ENVIRONMENTAL ASSESSMENT

to

DEPARTMENT OF PLANNING NEW SOUTH WALES (Reference No. MP06_0258)

in relation to

CONCEPT PLAN FOR TOWN CENTRE CASUARINA BEACH

including

PROJECT APPLICATION FOR STAGE 1 WORKS

on land described as

LOT 223 IN DP 1048494, LOT 3 IN DP 1042119 (CLOSED ROAD), LOT 144 IN DP 1030322 AND LOT 13 IN DP 1014470, PARISH OF CUDGEN, COUNTY OF ROUS

situated at

COAST ROAD, CASUARINA BEACH TOWNSHIP, KINGSCLIFF SOUTH

for and on behalf of

KINGS BEACH NO. 2 PTY LTD

VGF - 3083 AUGUST 2008

ENVIRONMENTAL ASSESSMENT TO DEPARTMENT OF PLANNING NEW SOUTH WALES IN RELATION TO CONCEPT PLAN FOR TOWN CENTRE, CASUARINA BEACH INCLUDING PROJECT APPLICATION FOR STAGE 1 WORKS ON LAND DESCRIBED AS LOT 223 IN DP 1048494, LOT 3 ON DP 1042119 (CLOSED ROAD), LOT 144 IN DP 1030322 AND LOT 13 IN DP 1014470, PARISH OF CUDGEN, COUNTY OF ROUS, SITUATED AT COAST ROAD, CASUARINA BEACH TOWNSHIP, KINGSCLIFF SOUTH

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EXECUTIVE SUMMARY

For ease of reference, **Exhibit Books** referable to the proposed Casuarina Beach Town Centre are **enclosed**, namely **Exhibit Book 1 – Concept Plan Drawings** and **Exhibit Book 2 – Project Application for Stage 1 Works Drawings**. These **Exhibit Books** contain the drawings referred to in various **Tables – Listing of Drawings** contained in this Environmental Assessment.

Additional plans and drawings are contained in the various Attachments to this Assessment.

1.00 BACKGROUND

By Submissions dated 11 October 2006, addressed to the Minister for Planning, a Request was made for and on behalf of the proponent, Kings Beach No. 2 Pty Ltd, the registered owner of land described as Lot 223 in DP 1048494, Lot 3 in DP 1042119 (Closed Road), Lot 144 in DP 1030322 and Lot 13 in DP 1014470, Parish of Cudgen, County of Rous, situated at Coast Road, Casuarina Beach, some 5.0 kilometres south of Kingscliff, and occupying an area of 26.2785 hectares (refer **Figure DA20G** (Cardno (Qld) Pty Ltd) – **Locality, Site Plan** and **Figure DA21E** (Cardno (Qld) Pty Ltd) – **Air Photo 2005** in **enclosed Exhibit Book 1** and **Attachment 2**)

The purpose of the Request to the Minister was to seek confirmation that the proposal for the projected development of a Town Centre and associated uses to service the needs of the emerging Casuarina Beach Township and environs, was a project, having regard to the relevant provisions of the Environmental Planning and Assessment Act 1979, to which such provisions applied.

The cited provisions were those at Part 3A of the Act, with reference to Clause 6 of State Environmental Planning Policy of the State Environmental Planning Policy (Major Projects) 2005. Contemporaneously, a Project Outline and Preliminary Assessment was lodged with the Director of Urban Assessments, Department of Planning, for consideration.

By letter of response dated 9 December 2006, the Minister advised confirmation of the proposed development as a Major Project and that Part 3A of the Act therefore applied, and that the submission of a Concept Plan for the project was duly authorized, pursuant to Section 75M of the Act for consideration for approval.

It was further advised that the Director General's Environmental Assessment requirements (DGR's) would issue, and did issue by letter dated 17 January 2007. Further requirements and advices were issued by the NSW Department of Planning by letter dated 21 March 2007, with particular reference to the Applicant's intent to seek approval for a Concept Plan for a Town Centre at Casuarina Beach and also to seek approval for a Project Application for Stage 1 Works comprising the subdivision of land into 38 lots and the construction of a shopping centre. Accordingly, this Environmental Assessment has been prepared and formatted in accordance with those instructions.

In addition, more recent consultations with the NSW Department of Planning have confirmed that the proposed Concept Plan Application and the Project Application for Stage 1 Works which now comprises the subdivision of land into 56 lots and construction of the shopping centre (to the stated extent), generally accords with the Concept Plan authorisation for the preparation of a Concept Plan (dated 9 December 2006) for consideration and thereby there was no necessity to seek a formal modification of this approval prior to the lodgement of the subject application.

In **summary**, this Environmental Assessment is therefore referable to a deemed Major Project (subject to approval being granted) in relation to a Concept Plan and a Project Application for Stage 1 Works for Casuarina Beach Town Centre, in accordance with the Minister's advices and in accordance with the subsequently advised Director General's requirements. A summary table demonstrating compliance with the Director General's requirements has been attached to this Assessment (refer **Attachment 10 - Summary Table of Director General's Requirements**).

2.00 INTRODUCTION

Since the commencement of site planning and attendant detailed investigations a decade ago, the Casuarina Beach Township is developing as a coastal community, with a number of precincts now developed and developing along the 3.5km of ocean frontage. Originally encompassing some 168 hectares of sand-mined ravaged land, which has undergone, and continues to undergo extensive rehabilitation and development, the emerging Casuarina Beach community to date consists of a contemporary residential product of varying densities comprising substantial public amenity facilities including beach car parking, sport and recreation facilities and fully integrated bikeway/pedestrian pathways immediately behind the vegetated natural dune system and the beach.

This **Concept Plan** for a planned new Town Centre for the Casuarina Beach community seeks to implement the December 1998 NSW Land and Environment Court decision to grant consent (under Appeal Number 10686 of 1997) with respect to the approved Master Plan (dated December 1998) for land now described as Lot 223 in DP 1048494, Lot 3 in DP 1042119 (Closed Road), Lot 144 in DP 1030322 and Lot 13 in DP 1014470, Parish of Cudgen, County of Rous, having an area of 26.2785 hectares. Lot 13, having an area of 5.215 hectares (excluding road) is abutting coastal Public Reserve under the control of Tweed Shire Council. (See **Appendix A – Request to Tweed Shire Council for consent to include land in Application.**)

This Concept Plan has been sequenced to follow the implementation of other preceding approved stages so as to develop a critical mass of permanent residents and to establish consistent visitor and tourist patterns within the immediate vicinity to support the retailing (supermarket), convenience food and beverage, mixed use shopping, tourist retail services, restaurant dining and lower order commercial and community services, within a consolidated and much anticipated '*Main Street*' Town Centre.

In so doing, the Town Centre Concept Plan offers refreshed appraisal of the Approved Master Plan (dated December 1998) and so seeks to establish an unambiguous pattern of development which endeavours to reflect the local Tweed Coast character and community values and expectations for this precinct within a contemporary context.

It is noted that the Town Centre site, the subject of this Environmental Assessment, is more or less coincident with the "Seaside Village" designation as it appeared on the approved Master Plan, which location generally has since been consistently identified in statutory and other Planning Instruments as a key strategic location for retail services. (Refer Attachment 1 – Tweed Shire Council ats Lenen Pty Ltd, Land and Environment Court No. 10689 of 1997, Consent

S96/135 and Deed of Agreement – in particular Kings Beach Development Plan MG9808/3-10/98).

The urban design framework adopted by the Concept Plan provides a layer of critical connections, enabling direct access from the Old Bogangar Road (Coast Road) into the heart of the (Town Centre) Precinct and to the beach foreshore, as well as resolving the '*missing link*' between the southern and northern sections of Casuarina Way. These connections will provide unobstructed beach access and public parking, and establish versatile connection points (car, cycle, pedestrian and fauna corridor) to existing networks servicing the greater Casuarina Beach community in an efficient, safe and measured manner without adverse impacts upon the residential amenity of the area.

Accordingly, the proposed Casuarina Beach Town Centre Concept Plan provides an integrated mixed-use design approach with a walkable "*Main Street*" with highly profiled feature buildings at either end of the main vista and supported by a high quality public realm which is sensitively and sympathetically landscaped. The Town Centre will be anchored by retail and convenience/tourist shopping opportunities appropriately scaled and supported by a medium- density population base within the precinct, to meet the existing and likely future needs and demands of the balance of the Casuarina Beach community and surrounds, without observable impacts upon the viability of neighbouring centres.

The **Project Application** details the first Stage of the Town Centre development, seeking approval for the shopping centre to the extent proposed and includes the provision of essential urban services and infrastructure framework necessarily associated with the Concept Plan. Subdivision of the subject land into 56 lots and associated carrying-out of works for land clearing, bulk earthworks, road construction, and other essential services, are included in the proposal's initial development phase.

This Environmental Assessment seeks to address issues including environmental considerations, infrastructure and service provision, and all other relevant matters as required by the relevant planning instruments and therefore is to be read in conjunction with supporting documents and reports **attached**, to which references are made throughout this Assessment Report.

Finally, it is intended that the implementation of this proposal will enable the ultimate development of this Town Centre Precinct to be carried out in a controlled and co-ordinated manner which will not adversely affect or prematurely burden existing physical, social and economic services and infrastructure. In response, the implementation of the Concept Plan envisages a four (4)-stage development programme (see Figure DA41F (Cardno (Qld) Pty Ltd) – Staging Plan, and enclosed in Exhibit Books 1 and 2 and Attachment 2), to ensure ordered and responsibly-sequenced development.

Overall, it is envisaged that the high standard of development, expressed in its built form to date, will be continued with the implementation of the proposed Town Centre, to create a relaxed, integrated, and functionally successful mix of town centre elements to service both residents and visitors to Casuarina Beach.

3.00 PROPOSED DEVELOPMENT

This Executive Summary refers to an Environmental Assessment prepared in response to the determination of the Minister of Planning, by letter dated 9 December 2006, that the proposed development of a Town Centre within the emerging Casuarina Beach Township, located at Casuarina Beach, approximately five (5) kilometres south of Kingscliff, is a Major Project, pursuant to Part 3A of the Environmental Planning and Assessment Act 1979, and subject to formal application and assessment procedures in relation to this Environmental Assessment.

In addition, this Environmental Assessment is in response to the Director General's Requirements (DGR's), advised by letters dated 17 January and 21 March 2007, pursuant to the Minister's determination.

The Assessment is prepared for and on behalf of Kings Beach No. 2 Pty Ltd, the registered owner of the land, the subject of the Assessment.

The subject land is described as Lot 223 in DP 1048494, Lot 3 in DP 1042119 (Closed Road), Lot 144 in DP 1030322 and Lot 13 in DP 1014470, Parish of Cudgen, County of Rous, having areas of 19.03 hectares, 0.9575 hectares, 1.076 hectares and 5.215 hectares (excluding road) respectively, totalling 26.2785 hectare. Lot 13 is abutting coastal Public Reserve under the control of Tweed Shire Council. (Refer **Figures DA01A** to **DA01D Survey Plans** in **enclosed Exhibit Book 1**).

It is submitted that the Concept Plan, the subject of this Environmental Assessment is generally in accordance with the December 1998 NSW Land and Environment Court decision to grant Consent (under Appeal Number 10686 of 1997) to allow land known as Lenen South to be further developed subject to conditions. This Consent (S96/135) approved:

- 1. The subdivision of the land into 14 lots as shown generally on the Subdivision Plan.
- 2. The carrying out of Stage 1 works generally in accordance with the conditions of this Consent.
- 3. The development of the management lots for the purposes of low-and-medium-density residential, retail, commercial and tourist development, together with associated and related uses and facilities generally in accordance with the Development Plan (refer Attachment 1 Land and Environment Court No 10689 of 1997- Consent S96/135 and Deed of Agreement).

The proposed development, the subject of this Environmental Assessment, is contained within lands comprising the above approvals, represents the Town Centre Precinct (Lot 5) with respect to the approved Concept Master Plan (dated December 1998) and is described as above (refer **Approved Master Plan**⁽¹⁾ (ML Design Architects Planners) in **enclosed Exhibit Book 1**).

In response to the approval and subsequent staged development of lands both within the Casuarina Beach community, as well as neighbouring '*New Tweed Coast*' communities since 1998, this proposal seeks to provide retailing and lower-order commercial and community services within a consolidated Town Centre, which services have been anticipated by the emerging resident and visitor community since its inception (refer **Final Concept Plan** (ML Design Architects Planners) in **enclosed Exhibit Book 1**). The Town Centre will concentrate non-residential and mixed use activities around a central boulevard or "*Main Street*", which will provide the primary east/west urban connection from Old Bogangar Road (Coast Road) to Casuarina Way and the public access to the beach (refer Land Use Plan (ML Design Architects Planners) in **enclosed Exhibit Book 1**).

Accordingly, this Application is consistent with, and seeks to develop further, the intent of the original approved Master Plan (dated December 1998), and so create a vibrant and sustainable Town Centre, responsive to contemporary development standards, key site planning and environmental issues, and relevant socioeconomic measures and aspirations.

The proposed development, the subject of this Assessment, comprises:

- the Concept Plan, and
- the Project Application for Stage 1 Works.

Amongst other things, the **Concept Plan** seeks to provide retailing and commercial services, in concert with further residential and associated development, as demonstrated in the following Land Use Table. (Refer **Land Use Plan** described above and **Open Space/Landscape Plan** (ML Design Architects Planners) in **enclosed Exhibit Book 1**).

⁽¹⁾ The approved Master Plan comprises two (2) Plans, namely, Kings Beach Subdivision Plan and Kings Beach Development Plan.

Table – Concept Plan – Land Use

Land Use	Number of Lots	Lot Identification Number
Retailing	1	1
Commercial (including office, medical centre, child care centre, community facilities, etc)	1	2
Commercial (including restaurants, entertainment, beach retailing)	1	17
Mixed Use	4	5, 6, 12, 13
Medium Density Residential	11	3-4, 7-11, 14-16,18
Low Density Residential	38	19-56
TOTAL	56	

Being the long-term planned focal point for the Casuarina Beach community and the adjoining Seaside City lands and the nearby now-developed Salt Resort to the immediate north, the scale of the proposed retail/commercial core has been limited to service the anticipated "chore" shopping and related needs of the Casuarina Beach community and those of the immediately surrounding *'New Tweed Coast'* communities, and is to be supported by residential development at densities which are in accordance with long-term approved plans and the stated objectives of the Residential 2(e) – Residential Tourist Zone, with reference to the Tweed Local Environmental Plan 2000, as amended. Accordingly, desired built form controls will accompany the Town Centre Concept Plan as tabulated below.

Table – Built Form Compliance Table

Land Use Type	Height	(1)	D	ensity ⁽¹⁾	Retail Floor Space	Min Landscape Area of Site
	Ridge & Ceiling	No. of Storeys	Plot Ratio	Min No. Units per m ² of site area		
Retailing (Lot 1)	13m - 10m	3	0.5	N/A	$3,660 \mathrm{m}^{2(2)}$	30%
Commercial (Lot 2)	13m - 10m	3	0.5	N/A	N/A	30%
Commercial (Lot 17)	10m - 8m	2	1.0	N/A	2000m ²	10%
Mixed Use (Lots 5, 6, 12, 13)	12.2m-9.6m	3	2.0	1 per 130m ²		20%
Medium Density Residential (Lots 3- 4, 7 –11, 14-16, 18)	12.2m-9.6m	3	1.2	1 per 130m ²	N/A	20%
Low Density Residential(Lots 19-56)	9m - 7m	2	0.6	N/A	N/A	25%

(1) The listed height and density criteria are compliant with those contained in the ratified Tweed Shire Council's Tweed Development Control Plan Section A1 – Residential and Tourist Development Code.

(2) Project Application (for (1) Stage 1 Works) is limited to ground floor retailing comprising a 2,500m² supermarket, 850m² specialty shops and 310m² restaurants, totalling 3,660m² floor space. Amenities (75m²) at ground floor are also proposed, with a first floor level to accommodate 400m² office space, additionally. Total proposed floor area (Stage 1) amounts to 4,135m².

Any expanded retailing and related floor space beyond the amount specified above, is to be the subject of any, if any, further application(s), consistent with population growth in the short-to-medium term future.

The following **Table** is to be read in conjunction with the above-described **Concept Plan** proposed for Casuarina Beach Town Centre, and provides Drawing Number and other Report references for ease of convenience.

Drawing **Drawing Title Report or Other** Author Attachment Number Reference Number DA01A -Survey Plan Environmental _ **DA01D** Assessment Report DA20G Locality, Site Plan Cardno (Qld) Pty 2 Report on Engineering and Ltd Environmental Matters

TABLE Listing of Drawings – Concept Plan Casuarina Beach Town Centre

Drawing Number	Drawing Title	Report or Other Reference	Author	Attachment Number
DA21E	Air Photo – 2005	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
-	 Approved Master Plan Kings Beach Subdivision Plan Kings Beach Development Plan 	Environmental Assessment Report	McInnes Group Development, Economic and Planning Advisors	1
-	Final Concept Plan	Master Planning Report	ML Design Architects, Planners	3
-	Land Use Plan	Master Planning Report	ML Design Architects, Planners	3
-	Open Space/Landscape Plan	Master Planning Report	ML Design Architects, Planners	3
DA06	Site Analysis Plan	Master Planning Report	ML Design Architects, Planners	3
	Landscape Concept Plan Stage 1 Landscape Works Circulation and Accessibility Retail Centre	Landscape Concept Report	EDAW/AECOM	6
DA39F	Subdivision Layout Plan	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
DA41F	Staging Plan	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
DA1 DA2 DA3 DA4 DA5 DA6 DA7 DA8 DA9 DA10 DA11 DA12 DA13 DA14 DA15 Schedule Board	Series of 6 perspective sketches (continued) (continued) Locality Plan Site Plan and Schedules Elevations North and East Elevations West and South Ground Floor Plan First Floor Plan Roof Plan Basement Plan Sections Shadow Diagrams Building Signage Details Pylon Signage Details Finishes Schedule Finishes Board	Retail Centre Design	Donovan Hill Architects	4

For ease of reference, an **Exhibit Book Exhibit Book 1 – Concept Plan Drawings** is **enclosed**, which contains all drawings and plans referred to in the above **Table**.

The **Project Application** for the first Stage of the Town Centre development seeks approval for the shopping complex including the essential urban services and infrastructure framework necessarily associated with the Concept Plan and generally includes the following:

- **Bulk earthworks,** including **vegetation clearing** (for all subject lands zoned Residential 2(e) Tourist Residential and both privately and publicly owned 7(f) Environmental Protection Coastal Lands)
- Construction of the north-south road link (Casuarina Way)
- Construction of all **roads** within the subject land, including kerbside public car parking areas (an esplanade, of some 175 metres in length, supported by an additional pedestrian beach access, is integrated into the network)
- Realignment of foreshore cycleway/walkway, vegetation clearing and associated **earthworks**, minor road construction and drainage swale works within the 7(f) zone
- **Subdivision** of the land into 56 lots (as indicated on the Concept Plan), excluding areas to be set aside for Public Open Space purposes
- Provision of **reticulated services** (water, sewerage, stormwater drainage) to each created lot
- **Reconstruction of** that part of **Dianella Drive at its intersection with Coast Road**, by the formation of a cul-de-sac, for reasons of safety⁽¹⁾
- Provision of **Public Open Space**⁽²⁾
- Landscaping to meet the reasonable expectations of the residential and visitor community
- Provision of, and connection to, electricity supply and telecommunication services

The Agreement-in-Principle of Tweed Shire Council to the proposed reconstruction of Dianella Drive and its intersection with Coast Road has been formally requested (see Appendix B – Request to Tweed Shire Council for Agreement in Principle to traffic changes to Dianella Drive –Coast Road intersection).

⁽²⁾ All Public Open Space provision and attendance contributions for the area, the subject of the Concept Plan, have already been made. Notwithstanding, the Concept Plan makes provision for a yet further 0.9801 hectares, or 4.5% of the Concept Plan area, to be added to the public (open space) domain despite all such dedications and contributions, statutorily requires, having been met.

• Stage 1 construction of the proposed shopping centre comprising:

Ground Level	
 Supermarket 	$2,500m^2$
 Specialty shops 	850m ²
• Restaurants	<u>310m²</u>
	3,660m ²
 Amenities 	75m ²
First Floor Level	
• Office	$400m^2$
Total Floor Space	$4,135m^2$
Car Parking Provision	

Cal I al King I Tovision	
• "At grade"	76 spaces
• Basement	150 spaces
• "Indented" on-street	<u>16</u> spaces
Total Car Parking Provision	242 spaces

• Signage for the proposed shopping centre

The following **Table** is to be read in conjunction with the above-described **Project Application for Stage 1 Works for Casuarina Beach Town Centre**, and provides Drawing Number and other Report references for ease of convenience.

Works	Drawing	Drawing Title	Report or	Author	Attachment
	Number		Other		Number
			Reference		
Bulk Earthworks	DA22G	Existing Contours Plan	Report on	Cardno	2
	DA24G	Finished Surface Contours	Engineering and	(Qld) Pty	
	DA25E	Cut/Fill Depths Layout Plan	Environmental	Ltd	
	DA26D	Site Cross Sections	Matters		
North-South Road Link	DA23G	Road Layout Plan	Report on	Cardno	2
Road 2 (Casuarina Way)	DA29C	Casuarina Way (Road No 2)	Engineering and	(Qld) Pty	
		Longitudinal Section	Environmental	Ltd	
Road 3 (Casuarina Way)	DAS30C	Casuarina Way (Road No 3)	Matters		
		Longitudinal Section			
	DA34B	Typical Cross Sections			
Other Roads	DA23G	Road Layout Plan	Report on	Cardno	2
Road 1 ("Main Street")	DA28D	Road No. 1	Engineering and	(Qld) Pty	
		Longitudinal Section	Environmental	Ltd	
Road 4	DA30C	Road No. 4	Matters		
		Longitudinal Section			
Road 5 (Esplanade)	DA31E	Road No. 5 (Esplanade)			
		Longitudinal Section			
Road 6	DA32E	Road No. 6			
		Longitudinal Section			
Road 7	DA33E	Road No. 7			
		Longitudinal Section			
All Roads	DA34B	Typical Cross Sections - Sheet 1			
All Roads	DA35D	Typical Cross Sections - Sheet 2			

TABLEListing of Drawings – Project Application for Stage 1 WorksCasuarina Beach Town Centre

Works	Drawing Number	Drawing Title	Report or Other Reference	Author	Attachment Number
Associated Earthworks, etc	DA36F	Catchment Areas and Drainage Paths	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
Subdivision	DA39F DA40G	Subdivision Layout Plan Dedication and Easement Plan	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
Reticulated Services Stormwater Drainage Sewerage Water Supply	DA36F DA37G DA38F	Catchment Areas & Drainage Paths Sewer Reticulation Layout Plan Water Reticulation Layout Plan	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
Reconstruction of Dianella Drive	DA23G	Road Layout Plan	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
Provision of Public Open Space	DA40G	Dedication and Easement Plan	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
	-	Open Space/Landscape Plan	Master Planning Report	ML Design Architect Planners	3
Landscaping	- - - -	Landscape Concept Plan Stage 1 Landscape Works Circulation and Accessibility Retail Centre	Landscape Concept Report	EDAW/ AECOM	6
Stage 1 Construction of Shopping Centre	DA1 DA2 DA3 DA4 DA5 DA6 DA7 DA8 DA9 DA10 DA11 DA12 DA13 Schedule Board	Series of 6 perspective sketches (continued) (continued) Locality Plan Site Plan and Schedules Elevations North and East Elevations West and South Ground Floor Plan First Floor Plan Roof Plan Basement Plan Sections Shadow Diagrams Finishes Schedule Finishes Board	Retail Centre Design	Donovan Hill Architects	4
Signage	DA14 DA15	Building Signage Details Pylon Signage Details	Retail Centre Design	Donovan Hill Architects	4

For ease of reference an Exhibit Book – Exhibit Book 2 – Project Application for Stage 1 Works Drawings is enclosed, which contains all the drawings and plans referred to in the above Table.

To reiterate, the subject lands have long-term been approved for the development for a Town Centre for the emerging Casuarina Beach Township, which presently comprises some 550 residences, including apartments, and an estimated population of the order of 1,500 persons – presently without local shopping and other community services.

The proposed lots are to facilitate future development in general accordance with the intent of the original approved Master Plan (December 1998) (refer **Approved Master Plan** (McInnes Group) in **enclosed Exhibit Book 1**). Accordingly, the Concept Plan seeks to confer controls with respect to land use, building heights, plot ratio and landscaping to the subject site. Notwithstanding, any future development or proposed use of the individual lots proposed in conjunction with this application will still require separate consents and therefore will be dependent upon the approval of subsequent Development Applications.

A public beach (pedestrian) access is proposed at the foreshore end of "*Main Street*", coincident with the closure (removal) of the existing public beach access to the immediate south. That is to say, the proposed "*Main Street*" public beach access will be a replacement, retaining the number of beach accesses overall in Casuarina Beach Town Centre environs to four (4). The principal reason for re-siting of the access is to enhance public convenience. (Refer **Part A Section 7.02** – **Public Access to the Foreshore** of this Environmental Assessment).

The formulation, development, assessment, consultation, justification and detailed preparation of this Concept Plan relies upon a suite of studies which have been undertaken with respect to the subject site. These documents are referred to throughout this Assessment and are summarized with reference also to contextual considerations, as follows:

Physical Environment and Engineering:

Cardno (Qld) Pty Ltd has prepared a Report on Engineering and Environmental Matters which includes a detailed assessment of the following issues (refer **Attachment 2 – Report on Engineering and Environmental Matters**):

- Earthworks and Clearing
- Roadworks
- Bushfire
- Infrastructure
- Erosion and Sediment Control Plan
- Environmental Issues⁽¹⁾
 - Ecological Assessment
 - Banksia Amelioration Program

A Peer Review of this reporting upon Environmental Issues has been prepared by Dr David Robertson, Director, Cumberland Ecology (see Attachment 13 – Casuarina Beach Town Centre: review of Flora and Fauna Impact Assessment) in support.

- Contamination
- Acid Sulfate Soils
- Climate Change Issues
- Total Water Cycle Management
- Drainage and Water Quality Management
- Heritage⁽¹⁾

Particularly, this Assessment addresses the proposed Town Centre Concept Plan within the context of previous works constructed within preceding stages of the Casuarina Beach community including revegetation and habitat preservation and revitalisation, the sequencing and phased establishment of urban utilities, roads and other physical infrastructure, conservation and protection of coastal dune systems, and bulk landscape works and contaminant treatment within sustainable and water sensitive design parameters.

Built Form:

ML Design Architects Planners has produced a Master Planning Report addressing the Concept Plan for the Town Centre Precinct, which reporting is supported by a Land Use Plan and associated Yield Analysis Table. This Report illustrates the planning synthesis of the proposed development and provides the fundamental framework of the Plan, addressing design within a sustainability context, and providing, in addition, Massing Plans and Shadows Study, (refer **Attachment 3** – **Master Planning Report** (ML Design Architects Planners)).

Shopping Centre:

Donovan Hill Architects has prepared the detailed architectural design for the shopping centre development which anchors the Town Centre Precinct. This centre development consists of a concentration of retailing opportunities, offering an engaging and interactive public interface which is responsive to the coastal climate, and constructed of enduring and appropriate external materials and treatments which are sympathetic to the character of the locale. This development will be the primary activity node for the Town Centre Precinct and will provide a high- quality built form and public realm which is consistent with, and makes a positive contribution to, the surrounding coastal vernacular (refer Attachment 4 – Retail Centre Design (Donovan Hill)).

⁽¹⁾ A further, continuing review is being undertaken (refer Section 2.05 – Aboriginal Cultural Heritage – of this Environmental Assessment)

Urban Design and Public Realm:

Malcolm Middleton Architects has prepared an Urban Design Report analysing the Town Centre Concept Plan with respect to core master planning design principles. This reporting, amongst other things, demonstrates how the proposal achieves the key performance requirements with respect to the following:

- Integration and compatibility;
- Consistency of use and location;
- Size and location of the proposed supermarket-anchored Shopping Centre;
- The visual impact of the Town Centre in the context of the existing and surrounding community; and
- Public access to the foreshore.

The Report examines the historical formulation, connectivity, permeability, character, land use mix and scale of this integrated design approach and its ability to support the existing critical mass of full-time residents and established visitor and tourist trade patterns in the context of the Casuarina Beach community (refer **Attachment 5** – **Urban Design Report** (Malcolm Middleton Architects)).

Landscape Planning:

EDAW/AECOM has prepared a Landscape Concept Report outlining the landscape treatments and planting detail necessarily associated with the Town Centre Development. The reporting emphasises the landscape design philosophy of the core Town Centre Precinct by taking advantage of the unique beachfront site and accentuating the character of the local natural environment in keeping with the overall Casuarina Beach development. Critical landscape design issues examined include:

- Establishing distinctive landscape character zones across the site;
- Addressing the interface between the new site development and adjoining established areas;
- Providing a hierarchy of circulation and access routes that promote a strong sense of community and legibility;
- Meeting environmental requirements and planning policies of the various government authorities;
- Providing areas of privacy and sanctuary within the site, while addressing issues of security, safety and definition of public access; and

• Developing distinctive treatments for materials and furniture that are harmonious with and reflect the local coastal character (refer Attachment 6 – Landscape Concept Plan (EDAW/AECOM)).

