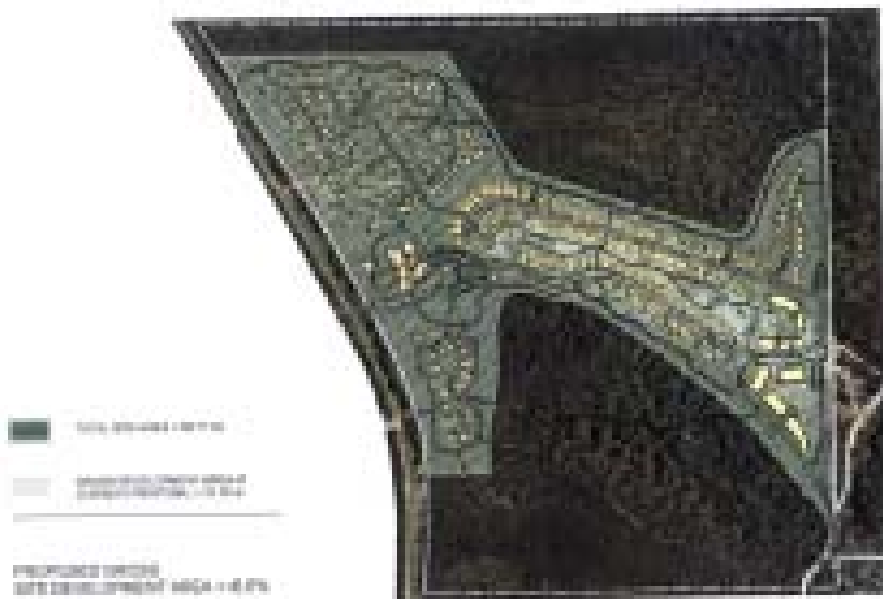




NSW GOVERNMENT
Department of Planning

***MAJOR PROJECT ASSESSMENT:
[MP 05_0125]
Integrated Eco Residential and Mixed Use
Community Title Subdivision
Lot 103 DP 753168,
Lot 142 DP 753168,
LOT 178 DP 753168,
The Lakes Way, Forster
Proposed by
Seven Mile Beach Developments P/L***

Director-General's
Environmental Assessment Report
Section 75I of the
Environmental Planning and Assessment Act 1979
Prepared by Great Lakes Council
June 2008



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NSW Department of Planning
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EXECUTIVE SUMMARY

Seven Mile Beach Developments Pty Ltd (the proponent) is proposing an Integrated Eco Residential and Mixed Use Community Title Subdivision on Lots 103, 142, 178 DP 753168, The Lakes Way, Forster.

The proposed development has 16 construction/conservation/implementation phases and incorporates the following development components:

- **Residential Buildings (three hundred and seventeen (317) Dwellings and Apartments)**
 - One hundred & seventy (170) - Detached two storey dwelling houses.
 - Twenty two (22) - Attached two storey dwelling houses.
 - Seven (7) - Detached three storey dwelling houses.
 - Two (2) individual apartment blocks of five (5) storeys (The Cove) containing thirty nine (39) units of one (1) to four (4) bedrooms with podium retail, restaurant, café, gym and pool.
 - Four individual apartment blocks of five storeys (The Point) containing seventy nine (79) units of one (1) to four (4) bedrooms.
- **Shops and Commercial Buildings - (consisting of a maximum of 1000 m² Floor space)**
 - Retail, business, recreation and administration centre
 - One restaurant and 2 café's.
- **Other Buildings**
 - Child Care facility
 - Storage and maintenance sheds
 - Bushfire facilities shed
 - Bushfire/Surf-watch tower
 - Gymnasiums
 - Cabanas and pool equipment structures, and
 - Small rest shelters and outdoor work out areas located on walking tracks/cycle ways.
- **Subdivision and Engineering Components**
 - Community title subdivision (200 Lots), strata lot subdivision of the proposed apartments and commercial components with a substantial land area held by the community association which includes 38 ha of conservation area land.
 - Public and private roads, ancillary parking and bus stops, delivery access ways, cycle ways and pedestrian pathways.
 - Internal passive and active recreational areas in the form of swimming pools, tennis courts, playgrounds and parklands.
 - Water management (including stormwater), sediment and nutrient controls.
- **Conservation Components**
 - Two conservation areas.
 - Re-establishment of wildlife corridors and maintenance of existing and rehabilitated corridors.
 - Identification, protection and maintenance of identified Aboriginal scar tree.
 - Bushfire protection regime in the form of asset protection zones and fire trails, maintained under a Bushfire Management Plan.
 - Approximately 10 hectares of the adjoining Booti Booti National Park is to be rehabilitated under the Eastern Habitat Corridor Regeneration Plan.

The subject land lies within a sensitive coastal setting, adjoining the Booti Booti National Park and within close proximity to the Pacific Ocean and Wallis Lake. This unique setting dictates a need for a specialised land use planning approach to protect water quality, flora and fauna habitat and scenic quality and to manage the environmental risks and hazards associated with development of the land. *Great lakes Local Environmental Plan*

[amendment 45] 1996 [LEP] and *Great Lakes Council Development Control Plan 40* [DCP] have been enacted to address development and conservation values within the subject land.

The estimated project cost of the development is \$161 million and will create 1000 full time equivalent construction jobs, 12-18 full time equivalent operational jobs and \$7-9 million annual household expenditure.

The Director-General delegated his assessment functions under Part 3A of the *Environmental Planning and Assessment Act 1979* [the EP&A Act] to Great Lakes Council [Council] in relation to this Major Projects application. The Minister for Planning remains the consent authority for the application.

During the exhibition period, a total of six (6) submissions from public authorities and three (3) submissions from the community were received, which raised issues relating to flora and fauna, traffic and access, stormwater and groundwater impacts, Aboriginal Heritage, impacts on adjoining National Park and servicing.

Key issues considered in this assessment included:

- Ecological impacts
- Built form and Urban Design
- Subdivision Design and Layout
- Bushfire
- Traffic and Access
- Social and Economic
- Visual Impact
- Aboriginal Heritage
- Impacts on adjoining National Park
- Sewerage Treatment Plant
- Stormwater Drainage and Groundwater
- Flooding
- Earthworks and filling
- Acid sulphate soils
- Sustainability
- Coastal Hazards and Climate Change
- Public Interest

The merits of the project have been assessed and it is considered that the impacts of the proposed development have been addressed via the Proponent's Statement of Commitments and the recommended conditions of approval, and can be suitably mitigated and/or managed to ensure a satisfactory level of environmental performance. On these grounds, it is considered that the site is suitable for the proposed development and that the project will provide environmental, social and economic benefits to the region. All statutory requirements have been met.

It is therefore recommended that the project be approved, subject to conditions.

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1 BACKGROUND

1.1 The Site

1.1.1 Site context and location

The subject site is described as Lots 103, 142 and 178 DP 753168, The Lakes Way, Seven Mile Beach, South Forster, NSW ('the site') and has an area of approximately 68 hectares. Seven Mile Beach Holdings Pty Ltd is the current land owner.

The land is within the Great lakes Local Government Area (LGA) and the site is situated on the periphery of the South Forster town area, approximately 1km south of the existing South Forster residential land. To the north is the Forster Sewerage Treatment Works and vacant rural lands which are primarily zoned 1 (c) - Future Urban Investigation under the *Great Lakes Environmental Plan 1996*. Booti Booti National Park adjoins the site to the east and south with The Lakes Way forming the western boundary.

The site is accessed from The Lakes Way, a NSW Roads and Traffic Authority (RTA) Classified Regional Road. The land also has pedestrian access to the adjoining National Park and Seven Mile Beach.

1.1.2 Existing site features

The site currently contains an exhibition home, sales suite, roads, power, water, sewer and telephone services. This development, as approved by Council, is the initial stage of the total Seven Mile Beach Development. Additional landscaping and minor road widening of The Lakes Way has also been implemented.

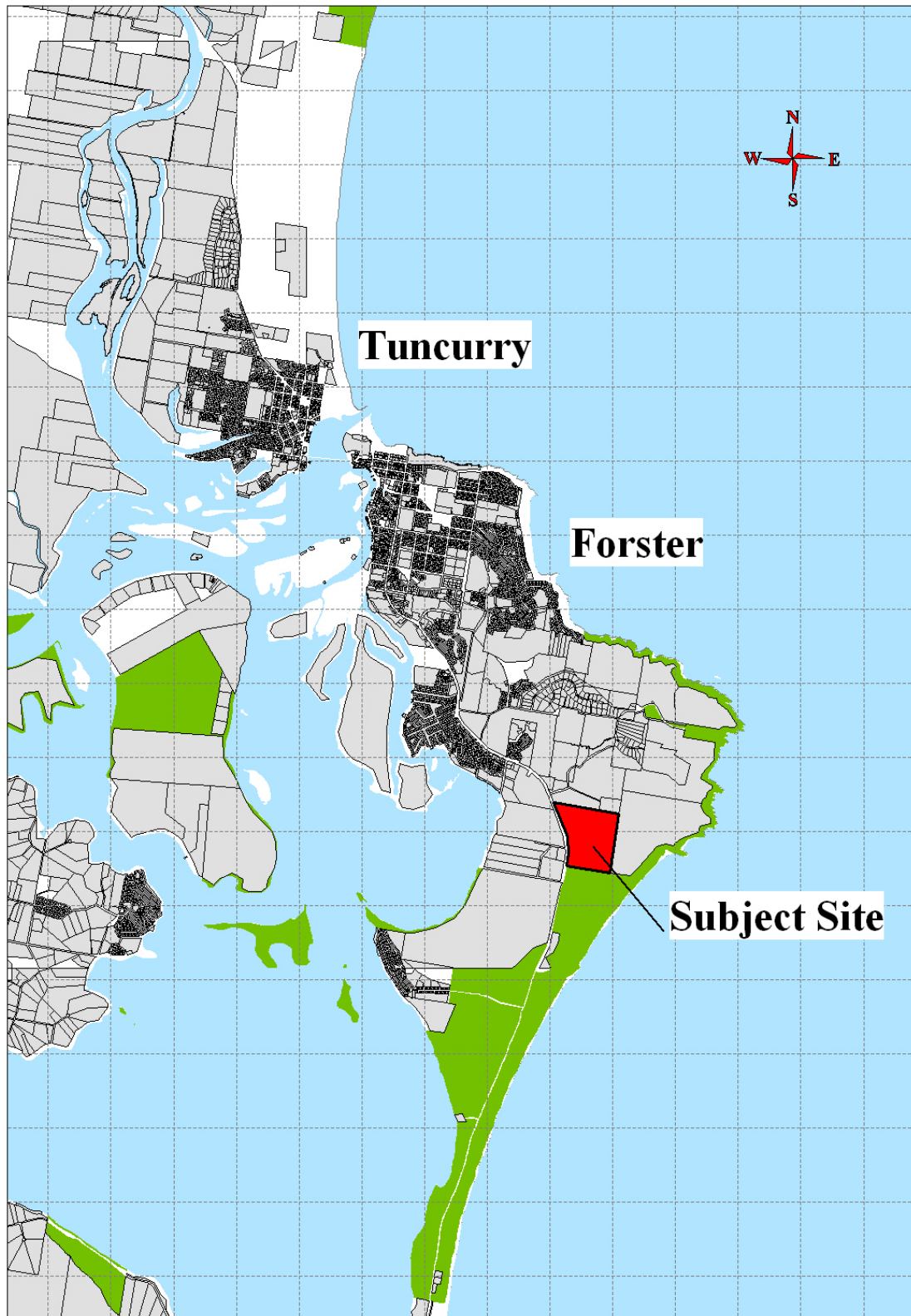
The subject land has both unique coastal vegetation communities and a highly degraded cleared area that was the subject of previous sand mining operations (see *figure 2*).

Threatened fauna species have been identified on the site through the Local Environment Study (LES) and extensive flora and fauna assessments. Vegetation communities, similar to some of the recently listed Endangered Ecological Communities (EECs), are also present. Due to the site geology these vegetation communities do not technically meet the criteria for classification as EEC's. However, given the floristic and structural similarities to the listed EEC's these communities have been ascribed a high conservation value.

1.1.3 Surrounding Development

The predominately adjoining land holding is Booti Booti National Park. Mid Coast Water's Forster Sewerage Treatment Plant is located on the northern boundary, along with a large parcel of land approved for industrial activity [concrete crushing]. Lands located to the south, east and west are highly vegetated and generally unsuitable for development.

*Figure 1 – Site
location*



1.2 Site History

The site has a previous history of sand extraction which was carried out in the central portion of the site. The sand extraction area is shown in *Figure 2*. Sand extraction occurred close to the water table resulting in periodic inundation of the quarry following heavy rainfall. This quarry was abandoned many years ago and regular use by 4WD vehicles and trail bikes, the dumping of cars and rubbish has resulted in limited re-vegetation within and around the quarry. The quarry access road has also been used as a shortcut to the beach following closure of the quarry.

Figure 2 – Previous sand mining activity degradation of site (white area)



1.3 Previous applications

There has been several development applications determined for the site, as outlined in Table 1.

Table 1: Previous Development Applications on the site

Application	Development	Determination	Date	Status
DA 3307/1988	Tourist resort	Approved	28 August 1989	Not commenced
DA 5537/1996	Caravan park	Refused	23 August 1994	
DA 15/1997	Tourist Facility incl. 9 hole golf course	Approved	17 December 1996	Commenced/ not completed
DA 66/2007	Exhibition home, sales office, roads, landscaping, signage, etc	Approved	04 December 2006	Commenced/ completed

In 1996, development consent (D/A 15/1997) was granted to a tourist facility comprising of the following components:

- Four (4) storey, four hundred (400) bed motel
- Three hundred and sixty four (364) cabins
- Administration and restaurant facilities
- Bowling green;
- Nine (9) hole golf course; and
- Associated recreation facilities.

Note: The four (4) storey height limit was determined following suitable survey work between the site and the beach to ensure the development is below the site lines from the beach.

Development Consent No. 15/1997 was required to be surrendered by the LEP (Amendment No 45) and accordingly forms a condition of approval.

1.4 Background to relevant Planning Instruments

The site has been the subject of a comprehensive assessment and consultation process between the Council and the proponent since 2001. This process culminated in the recent rezoning of the site and the adoption of a comprehensive Development Control Plan for the site, *Development Control Plan 40 – Eco Living Residential*. The objective of these discussions was to deliver a development package that was environmentally sustainable and which represented an improvement on the considerably larger development that was approved on the land in 1996. This previous approved development had physically commenced in accordance with Section 96(4) of the EP & A Act.

1.4.1 Forster/Tuncurry Conservation and Development Strategy

Over the period 2001 – 2002, Council prepared a draft blueprint for the future growth and conservation of the Forster/Tuncurry region for the next 20 to 25 years. This document was referred to as the *Forster/Tuncurry Conservation and Development Strategy*. In April to May 2002 Council exhibited the draft Strategy and invited comments from the community and Government Departments.

The draft Strategy stated the following in relation to the Seven Mile Beach site.

"Seven Mile Beach Resort Site

A Development Application was approved in relation to a tourist resort at Seven Mile Beach, to the south of the Forster WWTP, in 1996. This included consent for 364 cabins, 400 suite motel and 9 hole golf course. The applicants have expressed the wish to modify the application to allow permanent residential occupation of some of the site. While permanent occupation of the site is unlikely to substantially alter the impacts of the existing proposed resort, it remains that this Strategy has identified significant environmental attributes on the site. As a result, this site is not thought to be suitable for this scale of development, and has not been identified as a potential residential precinct."

Representatives of the 'Wise Property Group' made a submission to the Strategy requesting that the site be identified as a potential growth precinct. This request was on the basis that an innovative design response, which integrates appropriate development with the significant environmental values, could be developed for the land and that an ongoing environmental management system could be put in place. Council's Strategic Planning and Natural Systems Sections reviewed the documentation submitted by the proponent; in particular, a Species Impact Statement, and provided feedback on some issues.

Council's response outlined concerns with the Flora and Fauna assessment and identified deficiencies in the assessment and advised that Council would be unable to consider any development or rezoning on the site until such time as the issues had been resolved. The proponents were also advised to contact the NSW Coastal Council in order to ascertain other issues.

After holding meetings with the proponents and considering their further detailed submissions and results of site investigations, Council decided to include the land in the Strategy as a Category 2 Precinct, notwithstanding that there were still some specific matters that had to be resolved. The strategy was adopted by Council on 25 June 2003.

1.4.2 Draft Mid North Coast Regional Strategy

The relevant aims of the strategy for this development are:

- protect high value environments,
- cater for housing demand to accommodate forecast population increase, ensuring that new housing meets the needs of smaller households, with a shift in dwelling mix and type with 60 percent of new housing in Greenfield locations

The proposal is considered consistent with the Draft Mid North Coast Regional Strategy as the development will provide further housing, consistent with the continued migration to the Mid North Coast area, with an emphasis on protecting a large percentage of the high value surrounding environment.

The 7 Mile development area has been identified as a growth area (Map 9 –Draft Growth Area Map, Great Lakes North) in the Draft Mid North Coast Regional Strategy.

1.4.3 Flora and Fauna Assessment and Species Impact Statement

Council staff met with representatives of Ecotone Ecological Consultants in January 2003 who were acting for Wise Property Group. Subsequently, Council advised Ecotone of concerns with the SIS approach and that Council was not satisfied that the site was suitable for the development proposed at that time and that some revisions were likely. The SIS had not answered some of the fundamental questions relating to:

- Regional context of the site in terms of flora and fauna;
- Conservation values of flora and fauna, including an assessment of the compositional, structural and functional importance of vegetation, and spatial and temporal resources provided on the site and in the region;

- Importance of vegetation communities and habitat resources on the site, such as the palm forest south of the quarry which provides seasonal habitat resources for a range of species, particularly the Blossom Bat and Squirrel Glider;
- Need and provision of corridors through the site, and the functionality of proposed corridors for all target species;
- Potential conflicts between the 'eco' site concept, conservation areas including corridors with the need for bushfire protection; and
- Viability of the National Park at the east-west corner of the site if development occurs in this location, including adequacy of buffers to the National Park and possible impact on the Park from increased visitor access;

The draft SIS that was submitted by Ecotone included a preliminary master plan for development of the site. Council advised Ecotone of the following concerns:

- The finger of development proposed for the south of the site and the potential impacts relative to the development outcome;
- The need for, location and potential impacts of nutrient ponds which are indicated to the north of the site. The need for these ponds should be assessed against the free-draining nature of soils, they should be located outside of conservation areas unless associated with an existing drainage system and the potential impact of ponds on site hydrology and threatened species should be assessed;
- Potential impact on site biodiversity and threatened species, including the key species Squirrel Glider, Eastern Blossom Bat and Eastern Chestnut Mouse; and
- Site recovery since bushfire disturbance in the early 1990's, including regrowth of swamp mahogany across the site.

Council referred the draft SIS to the National Parks and Wildlife Service (NPWS) for comment in June 2003. The Service responded by advising that whilst the SIS is well set out and researched, the lack of survey effort through winter and the drought was a limit to its effectiveness.

1.4.4 Development Envelope on the site

In December 2003 Council met with representatives of Wise Property Group with a view to agreeing on a reasonable development envelope and the principles that should be established in any LEP/DCP/Masterplan. At the meeting Council advised that, based on the original SIS and additional work that had been undertaken and from an assessment of the site by Council's ecologists, the final development envelope and principles would have to involve the following:

- Deletion of the proposed development in the wet heath in the southern part of the site.
- The areas outside the development envelope being zoned environmental protection and a conservation agreement may be required.
- The proposal, whereby green "fingers" would permeate the site to allow fauna corridors was inadequate as there was insufficient separation between buildings to function as corridors. The envelope was to be revised to provide for a continuous corridor in the western part of the site. Primarily the corridors are required to enable Squirrel Glider movement. In addition, the National Park to the east can function as a corridor but the section of the park degraded by sand mining will have to be rehabilitated.
- The envelope being amended to ensure that no development immediately adjoins the National Park.
- Where development extends into the vegetated parts of the site measures to be implemented to preserve habitat trees and recruitment habitat trees. Squirrel Glider nest boxes are also required to be installed.

- Community title subdivision will be essential to achieve the ongoing management of the site and to set the design parameters for development. Council will require the development to be integrated where the subdivision is done concurrently with the development on each lot. That is, the land is not to be subdivided and each lot sold separately. This will ensure continuity in built form and avoid the situation where purchasers build their own dwellings without knowledge of the environmental and urban design constraints.
- Cats and dogs are to be prohibited by the community title management statement.
- There are to be substantial setbacks to the National Park and the sections of the National Park that have been previously degraded by sand mining are to be rehabilitated.
- Environmental enhancement works are required.
- Innovative urban design is required.
- Deletion of the proposed water bodies in the north eastern corner of the site.

The proponents met with Council in January 2004 to discuss the revised masterplan/development envelope. All the requirements stemming from the meeting of December 2003 had been incorporated into the revised development concept and the concerns previously conveyed to the landowner's and their consultants by Council had been adequately addressed. A plan dated 15 January 2004 represented the final agreed envelope subject to all issues being addressed and resolved through the LES process, this plan was subsequently amended following further investigations.

On the basis of the considerable amount of investigation that had been undertaken on the land and the negotiated development envelope and key urban design and environmental management principles that had been established, Council resolved on 10 February 2004 that it could now formally proceed with the preparation of a Draft LEP.

A draft Masterplan was then submitted by the proponents which subsequently became Development Control Plan No 40.

1.4.5 Local Environmental Study and draft LEP

When the formal LES/LEP process commenced, Council consulted all relevant Government Departments to seek their input to an appropriate development/conservation outcome for the land. All parties have agreed that the land is not suitable for general development purposes and that an innovative response will be required that is "*tailor made*" to the subject site. That is, the site can only be developed if it responds to and respects the significant features of the site and which provides for an integrated solution.

Although a previous development consent issued in 1996, for an extensive tourist complex and golf course over the land, remains current, a rezoning of the land from 1(c) Future Urban Investigation would be required (consistent with the adopted Forster Tuncurry Conservation and Development Strategy) in order to accommodate the new innovative development approach.

Council initiated this process at its meeting of 10 February 2004 when it resolved to prepare a *draft* Local Environmental Plan (*dLEP*) for the subject land. The Department of Planning subsequently advised Council that a LES was required to be prepared in accordance with the EP&A Act, 1979 and NSW Coastal Policy. Council subsequently engaged Bennell & Associates in July 2005 to prepare the LES. The primary purpose of the LES was to provide comprehensive information on the constraints and opportunities to develop the land and to provide the justification for the rezoning of the land for a combination of low/medium density residential and other associated purposes.

The LES considered the following specific comprehensive environmental assessment reports relating to the land and proposed development:

1. Bushfire Protection Assessment and plans;
2. Aboriginal Heritage Impact Assessment;
3. Social Impact Assessment;
4. Landscape Design Report;
5. Odour Monitoring and Modeling report;
6. Traffic Assessment;
7. Stormwater Management Plan;
8. Geotechnical Assessment;
9. Groundwater Monitoring Report;
10. Acid Sulphate Soils Assessment;
11. Hollow-bearing Tree Assessment;
12. Species Impact Statement Based on the Director-General's requirements;
13. Environmental Validation Report; and
14. Conservation and Land-use Management Plan.

Council subsequently considered a report on the LES/LEP and resolved at its meeting of 27 September 2005, to adopt the LES for the Seven Mile Beach site and seek a *Section 65* certificate from the Department of Planning for the exhibition of *draft* Amendment No 45 to the Great Lakes Local Environmental Plan 1996.

Council also resolved to adopt, for exhibition purposes, the *draft* Development Control Plan and upon receipt of a *Section 65* certificate, exhibited these documents concurrently for a period of six (6) weeks, commencing 15 December 2005.

The LEP [amendment 45] has the objective of providing for an innovative form of development whilst at the same time ensuring the balance of the land that is of high environmental value, is protected and properly managed in perpetuity. To achieve this, the LEP created a new 2(g) Environmental Living zone, over that part to contain the built development, with clear objectives that state the desired outcome of integrating sensitively designed development with the natural features of the land.

In summary, the LEP:

- o introduced a new 2(g) Environmental Living zone to the parts of site where appropriate residential and other associated uses can be supported;
- o applied a 7(a1) Environmental Protection zone to the balance of the land (about 38 ha or 55%);
- o introduced environmental and built form performance provisions to be met for any development of the land;
- o enabled a maximum of 1,000m² of retail and commercial floor space to be developed on the land.

At an early stage in the rezoning process Council recognised that an important requirement for the site was that it would have to be managed in an integrated manner and that ongoing environmental management measures would have to be in place for any development. Council was of the view that this could be best achieved by subdivision being undertaken by community title. The initial draft of the LEP included this as a restriction. Advice from the Department of Planning was that Council could not restrict subdivision to community title. As a result, the LEP was redrafted to state the performance criteria that would have to be achieved without specific reference to community title subdivision.

The DCP, as submitted by the proponent under s74D (3) of the Act, supplements the LEP and refers to community title subdivision.

It is also intended that the development be integrated so that the buildings and subdivision are undertaken concurrently as dictated by the design component of the DCP. An interlinked series of management plans are required by the Conservation and Landuse Management Plan (*CLUMP*) and are tested at prescribed intervals by the proposed Environmental Validation (*EV*) and Auditing system ensuring environmental values of the site are protected and enhanced in perpetuity. The CLUMP forms part of DCP No 40.

As a result of the LEP process, the proponent is required to surrender all previous active consents over the land upon the granting of any consent for this proposed development.

1.4.6 Development Control Plan NO. 40

Council was of the view that in order to achieve the best outcome for the land a comprehensive package comprising a LEP and DCP should be prepared. The DCP was based upon a development proposal put forward by the proponent and the intention was to ensure that the DCP included rigorous provisions relating to the environmental management of the land and the built form outcomes.

A DCP was prepared by the proponent under the provisions of section 74D (3) of the *Environmental Planning and Assessment Act 1979* and submitted to Council for its consideration. The DCP applied to the entire holding in which the proponents had an interest and contained detailed controls for the development and management of the land, including the part of the land to be zoned environmental protection.

As the draft LEP evolved with input from Government Agencies and negotiations with Council the form of development also evolved. Consequently, the DCP also evolved. For example, during the exhibition period, the Catchment Management Authority (CMA) ran the Property Vegetation Plan (PVP) developer model for the site so as to test whether the draft LEP and development proposal for the land would meet the "improve or maintain" test under the Native Vegetation Act 2003. After running the model the CMA advised that the development would meet the "improve or maintain" test.

Even though the development did meet the test, the CMA questioned how this could be guaranteed at the development application stage. To provide this guarantee Council required the proponent to identify all hollow bearing trees that would be removed and to show these on a figure within the DCP. Figure 13 on pages 08 and 08a were subsequently inserted in the DCP along with a procedure for tree removal as set out in section 4.6 of the CLUMP that is part of the DCP.

Council, at its meeting of 27 September 2005, considered and adopted the draft LEP and draft DCP for public exhibition.

On 24 October 2006 Council considered the draft DCP and submission from Government Agencies. Council amended the DCP to ensure that the principles agreed between the CMA and Department of Environment and Climate Control (DECC) were carried through to the development stage. The main amendments were the relocation of the access road to Seven Mile Beach from within Booti Booti National Park to the subject land, rehabilitation of parts of the National Park that were previously sand mined and the undertaking of works, such as construction of car parking, within the National Park. The DCP was also amended to include maps showing trees to be removed.

Council believed that these amendments would result in a sound environmental outcome whilst at the same time, providing for a significant boost to the local economy. The provisions that Council added to the DCP, combined with those already contained in the document, will ensure an environmentally sustainable outcome. These would bind the proponent to the commitments that were made during the evolution of the development and rezoning process.