Traffic Access and Connectivity:

Cardno Eppell Olsen has prepared a Traffic Impact Study which entails a detailed assessment of the traffic-related issues associated with the Town Centre Development including:

- Public Car Parking
- Pedestrian and Cycle Access
- Street Network, including Esplanade
- New Connection to Tweed Coast Road
- Treatment of Esplanade/Foreshore Closure
- Tweed Road Contribution Plan

This Report indicates that the proposal provides 170 public car parking spaces within 200 metres of the foreshore walkway/cycleway, which exceeds a policy requirement for 300 public spaces per kilometre of beach frontage (the subject site has approximately 538m of beach frontage). This provision is over and above that additionally required for individual land use development components within the Plan (refer **Attachment 7 – Traffic Impact Study** (Cardno Eppell Olsen)).

Socio-Economic:

Conics Pty Ltd has prepared a Socio-Economic Impact Assessment of the proposed Town Centre development which includes a detailed analysis of the following (refer **Attachment 8 – Socio-Economic Impact Assessment** (Conics Pty Ltd)):

- Current Retail Infrastructure
- Service Catchment
- Market Size

This Report defines the Primary Trade Area (PTA) to include the communities of Kings Forest, Seaside City, Salt Village, Casuarina Beach and Cabarita Beach/Bogangar. This Area is expected to attain an equivalent residential population comprising permanent residents and tourists of over 9,300 persons by the year 2011 (deemed the appropriate year for benchmarking of the subject proposal). Need and demand analysis indicates that a supermarket-anchored shopping centre within the greater south coastal area of Tweed Shire is exceeded now. As indicated by Conics Pty Ltd and supported by the Tweed Retail Strategy, the two (2) strategic locations for retail development, given anticipated population distribution and current trends, are identified to be Casuarina Beach and Pottsville. Accordingly, the proposed scale of the shopping centre, focused on "chore" shopping and related services, with a 2,500m² supermarket and specialty shopping (850m²) and restaurants (310m²), totalling 3,660m² within the subject application (Project Application for Stage 1 Works), is submitted to be supportible and is reasonably expected by the community.

This Report, in a comparative assessment of the merits of competing supermarket interests at Casuarina Beach, Pottsville and Cabarita, has concluded a view that, for stated reasons, a supermarket-anchored centre at Casuarina Beach, and another at Pottsville in 2011-2012 is the best outcome for the communities sought to be serviced; and that further, Cabarita is not considered to be an appropriate location for a supermarket-anchored centre.

Community Consultation:

Promedia Community has conducted a series of public displays for and on behalf of the proponent, with the primary purpose of providing to local residents the opportunity to view three (3) draft Master Plan options of the Town Centre Precinct. The displays of the proposed make-up of the Draft Town Centre Master Plans provided a valuable opportunity to present relevant information to the community, engage in open dialogue, to respond to community concerns about specific issues, to acknowledge community preferences and attitudes and to forge an on-going relationship with the participants. A précis outline of the process, participation and analysis of these responses is attached to in this reporting (refer **Attachment 9 – Community Consultation Report** (Promedia Community)).

4.00 CONCLUSION

In conclusion, it is noted that the subject land is centrally located within Casuarina Beach, which at completion is anticipated to contain 3,000 permanent residents and capacity for an additional 2,600 tourists, totalling 5,600 persons (consistent with the long-term statutorily imposed population estimates). Since its inception (a decade ago), Casuarina Beach has witnessed significant and substantial development of internal and external roads, urban services, structured recreational parklands and open space in accordance with recognised coastal design guidelines, water-sensitive design principles and the desired expectations of the community. Currently some 550 residences have been constructed within the town, with an estimated permanent resident population of the order of 1,500 persons.

Additionally, taking into account the commitment to the development of Seaside City to the immediate north, and the developed Salt Resort adjoining Seaside City, a projected 2009 population of the order of 8,000 residents and visitors will be available to be serviced by the subject proposal.

To service the "chore"-shopping and associated community needs of this projected population, including the needs of residents and visitors, in measured response, provision is made for a proposed supermarket-anchored shopping centre, to the extent proposed and at the location proposed, and complemented by supporting beach-orientated retailing and other associated opportunities within a cohesive "*Main Street*" setting.

In sustained anticipation within the preceding stages of development over the past decade, the development of the Town Centre is a progression of the formation and maturation of this unique coastal community, and therefore has been sequenced to follow numerous stages of the programmed development which have now established a critical mass of local residents and visitors whose needs and demands should now be more properly met. Accordingly, this Town Centre Precinct is the strategic linchpin which will bring to fruition the seaside/beachside village concept of the original Master Plan approval (December 1998) (refer **Approved Master Plan** (McInnes Group) in **enclosed Exhibit Book 1**).

The Town Centre site and surrounds have been the subject of intensive and extensive sand mining over a period of some 50 years and consequently, as a result, both the topography and the vegetation have undergone significant changes and hold no particular or identifiable value.

As a direct result of such activities, and as previously submitted and approved, environmental reports have consistently established that having regard to Section 5A of the Act, "*a significant effect*" is unlikely to be imposed upon "*any threatened species, populations of ecological communities or their habitats*" as a consequence of all approved development.

Furthermore, this has been established pursuant to an Order of the Land and Environment Court (2003) and by acknowledgement of the National Parks and Wildlife Service (NPWS) by letter dated 7 August 2003 addressed to Tweed Shire Council permitting the clearing of lands, including the land, the subject of the proposed Casuarina Beach Town Centre. (See Attachment 2 – Report on Engineering and Environmental Matters – Appendix D – Casuarina Beach Banksia Amelioration Program – Report No. 4).

The subject land is zoned 2(e) Residential Tourist Zone pursuant to the Tweed Local Environmental Plan 2000. The 2(e) Residential Tourist Zone provides for a variety of tourist and residential development and supporting uses in various forms with which the submitted Concept Plan is generally and particularly consistent.

Accordingly, this Town Centre Concept Plan provides the ways and means of managing the growing needs and demands of existing and future residents who are attracted to the contemporary sun, surf and leisure lifestyle and integrated tourist resort opportunities of the '*New Tweed Coast Villages*', within a water-sensitive and environmentally sustainable New Urbanism design philosophy which seeks to achieve a heightened level of public amenity afforded to both residents and visitors alike.

Having regard to the facts, considerations and circumstances upon which this reporting relies, and having regard to the existing zoning, the attendant planning requirements and the anticipated benefits that are anticipated to accrue to the emerging community, it is submitted that the Concept Plan, together with the Project Application for Stage 1 Works, are appropriate management responses to the residential growth aspirations within the 'New Tweed Communities' over the last decade, are generally in accord with the 1998 Approved Plan of Development and are in keeping with the local coastal character and planning philosophy for the Casuarina Beach development.

The Application is fully compliant with the Development Control Planning instruments of the Tweed Shire Council.

Accordingly, it is submitted that the Concept Plan and the Project Application are fully supportible and are supported.

PART A CONCEPT PLAN

1.00 SCOPE - CONCEPT PLAN

1.01 Proposed Casuarina Beach Concept Plan

The proposed development of the Casuarina Beach Town Centre and associated uses seeks to provide retailing and commercial services, in concert with further residential and associated development, to service the needs of Casuarina Beach Township, in general accordance with long-term approved plans and the stated objectives of the Residential 2(e) – Residential Tourist Zone, with reference to the Tweed Local Environmental Plan 2000 (refer **Final Concept Plan** (ML Design Architects Planners) in **enclosed Exhibit Book 1**).

The proposed development, in its consolidated form, is for an integrated tourist resort and associated community facilities, comprising some 56 lots (excluding public open space areas), for shopping centre, commercial, medical centre, child care centre, international hotel, tourist resort, beach retailing, mixed use and low-density and medium-density residential purposes (refer Land Use Plan (ML Design Architects Planners) in enclosed Exhibit Book 1).

Land Use	Number of Lots
Retailing	1
Commercial (including office, medical centre, child care centre, community facilities)	1
Commercial (including restaurants, entertainment, beach retailing)	1
Mixed Use	4
Medium Density Residential	11
Low Density Residential	<u>_38</u>
Total	56

The Town Centre Concept Plan details a preferred future land use pattern which has been scaled to provide for residential population densities for this Town Centre Precinct which are generally in accordance with the approved Master Plan (dated December 1998) and the Tweed Shire Council DCP 11 – Kings Beach population yield (refer **Approved Master Plan**⁽¹⁾ (McInnes Group) and **Land Use Plan** (ML Design Architects Planners) in **enclosed Exhibit Book 1**).

Accordingly, subsequent development approvals will be sought for construction of the retail/commercial and multi-unit housing developments on the proposed new allotments (refer Land Use Plan (ML Design Architects Planners) in enclosed Exhibit Book 1).

Notwithstanding, it is submitted that any future development of these lots will be designed to respond to its local context, providing an appropriate scale, density and built form which will deliver a high level of amenity and environmental quality consistent with the nature and characteristics of the subtropical beach environs.

The following **Table** is to be read in conjunction with the above-described **Concept Plan** proposed for Casuarina Beach Town Centre, and provides Drawing Number and other Report references for ease of convenience.

⁽¹⁾ The Approved Master Plan comprises two (2) Plans, namely, Kings Beach Subdivision Plan and Kings Beach Development Plan

TABLE Listing of Drawings – Concept Plan Casuarina Beach Town Centre

Drawing Number	Drawing Title	Report or Other Reference	Author	Attachment Number
DA01A -	Survey Plan	Environmental		-
DA01D		Assessment Report		
DA20G	Locality, Site Plan	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
DA21E	Air Photo – 2005	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
-	 Approved Master Plan Kings Beach Subdivision Plan Kings Beach Development Plan 	Environmental Assessment Report	McInnes Group Development, Economic and Planning Advisors	1
-	Final Concept Plan	Master Planning Report	ML Design Architects, Planners	3
-	Land Use Plan	Master Planning Report	ML Design Architects, Planners	3
-	Open Space/Landscape Plan	Master Planning Report	ML Design Architects, Planners	3
DA06	Site Analysis Plan	Master Planning Report	ML Design Architects, Planners	3
- - - -	Landscape Concept Plan Stage 1 Landscape Works Circulation and Accessibility Retail Centre	Landscape Concept Report	EDAW/AECOM	6
DA39F	Subdivision Layout Plan	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
DA41F	Staging Plan	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
DA1 DA2 DA3 DA4 DA5 DA6 DA7 DA8 DA9 DA10 DA11 DA12	Series of 6 perspective sketches (continued) (continued) Locality Plan Site Plan and Schedules Elevations North and East Elevations West and South Ground Floor Plan First Floor Plan Roof Plan Basement Plan Sections	Retail Centre Design	Donovan Hill Architects	4

Drawing Number	Drawing Title	Report or Other Reference	Author	Attachment Number
DA13	Shadow Diagrams			
DA14	Building Signage Details			
DA15	Pylon Signage Details			
Schedule	Finishes Schedule			
Board	Finishes Board			

As stated above, this listing of Concept Plan drawings comprises enclosed Exhibit Book 1.

As supported by the Tweed Retail Strategy, the Town Centre Concept Plan seeks approval for a stated shopping centre and mixed use retail and commercial development. The Project Application for Stage 1 Works is limited to a supermarket-led convenience shopping centre, which may be staged as described below. This (subject) project application is limited to a 2,500m² supermarket, and support space of 1,160m², totalling 3,660m² floor space. Any further retail and related development will be the subject of further (subsequent) applications, consistent with population growth in the short-to-medium term future.

The first stage of the shopping centre proposes the following

Ground Level		
 Supermarket 	$2,500m^2$	
 Specialty shops 	850m ²	
• Restaurants	<u>310m²</u>	
	$3,660m^2$	
 Amenities 	$75m^2$	
First Floor Level		
• Office	$\frac{400m^2}{4,135m^2}$	
Total Floor Space	4,135m ²	
Car Parking Provision		
• "At grade"	76 spaces	
• Basement	150 spaces	
• "Indented" on-street	<u>16</u> spaces	
Total Car Parking Provision	242 spaces	

Any subsequent staging of the shopping centre which would be required to be the subject of a further development application(s), and which would be the subject of prior further client consideration, may comprise an extension to the supermarket $(1,000m^2)$, a further $675m^2$ specialty shopping, and the provision of further 90 car parking spaces (including 39 spaces at basement level).

Casuarina Beach Township is to be the focal point for extensive tourism and tourism-related development referable to a significant section of the Tweed Shire coast, consistent with the aims and objectives expressed in regional and local planning instruments.

The Township presently comprises about 550 residences, including about 300 units/apartments, and has an estimated population of the order of 1,500 persons – presently without "chore" shopping and other community services.

The Concept Plan provides for an integrated and mixed-use design approach, scaled to support the existing permanent residential population established along the length of the Casuarina Beach community and its anticipated growth.

It is intended that the fundamental social infrastructure necessary to support the residential development potential in and around the Town Centre will be provided in a rational and orderly manner.

The Town Centre urban framework has been designed to facilitate road access to and from the external regional road structure and the beach.

The Town Centre boulevard (or "*Main Street*") which forms the central spine and core activity centre of the development, as well as providing the key connection to the major north-south collector road of Casuarina Way, will include – subject to further applications and approvals - retailing, civic functions, as well as tourist/commercial/mixed use along its full length (refer **Final Concept Plan** (ML Design Architects Planners) in **enclosed Exhibit Book 1**).

Other than "beach" retailing at the eastern end of the "*Main Street*", all retailing activity will be integrated with residential development (mixed use) and the shopping centre has been sited in its particular urban setting to respond to the important role which it seeks to play in the streetscape design and external image of the Casuarina Beach Town Centre. It is noted that the retail floor space indicatively proposed as part of the mixed-use and "beach" retailing development as part of the Town Centre Concept Plan (proposed lots 5, 6, 12, 13 and 17) has been limited so as not to exceed 2,000m² (refer Land Use Plan (ML Design Architects Planners) in enclosed Exhibit Book 1).

Overall, as stated previously and elsewhere in this reporting, the projected Town Centre is an integrated built form encompassing a comprehensive range of residential, tourism, retail, commercial, recreational, open space and other community support uses, which in totality will

cater for the lower order needs of the 5,600 persons who will reside in or visit Casuarina Beach, and also those persons within its identified sphere of influence. The proposed Casuarina Beach Concept Plan is the vehicle which seeks the implementation of, and the delivery of, this projected development.

1.02 Development Options

The planning and design of urban development areas is recognised as being of critical importance to the identity, functioning and community values attributed to the locality. This Concept Plan has made provision for a range of development opportunities consistent with a Local Centre (refer Attachment 11 - Statutory Assessment of Development Proposal - Section 1.07.10 - DCP Section B9 Tweed Coast Strategy) and in accordance with the original approved Master Plan (dated December 1998).

Such opportunities include the accommodation of a mixture of land uses including retailing and associated commercial development, mixed residential development, medium density (tourist resort or integrated tourist accommodation) and low density (detached house) residential development, as well as open space and foreshore recreational utilities and access (refer Land Use Plan (ML Design Architects Planners) and Open Space Landscape Plan (ML Design Architects Planners) in enclosed Exhibit Book 1).

The designated hierarchy of this parcel, as set out in the original Master Plan (dated December 1998) and referenced to other relevant statutory planning documents, has directed the ultimate development potential of the subject site. Therefore, any alternative use(s) would be inconsistent with the approved and developing urban planning framework of adjoining lands and would be contradictory to sustained and reasonably held community expectations.

Notwithstanding that other potential options for the development of the Casuarina Beach Town Centre are considered to be inconsistent with the planning history and uniformly stated intents of the relevant authorities, the following options are presented for analysis.

• No Retailing

Were the Town Centre to service the long-term projected needs of the Casuarina Beach community, to be developed without any retailing whatsoever, such an outcome would be devoid of any

Town Planning credibility. There is no precedent in recorded Town Planning history for a Town Centre not to provide any retailing functions.

Such an option is categorically rejected.

• Limited Retailing

Likewise, retailing limited to, say, a corner store or similar, would be equally without credit, and is also therefore, rejected.

• Stand-alone Supermarket

A "chore" shopping centre entirely dependent upon a limited-line supermarket in a location remote from an intensive population setting or other special-circumstance environment – that is, a supermarket without any specialty shopping in support – is, it is submitted, without any Town Planning justification, and is also rejected. In such constrained circumstances, such a facility could not, and would not, achieve a level of service commensurate with the otherwise reasonable expectations of the community which it would seek to serve, creating as it undoubtedly would, additional shopping trips of fragmented purposes, to the community's inconvenience and ultimate detriment.

• Limited or no "Main Street" Shopping

The transition to a casual, relaxed and comfortable beach-retailing environment, within a setting of a boulevard connecting to (and from) a "chore" shopping facility, is integral to the very philosophy of pleasantness of place promoted by the Concept Plan, the subject of this Environmental Assessment. Were the potential for such an experience to be removed from the Plan, the very essence of a cohesive and inviting Town Centre would risk being lost, and is not supported.

• Reduced Residential Form

The Concept Plan is dependent upon a rational and orderly gradation of residential form and density, which provides for increased densities in the immediate adjacency of retailing, commercial, entertainment and like facilities, uniformly reducing to low densities to ensure a seamless blending with the existing and projected form in the immediate Town Centre

surrounds. Such development form is entirely consistent with well-held and long established Town Planning principles addressing urban morphology.

Were such form to be replaced by, say, a low density residential form, without any variation, such a form would not be supported and is rejected

As will be evident from the above analysis, although a number of development options may theoretically be available for consideration for Town Centre structure, it is reasonable to conclude that the structure upon which this Environmental Assessment relies, is cogent, is consistent with Town Planning principles and is practical and practicable.

1.03 Justification of Development Strategy

Further to the above, the Casuarina Beach Town Centre Concept Plan development proposal is justified and is necessarily supported, having regard to the following considerations:

- The subject lands, previously described as Management Lot 5, have always been planned to provide for a beachside/seaside "Village" pursuant to the approved Master Plan (December 1998);
- This Concept Plan therefore seeks its implementation in a contemporary manner, to comply with current development controls, key site planning and environmental aspirations, and responsive to identified socioeconomic conditions and characteristics, and to incorporate water sensitive design principles, and energy efficient and sustainable urban design strategies;
- The preparation of the Town Centre Concept Plan is an iterative progression of the emerging coastal community at Casuarina Beach, and is sequenced to follow the preceding stages of the development which now provides a place of residence for approximately 1,500 persons, presently without convenient shopping and other community services;
- The Town Centre Precinct is strategically located within a defined Primary Trade Area whose growing convenience needs and demands are sufficient to support the development of a local retail/commercial centre;
- The size and scale of the proposed retail and commercial land use capacity of the Concept Plan, is supported by the Tweed Retail Strategy and will provide measured employment growth and localised economic development opportunities;
- As one of the last remaining undeveloped parcels within Casuarina Beach, the Concept Plan reflects the long term planning intent to develop a Town Centre, which has always been anticipated, and which follows a comprehensive consultation programme;

- The Concept Plan proposes the reconstruction of the existing connection of Dianella Drive to the Tweed Coast Road by the formation of a cul-de-sac, for reasons of safety, and will incorporate a new east-west central boulevard to the beach. This proposed axis will direct traffic into the heart of the Town Centre Precinct, and will generally improve traffic management and safety in the locality;
- The reconstruction of Dianella Drive at its intersection with Tweed Coast Road will improve the residential amenity for future residents of Dianella Drive and will facilitate the construction of the northern "*missing link*" in Casuarina Way, extending from Steelwood Lane at the southern end, to the Dianella Drive roundabout at the north;
- The Concept Plan proposes an Esplanade of some 175 metres in length, for the wider community benefit;
- In addition, a relocated (replacement) pedestrian beach access is proposed, also for community benefit, however, subject to consent being granted in response to further applications by Tweed Shire Council and the Department of Lands;
- The proposed residential development controls will provide for a mixture of permanent residential, short term tourist and resort style accommodation, which is consistent with stated coastal design guidelines;
- The Concept Plan encourages the development of active street frontages, complemented by a highly profiled, articulated and landscaped public realm, ample public beach access, coordinated open spaces reserves and conveniently located beachside public car parking; and
- The Concept Plan is consistent with existing environmental separation buffers and will introduce complementary native planting within road reserves and open space opportunities to protect and respect existing coastal environments.

1.04 Staging Strategy

As a consequence of the size and scale of the Town Centre, it is the intention of the proposal to proceed with a staged development as detailed in Attachment 2 – Report on Engineering and Environmental Matters (see Figure DA41F (Cardno (Qld) Pty Ltd) – Staging Plan in enclosed Exhibit Book 1 and Exhibit Book 2). The proposed first Stage generally includes the following:

- **Bulk earthworks** including **vegetation clearing** (for all subject lands zoned Residential 2(e) Tourist Residential and both privately and publicly owned lands zoned 7(f) Environmental Protection Coastal Lands)
- Construction of the **north-south road link** (Casuarina Way)

- Construction of all **roads** within the subject land, including kerbside public car parking areas (an **esplanade**, of some 175 metres in length, supported by an additional pedestrian beach access, is integrated into the road network)
- Realignment of the foreshore cycleway/walkway, vegetation clearing and **associated earthworks**, minor road construction and drainage swale works within the 7f Zone
- **Subdivision** of the land into 56 lots (as indicated on the Concept Plan), **excluding areas to** be set aside for Public Open Space purposes
- Provision of **reticulated services** (water, sewerage, stormwater drainage) to each created lot
- **Reconstruction of** that part of **Dianella Drive at its intersection with Coast Road**, by the formation of a cul-de-sac, for reasons of safety
- Provision of **Public Open Space**⁽¹⁾
- Landscaping to meet the reasonable expectations of the residential and visitor community
- Provision of, and connection to, electricity supply and telecommunication services
- Stage 1 construction of the proposed shopping centre comprising:

Ground Level

 Supermarket 	$2,500m^2$
 Specialty shops 	850m ²
• Restaurants	$310m^{2}$
	$3,660m^2$
 Amenities 	$75m^2$
First Floor Level	
• Office	$\frac{400\text{m}^2}{4,135\text{m}^2}$
Total Floor Space	4,135m ²
Car Parking Provision	
• "At grade"	76 spaces

- In Since	70 spaces
• Basement	150 spaces
• "Indented" on-street	<u>16</u> spaces
Total Car Parking Provision	242 spaces

• Signage for the proposed shopping centre

The following **Table** is to be read in conjunction with the above-described **Project Application for Stage 1 Works for Casuarina Beach Town Centre**, and provides Drawing Number and other Report references for ease of convenience.

⁽¹⁾ All Public Open Space provision and attendant contributions for the area, the subject of the Concept Plan, have already been made. Notwithstanding, the Concept Plan makes provision for a yet further 0.9081 hectares of land, or 4.5% of the Concept Plan area, to be added to the public (open space) domain, despite all such dedications and contributions, statutorily requires, having been met.

TABLE Listing of Drawings – Project Application for Stage 1 Works Casuarina Beach Town Centre

ng Drawing Title er	Report or Other Reference	Author	Attachment Number
Existing Contours Plan Finished Surface Contours Cut/Fill Depths Layout Plan Site Cross Sections	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
Road Layout Plan Casuarina Way (Road No 2) Longitudinal Section	Report on Engineering and Environmental	Cardno (Qld) Pty Ltd	2
Casuarina Way (Road No 3) Longitudinal Section Typical Cross Sections	Matters		
Road Layout Plan	Deport on	Conduo	2
Road No. 1 Longitudinal Section	Report on Engineering and Environmental	Cardno (Qld) Pty Ltd	2
Road No. 4 Longitudinal Section Road No. 5 (Esplanade)	Matters		
Longitudinal Section Road No. 6 Longitudinal Section			
Road No. 7 Longitudinal Section			
Typical Cross Sections - Sheet 1			
Typical Cross Sections - Sheet 2			
Catchment Areas and Drainage Paths	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
Subdivision Layout Plan Dedication and Easement Plan	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
Catchment Areas & Drainage Paths Sewer Reticulation Layout Plan Water Reticulation Layout Plan	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
Road Layout Plan	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
Dedication and Easement Plan	Report on Engineering and Environmental Matters	Cardno (Qld) Pty Ltd	2
Open Space/Landscape Plan	Master Planning Report	ML Design Architect Planners	3
Landscape Concept Plan Stage 1 Landscape Works Circulation and Accessibility Retail Centre	Landscape Concept Report	EDAW/ AECOM	6
Series of 6 perspective sketches (continued) (continued) Locality Plan	Retail Centre Design	Donovan Hill Architects	4
	Stage 1 Landscape Works Circulation and Accessibility Retail Centre Series of 6 perspective sketches (continued) (continued)	Landscape Concept Plan Landscape Stage 1 Landscape Works Concept Report Circulation and Accessibility Concept Report Retail Centre Retail Centre Series of 6 perspective sketches (continued) Retail Centre Locality Plan Locality Plan	Image: constraint of the sector of the sec

Works	Drawing Number	Drawing Title	Report or Other Reference	Author	Attachment Number
	DA6 DA7 - DA8 DA9 - DA10 - DA11 - DA12 - DA13 - Schedule Board	Elevations North and East Elevations West and South Ground Floor Plan First Floor Plan Roof Plan Basement Plan Sections Shadow Diagrams Finishes Schedule Finishes Board			
Signage	DA14 DA15	Building Signage Details Pylon Signage Details	Retail Centre Design	Donovan Hill Architects	4

As stated above, this listing of Project Plan drawings for Stage 1 Works comprises **Exhibit Book 2** enclosed.

It is intended that during Stage 1, the subdivided low-density residential lots will be developed for detached dwelling purposes, in a manner which will mirror adjoining development already established in neighbouring precincts. This will then be followed by the key commercial and mixed use allotments anchoring the eastern and western portions of the Town Centre boulevard, so completing the critical entry statement and eastern surfside interface of the development. The third stage will complete the mixed use allotments in the heart of the Town Centre. All remaining medium density allotments will be subsequently developed in accordance with market demands.

Overall, the staging of the project will reflect a rational and ordered sequence of development, including the delivery of all essential services, commencing with the implementation of a strongly themed "*Main Street*", moving consistently to the "edges" of the Town Centre precinct to mesh seamlessly with the low density express forms of development in adjoining precincts.

In summary, the staged development seeks to establish a strong and vibrant Town Centre village, with a detailed and articulated public realm, which will draw visitors through an active streetscape, supported by a range of permanent and tourist accommodation styles. Accordingly, the Town Centre is anticipated to proceed to completion within the next 8–10 years generally in the following sequence:

Stage No.	Proposed Lot No.s	Land Use
Stage 1	Lot 1,	Retailing
	Lots 19 – 56	Single Lot Dwellings (subdivision of lots)
Stage 2	Lot 2	Commercial (including medical centre, child care centre, community facilities, etc)
	Lot 3	Medium Density Residential
	Lots 5, 12	Mixed Use
	Lot 17	Commercial (including restaurants,
		entertainment, beach retailing)
Stage 3	Lots 6, 13	Mixed Use
	Lot 4, 10, 11, 16	Medium Density Residential
Stage 4	Lot 7-9, 14-15, 18	Medium Density Residential

The proposed staging is indicated in **Figure No.** DA41F (Cardno (Qld) Pty Ltd) – **Staging Plan** in **enclosed Exhibit Books 1** and 2 and also in **Attachment 2**.

1.05 Proposed Population Characteristics

Tweed Development Control Plan (DCP) Section B5 – Casuarina Beach (formally DCP No. 11 dated October 2000) contains population estimates for each of the Management Lots within the Estate, as well as the total estimated population. The estimated population per Management Lot is based on the previously referred Court proceedings which originally approved the Casuarina Beach development, and is consequently based on historical development trends, with 1999 the base year.

Notwithstanding, it is noted that the dynamic nature of the market demands dictate that over the ten-year development life of the Casuarina Beach Estate, the population yields of each Management Lot are likely to vary, to a degree, from those identified in DCP Section B 5 (formally DCP 11).

Section B 5.2.1 of the Tweed DCP estimated the population for Management Lot 5 (Town Centre Precinct) to be 1,520 persons and the estimated population for the Estate as a whole to be 5,600 persons.

It is assessed that the residential built form controls for the subject Town Centre Concept Plan development would support 1,044, say 1,000 or more new households. Considering that the average population per dwelling is 2.3 persons, this estimate would total a minimum of 2,300 persons.

Current market analysis has predicted an estimated total population for the Casuarina Beach community to be of some 3,000 permanent and 2,600 tourist residents. The Year 2007 permanent

resident population figures for the current community is estimated to be 1,068 and 1,246 in 2008 (refer **Attachment 8 – Socio-Economic Impact Assessment** (Conics Pty Ltd)–).

It is observed that the basis for the DCP Management Lot population estimates was formulated in or about 1999, at a time when this part of the Tweed Coast was without the necessary infrastructure and utilities to support a master-planned community. Based on current population estimates from preceding stages of the development, and including the Town Centre Precinct projections, the earlier projected population (5,600 persons) is still considered to be reliable.

Accordingly, and in keeping with the Tweed Coast Strategy which promotes the consolidation of residential densities within existing urban zoned lands, a maximum population of approximately 2,500 persons for the Town Centre Concept Plan is supportible.

It is submitted that the subject development proposal is considered to be a site-responsive approach to urban development opportunity and does take into account the various natural and man-made environmental constraints, both in and around the subject site. In addition, the Concept Plan allows for a range of residential choice which is consistent with the surrounding urban forms and configured so as to create an activity node which will be vibrant and interesting, containing a mix of retail, commercial and medium-density tourist accommodation and residential development within compact, walkable environs.

1.06 Implications of Existing Conditions of Consent

Pursuant to the approved Master Plan (December 1998), Management Lot 5 has always been planned to provide for a Beachside/Seaside Town Centre (refer Approved Master Plan (McInnes Group) in enclosed Exhibit Book 1 and Attachment 1 – Land and Environment Court No 10689 of 1997- Consent S96/135 and Deed of Agreement).

The development has been sequenced to follow the implementation of the largely completed Casuarina Beach development. As one of the last remaining undeveloped parcels, all other matters detailed in the original Consent S96/135 and Deed of Agreement have now been satisfied. Such issues include (but are not limited to):

- construction of external and internal roads, utilities and infrastructure;
- dune management;
- allocation and dedication of active and passive public open space areas;
- landscaping of road reserves and open space;

- native Banksia planting programmes for the foraging of the Queensland Blossom Bat;
- provision of urban services;
- payment of headworks contributions (sewer, water, road network etc), and
- protection of native fauna and flora species and the coastal environment generally,

Accordingly, the Concept Plan is consistent with the content and intent of the Conditions of the original development consent (as approved by the Land and Environment Court), and is consistent with the expectations of the local community.

1.07 Summary

Having regard to the project scope and outline addressed in this Section of the Environmental Assessment, the following matters are summarized.

• Any Development Options

Several Development Options have been presented for consideration. It is the conclusion of this Assessment that any option alternative to the preferred option – the proposed development – would be, and is, inconsistent with the approved and developing urban plan framework of the subject land and lands within the general setting, and would be contradictory to sustained and reasonably held community expectations, and is not supported.

• Justification of the Project taking into consideration any Environmental Impacts of the project, the suitability of the site and whether the project is in the public interest.

This Environmental Assessment has detailed the environmental credentials of the project which analysis demonstrates support generally and in particular the stated response to site specific constraints and opportunities. Overall, the site has demonstrated a suitability for the development as proposed and is held to be within the reasonable expectations of the community, which expectations have been consistent, and long held, in support of the proposed development.

• Outline of the staged implementation of the project.

The project is to be developed over an 8-10 year period in a sequenced form of development reliant upon four (4) stages. Overall, the development will proceed in a rational and ordered manner to ensure an efficient sequence of delivery of essential urban services and the formation, over time, of a cogent, sustainable built form, consistent with community expectations.

2.00 SITE ANALYSIS

A Site Analysis Plan (refer **Figure DA06** – **Site Analysis Plan** (ML Design Architects Planners) in **enclosed Exhibit Book 1**) has been prepared with respect to the various site specific opportunities and constraints which were considered during the design phase of the Concept Plan Application.

2.01 Site Location and Description

The subject site is located in northern New South Wales, approximately 5.0 kilometres to the south of Kingscliff, being part of the Casuarina Beach development. The subject site is described as Lot 223 in DP 1048494, Lot 3 in DP 1042119 (Closed Road), Lot 144 in DP 1030322 and Lot 13 in DP 1014470, Parish of Cudgen, County of Rous, having areas of 19.03 hectares, 0.9575 hectares, 1.076 hectares and 5.215 hectares (excluding road) respectively, totalling 26.2785 hectares (refer **Figure DA20G** (Cardno (Qld) Pty Ltd) – **Locality, Site Plan**– see **enclosed Exhibit Book 1** and **Attachment 2**).

The above referred Lot 13 is a Public Reserve under the control of Tweed Shire Council, adjoining the areally extensive Lot 500 in DP 727420, being foreshore lands. A formal request to Tweed Shire Council seeking its consent to the inclusion of Lot 13 in the lands, the subject of this Application is appended. (See Appendix A – Request to Tweed Shire Council for Consent to include land in Application).

The western portion of the subject site is bounded by Old Bogangar Road (new Coast Road) with lands to the north and south of the site being developed as Casuarina Beach North and North-West Precinct and Casuarina Central Precinct, respectively. The subject site has road frontage to Old Bogangar Road, Dianella Drive and connections to both the northern and southern boundaries of Casuarina Way (refer **Figure DA21E** (Cardno (Qld) Pty Ltd) – **Air Photo 2005** – see **Attachment 2**).

2.02 General Characteristics

Topography

The subject site is located on a low-lying coastal plain. The current topography is a result of intensive sand mining (which continued into the 1970's). The topography consists of a low ridge, with a maximum level of between 10m and 12m AHD, which runs north to south along the central section of the lot (refer Figure No. DA22G (Cardno (Qld) Pty Ltd) – Existing Contours Plan – see Attachment 2).

^cThis ridge is a remnant of the construction of the new Coast Road in the first stage of Casuarina Beach. On the western side of the ridge, substantial earthworks took place in 1999 as part of this construction. The ground levels in this part of the site vary from about 10m AHD adjacent to the ridge, to about 3m AHD on the eastern edge of the road. On the

eastern side of the ridge, the site remains unchanged in level from its pre-existing condition. From the east to the west, levels fall from 10m AHD on the line of the beach dunes to a depression with a level of about 6m AHD, before rising again to meet the ridge level of 12m AHD' (refer Attachment 2 – Report on Engineering and Environmental Matters – Appendix F – Acid Sulphate Soil Management Plan (Cardno (Qld) Pty Ltd))

Access

Access to the subject site is currently provided from the extension of Casuarina Way near Steelwood Lane at the southern end to the Dianella Drive roundabout to the north (refer Figure DA23G (Cardno (Qld) Pty Ltd) – Road Layout Plan in enclosed Exhibit Book 2 and Attachment 2).

Vegetation and Soils

The dominant vegetation type at the Town Centre site is best described as coastal shrub-land which is dominated by Coastal Banksia, Coastal Tea-tree, Wattles and Coastal Oak in the canopy layer and Lantana and the exotic Bitou Bush in the understorey (refer Attachment 2 – Report on Engineering and Environmental Matters – Appendix C – Ecological Assessment Report (Cardno (Qld) Pty Ltd))

'These vegetation types occupy the majority of the site and has regenerated, both naturally and as a result of post mining rehabilitation efforts, since the late 1960s. The balance of the site is comprised of areas of significant post mining disturbance that are primarily vegetated with introduced grasses and regenerating shrubland' (refer Attachment 2 – Report on Engineering and Environmental Matters – Appendix C – Ecological Assessment Report (Cardno (Qld) Pty Ltd)).

The soil profile of the subject site is typical of most of the Casuarina Beach Township site which has been extensively mined, and comprises dunal sands and beach ridges extending from the beach dune to beyond the alignment of the Coast Road. Quartzose sand is identified in surface deposits (refer Attachment 2 – Report on Engineering and Environmental Matters – Appendix F – Acid Sulphate Soil Management Plan (Cardno (Qld) Pty Ltd)).

Climate

The region experiences a reasonably humid, sub-tropical climate. Average maximum summer temperatures range from 25° to 30° (Celsius), whilst the average maximum winter temperatures range from 20° to 25° (Celsius). Minimum temperatures are in the order of 5° to 15° (Celsius).

The region has an average annual rainfall of 1,650mm, with most (65%) occurring between December and April.

2.03 Zoning

Site Zoning

The Tweed Local Environmental Plan 2000 is applicable to the whole area of the Tweed Shire. Pursuant to the Tweed LEP 2000, the subject land is zoned 2(e) Residential Tourist Zone'. The land adjacent to the eastern dune is zoned 7(f) – Environmental Protection (Coastal Lands). The majority of development involving construction will be limited to land zoned 2(e) however, some operational and road works, including the construction of an esplanade, the realignment of the foreshore cycleway and the provision of some drainage swales, are proposed within 7(f) zoned land. The zoning implications for the proposed development are addressed in detail in Attachment 11 – Statutory Assessment of Development Proposal – Section 1.05 – Tweed Local Environmental Plan 2000 of this Report.

Surrounding Zoning

Pursuant to the Tweed LEP 2000, the balance Casuarina Beach development (save for the 7(f) zoned land adjacent the eastern dunes) is also zoned 2(e) Residential Tourist Zone. This signifies Council's intent to foster a residential/tourist development in this area.

The land adjacent to the subject site, to the west of Old Bogangar Road (new Coast Road) is zoned 7(1) Environmental Protection (Habitat), and forms part of the Kings Forest Reserve which was dedicated as part of the Stage 1 approval (refer Attachment 1 – Land and Environment Court No 10689 of 1997- Consent S96/135 and Deed of Agreement).

2.04 Land Uses

The subject land is currently undeveloped. Land to the west forms part of the Kings Forest Reserve. The land to the north and south is zoned for tourist and residential purposes, namely Casuarina Beach North, North-West and Central Precincts. In general terms, the adjoining land to the north and south has been cleared and re-contoured, and subsequently subdivided and developed for residential purposes (refer **Figure DA21E** (Cardno (Qld) Pty Ltd)– **Air Photo 2005** – see **Attachment 2**).

2.05 Aboriginal Cultural Heritage

Given the extensive sand mining that has occurred over most of the site, and the previous investigations undertaken as part of the Casuarina Beach development approval process, it is advised that no Aboriginal relics of any significance are extant. This is generally addressed in the **Attachment 2 – Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd), at Section 14.

It is further advised that the matter is being more particularly addressed in an Aboriginal Cultural Heritage Assessment currently being undertaken, as follows:

"In accordance with the Interim Community Consultation Requirements for Applicants, December 2005 published by the Department of Environment and Conservation (now Department of Environment and Climate Change) ("DECC"), Mary Dallas Consulting Archaeologists ("MDCA") has commenced the consultation process with the Aboriginal community about the Aboriginal cultural heritage values (cultural significance) of Aboriginal objects and places within the area of the proposed development.

On 28 April 2008 MDCA wrote to The Registrar of Aboriginal Owners at the New South Wales Department of Aboriginal Affairs, Rojer Meher, Archaeologist at the Northern Region office of the DECC, the General Manager of the Tweed Shire Council and the New South Wales Native Title Services requesting details of any organisations or individuals with traditional or historic links to the land at Casuarina Beach who may wish to assist the aboriginal cultural heritage assessment of the land. MDCA has also made direct contact with the Tweed Byron Local Aboriginal Land Council.

On 30 April 2008, MDCA placed an advertisement in the Tweed Daily News Classifieds – Public Notices seeking registrations of interest by Aboriginal stakeholder groups with an interest in the project. The registration period closed on 14 May 2008.

MDCA has received one written response from the Registrar of Native Title Services who referred her to the Tweed Byron Local Aboriginal Land Council. MDCA also received a telephone contact from a Jackie McDonald on behalf of a person who claims to be a Native Title claimant with an interest in the land. It is noted that the land in question is freehold title and so Native Title has been extinguished.

MDCA proposes to meet with these and any other interested persons on site by the end of June, to provide opportunity for relevant stakeholders to contribute to the assessment process. MDCA will use this information to prepare a draft Cultural Heritage Assessment Report for circulation to the relevant stakeholders for comment and finalisation. A copy of this draft Cultural Heritage Assessment Report will also be provided to the Director-General."

By further letter dated 27 June 2008, Mary Dallas Consulting Archaeologist advised as follows:

"CASUARINA TOWN CENTRE PART 3A MAJOR PROJECT CONCEPT AND PROJECT APPLICATION – ABORIGINAL AND EUROPEAN HERITAGE ASSESSMENT

This letter provides a brief summary on our findings to date on the Aboriginal and European Heritage Assessment of the Casuarina Town Centre site. The full and final report will provide detail on the research into the Aboriginal and European historic background, environmental and archaeological context of the site, predictive modelling for the identification of sensitive areas or areas of archaeological potential, significance assessment, impact assessment and provision of management options

The current assessment was preceded by a process of Public Notification calling for Expressions of Interest from the Aboriginal community, pursuant to the Department of Environment and Climate Change (DECC) 2004 Interim Guidelines on Aboriginal Community Consultation. We received two responses: from the Tweed Byron Local Aboriginal Land Council (T-BLALC) and Ms Jackie MacDonald. Discussions concerning site condition and land use history were held with both these parties prior to the field survey.

The background research, Aboriginal community consultation and previous interviews with members of the Aboriginal community by the author have shown that the history of local sand mining has had a significant effect on local Aboriginal families. Aboriginal men engaged in the sand extraction process, along the far north coast, were powerless to act (in fear of dismissal) when traditional Aboriginal burials within the fore dunes were exposed and taken out to the processing plants. This remembered history should be commemorated at the Casuarina Town Centre. Appropriate interpretive signage on the past Aboriginal occupation could augment existing public art in the area and provide an important historical dimension to the development site. It is recommended that consultation with members of the Aboriginal community should be continued in regard to signage content and placement.

Preliminary investigations into the land use history of the site show that the sand extraction took place at the site between the mid-1950's in response to demand created by the Korean War until the late-1970's at which time, an extensive program of site rehabilitation commenced. The process of sand extraction included deep dredging and removal to nearby processing plants for mineral separation. The aim was to procure and process the mineral rich 'black sands' contained within the coastal foredune and 'back runs'. Aerial photographic imagery from the 1950's shows a relatively intact coastal landscape but by the 1970's the entire site is heavily modified and near denuded. Efforts were made to rehabilitate Bogangar Beach both during the mining phase and at its conclusion. This included the forming up of the remaining sand body and its planting with indigenous and non-indigenous vegetation. Parts of the margins of the subject lands appear to have been modified for access and drainage purposes at the time of the Casuarina Beach development.

MDCA conducted a fully comprehensive archaeological survey on 18 June 2008 over the entire area proposed for development. The survey was conducted in consultation with the Tweed Byron Local Aboriginal Land Council and Ms Jackie MacDonald. Representatives of the Aboriginal organisations who participated in the field survey were Mr Cyril Scott of the T-BLALC and Ms Jackie MacDonald and Mr Levi MacDonald representing Mrs Joyce Summers, a Native Title claimant and local Elder.

The survey confirmed the disturbed nature of the entire site. No Aboriginal cultural objects or sites were identified on the land. No areas of potential archaeological deposit were identified and the 'likelihood that the land retains undisturbed substantial or significant Aboriginal cultural remains is negligible'. There is no Aboriginal archaeological investigation under a DECC s.87 Permit or s90 Heritage Impact Permit. Part 6 approval under the National Parks & Wildlife Act 1974 is not required.

The European Heritage value of the site is minimal. The landscape is relatively modern and one resultant of mid-20th century mining and rehabilitation works and more recently adjacent residential development. The site contains no structures or above ground features of European Cultural Heritage significance and is unlikely to contain buried archaeological relics. In addition, neither the site, nor the elements within it, is listed on the NSW Heritage Officer's State Heritage Inventory (SHI) or the Register (SHR), or within the heritage provisions of the LEP, or within any other relevant statutory or nonstatutory register."

The above references are contained in Attachment 15 – Aboriginal and European Heritage Assessment.

3.00 STATUTORY ASSESSMENT OF DEVELOPMENT PROPOSAL

The application is subject to the requirements of, inter alia, the following statutory instruments:

- Environmental Planning and Assessment Act 1979 Part 3A Major Infrastructure and Other Projects
- State Environmental Planning Policy (Major Projects) 2005 Schedule 1 Part 3A Projects – Classes of Development Group 5 Residential, Commercial or Retail Projects (Clause 13(1) – Residential Commercial or Retail Projects) Group 6 Tourism and Recreational Facilities (Clause 17(b)) – Tourist, Convention and Entertainment Facilities Schedule 2 Part 3A Projects – Specified Sites (Coastal Areas)
- State Environmental Planning Policy No 11 Traffic Generating Developments
- State Environmental Planning Policy No 55 Remediation of Land
- State Environmental Planning Policy No 65 Design Quality of Residential Flat Development
- State Environmental Planning Policy No 71 Coastal Protection
- North Coast Regional Environmental Plan 1988 (NCREP) Part 3 – Conservation and the Environment Part 4 – Urban Development Part 5 – Regional Infrastructure Part 6 – Tourism and Recreation
- New South Wales Coastal Policy 1997
- Coastal Design Guidelines (CDG) for NSW Discussion Paper
- Coastal Management Manual (1990)
- New South Wales National Parks and Wildlife Service Gazetted Maps
- Northern Rivers Strategy 1999
- Tweed Shire Strategic Plan 2004-2024
- Tweed Local Environmental Plan 2000
- Far North Coast Regional Strategy 2006 2031
- Tweed Development Control Plan (DCP) Section A1 - Multi-Dwelling Housing and Tourist Accommodation (including Residential and Tourist Development Code)
 Section A2 - Site Access and Parking Code
 Section A3 - Development of Flood Liable Land
 Section A4 - Advertising Signs Code
 Section A5 - Subdivision Manual

Section A11	-	Public Notification Policy
Section A13	-	Socio Economic Impact Assessment
Section A14	-	Cut and Fill on Residential Land
Section B5	-	Casuarina Beach
Section B9	-	Tweed Coast Strategy
Section B18	-	Tweed Coast Building Heights

• The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

The application is also subject to reference to the following non-statutory documents:

- The Tweed '*Ready for Growth*' Economic Growth Management Strategy 2007-2010
- The Tweed Retail Strategy 2005
- The Tweed Economic Vision & Strategy 2007-2010

In summary, the proposed Concept Plan Application and Project Application for Stage 1 Works are generally in accordance with all relevant statutory and non-statutory requirements applicable to this Application. The proposed development is described as permitted and/or permissible development with respect to the 2 (e) and 7 (f) Zones and therefore is supportible on these grounds.

A detailed assessment of the relevant aspects of these instruments is addressed in Attachment 11 – Statutory Assessment of Development Proposal of this document.

4.00 ASSESSMENT OF POTENTIAL IMPACTS AND DRAFT STATEMENT OF COMMITMENTS

4.01 Potential Impacts

The potential impacts associated with the proposed Concept Plan and Project Application for the development of the Casuarina Beach Town Centre generally include the following elements:

- community awareness;
- air quality;
- noise emission;
- erosion and sediment control;
- contaminated land;
- stormwater quality;
- traffic management;
- waste management;
- threatened species⁽¹⁾; and
- Aboriginal cultural heritage.

A detailed assessment of potential impacts associated with both the Concept Plan Application and the Project Application for Stage 1 Works having regard to the abovementioned elements has been examined elsewhere in this Environmental Assessment. In addition, the **attached** Reports prepared by specialist consultants provide a further assessment of such matters.

It is the stated commitment of the Applicant to minimize any potential impacts arising from the Casuarina Beach Town Centre project and to address the formulation and implementation of any and all mitigation measures. An Environmental Management Plan (EMP) has been prepared to provide structure and to clarify deliverables with reference to the environmental management requirements for the construction of the proposed development (refer Attachment 12 – Environmental Management Plan (Cardno (Qld) Pty Ltd)).

 A Peer Review of this reporting upon Environmental Issues has been prepared by Dr David Robertson, Director, Cumberland Ecology (see Attachment 13 – Casuarina Beach Town Centre: Review of Flora and Fauna Impact Assessment) in support The EMP provides performance criteria that are to be met so that the impacts of the works on the physical and social environment are minimised. In particular, the EMP provides mechanisms whereby the environmental performance associated with the works can be measured and if required, provides procedures where agreed corrective actions are able to be implemented (refer **Attachment 12 – Environmental Management Plan** (Cardno (Qld) Pty Ltd)).

4.02 Statement of Commitments – Concept Plan

The following commitments have been compiled based on the environmental assessment undertaken in the preparation of this Report. They provide a commitment by the proponent of the project, Kings Beach No. 2 Pty Ltd, indicating the responsibilities and timing to implement measures to minimise the environmental impacts that have been identified through this assessment. The commitments are to ensure that the Casuarina Beach Town Centre is environmentally, socially, and economically sustainable. The Statement of Commitments outlines a programme of works that will be undertaken at the inception of the Concept Plan.

PROJECT	COMMITMENT	ENVIRONMENTAL	TIMING FOR
COMPONENT		OUTCOME	COMPLETION
1. Development Contributions	 The proponent will pay the lawful contributions in accordance with any condition(s) of consent granted under Part 4 of the Act and calculated in accordance with any relevant Section 94 Contribution Plan(s), taking into account any referable or other applicable credits for prior contributions to the public benefit. Such contributions will be paid at each Stage of the development relevant to such payment. 	 The Proponent and the Local Government Authority agreeing to a range of lawful contributions to ensure the timely delivery of local infrastructure and community services Provide certainty for the delivery and quality of the public domain elements of the project Ensure the project's compatibility with local strategies 	Payment will be effected prior to the issue of a Construction Certificate for Project Application for Stage 1 Works, namely, the Stage 1 construction of the proposed shopping centre

PROJECT COMPONENT	COMMITMENT	ENVIRONMENTAL OUTCOME	TIMING FOR COMPLETION
2. Urban Design	 Urban Design Guidelines will be developed to ensure design excellence is achieved in the architecture of private buildings and the public domain (streets, parks, and squares). This will include building designs and standards. The Guidelines will also take into account the Tweed DCP requirements The detailed urban design guidelines will be provided as part of project or development applications for subdivision and infrastructure works for each of the neighbourhood stages of the Town Centre. These guidelines will be submitted with future project or development applications for subdivision and infrastructure works. 	 Ensuring that over the various stages of the development there is consistency of standards for the built environment That the built form meets the best modern Australian coastal design standards Ensuring that the Sustainability Objectives of the development are implemented 	Guidelines issued prior to the issue of a Construction Certificate
3. Environmentally Sustainable Development	 The Proponent is committed to an adherence to the principles of sustainability as defined in the Environmental Planning and Assessment Act 1979. The proposed development will incorporate a range of relevant ESD initiatives to minimise the impact of the projected development on the environmental 	• Ensure that all development on the site is managed in an environmentally sustainable manner	From Stage 1 but will be implemented in all Stages of the Project

PROJECT COMPONENT	COMMITMENT	ENVIRONMENTAL OUTCOME	TIMING FOR COMPLETION
	including reduction in energy, water and waste generation by adherence to and implementation of, a suite of on-site management plans detailed in and/or attached to the Environmental Assessment, and upon which management protocols the proponent relies.		
4. Open Space and Public Walkway /Cycle Connections	 The Proponent will dedicate 5,767m² of privately held 7(f) lands as public open space to encourage a larger, more legible public realm which promotes permeability within the 7(f) zone. A total 9,801m² (including the above dedication) of public open space will be created, and will encompass the realignment and up-grading of the existing foreshore cycleway. This land will be dedicated to Tweed Council The proponent will design and build all the landscape elements of the public space Landscaping is to rely heavily on the use of native species Provision will be made in the public domain for Surf Life Saving Facilities 	 The Town Centre Park will create a large open recreational area for the whole of the Casuarina Beach village. It will cater for a wide variety of public uses from passive recreation to organised public events Allows full public access to the foreshore Allows full north- south pedestrian and cycle permeability throughout the length of the site Allows for easy east-west pedestrian and cycle links through the site There will be an upgrading of the foreshore walkway/cycleway The choice of local native plans will improve the habitat of the local fauna 	 The land will be dedicated in Stage 1 All landscaping works will be constructed in Stage 1

PROJECT COMPONENT	COMMITMENT	ENVIRONMENTAL OUTCOME	TIMING FOR COMPLETION
5. Foreshore Access and Public Beachside Car Parking	 The proponent will establish approximately 175 metres of publicly accessible beach access consisting of parkland and esplanade roadway, directly east of the centre east west axis boulevard. The proponent will provide 170 car spaces at a rate of 300 public spaces per kilometre length of beach within 200m of the beach The proponent will undertake these works and dedicate them to Council 	 Ensure full 24 hour a day access to the foreshore and walkway/cycleway for the public Visitors to Casuarina Beach will have easy access to the parkland, the beach and the village facilities 	All works to be completed in Stage 1
6. Traffic Management	 The proponent will design and construct all roads within the Town Centre in accordance with Australian Standards 	• There will be a highly coordinated approach to the traffic management on the site	All roadworks will be constructed in Stage 1
	 The roadworks include connecting Casuarina Way's missing northsouth link and creating a new and safer access point to the Coast Road The proponent will design and construct all the pedestrian and cycle pathways in accordance with the attached plans The road network will be capable of servicing the local bus needs. Provision for bus stops will be made. The proponent will design and install all the traffic management measures, like traffic lights, in accordance with Australian Standards 	 The mix will ensure that the traffic movements are compatible with the pedestrian and cycle movements particularly given the tourist village style of development Separation of the retail traffic around the supermarket from the quieter recreational traffic uses near the foreshore Creates the opportunity for improved and faster bus services 	

PROJECT COMPONENT	COMMITMENT	ENVIRONMENTAL OUTCOME	TIMING FOR COMPLETION
	• The proponent will undertake the works required for the closure of Dianella Drive	• A safer exit/entry point to the Coast Road for the residents of	
	• The proponent will dedicate the roads to Tweed Council upon construction completion	Casuarina Beach	
7. Infrastructure	• The proponent has identified in this report the infrastructure required to support all of the proposed development in the Concept Plan. The areas of infrastructure include:	 Casuarina Village will be well serviced with all its basic infrastructure needs from the beginning of the project 	Infrastructure works will be undertaken in Stage 1
	- sewerage		
	- water supply		
	- telecommunications		
	- electricity supply		
	- waste disposal		
	• Specific commitments include:		
	Upgrading of the pumps in Pump Station 2 and the installation of additional main capacity of the sewer mains		
	A connecting 150mm diameter main to the main aster supply		
8. Water Sensitive Urban Design	• The proponent commits to implementing a Water Sensitive Urban Design Strategy (WSUD) in accordance with the WSUD outlined in this report	• The system will substantially reduce the contaminant loads in Cudgen Creek and the Pacific Ocean	The WSUD will be delivered in Stage 1
	 Specific actions are: The on-site stormwater 	 It meets environmentally sustainable principles 	

PROJECT COMPONENT	COMMITMENT	ENVIRONMENTAL OUTCOME	TIMING FOR COMPLETION
	management system will capture and retain virtually all the run-off from the site		
	- The east west swale will be moved ¹		
	- Modifications to the frontal swale		
	- Re-contouring of the site will improve the drainage patterns		
9. Soil Contamination	• The proponent undertakes to comply with any and all guidelines endorsed by the relevant Authority to assess the extent of any surface or subsurface contamination prior to commencement of construction	• A safe site fit for habitation	Works will be undertaken in Stage 1
10. Management of Construction Noise, Vibration, Dust, Soils and Erosion	 Management of construction noise, vibration, dust, soil, and erosion during the construction phase of the development will be undertaken strictly in accordance with the relevant management plans and in accordance with the aforementioned and approved Environmental Management Plan for the development. 	 Minimise the impacts of the construction activity on the environment and on the neighbouring communities 	Implemented prior to the issue of a Construction Certificate
11. Management of Construction Waste	• The proponent undertakes to adopt approved targets as performance requirements for the management of construction waste.	• Minimise the impacts of the construction activity on the environment and on the neighbouring communities	Implemented prior to the issue of a Construction Certificate

PROJECT COMPONENT	COMMITMENT	ENVIRONMENTAL OUTCOME	TIMING FOR COMPLETION
12. Management of Construction Traffic	 A Construction Management Plan will be prepared prior to the issue of a Construction Certificate. The Plan will include the principles set out in this Report to minimise construction traffic impacts at all times of the construction process. 	• Minimise the impacts of the construction activity on the environment and on the neighbouring communities	Implemented prior to the issue of a Construction Certificate
13. Community and Stakeholder Engagement	 The proponent undertakes to implement a complaints registration procedure to record and to address any and all issues in relation to the construction phase of development The proponent commits to establishing community consultation mechanisms during the assessment and sales stages of the development 	• The community and the local authorities are fully informed and consulted throughout every stage of the projects' development	Community consultations have already been established. They will be maintained. Ongoing throughout every stage of the Project

5.00 5.00 STATEMENT OF INDEPENDENCE

This Environmental Assessment was prepared by Victor G Feros Town Planning Consultants and supported by a range of specialist consultants whose reports are appended.

It is hereby certified that the information contained in this Environmental Assessment is, to the best knowledge of the undersigned neither false nor misleading.

Signed for and on behalf of the authorship

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Dated

VICTOR G FEROS GCSJ BA MUS FPIA CMILT LGTP(Q) CPP Principal VICTOR G FEROS TOWN PLANNING CONSULTANTS

Adjunct Professor School of Geography, Planning & Architecture The University of Queensland

6.00 DIRECTOR GENERAL'S KEY ISSUES (CONCEPT PLAN)

As stated earlier in this Assessment, the Director-General's Requirements in this matter were issued on 17 January 2007, in response to the Ministerial advice, by letter dated 9 December 2006, authorizing a Concept Plan application for the proposed Casuarina Beach Town Centre, the subject of this Environmental Assessment.

By further letter dated 21 March 2007, Amended Director-General's Requirements (DGR's) were notified with particular reference to the inclusion of a Project Application for Stage 1 works. Accordingly, this Section of the Assessment addresses the identified Key Issues, as required by the aforementioned NSW Department of Planning's letter dated 21 March 2007 (in the sequential order of the Requirements).