2 THE PROPOSED DEVELOPMENT

2.1 Project Description

The proposed development [figure 3] as lodged under Part 3A EP&A Act 1979 has sixteen (16) construction/conservation implementation phases and incorporates the following development components:

- **Residential Buildings three hundred and seventeen (317) Dwellings and Apartments)**
 - One hundred and seventy (170) - Detached two (2) storey dwelling houses.
 - Twenty (22) - Attached two storey dwelling houses.
 - Seven (7) - Detached three storey dwelling houses.
 - Two (2) individual apartment blocks of five (5) stories (The Cove) containing thirty nine (39) units of one (1) to four (4) bedrooms with podium retail, restaurant, café, gym and pool.
 - Four (4) individual apartment blocks of five (5) stories (The Point) containing seventy nine (79) units of one (1) to four (4) bedrooms.
- **Shops and Commercial Building - (consisting of a maximum of 1000 m² floor space)**
 - Retail, business, recreation and administration centre
 - One (1) restaurant and two (2) café's.
- **Other buildings**
 - Child Care facility
 - Storage and maintenance sheds
 - Bushfire facilities shed
 - Bushfire/Surf-watch tower
 - Gymnasiums
 - Cabanas and pool equipment structures, and
 - Small rest shelters and outdoor work out areas located on walking tracks/cycle ways.
- **Subdivision and Engineering Components**
 - Community title subdivision creating 200 development lots complementary to the proposed built development form in a phased fashion, in addition to strata lot subdivision of the proposed apartments and commercial components with a substantial land area held by the community association which includes 38 ha of conservation area land.
 - A combination of public and private roads incorporating ancillary parking and bus stops, delivery access ways, cycle ways and pedestrian pathways.
 - Extensive internal passive and active recreational areas in the form of swimming pools, tennis courts, playgrounds and parklands.
 - State of the art water management (including stormwater), sediment and nutrient controls.
- **Conservation Components**
 - Two distinctly, clearly defined conservation areas to be rehabilitated, enhanced and maintained.
 - Re-establishment of wildlife corridors and maintenance of existing and rehabilitated corridors.
 - Identification, protection and maintenance of identified Aboriginal scar tree.
 - Establishment of a bushfire protection regime in the form of asset protection zones and fire trails, maintained under a Bushfire Management Plan.
 - Approximately 10 hectares of the adjoining Booti Booti National Park is to be rehabilitated under the Eastern Habitat Corridor Regeneration Plan.

The development will be split into eight distinct precincts, each of which has their own landscape and building characteristics. Figures 3b details the location of each precinct within the development, whilst typical dwelling plans for each precinct are detailed in Section 5. The eight precincts are:

1. *The Boardwalk* – located at the site entrance, this precinct contains the administration, retail and community centre buildings and is the only precinct that is open to the general public.
2. *The Crest* – located in close proximity to The Boardwalk, this precinct contains a mix of attached and detached dwellings together with community parkland.
3. *The Forest* – located in the north western corner of the site and contains detached houses nestled into a managed forest-like environment with centralised community parks and pool.
4. *The Palms* - a small precinct of detached housing connected to the Boardwalk precinct by bridges and raised walkways over a natural overland swale. It is located in the south-western portion of the site amidst paperbark trees and cabbage tree palms. The dwellings predominately focus around a small lagoon pool and parkland.
5. *The Dunes* – this precinct is central to the site and provides a series of on-ground detached dwellings. The housing backs onto the natural bushland peripheries at its extremities whilst focusing on a unique pool winding through the centre of the precinct.
6. *The Fronds* – situated in the north eastern portion of the site, the precinct comprises predominantly attached dwellings separated by natural site features and community parkland. The dwellings are provided with private plunge pools or spas.
7. *The Cove* – is located in the central-eastern portion of the site and comprises two five storey apartment buildings with basement car park. The apartments also include commercial facilities and recreation facilities that wrap around a community pool at the eastern boundary of the site.
8. *The Point* – is located in the south-eastern portion of the site and comprises four five storey apartment buildings located around private pools and recreation areas over a basement car park.

Precincts	No. of dwellings	Stores	Height-CL to top of structure
THE FOREST	17	2, 3 & 3	
THE FOREST 1	39		
THE FOREST 2	39		
THE FOREST 3	19		
THE FOREST 4	19		
THE DUNES	40		
THE DUNES 1	14		
THE DUNES 2	26		
THE COVE	19		
THE POINT	19		
BOARDWALK	199		
TOTAL DWELLINGS	118		

2.2 Phasing of the Development

In summary, the project contains eight (8) Precincts, two (2) of which are broken into two (2) parts creating ten (10) specific development/construction areas. The size of these areas is related to what is perceived as the sales demand in the market place for those dwellings. Each specific area will generally contain 2 phases of construction work: civil/subdivision and building, thus creating 18 construction phases.

The phasing of the precincts is as follows:

1. The Boardwalk Precinct is located at the site entrance and contains the main commercial and community buildings. Civil works and buildings will be constructed during Phase two (2) of the development.
2. The Crest Precinct is located in close proximity to The Boardwalk and contains a mix of attached and detached dwellings. Civil works for this precinct will be undertaken in Phase seven (7) whilst the dwellings will be constructed during Phase eight (8) of the development.
3. The Forest Precinct is located in the North-western corner of the site and contains detached houses with centralised community parks and a swimming pool. The Forest Precinct will be developed over four (4) phases. Civil works phases are proposed during phases nine (9) and eleven (11). Building works are to be carried out during Phases ten (10) and twelve (12).
4. The Palms Precinct is located in the south-western portion of the site and contains attached dwellings around a small lagoon pool and parkland. The civil works are to be undertaken during phase 13 and building works during phase 14.
5. The Dunes Precinct is central to the site and provides a series of detached dwellings around a unique pool which winds through the centre of the precinct. The development of this precinct will be split over four (4) phases. Civil works will be undertaken in phases 1 and 3 with building works being undertaken in phases 2 and 4.
6. The Fronds Precinct is situated in the north-eastern portion of the site and comprises predominantly attached dwellings with private plunge pools or spas. Civil works for the Fronds precinct will be carried out in phase 3 and building works during phase 4 of the development.
7. The Cove Precinct is located in the central-eastern portion of the site and comprises two five storey apartment buildings with a basement car park at the eastern boundary of the site. The apartments also include commercial facilities and community recreation facilities. The construction of the basement car parks are proposed during the bulk earthworks to be undertaken during phase one (1) whilst the remainder of the buildings will be constructed during Phase 15A. Civil works for the cove will be undertaken concurrently under Phase 15B.
8. The Point Precinct is located in the south-eastern portion of the site and comprises four five storey apartment buildings located around private pools and recreation areas over a basement car park. Civil works and the basement car park for this precinct will be constructed during Phase 16A and the remainder of the works to this precinct will be completed in Phase 16B.

2.3 Project Chronology

The following is a summary of the chronology of the major project application:

- 11 November 2005 – request for cl 6 opinion lodged with the Department
- 20 December 2005 – Director-General, as delegate for the Minister/the Minister formed the opinion that the proposal is a Project and that Part 3A of the Act applies
- 4 January 2006 – Director- General's Environmental Assessment Requirements (DGRs) signed by the Director- General's Delegate and provided to the proponent.
- 25 October 2006 – Draft Environmental Assessment lodged with the Department.
- 22 December 2006 - Environmental Assessment lodged with the Department. Assessment deemed inadequate.
- 23 February 2007 - revised Environmental Assessment (EA) lodged with the Department.
- 15 June 2007 – Confirmation from Department of Planning that E A adequately addresses the Director-General's Environmental Assessment Requirements issued on 4 January, 2006.

- 4 July 2007 to 2 August 2007 – EA placed on public exhibition in Great Lakes Advocate
- 13 August 2007 – Summary of submissions provided to proponent and issues from the Department
- 8 November 2007 – additional information supplied by applicant in response to agency submissions
- 22 November 2007 - additional information supplied by applicant referred to agencies
- 13 December 2007 – reply received from RTA
- 25 February 2008 – reply received from DWE
- 8 March 2008 – reply received from DECC

2.4 Project Amendments

During the assessment of the environmental assessment the project application has been amended by the proponent in the following manner:

- 26 October 2007 – amended roof plans for residential flat buildings
- 26 October 2007 – Flora and Fauna study; proposed National Park access road
- 26 October 2007 – Survey and design plans - proposed National Park access road
- 22 November 2007 – final Traffic Management Study - proposed National Park access road
- 29 May 2008 – Deed of Agreement

2.5 Discussion with proponent

The proponent and Consulting Surveyors met with Council staff to discuss the details contained in the Environmental Assessment Statement and accompanying reports and plans. Also discussed were preliminary draft conditions of approval.

The purpose of the meeting was to gain a clear understanding of the development, with particular emphasis on the phasing of the development together with the stormwater and groundwater issues. Discussion on the preliminary draft conditions of approval involved mainly the civil works to be carried out on The Lakes Way and the new access road to the National Park. The contents of the Planning Agreement between Seven Mile Beach Holdings Pty Ltd and the Council were also discussed in context with the preliminary draft conditions of approval.

3 STATUTORY CONTEXT

3.1 Major Project Declaration

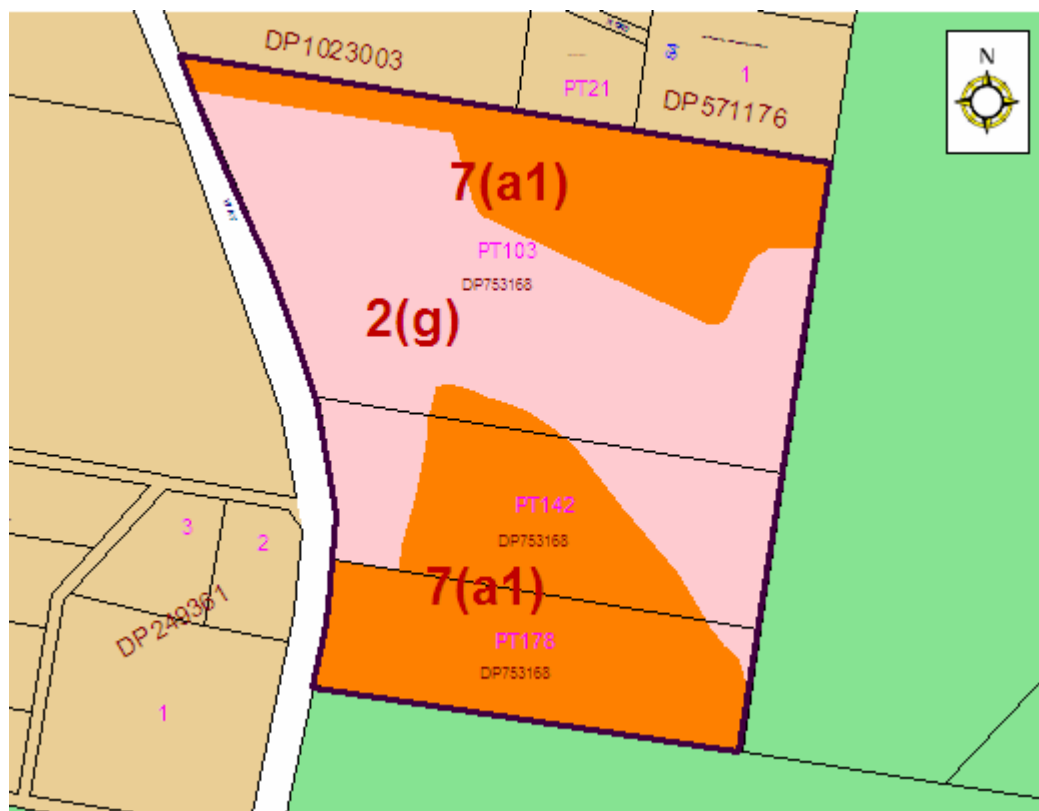
The project is a Major Project under *State Environmental Planning Policy (Major Projects) 2005* being significant coastal development being buildings greater than 13 metres (Sch 2,1,(1)(g)(i)) and 2(j)(i). This opinion was formed by the Minister/Director-General as delegate on 20 December 2005.

3.2 Permissibility

The site is zoned part Zone 2(g) Environmental Living and Low-Impact Development, and part Zone 7(a1) – Environmental Protection under the provisions of *Great Lakes Local Environmental Plan 1996* (LEP).

The proposed development is permissible in the respective land use zones and is consistent with the objectives of the zones. Figure 4 is an extract from the LEP 1996 map, identifying the land use zone boundaries for the land.

Figure 4 – land Use zones; GLLEP 1996



Clause 32 – Special provisions of the LEP also identifies development standards that are required to be met by any development on the land. An assessment of the LEP provision is located in Appendix B.

3.3 Director-General's environmental assessment requirements (DGRS)

The DGRs were issued on 4 January 2006 and required the following issues to be addressed:

- Development control
- Ecological impacts
- Bushfire
- Impacts on waterways
- Traffic
- Social and economic impacts
- Design, amenity and sustainability
- Aboriginal heritage
- Impacts on adjoining National Park
- Sewerage treatment plant
- Water quality
- General environmental risk analysis

The EA lodged by the proponent on 15 June 2007 was accepted as adequate under Section 75H of the EP&A Act 1979. The Department is satisfied that the DGRs have been adequately and satisfactorily addressed by the Proponent's Environmental Assessment. The DGRs are in **Appendix A**.

3.4 Objects of the Environmental Planning and Assessment Act 1979

The objects of any statute provide an overarching framework that informs the purpose and intent of the legislation and gives guidance to its operation. The Minister's consideration and determination of a project application under Part 3A must be informed by the relevant provisions of the Act, consistent with the objects of the Act.

The objects of the Act in section 5 are as follows:

(a) to encourage:

- (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
- (ii) the promotion and co-ordination of the orderly and economic use and development of land,*
- (iii) the protection, provision and co-ordination of communication and utility services,*
- (iv) the provision of land for public purposes,*
- (v) the provision and co-ordination of community services and facilities, and*
- (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
- (vii) ecologically sustainable development, and*
- (viii) the provision and maintenance of affordable housing, and*

(b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and

(c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

Of particular relevance to the assessment of the subject application is consideration of the Objects under section 5(a). Relevantly, the Objects stipulated under section 5(a) (i), (ii), (iii), (v), (vi), (vii), are significant factors informing the determination of the application. The project does not raise significant issues with regards to (iv) and (viii) as the project has minimal 'public' facilities and is promoted as "The Coasts most Luxurious Residential Development".

As identified in this report, the subject land has been through an extensive public consultation in respect of the LES/LEP/DCP process and now at the major projects application stage.

With respect to ESD, the Act adopts the definition in the *Protection of the Environment Administration Act 1991* including the precautionary principle, the principle of inter-generational equity, the principle of conservation of biological diversity and ecological integrity, and the principle of improved valuation, pricing and incentive mechanisms.

The Objects of the Act, including the encouragement of ESD, have been considered in the assessment of the project application and it is concluded that the proposal satisfies the Objects of the Act. .

3.5 Ecologically Sustainable Development (ESD) Principles

There are five accepted ESD principles:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations (the integration principle);
- (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (the precautionary principle);
- (c) the principle of inter-generational equity - that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations (the inter-generational principle);
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making (the biodiversity principle); and
- (e) improved valuation, pricing and incentive mechanisms should be promoted (the valuation principle).

Council has considered the proposed development in relation to the ESD principles and has made the following conclusions:

Integration Principle - through innovative design and environmental management the development will integrate with the existing natural environment, both short and long term. The conservation and remediation of the existing significant coastal vegetation and the development of the degraded part of the site will promote positive environmental outcomes with substantial long term environmental benefits. Short term integration is considered to achieve the ESD principles through the implementation of the CLUMP and validation reporting in accordance with best practice environmental management.

Precautionary Principle – The application does not present any risk of serious or irreversible environmental harm and all necessary environmental safeguards have been implemented to the fullest extent possible.

Inter-Generational Principle – The application includes long term binding commitments to ensure the development is sustainable and does not compromise the availability of natural resources for future generations. Careful site planning has maximised the use of previously degraded lands whilst preserving and enhancing significant natural features.

Biodiversity Principle – The planning of the proposed development has considered the impacts to biodiversity from the beginning of the process. Consultation with Council and Government agencies has played a key role in developing a proposal which is sustainable and respectful of the site attributes, including biodiversity.

Valuation Principle – The conservation of the land is paramount to the on-going value of the Community Title housing development. The CLUMP has been incorporated into DCP 40 and the ongoing environmental performance is integral to the community management plan.

The proponent is committed to ESD principles and has reinforced this through the Statement of Commitments and the Environmental Assessment which explores key ESD opportunities, including mechanical, electrical and hydraulic systems as well as architectural designs to ensure high environmental performance is delivered.

3.6 Section 75I(2) of the Act

Section 75I(2) provides that the Director-General's report is to address a number of requirements in the Director General Report. These matters and the Department's response are set out in Table 2.:

Table 2: Section 75I(2) of the Act Consideration

<i>Section 75I(2) criteria</i>	<i>Response</i>
Copy of the proponent's environmental assessment and any preferred project report	The Proponent's EA is at Appendix G and is located on the assessment file. A Preferred Project Report was not required.
Any advice provided by public authorities on the project	All advice provided by public authorities on the project for the Minister's consideration is set out in Section 4 of this report.
Copy of any report of a panel constituted under Section 75G in respect of the project	No statutory independent hearing and assessment panel was undertaken in respect of this project.
Copy of or reference to the provisions of any State Environmental Planning Policy that substantially govern the carrying out of the project	Each relevant SEPP that substantially governs the carrying out of the project are identified and assessed below.
Except in the case of a critical infrastructure project – a copy of or reference to the provisions of any environmental planning instrument that would (but for this Part) substantially govern the carrying out of the project and that have been taken into consideration in the environmental assessment of the project under this Division	An assessment of the development relative to all environmental planning instruments is provided in section 3 of this report.
Any environmental assessment undertaken by the Director General or other matter the Director General considers appropriate.	The Director General delegated the exhibition and reporting functions to Great Lakes Council. The environmental assessment of the project application is this report in its entirety.
A statement relating to compliance with the environmental assessment requirements under this division with respect to the project.	The DGRS are outlined in Section 3.3 and Appendix A of this report.

3.7 Environmental Planning Instruments (EPIS)

3.7.1 Application of EPIs to Part 3A projects

To satisfy the requirements of section 75I(2)(d) and (e) of the Act, this report includes references to the provisions of the environmental planning instruments that govern the carrying out of the project and have been taken into consideration in the environmental assessment of the project. An assessment of compliance with the relevant EPIs is immediately below and at **Appendix B** which demonstrates that the proposal complies with these plans and policies.

The primary controls guiding the assessment of the proposal are:

- State Environmental Planning Policy No 71 – Coastal Protection;
- State Environmental Planning Policy 65 – Design Quality of Residential Flat Development;
- State Environmental Planning Policy 55 – Remediation of Contaminated Land;
- State Environmental Planning Policy 44 – Koala Habitat Protection;
- State Environmental Planning Policy No 11 – Traffic Generating Developments;
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004;
- Hunter Regional Environmental Plan 1989; and
- Great Lakes Local Environmental Plan 1996.

Other controls to be considered in the assessment of the proposal are:

- Development Control Plan 40 – Seven Mile Beach; and
- NSW Coastal Policy 1997 and Coastal Design Guidelines.

The provisions, including development standards of local environmental plans, and development control plans are not required to be strictly applied in the assessment and determination of major projects under Section 75R(1) Part 3A of the Act. Notwithstanding this, these standards and provisions are relevant considerations for this application as the DGRs and Section 75I(2)(e) of the *Environmental Planning and Assessment Act, 1979* require the proponent to address such standards and provisions and the Department to duly consider such standards and provisions. Accordingly the objectives of a number of EPIs and the development standards therein and other plans and policies that govern the carrying out of the project are appropriate for consideration in this assessment as follows.

3.8 Primary Controls

3.8.1 State Environmental Planning Policy (Major Projects) 2005

SEPP (Major Projects) 2005 identifies development to which Part 3(A) of the Act applies. The minister is the approving authority for such projects and they are generally excluded from Parts 4 and 5 of the Act.

3.8.2 State Environmental Planning Policy 71 – Coastal Protection

State Environmental Planning Policy 71 – Coastal protection (SEPP 71) applies to land as the site is located within the coastal zone of NSW.

The Policy applies to all land within the coastal zone as defined in the Coastal Protection Act and accordingly applies to the subject site. The Policy's aims are to protect and manage the natural, cultural, recreational and economic attributes of the NSW coastal zone for the benefit of the NSW community and future generations; to ensure that development within the coastal zone occurs in a strategic manner; that development is appropriate and suitably located in context to the adjacent and surrounding coastal attributes; and that development does not place life and property in conflict or at risk.

These matters have been addressed in detail in the Environmental Assessment, as discussed in Section 5 of this report and also in **Appendix B**, and have been considered where relevant in determining the application.

3.8.3 State Environmental Planning Policy 65 – Design Quality of Residential Flat Development

SEPP 65 aims to improve the design quality of residential flat development in NSW as it is of significance to providing economic, social, cultural and environmental factors benefits.

SEPP 65 contains 10 design quality principles which guide the consideration of a proposed residential flat building to ensure that it achieves an appropriate level of design quality. A Design Verification Statement has been prepared by Morris Bray Architects, as Registered Architect stating that the proposed development has been designed having respect to the design quality principles.

The proposal has been considered against the 10 principles and addresses the design criteria by providing a high quality building which responds to the constraints and controls relating to the site in Section 5 of this report. The aims and objectives of SEPP 65 have been addressed in **Appendix B**.

3.8.4 State Environmental Planning Policy 55 – Remediation of Contaminated Land

Under Clause 7(1) of State Environmental Planning Policy No. 55 – Remediation of Land, consideration must be given as to whether or not the land is contaminated. The Land does not require remediation as it has not been identified as contaminated land. The aims and objectives of SEPP 55 have been addressed in **Appendix B**.

3.8.5 State Environmental Planning Policy 44 – Koala Habitat Protection

A consent authority to an application to carry out development on land to which this part applies, must satisfy itself whether or not the land is a potential koala habitat. Information must be obtained by it, or by the applicant, from a person who is qualified and experienced in tree identification. A Species Impact Statement was undertaken by Ecotone Ecological Consultants Pty Ltd. The report concluded that the proposed conservation precinct contained within the proposed project and the retention of larger trees in other areas will ensure the protection of any local population consistent with the objectives of the SEPP. The aims and objectives of SEPP44 have been addressed in **Appendix B**.

3.8.6 State Environmental Planning Policy No 11 – Traffic Generating Developments (Now State Environmental Planning Policy (Infrastructure) 2007)

SEPP 11 applies to the erection of, or the conversion of a building into, a residential flat building comprising 75 or more dwellings or the enlargement or extension of a residential flat building by the addition of 75 or more dwellings, and the subdivision of land into 50 or more allotments. The aims and objectives of SEPP11 have been addressed in **Appendix B**.

3.8.7 State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

This SEPP operates in conjunction with Environmental Planning and Assessment Amendment (Building Sustainability Index: BASIX) Regulation 2004 to ensure the effective introduction of BASIX in NSW.

The subject project application satisfies the SEPP and is accompanied by Basix Certificate No. 121588M; SMB Houses (All), 12417M; SMB Apartments (the Point) and 123297M; SMB Apartments (The Cove).

The following was achieved:

BASIX Certificate No. 121558M	a water rating of 43 where 40 is required a pass for thermal comfort and an energy rating of 44 where 40 is required
BASIX Certificate No. 12417M	a water rating of 43 where 40 is required a pass for thermal comfort and an energy rating of 30 where 30 is required
BASIX Certificate No. 123297M	a water rating of 43 where 40 is required a pass for thermal comfort and an energy rating of 30 where 30 is required

The aims and objectives of the BASIX SEPP have been addressed in **Appendix B**.

3.8.8 Hunter Regional Environmental Plan 1989

The relevant aims of the Plan are to protect and enhance the environmental qualities of the area and to facilitate the orderly and economic development of land in the area. The proposal is considered to be consistent with the aims of the Plan. The aims and objectives of HREP 1989 have been addressed in **Appendix B**.

3.8.9 Great Lakes Local Environmental Plan 1996

The land is zoned Part 2(g) Environmental Living and Low-Impact Development Part 7(a1) Environmental Protection Zone.

The objectives of the 2(g) Environmental Living and Low-Impact Development zone are:

- to provide for low-impact residential development in areas with special ecological, scientific or aesthetic values and
- to ensure that residential development does not have an adverse effect on those values, and
- to provide for other types of low-impact development that complement and support the residential development and which do not have an adverse effect on the special ecological, scientific or aesthetic values of the land.

The dwellings and residential flat building are sited within the 2(g) zone, are considered to be consistent with the objections of the zone and the development is permissible with consent.

The objectives of the 7(a1) Environmental Protection zone are to restrict development to that which:

- will protect the special ecological, scientific, educational or aesthetic values of the terrestrial or aquatic ecosystem, and
- will protect areas of significant vegetation and promote the regeneration of native plants communities; and
- will protect the biodiversity of the land, including threatened or migratory species and their habitat; and
- will protect significant conservation nodes, conservation reserves and linking corridors, and
- protect ecological process and systems.

The area zoned 7(a1) is to be undeveloped with the exception of walking and cycling tracks, which are considered to be consistent with the objections of the zone and are permissible with consent.

3.9 Other Controls

3.9.1 Development Control Plan 40 – Seven Mile Beach

This site specific DCP to provide development controls that reflect the outcome of the LES process and hence the LEP 1996 objectives and the land use zone objectives. The DCP specifically deals with the commercial/residential development component of the site [zoned 2(g)] and replaces all other relevant Council DCPs which would otherwise relate to the proposal. In respect to the commercial/residential component of the site, the application adopts the requirements of the DCP and therefore complies with the aims and objectives of the DCP and section 7 Planning Principles which have also been considered within the EA.

Compliance with the DCP built form controls has been tabulated within section 6.1 of the EA and an assessment of compliance with the DCP controls is provided in Appendix C of this report, with minor variations from built form controls addressed as conditions of approval. The proposed subdivision plan is considered to be consistent with the minimum lot sizes specified within DCP 40, which prevails over DCP 30 – Subdivisions, and the community management plan is considered appropriate for the maintenance of the planning principles contained within the DCP.

The application includes works for, and within, the adjoining Booti Booti National Park. Those works relate to the 'Eastern Habitat Corridor Restoration Plan' and the provision of a new vehicle access road through the subject land to the National Park, replacing an existing access track. As per the submission from DECC, a 'Deed of Agreement' is required to be enacted to ensure that the 'agreed works' as nominated in the DCP 40 and major projects application are implemented. At this stage the Deed of Agreement has not been signed, and will be required to be finalised before any approval is granted.

Incorporated in the LEP and DCP process was the development of the Conservation Land Use Management Plan [CLUMP]. The application has addressed the requirements of the CLUMP within the Statement of Commitments. Further, the application has provided an Environmental Validation Report [EVR], as required by the DCP, indicating compliance with the Environmental Considerations identified within section 7.0 of the CLUMP. The proposal satisfies the environmental requirements of the DCP and CLUMP.

The application includes documentation that identified the proposed staging of the development, including the phasing of works required for each of the development stages [see figure 3a].

Therefore, the development is considered to be compliant with all aspects of the DCP subject to the conditions of approval. DCP 40 includes a site Master Plan and a Conservation Land Use Management Plan. The DCP also requires the proponent to provide an Environmental Validation Report.

The proposed development has been assessed against these controls in **Appendix C** to this report.

3.9.2 NSW Coastal Policy 1997 and Coastal Design Guidelines

The proposed development has been assessed against these controls in **Appendix C** to this report.

4 CONSULTATION AND ISSUES RAISED

4.1 Public Exhibition Details

The Major Project application was exhibited from Wednesday 4 July 2007 to 2 August 2007 and was advertised in the Great Lakes Advocate for a period of 30 days. The Environmental Assessment was made available to the public at the following locations during the exhibition period:-

- Department of Planning Head Office, Bridge Street Sydney;
- Department of Planning Newcastle Office, Honey Suckle Drive Newcastle; and
- Great lakes Council, Breese Parade Forster.

The submissions received in response to the exhibition are outlined below.

It is noted that the LES, LEP and DCP processes that have been undertaken over this site in the last 3 years, have had extensive public consultation process. As part of that process community meetings were held by the proponent.

4.2 Submissions from the Community

During the exhibition period, three (3) submissions were received from the community which are outlined in Table 3 below.