6.01 Land Use Pattern and Visual Impacts

6.01.1 Integration and Compatibility of Land Uses

"1.1 Consider the integration and compatibility of the proposed land uses (retail, commercial, residential, tourist, open space) across the site with regard to access arrangements, traffic, environmental buffers, density controls and suitability of the land use with surrounding development."

The Town Centre Concept Plan proposes the integration of retail, commercial, mixed use, open space and mixed commercial/retail land uses along the east–west "*Main Street*" axis (the boulevard) between Tweed Coast Road and the beach (refer Attachment 3 – Master Planning Report (ML Design Architects Planners)).

The design enables designated commercial and retail development to occur as well as facilitating the convenience of a mixed land use approach so that activity along the full length of the east-west activity centre is maintained in a manner in which the amenity values associated with all uses may be maintained without adverse impacts upon the coastal residential character of the community (refer **Attachment 5 – Urban Design Report** (Malcolm Middleton Architects)).

The "*Main Street*" boulevard connects the two major service roads at ninety degrees and provides a linear urban form which services traffic/transport demand patterns necessarily associated with the proposed land uses in an efficient and safe manner.

The integrated land uses have been carefully placed within an overall network that provides efficient and equitable access to the public and private car parking areas within the activity node, as well as facilitating convenient access to the beach.

As referenced in the Attachment 5 – Urban Design Report (Malcolm Middleton Architects), the proposed subdivision pattern has been determined with the idea of generating locations for mixed use sites as an important concept that will support the Town Centre.

The form of the subdivision has evolved to support a modified grid approach with separation of both high and low order commercial traffic volumes and the provision of activated frontages to the main pedestrian areas that will support visitor and tourist activity.

It is anticipated that the residential component of mixed use areas will be utilised primarily by short stay residential users who will not have expectations for quieter residential amenity to the same degree that would be expected from permanent residents.

Mixed use sites are located on street frontages with good pedestrian volumes and overlooking surveillance to ensure public standards of behaviour are monitored within and from the areas of public realm within the Town Centre.

Low density residential areas are not located in direct interface with mixed use operations.

It is anticipated that operating hours for mixed use sites will extend into the evening, but there is no expectation of late night uses beyond normal food and beverage standards apart from the hotel site which is effectively stand alone and capable of being acoustically isolated from residential uses.

Notably, the stated principles of the Town Centre Design upon which the Concept relies are in close accord with the principles contained within the Guidelines for Coastal Settlements in NSW (refer Attachment 5 – Urban Design Report (Malcolm Middleton Architects)).

The proposed allotments adjacent to the eastern boundary have been configured so as to allow for suitable building setbacks which are buffered from the coastal dunes by the existing public open space reserve and cycleway walkway corridor. In addition, 8,109m²

of privately owned Environmental Protection 7(f) zoned land will also be dedicated as part of this Concept Plan.

Being one of the last remaining undeveloped parcels within the Casuarina Beach Estate, the proposed residential densities and pattern of development complies with the requirements within the Tourist Residential 2(e) zone and will establish building heights and density controls which are consistent with the nature of surrounding development already constructed within the Casuarina Beach Estate and within the immediate locality.

6.01.2 Variations from Approved Development Plan (December 1998 NSW LEC)

"1.2 Justify any inconsistencies in the proposed concept plan for the site from the Development Plan approved by the Land and Environment Court (LEC)."

The proposed Concept Plan is generally in accordance with the original approved Master Plan (dated December 1998) as it will develop an integrated mixed land use focus which supports a measured level of retailing, lower-order commercial and community services, open space and public access to the beach within a consolidated and long-anticipated Town Centre node (refer **Attachment 3 – Master Planning Report** (ML Design Architects Planners)).

The layout seeks to develop further the fundamental intent of the original approved Stage 1 Master Plan (dated December 1998) which generally defined the subject site as a beachside/seaside village, so as to create a vibrant and sustainable urban community.

Inevitably, as is inherent in the maturation of projects of this kind, there have emerged variations from the Development Plan approved by the NSW Land and Environment Court (LEC), which include:

- Town Centre boulevard (40m wide west of Casuarina Way and 31.4m east of Casuarina Way) connecting the Coast Road to the core "*Main Street*" activity node and the beach;
- the reconstruction of Dianella Drive where it connects to Tweed Coast Road, by the formation of a cul-de-sac, for reasons of safety, and diversion of all traffic along Casuarina Way through to a central 90-degree intersection with the Town Centre boulevard;
- inclusion of a mixture of land uses and residential development opportunities (detached house, community, medium-density and mixed use)

- retention of a Beach Esplanade in amended form, however within an enhanced foreshore landscaped open space setting; and
- dedication of additional open space areas, including pocket parks, with a direct interface with the walkway/cycleway and controlled beach connection points, notwithstanding that all statutory public open space requirements have been previously met.

In general and specific terms, these variations:

- improve public access to the Town Centre;
- provide a higher level of service to retail and commercial development sites without adverse impacts upon the amenity of surrounding residential areas;
- achieve a core activity centre which is more legible in "Main Street" terms,
- improve functionality as it facilitates efficient cross access between Casuarina Way and the Tweed Coast Road,
- enable and facilitate equitable access via a range of modes without conflicts or compromises in safety;
- provide the structure to build a vibrant and viable coastal centre to the standard of amenity and design philosophy comparable with that developed within the immediate vicinity;
- manage more efficiently the balance between the provision of public parking and access to the beach and the surrounding amenity for residents;
- enable safer pedestrian movements between land uses and the beach; and
- improve upon design intent of the original Town Centre approval;

(refer Attachment 3 – Master Planning Report (ML Design Architects Planners) and Attachment 5 – Urban Design Report (Malcolm Middleton Architects)).

6.01.3 Retail Demand Planning

"1.3 Justify the size and location of the proposed supermarket anchored Shopping Centre with regard to Tweed Shire Council's Retail Strategy, DCP 11 – Kings Beach, DCP 51 – Tweed Coast Strategy, the objectives of the 2(e) Residential Tourist zone and the Far North Coast Regional Strategy".

With respect to the subject application, as addressed in Section 1.07.13 of Attachment 11, the Tweed Retail Strategy anticipates the possible inclusion of additional supermarketanchored centres (other than the centre at Kingscliff), located in one of the following emerging communities of Pottsville Beach, Casuarina Beach/Salt Village and Kings Forest. Based on current growth estimates and the advices that supermarkets will not be developed at Kings Forest or Salt Village, the subject shopping centre is submitted to be generally consistent with the Tweed Coast Strategy (refer Attachment 8 – Socio-Economic Impact Assessment (Conics Pty Ltd)).

With reference to Tweed Shire Council DCP Section B5 – Casuarina Beach (formally DCP 11 Kings Beach) as addressed in Section 1.07.10 of Attachment 11, it is noted that all of the 56 proposed new lots are within 400m of the Town Centre boulevard which will contain retail, commercial, community services and open spaces provisions as generally described above and in general accordance with the Court-approved Master Plan (December 1998) for the settlement. The proposed Concept Plan has developed a settlement pattern which will create active street frontages along the full length of the central Town Centre boulevard. In particular, the Stage 1 retail shopping centre aims to create an engaging and interactive public realm, which achieves a high standard of architecture, representative of the coastal climate, character and values of the wider Casuarina Beach community (refer Attachment 4 – Retail Centre Design (Donovan Hill)).

The Tweed Coast Strategy (refer Section 1.07.10 of Attachment 11) anticipates the development of three (3) local town centres at Kingscliff, South Kingscliff and Kings Forest. The Strategy states that the primary purpose of the local centres is to provide for the day-to-day commercial and service needs of the local area only, service a population catchment of up to 10,000 people and incorporate between 1,500m² and 6,000m² of retail floor space, according to local demand. In response, it is submitted that the Concept Plan, which proposes the development of a Town Centre in accordance with the original Master Plan approval for Casuarina Beach and the proposed Stage 1 which includes the development of a shopping centre with 3,660m² retail floor space and limits the extent of additional retail floor space provided within the mixed-use and retail/commercial allotments (Lots 2, 5, 6, 12, 13 and 18) to 2,000m², is in accordance with Tweed Coast Strategy (refer **Attachment 8 – Socio-Economic Impact Assessment** (Conics Pty Ltd)).

As the Town Centre Precinct has been the long-term planned focal point for extensive tourism and tourism-related development on the Tweed Shire Coast consistent with the expressions contained in regional and local planning instruments, the scale of the proposed retail area has been contained. The shopping centre has been sensitively designed to service the demand and needs consistent with the residential densities of the Casuarina Beach community and those of the immediately surrounding '*New Tweed Coast*' communities from Salt to Pottsville. There is further demonstration that the subject

proposals are in accordance with the objectives of the 2(e) Residential Tourist Zone as they facilitate the development of activities which have an association with a residential/tourist environment and have been specifically designed so as not to affect adversely the residential amenity of the area (refer **Section 1.05 of Attachment 11**).

The Far North Coastal Regional Strategy (refer **Section 1.06 of Attachment 11**) promotes a clear hierarchy of commercial centres, centrally located and consistent in scale, located within each community. Accordingly, as the scale of the proposed shopping centre is within the limits for a Local Centre as described in the Tweed Coast Strategy, the Concept Plan is consistent with the Far North Coastal Regional Strategy.

When assessed in urban design terms, the location of the proposed supermarket-anchored retail centre is submitted to be in the preferred location. It provides direct access along Casuarina Way for residents of Casuarina Beach and also is directly accessible from Old Bogangar Road for residents along the New Tweed Coast utilizing this collector system.

With further reference to the reporting in Attachment 8 – Socio-Economic Impact Assessment (Conics Pty Ltd) of this Environmental Assessment, in a comparative assessment of the merits of competing supermarket interests at Casuarina Beach, Pottsville and Cabarita, the concluded view was that, for stated reasons, a supermarket-anchored centre at Casuarina Beach and another at Pottsville in 2011-2012, is the best outcome for the communities sought to be serviced; and that further, Cabarita was not considered to be an appropriate location for a supermarket-anchored centre.

The current proposal is intended to strengthen the east-west link between Tweed Coast Road and the beach by creating two complementary "*anchors*": the retail/community service component at the western end of the site, and the beach/civic park/entertainment component at the eastern end. The strong visual and pedestrian connection between these two "*anchors*" creates the "*Main Street*" character that is intended to epitomise the Casuarina Beach experience.

The shopping centre is intended to be separated from the slower-paced retail, recreation and tourist activity located in closer proximity to the beach and the open space public realm leading to the beach. Again, this is consistent with good urban design principles of activation for the Town Centre so reducing conflicts between higher activity associated with supermarket shopping and the lower-scaled activities of recreation and tourist retailing. The size of the centre, which, it is submitted, is justified in terms of economic assessment (Attachment 8 – Socio-Economic Impact Assessment (Conics Pty Ltd–)), seeks to facilitate integration as an important contribution to the Town Centre itself. This is achieved not only by its fundamental siting but also through its street engagement and architectural form which is of a significantly higher standard than normally provided (refer Attachment 3 – Master Planning Report (ML Design)– and Attachment 5 – Urban Design Report (Malcolm Middleton Architects)).

6.01.4 Residential Design and Layout

"1.4 Demonstrate the consistency of the proposed residential subdivision with the NSW Coastal Design Guidelines."

The proposed residential subdivision associated with the Concept Plan will create the following allotments:

Land Use	Number of Lots
Retailing	1
Commercial (including office, medical centre, child care centre, community facilities, etc)	1
Commercial (including restaurants, entertainment, beach retailin	g) 1
Mixed Use	4
Medium Density Residential	11
Low Density Dwelling	<u>38</u>
TOTAL	56

With respect to the Coastal Design guidelines, the subdivision layout and design seeks to achieve the following:

Defining the footprint and boundary

- the seamless integration of the proposed Single Dwelling lots (37 lots) within the existing surrounding cadastre;
- the dedication of 8,109m² privately owned 7(f) lands will assist in providing an adequate building separation from the coastal dunes so as to protect natural areas and coastal ecosystems;
- the maximising of the use of utilities, services and infrastructure
- the placement of non-residential land uses along the interface with the Tweed Coast Road;

Connecting Open Spaces

- new open space opportunities to connect with existing reserves and buffers to facilitate an interconnected network of open spaces as has been consistently applied throughout the Casuarina Beach community generally;
- the provision of pedestrian access to connect all activities nodes throughout the settlement as well as to connect residential areas to commercial and retail locations;
- the provision of an open-space network system within the settlement in order to connect all public and private recreational areas;
- the creation of a variety of sized public open spaces to serve a range of different active and passive recreational uses within the settlement;
- the establishment of edge open-spaces with streets and pedestrian pathways;

Protecting the natural edges

- the protection of natural edges through the provision of large land allotments which enable the development of suitable building setback provisions and buffers between natural coastal environments;
- pedestrian and vehicular entry points to the foreshore which are clearly defined with an aim to reduce the impact of traffic through coastal vegetation and other fragile areas;
- the provision of direct pedestrian accesses from the settlement to the foreshore;
- the avoidance of development on frontal dunes;
- the incorporation of limited building heights and sufficient distance from the foreshore edges of the natural environment in order to protect visual amenity and create opportunities for public access as well as to ensure private land and buildings are not affected by foreshore erosion and dune movement;
- the installation of interconnected cycleway/walkway systems along the foreshore to allow walking or riding a bike to all other parts of the settlement in a convenient manner and in a pleasant setting;

Reinforcing the street pattern

- the dedication of private lands within the 7(f) zone to widen and improve public access to the foreshore;
- direct linkage of residential streets to the foreshore, open spaces and views throughout and around the settlement;

- the provision of high accessibility and permeability for pedestrians and vehicles. Moreover, all streets are designed to limit fast-moving through-traffic within the settlement;
- the location of the shopping centre to the west of Casuarina Way enables a practical separation of traffic volumes between beach goers, local residents/ tourists and shoppers;
- a street pattern which has a clear hierarchy appropriate to the social, retail and residential requirements of the Town Centre Precinct, aligning with, and connecting to, places of civic and community importance, and providing views to significant built forms to be developed at either end of the "*Main Street*" boulevard;

Appropriate buildings for a coastal context

- developments within the settlement having access to daylight, natural ventilation and open spaces;
- built forms of new buildings taking into account the streetscape and maintain consistent setbacks along street so as not obstruct view corridors.

(refer Attachment 3 – Master Planning Report (ML Design Architects Planners) and Attachment 5 – Urban Design Report (Malcolm Middleton Architects)).

6.01.5 Proposed Works within 7(f) Environmental Protection Zone

"1.5 Outline the works proposed (including subdivision) within the 7(f) Environmental Protection (Coastal Lands) zone and justify any departure from development controls".

The Concept Plan proposes works within both the privately and publicly owned 7(f) Environmental Protection Zone – (Coastal Lands), including vegetation clearing and bulk earthworks, some minor road works (around Lot 17), the upgrading of the existing walkway/cycleway (which was temporarily established to link preceding stages of the Casuarina Beach community development), as well as some necessarily associated water quality and drainage swales and utilities, which will be landscaped and integrated into the natural coastal zone (refer **Attachment 2 – Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

To the extent that proposed Lots 14, 15 and 18 extend to a minor extent into the 7(f) Zone, these lots, respectively $8,148m^2$, $5,018m^2$ and $20,493m^2$ in area, are proposed "super-lots" for integrated medium-density residential development. Where such "super-lots" include

such 7(f) zoned lands, no buildings or other structures are included in such zoned lands. Their use of such lands will be contributory, solely, for private open space purposes and so complement and enhance the adjoining and adjacent public domain.

It is accordingly noted that, notwithstanding that with reference to the relevant Local Planning instruments, consent may only be granted to subdivision of such zoned land to a minimum allotment size of 40 hectares, other than for agricultural or residential purposes. The intended purpose is private open space, allowing for favourable consideration in the circumstances stated above, which consent is supported.

6.01.6 Built Form Controls

"1.6 Address visual impact in the context of adjoining and surrounding development in relation to setting, density, built form, building mass, and height as viewed from the public domain including all publicly accessible coastal locations (eg beaches, headlands etc) and relevant mitigation measures".

The visual impact of the Town Centre is submitted to be generally consistent with the developing character and scale of the local community into which it is proposed to be placed. Height is within the generally accepted height limits (maximum three (3) storeys) for coastal communities in Northern NSW.

The shopping complex, being the only proposed building structure developed as part of the Project Application for Stage 1 Works, addresses fully matters of built form, articulation, shadowing, street activation and consistent visual interest contextually within the central area (refer Attachment 3 – Master Planning Report (ML Design Architects Planners)–, Attachment 4 – Retail Centre Design (Donovan Hill) and Attachment 5 – Urban Design Report (Malcolm Middleton Architects)).

Surrounding development will be developed adopting a similar contextual and cohesive approach. The intended intensity of development is generally consistent with that of adjoining communities such as Seaside City, Cotton Beach, Peppers and Salt. To achieve this outcome and desired built form controls will accompany the Town Centre Concept Plan as tabulated below:

Table – Built Form Compliance Table

Land Use Type	Height ⁽¹⁾		Density ⁽¹⁾		Retail Floor Space	Min Landscape Area of Site
	Ridge & Ceiling	No. of Storeys	Plot Ratio	Min No. Units per m ² of site area		
Retailing (Lot 1)	13m – 10m	3	0.5	N/A	$3,660 \mathrm{m}^{2(2)}$	30%
Commercial (Lot 2)	13m – 10m	3	0.5	N/A	N/A	30%
Commercial (Lot 17)	10m – 8m	2	1.0	N/A	2000m ²	10%
Mixed Use (Lots 5, 6, 12, 13)	12.2m-9.6m	3	2.0	1 per 130m ²		20%
Medium Density Residential (Lots 3- 4, 7 –11, 14-16, 18)	12.2m-9.6m	3	1.2	1 per 130m ²	N/A	20%
Low Density Residential(Lots 19-56)	9m – 7m	2	0.6	N/A	N/A	25%

(1) The listed height and density criteria are compliant with those contained in the ratified Tweed Shire Council's Tweed Development Control Plan Section A1 – Residential and Tourist Development Code.

(2) Project Application (for (1) Stage 1 Works) is limited to ground floor retailing comprising a 2,500m² supermarket, 850m² specialty shops and 310m² restaurants, totalling 3,660m² floor space. Amenities (75m²) at ground floor are also proposed, with a first floor level to accommodate 400m² office space, additionally.

Any expanded retailing and related floor space beyond the amount specified above, is to be the subject of any, if any, further application(s), consistent with population growth in the short-to-medium term future.

The setting is conducive to a visually strong Town Centre, given the beachside setting of the centre, its central location within the community and its direct visual connection to Old Bogangar Road and the balance of the new Tweed Coast (refer Attachment 5 – Urban Design Report (Malcolm Middleton Architects)).

Furthermore, historically, the Casuarina Beach Architectural Design Regulations (ADR) govern the built form within the entire Casuarina Beach Estate and seek to ensure that individual detached dwellings and multi-dwelling housing (dual occupancy and medium density dwellings) are built to high standards of modern urban design. Although not part of this Application, subsequent applications for building work over the proposed lots within the Town Centre Precinct will engender a building form which is appropriate to the local context in terms of design, location, uses, bulk, form, footprint, car parking, height, materials and detailing and will not adversely affect local views, view corridors or vistas.

6.01.7 Concept Plan Staging Strategy

"1.7 Outline the proposed staging of the development and provide supporting plans prepared at an appropriate scale".

As stated above, it is the intention of the proposal to proceed with a staged development of the Town Centre Precinct to completion within the next 8–10 years generally in accordance with the following sequence:

Stage No.	Proposed Lot No.s	Land Use
Stage 1	Lot 1,	Retailing
	Lots 19 – 56	Single Lot Dwellings (subdivision of lots)
Stage 2Lot 2		Commercial (including medical centre, child care centre, community facilities, etc)
	Lot 3	Medium Density Residential
	Lots 5, 12	Mixed Use
	Lot 17	Commercial (including restaurants,
		entertainment, beach retailing)
Stage 3	Lots 6, 13	Mixed Use
-	Lot 4, 10, 11, 16	Medium Density Residential
Stage 4	Lot 7-9, 14-15, 18	Medium Density Residential

The proposed staging is indicated in Figure No. DA41F (Cardno (Qld) Pty Ltd) - Staging Plan – see enclosed Exhibit Books 1 and 2 and Attachment 2.

6.02 Public Access to the Foreshore

6.02.1 Foreshore Access

"2.1 Consider measures that would be implemented to ensure ongoing public access to the foreshore. Justify any inconsistencies in public access measures from the Development Plan approved by the LEC, in particular, the lack of an esplanade."

Public access to the foreshore is promoted by the large civic park (approximately 80 metres foreshore frontage), an "*icon*" building (with ground level restaurants, outdoor dining terraces and a ring road along the eastern boundary) and "*north*" and "*south*" public car parks which are strategically located adjacent to beach access paths to provide direct access to the foreshore and north-south walkway/cycle path.

A public beach (pedestrian) access is proposed at the foreshore end of "*Main Street*", in front of the "*icon*" building referred to above. This proposal will be the subject of a further separate (and independent) application⁽¹⁾.

Of the four (4) existing pedestrian beach accesses it is intended to close (remove) the existing access to the immediate south of the proposed new access and to rehabilitate the beach environs at that location. That is to say, the proposed "*Main Street*" public beach access will be a replacement, retaining the number of such accesses overall at four (4). The principal reasons for favouring the re-siting of the beach access to align with "*Main Street*" include the enhancement of public convenience, and heightened legibility, having regard to urban design planning principles. Any such proposed re-siting will necessarily be the subject of a separate (and independent) application.

The coastal 7(f) zoned lands extending from the southern cul-de-sac to the "*icon*" building, are proposed to be reduced from a 20m wide private open space area to 6.5m width. The remaining 13.5m width will be dedicated as public open space to encourage a larger, more legible, public realm which promotes pedestrian permeability within the 7(f) zone. The Concept Plan incorporates a north-south esplanade of some 175m length, with car parking in the 7(f) zone as detailed in the original Development Plan. It is intended that the Esplanade be further supported by the insertion of a strategically located additional pedestrian beach access, the placement of which will yet further enhance the enjoyment of Town Centre use (refer Attachment 3 – Master Planning Report (ML Design Architects Planners)).

The proposed urban form of the Town Centre is predicated on the premise that ongoing public access to the foreshore is desirable and will occur. The urban design strategy inherent within the Concept Plan takes this principle as the base condition and builds all the surrounding urban form from this base. The boulevard is focused upon the preferred access primarily, as are the car parking and pick-up and drop-off facilities. The supermarket-anchored shopping centre also directly responds to this concept by removing any potentially conflicting vehicular and functional activity of the centre away from the more sedate and environmentally sensitive activity of beach access and activity.

⁽¹⁾ An application for the new (replacement) foreshore beach access has been prepared, pending lodgement with the Tweed Shire Council. This application will relate not only to the opening of a new access, but the closure of an existing access. In this regard, the matter has been the subject of continuing consultations with the Department of Lands, Grafton, which consultations to date indicate, subject to receipt and assessment of application(s),favourable outcome(s).

This proposed structure is considered to be the insurance needed to achieve ongoing successful public access to the foreshore.

The Casuarina Beach Town Centre is submitted to be an important milestone in bringing together all of the design themes and new community management approaches that have characterised the site development to date (refer Attachment 5 – Urban Design Report (Malcolm Middleton Architects)–).

6.03 Traffic Management and Access

In accordance with the Director General's instructions (see DGR at 3.1), a Traffic Impact Study has been prepared in accordance with the RTA's Guide to Traffic Generating Developments (refer **Attachment 7 – Traffic Impact Study** (Cardno Eppell Olsen)).

The following "DGR" listed matters are further addressed.

6.03.1 Capacity, Access, Servicing and Parking

"The capacity of the road network to safely and efficiently cater for the additional traffic generated and, if necessary, mitigation measures required to ensure efficient functioning of the road network;"

The proposed street network represents an appropriate design outcome achieving the following key objectives:

- connection of Casuarina Way to provide a collector route for local traffic within Casuarina Beach. This route would accommodate public transport services through the Casuarina Beach catchment;
- connection of the foreshore to Casuarina Way via a number of local streets and walkways;
- connection of Casuarina Way to Tweed Coast Road via the boulevard (replacing the existing connection via Dianella Drive);
- provision of public car parking and public open space areas adjacent to the foreshore;
- accessibility to, from and within the individual uses within the Town Centre;
- easy and convenient pedestrian and cycle access to/from the foreshore and within the Town Centre (refer Attachment 7 – Traffic Impact Study (Cardno Eppell Olsen))

It is estimated that by 2018, Casuarina Way (through the Town Centre) will carry approximately 14,000vpd (two way daily) immediately north of the boulevard, approximately 14,000vpd immediately south of the boulevard and the east-west connection to Tweed Coast Road (the boulevard (west)) will carry approximately 15,400vpd (two way daily) (refer **Attachment 7 – Traffic Impact Study** (Cardno Eppell Olsen)).

Such volumes can be accommodated by two-lane roadways. However, to facilitate better access to kerbside parking and to provide stand-up lane capacity at intersections, it is assessed that the new roadway (the boulevard) between Tweed Coast Road and Casuarina Way and the northern and southern legs at the intersection of Casuarina Way and the boulevard be constructed to four lanes.

Furthermore, in accordance with current Australian standards, traffic signals are required and will be developed at the new intersections of the boulevard/Casuarina Way and the boulevard/Tweed Coast Road and it is confirmed that there do not appear to be any inherent safety problems with the proposed street network (refer **Attachment 7 – Traffic Impact Study** (Cardno Eppell Olsen)).

Access

"Access to and within the site, in particular the impact of the establishment of a new intersection onto Tweed Coast Road".

This road network is based on an easily permeable, interconnecting design, which will facilitate vehicular movement within the Precinct, while discouraging through traffic access by non-local residents (refer **Attachment 7 – Traffic Impact Study** (Cardno Eppell Olsen)).

The Concept Plan seeks to develop a new connection (the boulevard) between Casuarina Way and Tweed Coast Road, some 80-100m south of the existing Dianella Drive intersection and so improve vehicular safety. This revision to the street network is an appropriate outcome as it introduces the opportunity for direct access into the Town Centre from Tweed Coast Road and will revert the use of Dianella Drive to a local street access role. As Dianella Drive is an existing road, Council consent to any such reconstruction proposal is being sought from the relevant Authorities to facilitate this process. (See **Appendix B – Request to Tweed Shire Council for Agreement-in-Principle for traffic changes to Dianella Drive** are also held in the ownership of the Applicant (Kings Beach No. 2), consent from the affected property owners is deemed granted. Therefore it is submitted, as

a possible alternative, that this is a matter which may be dealt with by the imposition of a reasonably and relevant stated condition (refer Attachment 7 – Traffic Impact Study (Cardno Eppell Olsen)).

Most importantly, this redirection is consistent with the Casuarina Beach Master Plan requirement of allowing only three (3) traffic connection points to Tweed Coast Road as well as catering for increased traffic levels into the core Town Centre Precinct and so activate the streets to enhance the shopping, dining and commercial opportunities (refer **Attachment 7 – Traffic Impact Study** (Cardno Eppell Olsen)).

Servicing and Public Parking

"Servicing and parking arrangements, in particular the provision of adequate public parking along the foreshore".

The Tweed Coast Strategy (refer to Section 1.07.10 of Attachment 11) stipulates the appropriate provision of public car parking to satisfy the demand of beachgoers in Casuarina Beach as 300 public spaces per kilometre length of beach. The Town Centre development site has a beach frontage of approximately 538 metres, hence, 162 public car spaces are required. The proposal has made provision for 170 public on-grade parking spaces within a 200m distance of the foreshore walkway/cycleway to ensure easy and convenient access to the beach. Such proposed parking provision is to be provided via a combination of open public car parks in discrete areas adjacent to the foreshore and kerbside parking in streets adjacent to the foreshore and therefore complies with this provision (refer Attachment 7 – Traffic Impact Study (Cardno Eppell Olsen)).

With reference to provision of parking spaces for disabled persons, the Tweed Shire Council Development Control Plan Section A2 (Site Access and Parking Code) requires that disabled parking be provided a rate of not less one (1) space per 30 spaces. For the 170 spaces proposed (as above), this equates to a requirement of six (6) disabled parking spaces, which the proposed development seeks to provide (see Attachment 7 – Traffic Impact Study (Cardno Eppell Olsen) – Drawing Nos. 8491-901 to 8491-907).

Parking requirement (both private and public) for the subsequent development components of the Concept Plan will be provided on site, in addition to the parking on-site of the above-referred 170 space public parking spaces.

With reference to the Stage 1 component of this Assessment, and in particular, the proposed shopping centre, the car parking servicing and bicycle storage requirements from

the Tweed DCP Section A2 – Site Access and Parking Code, for land uses applicable to the proposed shopping centre are:

Car Parking

 shops: 	4.4 spaces per 100sq.m GFA, plus 1 per 100sq.m GFA for staff;
• restaurant:	1 space per 7sq.m GFA dining area, plus 1 per staff;
• office:	1 space per 40sq.m GFA.

Bicycle

• shops:	2 spaces per 100sq.m GFA up to 100sq.m GFA , 1 per 200sq.m GFA thereafter;
restaurant:office:	1 space per 5 car parking spaces; 1 space per 100sq.m GFA.

Service Vehicle

• shops:	1 space per 1,500sq.m GFA, minimum of 1, minimum of 2 for supermarkets (HRV);
restaurant:office:	1 (HRV); 1 space per 200sq.m GFA (SRV).

The calculated requirement for the centre is 181 spaces (see Attachment 7).

Accordingly, it is considered that the number of spaces proposed (242 spaces, 2 HRV loading spaces and provision for multiple bicycle parking spaces) by the shopping centre is above the requirements of DCP No. 2 (refer Attachment 4 – Retail Centre Design (Donovan Hill)– and Attachment 7 – Traffic Impact Study (Cardno Eppell Olsen)).

Additional matters to be addressed are as follows:

6.03.2 Public Transport

"Consider existing public transport to and from the site and additional demands for such transport".

Rail Station Locations

There are no rail stations in the proximity of the proposed development. The closest Queensland Rail station is located at Robina, Queensland, while the closest CountryLink station is located at Kyogle, New South Wales. The respective locations of the closest Queensland Rail and CountryLink rail stations are accordingly not relevant.

Bus Routes and Bus Stop Locations

Surfside Bus Lines operates a bus route from Tweed Centro through to Pottsville which services Casuarina Beach. Route 603 travels along Tweed Coast Road and will pick-up and drop-off passengers wherever it is safe to do so.

Bus Service Frequencies

The number and frequency of services for the Route 603 bus operated by Surfside Bus Lines are outlined in following table.

Time of Week	Period	Number of Services	Approximate Frequency
Monday-Friday	am	5	hourly
	pm	11	hourly
Saturday	am	5	hourly
	pm	12	hourly
Sunday	am	5	hourly
	pm	6	hourly

Surfside Bus Lines Route 603

Accordingly, the development of a new Town Centre Precinct will make suitable provision for a bus bay in a central and convenient location (refer Attachment 7 – Traffic Impact Study (Cardno Eppell Olsen)).

Buses can and will continue to use the Coast Road, however they will now be able to use a continuous Casuarina Way, so creating the opportunity for any local bus service operator to improve the public transport services to the Town Centre.

6.03.3 Pedestrian and Cycle Access

"Consider pedestrian and cycle access both to and within the site."

The proposed development will maintain and improve the existing walkway and cycleway network along the foreshore and will upgrade the existing pedestrian access points to the beach. In addition, a network of pathways will be provided throughout the Town Centre, in keeping with the seaside village and outdoor lifestyle theme of Casuarina Beach. The street network will readily accommodate cycling on roadways.

Accordingly, convenient pedestrian connections between the foreshore, other internal recreational, residential and retail/commercial components of the development will be provided throughout the Concept Plan area.

6.04 Water Cycle Management and Watercourses

6.04.1 Water Quality

"4.1 Address potential impacts on water quality of both surface and groundwater."

The existing frontal and east-west swales on this site contain infiltration basins which were sized to accommodate any future development of this Precinct. However, the redevelopment of the site will remove the east-west swale, and modify the frontal swale. The re-contouring of the site will also alter the drainage patterns in a way which was not envisaged at the time when the original hydraulic and water quality analyses were undertaken (refer **Attachment 2 – Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

The major implications of these changes are as follows:

- The removal of the east-west swale⁽¹⁾ would remove a number of small infiltration basins which were sized to accommodate the low level (i.e. 3 month average recurrence interval) developed stormwater runoff from Lot 223, as well as part of the previously developed northern Precinct. However, the redevelopment of the frontal swale will enable additional infiltration capacity to be provided in this location to compensate for the loss.
 - The reshaping of the site will direct all flow on the site away from the frontal swale, and to the west (i.e. towards Casuarina Way and the Coast Road) and north. The drainage paths for the finished site represent a departure from previous design practice on Casuarina Beach, where the eastern parts of the site drained initially to the frontal swale, and then west to Cudgen Creek. The lack of available filling material on Lot 223 prevents such an outcome from being achieved.
- The finished site will be divided into four (4) catchments.

⁽¹⁾ See Appendix C – Submissions to Department of Planning advising intention to Consult – Drainage Swale.

The south-eastern catchment, representing the majority of the site, will drain to the west, to an infiltration basin to be constructed at the south-eastern corner of the supermarket site. This basin requires a surface area of $1,600m^2$ and will be a maximum of 0.5m deep. It is proposed that this basin will be dedicated as open space to Council.

The north-eastern catchment, i.e. that part of the site north of the Town Centre "*Main Street*" and east of the newly constructed section of Casuarina Way, will drain northwards to the boundary of the site (and towards the previous alignment of the east-west swale). There is sufficient open space available within this site to accommodate the required $600m^2$ area of infiltration at a maximum depth of 0.3m. These basins will form part of the resort to be constructed on this site, and will remain in private ownership.

The north-western catchment, i.e. that part of the site north of the Town Centre "*Main Street*" and west of Casuarina Way, will drain to its south-western corner, and into an infiltration basin with an area of $300m^2$ and a maximum depth of 0.3m. This basin is proposed to be dedicated as public open space to Council.

The south-western catchment, i.e. the supermarket site, will drain to its southwestern corner, and thence into the unconstructed part of the east-west swale which will be retained in the playing field area. Prior to draining out, low flows will be directed through proprietary Gross Pollutant Traps such as a Humeceptor, and then through an infiltration system comprising of Atlantis cells.

An area of approximately $100m^2$ of Atlantis cells will be required to handle the three (3) month design runoff, and this infiltration system will be located within the supermarket car park and will remain the responsibility of the supermarket operator.

The design procedure for sizing the infiltration basins noted above is identical to that used on all other Casuarina Beach sites, i.e. a maximum infiltration rate of 12m/day, and basins sized with a factor of safety of 2. All open basins will consist of bare sand, vegetated sparsely with dune grasses and spinifex, similar to the existing basins present on the site (refer **Attachment 2 – Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

6.04.2 Water Sensitive Urban Design

"4.2 Address and outline measures for Integrated Water Cycle Management (including stormwater) based on Water Sensitive Urban Design principles, including impacts on the surrounding environment".

As noted previously, water quality objectives and environmental values are to be maintained by the utilisation of appropriate management measures consistent throughout the entirety of the Casuarina Beach development. Accordingly, the engineering design standards to be applied to the Town Centre development will strongly incorporate Water Sensitive Urban Design (WSUD) principles (refer Attachment 2 – Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

It is the intention that (as has been achieved within previous stages of Casuarina Beach and Salt, where innovative stormwater management practices were developed specifically for the unique nature of the South Kingscliff coastal strip) the stormwater management of the Town Centre development will involve the capture and retention of virtually all runoff from the site. Such a resource provides a sustainable recycling option, as well as substantially reducing contaminant loads in Cudgen Creek and the Pacific Ocean.

It is noted that the use of infiltration basins throughout Casuarina Beach and Salt directs a significant amount of stormwater to the existing freshwater aquifer underlying the site. It is proposed to reuse the water from this aquifer (as has been used extensively on the two sites) for irrigation of public open space and for the maintenance of adequate flows in the sewer system, thereby reducing demands for potable water from Council's municipal system (refer Attachment 2 – Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

With reference to reuse, there is also potential for the use of individual rainwater tanks for house and other development sites in the Town Centre. This practice is already available to all residents. Accordingly, the proposed coordinated capture and reuse of water within the proposed development is sustainable and is in accordance with Best Management Practice.

6.05 Hazard Management and Mitigation

6.05.1 Bush Fire Protection

"5.1 Address the requirements of Planning for Bushfire Protection 2001 (or relevant policy)."

The construction process on this site will involve the clearing and removal of vegetation from the entire site. As the Town Centre is bounded to the west by the Coast Road and to the north and south by existing developed sections of Casuarina Beach development, the only part of the site which is potentially subject to bushfire attack is the eastern boundary which is adjacent to approximately 60 metres of dune vegetation.

It is advised that a maintained fuel-free zone of 32 metres is proposed along this eastern boundary which achieves compliance with the Asset Protection Zones (APZ) requirements as issued by the NSW Rural Fire Service and therefore, bushfire risk can be managed appropriately (refer Attachment 2 – Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

Accordingly, as this Assessment is limited to the development of undeveloped allotments adjacent to this eastern boundary, a Bushfire Management Plan has not been prepared at this stage.

6.05.2 Soil Contamination

"5.2 Identify any contamination on site (particularly the presence of radioactive sands) and, if necessary, appropriate mitigation measures in accordance with the provisions of SEPP 55 – Remediation of Land."

The Town Centre site is located between the Central and Northern Precincts in Casuarina Beach. Previous investigations have determined the presence of radioactive sand in this general area resulting from former mineral sand mining activities which existed on the site.

These investigations have determined the presence of radioactive sand generally in the north eastern corner of the site which has been the subject of more detailed assessment prior to release of the allotments in the northern Precinct. The area of contamination is centred on the eastern end of the existing drainage swale.

Current surface radiation monitoring has indicated that radiation levels at the top of the swale, along its southern boundary, are of the order of 0.4 uGy/hr, while those in the swale

do not exceed 0.95 uGy/hr. It is concluded that the radiation levels recorded indicate that there is no risk to health from the site. Nevertheless, this application will not disturb this area until further detailed site investigations, including surface assessment and site drilling, have been undertaken (refer Attachment 2 – Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

6.05.3 Acid Sulfate Soils

"5.3 Identify the presence and extent of acid sulfate soils on the site and, if necessary, appropriate mitigation measures."

An Acid Sulfate Soils Management Plan has been prepared for the site (refer Attachment 2 – Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

It is noted that an Acid Sulfate Soils Investigation was undertaken by Sinclair Knight Merz in 1998 prior to the issue of the Stage 1 approval which found PASS material on the western side of the site in the area where ground levels are at, or slightly below, 5.0m AHD. As the minimum final surface levels proposed for that part of the site east of Casuarina Way will be about 7.0m AHD, and given that acid sulfate soils are rarely found at levels above 5.0m AHD, it seems very unlikely that any PASS materials will be disturbed during the construction phase of the Town Centre Precinct (refer **Attachment 2** – **Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

6.06 Infrastructure

"6.1 Address existing capacity and requirements of the development for sewerage, water, electricity, telecommunications, waste disposal and gas in consultation with relevant agencies."

These matters are addressed as follows.

Sewerage Reticulation

An existing sewer main runs from the north-eastern corner of the Town Centre Precinct, along the drainage swale to Pump Station No 2 on the Coast Road. As a consequence of this Assessment, this sewer will be relocated (refer Attachment 2 – Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

Furthermore, the development of the Town Centre site will require upgrading of the pumps in Pump Station No 2, and the installation of additional rising main capacity in the Coast Road and in Old Bogangar Road. The requirement for upgrading has been previously investigated in detail, and is the subject of an agreement between Cardno and Tweed Shire Council in terms of timing of the works and responsibility for installation (refer Attachment 2 – Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

Accordingly, it is anticipated that the subject Assessment will be appropriately conditioned to ensure that adequate external infrastructure is called up and provided at the correct time.

Water Capacity

With reference to water supply, 150mm diameter mains already exist in Casuarina Way at the southern and northern boundaries of the site. A connecting 150mm diameter main will therefore be constructed along the proposed road alignment to deliver service to the lots. A stub connection will be provided into each lot from this main. It is advised that adequate water supply capacity is available to meet the proposed demands from the Town Centre development (refer **Attachment 2** – **Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

Electricity Supply Telecommunications Infrastructure

Electricity and telecommunications services are available in the Coast Road adjoining the site, and this infrastructure has previously been sized to accommodate all planned development within the South Kingscliff Precinct. Accordingly, an application will be made to the relevant service providers at the appropriate time for connection to these external systems.

Waste Disposal

With reference to waste collection, the site will be serviced by either Tweed Shire Council, or private service providers, depending upon the specific requirements of each individual business or residence.

Natural Gas Network

It is advised that a piped natural gas network is not located within the vicinity of the Casuarina Beach development. Accordingly, this service is only available via individual agreements with the gas suppliers with the resource safely stored on-site in domestic-sized bottles.

6.07 Flora and Fauna

"7.1 Outline measures for the conservation of flora and fauna and their habitats within the meaning of the Threatened Species Conservation Act 1995, in particular, the Common Blossom Bat habitat identified within and adjacent to the site".

Acknowledging that the environmental significance of the subject site has been degraded by past sand mining uses to an advanced extent, a detailed report on flora and fauna matters relevant to the Town Centre Precinct has been prepared in response to the environmental assessment of the subject application.

This Assessment concludes that 'as a consequence of the disturbed nature of the site, and the limited extent of suitable natural habitats and resources in the general locality, the proposed development is not regarded as having the potential for adverse impacts of concern on the natural environment.' The principal findings are summarised below (refer Attachment 2 – Appendix C Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

Vegetation

Vegetation on the site has been significantly affected by sand mining and rehabilitation activities undertaken since the cessation of mining. The western part of the site was totally cleared during the Coast Road construction activities, and now supports introduced grasses and minor regenerating shrubland. The eastern part of the site, which was also totally cleared during mining activities, is dominated by Coastal Banksia, Coast Tea-tree and Coastal Oak, with an understorey of lantana and bitou bush.

Threatened Species

There are no threatened flora species present within the proposed Town Centre site. The area does not support habitat or vegetation communities of relevance to any threatened plant species known to occur in the general locality. In particular, there are no rainforest or wetland habitats present.

Threatened fauna species which are likely to occur in the area are limited to the highly mobile megachiropteran and microchiropteran bats. The Coast Banksia stands provide winter foraging resources for the Common Blossom Bat, the Black Flying Fox and the Grey-headed Flying Fox. However, the extent of this resource within the site constitutes only a very small part of the available foraging resource for individuals of these species within the locality. The site is generally not suitable for other threatened species which are known to occur locally, including koala, the glossy black cockatoo and a number of wading and wetland bird species.

Testing in accordance with Section 5A of the Environmental Planning & Assessment Act has been carried out in respect of potential impacts of development on these bat species. It has been concluded that "*a significant effect*" is not likely to be imposed on "*any threatened species, populations or ecological communities, or their habitats*" as a consequence of the proposed works (refer to Attachment 2 – Appendix C Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

6.07.1 Impacts of Clearing of Native Vegetation

"7.2 Consider impacts of clearing of native vegetation."

As a consequence of the intensive and sustained sand mining which was undertaken on the site, the previously occurring vegetation has been removed. However, large tracts support exotic and native, but non-endemic vegetation, planted during site rehabilitation activities after sand mining had ceased. These include Coastal Banksia, Coastal Tea-tree and Coastal Oak, with an under-storey of lantana and bitou bush.

As previously submitted, there are no threatened flora species present within the Town Centre site, nor does the area support habitat or vegetation communities of relevance to any threatened plant species known to occur in the general locality. In view of this Assessment, it was considered that "the Town Centre development would not have, nor be likely to have, a significant impact upon any threatened species, populations or ecological communities, or habitats". On this basis, it was determined that there was no requirement for the preparation of a Species Impact Statement for the proposed development, and it is so submitted (refer Attachment 2 – Appendix C Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

Banksia Amelioration Program

As required by the relevant conditions of the approval granted over the site, the Casuarina Beach (formerly Kings Beach) Banksia Amelioration Program was initiated and has now been in place for a period of approximately seven (7) years. This programme was required to demonstrate compliance with respect to revegetation of species removed from the urbanised part of the site during the construction process and has been responsible for the planting of some 15,000 native species (refer **Attachment 2 – Appendix D Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

In addition to this planting scheme, numerous Banksia have been planted throughout the Casuarina Beach development as conditioned in preceding stages as well as in excess of 20,000 planted within Lot 500 as part of the Dune Management Plan. Accordingly, these programmes, where relevant to the Town Centre Precinct, will continue to have a positive impact to the local native environment.

Further to the above, reference is also made to a Peer Review of this reporting on Environmental Issues prepared by Dr David Robertson, Director, Cumberland Ecology (see Attachment 13 – Casuarina Beach Town Centre Review of Flora and Fauna Impact Assessment).

This Review concludes that "the ecological impacts of the Town Centre have been adequately assessed and provided for. No additional threatened flora or fauna species have been listed since the 2005 Flora and Fauna Assessment that would invalidate the assessment."

6.08 Heritage

6.08.1 Aboriginal Cultural Heritage

"8.1 Identify whether the site has significance to Aboriginal cultural heritage and identify appropriate measures to preserve any significance (refer to draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation and Interim Community Consultation Requirements for Applicants)."

This site, in common with the entire South Kingscliff coastal strip, has been subject to very significant land surface disturbance in the past. A study of historical aerial photography and other site history information has determined that extensive sand mining took place over the subject site between 1956 and 1975, with the result that no pre-existing surface information now remains (refer **Attachment 2 – Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

It is advised that during the construction of the Salt site approximately 2km to the north of the proposed Town Centre development, the Tweed Byron Local Aboriginal Land Council was consulted in respect of the archaeological values of the area. The following comment was made by the Land Council:

"Sandmining has disturbed/destroyed Aboriginal cultural heritage since the 1940s. Due to the disturbance and years of sand mining of this property we were unable to determine whether there were any Aboriginal artefacts on this area, therefore the Tweed Byron Local Aboriginal Land Council has no objection to development of this property."

Accordingly, it is expected that a similar finding would apply to this area. Further, it is noted that earlier archaeological investigations of the subject area did not disclose the presence of any sites or artefacts of relevance to either indigenous or European settlement heritage considerations. In addition, no such sites or artefacts have been identified during the development of either Casuarina Beach or Salt.

It is therefore considered that it is extremely unlikely that any remnants of either Aboriginal or European cultural value exist on the site. Nevertheless, the Tweed Byron Local Aboriginal Land Council will be consulted prior to commencement of site works and a relevant component will be incorporated in the Construction Environmental Management Plan to ensure that any items uncovered during site works will be preserved and investigated (refer Attachment 2 – Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

Further to the above, as reported in **Part A**, **Section 2.05 Aboriginal Cultural Heritage** of this Environmental Assessment, the matter is being more particularly addressed by Mary Dallas, Consulting Archaeologist (MDCA) presently engaged in a community consultative programme specific to this Assessment. It is the intention that a Draft Cultural Heritage Assessment Report be prepared and circulated for comment (including the Director General) prior to finalization and submission.

6.08.2 European Cultural Heritage

"8.2 Identify any other items of European heritage significance and provide measures for conservation of such items".

As previously mentioned, due to the extent of sand mining which has occurred over the subject site, it is considered that it is extremely unlikely that any remnants of European cultural value exist on the site. Nevertheless, suitable precautions will be undertaken during the construction phase of the development to ensure that any items uncovered during site works will be preserved and investigated (refer **Attachment 2 – Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

To provide certainty, it is undertaken that a relevant component would be incorporated in the construction Environmental Management Plan to ensure that, in the event of any artefacts being uncovered, these would be brought to the attention of the Sites Officer of the Tweed Bayside Local Land Council for investigation.

6.09 Planning Agreements and/or Developer Contributions

"9.1 Address and provide the likely scope of any planning agreement and/or developer contributions with Council/Government agencies".

The Stage 1 works will consist of subdividing the land into 56 lots, the construction of the shopping centre and the provision of infrastructure.

The only specific land uses which will be enacted as a result of the Stage 1 approval will be the shopping centre and the 38 low-density residential lots. The remaining lots will essentially be Master Lots with no development opportunity until further development or building applications are lodged and approved.

It has therefore been determined that the most efficient way of determining and apportioning Section 64 and Section 94 contributions in respect of the current application is to pay the final applicable rates for the Shopping Centre and the 38 low-density residential lots, and to pay for 1 Equivalent Tenement for each of the remaining lots. This single lot payment will then be credited when subsequent development applications are lodged, and the final land use densities are known, at which time full payment for the land use will be required.

In relation to the Shopping Centre, the following use break up applies:

Supermarket	$2,500m^2$
Specialty Shops	850m ²
Restaurants	310m ²
Office	400m ²
Amenities	<u>75m²</u>
Total	4,135m ²

Section 64 Plans

Tweed Shire Council's Section 64 Plans call up the following contribution rates for water and sewer

Water	\$9,997/Equivalent Tenement
Sewerage	\$4,804/Equivalent Tenement

Council's Schedule of Rates and Charges then imposes the following ET rates depending upon land use:

Utility	Shops	Food Preparation	Commercial	
Water	$0.002 \text{ ET/m}^2 \text{ GFA}$	0.015 ET/m ² GFA	0.004 ET/m ² GFA	
Sewerage	0.003 ET/m ² GFA	$0.024 \text{ ET/m}^2 \text{ GFA}$	0.006 ET/m ² GFA	

Using the land use areas given above, the contribution rates for the development will be as follows:

Water

Land Use	Area or Lot Numbers	ET Equivalency	ET
Supermarket	2500m ²	0.002	5.00
Specialty Shops	850m ²	0.002	1.70
Restaurants	310m ²	0.015	4.65
Office	400m^2	0.004	1.60
Amenities	75m ²	0	0.00
Low Density Residential Lots	38 lots	1	28.00
Balance Lots	18 lots	1	30.00
TOTAL			70.95

Sewerage

Land Use	Area or Lot Numbers	ET Equivalency	ЕТ
Supermarket	2500m ²	0.003	7.50
Specialty Shops	850m ²	0.003	2.55
Restaurants	310m ²	0.024	7.44
Office	$400m^{2}$	0.006	2.40
Amenities	75m ²	0	0.00
Low Density Residential Lots	38 lots	1	28.00
Balance Lots	18 lots	1	30.00
TOTAL			77.89

Based on the per ET rates given above, the total amounts payable for Section 64 charges are therefore as follows:

Water \$709,287.15
Sewerage \$374,183.56

Section 94 Contributions

Council has a detailed set of Section 94 Contributions Plans. The relevant contribution rates are given for specific plans are given in the following table:

S94 Plan	Concerning	Rate
6	Street Trees	\$297/residential lot
11	Library	\$688/residential lot
12	Bus Shelters	\$26/residential lot
13	Cemetery	\$131/residential lot
15	Community Facilities	\$584/residential lot
16	Lifesaving	\$200/residential lot
18	Council Offices	\$1,996.80/residential lot
		\$277/300m ² commercial
19	Kings Beach	
	Structured Open Space	\$1,544/residential lot
	Cycleways	Already Provided
	Community Facilities	\$1,443/residential lot
22	Cycleways	Already Provided
26	Shirewide Structured Open Space	\$2,327/residential lot
	Shirewide Casual Open Space	\$855/residential lot
		\$297/residential lot

This equates therefore to a cost of 10,091.80 per residential lot, plus 277 per $300m^2$ of commercial/retail. In this case, there are 56 residential lots (accepting the mixed use sites as residential lots for this purpose) and $4,135m^2$ of commercial/retail in the shopping centre.

The total Section 94 contribution for this application will therefore be \$558,866.98. Additional charges will apply to lots other than the 38 standard residential lots and the shopping centre when future applications are made.

In summary the contributions payable for this application will therefore be:

- Water \$709,287.15
- Sewerage \$374,183.56
- Section 94 \$558,866.98

This equates to a total of \$1,642,337.69.

Tweed Road Contribution Plan

The development contribution towards infrastructure funding has been assessed using the Tweed Road Contribution Plan (refer **Attachment 7 – Traffic Impact Study** (Cardno Eppell Olsen)).

The total contribution towards infrastructure funding has been indicatively estimated to be \$2,640,728 for the total Concept Plan development. However, it must be recognised that this is an estimate based upon the ultimate development yields assumed herein and obviously will vary as individual applications are made.

For the Stage 1 Project Application, the TRCP contribution is estimated to be \$576,321 since the current application only represents subdivision into a number of lots (56) plus Stage 1 of the shopping centre site.

It is noted that whilst the TRCP estimate is provided herein, it is anticipated that the Applicant (Kings Beach No. 2) will make a claim for credits against the TRCP contributions on the basis that the Applicant has funded the construction of the Tweed Coast Road which provides a material public benefit; and the signalisation of the Tweed Coast Road/the boulevard intersection is included within the funding contributions received under the TRCP (refer **Attachment 7 – Traffic Impact Study** (Cardno Eppell Olsen)).

6.10 Consultation

The consultative process leading to the preparation of this Environmental Assessment has required extensive liaison with Government instrumentalities since the late 1990's. A history of this liaison is provided below. Additionally, consultative processes are engaged in the preparation of this Assessment, including specialist consultancy, is also reported below.

6.10.1 Consultation with Government

The Casuarina Beach consulting team has met frequently and regularly with Government Departments, Tweed Shire Council and other regulatory agencies in the period since the Stage 1 Consent Approval was issued by the Land and Environment Court in 1999. Following that decision, a number of meetings were held with Tweed Shire Council planning and engineering staff prior to the lodgement of further Development Applications for each stage of the project.

The Development Application for Stage 2 of the development (Southern Precinct) was lodged with Council in early 2000. Following that lodgement, the consulting team entered into long discussions and negotiations with Council in respect of the form and detail of the development. Issues which were discussed and agreed at that time included:

- Approval by Council of the water quality management regime proposed for the site, primarily involving the use of Gross Pollutant Traps to handle stormwater runoff from parking and other hardstand areas, and infiltration basins located in the frontal open space swales on the eastern boundary of the site. Relevant parameters for the management of stormwater runoff, such as catchment areas, acceptable infiltration rates and on-site infiltration capacity, were discussed and agreed.
- Approval of the hydraulic (flooding) regime proposed for the site, whereby flow on the eastern part of the site was directed towards the frontal swales, and then carried along the swale before being discharged westwards eventually to Cudgen Creek. The overall drainage solution for the site was discussed in detail and agreed.
- Approval by Council of the form and type of cycleway to be provided in the frontal swale system.
- Approval by Council of the road hierarchy to be adopted throughout Casuarina Beach.

• Approval by Council of the plan to provide sewerage and water supply services to all future stages of Casuarina Beach.

These meetings were an invaluable part of the process, enabling the underlying principles of the development to be established and agreed at the very start of the development process. Subsequent meetings were held with Council in relation to each later stage of the development, but were significantly reduced in scope because of the general agreements reached. All engineering infrastructure provision issues were agreed as part of the Stage 2 approval, producing a streamlined outcome for later applications.

Meetings were also held at this time with officers of the then Department of Land and Water Conservation (DLWC) and its successors, the Department of Infrastructure, Planning and Natural Resources (DIPNR) and the Department of Planning (DoP). Discussions at that time centred on two principal areas – firstly, the impact of development on Lot 500, and secondly, DIPNR's concurrence role in the 7f erosion protection zone which runs along the entire frontage of the Casuarina Beach site. These meetings were also successful and the outcomes have been used to guide development outcomes on the site since that time. The Department also had a substantial role to play in respect of the approval and implementation of the Dune Management Plan, which sought to rehabilitate areas on the dunal system east of Casuarina Beach so as to maintain adequate protection against both wind and water erosion. The Department of Lands was also involved in this process.

Discussions with the National Parks and Wildlife Service (NPWS) and the Environmental Protection Authority (EPA) had also been held prior to the issuing of the Stage 1 approval, relating specifically to the potential clearing of vegetation on the site and the impacts on the common blossom bat. Subsequent discussions were held with those authorities, and their successor, the Department of Environment and Climate Change, in relation to management and approval of environmental issues relating to the site, including dust management during construction. Agreement was reached with NPWS (Mr Gary Davey) in or about 2003 that resulted in their agreement that lands known as the Town Centre (the subject land) and the North West Precinct could then be cleared of vegetation. This agreement was based upon the earlier provision of compensatory planting and the payment of the sum of \$200,000.00 towards the revegetation of other areas nearby. Discussions were also held with the Department of Fisheries in respect of potential water quality impacts resulting from discharge of stormwater to Cudgen Creek.

Discussions were also held with the Rural Fire Services Authority in Sydney originally with Mr Graeme Douglas and then others. Agreements were reached in terms of the widths of asset protection zone in respect of all lands adjoining the coastal walkway/cycleway and approvals have since been issued in line with agreements reached. Further meetings were held with Tweed Shire Council (administrators and officers) on 22 January 2008 and 1 April 2008 at which the nature and extent of the subject application was presented and discussed.

In all cases, agreement was reached in relation to proposed actions, and the development of Casuarina Beach has proceeded in accordance with these agreements since that time.

6.10.2 Environmental Assessment Consultation

Consultation has been held with the following agencies during the preparation of this Environmental Assessment.

- Tweed Shire Council;
- Department of Environment and Climate Change;
- Roads and Traffic Authority;
- NSW Rural Fire Service; and
- Department of Planning;

In response, this reporting also deals with the issues raised by Tweed Shire Council in its letter dated 8 April 2008 and the issues raised by the Department of Environment and Climate Change in its advices dated 11 April 2008.

In addition the proponent has conducted a series of public exhibitions to provide opportunity for the viewing of three (3) draft Master Plan options of the Town Centre Precinct. The displays of the proposed make-up of the Draft Town Centre Master Plans provided a valuable opportunity to present relevant information to the community, to engage in open dialogue, to respond to community concerns about specific issues, to acknowledge community preferences and attitudes and to foster and enhance a continuing relationship with the community. An outline of the process, participation and analysis of these responses has been included in this reporting (refer **Attachment 9 – Community Consultation Report** (Promedia Community)).