Table 3: Summary of issues raised in Community submissions

Topic	Number of references in submissions	Details / Comment
Traffic generation	1	<ul style="list-style-type: none"> • Extra traffic turning into the narrow Lakes Way • Increased traffic on Lakes Way • Traffic impacts on school [Forster High] • Driver behaviour – speeding • Increase boat and caravan traffic; impact on caravan parks and Wallis Lake • Lack of sufficient parking at Stocklands – increased population
Companion animals, etc	1	<ul style="list-style-type: none"> • Impact on native flora and fauna • Impact on National Park.
Water supply/usage	1	<ul style="list-style-type: none"> • Sustainable supply of water for proposed water features/lagoons/pools/
Over development	2	<ul style="list-style-type: none"> • Too much development in a small area [housing density, floor space ratio's, etc] • Building height and scale [5 storey buildings] out of proportion to existing character of the area [National Park] • Five (5) storey apartment buildings, visible from seven mile beach and surrounding National Parks, a great eyesore sticking up the middle of pristine, rare, vulnerable and yet stunningly beautiful environment, that should be protected and preserved for all to share, not just the rich and greedy!
Storm Water management	1	<ul style="list-style-type: none"> • Off-site impacts on Wallis Lake – quality and quantity
Ecological impacts	1	<ul style="list-style-type: none"> • The impact and pressure on the Janie's corner ecosystem, being the sand dunes and grasses, bird life that feed and breed in the area, right down to the little sand crabs, from increased human traffic [presumable generated by the development and improved public road system].

Topic	Number of references in submissions	Details / Comment
		<ul style="list-style-type: none"> One of the last Cabbage Palm [<i>Livistona Australis</i>] forests in the area and maybe the East Coast of Australia. A number of these trees have mechanically moved already and in the process some have died from transplantation shock and then removed and destroyed with out a word. Also this is an area that has a large number of swamp paper barks [<i>Melaleuca Ericfolia</i>] that provide pollen to Gliders, Foxes, honey eaters, and possums just to name a few that rely on them to survive. Gated community would restrict fauna access from Cape Hawk/McBrides Beach to the national park, by way of fencing barriers. Fauna would be forced to cross Lakes Way at a concentrated point only to dodge increasing traffic to cross the road [increasing road kill fatalities]. The pressure put on all uncommon rare, fragile and endangered flora, fauna, avifauna being: Cabbage palms, flowing gums, Flying Foxes, Swamp Wallaby's, Glossy Black Cockatoos', Square Tailed kits, goannas, Sugar Gliders, Brahminey kites.

The applicant has adequately addressed the issues in their response to the submissions documents. The response identifies the relevant sections of the studies and report prepared as part of the LES/LEP/DCP and application process. A summary of the public submissions and the Department's response is contained in **Appendix D**.

4.3 Submissions from Public Authorities

The following issues were raised by the public authorities in their submissions

4.3.1 MidCoast Water

MidCoast Water has reviewed the proposal and has not raised any objections to the proposed development. The site can be serviced by reticulated water and sewerage services and system capacity is sufficient to cater for the proposed development site. The development proposes the use of a reticulated recycled water supply for onsite toilet flushing, irrigation and other non-potable uses. No objection was raised by MidCoast Water in this regard.

MidCoast Water also reviewed the Odour Modelling Assessment Report prepared by GHD and indicated their acceptance with the demonstrated compliance with NSW odour criteria.

4.3.2 NSW Roads and Traffic Authority (RTA)

The RTA have provided their terms of approval following extensive negotiations regarding the proposed primary access and the proposed relocation of Scenic Drive. The agreed intersection design comprises a roundabout at the intersection of The Lakes Way and Seven Mile Beach Development, with the intersection of The Lakes Way and Scenic Drive constructed to the requirements of the RTA and Council. Upgrading works will be required within the Lakes Way and a reduced speed zone of 80kph will be implemented between Sweet Pea Road and the new Scenic Drive. All other RTA requirements have been included as condition of approval and there are no outstanding concerns from the RTA.

4.3.3 Rural Fire Service

The Rural Fire Service has raised no objection to the proposal; however, has requested that a number of conditions be applied to ensure that the development is completed in accordance with the recommendations contained in the Bushfire Assessment Report and DCP40. These matters are discussed in more detail in the section of the report 5.4 - Bushfire.

4.3.4 Department of Water and Energy (DWE)

Submissions from DWE identified significant concerns regarding permanent connection to the groundwater table and the potential contamination of ground water aquifers, particularly through interference by proposed stormwater detention basins. Aquifer interference approvals are required to be issued by DWE under the *Water Act 1912* and conditions of approval have been recommended that address interference and the quality of stormwater entering ground water reserves. The DWE has issued matters for consideration which have been satisfactorily resolved through the stormwater management strategy submitted by the proponent.

Subject to the proposed conditions of consent, all of the concerns raised through the submissions have been resolved to the satisfaction of DWE.

4.3.5 Department of Environment and Climate Change (DECC)

As an adjoining and affected landholder, as well as an authority for conservation, the DECC have raised a number of concerns with the project. The primary concerns related to the provision of the new access road to Janie's Corner (Scenic Drive), beach safety considerations, remediation and works within DECC land and the function of fauna corridors within the Seven Mile Beach Development. DECC have also expressed particular concern regarding the release of any approval prior to the gazettal of the necessary Deed of Agreement.

Many of DECC's concerns have been resolved through the Deed of Agreement and the fauna corridor concerns have been resolved through conditions relating to the proposed bus stop, street lighting and road widening. Likewise, the beach safety issue is addressed through conditions of approval.

A copy of the Deed of Agreement is contained in **Appendix E**.

4.3.6 NSW Department of Primary Industries

The NSW Department of Primary Industries has assessed the site and considered the predicted environmental impacts of the development. No objection was raised by the Department and no conditions were requested to be imposed as the proposal does not involve dredging or reclamation and does not obstruct the passage of fish or harm marine vegetation.

4.4 Response from Applicant to Submissions

The submissions were forwarded to the applicant under section 75H of the EP&A Act 1979. A copy of the applicant's response to the submissions is contained in **Appendix F**.

The response satisfied all the issues raised in the submissions except for ground water impacts and the new/replacement National Park Access road. The response to submissions included additional information as requested and was forwarded to D W E [stormwater quality] and the RTA [proposed new intersection with 'The Lakes Way'] for their comment.

The RTA has accepted the traffic study and has given conditional concurrence under S138 of the *Roads Act 1993* for the new road intersection with the Lakes Way. Appropriate conditions have been provided for inclusion into any approval granted.

DWE indicated that the additional information provided by the proponent did not satisfy their concerns with the impacts on groundwater. Subsequent discussions between DWE and the proponent have taken place and these issues have now been resolved. DWE have indicated their support subject to the inclusion of a number of conditions should approval be granted. These conditions have been incorporated into the conditions schedule.

5 ASSESSMENT OF ENVIRONMENTAL IMPACTS

Key issues considered in this assessment of the EA and consideration of the proponent's draft Statement of Commitments as identified in the Director General's Requirements is addressed as follows. It is noted that the subject land has been through a LES, LEP and DCP process and that this major projects application has been formulated to comply with the outcomes and controls implemented by the LEP and DCP-40.

Key issues considered in the Department's assessment of the Environmental Assessment include:-

- Ecological impacts
- Built form and Urban Design
- Subdivision Design and Layout
- Bushfire
- Traffic and Access
- Social and Economic
- Visual Impact
- Aboriginal Heritage
- Impacts on adjoining National Park
- Sewerage Treatment Plant
- Stormwater Drainage and Groundwater
- Flooding
- Earthworks and filling
- Acid sulphate soils
- Sustainability
- Coastal Hazards and Climate Change
- Public Interest

5.1 Ecological Impacts

The application addresses section 5A of the *Environmental Planning and Assessment Act 1979* and has been submitted in a manner that addresses the requirements of the *Threatened Biodiversity Survey and Assessment Guidelines for Activities and Developments DECC (2004) (Working Draft)*. In particular, the Statement of Commitments set-out the objectives and performance criteria for the management of conservation areas and threatened species, the control of weeds and feral animals, the protection and management of native flora and faunal assemblages and the rehabilitation and restoration of plant communities and fauna.

Following a thorough assessment of all ecological information submitted for the LES/LEP/DCP and application processes, the following is acknowledged and recognised:

- The subject lands comprise a mixture of cleared and modified lands (former sand extraction area) and some 13 separate native vegetation communities, ranging from low closed heathland through various swamp forest types to blackbutt open forest;
- The subject lands are known to contain habitat of five (5) threatened fauna species, namely squirrel glider, little bentwing-bat, grey-headed flying-fox, eastern blossom-bat and masked owl. No threatened flora species have been recorded on the subject lands;
- Some 38-hectares of the subject lands are to be conserved in the northern and southern conservation areas and an area of 12 hectares of currently modified, former sandmining land in the adjacent Booti Booti National Park shall be restored and regenerated through a combination of active plantings and facilitated natural regeneration; and

- Conservation management in the development and the subject lands is effectively set-out within the Conservation and Land Use Management Plan, the Development Control Plan, the Ecological Site Management Plan, the Squirrel Glider Habitat Management Plan, the Environmental Validation Report, the draft proposed Deed for the carrying out of works – Lakes Way, Forster between the applicant and the Minister for the Environment and the DG of the DECC, the Eastern Corridor Regeneration Plan, the Landscape Design Report, the Stormwater Management Plan and the Pest Species Management Plan.

The following conclusions are made, having regard to the relevant statutes and legislation that apply to the development:

- No matters of national environmental significance significantly relate to the site and that no referral to Department of Environment, Water, Heritage and the Arts (DEWHA) is required under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC);
- While a non-statutory Species Impact Statement (SIS) has been prepared, there is unlikely to be a significant impact on threatened biodiversity under s5A of the EP&A Act and the *Threatened Species Conservation Act 1995* (TSC). No further investigation or licensing is deemed required;
- The proposal accords with the recent LEP amendments that have been gazetted on this land;
- A Koala Plan of Management under SEP 44 – Koala Habitat Protection is not required as Core Koala Habitat does not occur;
- The proposal does not appear to cause a significant loss of native coastal vegetation pursuant to clause 2(1)(g) of SEPP 71 – Coastal Protection given the conservation and restoration actions to be undertaken as part of the proposal;
- SEPP14 – Coastal Wetlands and SEPP26 – Littoral Rainforests are not relevant to this site or the development;
- The development is proposed within land zoned 2(g), in which the *Native Vegetation Act 2003* (NVA) does not apply. Previously, the Hunter-Central Rivers Catchment Management Authority (HCRCMA) has assessed and endorsed the development with respect to the PVP Developer, BioMetric tool and environmental outcomes assessment methodology; and
- There does not appear to be any significant ecological issues associated with this development application, pursuant to S69c of the EP & A Act that would preclude its approval, with conditions.

It is considered that the development recognises and responds to the ecological constraints and opportunities of the subject lands and, when combined with the conservation and ecological management actions set-out in the environmental assessment statement, the CLUMP and other pertinent management plans and documents, including compensatory actions, that the development is ecologically reasonable and appropriate and would not significantly impact threatened biodiversity, native vegetation or the environment.

In relation to ecology, no objection to the application is raised and the conservation actions proposed therein, including the construction of the "new" vehicle access road to Janies Corner, Booti Booti National Park, provided that the clearing, construction and site management is undertaken in accordance with the actions set-out in the planning documents submitted with the application, except where varied by the amendments that are required to the Statement of Commitments as detailed within the conditions of approval.

As stated above, DECC are satisfied with the ecological outcomes of the application and the 'Deed of Agreement' has been signed by the Director-General of the Department of Environment and Climate Change.

5.2 Built Form and Urban Design

The key aspects of the proposed development in relation to built form and urban design to be considered in this assessment include density, height, massing and building articulation, design, materials and finishes, unit mix and open space. These are discussed below for each precinct in the proposal. The location of each Precinct can be seen in Figure 3.

The Boardwalk

The Boardwalk Precinct is located at the site entrance and contains the administration, retail and community centre buildings. A photo of the main building is shown in Photo 1. DCP 40 includes controls for site coverage, car parking, height and setbacks as well as guidelines for architecture and materials. The precinct is considered to be satisfactory having regard to the planning principles and controls detailed in the DCP and the design considerations of SEPP71 and the Coastal Design Guidelines.

Density and site coverage

The density of the buildings is considered to be appropriate to the context of the site and surrounding development. The proposed buildings have a footprint of 1438m² which is 6.3% of the total area of this precinct. This is significantly lower than the 25% building coverage permissible under DCP40.

Height and setbacks

Buildings within the Boardwalk Precinct have a maximum height of two (2) storeys which is consistent with the DCP 40 height control. The height of the building responds to and reflects the surrounding vegetation and sightlines from the entrance road.

Buildings within the Boardwalk are required to have a minimum setback of 30m from the boundary with The Lakes Way. This has been achieved and provides for significant vegetation to be retained offering filtered views of the buildings from The Lakes Way.

Design and character

The design and character of the buildings is consistent with the requirements of DCP40 and the Coastal Design Guidelines. The location of the buildings within the Precinct and the curved footprint responds to the site conditions, being located in a natural clearing and minimising the amount of vegetation required to be removed. Several existing large trees have been retained by stepping the building around them and these trees form an attractive landscape feature which can be viewed from numerous points within the building. Utilising two buildings allows the natural vegetation to filter between the buildings and the creation of a large semi-enclosed outdoor community space including an outdoor theatre. Existing trees are to be preserved by constructing timber boardwalks and large areas of decking which allows the trees to grow through the them. This design retains the natural vegetation characteristics of this area and creates a naturally shaded recreational space whilst linking the two buildings together. Additional planting throughout the precinct define the boundaries of the site and the boardwalks connect with pathways to provide links to the adjoining precincts.

The buildings incorporate a modern palette of material and finishes and the skillion roof design and large expanses of glazing allow natural light to penetrate the buildings. These windows also provide expansive views of the surrounding vegetation from within the building. The building design and materials are consistent with the natural features of the site and the coastal setting. Retention of existing trees and extensive additional vegetation together with the use of natural timber boardwalks compliment the building design, siting and the character of the site.

Massing and building articulation

Although DCP40 does not contain specific controls relating to massing and articulation, the design of the buildings within the Boardwalk Precinct are consistent with the planning principles contained in DCP40. The community buildings consist of two separate buildings, one of which has already been constructed under a separate development consent. The massing of the buildings has been minimised by the use of a curved wall

design together with wall articulation and the stepping in of the first floor level. The use of horizontal slatted timber feature screens introduces horizontal elements and the contrasting pallet of materials also reduces the perceived bulk of the buildings.

Materials and finishes

The materials and finishes are consistent with the character guidelines within DCP 40 and are appropriate to the context of the site. The buildings utilise a mix of materials including exposed structural steel elements, large exposed laminated timber beams, lightweight wall cladding with masonry feature walls and slatted timber feature screens. The mix of materials and colours blends with the natural colours of the surrounding vegetation and is compatible with the coastal environment. Colours include unstained timber, stone, greys and browns.

Visual Amenity

The buildings within this precinct will be partially visible from the Lakes Way, although views will be limited by the large setback (30m) and through the existing established dense vegetation. Planting of indigenous trees and the retention of established vegetation provides a continuity and coherence to the coastal environment, whilst the building design and finishes reflect a modern coastal building.

Open space

Although there are no specific open space controls for this precinct, the siting and design of the buildings is considered to be consistent with the general planning principles of DCP40. The siting of the building and associated car parking provides for the retention of significant vegetation and a large landscaped communal space. Additional landscaping and timber boardwalks contribute to the amenity of the open space and the proposed landscaping will screen and visually break views into the adjoining precincts.

Car parking

DCP 40 requires a minimum of 28 car parking spaces to be provided within the Boardwalk Precinct. The number of car parking spaces exceeds the DCP requirements with 53 parking spaces provided within the precinct. The car parking spaces have been spaced throughout the precinct to minimise the impact on vegetation and reduce large expanses of hard surfaces. The two larger car parking area's have been stepped around existing trees thus providing additional screening of those areas from The Boardwalk buildings.

Photo 1 – main building – The Boardwalk



The Crest

The Crest Precinct is located in close proximity to The Boardwalk and contains a total of 19 attached and detached dwellings set within community parkland. The Crest Precinct forms a junction between the currently bare dunes, the densely treed Eucalypt forest of the Forest Precinct and the Palms precinct. Photo 2 and Figure 4a & 4b contain an example of a typical dwelling within this Precinct.

Density and site coverage

DCP 40 set a density control for this Precinct by limiting the number of dwellings to 19. Each dwelling is required to be located on a lot with an area of at least 400m² and to have a maximum dwelling footprint of 40% of the lot area. The proposed dwellings within this Precinct comply with these requirements with 19 dwellings proposed on lot sizes ranging between 402m² to 627m².

Height and setbacks

Height controls for the precinct allow dwellings to be two storeys in height with a loft. All proposed dwellings comply with this control being a maximum of two storeys. The heights of the dwellings are considered to be compatible with the Precinct environment, having regard to the surrounding vegetation and generous setbacks from the main site thoroughfares, community buildings and facilities.

The DCP 40 setback controls for this Precinct provide a performance based approach. Zero lot lines to the side boundaries are permissible and although the front setback is preferred to be 4m, a 1m setback is acceptable where natural site features or bushfire buffer areas are accommodated. The attached dwellings incorporate zero lot lines; however, all detached dwellings have generous side setbacks generally around 2m, providing adequate separation for privacy and vegetation. Front setbacks generally meet or exceed 4m; with the exception of dwellings on lots 3, 5, 6, 17 and 18. The location of these dwellings, however, is considered to meet the performance approach of the control and the overall planning principles for the site. The reduced front setback relates to the curved nature of the subdivision pattern and allows for large areas of north facing private open space. Having regard to the overall precinct layout, dwelling design and the expanse of landscaping visible around the dwellings, the reduced front setback of these dwellings is considered to be acceptable.

Design and character

The dwellings have been located within the precinct to allow for view-lines between the dwellings into the park and to enable landscaping to filter to the road edge. The precinct layout relates well to the existing site features with dwellings located along the curved crest of the dune.

The dwelling designs provide for good occupant amenity with north-facing living areas and outdoor private spaces that maintain sufficient privacy between the dwellings. There is a mix of detached and attached dwellings with open plan living areas and large north-facing decks or courtyards allowing passive solar design principles to be implemented. Large windows and the open plan design provide for abundant natural light within the dwellings and good cross-flow ventilation. The design is consistent with the character and architecture guidelines of DCP40 and the coastal setting in which they are located.

Massing and building articulation

The dwellings incorporate appropriate articulation and materials which serve to minimise their massing and perceived bulk. Larger dwellings have been designed as two pavilions wrapping around a courtyard and this minimises the expanse of the roof form. First floor balconies and horizontal timber slat screens provide horizontal elements which reduce the perceived height of dwellings. Smaller attached dwellings incorporate articulation to the front and rear elevations with an appropriate mix of materials to minimise massing. Building separation and extensive landscaping around the dwellings also contribute to minimising building massing.

Materials and finishes

The dwellings in this precinct have a similar design to the main community buildings located in the adjacent Boardwalk Precinct incorporating simple skillion roof design with exposed rafters and a modern palette of external materials and colours. The dwellings incorporate metal roofing, lightweight wall cladding with feature masonry walls. The selected colours and finishes are appropriate to the context of the site and the coastal

environment, including neutral base colours and a range of accent colours, reflective of the surrounding environment.

Visual amenity

Dwellings in this Precinct will not be visible from outside of the site due to its central position within the site and extensive vegetation surrounding the precinct. However, the precinct layout together with the dwelling design is considered to provide good internal site visual amenity.

Open space

This precinct contains a large community park and each dwelling has a large area of landscaped private open space. The size, location and spacing of the dwellings provide adequate space for screen landscaping and the retention of significant vegetation within the Precinct.

Car parking

Each dwelling in this precinct is required to be provided with two covered car parking spaces in accordance with DCP40. Each dwelling has been designed with a double garage to comply with this requirement. Garages have been integrated with the main dwellings so that the garages do not dominate the front facades of the dwellings.

Photo 2 – Two (2) storey dwelling – The Crest



Figure 4a – Typical floor plan – The Crest

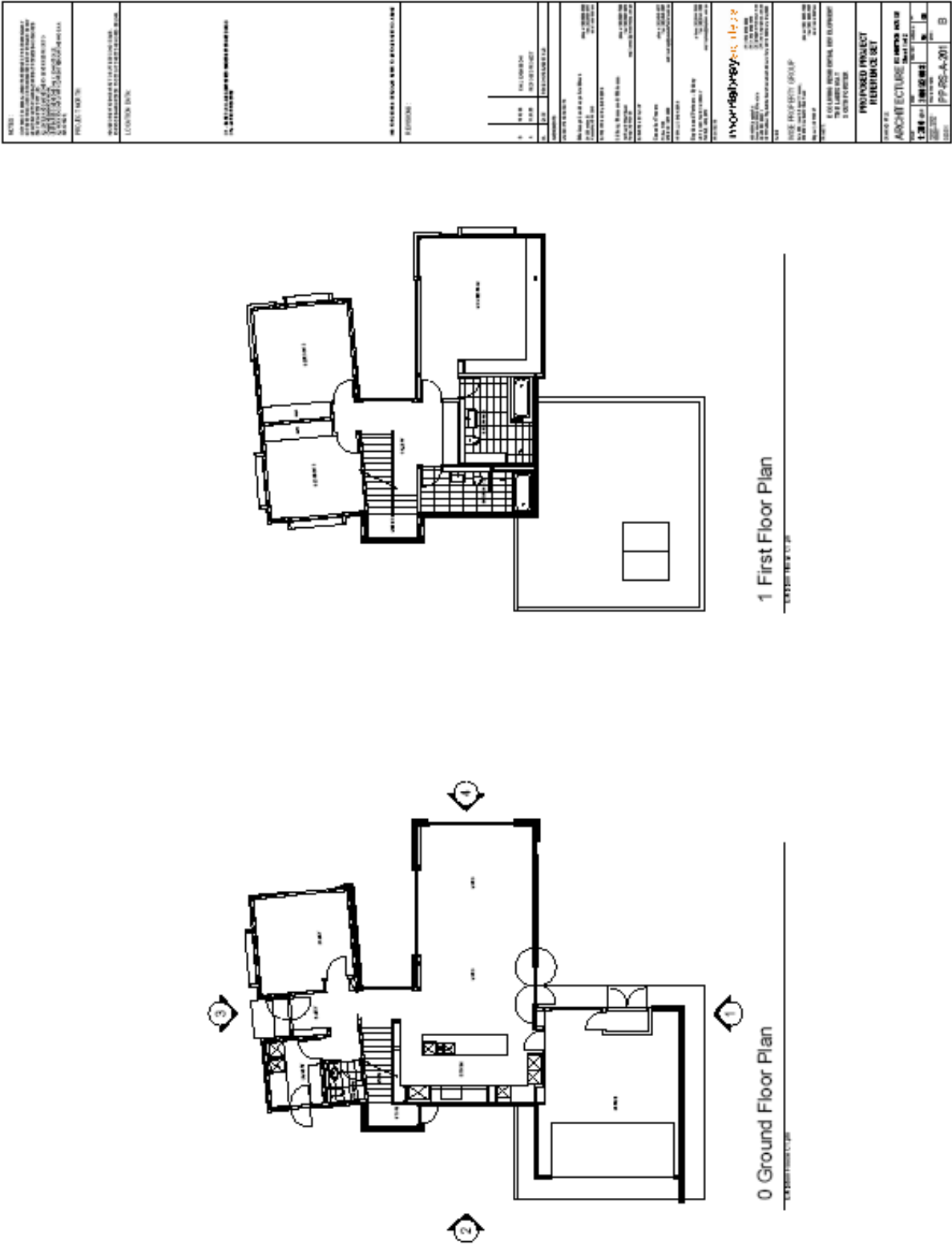
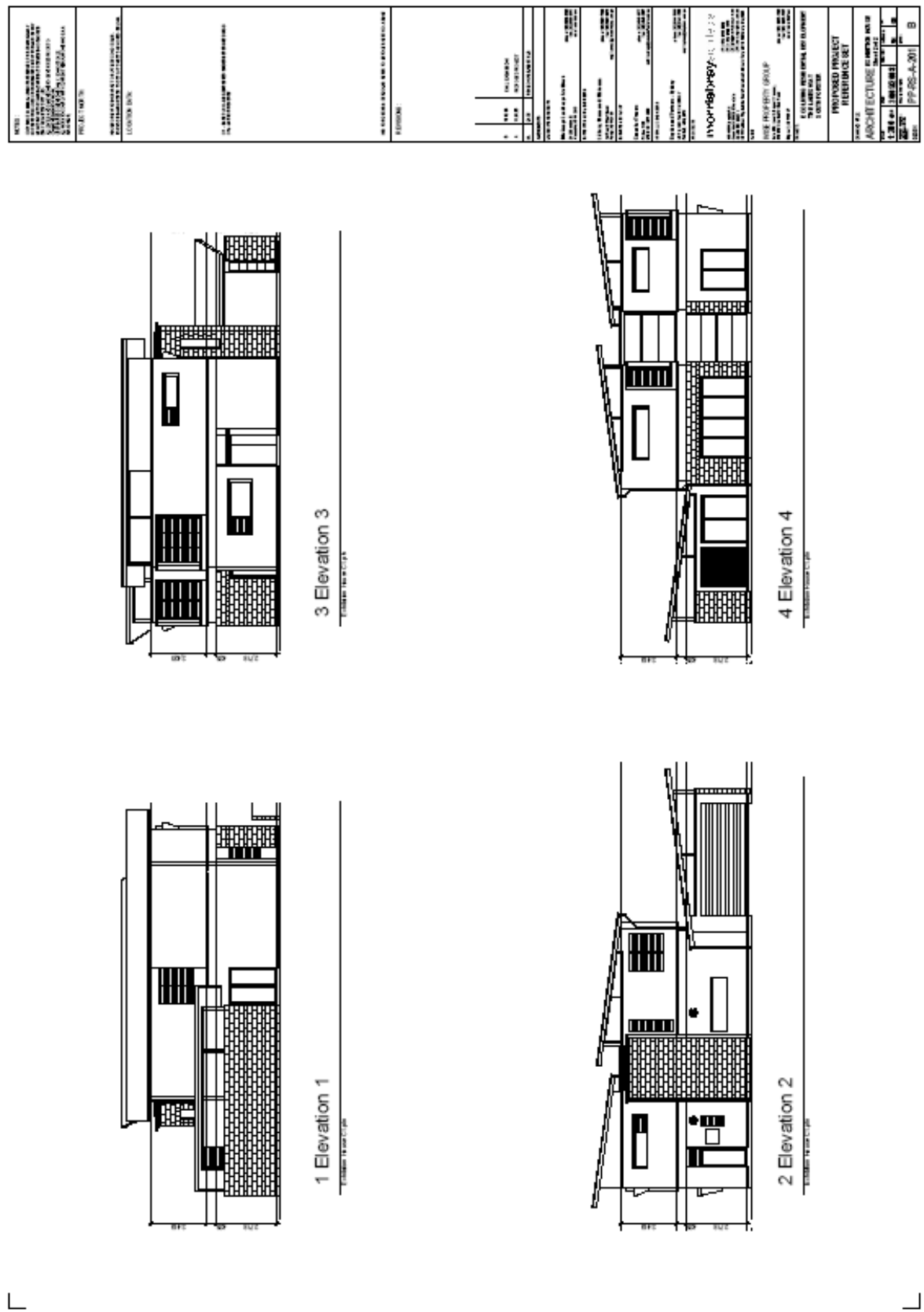


Figure 4b – Typical elevation – The Crest



The Forest

The Forest Precinct is located in the North-western corner of the site and covers the largest area in the site containing 78 detached dwelling houses with a central community park and swimming pool. Architectural intent of DCP40 was to provide floor plans that give flexibility in orientation, entry location and car access points to respond to the constraints of the site, such as orientation and existing trees. A typical dwelling is shown in Figure 5a & 5b.