6.10.3 Specialist Consultancy

As reported at Section 2.05 of this Assessment – Cultural Heritage Assessment, continuing consultative processes are engaged addressing matters of Aboriginality, amongst other considerations.

6.10.4 Further Community Consultation

As stated earlier in this Assessment, it is the express intention to continue engagement in consultation with the community on any and all matters relevant to this Application, as and when required.

In relation specifically to the issue of the east-west drainage swale at the northernmost extent of the subject lands, it is the intention of the proponent to engage with the community to seek to effect resolution of any outstanding matters of concern (see Appendix C – Submissions to Department of Planning advising Intension to Consult – Drainage Swale).

7.00 QUANTITY SURVEYORS INDICATIVE COST ESTIMATES

ESTIMATED COSTS

By letter dated 15 May 2008, addressed to Kings Beach No. 2 Pty Ltd, Gray Robinson and Cottrell Quantity Surveyors, 9 Bayswater Street, Paddington, Q 4064, has provided an Indicative Level of Estimate for the carrying out of the projected Project Application Stage 1 Works.

The Statement provides the following indicative estimates.

"Stage 1		
•	Civil & External Works as provided by others	\$ 10,630,000
•	Shopping Centre as per Hutchinson's price	\$ 16,000,000
Future S	tages	
•	Other Residential & Commercial properties in	
	the Precinct	\$355,370,000
	TOTAL	<u>\$382,000,000</u>

All of the above pricing is at current day costs and exclude GST. The current costs also exclude any adverse ground conditions, fees, headworks charges, etc.

Please note the level of estimate provided is not suitable for making any major decisions and is *indicative* only."

The above-referred letter is presented in Attachment 14 – Indicative Estimate (Gray Robinson and Cottrell, Quantity Surveyors)

PART B PROJECT APPLICATION FOR STAGE 1 WORKS

8.00 SCOPE – PROJECT APPLICATION FOR STAGE 1 WORKS

The Project Application for Stage 1 Works is detailed in **Part A** of this Environmental Assessment and in **Attachment 2 – Report on Engineering Matters** and supporting **Attachments (Attachments 3-9** inclusive).

This Application seeks the necessary approvals and development consents for bulk earthworks, road construction, the subdivision of land for the proposed Casuarina Beach Town Centre, the construction of the first stage of the proposed shopping centre and landscaping and other works necessarily associated with such development.

The proposed development will result in the subject land being profiled to achieve the proposed finished surface levels, and subsequently developed with necessary infrastructure networks. Further, the proposed road layout seeks to provide the critical connection point between the Coast Road and the "*Main Street*" through to the beach and incorporates the construction of the northern "*missing link*" in Casuarina Way through the Town Centre Precinct, generally in accordance with the approved Master Plan (dated December 1998).

This proposal will extend Casuarina Way from Steelwood Lane at the southern end, to the Dianella Drive roundabout at the north, so as to create a central precinct.

The First Stage of the Town Centre development also addresses the proposed shopping centre development, including the essential urban services and infrastructure framework necessarily associated with the Project Plan and includes the following:

- Bulk earthworks and vegetation clearing (for all subject lands zoned Residential 2e

 Tourist Residential and the privately owned 7(f) Environmental Protection Coastal Lands);
- Construction of the **north-south road link** (Casuarina Way);

- Construction of all **roads** proposed within the subject land, including kerbside, basement and other public car parking areas (an **esplanade**, of some 175 metres in length, supported by an additional pedestrian beach access, is integrated into the road network);
- Realignment of the foreshore cycleway/walkway, vegetation clearing and associated earthworks, minor road construction and drainage swale works within the 7(f) Zone;
- **Subdivision** of the land into 56 lots (as indicated on the Concept Plan), excluding areas to be set aside for Public Open Space purposes;
- Provision of **reticulated services** (water, sewerage, stormwater drainage) to each created lot;
- **Reconstruction** of that part of **Dianella Drive at its intersection with Coast Road**, and the formation of a cul-de-sac for reasons of safety;
- Provision of Public Open Space⁽¹⁾
- **Landscaping** to meet the reasonable expectations of the residential and visitor community and other statutory or other requirements;
- Provision of, and connection to, electricity supply and telecommunication services; and
- Signage for proposed shopping centre

The following **Table** is to be read in conjunction with the above-described **Project Application for Stage 1 Works for Casuarina Beach Town Centre**, and provides Drawing Number and other Report references for ease of convenience.

(See also Exhibit Book 2 enclosed – Project Application Stage 1 Drawings).

(1) All Public Open Space provision and attendant contributions for the area, the subject of the Concept Plan, have already been made. Notwithstanding, the Concept Plan makes provision for a yet further 0.9081 hectares, or 4.5% of the Concept Plan area, to be added to the public (open space) domain, despite all such dedications and contributions, statutorily requires, having been met.

TABLEListing of Drawings – Project Application for Stage 1 WorksCasuarina Beach Town Centre

Works	Drawing Number	Drawing Title	Report or Other Reference	Author	Attachment Number
Bulk Earthworks	DA22G	Existing Contours Plan	Report on	Cardno	2
Buik Earthworks	DA22G DA24G	Finished Surface Contours	Engineering and	(Qld) Pty	2
	DA240 DA25E	Cut/Fill Depths Layout Plan	Environmental	Ltd	
	DA25E DA26D	Site Cross Sections	Matters	Liu	
North-South Road Link	DA20D DA23G	Road Layout Plan	Report on	Cardno	2
Road 2 (Casuarina Way)	DA23G DA29C	Casuarina Way (Road No 2)	Engineering and	(Qld) Pty	2
Koau 2 (Casualilla way)	DA29C	Longitudinal Section	Environmental	Ltd	
Road 3 (Casuarina Way)	DAS30C	Casuarina Way (Road No 3)	Matters	Liu	
Road 5 (Casualina way)	DASSOC	Longitudinal Section	Watters		
	DA34B	Typical Cross Sections			
Other Roads	DA34B DA23G	Road Layout Plan	Report on	Cardno	2
Road 1 ("Main Street")	DA230 DA28D	Road No. 1	Engineering and	(Qld) Pty	2
Koad I (Main Street)	DA20D	Longitudinal Section	Environmental	Ltd	
Road 4	DA30C	Road No. 4	Matters	Liu	
Koad 4	DASOC	Longitudinal Section	Matters		
Road 5 (Esplanade)	DA31E	Road No. 5 (Esplanade)			
Road 5 (Espianade)	DAJIE	Longitudinal Section			
Road 6	DA32E	Road No. 6			
Road o	DAJZE	Longitudinal Section			
Road 7	DA33E	Road No. 7			
Koad /	DASSE	Longitudinal Section			
All Roads	DA34B	Typical Cross Sections – Sheet 1			
All Roads	DA34B DA35D	Typical Cross Sections – Sheet 1 Typical Cross Sections – Sheet 2			
Associated Earthworks,	DA36F	Catchment Areas and Drainage	Report on	Cardno	2
etc	DAJOF	Paths	Engineering and	(Qld) Pty	2
etc		r auis	Environmental	Ltd	
			Matters	Liu	
Subdivision	DA39F	Subdivision Layout Plan	Report on	Cardno	2
Subarvision	DA391 DA40G	Dedication and Easement Plan	Engineering and	(Qld) Pty	2
	DA400	Dedication and Easement I fair	Environmental	Ltd	
			Matters	Liu	
Reticulated Services			Report on	Cardno	2
Stormwater Drainage	DA36F	Catchment Areas & Drainage Paths	Engineering and	(Qld) Pty	2
Sewerage	DA301 DA37G	Sewer Reticulation Layout Plan	Environmental	Ltd	
Water Supply	DA37G DA38F	Water Reticulation Layout Plan	Matters	Liu	
Reconstruction of	DA36	Road Layout Plan	Report on	Cardno	2
Dianella Drive	DA23U	Road Layout I fail	Engineering and	(Qld) Pty	2
Dianena Difve			Environmental	Ltd	
			Matters	Liu	
Provision of Public	DA40G	Dedication and Easement Plan	Report on	Cardno	2
Open Space	DAHUU		Engineering and	(Qld) Pty	<u>_</u>
open opace			Environmental	(Qlu) Fly Ltd	
			Matters	Liu	
		Open Space/Landscape Plan	Master Planning	ML Design	3
	_	Open Space/Landscape I fair	Report	Architect	5
			Кероп	Planners	
Landscaping	_	Landscape Concept Plan	Landscape	EDAW/	6
Danuscaping		Stage 1 Landscape Works	Concept Report	AECOM	0
	_	Circulation and Accessibility	concept report	ALCOWI	
	_	Retail Centre			
Stage 1 Construction of	DA1	Series of 6 perspective sketches	Retail Centre	Donovan	4
Shopping Centre	DA1 DA2	(continued)	Design	Hill	
Snopping Centre	DA2 DA3	(continued)	Design	Architects	
	DA3 DA4	Locality Plan		Auchitects	
	DA4 DA5	Site Plan and Schedules			
	DAS DA6	Elevations North and East			
	DA6 DA7	Elevations North and East Elevations West and South			
	DA/ DA8	Ground Floor Plan			
	DA8 DA9	First Floor Plan			
	DAy	FIIST FIOULFIAII	l		

Works	Drawing Number	Drawing Title	Report or Other Reference	Author	Attachment Number
	DA10	Roof Plan			
	DA11	Basement Plan			
	DA12	Sections			
	DA13	Shadow Diagrams			
	Schedule	Finishes Schedule			
	Board	Finishes Board			
Signage	DA14	Building Signage Details	Retail Centre	Donovan	4
	DA15	Pylon Signage Details	Design	Hill	
				Architects	

In addition, the Project Application includes the **Stage 1 construction of the proposed shopping centre**, comprising a supermarket, specialty retail shops, restaurants and offices, as follows:

Ground Level	
 Supermarket 	$2,500m^2$
 Specialty shops 	850m ²
• Restaurants	<u>310m²</u>
	3,660m ²
 Amenities 	$75m^2$
First Floor Level	
• Office	$\frac{400m^2}{4,135m^2}$
Total Floor Space	4,135m ²
Car Parking Provision	
• "At grade"	76 spaces
• Basement	150 spaces
• "Indented" on-street	<u>16</u> spaces
Total Car Parking Provision	242 spaces

The **shopping centre** aims to create an engaging and interactive public and private realm, which achieves a high standard of architecture, reflective of the coastal climate and the character and values of the wider Casuarina Beach community.

The design of the shopping centre seeks to achieve a high degree of pedestrian accessibility with interactive street frontages serviced by limited on-street parking, a fully covered public realm, which is highly visual, and which accentuates the character and identity of the Town Centre Precinct as a whole.

The northern and eastern principal active frontages are punctuated by "*outdoor rooms*" which provide shaded public space and frame identifiable entry points to the recessed supermarket and main pedestrian lane servicing the on-grade parking. In contrast, the western elevation will be well screened from the Coast Road by a dense raised buffer of native planting, with the

southern elevation providing the only direct interface with the primary off-street parking supply.

Unlike other centres typical of this function, this centre is to be serviced by basement car parking which is almost twice that proposed on-grade, significantly reducing the hardstand usually provided with such developments.

Attachment 4 – Retail Centre Design (Donovan Hill) provides a series of detailed plans and reporting addressing the design issues, including **signage**, pertinent to the proposed shopping centre.

Drawing Number	Drawing Title	Report or Other Reference	Author	Attachment Number
DA1	Series of 6 perspective sketches	Retail Centre	Donovan	4
DA2	(continued)	Design	Hill	
DA3	(continued)		Architects	
DA4	Locality Plan			
DA5	Site Plan and Schedules			
DA6	Elevations North and East			
DA7 -	Elevations West and South			
DA8	Ground Floor Plan			
DA9 -	First Floor Plan			
DA10 -	Roof Plan			
DA11 -	Basement Plan			
DA12 -	Sections			
DA13 -	Shadow Diagrams			
DA14 -	Building Signage Details			
DA15	Pylon Signage Details			
Schedule	Finishes Schedule			
Board	Finishes Board			

The following drawings refer (see also enclosed Exhibit Books 1 and 2)

As stated in **Part A** – **Concept Plan**, in addition to the proposed shopping centre detailed above, it is noted that the retail floor space indicatively proposed as part of the mixed use and beach convenience retail/commercial development integral to the Town Centre Concept Plan (proposed Lots 5, 6, 12, 13 and 17) has been limited so as not to exceed 2000m² floor space (refer Land Use Plan (ML Design Architects Planners) in enclosed Exhibit Book 1).

It is the intention that, in relation to the proposed Town Centre **road system**, the proposed development will generally comprise the following:

- A *"Main Street"* vista which will provide the critical connection point drawing traffic from the Coast Road through and into the heart of the Town Centre Precinct;
- The continuation of Casuarina Way from north to south through the Town Centre so seeking to provide the "*missing link*" and integrate the Central Precinct (of Casuarina Beach) with the Northern Precinct;
- Suitable internal circulation compliant with the defined road hierarchy so as to provide an integrated transport network to meet the needs of visitors, tourists and permanent local residents; and
- Public parking and access to the beach entry points will be provided so as to maintain a high level of entry into foreshore environments, enhanced by the insertion of an esplanade.

Attached reporting seeks to demonstrate the adequacy, in traffic engineering and management terms, of the proposed development having regard to matters of capacity, sight distances or geometric limitations, amongst other considerations, which might otherwise prevent the access roads being so designed.

9.00 STATEMENT OF COMMITMENTS – PROJECT APPLICATION FOR STAGE 1 WORKS

The following commitments have been compiled based on the environmental assessment undertaken in the preparation of this Report. They provide a commitment by the proponent of the project, Kings Beach No. 2 Pty Ltd, indicating the responsibilities and timing to implement measures to minimise the environmental impacts that have been identified through this assessment. The commitments are to ensure that the Casuarina Beach Town Centre is environmentally, socially, and economically sustainable. This Statement of Commitments outlines a programme of works that will be undertaken with reference to the Project Application for Stage 1 Works.

PROJECT	COMMITMENT	ENVIRONMENTAL	TIMING FOR
COMPONENT		OUTCOME	COMPLETION
1. Development Contributions	 The proponent will pay the lawful contributions in accordance with any condition(s) of consent granted under Part 4 of the Act and calculated in accordance with any relevant Section 94 Contribution Plan(s), taking into account any referable or other applicable credits for prior contributions to the public benefit. Such contributions will be paid at each Stage of the development relevant to such payment. 	 The Proponent and the Local Government Authority agreeing to a range of lawful contributions to ensure the timely delivery of local infrastructure and community services Provide certainty for the delivery and quality of the public domain elements of the project Ensure the project's compatibility with local strategies 	Payment will be effected prior to the issue of a Construction Certificate for Project Application for Stage 1 Works, namely, the Stage 1 construction of the proposed shopping centre

PROJECT COMPONENT	COMMITMENT	ENVIRONMENTAL OUTCOME	TIMING FOR COMPLETION
2. Urban Design	 Urban Design Guidelines will be developed to ensure design excellence is achieved in the architecture of private buildings and the public domain (streets, parks, and squares). This will include building designs and standards. The Guidelines will also take into account the Tweed DCP requirements The detailed urban design guidelines will be provided as part of project or development applications for subdivision and infrastructure works for each of the neighbourhood stages of the Town Centre. These guidelines will be submitted with future project or development applications for subdivision and infrastructure works. 	 Ensuring that over the various stages of the development there is consistency of standards for the built environment That the built form meets the best modern Australian coastal design standards Ensuring that the Sustainability Objectives of the development are implemented 	Guidelines issued prior to the issue of a Construction Certificate
3. Environmentally Sustainable Development	 The Proponent is committed to an adherence to the principles of sustainability as defined in the Environmental Planning and Assessment Act 1979. The proposed development will incorporate a range of relevant ESD initiatives to minimise the impact of the projected development on the environmental including reduction in energy, water and waste generation by adherence to and implementation of, a suite of on-site management plans detailed in and/or attached to the Environmental Assessment, and upon which management protocols the proponent relies. 	• Ensure that all development on the site is managed in an environmentally sustainable manner	From Stage 1 but will be implemented in all Stages of the Project

PROJECT COMPONENT	COMMITMENT	ENVIRONMENTAL OUTCOME	TIMING FOR COMPLETION
4. Open Space and Public Walkway/ Cycle Connections	 The Proponent will dedicate 5,767m² of privately held 7(f) lands as public open space to encourage a larger, more legible public realm which promotes permeability within the 7(f) zone. A total of 9,801m² (including the above dedication) of public open space will be created, and will encompass the realignment and upgrading of the existing foreshore cycleway. This land will be dedicated to Tweed Council The proponent will design and build all the landscape elements of the public space Landscaping is to rely heavily on the use of native species Provision will be made in the public domain for Surf Life Saving Facilities 	 The Town Centre Park will create a large open recreational area for the whole of the Casuarina Beach village. It will cater for a wide variety of public uses from passive recreation to organised public events Allows full public access to the foreshore Allows full north- south pedestrian and cycle permeability throughout the length of the site Allows for easy east-west pedestrian and cycle links through the site There will be an upgrading of the foreshore walkway/cycleway The choice of local native plants will improve the habitat of the local fauna 	 The land will be dedicated in Stage 1 All landscaping works will be constructed in Stage 1
5. Foreshore Access and Public Beachside Car Parking	 The proponent will establish approximately 175 metres of publicly accessible beach access consisting of parkland and esplanade roadway, directly east of the centre east west axis boulevard. The proponent will provide 170 car spaces at a rate of 300 public spaces per kilometre length of beach 	 Ensure full 24 hour a day access to the foreshore and walkway/cycleway for the public Visitors to Casuarina Beach will have easy access to the parkland, the beach and the 	All works to be completed in Stage 1

PROJECT COMPONENT	COMMITMENT	ENVIRONMENTAL OUTCOME	TIMING FOR COMPLETION
	• The proponent will undertake these works and dedicate them to Council		
6. Traffic Management	• The proponent will design and construct all roads within the Town Centre in accordance with Australian Standards	• There will be a highly coordinated approach to the traffic management on	All roadworks will be constructed in Stage 1
	 The roadworks include connecting Casuarina Way's missing north-south link and creating a new and safer access point to the Coast Road 	 the site The mix will ensure that the traffic movements are compatible with the pedestrian 	
	• The proponent will design and construct all the pedestrian and cycle pathways in accordance with the attached plans	and cycle movements particularly given the tourist village style of development	
	 The road network will be capable of servicing the local bus needs. Provision for bus stops will be made. The proponent will design and install all the traffic management measures, like traffic lights, in accordance with Australian Standards The proponent will undertake the works required for the closure of The road network will be capable of servicing the local bus needs. Provision for bus stops will be made. Separation of the retail traffic around the supermarket from the quieter recreational traffic uses near the foreshore Creates the opportunity for improved and faster bus services 	retail traffic around the	
		the quieter recreational traffic uses near the foreshore	
		opportunity for improved and	
	 Dianella Drive The proponent will dedicate the roads to Tweed Council upon construction completion 	 A safer exit/entry point to the Coast Road for the residents of Casuarina Beach 	
7. Infrastructure	 The proponent has identified in this report the infrastructure required to support all of the proposed development in the Concept Plan. The areas of infrastructure include: sewerage water supply telecommunications electricity supply waste disposal 	 Casuarina Beach Village will be well serviced with all its basic infrastructure needs from the beginning of the project 	Infrastructure works will be undertaken in Stage 1

PROJECT COMPONENT	COMMITMENT	ENVIRONMENTAL OUTCOME	TIMING FOR COMPLETION
	• Specific commitments include:		
	Upgrading of the pumps in Pump Station 2 and the installation of additional main capacity of the sewer mains		
	A connecting main to the main waster supply		
8. Water Sensitive Urban Design	• The proponent commits to implementing a Water Sensitive Urban Design Strategy (WSUD) in accordance with the WSUD outlined in this report	• The system will substantially reduce the contaminant loads in Cudgen Creek and the Pacific	The WSUD will be delivered in Stage 1
	• Specific actions are:	Ocean	
	- The on-site stormwater management system will capture and retain virtually all the run-off from the site	 It meets environmentally sustainable principles 	
	- The east west swale will be moved ⁽¹⁾		
	- Modifications to the frontal swale		
	- Re-contouring of the site will improve the drainage patterns		
9. Soil Contamination	• The proponent undertakes to comply with any and all guidelines endorsed by the relevant Authority to assess the extent of any surface or subsurface contamination prior to commencement of construction	 A safe site fit for habitation 	Works will be undertaken in Stage 1
10. Management of Construction Noise, Vibration, Dust, Soils and Erosion	• Management of construction noise, vibration, dust, soil, and erosion during the construction phase of the development will be undertaken strictly in accordance with the relevant management plans and in accordance with the	• Minimise the impacts of the construction activity on the environment and on the neighbouring communities	Implemented prior to the issue of a Construction Certificate

⁽¹⁾ See Appendix C – Submissions to Department of Planning advising intention to Consult – Drainage Swale. 101

PROJECT COMPONENT	COMMITMENT	ENVIRONMENTAL OUTCOME	TIMING FOR COMPLETION
	aforementioned and approved Environmental Management Plan for the development.		
11. Management of Construction Waste	• The proponent undertakes to adopt approved targets as performance requirements for the management of construction waste.	 Minimise the impacts of the construction activity on the environment and on the neighbouring communities 	Implemented prior to the issue of a Construction Certificate
12. Management of Construction Traffic	 A Construction Management Plan will be prepared prior to the issue of a Construction Certificate. The Plan will include the principles set out in this Report to minimise construction traffic impacts at all times of the construction process. 	• Minimise the impacts of the construction activity on the environment and on the neighbouring communities	Implemented prior to the issue of a Construction Certificate
 Community and Stakeholder Engagement 	 The proponent undertakes to implement a complaints registration procedure to record and to address any and all issues in relation to the construction phase of development The proponent commits to establishing community consultation mechanisms during the assessment and sales stages of the development 	• The community and the local authorities are fully informed and consulted throughout every stage of the projects' development	Community consultations have already been established. They will be maintained. Ongoing throughout every stage of the Project
 14. Stage One Works – Project Plan Application - General 	 The proponent will subdivide the land into 56 lots including: 38 single lot dwellings comprising 12 low density residential allotments, 18 low density lots and 8 low density lots (as detailed in Figure DA39F (Cardno (Qld) Pty Ltd) - Subdivision Layout Plan) 	• A quality subdivision designed and built in accordance with the approved Plans	To be constructed in Stage One

PROJECT	COMMITMENT	ENVIRONMENTAL	TIMING FOR
COMPONENT		OUTCOME	COMPLETION
15. Essential urban services and infrastructure	 The proponent will clear of vegetation on the Town Centre site (Lot 223, DP 1048494), then the land will be reshaped to achieve the desired development outcome (Detailed in Figure 24G (Cardno (Qld) Pty Ltd) - Finished Surface Contours). All disturbed surfaces will be grassed and stabilised immediately on completion. The proponent will undertake all the bulk earthworks for all subject lands zoned Residential 2e - Tourist Residential and the privately owned 7(f) Environment Protection – Coastal lands. The proponent will provide all reticulated services (water, sewerage, stormwater drainage) to each created lot. External infrastructure with the exception of sewerage will meet Australian standards (as detailed in Figure DA37G (Cardno (Qld) Pty Ltd) – Sewer Reticulation Layout Plan and Figure DA38F (Cardno (Qld) Pty Ltd) – Water Reticulation Layout Plan) The proponent will construct a 250mm diameter main to the north, the new main to be constructed along the proposed road alignment of Casuarina Way from the northern connection to the road entrance to Lot 1. From that point, a new 150mm diameter main to the south. 	 Ensure that all the infrastructure needs of the subdivision are fully met and no burden is left with the service providers or the wider community. Ensure that ESD principles are employed in the provision of the infrastructure. 	To be constructed in Stage One

PROJECT COMPONENT	COMMITMENT	ENVIRONMENTAL OUTCOME	TIMING FOR COMPLETION	
	 The existing sewer main runs from the south-eastern corner of the Northern Precinct along the drainage swale to Pump Station No 2 on the Coast Road. 	0		
	 The proponent will relocate the existing sewer main along the new Casuarina Way road alignment (detailed in Figure. DA37G (Cardno (Qld) Pty Ltd) – Sewer Reticulation Layout Plan). 			
	• The proponent will upgrade the pumps in Pump Station No 2, and the installation of additional rising main capacity in the Tweed Coast Road.			
	• The proponent will undertake all landscaping on site to meet the expectations of the residential and visitor community and other statutory requirements.			
	 (Attachment 6, Landscape Concept Report (EDAW/AECOM)) 			
16. Drainage Swale ¹	• The proponent will fill in the drainage swale which commences at the north- eastern boundary of the site and bisects it before discharging to the existing culverts in the Coast Road.	• An efficient drainage system that does not create any adverse environmental impacts	To be constructed in Stage One	
	• The swale will be replaced by underground stormwater pipe drainage before discharging back to the existing drainage system at the northern end of the playing field area			
17. Road System	• The proponent will construct all roads in accordance with Australian Standards	• Provision of an efficient, safe road network that adheres to	To be constructed in Stage One	

PROJECT COMPONENT	COMMITMENT	ENVIRONMENTAL OUTCOME	TIMING FOR COMPLETION	
	 The proponent will construct all roads proposed within the subject land, including kerbside, basement and other public car parking areas (as detailed in Drawing. DA 23G, (Cardno (Qld) Pty Ltd) -Road Layout Plan). 	Australian Standards. • Provision of an esplanade and walkway / cycleway enabling public access to the beach		
	• The proponent will construct the "missing link" north-south road link (Casuarina Way) extending from Steelwood Lane at the southern end to the Dianella Drive roundabout in the north			
	 The road reserve width (20m) and cross sections proposed will match all the existing sections of Casuarina Way (Figure DA34B (Cardno (Qld) Pty Ltd) – Typical Cross Section, Sheets 1 and 2) 			
	• The proponent will construct an esplanade which will be integrated into the road network			
	• The proponent will create an additional pedestrian beach access point which will be integrated into the road network			
	• The proponent will realign the foreshore cycleway/ walkway along the coastal frontage of the site as well as vegetation clearing and associated earthworks, minor road construction and drainage swale works within the 7(f) zone			
	 The proponent will physically close Dianella Drive at its intersection with Coast Road, and construct a cul-de-sac for reasons of safety 			

PROJECT COMPONENT	COMMITMENT	ENVIRONMENTAL OUTCOME	TIMING FOR COMPLETION
18. Retail/ Commercial	 The proponent will construct a shopping centre in accordance with approved Plans (see Attachment 4, Retail Centre Design (Donovan Hill)) The shopping centre design will have a high degree of pedestrian accessibility Interactive street frontages serviced by limited on-street parking Fully covered, highly visual public realm which accentuates the character and identify of the Town Centre Basement car parking The shopping centre will comprise approximately: 2,500m² supermarket 850m² speciality retail shops 310m² restaurant 400m² office on first floor 242 car parking spaces Signage (see Attachment 4 Drawing Series Numbers DA1 – DA15 inclusive) The sinclusive) Attachment 4 Drawing Series Numbers DA1 – DA15 inclusive) Signage Mathematical states of the states	 A vibrant retail / commercial precinct catering to the needs of the local community and the tourists visiting the area The local shopping centre will reduce traffic on the Coast Road. This also provides environmental benefits. 	To be constructed in Stage One
19. Public Open Space	 The Proponent will dedicate 5,767m² of privately held 7(f) lands as public open space to encourage a larger, more legible public realm which promotes permeability within the 7(f) zone. A total of 9,801m² (including the above dedication) of public open space will be created, and will encompass the 	• The Town Centre Park will create a large open recreational area for the whole of the Casuarina Beach village. It will cater for a wide variety of public uses from passive recreation to organised public events	 The land will be dedicated in Stage 1 All landscaping works will be constructed in Stage 1

PROJECT COMPONENT	COMMITMENT ENVIRONMENTAL OUTCOME		TIMING FOR COMPLETION
	 realignment and upgrading of the existing foreshore cycleway. This land will be dedicated to Tweed Council The proponent will design and build all the landscape elements of the public space Landscaping is to rely heavily on the use of native species Provision will be made in the public domain for Surf Life Saving Facilities 	 Allows full public access to the foreshore Allows full north-south pedestrian and cycle permeability throughout the length of the site Allows for easy east-west pedestrian and cycle links through the site There will be an upgrading of the foreshore walkway/cycleway The choice of local native plants will improve the habitat of the local fauna 	
20. Foreshore Access and Public Beachside car parking	 Establishment of approximately 175 metres of publicly accessible beach access consisting of parkland and an esplanade roadway Provision of 170 car spaces at a rate of 300 public spaces per kilometre length of beach within 200m of the beach (162 spaces required) All works will be dedicated to Council 	 Easy 24 hour access to the beach for local residents and visitors The open design will encourage visitors and tourists to the Tweed Coast and provide a wonderful facility for Tweed residents 	To be constructed in Stage One
21. Community Stakeholder Management	 The proponent undertakes to consult with community and local authorities throughout the construction phase of Stage One. 	• The community and the local authorities are fully informed and consulted throughout the construction of Stage One	Ongoing Community consultation throughout the Project

10.00 DIRECTOR GENERAL'S KEY ISSUES - PROJECT APPLICATION FOR STAGE 1 WORKS

10.01 Compliance with the Requirements for the Concept Plan

It is submitted that the responses made in the preceding **Part A** of this Environmental Assessment reporting have addressed the matters necessarily applicable to the Stage 1 Project Application.