Density and site coverage

DCP 40 set a density control for this Precinct by limiting the number of dwellings to 78. Each dwelling is required to be located on a lot with an area of at least 400m² and to have a maximum dwelling footprint of 40% of the lot area. The proposed dwellings within this precinct generally comply with these requirements with 77 of the dwellings located on lots ranging between 400m² to 1194m². Dwelling footprints also comply with the maximum permitted site coverage ranging between 10.6% and 30.2%. Proposed Lot 6.37 is slightly smaller than the required 400m² with a proposed area of 372.3m². Although this lot does not comply with the numerical control it is considered to be satisfactory having regard to the site constraints and the intention to maintain as many of the existing trees as possible within the precinct. It is noted that this lot achieves a building footprint of 21% which is significantly less than the 40% maximum permitted.

The density of the dwellings is consistent with the site characteristics and planning principles required under DCP40.

Height and setbacks

Setbacks in the Forest Precinct are similar to those required within the Crest Precinct. Zero allotment side boundary setbacks are permissible and variations to front setbacks are permitted where natural site features are accommodated and the impact on existing trees is minimised. The front setbacks for dwellings are required to be 4m, although garages and carports are permitted to have a 1m front setback. None of the dwellings incorporate zero side boundary setbacks with most having one side with a minimum setback of 1.0m and the other side setback greater than 1.0m. The majority of lots comply with the required 4.0m front setback; however, there are 11 sites within the precinct that have parts of the building encroaching the preferred front setback. Encroachments vary between 0.5m up to 1.5m. This encroachment on the preferred setback is not considered to result in a detrimental impact on the amenity of these dwellings or the streetscape due to the organic nature of the street design and dwelling layout. It is also consistent with the design philosophy of this precinct which is to allow design flexibility so that impacts to existing trees are minimised.

DCP 40 permits dwellings in this precinct to have a maximum height of two storeys. All proposed dwellings comply with this control.

Design and character

The subdivision layout incorporates varying lot sizes and shapes so that dwellings can achieve good solar access and cross ventilation so as to respond to the specific site attributes. The flexible design of the dwellings in this precinct have allowed for individual floor plans to be mirror reversed, rotated or cranked within the individual sites so that specific site constraints are addressed (e.g. retention of trees).

Dwellings are similar in design to the dwellings within The Crest Precinct, with the larger dwellings designed as two pavilions wrapping around a courtyard. Rather than slab on ground construction, however, these dwellings are elevated to minimise ground and vegetation disturbance. All dwellings generally contain north-facing, open-plan living areas with large windows to allow natural light and cross ventilation. Sites which do not have north-facing private open spaces are provided with north-facing decks. Dwelling layouts together with side setbacks and landscaping provide a satisfactory level of privacy between the dwellings.

Massing and building articulation

The dwellings incorporate appropriate articulation and materials which serve to minimise massing and perceived bulk of the individual dwellings. Larger dwellings have been designed as two pavilions wrapping around a courtyard which serves to minimise the bulk of the roof form. Wall articulation, first floor balconies and

a mixed palette of materials contributes to minimising wall mass. Horizontal elements, including windows and balcony screens assist to reduce the perceived height of dwellings.

Materials and finishes

The dwellings in this precinct have a similar design theme as the buildings in the adjacent Boardwalk Precinct incorporating simple skillion roof design with exposed structural elements and a modern palette of external materials and colours. The dwellings incorporate metal roofing, lightweight wall cladding with feature masonry walls. The selected colours and finishes are appropriate to the context of the site and the coastal environment.

Visual Amenity

The Forest Precinct adjoins the Lakes Way, although all dwellings are setback around 40m from the boundary with the Lakes Way. This provides sufficient area for additional landscape screening so that when combined with the existing dense vegetation only filtered views of the dwellings will be possible. The design and siting of these dwellings is consistent with the site and coastal environment and will present a positive contribution when viewed from the Lakes Way.

Open space

Each dwelling has been provided with private open space in the form of gardens and private decks including ground and first floor screen rooms. Community parkland and a swimming pool have been provided to the centre of the Precinct. The pool has an entirely different character from those of other precincts in that it is presented more like a lake with an old jetty style structure projecting into it. The size, location and spacing of the dwellings provide adequate space for screen landscaping and the retention of significant vegetation within the Precinct.

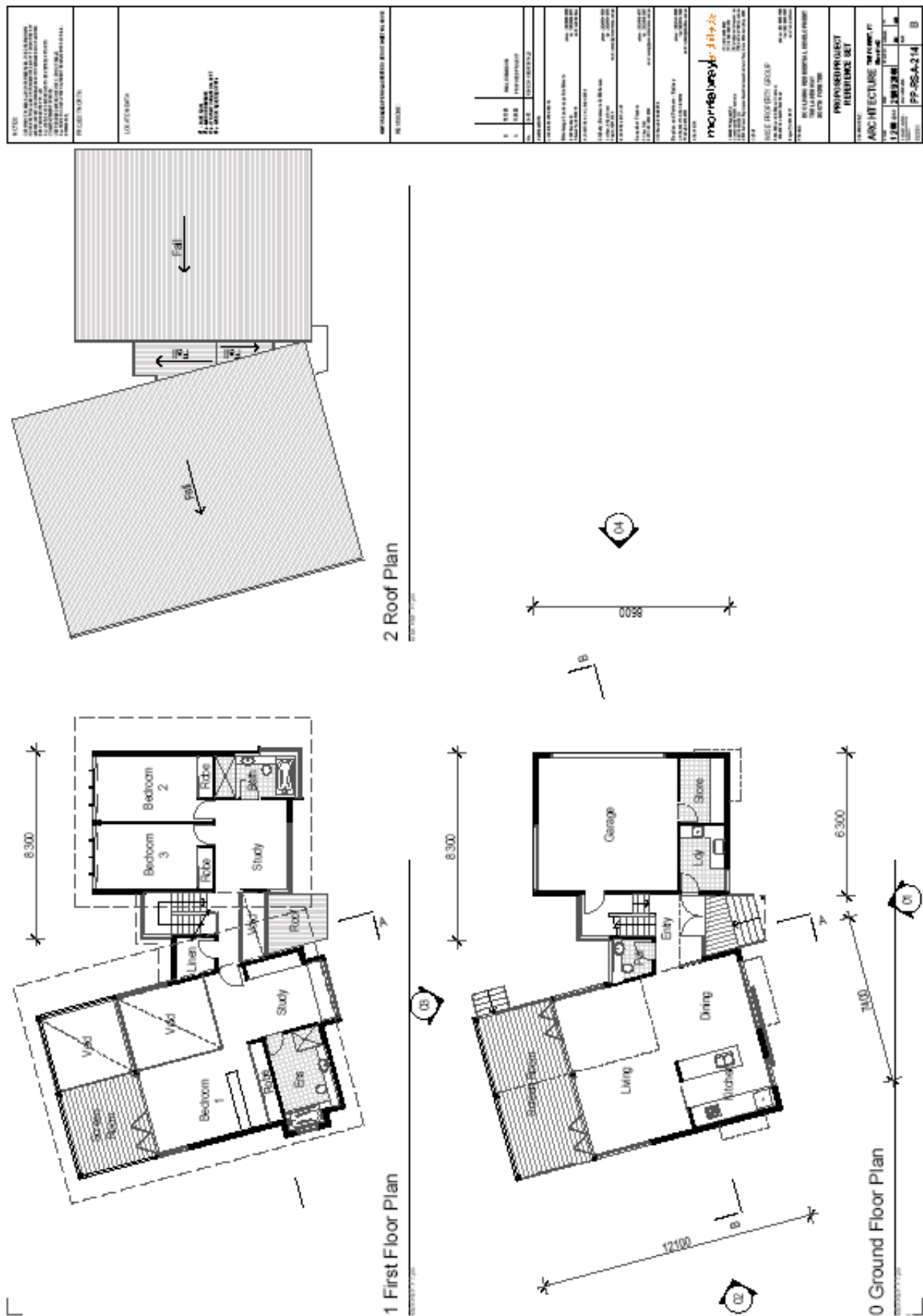
Car parking

Each dwelling is required to be provided with two (2) car parking spaces with at least one space to be covered. This control has been achieved with a mix of single and double garages attached to the dwelling and some dwellings with detached garages. The location of the car parking complies with the front setback requirements of DCP40.

Figure 5a – Typical Elevation – the Forest



Figure 5b – Typical floor plan – the Forest



The Palms

The Palms is a small precinct of detached housing connected to the Boardwalk precinct by bridges and raised walkways over a natural overland swale. It is located in the south-western portion of the site amidst paperbark trees and cabbage tree palms. The dwellings predominately focus around a small lagoon pool and parkland. Figure 6a & 6b shows a typical dwelling within this precinct.

Density and site coverage

DCP 40 set a density control for this Precinct by limiting the number of dwellings to 17. Each dwelling is required to be located on a lot with an area of at least 400m² and to have a maximum dwelling footprint of 40% of the lot area. The proposed dwellings within this Precinct generally comply with these requirements with 16 of the dwellings proposed on lot sizes ranging between 400m² to 1497m². Dwelling footprints on these sites vary between 4.5% and 33%. One lot (7.06) is slightly less than the minimum being 391m² in size. This minor non-compliance is considered to be acceptable having regard to the expansive public open space which is designed to meld with private open spaces; and given that the dwelling footprint covers only 29% of the lot, which is substantially less than the 40% permitted.

Height and setbacks

This precinct allows dwellings to be a maximum of three storeys in height and the proposed dwellings contain a mix of two and three storey structures. The height of the buildings is appropriate to this area as it is partially isolated from the remainder of the site by a natural swale and the height relates to the existing mix of tall thin paperbark and cabbage tree palms.

As with the other residential precincts, front setbacks are performance based with a preferred setback of 4.0m. Six of the dwellings have setbacks less than 4.0m; and these range between 1.0m and 3.5m. The reduced setbacks are proposed in response to site conditions to allow for the retention of significant trees. Given that the one-way internal access road serves only the 17 dwellings in this precinct and that the focus of the dwellings is towards the central parkland and pool the reduced setbacks are not considered to reduce the internal amenity of the dwellings. The circular subdivision layout and spacing of dwellings also ensures that the reduced front setback does not impact on the streetscape amenity. The precinct also fronts directly onto the Southern Conservation Zone to both the south and the east, as well as a significant wildlife corridor to the north which separates it from the main site entry.

DCP40 sets a minimum side boundary setback of 900mm for dwellings; however, all dwellings exceed this minimum which allows substantial landscape screening between the dwellings.

Design and character

The generous building setbacks and extensive vegetation within this precinct contribute to a sense of space and privacy between the dwellings whilst the central pool and parkland provide a community focal point. The sizes and shapes of the allotments allow for most buildings to have north-facing living spaces.

Dwellings within this precinct are pole platform style with small footprints to minimise site disturbance. The two and three storey designs allow the buildings to extrude vertically like a tree house in sympathy to the tall thin tree canopy surrounding the dwellings and to reach sunlight. The dwellings consist of either single or double pavilions generally with north-facing living areas and large decks. Tall voids allow sunlight to be carried deep into the buildings. Appropriate placement of windows and open-plan rooms allows cross ventilation. In contrast to the other precincts, tallness of buildings is emphasised through the use of vertical elements such as vertically proportioned windows, masonry feature walls, timber cladding installed vertically and elongated timber support features.

Massing and building articulation

Although some buildings are three storeys and the designs emphasise height, the massing of the dwellings is not overbearing to surrounding dwellings or public spaces. Wall articulation and the mixed pallet of materials serve to minimise building mass. The larger dwellings have been split into two angled pavilions which break up the roof form and the extensive landscaping throughout the precinct also provides visual relief.

Materials and finishes

The dwellings incorporate metal roofing, lightweight wall cladding with feature masonry walls. The selected colours and finishes are appropriate to the context of the site and the coastal environment, with colours accenting the surrounding vegetation.

Visual amenity

This is the only other precinct that is visible from the Lakes Way. The low density of dwellings within this precinct together with the generous setback from the Lakes Way (at least 40m) and landscaping will limit the visual impact on the Lakes Way. Further, the dwellings have been designed to blend in with tall trees in this part of the site. Internal site amenity is maintained by the subdivision layout, precinct landscaping and building design.

Open space

Each dwelling has been provided with private open space in the form of gardens and private decks. Community parkland and a swimming pool have been provided to the centre of the Precinct. The size, location and spacing of the dwellings provide adequate space for screen landscaping and the retention of significant vegetation.

Car parking

DCP40 requires two covered car parking spaces to be provided where possible, however, a minimum of one covered space and one hardstand is considered to be acceptable. Within this precinct, there are a mix of parking arrangements including attached and detached double garages, single carports and hardstand areas. The design of car parking is appropriate to the site conditions and constraints.

Figure 6a – Typical elevation – The Palms

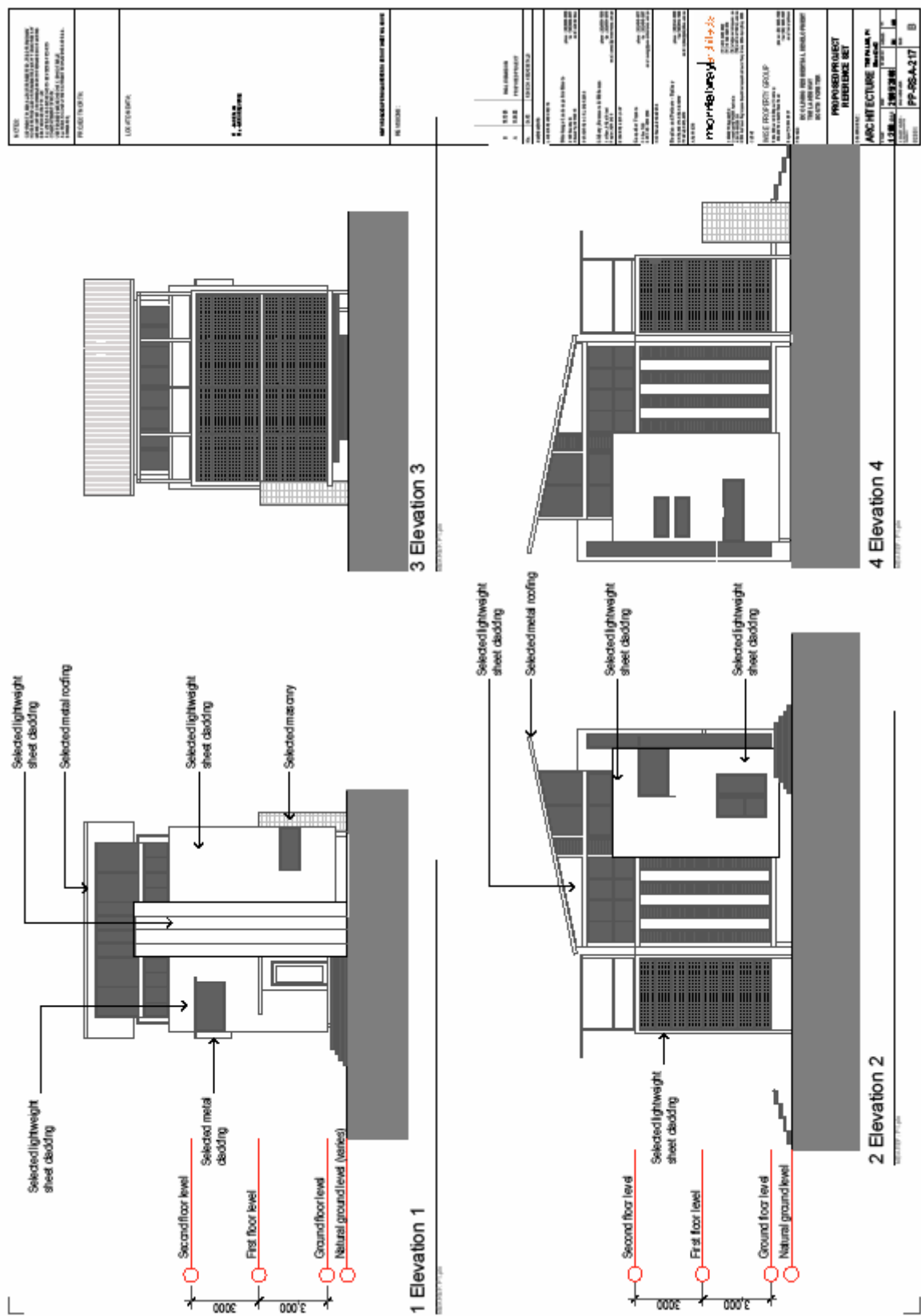


Figure 6b – Typical floor plan – The Palms



The Dunes

The Dunes Precinct is central to the site and provides 71 on-ground detached dwellings. The housing backs onto the natural bushland peripheries along its northern and southern edges with the remainder of the housing focuses on a unique pool winding through the centre of the precinct. **Figure 7a, 7b & 7c** is an example of a typical dwelling in the Precinct.

Density and site coverage

DCP 40 set a density control for this Precinct by limiting the number of dwellings to 71. Each dwelling is required to be located on a lot with an area of at least 400m² and to have a maximum dwelling footprint of 40%. Most lots comply with this requirement ranging in size between 400m² and 792m² with site coverage between 15% and 38%. There are two minor non-compliances with the lot size control with proposed lot 23 having an area of 386m² and proposed lot 3.18 having an area of 397m². The dwelling footprints for these sites are below the 40% maximum with lot 23 having a building footprint of 29% and lot 3.18 having a dwelling coverage of 28%. The non-compliance of these two lots with the minimum lot size is not considered to result in adverse amenity impacts within the precinct or for the amenity of these lots given the extensive community open space and the variation in lot shapes and dimensions within the Precinct.

Height and setbacks

A two storey height limit was set by DCP40 for this precinct. All proposed dwellings for the Dunes are proposed to be two storeys.

As with the other residential precincts, front setbacks are performance based with a preferred setback of 4.0m for dwellings and 1.0m for garages and carports. Sides setbacks are required to be a minimum of 900mm. The Dunes precinct also has a rear setback which requires swimming pools to be at least 1.5m from the rear boundaries of the sites. Most sites within the precinct comply with the preferred setback of 4.0m; however, there are 12 sites within the precinct that have front building setbacks varying between 2.5m and 3.5m. These setbacks are considered to be acceptable as buildings have been positioned in relation to the site topography and buffer zones as intended by the performance control. As the subdivision pattern is not based on linear streets or consistent lot sizes or shapes, the variations to the building lines do not impact on the amenity of the streetscape.

All dwellings comply with the minimum side boundary setback and in most cases, exceed the minimum side setback allowing screen landscaping to be carried through the precinct and limiting overshadowing of adjoining living spaces. There are three (3) sites that contain swimming pools that do not comply with the minimum rear boundary setback. A condition of approval has been included to require the pools to be relocated within the sites in accordance with this control.

Design and character

The design philosophy for this precinct is for the 'dwellings to emerge out of the dunal landscape, strongly connected to the earth'. This has been achieved by the use of slab on ground construction, low pitched skillion roofs, the use of horizontal elements (e.g. cladding installed horizontally; horizontally proportioned windows and horizontal timber privacy screens) and colours which reflect the surrounding environment. The lack of existing vegetation in this part of the site allows for larger on-ground building footprints to be achieved.

Internal amenity has been considered with dwellings orientated with north facing living areas and courtyards and open plan living spaces for cross-flow ventilation. The slab on ground construction provides good thermal mass and the reduced shading from the limited number of existing tall trees allows for the installation of solar panels to all dwellings within this precinct. Room orientation and layout, together with sensitive window placement and screen landscaping provides appropriate acoustic and visual privacy between dwellings.

Massing and building articulation

Massing of these buildings has been addressed by providing a mix of dwelling styles and the sensitive use of wall articulation. Larger dwellings are split into two pavilions which minimise bulky roof forms. Dwellings incorporate articulated walls to both street and side elevations, reducing bulk to both the streetscape and neighbouring dwellings. Contrasting wall materials are also utilised to reduce the perceived dwelling bulk.

Materials and finishes

The dwellings incorporate metal roofing, lightweight wall cladding, including timber and sheet cladding with feature masonry walls. The materials are reminiscent of typical beach houses found in coastal areas.

Visual amenity

Dwellings in this Precinct will not be visible from outside of the site due to its central position within the site and extensive vegetation surrounding the precinct. However, the precinct layout together with the dwelling design is considered to provide good internal site visual amenity.

Open space

Each dwelling has been provided with private open space in the form of gardens and private paved courtyards. Community parkland and a swimming pool have been provided through the centre of the Precinct. Extensive planting of native species along with relocation of palms which are to be removed from the roadways and building footprints of the Palms precinct will recreate the natural vegetation that was once evident in this area prior to it being sand mined and will provide aesthetic ambience to the precinct.

Car parking

Two covered car parking spaces are required to comply with the car parking requirements detailed in DCP40 for this precinct. Each dwelling has been designed to incorporate a double garage. Although the DCP40 permits garages with a 1.0m setback, many of the dwelling designs incorporate garages set behind the main building line which minimises the dominance of the garage element on the streetscape. Those dwelling designs which incorporate a 1.0m setback have garages doors orientated away from the street, minimising the impact of these structures on the streetscape.

A number of visitor car parking spaces have also been provided throughout the roads within this precinct.

Figure 7a – Typical elevation – The Dunes

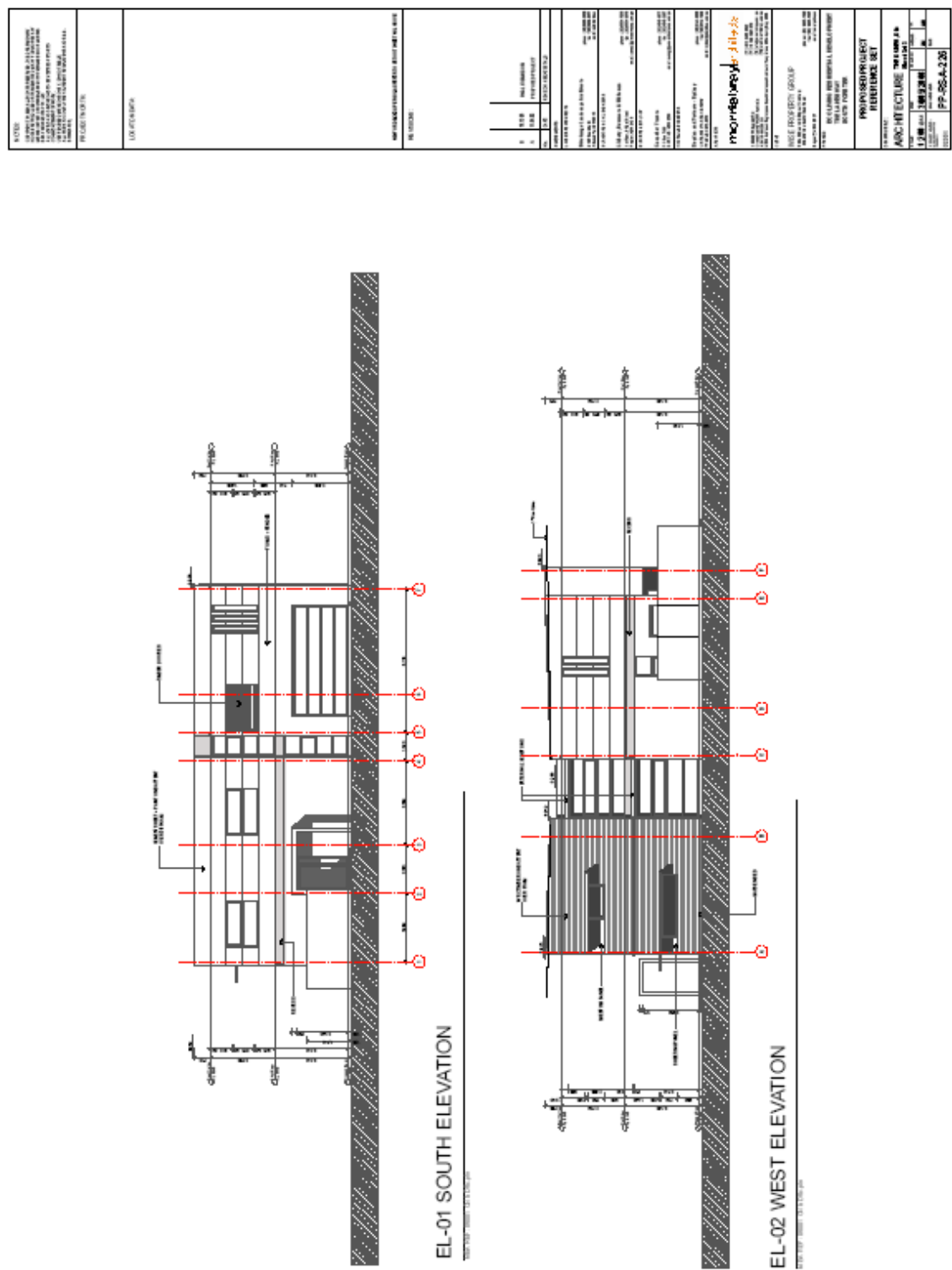


Figure 7b – Typical elevation – The Dunes

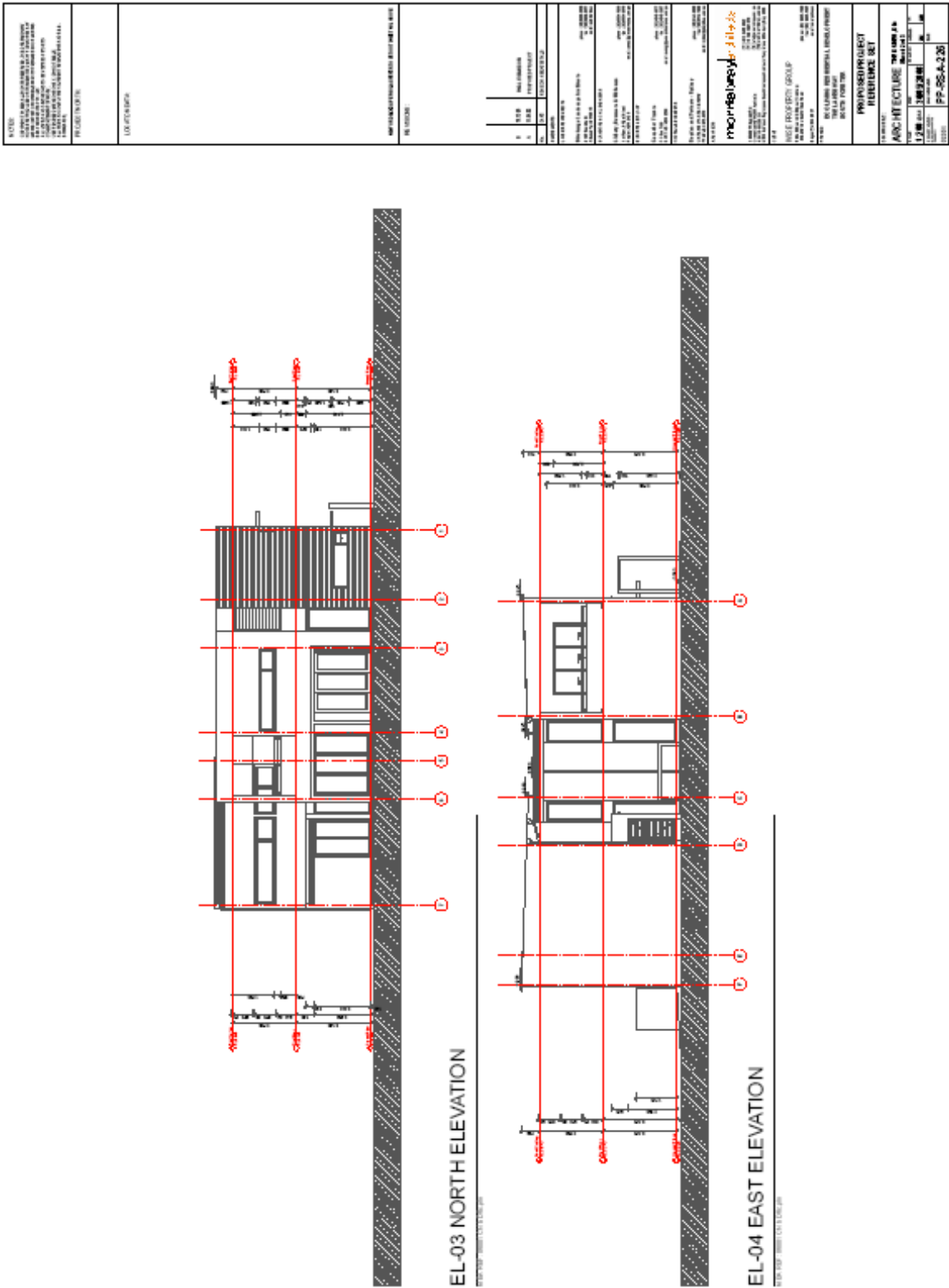
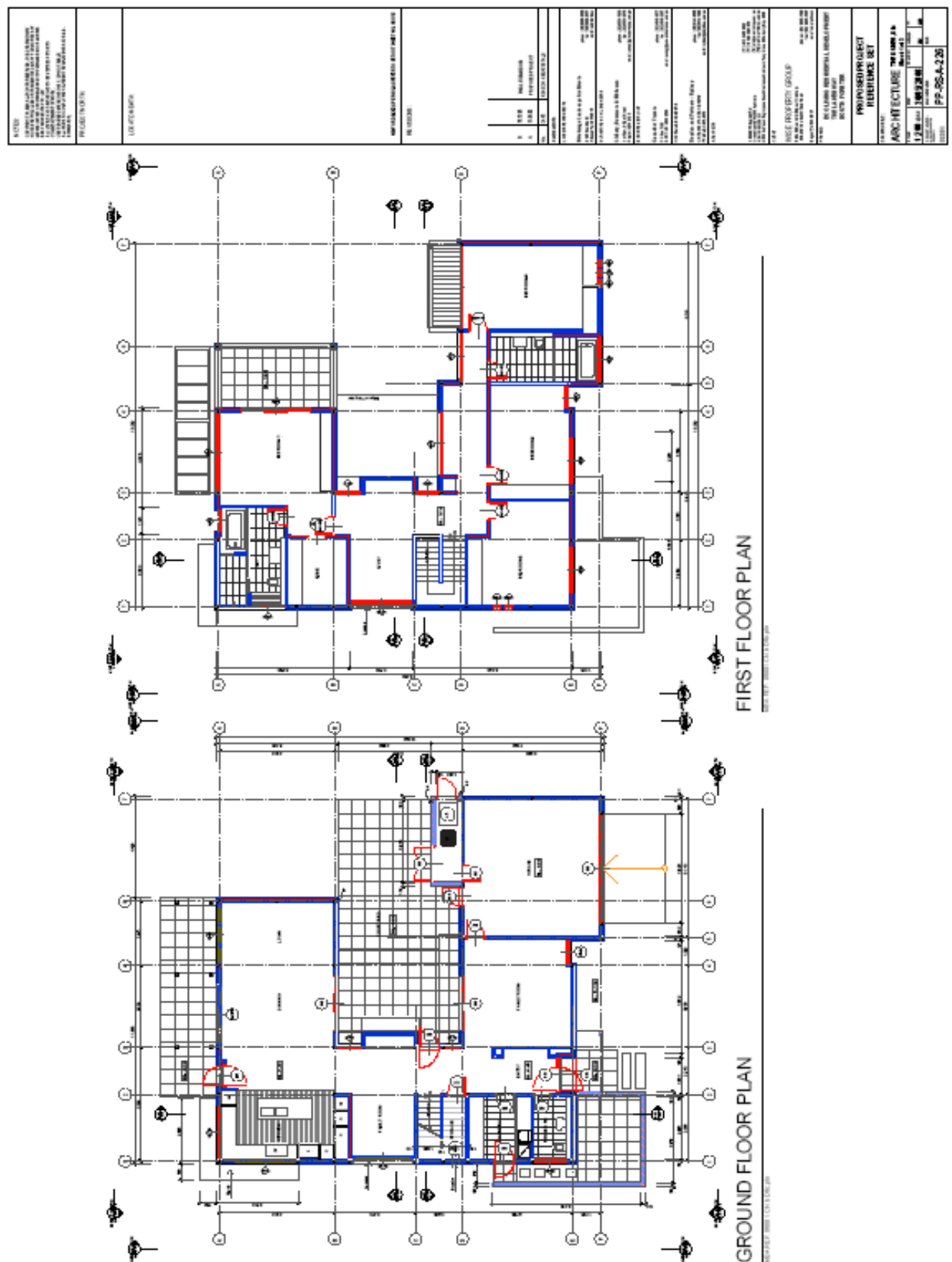


Figure 7c – Typical floor plan – The Dunes



The Fronds

The Fronds Precinct is located in the north eastern portion of the site and comprises 14 predominantly attached dwellings separated by natural site features and community parkland. An example of a typical dwelling in this Precinct is shown in **Figure 8a & 8b**.

Density and site coverage

DCP 40 set a density control for this Precinct by limiting the number of dwellings to 15. Each dwelling is required to be located on a lot with an area of at least 340m² and to have a maximum dwelling footprint of 45% of the lot area. The higher density and smaller lot size reflects the intent of smaller attached dwellings to be provided within this precinct. There are 14 dwellings proposed in the Precinct all of which are located on lots that exceed the minimum lot size. Lots within this precinct range from 370m² to 1402m² and dwelling footprints range from 10% to 42%. The density and coverage of the dwellings provides satisfactory open space on each site.

Height and setbacks

Twelve of the dwellings share a common wall and two dwellings are fully detached. The intention for attached dwellings is reflected in the DCP40 controls which permit zero lot lines for side boundaries within this precinct. The two detached dwellings have side setbacks of at least 3m which is suitable for the site shapes and dwelling location.

Within this precinct, dwellings are permitted to have a front setback of 2m, however, a lesser setback is permissible where natural site features are accommodated and impacts on existing trees are minimised. All sites except proposed lot 2.08 achieve at least a 2m front setback. Lot 2.08 is constrained by the need to maintain appropriate setbacks from the Aboriginal 'scar tree' located at the rear of the Precinct. The proposed front setback is considered to be acceptable to both the streetscape and for dwelling amenity. The orientation of living areas and the limited vehicle traffic passing the dwelling will ensure that internal amenity is not affected by the reduced setback. The dwelling design together with the character of this Precinct and the subdivision pattern provide a positive streetscape view regardless of the reduced front setback.

Design and character

Although the majority of dwellings in this Precinct are attached, dwelling designs incorporate measures to achieve passive solar design. Dwellings are slab on ground for good thermal massing and living rooms are provided with large north-facing windows. North-facing living rooms have been located in a single storey pavilion at the rear of each dwelling and located so that they are not overshadowed by the neighbouring dwelling. North-facing clerestory windows allow light to penetrate the interior of dwellings. Simple open-plan designs provide cross-ventilation, whilst pergolas and eave overhangs are provided to shade east and west facing windows.

The open plan design, simple roof form and external colours and finishes are considered to be appropriate to the coastal bush setting of the development.

Massing and building articulation

Each dwelling within an attached grouping has been stepped back from its adjoining neighbour to reduce the massing of the group as a whole. The central staircase wall provides a contrasting feature as it has been stepped out from the main dwelling wall and finished in a contrasting material. The use of a simple skillion roof form reduces overall height, bulk and scale.

Materials and finishes

The dwellings incorporate metal roofing, lightweight wall cladding, including timber and sheet cladding with masonry dividing and feature walls. An appropriate colour palette has been selected which includes colours from the surrounding landscape.

Visual amenity

Dwellings in this Precinct will not be visible from outside of the site due the extensive vegetation surrounding the precinct. The eastern boundary of the precinct adjoins Booti Booti National Park which will restrict views of the

development from Seven Mile Beach. The precinct layout; however, together with the dwelling designs provide good internal site visual amenity.

Open space

Each dwelling has been provided with private open space in the form of gardens and private decks. Some dwellings have also been provided with private spas or plunge pools. The lot sizes provide expansive garden areas and a large community park is located within the precinct. The Fronds Precinct also has paths giving direct access to Booti Booti National Park. Open space is considered to be satisfactory.

Car parking

Two covered car parking spaces are required to comply with the car parking requirements detailed in DCP40 for this precinct. Each dwelling has been designed to incorporate a double garage and a visitor parking area has been provided at the entrance to the Precinct.

Figure 8a – Typical elevation – The Fronds

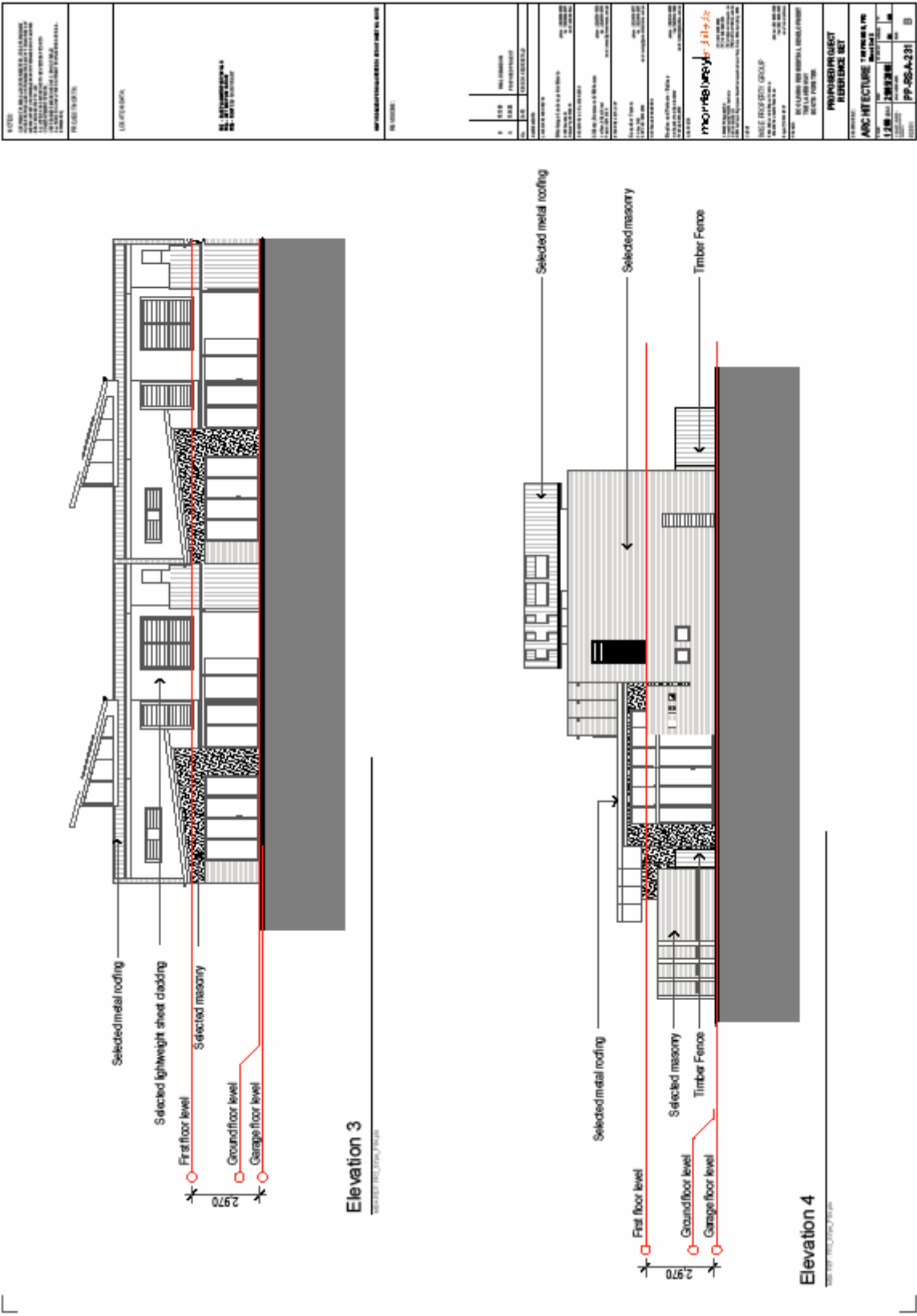


Figure 8b – Typical floor plan – The Fronds



The Cove

The Cove Precinct comprises two five storey apartment buildings with a basement car park. The apartments also include commercial facilities and recreation facilities that wrap around a community pool at the eastern boundary of the site. These apartments are located on previously disturbed land to minimise environmental impact. **Figure 9** shows the external elevation of the buildings in this Precinct.

Density and site coverage

DCP40 controls for density are based on a maximum number of 50 apartments and a maximum building foot print of 35% of the precinct. The Cove has been designed as two buildings containing 39 apartments and a building footprint of 15% satisfying the DCP controls. This also provides significant amenity for the building occupants by providing large areas of communal open space and large setbacks between the buildings.

Height and setbacks

DCP40 provides for Buildings in this precinct to be five (5) storeys in height. The Coastal Design Guidelines suggest a maximum height of three (3) storeys for buildings in 'new coastal hamlets or villages' where visual prominence is not apparent. However, the guidelines also suggest that heights should be subject to place-specific urban design studies. In the case of this site, extensive studies were carried out in the preparation of the LES, LEP and DCP40. The relative isolation of this site from existing roads and public places ensures that the proposed building can not be seen from the surrounding public places (Seven Mile Beach and the Lakes Way). There is also sufficient spacing between these five storey buildings and the two-storey dwellings located in the adjacent precincts so that the height of the building is not overbearing or out of context. The closest dwelling in the Dunes Precinct is 20m away, separated by a road and significant landscape planting. The closest dwelling in the Fronds Precinct is 25m away and is also separated by a road and landscaping.

The height of the building will not result in overshadowing of public spaces external to the site or the dwellings within the adjoining precincts. Pedestrians within the apartment precinct will read the building as four storeys as the fifth floor is recessed in from the lower floors. The building height is also considered to be consistent with the good design principles detailed in SEPP65 and discussed in Table 4.

Design and character

The Cove is a courtyard style development as the two buildings wrap around and define a central community parkland and swimming pool. The ground floor of one building contains commercial facilities (café and gym) and open walkways through the ground floor level provides pedestrian links from the communal park and pool to the cycle and pathways linking to Booti Booti National Park and Seven Mile Beach.

Given the isolation of the development site from any other buildings, the building context need only relate to the surrounding landscape and the proposed dwellings and apartments within the other precincts of this site. The flat roof and use of similar materials and finishes to those used on buildings within the other precincts provides a good visual link to the remainder of the development and is suited to the coastal bush environment. The spacing between the two buildings and the other precincts provides sufficient distance to maintain visual and acoustic privacy. This part of the site is denuded of landscape due to the previous sandmining activities, therefore it is proposed to introduce extensive landscaping which will provide continuity with the low density residential precincts.

Internal apartment amenity has been considered in the design and layout of the buildings. The apartments have been designed such that each floor contains two end apartments with views and balconies on three sides with the two or three apartments positioned in the middle of each building having views and balconies on two sides. Apartments are generally elongated in design to allow cross-ventilation and dual orientation to both the central park and swimming pool and to the adjoining bushland of Booti Booti National Park. All apartments have kitchens and where possible, bathrooms with external walls to allow natural light and ventilation. Living/dining rooms are located to face north/north-east. Large windows and glazed doors allow for abundant natural light and ventilation of the apartments. Ceiling heights for habitable rooms are 2700mm which contributes to the internal amenity. Each apartment above the ground floor level is provided with at least two (2) balconies. Living rooms open to a balcony of at least 18m², providing useable private open space area.

Massing and building articulation

The buildings are essentially four storeys with a recessive fifth floor which reduces the apparent height and enables the horizontal width of the buildings to be reinforced. There are no protrusions from the roof as all plant and lift overruns are contained within the envelope. The provision of deeply recessed balconies provides articulation and different areas of light and shade to provide visual interest to the facades of the building. A mixed palette of materials and the use of operable screens the balconies also reduces the perceived wall mass. Ground floor apartments and commercial areas reinforce the relationship of the building to the street at the pedestrian level.

Materials and finishes

The buildings in the precinct have been designed with a similar palette of materials and colours as the other buildings in the development, incorporating masonry walls, light-weight roof cladding, feature timber screens, hand rails and columns. The colour palette includes neutral base colours with accent colours that reflect the surrounding coastal environment.

Visual amenity

The bulk of the building is made up of a large grided balcony structure and adjustable sun screens creating visual interest to the building. The fifth storey is setback from the bulk of the building and ends in a lightweight – floating roof that caps the building. These elements define and articulate the façade whilst the recessive top edge of the building creates a skyline cap to visually anchor the building to the ground.

Car parking

DCP40 requires car parking to be provided at the following rates:

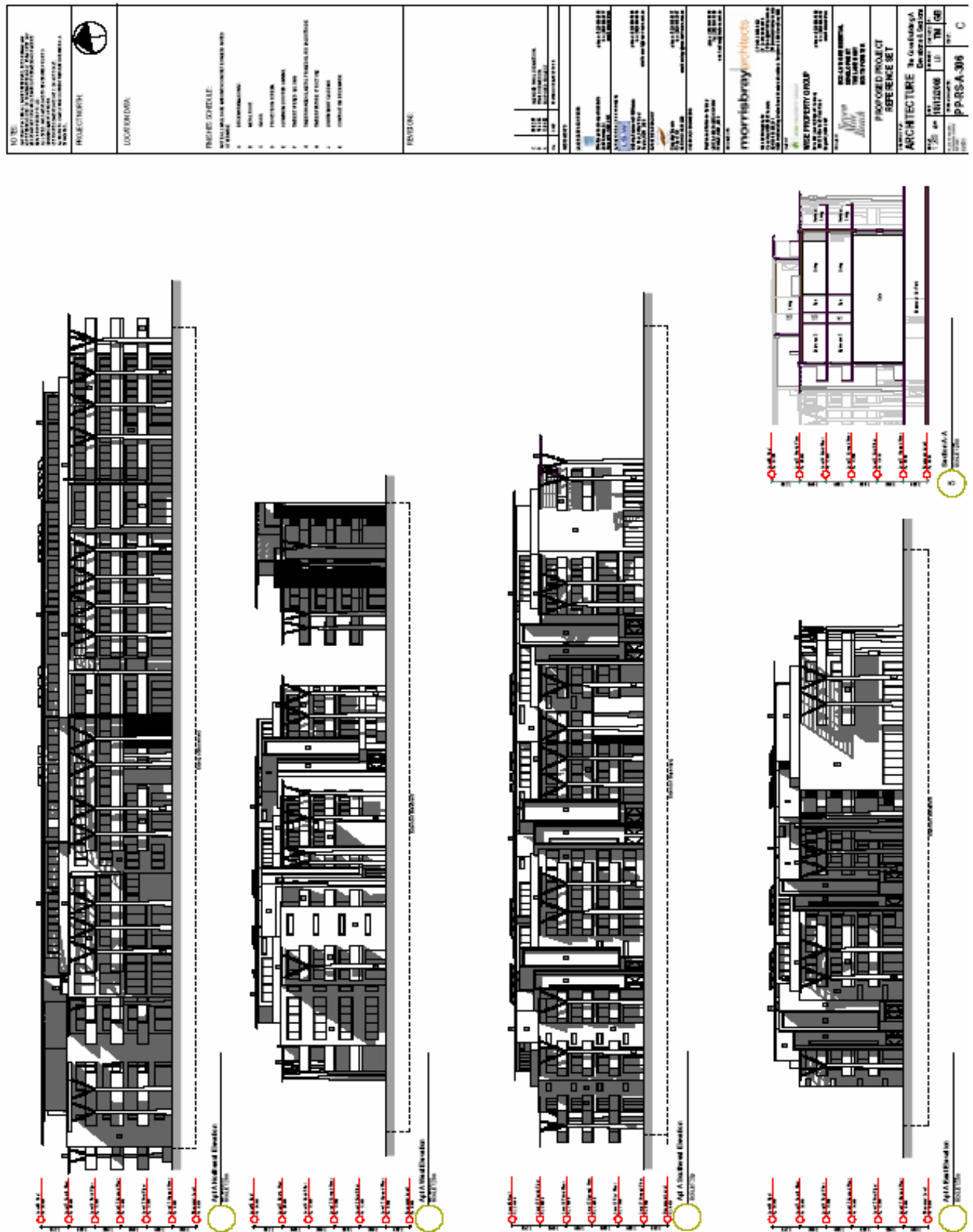
- One (1) space per dwelling containing one (1) bedroom;
- 1.2 spaces per dwelling containing two (2) bedrooms;
- 1.5 spaces per dwelling containing more than two (2) bedrooms;
- 0.2 of a space per dwelling for visitor parking;

The Cove apartments therefore require a total of 65 parking spaces. The single level basement car park has been designed with 93 parking spaces, exceeding the minimum required. There is a single basement car park entrance located on the north-eastern side of the building which ensure vehicles do not dominate the communal open space areas.

Open space

As well as each unit being provided with large private balconies, the precinct has been designed around a central pool and garden for recreational use by the building occupants. Deep soil zones are provided around the communal open space for appropriate tree planting. Pedestrian linkages have been provided from the precinct to the existing bicycle path to link with the other precincts and community buildings located in the Boardwalk Precinct. This precinct is also located closest to Booti Booti National Park and Seven Mile Beach which provides an abundance of recreation opportunities. The Cove Precinct has a suitable level of open space.

Figure 9 – Elevation – The Cove



The Point

The Point Precinct is located in the south-eastern portion of the site and comprises four apartment buildings over a basement car park located around a central community space. **Figure 10** shows the external elevation of the buildings in this Precinct.

Density and site coverage

DCP40 controls for density are based on a maximum number of 80 apartments and a maximum building footprint of 35% of the precinct. The Point has been designed as four five-storey buildings containing 79 apartments and a building footprint of 11% satisfying the DCP controls. This also provides significant amenity for the building occupants by providing large areas of communal open space and large setbacks between the buildings.

Height and setbacks

DCP40 provides for Buildings in this precinct to be five (5) storeys in height. As with the five storey height of the buildings within the Cove Precinct, the height is considered to be appropriate to the context of the site and surrounding environment. Again, the relative isolation of this site from existing roads and public places ensures that the proposed buildings can not be seen from the surrounding public places (Seven Mile Beach and the Lakes Way). There is also sufficient spacing between these five storey buildings and the two-storey dwellings located in the adjacent Dunes Precinct with a distance of 60m to the closest dwelling.

Design and character

The Point is also a courtyard style development with the four building being located around and a central community pool and one side opening to the vista of Booti Booti National Park. The ground floor of one building contains commercial facilities (restaurant).

Given the isolation of the development site from any other buildings, the building context need only relate to the surrounding landscape and the proposed dwellings and apartments within the other precincts of this site. The height, design and finishes together with the landscape treatment melds with the other precincts and is suited to the coastal bush environment. The spacing between the buildings in this precinct and the other precincts provides sufficient distance to maintain visual and acoustic privacy as does the spacing between the four buildings.

Internal apartment amenity has been considered in the design and layout of the buildings. Apartments are generally elongated in design to allow cross-ventilation and dual orientation to both the central park and swimming pool and to the adjoining bushland of Booti Booti National Park. All apartments have kitchens and where possible, bathrooms with external walls to allow natural light and ventilation. Living/dining rooms are generally located to face north/north-east. Large windows and glazed doors allow for abundant natural light and ventilation of the apartments. Ceiling heights for habitable rooms are 2700mm which contributes to the internal amenity. Each apartment above the ground floor level is provided with at least two (2) balconies whilst ground floor apartments have private terraces which are raised and separated from communal space by planter boxes.

Building D contains eight (8) units that have only a single orientation. These units face east or west and are generally two storey apartments with a narrow depth (maximum 8.5m) providing good natural lighting. Large expanses of operable glazing to the façade of these units allows for good air exchange within. Operable louver screens to the balconies assist in the control of heat to these units. Having regard to the site layout and planning to achieve a focal point and amenable community space it is considered acceptable that this small number of units is not provided with two orientations.

Massing and building articulation

The buildings are essentially four storeys with a recessive fifth floor which reduces the apparent height and enables the horizontal width of the buildings to be reinforced. There are no protrusions from the roof as all plant and lift overruns are contained within the envelope. The balcony design which extends beyond the ends of the building also contributes to the interpretation of the width rather than height. The depth of balconies along the longer wall lengths provides articulation and different areas of light and shade to provide visual interest to the facades of the building. A mixed palette of materials and the use of operable screens the balconies also

reduces the perceived wall mass. Ground floor apartments and commercial areas reinforce the relationship of the building to the street at the pedestrian level with low fences (1.0m) and planter boxes defining the private open space.

Materials and finishes

The buildings in the precinct have been designed with a similar palette of materials and colours as the other buildings in the development, incorporating masonry walls, light-weight roof cladding and feature timber screens. The colour palette includes neutral base colours with accent colours that reflect the surrounding coastal environment.

Visual amenity

The fifth storey of each building is setback from the lower levels and ends in a lightweight –floating roof that caps the building. The extensive number of balconies provides definition and articulation to the façade of the buildings. The use of materials and finishes found throughout the other precincts reinforces the connections with the other Precincts and the coastal bush environment in which the development is located.

Car parking

DCP40 requires this Precinct to have the same car parking rates as was required for The Cove, resulting in a total of 120 spaces being required. The single level basement car park exceeds these requirements with car parking being provided for 180 cars. Additional car parking spaces are provided around the Precinct. Car parking is satisfactory.

Open space

As well as each unit being provided with at least one large private balcony (with most units having at least two balconies), the precinct has been designed around a central pool and garden for recreational use by the building occupants. Deep soil zones are provided around the communal open space for appropriate tree planting. Buildings have been orientated so that most units have views over the adjoining Booti Booti National Park with pedestrian linkages provided from the buildings to this park. The area of open space is suitable for this development.