To reiterate, the proponent agrees to the Statement of Commitments for the Project Plan, as detailed in **Section 9.00** of this Assessment Report.

10.02 Subdivision Layout and Design

The following matters are further addressed, as required:

"2.1 Demonstrate the consistency of the proposal with the character of existing development in the locality in terms of street frontage, scale, building envelopes and future built form controls, aesthetics, energy and water efficiency and safety."

Continuity/Settlement Pattern

The proposed subdivision of the Town Centre Precinct enables the proposed development of this key activity node to mesh seamlessly with the preceding stages of development to the north and south within the Casuarina Beach community. This is to be achieved by providing a range of allotment sizes to integrate with the settlement pattern of adjoining lands as well as to create a focus around the boulevard, where the intensity and type of development will increase in scale without adversely impacting upon the amenity of neighbouring sites. This is to be achieved utilizing the following land use elements:

- twelve (12) low-density residential allotments on the southern alignment of Dianella Drive. The proposed new lots are generally consistent in size, scale and detached residential type as are properties on the northern side of Dianella Drive (proposed Lots 19-30);
- eighteen (18) low-density residential allotments configured off a new local access street between Casuarina Way and the existing Open Space on the western side of the site. The proposed new lots are consistent in size, scale

and detached residential type as are properties also on the western side of Casuarina Way immediately to the south (**proposed Lots 31-48**);

- eight (8) low-density residential allotments on the southern alignment of the subject site abutting complementary sized forms of residential development further to the south (**proposed Lots 49-56**);
- eleven (11) medium density allotments (master lots) ranging in size, generally surrounding the core Town Centre axis. The size, configuration and position of these allotments are consistent with other medium-density residential development sites elsewhere within Casuarina Beach and will provide the critical mass residential/tourist population to support a vibrant and exciting core Town Centre village (**proposed Lots 3-4, 7-11, 14-16 & 18**);
- four (4) mixed use allotments placed equally on the northern and southern alignments of the core east-west axis. These allotments will play a fundamental role in the Concept Plan as they allow, at ground level, a high degree of activity and connectivity which will be unbroken along both sides of the Town Centre boulevard between the Shopping Centre and the beach (**proposed Lots 5, 6, 12 & 13**);
- one (1) designated retail allotment (**proposed Lot 1**) and one (1) designated commercial allotment (**proposed Lot 2** allocated for office, medical centre, child care centre and other community uses) located on the southern and northern alignments of the boulevard respectively between Casuarina Way and the Tweed Coast Road. These allotments are key elements of the Concept Plan as they provide the non-residential activity centres at a scale and intensity long-anticipated within the Town Centre Precinct. They have been purposely located to the west of Casuarina Way to ensure management of traffic flows and to separate effectively low levels of slow-paced beachgoer traffic from consumer traffic flows;
- one (1) mixed retail and commercial allotment (**proposed Lot 17**) on the southern alignment of the boulevard, at its eastern end adjacent to the primary beach access point. This building is referred to as an "*icon*" building and will be designed specifically to draw attention and activity towards the eastern end of the boulevard. It is intended to accommodate uses including a mix of restaurants, entertainment, beach retailing and space for use in support of surf lifesaving activity within Casuarina Beach.

Character – Scale and Intensity

The visual impact of the Town Centre as part of proposed Stage 1 will be consistent with the developing character and scale of the local community into which it is proposed to be placed. Height is within the generally accepted height limits (maximum three (3) storeys) for coastal communities in Northern NSW.

The built form which is proposed as part of Stage 1 development is the shopping centre. Consisting of a supermarket, specialty shops and restaurants and offices, this development will form a hub of activity (refer **Attachment 4 - Retail Centre Design** (Donovan Hill)).

(The details of the shopping centre are produced elsewhere in this reporting).

The design of the centre aims to create an engaging and interactive public realm which seeks to achieve a high standard of architecture which is representative of the coastal climate, character and values of the wider Casuarina Beach community. The built form aims to present four (4) significant and individual elevations of the complex, responding directly to its urban setting and its contribution to the whole project form in a manner that significantly departs from the traditional, large format "*box in the car park*" built-form that typifies many similar retail complexes of this size and scale (refer **Attachment 4 -Retail Centre Design** (Donovan Hill) and **Attachment 5 - Urban Design Report** (Malcolm Middleton Architects)).

Future Built Form Controls

Other '*Main Street*' development will be developed with a similar design approach with surrounding residential development, however without the particular visual interest which is envisaged for the Town Centre facilities. Residential densities proposed are consistent with those adjacent and nearby communities such as Seaside City, Salt and Kingscliff.

The Concept Plan provides the structure by which to control future built-forms with respect to building setbacks, heights, plot ratio and landscaping. It is noted that the proposed shopping centre generally seeks to comply with relevant statutory provisions.

Accordingly, the size, configuration, plot ratio, landscape provision and height controls for the proposed allotments are consistent with those of other neighbouring development within and around Casuarina Beach, as well as that supportible within the 2(e) Zone generally.

A breakdown of the proposed allotments with respect to building form controls and areas are provided below.

Land Use Type	Height ⁽¹⁾		Type Height ⁽¹⁾ Density ⁽¹⁾	Density ⁽¹⁾		Retail Floor Space	Min Landscape Area of Site
	Ridge & Ceiling	No. of Storeys	Plot Ratio	Min No. Units per m ² of site area			
Retailing (Lot 1)	13m - 10m	3	0.5	N/A	$3,660 \mathrm{m}^{2(2)}$	30%	
Commercial (Lot 2)	13m - 10m	3	0.5	N/A	N/A	30%	
Commercial (Lot 17)	10m - 8m	2	1.0	N/A	2000m ²	10%	
Mixed Use (Lots 5, 6, 12, 13)	12.2m-9.6m	3	2.0	1 per 130m ²		20%	
Medium Density Residential (Lots 3- 4, 7 –11, 14-16, 18)	12.2m-9.6m	3	1.2	1 per 130m ²	N/A	20%	
Low Density Residential(Lots 19-56)	9m - 7m	2	0.6	N/A	N/A	25%	

(1) The listed height and density criteria are compliant with those contained in the ratified Tweed Shire Council's Tweed Development Control Plan Section A1 – Residential and Tourist Development Code.

(2) Project Application (for (1) Stage 1 Works) is limited to ground floor retailing comprising a $2,500m^2$ supermarket, $850m^2$ specialty shops and $310m^2$ restaurants, totalling $3,660m^2$ floor space. Amenities ($75m^2$) at ground floor are also proposed, with a first floor level to accommodate $400m^2$ office space, additionally.

Any expanded retailing and related floor space beyond the amount specified above, is to be the subject of any, if any, further application(s), consistent with population growth in the short-to-medium term future.

The site areas for the proposed allotments are listed below:

Land Use	Area Range
Retailing (Lot 1)	16,324m ²
Commercial (Lot 2)	9,582m ²
Commercial (Lot 17)	2,008m ²
Mixed Use	$5,167m^2 - 6,408m^2$
Medium Density Residential	4,239m ² - 21,134m ²
Low Density Residential	$450m^2 - 685m^2$

Table – Proposed Allotment Area Ranges

Character – Aesthetics, Energy and Water Efficiency and Safety

In keeping with the established settlement pattern throughout the preceding development stages of Casuarina Beach Township, New Urbanism design principles dominate the open space, landscaped public realm and pedestrian connectivity networks developed in this premier coastal community. As is now standard throughout NSW, environmentally sustainable design (ESD) principles have been widely engaged in the development and formulation of the Town Centre Concept Plan (refer **Attachment 5 – Urban Design Report** (Malcolm Middleton Architects)).

In particular, the shopping centre has been designed in accordance with passive solar design principles and the strategic planning of the centre has ensured that much of the development does not rely on air conditioning. The centre is based around the generous provision of north-facing covered public spaces which are protected from undesirable winds but allow control of desirable breezes. The large expanse of roof has the opportunity to catch a significant quantity of rainwater, which can be used for landscaping and cleaning. The basement car park, as a planning initiative, allows for more landscaping by reducing the demand for on-grade parking and reduces the footprint of the overall development. It also keeps cars cool and reduces load on subsequent private vehicle air conditioning (refer **Attachment 4 - Retail Centre Design** (Donovan Hill)).

In addition, it is also a key urban design aim, (as has been achieved within previous stages of Casuarina Beach and Salt), to introduce innovative stormwater management practices for the stormwater management of the Town Centre development. This will include the use of infiltration basins which will in turn direct a significant amount of stormwater to the existing freshwater aquifer underlying the site. It is proposed to reuse the water from this aquifer for irrigation of public open space and for the maintenance of adequate flows in the sewer system thereby reducing demands for potable water from Council's municipal system (refer **Attachment 2 - Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

Similarly, the Town Centre Concept Plan seeks to continue this design philosophy, seeking to encourage yet further innovative and responsive built forms which complement the coastal climatic condition of the region in a sustainable manner.

"2.2 Provide details of potential building envelope, built form and design quality controls and the means for implementing them."

The Casuarina Beach Township has always placed a great emphasis on the establishment of high quality built form. This has been represented through the active participation of a respected and recognised team of designers to deliver desirable outcomes for the community. This will continue with a heightened relevance to in the Town Centre Precinct.

The Concept Plan has created individual sites which have been configured to allow for optimum north and north-easterly aspects and limited beach views. Building footprints will be controlled to encourage space between buildings to allow for natural light, views and ventilation to all units, and to free up ground level space for outdoor living and recreation opportunities. Accordingly, it is proposed the built form will be controlled by an agreed Design Code attached to all project contracts (refer **Attachment 5 - Urban Design Report** (Malcolm Middleton Architects)).

Compliance with DCP 16 Subdivision Manual

"2.3 Assess the consistency of the subdivision with Tweed Council's DCP 16 Subdivision Manual."

The Stage 1 Project Application seeks approval for the formal subdivision of the subject land to create fifty-six (56) new lots. Accordingly, a full assessment against the various provisions of the Tweed DCP Section A5 – Subdivision Manual has been conducted as part of the preparation of this application. As such it is advised that the proposed new allotment configuration, road frontages, areas and associated road design and integrated drainage proposed are in accordance with the DCP Section A5 – Subdivision Manual (refer Section 1.07.5 of Attachment 11, Attachment 5 - Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd) and Attachment 3 - Master Planning Report (ML Design Architects Planners)).

10.03 Water Cycle Management and Watercourses

"3.1 The proposed stormwater discharge points from the site. (Note: Council state that the Council owned playing fields to the west of the site are not a lawful point of discharge."

The drainage design premise within the Casuarina Beach Township has generally been to carry stormwater runoff to the frontal swale which runs along the entire length of the site, with flow in excess of infiltration capacity to be then directed westwards to the Coast Road. This western discharge occurs in two locations, namely the east-west swale between the Town Centre and the northern Precinct (which is designed to carry developed runoff from those two areas) and the Central Park in central Precinct, which is designed to carry developed runoff from the southern and central Precincts (refer **Attachment 2 - Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

During the development of the northern Precinct, the east-west swale was constructed as a temporary channel to convey stormwater from those two sites to drainage outlet 11, and subsequently to Cudgen Creek. (It is to be noted that, at the time of construction and subsequently, the Town Centre site, including the drainage swale, has remained in an undeveloped state) (refer **Attachment 2 - Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

Runoff Controls

"Measures to ensure compliance of road runoff quality with Tweed Council's DCP 16."

As a consequence of the change to the drainage catchments on the Town Centre site which will result from the reshaping of the land, the peak rate of flow being delivered to the swale reduces significantly. By utilizing the existing flood storage capacity in the frontal swale for the north Precinct and the Town Centre, the peak rate of discharge can be further reduced, to the point where the open channel can be replaced by a relatively minor drainage system (refer **Attachment 2 - Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

The need for an open channel to carry the overland flow has therefore been removed by a change in design, and the value and residential amenity of the site to be created dictates that a piped solution is significantly preferable. Detailed hydraulic analysis has been undertaken to assess the likely performance of the replacement pipe system for the east-west swale. It has been determined that a pipe installation equivalent to three (3) to five (5) x 900mm diameter pipes will produce an acceptable outcome.

Drainage Swale

"Potential impacts of the proposal on stormwater within the drainage swale on site. (Note: Council state that Casuarina Way would cross this swale for 130m. This length should be minimised with measures proposed to ensure the ongoing effective management of stormwater)".

The existing frontal and east-west swales on this site contain infiltration basins which were sized to accommodate any future development of this Precinct. However, the redevelopment of the site will remove the east-west swale⁽¹⁾, and modify the frontal swale. The re-contouring of the site will also alter the drainage patterns in a way which was not envisaged at the time that the original hydraulic and water quality analyses were undertaken (refer **Attachment 2 - Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

With further reference to this Engineering Report, the major implications of these changes have been summarised as follows:

- The removal of the east-west swale will remove a number of small infiltration basins. This shortfall will be catered for with the redevelopment of the frontal swale which will enable additional infiltration capacity to be provided in this location to compensate for the loss.
- The reshaping of the site will direct all flow on the site away from the frontal swale, and to the west (ie towards Casuarina Way and the Coast Road) and north.
- The finished site will be divided into four (4) catchments.
- The south-eastern catchment, representing the majority of the site, will drain to the west, to an infiltration basin to be constructed at the south-eastern corner of the supermarket site. It is proposed that this basin will be dedicated as open space to Council.

⁽¹⁾ See Appendix C – Submissions to Department of Planning advising Intention to Consult – Drainage Swale

- The north-eastern catchment, ie that part of the site north of the Town Centre "*Main Street*" and east of the newly constructed section of Casuarina Way, will drain northwards to the boundary of the site and towards the previous alignment of the east-west swale. These basins will form part of the resort to be constructed on this site, and will remain in private ownership.
- The north-western catchment, ie that part of the site north of the Town Centre "*Main Street*" and west of Casuarina Way, will drain to its south-western corner, and into an infiltration basin. This basin is proposed to be dedicated as public open space to Council.
- The south-western catchment, ie the supermarket site, will drain to its south-western corner, and thence into the unreconstructed part of the east-west swale which will be retained in the playing field area.
- The remaining element of the stormwater management system on this site is the replacement of the existing overland flow swale with underground stormwater drainage pipes (refer Attachment 2 - Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

10.04 Infrastructure Provision

"Identify staging, if any, of infrastructure works."

This application involves the subdivision of the site into fifty-six (56) new lots, hence it is necessary to ensure that adequate independent water supply and sewerage reticulation connections are available to each new allotment (refer Attachment 2 - Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

As all lands within the Town Centre Precinct will be created as part of the Stage 1 Project Application, there will be no need for staging requirements. Details in relation sewer and water infrastructure and capacity, have already been addressed previously in this Assessment.

Relevant inquiries indicate that adequate electricity and telephone services are available to the subject site to cater for the proposed development.

10.05 Traffic Management and Access

Dianella Drive Closure

"Address the impacts of the closure of Dianella Drive."

A key aspect of the development will be the re-construction of the existing Dianella Drive at its intersection with the Tweed Coast Road, by the formation of a cul-de-sac at its western end, for reasons of safety, and the construction of the boulevard which will redirect traffic from the Tweed Coast Road through and into the Town Centre development and onto Casuarina Way. This will improve the residential amenity for future residents of Dianella Drive and most relevantly, construct the northern "missing link" in Casuarina Way, extending from Steelwood Lane at the southern end, to the Dianella Drive roundabout at the north. As Dianella Drive is an existing road, Council consent to any such proposal will be sought from the relevant Authorities to facilitate this process. However, as lands on the northern side of Dianella Drive are also held in the ownership of the Applicant (Kings Beach No. 2), consent from the affected property owners is deemed granted. Therefore it is submitted, as a possible alternative, that this is a matter which may be dealt with by the imposition of a reasonably and relevant stated condition to facilitate this process. (See **Appendix B – Request to Tweed Shire Council for Agreement-in-Principle to traffic changes to Dianella Drive-Coast Road intersection**).

As a consequence, a new intersection on the Tweed Coast Road will be created to provide direct access to the Casuarina Beach Town Centre and to connect Casuarina Way with the Tweed Coast Road, replacing the existing collector function of Dianella Drive. This connection will occur via a proposed new road, the boulevard. This revision to the street network is an appropriate outcome as it introduces the opportunity for direct access into the Town Centre from Tweed Coast Road without the need for traffic to pass through residential areas. It also provides increased traffic levels into the Town Centre to activate the streets. This is an important factor in the success of the Town Centre (refer **Attachment 7 - Traffic Impact Study** (Cardno Eppell Olsen)).

The re-construction of Dianella Drive is necessary as the intersection spacing between the Tweed Coast Road/Dianella Drive intersection and the Tweed Coast Road/the boulevard intersection would be less than the desirable intersection spacing of 300m. In addition, the Casuarina Beach Master Plan Policy allows for only three (3) connections from Casuarina Beach to Tweed Coast Road (refer **Attachment 7 - Traffic Impact Study** (Cardno Eppell Olsen)).

To restate, the re-construction of Dianella Drive as proposed, and the relocation of the connection to, and intersection with, the Tweed Coast Road, will not result in any significantly altered travel times, and will improve measures of road safety.

Public Car Parking

"Ensure that the layout of all car parking areas proposed are in accordance with relevant RTA and Council guidelines and Australian Standards."

Provision of beach-side car parking at a rate of 300 spaces per kilometre of beach frontage is Policy provision of public parking for beachgoers (as discussed previously in this Assessment). Notwithstanding, it is observed that the Salt development to the north has proceeded with public parking provided at 200 public spaces per kilometre of beach frontage. The full length of the Casuarina Beach Town Centre site has a beach frontage of approximately 538m, yielding a Policy public parking requirement of 162 car spaces. It is proposed to supply a total of 170 such public car parking spaces with all spaces provided within a 200m distance of the foreshore for ease of access by walking (refer **Attachment 7 -Traffic Impact Study** (Cardno Eppell Olsen)).

The location of the proposed public car parking provision (within 200m of the beach) is summarized below.

Car Parking Provision				
No. Spaces 21				
20				
20				
16				
21				
72				
170				

There will be other public on-street spaces provided throughout the site as part of the overall development and streets (eg. on Casuarina Way and the boulevard (west)). These are not included in the numbers reported above since they are further than 200m from the foreshore.

It is noted that the subject site is one of the last remaining beach front sites within Casuarina Beach. It is understood that Council had initially agreed upon a requirement for 668 public car parking spaces to be provided throughout the entire length of Casuarina Beach to satisfy beachgoer demand. As at January 2005, there were a total of 410 spaces available for such public use. In general, this number has not changed since then. Recent applications by Multiplex at the southern end of Casuarina Beach will provide an additional 120 public spaces. As such, the total provision of 410 (existing) plus 120 (Multiplex development) plus 170 (proposed) spaces (700 spaces in total) will exceed Council's stated requirement.

Disabled parking will be provided within the public parking areas. There will be easy access for disabled users to the foreshore (parkland and boardwalk) in the vicinity of each designated pedestrian beach access (refer **Attachment 7 - Traffic Impact Study** (Cardno Eppell Olsen)).

10.06 Earthworks and Filling

"6.1 Provide a detailed survey showing existing and proposed levels and quantities o fill, if required."

Bulk Earthworks

The development proposal will include site profiling which will involve approximately 180,000m³ of bulk earthworks (cut and fill) to achieve the desired surface levels for development. Approximately 40,000m³ of fill will be required to be imported by road onto the site. The existing and proposed surface contours are exhibited in the attached Engineering Report (refer **Attachment 2 - Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

It is noted that the earthworks phase will also include the filling in of the existing east-west drainage swale which bisects the site, with the eventual replacement of the drainage capacity of that system by an underground stormwater drainage pipe system⁽¹⁾.

All existing vegetation is to be removed to facilitate the projected earthworks activity, particularly on the eastern part of the site. All cleared vegetation will be mulched on-site for reuse on-site. In addition, following clearance, the subject site will be seeded with rapid-growing grasses to prevent wind erosion and will be planted with appropriate native species.

⁽¹⁾ See Appendix C – Submissions to Department of Planning advising intention to Consult – Drainage Swale.

An Earthworks Management Plan is included in the attached documents (refer Attachment 2 - Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

"6.2 Where relevant, provide details of the source of fill, including types of materials and soils."

Fill Source

Completion of the earthworks to the required levels will require the importation of approximately 40,000m³ of material. This material will be brought to site by road transport (refer **Attachment 2 - Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

Further relevant matters are addressed as follows:

Sediment and Erosion Controls

The site is generally considered to be a low erosion risk due to the relatively flat grades across the site and the high infiltration capabilities of sand. Regardless, all construction activities on the subject lands are to be carried out in accordance with the Erosion and Sediment Control Plan (ESCP) prepared by Cardno (Qld) Pty Ltd to minimise any adverse impacts. The ESCP has been prepared in accordance with Tweed Shire Council's Aus-spec D7 Stormwater Quality and Good Engineering and Environmental Practice (refer **Attachment 2 - Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

Geotechnical Issues

Previous Geotechnical Reports on the subject land have indicated that there is no geotechnical impediment to the carrying out of the proposed development and associated earthworks (refer **Attachment 2 - Report on Engineering and Environmental Matters** (Cardno (Qld) Pty Ltd)).

Hydraulics/Flooding

Any development of the land must take into account the prevailing Q100 flood level. Apart from the very small areas contained within the drainage swale, the subject land is above the predicted Q100 flood level of RL2.6m AHD. Accordingly, following operation of appropriate earthworks, it is advised that the subject land will not be flood prone. The finished levels of the surface of the land have been included in the attached engineering report (refer

Attachment 2 - Report on Engineering and Environmental Matters (Cardno (Qld) Pty Ltd)).

Air Quality

Considering that the proposed shopping centre will incorporate ESD Principles in its design and operation, no detrimental impacts are anticipated.

10.07 Noise

"7.1 Address potential noise impacts, in particular, road traffic noise, for future residents and appropriate mitigation measures."

The subject site is currently vacant and experiences negligible noise impacts from vehicles travelling along the Tweed Coast Road (Old Bogangar Road) and Dianella Drive into Casuarina Way to the north.

Accordingly, the shopping centre will be the only potential noise source created as part of this Application. It is submitted that proposed separation distances and sight lines between the Shopping Centre and residential allotments will be sufficient to control emissions within Council's accepted standards. As such, specific noise attenuation measures are not proposed at this time.

10.08 Socio-Economic

"8.1 Address any potential social or economic impacts of the proposal, particularly in regard to the shopping centre, including consideration of Tweed Shire Council's DCP45 – Socio-Economic Impact Assessment."

It is proposed that the future development of the Casuarina Beach Town Centre, incorporate, at its focus, the creation of a *"Main Street"* mixed use precinct including:

- a retail site to be occupied by a supermarket-anchored shopping centre with a total floor area of 4,135m² (3,660m² retail) in Stage 1 (with a 2,500m² supermarket).
- A series of mixed use and commercial allotments extending along the main road from the supermarket to the beach (Lots 2, 5, 6, 12, 13 and 18) which will limit additional total retail floor space to 2,000m²; and
- A commercial site proximate to the beach (Lot 17), focusing upon restaurant, entertainment and beach retailing uses.

It is envisaged that the Town Centre will have two distinct, yet complementary features. As an everyday centre for residents of surrounding communities to meet convenience ("chore") shopping needs, dining and other regular 'centre-based' activities; and as a beach-orientated tourist centre, servicing the needs of visitors to the area, which will also include dining, tourist services and other shopping (refer **Attachment 8 - Socio-Economic Impact Assessment** (Conics Pty Ltd)).

Additional development of the retail floor space above that proposed as part of the Stage 1 Project Application will only proceed in accordance with subsequent applications which are lodged and approved and at a time when market demands are strong enough to support such an increase without adversely impacting upon the viability of neighbouring centres.

Accordingly, the project will exhibit social and economic impacts upon the general locality, pursuant to the provisions of Part 3 Section 17 of the Tweed Local Environmental Plan 2000 and DCP Section B9 – Socio-Economic Impact Assessment. As such, it is appropriate to consider the implications of the proposed development with respect to the identification of issues and affected groups.

The Town Centre Development is the key element which will facilitate the establishment of residential, commercial, community and personal services and retail opportunities to meet the growing needs and demands for the Casuarina Beach community. This neighbourhood meeting place is intended to become the formal gateway for visitors and residents to this premier beachside community. Integrating environmentally sound design principles, this proposed Town Centre development seeks to represent the aims and the objectives of the entire project by way of its unique beach culture architecture and level of residential amenity.

Based on the Tweed Retail Strategy and current population estimates for both the assessed primary and secondary trade areas, there is a demonstrated demand now for a suitably-scaled retail facility at the location proposed. This is further evident given the distance to existing centres in Kingscliff (6-8km to the north), South Tweed (14-16km) and at Pottsville (13km to the south) and the expressed opinions of the local community supporting the establishment of a supermarket-anchored centre (refer **Attachment 8 - Socio-Economic Impact Assessment** (Conics Pty Ltd)).

Accordingly, the establishment of a supermarket-anchored centre and mixed use "*Main Street*" precinct at Casuarina Beach is considered to be a good "fit" with the needs of the community and will service the areas of Kings Forest, Seaside City, Salt, Casuarina Beach and

Cabarita Beach/Bogangar (refer Attachment 8 - Socio-Economic Impact Assessment (Conics Pty Ltd)).

Population projection estimates for the (total) population for the Casuarina Beach community have been assessed to comprise 3,000 permanent residents and 2,600 tourist residents. This assessment is consistent with the estimated total population yield of the entire Casuarina Beach Estate as per the DCP Section B5, which refers to 5,600 persons. The Year 2007 permanent resident population estimates are 1,068 persons and 1,246 persons in 2008. An ultimate population of approximately 2,500 persons for the Town Centre Concept Plan is projected which, although it exceeds the original assessment of 1,520 persons for Management Lot 5 (Town Centre Precinct) is still supportible (refer **Attachment 8 - Socio-Economic Impact Assessment** (Conics Pty Ltd)).

In terms of identifying affected groups, the most immediate 'affected groups' would likely be the existing residents within this beachside estate who will positively benefit from the future community facilities and commercial/retail services incorporated as part of this Town Centre Precinct. In addition, the 'sphere of influence' of the proposal will include persons residing in and/or visiting the general locality. The impacts resulting from the future development of the Town Centre Precinct, in accordance with the Concept Plan, may reasonably be stated to be positive and in general accordance with the requirements of the original Master Plan (dated December 1998) approval.

Generally stated, the various community benefits likely to accrue include the following:

- the introduction locally of uses which are both compatible and consistent with Casuarina Beach's image and that of the Tweed Shire as a whole, (being a relaxed, quiet, pleasant and enjoyable lifestyle);
- the creation of opportunities for ongoing local employment;
- the establishment of scaled local retail and commercial services to meet the needs and demands of the immediate area;
- a commitment to an overall, coherent design which is aimed at reflecting a quality environment and the design philosophy embodied by Casuarina Beach;
- the effective development of a significant "gateway" site which will be comprehensively and sensitively landscaped; and
- the production of "multiplier effects", including benefits from resident spending.

Based on an examination of the abovementioned matters, it is considered that outcomes from the Concept Plan and the proposed Stage 1 development, namely land subdivision and development of a shopping centre, will provide net benefits to the community's residents and visitors.

No mitigation measures or monitoring, as might otherwise be needed if the site were in very close proximity, for example, to an existing developed area where the proposal was merely replicating existing offerings or facilities, are required, in any reasonable analysis.

No detriment to amenity values or the production of adverse economic impacts are anticipated.

Accordingly, it is considered that net benefits to the community will accrue, as a consequence of the implementation of Stage 1 of the Concept Plan, the subject of this Assessment.

11.00 CONSULTATION

Extensive consultative processes have been engaged prior to, and during, the preparation of this Environmental Assessment. Of necessity, these processes have included, in addition to consideration of the Concept Plan, matters relating directly to the project application for Stage 1 Works for the Casuarina Beach Town Centre.

These processes have been reported earlier in this Assessment at Section 6.10 – Consultation.

PART C CONCLUSION

12.00 STATEMENT

Having regard to the matters raised in this Environmental Assessment and its Attachments, and the facts, considerations and circumstances upon which the Assessment relies, the following concluding Statement is made.

In the final analysis, having regard to the facts, considerations and circumstances upon which this Environmental Assessment relies, it is concluded that the Major Project proposed by Kings Beach No. 2 Pty Ltd, the registered owners and proponents of a Concept Plan for Town Centre, and including the Project Application for Stage 1 Works as described, on land described as Lot 223 in DP 1048494, Lot 3 in DP 1042119 (Closed Road), Lot 144 in DP 1030322 and Lot 13 in DP 1014470, Parish of Cudgen, County of Rous, having areas of 19.03 hectares, 0.9575 hectares, 1.076 hectares and 5.215 hectares (excluding road) respectively, totalling 26.2785 hectares, situated at Coast Road, Casuarina Beach Township, Kingscliff South, New South Wales, is a project which is supportible and is supported.

Accordingly, favourable consideration of the Project is commended, subject only to the imposition of reasonable and relevant conditions.

VICTOR G FEROS TOWN PLANNING CONSULTANTS

August 2008

APPENDICES

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APPENDIX A

Request to Tweed Shire Council for Consent to include land in Application

Victor G Feros Town Planning Consultants

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Facsimile 07 3846 1840

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Telephone 07 5574 1896 Facsimile 07 5574 1118 gcoast@ferosplanning.com.au

8 August 2008

Our Reference: VGF - 3083 (WP: 18846)

The General Manager Tweed Shire Council P O Box 816 MURWILLUMBAH NSW 2484

Dear Sir

RE: PROJECT APPLICATION FOR STAGE I WORKS BY KINGS BEACH NO. 2 PTY LTD TO DEPARTMENT OF PLANNING NEW SOUTH WALES IN RELATION TO AUTHORIZED CONCEPT PLAN FOR TOWN CENTRE, CASUARINA BEACH ON LAND DESCRIBED AS LOT 223 IN DP 1048494, LOT 3 IN DP 1042119 AND LOT 144 IN DP 727420, PARISH OF CUDGEN, COUNTY OF ROUS, SITUATED AT COAST ROAD, CASUARINA BEACH TOWNSHIP, KINGSCLIFF SOUTH

We advise that we act as Town Planning Consultants and Agents for and on behalf of the proponents in the above-described Application.

The subject lands border coastal lands in the ownership or control of Tweed Shire Council, land described as Lot 13 in DP 1014470, Parish of Cudgen, County of Rous.

The Application seeks to effect operational works in Lot 13 associated with the proposed Stage 1 development, namely drainage works, landscaping works, and pedestrian and bicycle path works.

The consent of Council to include, for purposes limited to the operational works described above, Lot 13 in DP 1014470, Parish of Cudgen, County of Rous, in the lands comprising the subject Application, is formally sought.

We look forward to receipt of your response.

Yours faithfully

VICTOR G FEROS GCSJ BA MUS FPIA CMILT LGTP(Q) CPP Principal VICTOR G FEROS TOWN PLANNING CONSULTANTS

Adjunct Professor School of Geography, Planning & Architecture The University of Queensland

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Senior Consultant Planner Ken Todd DOIT (T&CP) Dip.Soc.PL LFPIA LGTP (Q) Víctor G Feros

Town Planning Consultant Pty Ltd ABN 51 010 417 302

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APPENDIX B

Request to Tweed Shire Council for Agreement-in-Principle to traffic changes to Dianella Drive-Coast Road intersection

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Victor G Feros Town Planning Consultants

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Telephone 07 3844 2882 Facsimile 07 3846 1840 brisbane@ferosplanning.com.au Level 1 127 Abbott Street PO Box 1256 Cairns 4870 Queensland Australia

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Telephone 07 5574 1896 Facsimile 07 5574 1118 gcoast@ferosplanning.com.au

Our Reference: VGF - 3083 (WP: 18857)

8 August 2008

The General Manager Tweed Shire Council P O Box 816 MURWILLUMBAH NSW 2484

Dear Sir

RE: PROJECT APPLICATION FOR STAGE 1 WORKS BY KINGS BEACH NO. 2 PTY LTD TO DEPARTMENT OF PLANNING NEW SOUTH WALES IN RELATION TO AUTHORIZED CONCEPT PLAN FOR TOWN CENTRE, CASUARINA BEACH ON LAND DESCRIBED AS LOT 223 IN DP 1048494, LOT 3 IN DP 1042119 AND LOT 144 IN DP 727420, PARISH OF CUDGEN, COUNTY OF ROUS, SITUATED AT COAST ROAD, CASUARINA BEACH TOWNSHIP, KINGSCLIFF SOUTH

We advise that we act as Town Planning Consultants and Agents for and on behalf of the proponents in the above-described Application.

An element of this Application is referable to a proposal to effect a road closure to Dianella Drive at its intersection with Coast Road, Casuarina.

Council is in receipt of a letter dated 6 August 2008 from Cardno Eppell Olsen on behalf of the proponent seeking Council's agreement in principle to the above adverted traffic change. (See copy of letter **attached**).

Attached also please find a letter dated 4 August 2008 from Kings Beach No.2 Pty Ltd (the "Proponent"), as the owner of Lot 224 in DP 107537, Parish of Cudgen, County of Rous, being land adjoining the proposed traffic change, consenting to the traffic change and any associated landscaping works at that location.

Should you have any requirements for further information in relation to this matter, please do not hesitate to contact the writer.

Yours faithfully

VICTOR & FEROS GCSJ BA MUS FPIA CMILT LGTP(Q) CPP Principan VICTOR G FEROS TOWN PLANNING CONSULTANTS

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Our Ref CE008491 :bm

Contact Brett McClurg

6 August 2008

Tweed Shire Council Po Box 816 MURWILLUMBAH NSW 2484

Attention: Mr Paul Morgan

Dear Sir

CASUARINA TOWN CENTRE - INTERSECTION ON TWEED COAST ROAD

Cardno Eppell Olsen is the traffic consultant working on behalf of Consolidated Properties in respect of their development application for the Town Centre at Casuarina. This letter requests agreement in principle to the traffic changes proposed on the applicant's behalf.

The development proposal is to establish a master planned Town Centre development on land to the south east of the Dianella Drive/Tweed Coast Road intersection at Casuarina (south of Kingscliff). The development will comprise a combination of residential, retail, commercial and tourist facilities.

The development has been determined to be of state significance hence the New South Wales Department of Planning is assessing the application.

A copy of the traffic impact assessment report prepared by Cardno Eppell Olsen is attached. This has been submitted with the application for review by state government agencies.

As part of the traffic works and access arrangements for the development it is proposed to:

- close Dianella Drive at the point of its existing unsignalised junction at Tweed Coast Road;
- construct a new access road and signalised intersection on Tweed Coast Road approximately 80m south of Dianella Drive intersection;
- construct the "missing link" of Casuarina Way between Dianella Drive (north) and Steelwood Lane (south);
- construct an access roadway between the proposed signalised intersection at Tweed Coast Road and the new section of Casuarina Way.

These proposed works are shown on the attached drawings 8491-100(C), 8491-101(D) and 8491-102(B). Analysis of these intersections is shown in the traffic impact assessment report.



Shaping the Future

Cardno Eppell Oisen Pty Ltd. ABN 82 095 614 154

Transportation and Traffic Specialists

Level 1, 9 Gardner Close Milton Queensland 4064 PO Box 388 Toowong Queensland 4066 Australia **Telephone: 07 3310 2401** Facsimile: 07 3369 9722 International: +61 73310 2401 eop@eo.com.au www.cardno.com.au

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These works have been discussed and explained with Council officers. We now seek the following from Council:

- agreement in principle to the proposed traffic works;
- owners consent to the application, as it involves road works on land under the control of Council;
- referral to NSW Roads and Traffic Authority (RTA), for concurrence to road works as Tweed Coast Road is a state road.

To facilitate RTA response, a copy of this letter and documentation has been sent direct to Greg Sciffer at RTA (see cc below).

Your early consideration of this report and the granting at agreement in principle would be appreciated. Please contact us to discuss any aspects of concern or if further material or documentation is required.

Yours faithfully

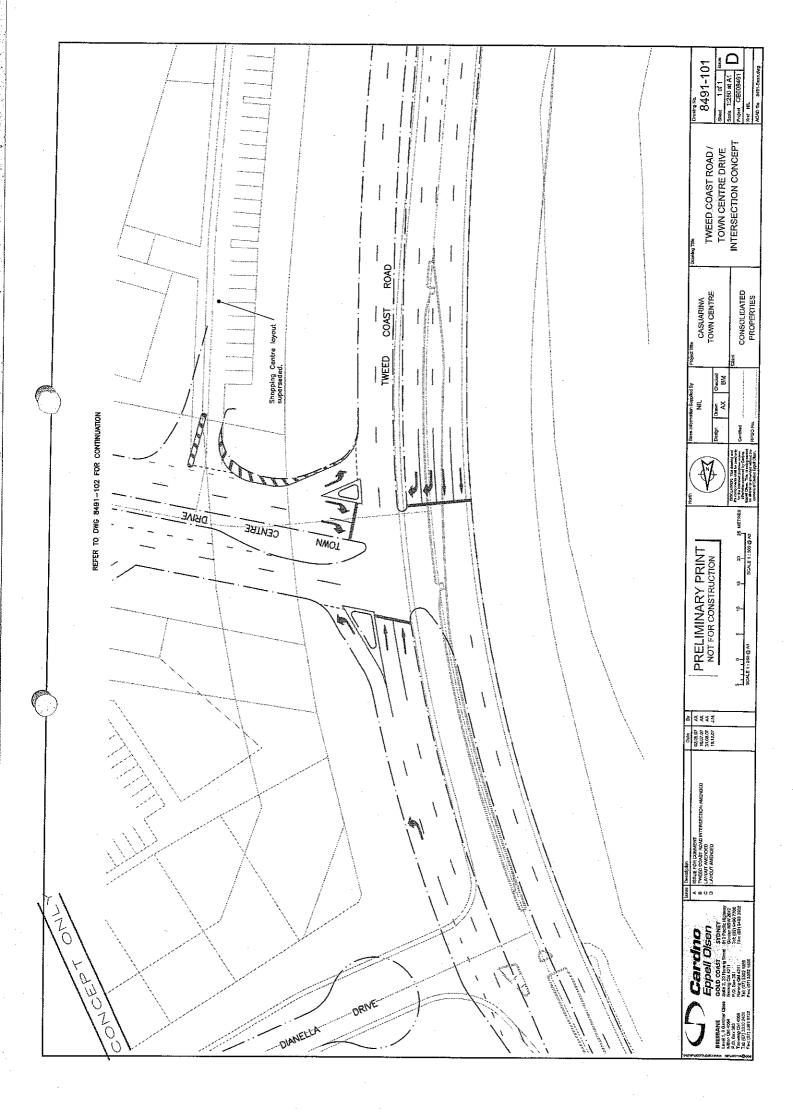
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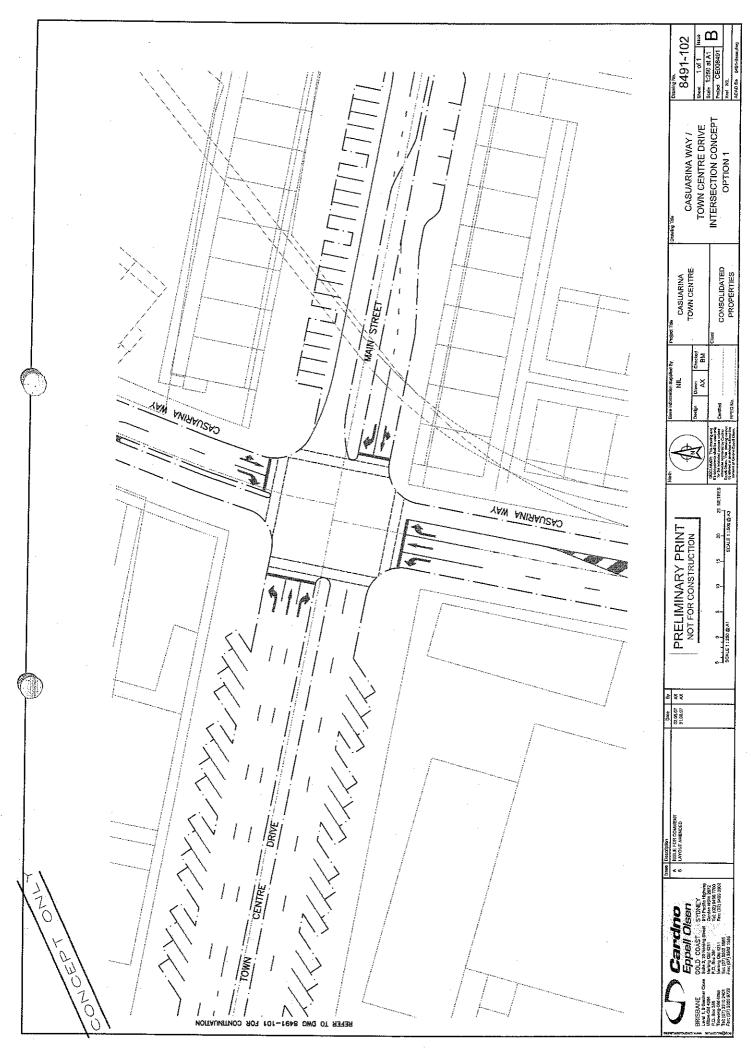
Brett McClurg Director for Cardno Eppell Olsen

Enc: traffic impact assessment report Drawings: 8401-100(C), 8491-102(D) and 8491-102(B). cc: Greg Sciffer Roads and Traffic Authority NSW

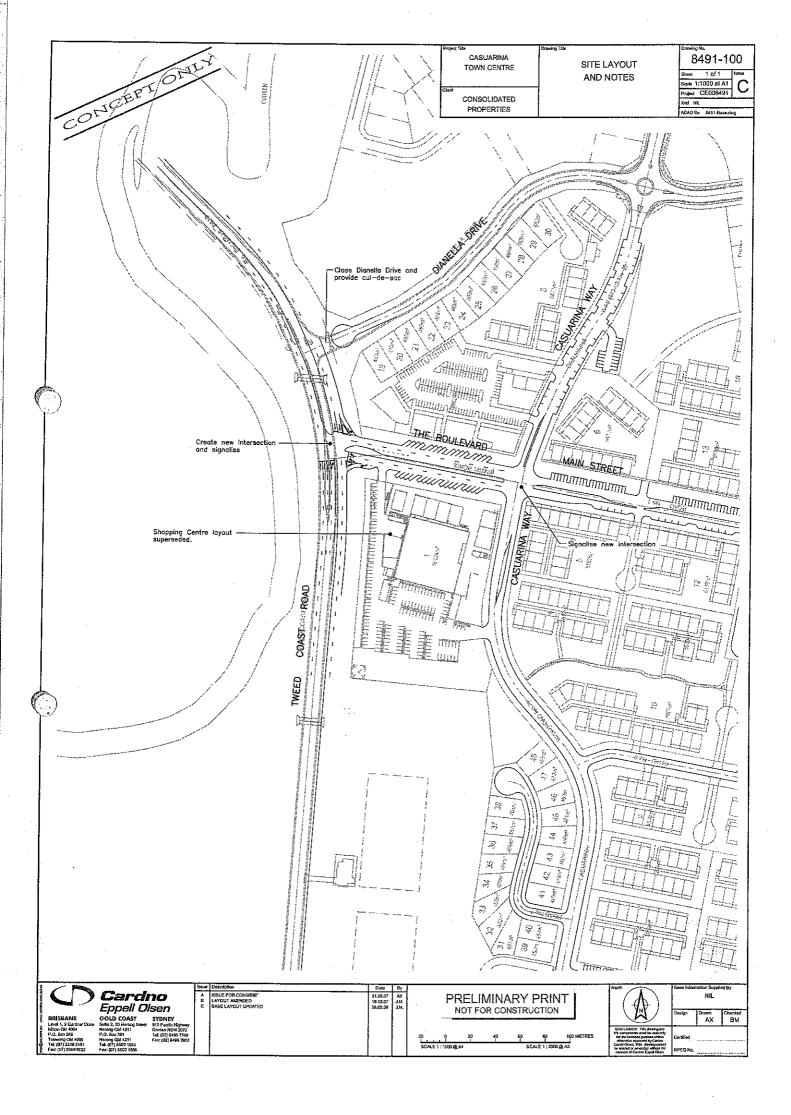
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4 August 2008

Victor Feros Victor G Feros Town Planning Consultants 195 Dornoch Terrace Highgate Hill Qld 4101

BY EMAIL

Dear Victor,

Re: Casuarina Beach Town Centre

We refer to the application made to the Department of Planning, New South Wales for the Concept Plan for the Town Centre Casuarina Beach including a Project Application for Stage 1 Works.

As the owner of the adjacent property being Lot 224 on DP 1075237 located to the north of the site the subject of the applications and fronting Dianella Drive, we confirm our consent to the closure of that road at the intersection with the Coast Road, and further confirm our acceptance of the proposed landscaping works at that location.

Yours faithfully

Donald O'Rorke Director Kings Beach (No 2) Pty Limited ACN

ABN 481 273 307 23 Level 12 344 Quean Street Brisbane Qtd 4000 phone +61 (0)7 3229 8500 fax+61 (0)7 3221 7877

APPENDIX C

Submissions to Department of Planning advising intention to Consult – Drainage Swale

Victor G Feros Town Planning Consultants

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12 August 2008

The Executive Director Major Project Assessments Department of Planning New South Wales 23-33 Bridge Street SYDNEY NSW 2000

ATTENTION: Mr Chris Wilson

Dear Sir

RE: ENVIRONMENTAL ASSESSMENT IN RELATION TO CONCEPT PLAN FOR TOWN CENTRE, CASUARINA BEACH, INCLUDING PROJECT APPLICATION FOR STAGE 1 WORKS ON LAND DESCRIBED AS LOT 223 IN DP 1048494, LOT 3 IN DP 1042119 (CLOSED ROAD), LOT 144 IN DP 1030322 AND LOT 13 IN DP 1014470, PARISH OF CUDGEN, COUNTY OF ROUS, SITUATED AT COAST ROAD, CASUARINA BEACH TOWNSHIP, KINGSCLIFF SOUTH, FOR AND ON BEHALF OF KINGS BEACH NO. 2 PTY LTD

We advise that we act as Town Planning Consultants and Agents for and on behalf of Kings Beach No. 2 Pty Ltd, Applicant for and proponent of the above-described proposed development.

We refer to our letter addressed to the Executive Director, Department of Planning, letter dated 7 August 2008, in relation to the subject application, and in particular, to the reference "Key Issues – Project Application – Consultation – "drainage swale". These submissions, cited as follows, are reiterated, in conclusion:

"It is noted further to the above, that it is the express intention of the proponent at the earliest opportunity to seek to engage in community consultation in the matter of the swale. It is expected that this consultation will commence during the public exhibition period to ensure effective dialogue and to resolve any outstanding issues."

Further to the above, we are instructed to advise that the proponent has been informed of representations made by certain residents having regard to the proposed design treatment of the swale area at the northern boundary of the subject site.

The proponent accordingly acknowledges an awareness of the concerns, expressed as a possible loss of residential amenity.

In response, the proponent has instructed its advisers to review, and if necessary, to revise the design of the area, in an effort to seek to resolve any outstanding issues.

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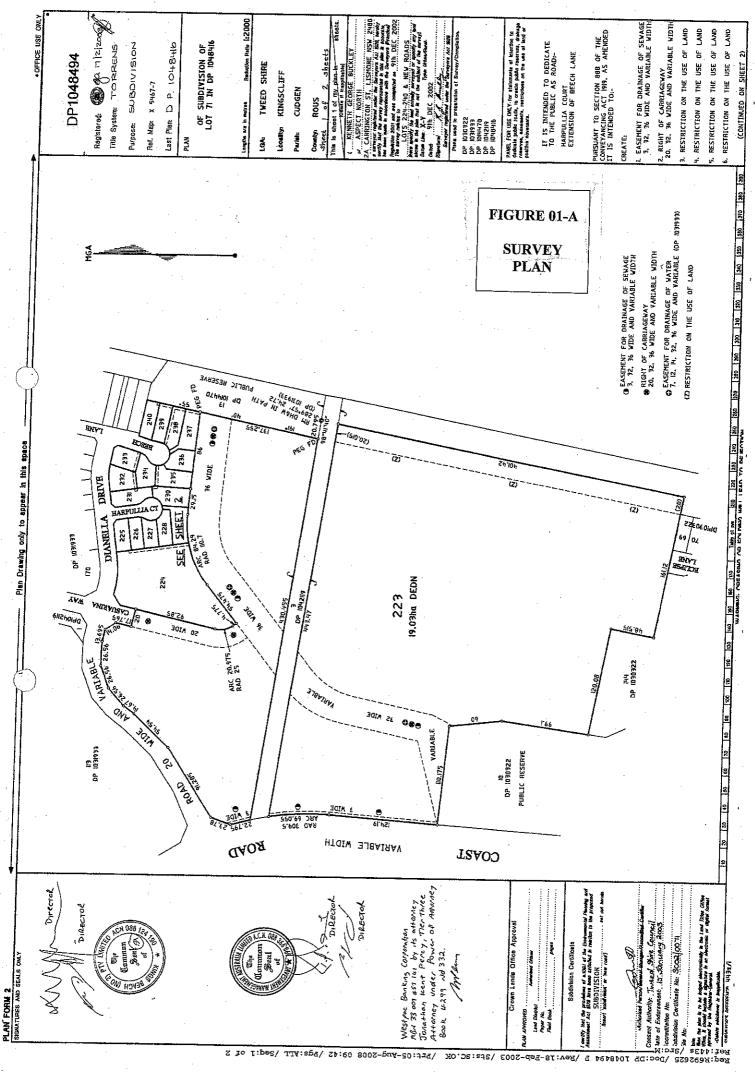
The proponent will commit, and is committed to, a consultative process commencing during the public exhibition period, with an intention to settle any outstanding issues at the end of such period, or as soon as is practicable following the close of the public exhibition.

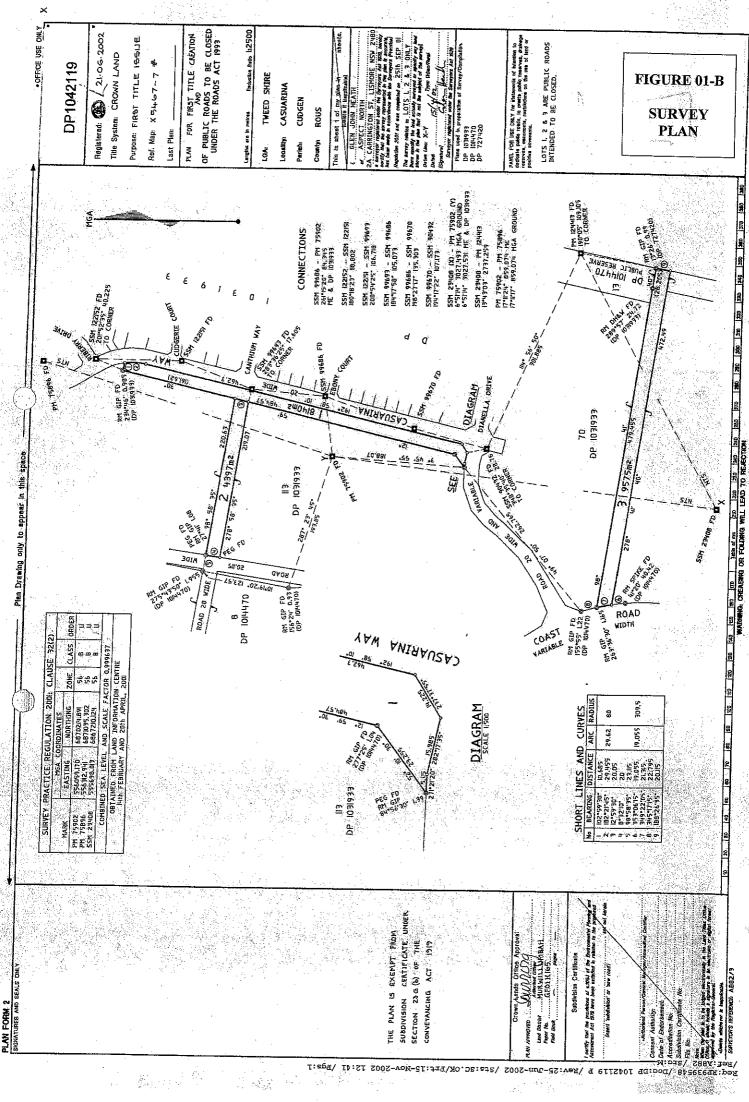
Finally, we are instructed to advise that the proponent will ensure that the necessary resources are applied to achieve the stated end.

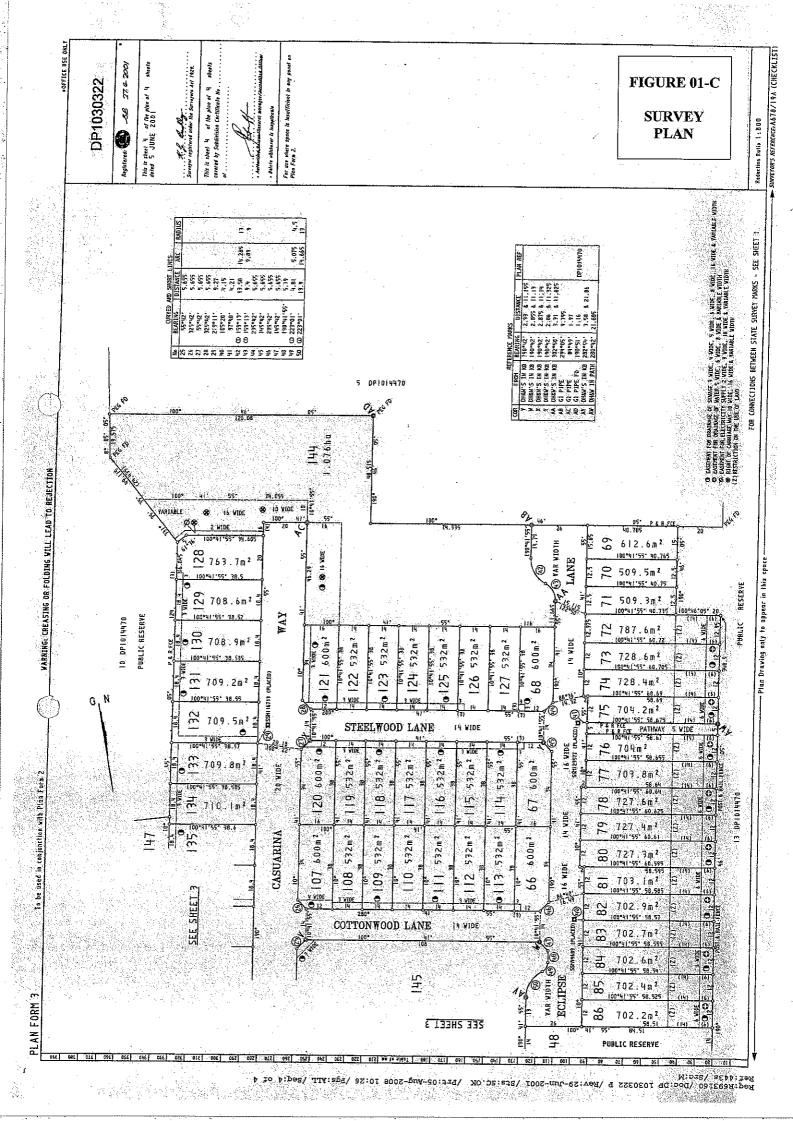
Yours faithfully

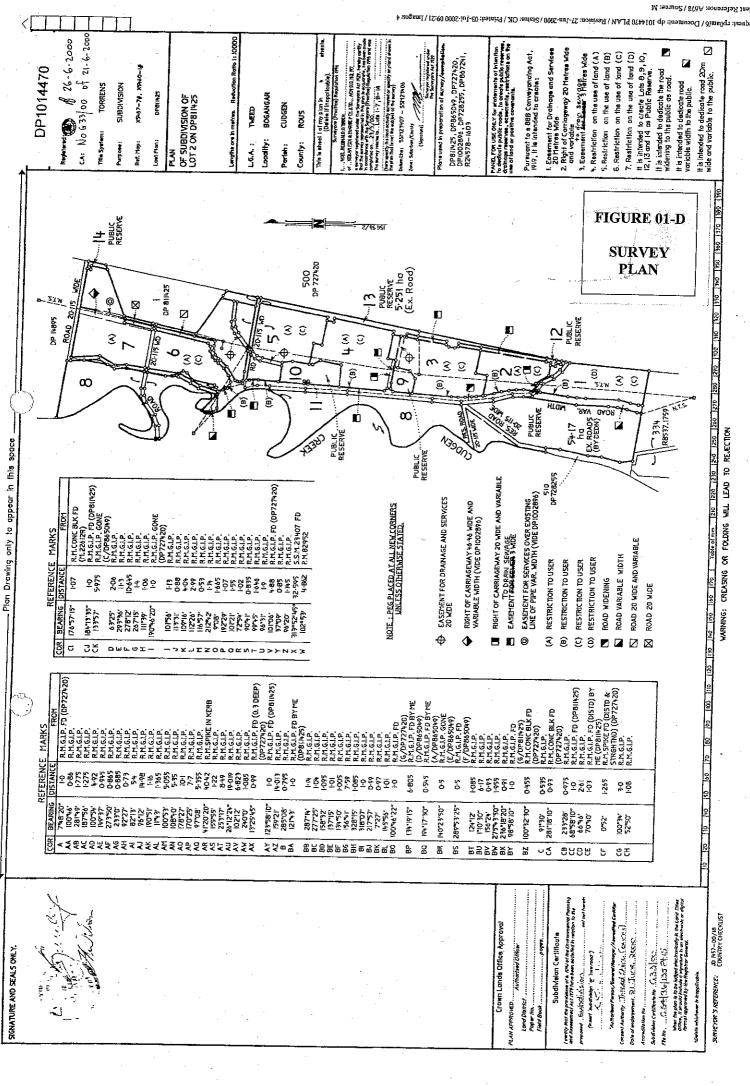
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PLAN FORM 2