Figure 10 – Elevation – The Point

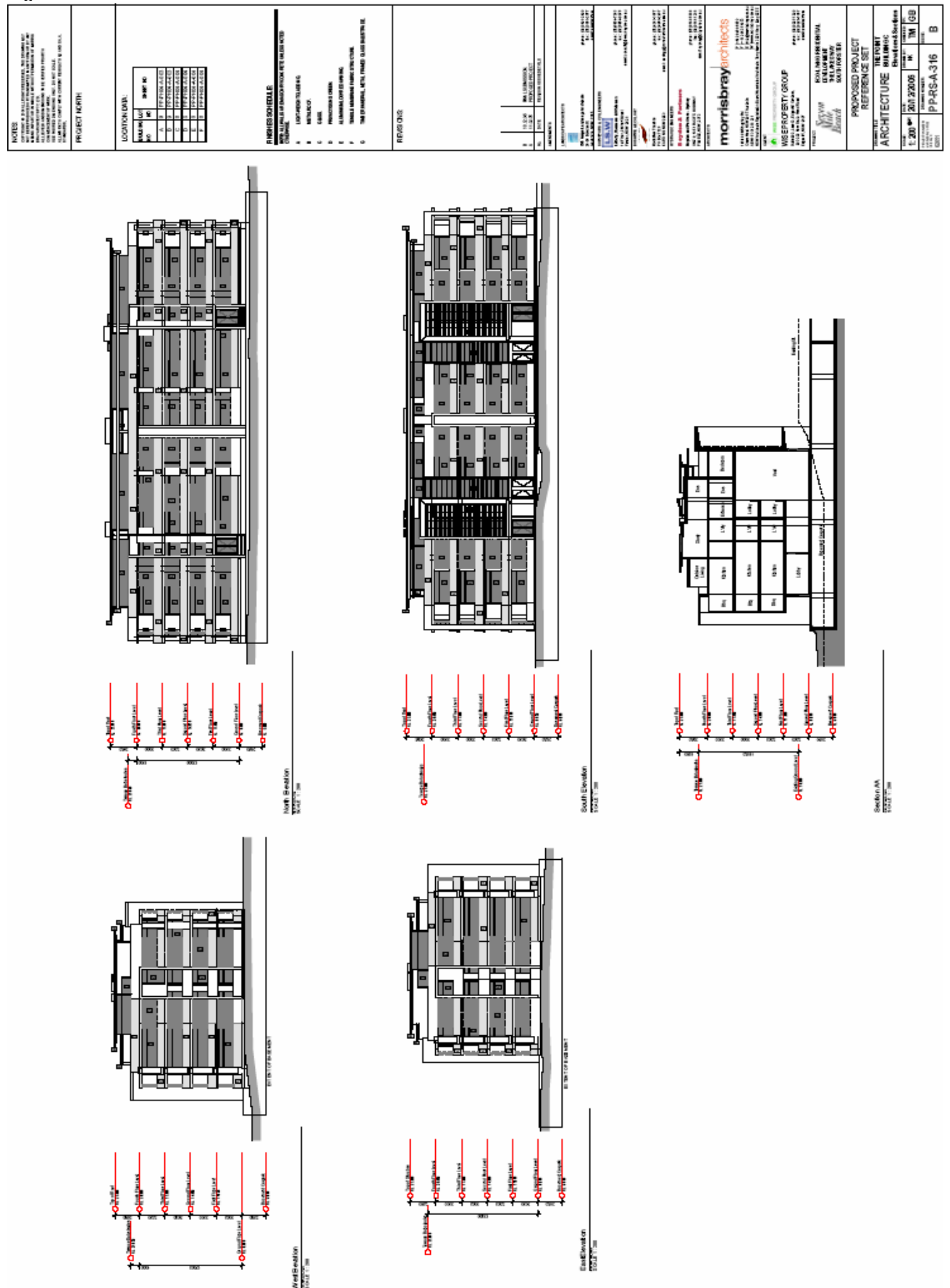


Table 4: Design Quality Principles (Part 2 of SEPP 65)

Principle	The Cove	The Point	Comply
<p>1- Context - Good design responds and contributes to its context. Context can be defined as the key natural and built features of an area.</p> <p>Involves identifying the desirable elements of a location's current character or desired future character. New buildings will contribute to the quality of the area</p>	<p>This part of the site is quite barren as it is located in an area that has been greatly disturbed through past sand mining activities. The character of this development is strongly connected to the surrounding natural landscape. Large open space areas together with revegetation and building design provide a connection to the natural landscaping surrounding the site and a link with the other precincts.</p>	<p>These apartments are located adjacent to The Cove and this area has also been significantly disturbed by past activities. The Precinct consists of four buildings around a central courtyard, which allows for views of and connection with the surrounding landscaped area. The materials and finishes of the buildings and the extensive revegetation of the site contribute to the desired character and quality of the precinct and its relationship to the surrounding landscape.</p>	Yes
<p>2 - Scale - Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings.</p> <p>Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.</p>	<p>Although there are no existing surrounding buildings, the proposed buildings have been sited to compliment their scale relationship to the adjoining two storey low density residential precincts. Distances from public places and setbacks from buildings in other precincts ensure that the bulk and height are compatible with the site. Buildings will not be visible from Seven Mile Beach or the Lakes Way.</p>	<p>The scale of the buildings are compatible with the adjoining residential flat buildings in The Cove Precinct and are suitably spaced from the adjoining two storey low density residential precincts. The buildings in this precinct will not be visible from Seven Mile Beach or the Lakes Way and do not result in any shadow impacts to the adjoining national park.</p>	Yes
<p>3 - Built Form - Good design achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type and the manipulation of the building elements.</p> <p>Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.</p>	<p>The buildings have been orientated to provide a defined central community space that receives good solar access and provides a visual focal point for the units. Building orientation also provides north-facing living areas enabling good access to natural light and the open-plan floor plan provides at least two orientations allowing good cross-flow ventilation. Large balconies of sufficient dimensions provide suitable open space to each apartment.</p>	<p>The buildings have been orientated around a central communal space with views to the surrounding National Park. The majority of the apartments have at least two orientations and open plan living areas enabling cross-ventilation and good access to natural light. Each apartment has at least one (1) balcony of appropriate size and dimensions providing suitable open space.</p>	Yes
<p>4 - Density - Good design has a density appropriate for a site and context, in terms of floor space yields (or numbers of units or residents).</p> <p>Appropriate densities are sustainable and consistent with the existing density in an area or, in precincts undergoing a</p>	<p>The density is consistent with the intended density detailed in DCP40. The density is appropriate to the site context. A total of 39 apartments are provided as well as community facilities within two buildings. The apartment yield is satisfactory given</p>	<p>The density is consistent with the intended density detailed in DCP40. The density is appropriate to the site context. A total of 79 apartments are proposed within four (4) five-storey buildings. The</p>	Yes

transition, are consistent with the stated desired future density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.	the apartment mix and good levels of internal amenity. Sufficient space has been provided around the buildings for landscaping and communal open space and community facilities are provided throughout the development site	apartment yield is satisfactory given the apartment mix and good levels of internal amenity. Sufficient space has been provided around the buildings for landscaping and communal open space and community facilities are provided throughout the development site.	
5 - Resource, Energy & Water Efficiency - Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction. Sustainability is integral to the design process. Aspects include demolition of existing structures, recycling of materials, selection of appropriate and sustainable materials, adaptability and reuse of buildings, layouts and built form, passive solar design principles, efficient appliances and mechanical services, soil zones for vegetation and reuse of water.	The buildings have been designed to incorporate passive solar design principles including thermal mass, north-facing living areas and cross-flow ventilation paths. The buildings also utilise solar energy and grey-water reuse where possible and meet the energy and water targets of BASIX. Materials of construction are low maintenance and it is proposed to install energy efficient appliances within the apartments. The overall development includes WSUD principles for stormwater. This part of the site is to be revegetated with plants suited to the local environment.	The buildings have been designed to incorporate passive solar design principles including thermal mass, north-facing living areas and cross-flow ventilation paths. The buildings also utilise solar energy and grey-water reuse where possible and meet the energy and water targets of BASIX. Materials of construction are low maintenance and it is proposed to install energy efficient appliances within the apartments. The overall development includes WSUD principles for stormwater. This part of the site is to be revegetated with plants suited to the local environment.	Yes
6 - Landscape - Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain. Landscape design builds on the existing site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by coordinating water and soil management, solar access, micro-climate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character. Landscape design should optimise useability, privacy and social opportunity, equitable access and respect for neighbour's amenity, and provide for practical establishment and long term management.	Landscaping is an integral part of this development. This part of the site was previously used for sand mining activities so is quite devoid of vegetation. Planting design has been provided to reinforce the endemic character of the site and to provide visual connections with the other precincts and adjoining national park. The built landscape elements such as paths and structures compliment the architecture and building finishes. All landscaping elements address overland water flow paths and provide planting appropriate to the swales and bio-retention basins.	Landscaping is an integral part of this development. This part of the site was previously used for sand mining activities so is quite devoid of vegetation. Planting design has been provided to reinforce the endemic character of the site and to provide visual connections with the other precincts and adjoining national park. The built landscape elements such as paths and structures compliment the architecture and building finishes. All landscaping elements address overland water flow paths and provide planting appropriate to the swales and bio-retention basins.	Yes

<p>7 – Amenity - Good design provides amenity through the physical, spatial and environmental quality of a development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.</p>	<p>Efficient apartment layouts provide a high level of residential amenity and maximises environmental performance by allowing natural ventilation, orientating living areas to views and sunlight, providing flexible useable balcony spaces, arranging rooms to maximise visual and acoustic privacy and generous ceiling heights for optimum solar access into the building. The majority of apartments are larger than usual, ranging in size from 65m² to 336m². Storage areas are also provided within the basement car parking area. Large balconies and terraces with shutters for privacy and sun control provided. Acoustic and visual privacy is maintained by significant separation between apartments and by orienting habitable rooms away from each other. Access is provided between the street level and the foyer. Lifts have been provided from the basement carpark and foyer to the upper levels. 10% of apartments have been designed to be adaptable for people with disabilities.</p>	<p>Efficient apartment layouts provide a high level of residential amenity and maximises environmental performance by allowing natural ventilation, orientating living areas to views and sunlight, providing flexible useable balcony spaces, arranging rooms to maximise visual and acoustic privacy and generous ceiling heights for optimum solar access into the building. The majority of apartments are larger than usual, ranging in size from 65m² to 336m². Storage areas are also provided within the basement car parking area. Large balconies and terraces with shutters for privacy and sun control provided. Acoustic and visual privacy is maintained by significant separation between apartments and by orienting habitable rooms away from each other. Access is provided between the street level and the foyer. Lifts have been provided from the basement carpark and foyer to the upper levels. 10% of apartments have been designed to be adaptable for people with disabilities.</p>	<p>Yes</p>
<p>8 - Safety & Security - Good design optimises safety and security, both internal to the development and for the public domain. This is achieved by maximising overlooking of public and communal spaces while maintaining internal privacy avoiding dark and non-visible areas, maximising activity on streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and clear definition between public and private spaces.</p>	<p>The Precinct is considered to be satisfactory having regard to the principles of crime prevention through environmental design, whereby passive and active surveillance of communal spaces is achieved whilst ensuring internal privacy. Access to the site on a macro scale is also controlled through a series of intercoms and gates.</p>	<p>The Precinct is considered to be satisfactory having regard to the principles of crime prevention through environmental design, whereby passive and active surveillance of communal spaces is achieved whilst ensuring internal privacy. Access to the site on a macro scale is also controlled through a series of intercoms and gates.</p>	<p>Yes</p>
<p>9 – Social Dimensions - Good design responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities.</p>	<p>The buildings in this precinct provide a mix of apartments that cater to a variety of families and a range of affordability's. A number of adaptable apartments have also been included</p>	<p>The buildings in this precinct provide a mix of apartments that cater to a variety of families and a range of affordability's. A number of</p>	<p>Yes</p>

New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community.	in the unit mix. There are also a range of social facilities provided on the site including, bicycle paths, swimming pools, tennis courts, café and restaurant.	adaptable apartments have also been included in the unit mix. There are also a range of social facilities provided on the site including, bicycle paths, swimming pools, tennis courts, café and restaurant.	
10 – Aesthetics - Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development. Aesthetics should respond to the environment and context, particularly to desirable elements of the existing streetscape or, in precincts undergoing transition, contribute to the desired future character of the area.	The bulk of the building is made up of a large grided balcony structure and adjustable sun screens creating visual interest to the building. The fifth storey is setback from the bulk of the building and ends in a lightweight –floating roof that caps the building. The buildings in this precinct, incorporate masonry walls, light-weight roof cladding, feature timber screens and columns which reflect the surrounding environment. The colour palette includes neutral base colours with accent colours that reflect the surrounding coastal environment.	The buildings are essentially four storeys with a recessive fifth floor which reduces the apparent height and enables the horizontal width of the buildings to be reinforced. The extensive number of balconies provides definition and articulation to the façade of the buildings. The use of materials and finishes found throughout the other precincts reinforces the connections with the other Precincts and the coastal bush environment in which the development is located.	Yes

5.3 Subdivision design and layout

The subdivision layout is a typical pattern, common to new urban development and includes a variation in lot sizes and shapes to allow positive solar access and passive solar design principles to be utilised in the dwelling design. The subdivision is serviced by internal community title roads with each separate allotment having direct access to the internal road system.

Private open space will be available on each separate allotment with large areas of managed open space, both within and surrounding the dwellings and residential flat buildings. Managed park areas are provided on the site including swimming pool areas, tennis courts and managed secure playground areas.

Community facilities are to be provided including a community centre, several pools, shops ie, café, day spa, restaurant, conference room, tennis courts, community gym, playground areas barbecue and picnic areas, and walking and cycling tracks. Community facilities, included within both the dwelling precincts and the residential flat building precincts, are considered adequate to service the population.

The overall design and layout of the development is considered conducive to a casual coastal lifestyle, that has been designed with a view to retaining large tracts of the natural environment.

The overall design of the Seven Mile Beach development generally complies with the DCP and is in accordance with the DGRS. The subdivision design responds to the semi rural and natural character of the area, provides public open space for recreation and social functions and ecological protection. Given the previous approval for the site the proposed development makes planning sense, as it considers the environmental character of the location and utilises best practice water and design initiatives.

5.4 Bushfire

The site is mapped as Bushfire Prone Land and therefore bushfire management is significant to the site. The issue of bushfire management has been extensively addressed in the LES/LEP/DCP process for the land.

DCP40 and the CLUMP detail five matters to be considered in relation to bushfire protection:

- Identification and management of bushfire threats to create a safe development.
- Clear delineation of APZ's and other measures and management requirements of ecologically sensitive areas within or adjacent to Asset Protection Zone's.
- Identification of construction standards for buildings requiring additional protection measures.
- Coordinate fuel load management with adjacent fuel management zones managed by adjacent landholders.
- Minimise impacts on the site's biodiversity due to bushfire hazard reduction measures.

The applicant submitted a Bushfire Report prepared by Conacher Travers to address the bushfire requirements detailed in DCP40 and the requirements of the NSW Rural Fire Service. The report identifies bushfire threats and makes detailed recommendations to address the bushfire requirements detailed in DCP 40. Specific recommendations have been made in relation to land ownership responsibilities, hazard management, construction standards, building protection mechanisms, access arrangements and education programs for the residents. In particular, management plans have been developed in relation to fuel, contingency and emergency response. The community title subdivision is an important component of the bushfire strategy as it will allow the perpetual management of hazardous fuels that will potentially remain on the site.

The bushfire strategies detailed in the Bushfire Report prepared by Conacher Travers dated July 2006 are consistent with the strategies and validation criteria for bushfire control detailed in DCP40.

The application was referred to the NSW Rural Fire Service and no objection was raised to the proposal subject to the inclusion of standard bushfire conditions in any approval granted.

Conditions have been included to ensure that the recommendations contained in the Bushfire Report and the requirements of the Rural Fire Service are implemented in the development.

5.5 Impacts on Waterways

One submission received during the notification process raises a concern with the impact that the development will have on the water quality of Wallis Lake through additional stormwater or accidental contamination from fuel spills or overflow of chlorinated water from the swimming pool.

Management of stormwater has been considered at the LES/LEP/DCP stage. DCP40 requires the use of water sensitive urban design measures to ensure water quality and minimise stormwater discharge from the site.

A stormwater management strategy has been developed for the site with the objective being to restrict post development pollutant export loads to existing levels, as per the objectives of the Forster Tuncurry and Wallis Lake Stormwater Management Plan (2000) (i.e. pollutant export equivalent to a forest landscape). The stormwater management strategy incorporates current best practice water sensitive urban design techniques. In particular, the use of bio-retention ponds around the site will ensure that accidental contamination of surface water will be treated on site rather than entering Wallis Lake. Modelling undertaken by Boyden & Partners dated January 2006 demonstrates that the proposed stormwater management system would achieve the no net increase objective for pollutant loads exported from the development, into Wallis Lake.

A condition of approval is to be included, that the final Model of Urban Stormwater Improvement Conceptualisation (MUSIC) modelling and design of the water quality treatment train for the development, incorporate the additional loading from use of recycled effluent on the site.

Concerns were also raised by DWE for:

- the permanent connection to the groundwater
- pollution of the groundwater.

A Stormwater Management Plan has been developed for the site and this is discussed in the section of the report titled 'Site stormwater; and Groundwater'. Implementation of the stormwater management strategy will actually reduce the pollutant load discharging to Wallis Lake.

DWE has agreed to various conditions to be included in any approval including:

- a contingency plan
- monitoring of the groundwater

5.6 Traffic and Access

5.6.1 Traffic Generation

The Lakes Way is a RTA classified regional road (being Main Road No. 111) and is an arterial road providing secondary inter-regional links to Bulahdelah in the south, through to Halidays Point to the north. Concurrence is required with the RTA for connections to The Lakes Way with Council consent. Present peak time traffic volume of The Lakes Way is estimated at 595 veh/h. The present traffic capacity of The Lakes Way is estimated at 1550 veh/h. The projected peak traffic for The Lakes Way during 2014 including the proposed development is estimated at 906 veh/h.

The traffic study undertaken has determined that the proposed roundabout has a level of service B classification which is defined as – "*Good with acceptable delays and spare capacity*" (RTA publication Guidelines to Traffic Generating Developments)

The Lakes Way near to the subject site has a 6.2 to 6.8 metres wide sealed carriageway with undivided lanes. The Lakes Way is progressively being upgraded and widened with a 7.0 metres wide carriageway with a sealed shoulder width of 0.9 m.

5.6.2 Access

The proposed development has been considered by the NSW Roads and Traffic Authority (RTA), the Traffic Advisory Committee and Council, with the RTA providing conditions regarding impacts relating to Main Road 111 (The Lakes Way). The two most pertinent issues are the traffic entering and exiting from the Seven Mile Beach Development and the impacts relating to the relocation of Scenic Drive (proposed National Park access road) and access to Janies Point.

The proponent originally proposed the relocation of Scenic Drive through the development site and included access to a residential flat building comprising 79 apartments through this relocated National Park access road via proposed road 12. This was not supported by the RTA, the Traffic Committee or Council as this would create the opportunity for the development to have a secondary access to The Lakes Way. The design was subsequently amended so that the relocated National Park access road only provides access to Seven Mile Beach and to Janie's Corner, for the public, as shown in *Figure 5* with the exception of access for emergency and maintenance vehicles to the development site (via a proposed fire trail and proposed road 12 that both intersect the proposed National Parks access road).

Proposed fire trail roads have also been provided from the Lakes Way (roads to the north and south of the main intersection) these will be used for emergency and maintenance vehicle access only. Conditions have been proposed that require gating to be provided so that these roads can only be accessed by emergency and

maintenance service vehicles, thereby complying with the requirement that access to the development be provided via a single access point.

The final intersection design comprises a roundabout and a reduced speed zone of 80kph which is to be designed in accordance with the RTA's *Road Design Guide*, to the RTA's and Council's satisfaction. Upgrading of The Lakes Way will also be required along the eastern side of the Lakes Way across the majority of the development site frontage.

Upon the opening of the new Booti Booti National Park access road, the existing Scenic Drive entrance onto The Lakes Way shall be closed to the public. The proponent is to liaise with DECC's Great Lakes Area Manager for the final landscaping treatment of the existing road intersection with The Lakes Way. Should the intersection and part of the road remain and be used as a fire trail (subject to the concurrence of the RTA) suitable gating shall be installed. This requirement is included in the conditions of approval. There is no existing kerbing and guttering in this location and there is none proposed.

Upon the opening of the new Booti Booti National Park access road, the existing Scenic Drive entrance onto The Lakes Way shall be closed to the public. The proponent is to liaise with DECC's Great Lakes Area Manager for the final landscaping treatment of the existing road intersection with The Lakes Way. Should the intersection and part of the road remain and be used as a fire trail (subject to the concurrence of the RTA) suitable gating shall be installed. This requirement is included in the conditions of approval. There is no existing kerbing and guttering in this location and there is none proposed.

Figure 5: Proposed new National Parks access road



5.6.3 Internal Road Network

The internal road network is within a Community Title. The internal road network will be maintained and serviced by the Community Association. Buses will not travel within the development, the roads are not through roads and do not service any adjoining areas. The roads, pedestrian footpaths are adequate for the development. Conditions have been imposed in relation to the provision of internal lights and roads are to be constructed to the Australian Standard.

5.6.4 Upgrading of Infrastructure

The existing Scenic Drive is not considered to be of a suitable standard to accommodate an increase in traffic that would reasonably be expected to utilise the access following completion of the Seven Mile Beach development. Therefore, the relocation of Scenic Drive (the proposed National Park access road) will provide substantial public benefit by removing approximately 1.4km of the existing road which is currently unsealed, with inadequate horizontal and vertical curves. The relocation of the intersection will provide adequate sight distances, significantly improving the traffic safety at the proposed National Park access road intersection and for the length of this road. The relocation/reconstruction of this road, provision of car parking and other associated infrastructure within the National Park has been negotiated between the proponent and DECC and forms the 'Deed of Agreement'. The implementation of the Deed of Agreement is a condition of approval.

Access to the proposed development is from The Lakes Way which is a bitumen sealed arterial road. The Lakes Way has a traffic volume adjacent to the site in the range of 3600 to 6368 vpd (counts taken between 1998 – 2006) and is the southern road connection/link to the Pacific Highway (Bulahdelah via Pacific Palms). It is expected that the areas adjacent to The Lakes Way north of the development site will eventually become subdivided and urbanised. Conditions have been proposed which require The Lakes Way to be upgraded to the satisfaction of the RTA and Council. This includes:

- The eastern portion of the Lakes Way being widened along the majority of the development site frontage;
- A roundabout; and
- The intersection of the new access road to the Booti Booti National Park to RTA requirements.

The conditions also address the concerns raised by DECC regarding appropriately designed street lighting to minimise the impacts on nocturnal fauna.

The upgrading of The Lakes Way to include the future provision of a bus bay to the north of the proposed roundabout on the Eastern side of The Lakes Way is also considered to be required. DECC has raised concerns that the location of the bus bay/bus stop will inhibit the movement of squirrel gliders within this area and requested that the bus stop be relocated south of the roundabout. As the bus bay/stop will not be constructed at this stage, it is considered that DECC's concerns can be addressed once the location of the wildlife corridor has been identified and surveyed and a final location of the bus bay can be identified.

5.6.5 Cycleway

There is a network of cycleways within the development site and includes the proposed fire trails. The main connection to the Lakes Way being at the north-west corner of the development site.

The site is approximately 1.1 kilometres south of the constructed pedestrian footpath/cycleway that links Forster to the Lakes Estate. (ie. opposite Tea Tree Road) and the nearby/adjacent Forster High School. A two metre cycleway will eventually be constructed where the cycleway presently terminates (ie opposite Tea Tree Road) to approximately the southern boundary of the development site. Provision of a cycleway along this portion of the Lakes Way presents some difficulties and will require boundary surveys of adjacent properties, so that the cycleway can be suitably designed and located. Construction of the cycleway and other road works will be partially funded by

funds from the Voluntary Planning Agreement. Construction of the cycleway will occur as adjacent sites are redeveloped.

5.7 Social and Economic

The applicant has provided a social and economic impact assessment that details the demographic impacts on the locality, accessibility, mix of housing opportunities, provision of community infrastructure, and catering for cultural diversity. The social and economic impact assessment concludes that the development will provide a mix of housing types, for existing and new residents to the locality and that existing goods and services within the urban centre (Forster-Tuncurry) generally satisfies the requirements of any increased population generated by this development. It is noted that some service gaps exist in the Forster-Tuncurry area, particularly in General Practitioner services and childcare for under two year olds.

Within the Seven Mile Beach development it is proposed to provide commercial and recreational facilities to support the residential component of the development. These facilities include two cafes, a restaurant, two indoor gymnasiums, two outdoor gymnasiums, a doctor's surgery, a pharmacy, delicatessen/general store, outdoor movie theatre, childminding/day-care facility, day spa and a conference and function centre. The inclusion of a doctor's surgery and day-care facility will ensure that the development will not unreasonably impact on the identified service gaps for these services. Having regard to the availability of commercial and recreational facilities in Forster-Tuncurry, the commercial and recreational facilities proposed within the development are adequate to serve the residents of the development.

The proponent entered into a Voluntary Planning Agreement ("VPA") pursuant to section 93 of the Act on 27 February, 2007, which is outlined below.

Voluntary Planning Agreement

A VPA dated 27 February 2007 prepared by Minter Ellison, Lawyers has been prepared to allow for the payment of monetary contributions to, and the carrying out of work as material public benefit for the Council. The VPA is inclusive of applicable S94 contributions.

The Voluntary Planning Agreement was entered into by the proponent during the rezoning of the site and the amendment to Great Lakes Local Environmental Plan in accordance with Section 93F Clause (1)(a) of the Environmental Planning and Assessment Act 1979.

The Voluntary Planning Agreement does not specifically exclude the payment of S94 contributions. However the VPA was structured such that there will be no further Section 94 contributions payable to Council in connection with the development of the land. The contribution rates as set out below in Table 2 apply to the year 2006-2007. The rates are to be re-calculated on 1 July each year thereafter. The planning agreement operates from the date of gazettal of the LEP. The LEP was gazetted on 23 February 2007.

Summary of Objectives, Nature and Effect of the Draft Planning Agreement:

The objectives of the Planning Agreement are to:

- ensure that the development of the land results in the provision of physical infrastructure to adequately service the development, including, and in addition to, Council's current s94 contributions.;
- ensure that the development of the land results in the payment of contributions towards the provision of community services and facilities that will be required as a consequence of the increased population from the development of the land.
- give effect to the developer's recognition that there is a social obligation incumbent on them to contribute to services and facilities that are provided by Council, over and beyond those identified in

s94 Contributions Plans, and which enhance the attractiveness of the area for investment and which add to the wellbeing of the community.

The effect of the Planning Agreement will be the payment by the Developer to the Council of a contribution of \$3,440,717.81 (calculated at current s94 rates for the respective facilities) towards the provision of services and facilities that will benefit the public. The Agreement also requires the construction of intersection and drainage works required for the development of the land.

The VPA provides monetary contributions to be paid to Council as outlined in Table 2.

Table 2: Monetary Contributions to Council under the Planning Agreement

Public Purpose Items	Rate	Estimated Contributions	Timing for Payment
1.Forster Aquatic Centre	\$111.39 per person ('pp')	\$79,744.10	For each Dwelling-house Lot, prior to the issue of a subdivision certificate for the plan of subdivision containing that lot. For each Residential Flat Lot, prior to the issue of a subdivision certificate for the plan of subdivision containing that lot. For each Dwelling in a Dual Occupancy and Residential Flat Building prior to the issue of a Construction Certificate for that building.
2.Surf life saving equipment at Forster	\$27.13 pp	\$19,422.37	
3.Library stock	\$43.11 pp	\$30,862.45	
4.Library services	\$414.21 pp	\$296,532.94	
5.Rural fire fighting facilities	\$519.92 pp	\$372,210.73	
6.Contributions Plan administration	\$47.19 pp	\$33,783.32	
7.Contributions Plan preparation	\$0.38 pp	\$272.04	
8.Council headquarters	\$180.34 pp	\$129,105.41	
9.Open Space Acquisition and Embellishment	\$545.04pp	\$390,198.91	
10.Roads	\$456.43 per trip	\$1,088,585.55	
11.Additional Community projects	\$3,154.57 per Dwelling-house Lot, Residential Flat Lot, or Dwelling in a Residential Flat Building and Dwelling in a Dual Occupancy.	\$1,000,000.00	
TOTAL		\$3,440,717.81	(The rates are to be re-calculated on 1 July each year).

The contributions payable under the Planning Agreement are subject to adjustment calculated using Council's method of indexation in its current s94 Contributions Plans.

The Planning Purposes Served by the Draft Planning Agreement

The provision of basic services and infrastructure to meet the needs of the growing population is an issue that constantly confronts Council when it prepares its budget. Sources, such as s94 contributions go a long way

towards providing funds for this infrastructure but there are limitations on the use of s94. There are always services and facilities, other than the basic ones for which s94 contributions are levied, that enhance the well being of the community and which will make Forster/Tuncurry a better place to live.

In recognition of this SMB Developments has offered to enter into a Planning Agreement with Council to provide funds, in the order of \$1,000,000.00, for off-site planning benefits for the wider community. These funds will be in addition to the standard s94 contributions that will be payable to Council as development of the land proceeds. The funds will be expended so as to give better planning outcomes for the residents of, and visitors to, Forster/Tuncurry. Examples of some areas of expenditure include enhanced recreational and cultural facilities, walking trails, completion of town centre and lakeside improvements and environmental enhancement works and activities.

The contributions to be paid by the developer, as set out in Schedule 1 of the Planning Agreement, are based on a work program for each of the respective services and facilities in Council's current s94 Contribution Plans.

In relation to the Material Public Benefits described in the table to Section 1.2 of the Agreement these are required as a result of the development of the land. In relation to the Additional Community Projects contribution described at item 11 in the table to Section 1.1 of the Agreement, some of the contribution will be expended on enhancement of facilities identified in Council's work program and a separate work program will be created for the expenditure of the balance of the funds.

In addition to the public purpose items described in Table 2, the planning agreement will provide the following material public benefit:

- **Stormwater drainage**

The existing stormwater drainage culverts located along The Lakes Way adjacent to the development site are required to be upgraded so that there is no overland flow across the carriageway of The Lakes Way during a localised 1 in 100 year flood. The stormwater culverts are located immediately to the north of the site and south of the proposed roundabout.

- **Public road intersection and roundabout**

There is a proposed new access road to service the Booti Booti National Park that will gain access from and onto The Lakes Way. The relocated road has been subject to negotiations between the DECC. The developer will replace the existing Scenic Drive gravel road that services the Booti Booti National Park further to the south and the access road will be relocated within the development site 110 metres from the southern boundary of the site.

Vehicle access to and from the development site will be gained from The Lakes Way by a new road located approximately 500 metres from the northern boundary of the development site.

The two new road intersections are to be designed and constructed to conform to current road design standards and include the relocated Scenic Drive intersection in accordance with the current RTA and Ausroad Design Guidelines and a single lane roundabout for access to the Seven Mile Beach Development.

The nature of the Planning Agreement is such that when the land is developed, the proponent will be obliged to undertake certain works and pay certain amounts towards the provision of community services and facilities.

The planning agreement was agreed and entered into by both parties on 27 February 2007. The planning agreement is to be included as a condition of approval. The condition requires payment of the contributions and provision of the infrastructure in accordance with the terms and conditions as required by Schedule 1 (Contributions Schedule) of the Planning Agreement.

5.8 Visual Impact

Visual impacts from prominent and public coastal locations; will not be altered by the development proposal [figure 11].

Figure 11 – survey site lines from coastal foreshore

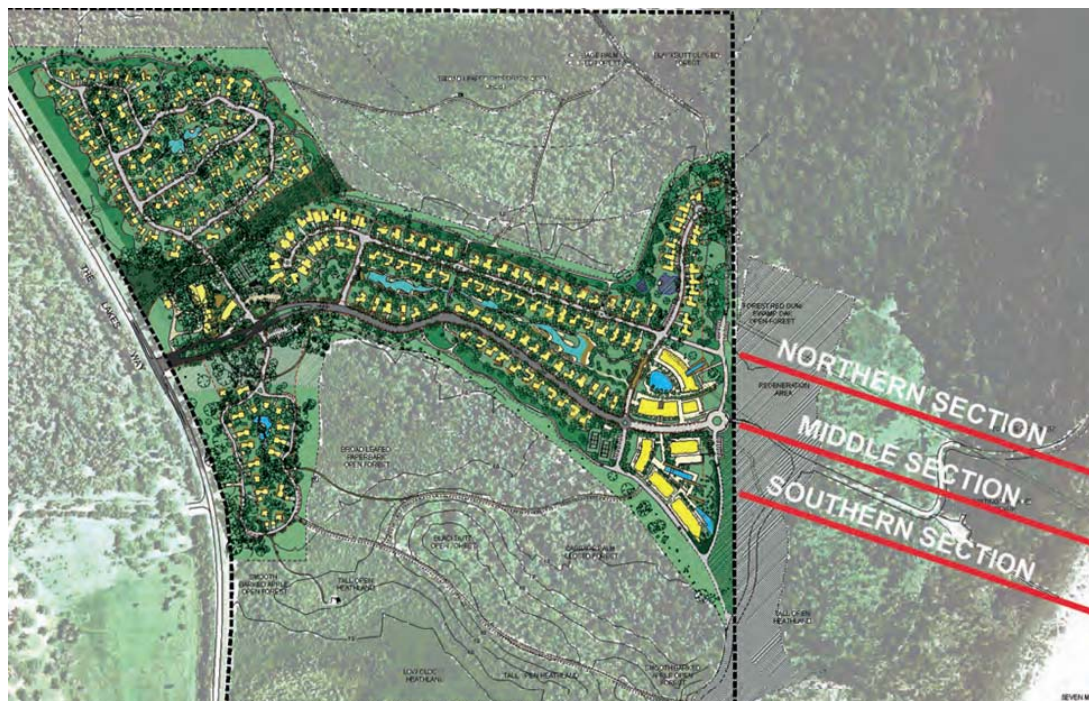


Figure 12

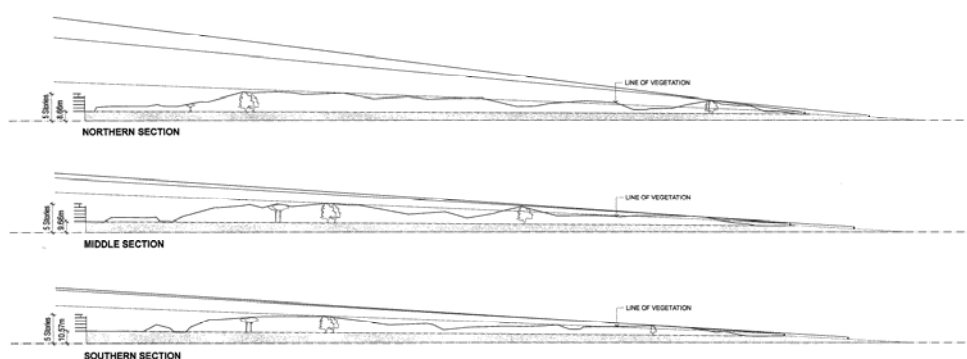


Figure 12 demonstrates that no part of the project can be viewed from the beach. The north eastern corner of Janies Headland rises steeply and the land to the east of the proposed apartments also rises and contains tall vegetation which forms a significant buffer between the beach and the development. A 10 hectare bush land regeneration is to be undertaken on the eastern edge of the site which will in due course introduce tall

vegetation. There is no overshadowing created into the National Park. The top floor of the proposed apartment buildings, obtain water views over the top of the existing canopy with this view being some kilometres out to sea.

The existing National Park Road, located to the east of the property boundary is proposed to be relocated. This road will not be utilised and will be revegetated. The new road will be provided with dense vegetation that will prevent viewing of the development from this road. The top floor of the building has been stepped back significantly from the lower floors, there are no protrusions from the upper level such as lift overruns etc. and no access to the roof. The development proposal attempts to preserve sensitive vegetation, both within the proposed north and south conservation zones, as well as within the development area.

The design of the buildings is considered to be appropriate for the coastal setting. Colour palettes, including light to mild tones with natural timber are to be used for the buildings. The overall design of the development including the height and scale of buildings, has been considered in terms of the coastal setting. The development layout has been designed giving consideration to the natural bushland environment with development within individual precincts designed to integrate with the natural landscape. Consideration has been given to providing an integrated landscape theme throughout the development.

To minimise visual impact from the Lakes Way a 40m buffer of retained and regenerated vegetation has been provided. The provision of the buffer will result in only glimpses of buildings being viewed from The Lakes Way.

There is only one access road to the beach located on the southern boundary of the site with a 200 to 450 metre buffer of natural landscaped space to the nearest building. The nearest boundary to the east is approximately 500 metres from the beach. Detached houses are generally of a two and one storey pavilion nature with low skillion or flat roofs with minimal visibility from the surrounding public places. Apartment buildings, although five stories in height will not be visible from the public space of the Seven Mile Beach due to screening by the existing topography and the existing landscape.

5.9 Aboriginal Heritage

For the purposes of S91 of the Environmental Planning and Assessment Act 1979 an Aboriginal Heritage Impact Assessment is required if the development will or is likely to impact on an Aboriginal object or place. Under S79c(b) of the Environmental Planning and Assessment Act 1979, consent authorities must consider the impact of a proposed development, including the impacts on Aboriginal heritage values. State Environmental Planning Policy No 71 - Coastal Protection aims and matters for consideration requires consideration be given to matters of Aboriginal cultural heritage, aboriginal places, values, customs beliefs and traditional knowledge. Through the services of the Forster Aboriginal Land Council's Culture and Heritage Section's Senior Sites Officer the site was identified as having a cultural history for the Worimi people. An Aboriginal Heritage Impact Assessment was undertaken by Andrew Roberts, ARC Consulting and Robert Yettica, Forster Local Aboriginal Land Council dated November 2004 and the recommendations incorporated within DCP40 and the CLUMP. The report was prepared in accordance with the requirements of the *National Parks and Wildlife Act 1974*, *Environment Protection Act 1979* and the *Heritage Act 1977*. The report assesses the impacts of the proposed residential development on known places of significance to the Aboriginal community and was passed on to the Forster Local Aboriginal Land Council Culture and Heritage Section for comment. An assessment of the site was undertaken by an archaeologist Jacki Collins in 1995 wherein four (4) sites were located. Large complex assemblages of stone artefacts and dispersed midden shell, isolated stone artefacts, an 'open campsite' containing four stone artefacts and a scarred tree were found within the four (4) located sites. The cultural features of the site are considered to have significance to the local Aboriginal community.

A community consultation process as outlined in the National Parks & Wildlife Services requirements for consultation was carried out by the proponent. DECC was approached to provide an Aboriginal Heritage Information System report.

The Aboriginal Heritage Impact Assessment was originally prepared in November 2004, one month prior to the release of the *National Parks and Wildlife Act 1974*, Part 6 Approvals Interim Community Consultation

Requirements for Applicants. In 2006 the Aboriginal Heritage Impact Assessment was amended to address the Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation as required by the DGRs. The report details the consultation process undertaken in preparation of the impact assessment. This involved identification of stakeholders, advertisements in the local newspaper, field studies and a consultation workshop. No matters concerning cultural heritage were raised during the workshop or subsequent discussions with FLALC.

In particular, DCP40 and the CLUMP identified a number of strategies with regard to Aboriginal Heritage:

- Provision of a 25-30m buffer zone around the 'scarred tree'. The buffer may be reduced to 20m if appropriate fencing and interpretive signage is installed and approved by Forster Local Aboriginal Land Council (FLALC).
- Representation from the Cultural and Heritage unit be present to monitor all excavation works to be undertaken and that the proponent be responsible for the cost of all works undertaken;
- Any artefacts or relics that are brought to the surface from the excavation works will be re-deposited into the excavation.

The development is consistent with the requirements of DCP40 and the CLUMP in relation to setbacks from the 'scarred tree' as dwellings within 'The Fronds' precinct have a 20m setback from the 'scarred tree' and a 1.25m high galvanised and powder-coated fence has been proposed at a setback of 16m from the tree.

Prior to the issue of the DGRs, the proponent lodged an application with DECC under s90 of the National Parks and Wildlife Act 1974 detailing appropriate strategies to address Aboriginal cultural heritage during the development of the site. A s90 permit with conditions was issued by DECC after the issue of the DGRs. In order to avoid any uncertainty in the application of s75U of the Act, however, the conditions proposed by DECC have been imposed as conditions of this approval.

5.10 Impacts on adjoining National Parks

Booti Booti National Park surrounds the site from north of the adjacent waste water treatment plant, to the eastern and southern edges of the site. The potential impacts of the development on the national park were considered at the LES/LEP/DCP and application stage and issues identified were embodied in the 'Planning Principles and Site Planning Strategies' of DCP40 and the CLUMP.

The proponent has had extensive negotiations with NPWS in relation to a number of issues:

- Input from the department on the plan of management for the park, including the offer to rehabilitate an area within the National Park adjacent to the development site;
- Public access to Seven Mile Beach through the National Park from The Lakes Way; and
- Formalising beach parking

As a result of these negotiations a 'Deed of Agreement' has been enacted. The 'Deed of Agreement' covers impacts on wildlife corridor values; impacts from erosion, sedimentation, runoff and fire; visual impacts; boundary encroachments; and management impacts and implications and includes public access provisions. DECC required in their submission that the 'Deed of Agreement' was required to be executed before any approval is granted. This Deed of Agreement was executed on 29 May 2008.

The proposal is consistent with the planning principles detailed in DCP40 and the CLUMP. The Deed of Agreement has been agreed to and signed by all relevant parties and has been recommended to be included as a condition of approval.

5.11 Sewage Treatment Plant

The Forster Waste Water Treatment Plant (FWWTP) is located to the north of the development site and the potential for odour issues was considered at the LES/LEP/DCP and application stage. As a result, DCP40 and the CLUMP identified three issues to be considered in the assessment of the development application:

- Generation of odour from the sewerage treatment plant;
- Effective buffer zones; and
- Delivery and adequacy of sewage treatment.

The applicant was also required to address the Departments Circular No. E3 – Guidelines for buffer zones around sewage treatment plants.

An Odour Modelling Assessment was carried out to assess the odour impacts from the FWWTP on the proposed development. As a result a 400 metre buffer zone between the sewer inlet and proposed dwellings was established. This is consistent with the buffer zone identified in DCP40. The buffer zone is within that part of the site zoned 7(a1) – Environmental Protection, providing for the maintenance of existing flora and fauna. The proposed buffer zone is consistent with both the requirements of DCP40 and the CLUMP. The Odour Impact Assessment has been endorsed by Mid-Coast Water.

DECC raised a number of issues with the Odour Assessment Report with regard to the setbacks of the dwellings from the FWWTP being less than 400m and that the modelling was not sufficiently detailed to account for unusual events such as plant maintenance, increased loads and weather fluctuations.

These matters were considered in the preparation of the LES/LEP/DCP and accordingly the proposed buffer zones identified. The proposed setbacks are consistent with those outlined in DCP40.

The NSW Department of Environment and Climate Control (DECC) Draft Odour Policy includes recommendations for odour criteria of 2 odour units for urban environments where the population is greater than 2000. As the population estimate for this land is in the order of 1000, the criteria can be expressed as 2.5 odour units (99 percentile, 1 second average). The report by GHD indicates that all the proposed residential allotments will meet this criterion.

MidCoast Water has reviewed the proposal and advised that the project site has been included in its current strategy for the Forster Sewerage Scheme and that the project can be serviced by an extension of the sewerage system. It is considered that the proposal is consistent with the objectives for the sewage treatment plant detailed in DCP40.

5.12 Stormwater Drainage and Groundwater

5.12.1 Flooding

The maximum 100yr ARI flood level in Wallis Lake (considering climate change) is determined to be no higher than 3.21m AHD. This is based on the 100yr Average Recurrence Interval (ARI) flood level in Wallis Lake of 2.3 mAHd as presented in Webb, McKeown & Associates (2008), and the maximum rise in sea level as a result of climate change of 0.91m as advised by DECC (2007). Allowing 500mm freeboard above the maximum 100yr ARI flood level, the minimum habitable floor level should be no lower than 3.71mAHd. Given that the lowest finished surface level within the proposed development is at 3.8mAHd, (and the lowest habitable floor level is 4.3mAHd) the proposed development will not be affected directly by flooding from Wallis Lake. It is noted also that the majority of the site is above 5.0mAHd and so significantly above the 100year ARI flood level from Wallis Lake (including climate change).

In accordance with the guidelines outlined in the floodplain risk management (FRM) guidelines, the proponent has undertaken a sensitivity analysis of the predicted 100 ARI peak flood levels within the development site to account for any increase of rainfall intensities. All proposed habitable floor levels of the dwellings were found to have a minimum 0.5 m freeboard above the resultant 1 in 100 year flood levels for the associated Northern Wetland, Southern Wetland and The Lakes Way culverts.

It is possible that road access along The Lakes Way northwards towards Forster would not be available to this development site (with the wave run-up) during a Probable Maximum Flood (PMF) – RL4.33m AHD. However, with the slow increase in Wallis Lake flood heights, evacuation of residents could be undertaken or alternatively, affected residents could remain within their dwellings or find refuge within the higher grounds of the development site.

Advice from the State Emergency Services in relation to development is that *"The Service is concerned about the public safety aspects of the development of flood prone land and endeavours to provide advice and guidance to local government on matters of floodplain management. Our aim is for the SES to be involved at a strategic planning level in this process such as at the floodplain management committee level or local environment planning stage, not at the individual development application level."*

The development of the site will not lead to a significant reduction in available flood storage on the floodplain or a rise in flood levels and velocity within the locality during a 1 in 100 year flood for either Wallis Lake or a localised flood. It is considered that the proposal will not have an adverse effect on the downstream properties or flood risk for Wallis Lake.

The proposed development is considered to be satisfactory with regard to flood impacts including projected climate change.

5.12.2 Site Stormwater

The existing stormwater catchment area comprises the development site stormwater runoff and an external catchment area located to the north-east of the proposed development site. Stormwater generated on the site and the northern external site drains westwards to The Lakes Way and then into Pipers Bay (Wallis Lake). Minor filling and regrading of the low areas of the site has been proposed to allow surface water to be directed to The Lakes Way. The stormwater management strategy aims to restrict post development pollutant export loads (as a minimum) to existing levels. The stormwater strategy submitted with the development application proposes to utilise Water Sensitive Urban Design (WSUD) principles within the development.

This incorporates:

- Extensive use of swales and bioretention basins to replicate or reduce the stormwater runoff volumes and pollutant levels from the existing runoff;
- All proposed downpipes on dwellings and runoff from driveways, car parking areas and other impervious areas to be routed to lot-based infiltration systems where appropriate, to encourage groundwater recharge and removal of pollutants by filtration through the trenches, with overflows being directed to the downstream stormwater drainage system and basins;
- All drainage systems will be designed to convey the 100-year ARI design storm event. The proposed road drainage system will convey all stormwater runoff from paved areas to communal biofiltration basins on the perimeter of the development. Overflows from basins will be controlled by a weir that will discharge runoff into the existing swamp areas within the low-lying areas of the site. Biofiltration basins will be sized and detailed in accordance with *Australian Rainfall Quality, 2004 (Draft)*.
- Providing recycled water from the nearby sewer treatment works plant, which will provide water for toilet flushing; external (non-drinking) tap usage and irrigation of landscaped areas.
- Bore water from within the site is proposed to irrigate common landscaped areas and to "top up" the common pool areas.
- A 500 mm freeboard between habitable finished floor levels and the 100-year design storm top water level of the adjacent swamp, biofiltration basins and overflow paths will be maintained at all times.

The stormwater models and the proposed Water Sensitive Urban Design (WSUD) principles submitted with the development application indicate the development will reduce the impact of the developed site on existing hydrological and hydraulic processes. The proposals are generally acceptable to Council; however, the proponent's consultant will need to further investigate and modify some input parameters for the "RAFTS" Computer model. The detail for modifying the "RAFTS" stormwater drainage computer model (for stormwater

quantity) is expected to have only minor variations for the internal development site stormwater proposal and any upgrading required for the box culverts under The Lakes Way. Conditions have been included to require these modifications to be undertaken prior to the release of the construction certificate for the first stage of construction.

DWE have raised concerns with the impacts from stormwater on the existing groundwater and these are discussed below.

5.12.3 Groundwater

The site consists of low-lying areas between RL3.0m to RL5.0m, as well as a forested knoll towards the southern boundary of the site and an elevated sand dunal ridge, which rises to approximately RL10.0m in the centre of the site. The development site is located in an area with a shallow groundwater.

A groundwater mound exists beneath the sand ridge/burrow pit area. Modeling and monitoring undertaken by the proponents geotechnical engineer has determined that the maximum groundwater level in the vicinity of the sand ridge/burrow pit area is RL6.0m. This represents a perched water table overlaying a layer of indurated sand at the base of the former burrow pit.

The development of the site does not incorporate measures to lower the groundwater table in this area and surface levels in the former burrow pit are to be raised to approximately RL7.0m using sand fill. This will involve the addition of approximately a metre of sand fill over the existing surface. The proponent's geotechnical engineer has concluded that this would not be expected to significantly alter groundwater levels and that structures placed on high level footings would therefore not intercept the groundwater table.

The proposed apartment developments at either end of the former burrow pit area will incorporate a partial basement, with a base level of RL5.9m. When groundwater levels reach the highest expected level of RL 6.0m, they will be marginally above the basement levels. The proponent's geotechnical engineer has concluded that this degree of encroachment into the groundwater table would not be expected to impact the groundwater flow regime provided the structures are provided with a drainage layer beneath, and adequate drainage behind all basement walls. DWE have advised that a licence for temporary dewatering under Part 5 of the *Water Act 1912* will be required.

The proponent's geotechnical engineer has also recommended that minimum habitable floor level for residential development should be one (1) metre above the minimum measured groundwater level.

DWE's main issues relate to the protection of the groundwater aquifer and the requirement to adhere to the principles and objectives of the above groundwater policies. As previously discussed, the development will incorporate a number of biofiltration basins to allow stormwater runoff to infiltrate into the groundwater and DWE was concerned that the stormwater drainage concept would result in the interception and potential contamination of groundwater. Further discussions between DWE and the proponent have resulted in DWE supporting the proposal subject to the following requirements:

1. *The proposed development must not result in permanent connection with the groundwater aquifer.*
2. *Prohibit activity that poses a pollution risk to groundwater aquifers.*
3. *Necessary on-site stormwater treatment devices are to be installed to ensure removal of potential pollutants before storm waters enter the groundwater.*
4. *The quality of any water entering the groundwater aquifer shall be equal to or better than the quality of the receiving groundwater.*
5. *The preparation and implementation of satisfactory stormwater management plan/s, groundwater monitoring methodology/ plan/s, maintenance plan/s and contingency plan/s.*
6. *The contingency plan/s to include trigger mechanisms, remediation actions and communication strategies for events that have the potential to contaminate the aquifer and establish a groundwater monitoring network/ reporting program (for construction and operational stages) linked to the contingency plan.*

7. *Plan preparation and associated reporting responsibilities must be clearly identified for monitoring, assessment and implementation of contingency arrangements, water quality restoration work and maintenance of the monitoring network."*

Conditions for a stormwater quality management plan to ensure that downstream water and the groundwater are not contaminated have been included in the conditions of approval. The conditions include monitoring, operation and maintenance and contingency plans consistent with DWE requirements.

5.13 Earthworks and Filling

The proposal includes bulk earthworks over the previous sand mined area generally within the residential flat building precincts (the Cove and the Point) and through the centre of the Dunes Precinct. Generally material excavated from the areas of the Cove and the Point will be used to fill and level areas within the Dunes Precinct. The largest area of fill is to occur through the centre of the Dunes Precinct (up to approximately 1.4m) which is located over in the area of the old burrow pit. The largest area of cut is within the Cove and the Point precincts to allow for the construction of the basement car parks; however, parts of the basement are also located within the old burrow pit. Due to the previous sand mining activities in these areas of the site, no significant vegetation will be affected by the cut or fill. A property vegetation plan process was undertaken in conjunction with the Catchment Management Authority at the site planning stage. This Catchment Management Authority confirmed that these areas were of no conservation value as vegetation within these areas consisted only of regrowth

Within some parts of the Crest, The Palms and the Forest precincts, some filling is to take place with the proposed levels between a depth of 50mm and 300mm. It is important to note that the subdivision design and building footprints for each lot were determined after extensive consideration was given to the location of and proximity to significant trees during the site validation process. Changes to road location and lot boundaries were made during the site validation process to ensure that significant trees were retained, having regard to the earthworks required. A Tree Management Plan has been prepared for the site by Conacher Travers in order to minimise impacts on the retained trees as a result of the earthworks. The Tree Management Plan incorporates the following measures to minimise impacts of the development on retained trees:

1. Identification and marking of trees to be cleared and areas to be protected before and during construction and the establishment of tree protection zones around retained trees and the erection of sediment and erosion controls;
2. The use of permeable pavement or soft measures such as gravel or crushed rock for driveways and pathways where retained trees may be affected;
3. Where appropriate fill is to be graded down around the bole of trees. In cases where the level of fill is too high for this method, other measures such as the installation of blue metal fill surrounding the trunks of trees or the relocation of trees that are to be retained to the filled ground level may be done.
4. Ongoing monitoring and maintenance of the retained trees throughout the development of this site by a qualified arborist.

Conditions have been proposed to ensure that soil and erosion control measures and tree protection zones are installed and maintained throughout the development works and that these works are carried out in accordance with the Tree Management Plan, the CLUMP and the ESMP.

DWE have indicated their concurrence to the proposal subject to a number of conditions to minimise the impacts of the development on the ground water table. These conditions are detailed in the above section 'Groundwater'

5.14 Acid Sulfate Soils

An assessment of Acid Sulfate Soils concluded that the acid sulfate potential appeared to be confined the soils located below the water table. The development proposed all structures and services (other than part of the basement level within the apartments) are to be located above the water table with only foundation piercing and one well for the Sewerage Pumping Station intercepting or passing through the water table. In this

circumstance, acid sulfate soils are a limiting rather than a prohibiting factor due to the low risk and because soils are able to be managed during the operational phase of any development. A condition has been proposed to require the submission of an Acid Sulfate Soils Management Plan where it is proposed to excavate below the water table prior to the commencement of building works.

Acid Sulfate Soil Management Plans will be required during Phase 1, when installing Pump Station 1 and the bulk earthworks within the Cove Precinct; Phase 9, when installing Pump Station 2, and during Phase 16A, when constructing the basement level car parking for the residential flat buildings within the Point Precinct.

5.15 Sustainability

The proposal reflects the 'modern' sustainable outcomes through design and technology. Housing design incorporated BASIX requirements and certification while public areas are serviced by solar powered lighting. The proposal also includes the re-use of recycled water from the Forster Sewerage Treatment plant for toilet flushing and landscaping purposes.

BASIX commitments include 3 to 5 star taps, showerheads, clothes washers, dishwashers and toilet systems are to be provided to the unit buildings. Indigenous or low water use plants are to be used for landscaping. Pools and spas must be covered. Alternative water supply systems for the units must be installed and configured to collect run-off from specified areas. 3 to 6 star taps, showerheads, and toilet flushing systems are to be provided to the dwellings. Hot water systems (gas boosted), gas cooktops and electric ovens are to be installed. Ceiling fans are to be provided throughout the dwellings.

Thirty thousand (30,000) litres of recycled water is to be provided per day to service the pools within the development. The pools are not heated and the pumps are to be controlled by timers. Water sensitive urban design techniques, such as bio-swales, are to be used throughout the development site to minimise the impact of urban stormwater on the surrounding environment. The bio retention works meets Council's requirements for no net increase in pollutant from the site after development. The discharge from the site is kept to the same discharge up to and including the 1 in 3 month recurrence. All recurrent stormwater will be retained on site – this means that small storm event will not impact on downstream wetland environments.

The subdivision layout has been designed to allow the buildings to be orientated with north facing recreation and living areas and dwellings include passive solar design principles such as slabs for thermal mass and open-plan living for cross-ventilation. The subdivision includes pedestrian and cycle paths through the development and to the adjoining National Park. Cycleways will be designed to link to any future cycleway along the Lakes Way to Forster.

Local services are available within the development site (e.g. café, pharmacy, doctors surgery) and existing services in Forster are only a short distance away.

5.16 Coastal Erosion/Climate Change

The development site and the Booti Booti National Park land between the site and the ocean are characterised by a deep sand strata and is comprised of a vegetated area at approximately 8m AHD fronted by sand dunes ranging between 9 to 11.5m AHD at the back of the beach. The south eastern corner of the site is located 430 metres from the vegetation line along Seven Mile Beach and existing site levels adjacent to the eastern boundary range from RL 9.6m to RL 8.2m AHD, with a localised low point of 6.8m AHD.

Council has not adopted a recommendation for climate change/sea level rise; however the predicted 100 year sea level rise of 0.91m would provide an oceanic water movement associated with wave run-up up to 6.31m AHD during an extreme storm event. The proponent has predicted a 100 year ARI wave run-up level of RL 5.4m AHD. Combined with the projected 50 year sea level rise of 0.5m, it is expected that a level of RL 5.9m AHD will result. It is concluded that an extreme storm is unlikely to propagate beyond the back of the dunes of the beach and oceanic inundation of the subject site is unlikely for a 50 year planning period.

Considering the distance of the site from the ocean and the sand dune system along the eastern side of the development site, the site is unlikely to be adversely affected by coastal erosion from the presently projected 50 and 100 year sea level rise.

5.17 Public Interest

The public interest is served by adopting plans, policies and guidelines, which reflect the ecological, economical and social values of the local and broader communities. The application of the plans, policies and guidelines, incorporated with Public requirements, enables the development proposal to be assessed in a legal and transparent manner.

In respect to the land, extensive studies, consultation and land use planning outcomes have been implemented to provide a site specific development control plan. The Major projects application is consistent with the conservation and development outcomes of the DCP and therefore the proposal is in the public interest.

6 CONCLUSION

The site has been the subject of extensive studies that have identified the site opportunities and constraints for development. As a result of this process, the land was appropriately rezoned and a site and development specific DCP was enacted. The application reflects the requirements of the LEP and DCP.

The EA and relevant public and agency submissions have been assessed. The key issues raised in submissions related to bushfire, access, ecological impacts, ground water, natural heritage, built form and impacts from the adjoining sewerage treatment plant. These issues have been appropriately considered and a number of conditions are recommended to ensure that these issues are satisfactorily addressed and that there are minimal impacts as a result of the proposal.

The proposed development will allow for mixed commercial residential eco-living development. Furthermore, the application has largely demonstrated compliance with the existing environmental planning instruments and the Director General's requirements.

The approval of this application would be a positive benefit to the environment, particularly having regard to the current active development approval over the site. The development outcome and subsequently the application was extensively planned to comply with the lands environmental attributes and State Planning legislation.

On these grounds, it is considered that the site is suitable for the proposed development and that the project is in the public interest. Consequently, it is recommended that the project be approved, subject to the conditions of approval.

7 RECOMMENDATION

It is recommended that the Minister:

- (A) consider the findings and recommendations of this Report; and
- (B) approve the carrying out of the project, under Section 75J *Environmental Planning and Assessment Act, 1979*, subject to modifications of the project and conditions and sign the Determination of the Major Project (**tag A**).

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APPENDIX A. DIRECTOR-GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

<i>Project</i>	Staged eco-living mixed use, conservation and residential community title subdivision.
<i>Site</i>	Lots 103,142 and 178, DP 753168
<i>Proponent</i>	Seven Mile Beach Pty Ltd
<i>Date of Issue</i>	4 January 2006
<i>Date of Expiration</i>	4 January 2008
<i>General Requirements</i>	<p>The Environmental Assessment must be prepared to a high technical and scientific standard and must include:</p> <ul style="list-style-type: none"> • an executive summary; • a description of the proposal, including construction, operation, and staging; • an assessment of the environmental impacts of the project, with particular focus on the key assessment requirements specified below; • justification for undertaking the project with consideration of the benefits and impacts of the proposal; • a draft Statement of Commitments detailing measures for environmental mitigation, management and monitoring for the project; and • certification by the author of the Environment Assessment that the information contained in the Assessment is neither false nor misleading.
<i>Key Assessment Requirements</i>	<p>The Environmental Assessment must include assessment of the following key issues:</p> <ul style="list-style-type: none"> • Development control – address relevant legislation and planning provisions applying to the site and the nature, extent and justification for any non-compliance. Clearly delineate proposed staging. • Ecological impacts – address section 5A of the <i>Environmental Planning and Assessment Act 1979</i> and <i>Threatened Biodiversity Survey and Assessment Guidelines</i> prepared by DECC. Provide objectives and performance criteria for control of feral and pest flora and fauna; rehabilitation and re-introduction of indigenous flora and fauna; and ongoing management of conservation areas. • Bushfire – demonstrate compliance with the requirements of <i>Planning for Bush Fire Protection 2001</i>. • Impacts on waterways – demonstrate compliance with the requirements of <i>NSW State Rivers and Estuaries Policy</i> including the provision of native vegetation riparian zones adjacent to watercourses or wetlands. • Traffic – demonstrate compliance with relevant Council and RTA traffic and car parking codes. Impacts on the existing road network. • Social and economic – provide social and economic impact assessment including demographic impacts on the locality, accessibility, mix of housing opportunities, provision of community infrastructure, catering for cultural diversity • Design, amenity and sustainability – address <i>State Environmental Planning Policy No 65 – Design Quality of Residential Flat Development</i>; <i>NSW Residential Flat Design Code</i>; <i>BASIX</i>; <i>Coastal Design Guidelines for NSW</i>. Assess: appearance of all buildings on site and from areas surrounding the site; overshadowing; safety; relationship to surrounding areas, including visual impacts from prominent and public coastal locations; site permeability and pedestrian and bicycle movement to, within and thru the site. • Aboriginal heritage – address <i>Draft Guidelines for Aboriginal Cultural Heritage Impact</i>

Assessment and Community Consultation.

- **Impacts on adjoining National Parks** – address impacts on wildlife corridor values; impacts from erosion, sedimentation, runoff and fire; visual impacts; boundary encroachments; and management impacts and implications.
 - **Sewage Treatment Plant** – address Department Circular No E3 – *Guidelines for Buffer Areas around STPs* and Department of Environment and Conservation recommendations regarding the preservation of buffer zones around STPs.
 - **Water quality** – address: capacity of Forster sewage treatment system to service the development; water sensitive urban design principles; compliance with the 1 in 100 year ARI event for the site; impacts on the Wallis Lake Estuary; and groundwater impacts.
 - **General Environmental Risk Analysis** – notwithstanding the above key assessment requirements, the Environmental Assessment must include an environmental risk analysis to identify potential environmental impacts associated with the project (construction and operation), proposed mitigation measures and potentially significant residual environmental impacts after the application of proposed mitigation measures. Where additional key environmental impacts are identified through this environmental risk analysis, an appropriately detailed impact assessment of these additional key environmental impacts must be included in the Environmental Assessment.
-

You must undertake an appropriate and justified level of consultation with the following parties during the preparation of the Environmental Assessment:

*Consultation
Requirements*

- Great Lakes Shire Council;
- NSW Department of Natural Resources;
- NSW Department of Environment and Conservation;
- Natural Resources Commission;
- Department of Lands;
- Department of Mineral Resources;
- Mid Coast Water;
- NSW Rural Fire Service;
- NSW Roads and Traffic Authority
- Telstra
- AGL
- Country Energy
- NSW Department of Health;
- NSW Department of Education;
- NSW Police;
- Commonwealth Department of Environment and Heritage;
- Aboriginal groups; and
- the local community.

The Environmental Assessment must clearly indicate issues raised by stakeholders during consultation, and how those matters have been addressed in the Environmental Assessment.

Deemed refusal period

Under clause 8E(2) of the Environmental Planning and Assessment Regulation 2000, the applicable deemed refusal period is 60 days from the end of the proponent's environmental assessment period for the project.

APPENDIX B. COMPLIANCE WITH EPIs INCLUDING STATE ENVIRONMENTAL PLANNING POLICIES THAT SUBSTANTIALLY GOVERN THE CARRYING OUT OF A PROJECT

As required by the Director General Requirements of 4 January 2006 (to consider relevant statutory and non-statutory requirements) and having consideration to the provisions of Part 3A and section 75R of the Act, the environmental planning instruments, draft environmental planning instruments, development control plans, guidelines and other documents that could otherwise apply are as follows:

- State Environmental Planning Policy No. 71 - Coastal Protection;
- State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Buildings;
- State Environmental Planning Policy No. 55 – Remediation of Land
- State Environmental Planning Policy No. 44 – Koala Habitat Protection;
- State Environmental Planning Policy No. 11 – Traffic Generating Developments;
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004
- Hunter Regional Environmental Plan 1989;
- Great Lakes Local Environmental Plan 1996;

The following tables provide an assessment of the applicability of these instruments and plans to the application.

It is noted that the subject land was rezoned in 2007 to permit the commercial/residential/conservation development. As part of that process a Local Environmental Study [LES] was undertaken and a draft Local Environmental Plan [LEP] and site specific draft Development Control Plan 40 were prepared. Those plans were required to consider Environmental Planning Instruments [EPI] and relevant legislation/policy/guidelines. Extensive consultation was undertaken with Government Agencies. Subsequently the LEP and DCP were enacted.

The DCP included a Development Master Plan with appropriate development controls and a Conservation Land Use Management Plan [CLUMP]. The DCP also requires an Environmental Validation Report to be produced, verifying compliance with the DCP including relevant EPI's, legislation, policy and guidelines.

(a) State Environmental Planning Policy No 71 – Coastal Protection (SEPP 71)

MATTERS	COMPLIANCE	CONSIDERATION
Clause 2 AIMS OF THE POLICY		
(a) To protect and manage the natural, cultural, recreational and economic attributes of New South Wales coast, and	Yes	The proposal will provide a mix of housing types within an area zoned for residential development. The proposal includes a range of environmentally sustainable measures to protect, conserve and enhance the coastal character of the locality.
(b) To protect and improve existing public access to and along coastal foreshores to the extent that it is compatible with the natural attributes of the coastal foreshore, and	N/A	There is currently no public access to the foreshore from the site.
(c) To ensure that new opportunities for public access to and along coastal foreshores are identified and realised to the extent that this is compatible with the natural attributes of the	Yes	The site is separated from the coastal foreshore by Booti Booti National Park. The proponent and NPWS have entered into a 'Deed of Agreement' for access

coastal foreshore, and		works to, access within and conservation and enhancement of vegetation, within the National Park.
(d) To protect and preserve Aboriginal cultural heritage, and Aboriginal places, values, customs, beliefs and traditional knowledge, and	Yes	Extensive studies were undertaken as part of the LES/LEP/DCP process. An appropriate management plan for construction works is to be implemented for any items excavated during the construction process and items within the Environmental Protection zone. Aboriginal Heritage is further discussed in section 5.9 of this report.
(e) To ensure that the visual amenity of the coast is protected, and	Yes	The proposal identified through survey, appropriate building heights to eliminate any views of the development from the coastal foreshore. The application complies with the DCP 40 requirements for height and layout. Visual amenity is further discussed in section 5.8 of this report.
(f) To protect and preserve beach environments and beach amenity, and	Yes	The proposal will not have a direct impact on the coastal foreshore, however increased residential activity may increase use of the adjoining National Park including beaches. The proponent, as part of a 'Deed of Agreement' with NPWS, will provide a new/replacement access road and car parking to compensate for the increased activity. Beach safety signage is also included in this Deed of Agreement given this beach is not a patrolled beach.
(g) To protect and preserve native coastal vegetation, and	Yes	Significant areas of coastal vegetation within the site are protected under the proposal, including the northern and southern conservation areas, corridor areas and the EHCRA within the adjoining BBNP. Within the commercial/residential component of the site, the proponent has adopted strategies to relocate significant trees from proposed construction areas to proposed landscaping areas.
(h) To protect and preserve the marine environment of New South Wales, and	Yes	Runoff from the site is unlikely to intercept the marine environment as a result of the controls on the site to contain and treat stormwater.
(i) To protect and preserve rock platforms, and	N/A	There are no rock platforms affected by the proposal.
(j) To manage the coastal zone in accordance with the principles of ecologically sustainable development (within the meaning of section 6(2) of the <i>Protection of the Environment Administration Act 1997</i>), and	Yes	The proposal is unlikely to result in any serious or irreversible environmental damage. There are no likely adverse intergenerational impacts. The proposal will result in additional housing while conserving the existing natural heritage of the site.
(k) To ensure that the type, bulk, scale and size of development is appropriate for the location	Yes	The proposed built form and subdivision complies with development controls

and protects and improves the natural scenic quality of the surrounding area, and		contained in DCP 40. Following an urban design assessment of the proposal in section 5.2 of this report, it is considered that the proposal is appropriate for the subject site.
(l) To encourage a strategic approach to coastal management.	Yes	The proposal is consistent with a strategic approach to development of this locality. It is consistent with the zoning of the site and the South Forster Conservation and Development Strategy.
CLAUSE 8: MATTERS FOR CONSIDERATION		
(a) The aims of this Policy set out in clause 2	Yes	These are addressed above.
(b) Existing public access to and along the coastal foreshore for pedestrians or persons with a disability should be retained and, where possible, public access to and along the coastal foreshore for pedestrians or persons with a disability should be improved	Yes	As above
(c) Opportunities to provide new public access to and along the coastal foreshore for pedestrians or persons with a disability	Yes	As above.
(d) The suitability of development given its type, location and design and its relationship with the surrounding area	Yes	As above
(e) Any detrimental impact that development may have on the amenity of the coastal foreshore, including any significant overshadowing of the coastal foreshore and any significant loss of views from a public place to the coastal foreshore	Yes	As above
(f) The scenic qualities of the New South Wales coast, and means to protect and improve these qualities	Yes	The visual or potential scenic impacts of the proposal have been considered in this report in section 5.7. The implementation of measures in DCP 40 will limit visual impact from the coastal foreshore.
(g) Measures to conserve animals (within the meaning of the Threatened Species Conservation Act 1995) and plants (within the meaning of that Act) and their habitats	Yes	The proposal includes management plans for the conservation of vegetation both within the site and the adjoining National Park. The proposed development footprint was developed having regard to disturbed areas on the site (previous sand mining activities). The majority of the undisturbed portions of the site are to remain as conservation areas resulting in the conservation of animals and plants on the site.
(h) Measures to conserve fish (within the meaning of Part 7A of the <i>Fisheries Management Act</i> 1994) and plants (within the meaning of that Act), and their habitats	N/A	There will be no impacts on fish, aquatic plants or their habitats.
(i) Existing wildlife corridors and the impact of development on these corridors	Yes	Measures to enhance wildlife corridors are identified in the site specific Conservation Land Use Management Plan. The proposal conserves existing wildlife corridors and ensures new corridors are established, including the EHCRA in the adjoining BBNP.
(j) The likely impact of coastal processes and	Yes	The development is unlikely to impact or

coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards		be impacted upon by any coastal processes or hazards due to its set back from the foreshore and extensive development controls contained in DCP 40. This issue is further discussed in section 5.15 of this report.
(k) Measures to reduce the potential for conflict between land based and water based coastal activities	Yes	No conflicts are expected.
(l) Measures to protect the cultural places, values, customs, beliefs and traditional knowledge of Aboriginals	Yes	Extensive studies were undertaken as part of the LES/LEP/DCP process. An appropriate management plan for construction works is to be implemented for any items excavated during the construction process and items within the Environmental Protection zone in accordance with the conditions imposed by DECC.. Aboriginal Heritage is further discussed in section 5.9 of this report.
(m) Likely impacts of development on the water quality of coastal water bodies	Yes	No significant impacts are identified. The development will be connected to reticulated sewer services and recycling and water sensitive urban design measures will be used for stormwater disposal.
(n) The conservation and preservation of items of heritage, archaeological or historic significance	Yes	There are no identified matters of European heritage or significance. Aboriginal cultural heritage significance is addressed above.
(o) Only in cases in which a council prepares a draft local environmental plan that applies to land to which this Policy applies, the means to encourage compact towns and cities	N/A	A LES/LEP/DCP process was completed in early 2007 for the site. This process incorporated the outcomes of the South Forster Development and Conservation Strategy.
(p) Only in cases in which a development application in relation to proposed development is determined: (i) the cumulative impacts of the proposed development on the environment, and (ii) measures to ensure that water and energy usage by the proposed development is efficient.	Yes	No potential unacceptable cumulative impacts of the proposal on the environment have been identified as the proposal is consistent with a strategic approach to the establishment of new housing in the area. The proposed stormwater management system for the site has been based on water sensitive urban design principles. In addition, any dwelling approval is subject to a BASIX certificate.
CLAUSE 14: PUBLIC ACCESS		
A consent authority must not consent to an application to carry out development on land to which this Policy applies if, in the opinion of the consent authority, the development will, or is likely to, result in the impending or diminishing, to any extent, of the physical, land-based right of access of the public to or along the coastal foreshore.	Yes	The development will enhance coastal access through proposed new access works within the adjoining NPWS under the Deed of Agreement.

CLAUSE 15: EFFLUENT DISPOSAL		
The consent authority must not consent to a DA to carry out development on land to which this Policy applies in which effluent is proposed to be disposed of by means of a non-reticulated system if the consent authority is satisfied the proposal will, or is likely to, have a negative effect on the water quality of the sea or any nearby beach, or an estuary, a coastal lake, coastal creek or other similar body of water, rock platform.	Yes	The development will be connected to reticulated sewerage service.
CLAUSE 16: STORMWATER		
The consent authority must not consent to a development application to carry out development on land to which this Policy applies if the consent authority is of the opinion that the development will, or is likely to, discharge untreated stormwater into the sea, a beach, or an estuary, a coastal lake, a coastal creek or other similar body of water, or onto a rock platform.	Yes	The proponent has addressed the matter of the treatment of stormwater in a stormwater management plan incorporating water sensitive urban design features. Untreated stormwater will not be discharged from the site.
CLAUSE 18(2): MASTERPLAN REQUIRED		
The Minister may waive the need for a master plan to be adopted because of the nature of the development concerned, the adequacy of other planning controls that apply to the proposed development or for other such reasons as the Minister considers sufficient.	N/A	<p>A masterplan under SEPP 71 is not required as the proposal is being assessed under Part 3A of the Act.</p> <p>Notwithstanding this, Council previously initiated a LES/LEP/DCP process over the site. LEP [amendment 45] was gazetted in 2007 and DCP 40 was enacted</p> <p>It is noted that DCP 40 is a site specific DCP and address all development and conservation controls for the development.</p>

(b) State Environmental Planning Policy No 65 – Design Quality of Residential Flat Development (SEPP 65)

MATTERS	COMPLY	COMMENT
Clause 2 – Aims of the policy		
<ol style="list-style-type: none"> This Policy aims to improve the design quality of residential flat development in New South Wales This Policy recognises that the design quality of residential flat development is of significance for environmental planning for the State due to the economic, environmental, cultural and social benefits of high quality design. Improving the design quality of residential flat development aims: <ol style="list-style-type: none"> to ensure that it contributes to the sustainable development of New South Wales: <ol style="list-style-type: none"> by providing sustainable housing in social and environmental terms, and by being a long-term asset to its neighbourhood, and 	Yes	<p>The residential flat buildings proposed within the Cove and the Point Precincts are considered to meet the aims of SEPP 65 as follows:</p> <p>(a)(i) a mix of unit sizes and types have been provided throughout the two precincts together with community facilities. The residential flat building incorporate measures to minimise environmental impacts including passive solar design, grey-water reuse, water sensitive urban design and revegetation of the site.</p> <p>(a)(ii) the design and finishes of the buildings together with the inclusion of the water sensitive urban design and grey-water reuse will ensure the buildings make a positive long-term contribution to the local environment.</p> <p>(a)(iii) the residential flat buildings are consistent with the planning policies for this region and its context having regard to the Draft Regional Mid-North Coast Strategy , Great Lakes Local Environment Plan and DCP40.</p>

<p>(iii) by achieving the urban planning policies for its regional and local contexts, and (b) to achieve better built form and aesthetics of buildings and of the streetscapes and the public spaces they define, and (c) to better satisfy the increasing demand, the changing social and demographic profile of the community, and the needs of the widest range of people from childhood to old age, including those with disabilities, and (d) to maximise amenity, safety and security for the benefit of its occupants and the wider community, and (e) to minimise the consumption of energy from non-renewable resources, to conserve the environment and to reduce greenhouse gas emissions.</p> <p>4. This Policy aims to provide: (a) consistency of policy and mechanisms across the State, and (b) a framework for local and regional planning to achieve identified outcomes for specific places.</p>		<p>(b) The design and finishes of the proposed buildings are appropriate to the site context and will provide an amenable environment to the internal streetscape and communal open spaces. These areas are not visible outside of the site.</p> <p>(C) The buildings contain a mix of unit sizes and types and are capable of meeting a wide range of community needs. A number of apartments are adaptable and access is provided from basement car parking and community areas to each level of each residential flat building.</p> <p>(d) amenity, safety and security of occupants and the wider community has been addressed. Unit orientation, open plan design, large balconies and expansive landscaped community space provide good unit amenity and allow for passive surveillance.</p> <p>(e) These residential flat buildings have been designed to minimise energy consumption and to reduce greenhouse gas emissions. Passive solar design with most units being provided with north facing living rooms and two orientations reduce the need for air conditioning. The development also incorporates water sensitive urban design and grey-water re-use to minimise the impacts of stormwater runoff on the surrounding environment.</p>
Clause 4 – Application of the policy		
<p>(1) This Policy applies to development being: (a) the erection of a new residential flat building, and (b) the substantial redevelopment or the substantial refurbishment of an existing residential flat building, and (c) the conversion of an existing building to a residential flat building.</p> <p>(2) If particular development comprises development to which subclause (1) applies and other development, this Policy applies to the part of the development that is development to which subclause (1) applies and does not apply to the other part.</p>	Yes	The policy applies to the current application as the erection of residential flat development is proposed.
Part 2 Design Quality Principles (Clauses 7 – 18)		
Design Quality Principles	Yes	An urban design assessment is outlined in Section 5.2 of this report. DCP 40 contains similar controls to SEPP 65 and the proposal is consistent with this DCP. The application includes a design verification report that identifies compliance with both the SEPP and the DCP.
Clause 30 - Determination of development applications		
<p>(1) After receipt of a development application for consent to carry out residential flat development and before it determines the application, the consent authority is to obtain the advice of the relevant design review panel (if any) concerning the design quality of the residential flat development.</p> <p>(2) In determining a development application for consent to carry out residential flat development, a consent authority is to take into consideration (in addition to any other matters that are required to be, or may be, taken into consideration): (a) the advice (if any) obtained in accordance with subclause (1), and</p>	Yes	Great Lakes Council does not have a design review panel, therefore the development was not referred to a panel for comment regarding the design quality of the residential flat buildings. However, the proposal has been considered against the design principles of this policy and the Residential Flat Design Code and is considered to be satisfactory. A detailed assessment is included in Section 5.2 of this report.

(b) the design quality of the residential flat development when evaluated in accordance with the design quality principles, and (c) the publication <i>Residential Flat Design Code</i> (a publication of the Department of Planning, September 2002).		
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(c) State Environmental Planning Policy No 55 – Remediation of Land

MATTERS	COMPLY	COMMENT
Clause 2 – Objects of the Policy		
(1) The object of this Policy is to provide for a Statewide planning approach to the remediation of contaminated land. (2) In particular, this Policy aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment: (a) by specifying when consent is required, and when it is not required, for a remediation work, and (b) by specifying certain considerations that are relevant in rezoning land and in determining development applications in general and development applications for consent to carry out a remediation work in particular, and (c) by requiring that a remediation work meet certain standards and notification requirements.	Yes	The site and adjoining sites were used for sand extraction prior to 1995. The sand was extracted for use in construction and for mortar and fill sand.
Clause 7 – Contamination and Remediation to be considered in determining development application		
(1) A consent authority must not consent to the carrying out of any development on land unless: (a) it has considered whether the land is contaminated, and (b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and (c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose. (2) Before determining an application for consent to carry out development that would involve a change of use on any of the land specified in subclause (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines. (3) The applicant for development consent must carry out the investigation required by subclause (2) and must provide a report on it to the consent authority. The consent authority may require the applicant to carry out, and provide a report on, a detailed investigation		The site has not been identified as a contaminated site as there was no refining production of the sand undertaken upon the site. No remediation of the site is necessary.

<p>(as referred to in the contaminated land planning guidelines) if it considers that the findings of the preliminary investigation warrant such an investigation.</p> <p>(4) The land concerned is:</p> <p>(a) land that is within an investigation area,</p> <p>(b) land on which development for a purpose referred to in Table 1 to the contaminated land planning guidelines is being, or is known to have been, carried out,</p> <p>(c) to the extent to which it is proposed to carry out development on it for residential, educational, recreational or child care purposes, or for the purposes of a hospital—land:</p> <p>(i) in relation to which there is no knowledge (or incomplete knowledge) as to whether development for a purpose referred to in Table 1 to the contaminated land planning guidelines has been carried out, and</p> <p>(ii) on which it would have been lawful to carry out such development during any period in respect of which there is no knowledge (or incomplete knowledge).</p>		
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(d) State Environmental Planning Policy No 44 – Koala Habitat Protection

MATTERS	COMPLY	COMMENT
Clause		
Before a Council may grant consent to an application to carry out development on land to which this part applies, it must satisfy itself whether or not the land is a potential koala habitat. Information must be obtained by it, or by the applicant, from a person who is qualified and experienced in tree identification	Yes	Ecotone Ecological Consultants Pty Ltd undertook a detailed Species Impact Statement. Part of the assessment included investigation for the presence of Koalas in accordance with the requirements of SEPP 44. The assessment identified Swamp Mahoganies (<i>eucalyptus robusta</i>) and Forest Gums (<i>Eucalyptus tereticomis</i>). The trees are listed under Schedule 2 of the policy. The SIS made the observation that only old records of koalas to the north east of the study area exist with no evidence of koalas found despite targeted searches carried out within the study area. The report concluded that the proposed conservation precincts contained within the proposed project and the retention of larger trees in other areas will ensure the protection of any local population consistent with the objectives of the SEPP.

(e) State Environmental Planning Policy No 11 – Traffic Generating Developments (SEPP 11)

MATTERS	COMPLY	COMMENT
Clause 7 – Development Applications to be Referred to the Traffic Authority		
<p>(1) Subject to subclause (2), this clause applies to applications for development consent to carry out development specified in Schedule 1 or 2.</p> <p>Schedule 2</p> <p>(a) the erection of, or the conversion of a building into, a residential flat building comprising 75 or more dwellings or the enlargement or extension of a residential flat building by the addition of 75 or more dwellings,</p>	Yes	<p>The land fronts The Lakes Way, a classified regional road. The application was referred to the RTA.</p> <p>In respect to the commercial/residential component of the development the RTA have provide the following conditional approval and concurrence under the <i>Roads Act 1993</i>.</p> <p>This SEPP has since been repealed and replaced by SEPP (Infrastructure) 2007.</p> <p>Section 4.3.2 and 5.6 of the report further discuss traffic.</p>

(g) subdivision of land into 50 or more allotments,		
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(f) State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

MATTERS	COMPLY	COMMENT
Clause		
<p>The aims of this plan are:</p> <p>(a) an application for a development consent, complying development certificate or construction certificate in relation to certain kinds of residential development must be accompanied by a list of commitments by the applicant as to the manner in which the development will be carried out and</p> <p>(b) the carrying out of residential development pursuant to the resulting development consent, complying development certificate or construction certificate will be subject to a condition requiring such commitments to be fulfilled.</p>	YES	<p>Full BASIX certification was submitted with the development application.</p> <p>BASIX certification is discussed in Section 5.15 of this report.</p> <p>A condition of consent has been included requiring commitments on the BASIX certificate to be fulfilled.</p>

(g) Hunter Regional Environmental Plan 1989 (HREP)

MATTERS	COMPLIANCE	COMMENTS
Clause 2 - Aims		
<p>(1) The aims of this plan are:</p> <p>(a) to promote the balanced development of the region, the improvement of its urban and rural environments and the orderly and economic development and optimum use of its land and other resources, consistent with conservation of natural and man made features and so as to meet the needs and aspirations of the community,</p> <p>(b) to co-ordinate activities related to development in the region so there is optimum social and economic benefit to the community, and</p> <p>(c) to continue a regional planning process that will serve as a framework for identifying priorities for further investigations to be carried out by the Department and other agencies.</p> <p>(2) The aims will be implemented in this plan by specifying:</p> <p>(a) objectives for the future planning and development of the region,</p> <p>(b) regional policies to guide the preparation of local environmental plans and development control plans, to control development and to control activities in the region, and</p> <p>(c) principles relating to future needs of the region, future development opportunities and requirements and the manner in which the effects of growth and change are to be</p>	Yes	<p>The proposed development complies with the LEP and DCP 40 which were required to comply with the HREP.</p> <p>The development and conservation proposal will enhance the sites coastal attributes, in both, vegetation management, and providing housing /commercial opportunities and in these ways is consistent with the aims of the HREP.</p>

managed.		
Clause 7 - Duties of certain public authorities in relation to plan preparation and development consents		
(c) If a council decides or is directed to prepare a draft local environmental plan, then a consent authority, the Director, the Minister or a determining authority (as the case may be) should, in carrying out its or his or her function under the Act or under the instrument concerned, and for the purpose of advancing the aims and objectives of this plan enumerated in clause 2, consider the content of the background report and the objectives, policies and principles contained in this plan and relevant to the matter.	Yes	Great Lakes LEP [amendment 45] was formulated, exhibited and gazetted in compliance with aims and requirements of HREP.

(h) Great Lakes Local Environmental Plan 1996 (GLLEP)

MATTERS	COMPLIANCE	COMMENTS
CLAUSE 2 – Aims, objectives etc		
(1) The aims of this plan are: (a) to provide an updated and simplified plan for the area of Great Lakes; and (b) to protect and enhance the environmental qualities of the area; and (c) to facilitate the orderly and economic development of land within the area; and (d) to promote the well-being of the area's population. (2) The objectives of this plan are: (a) to provide a land use framework to guide the future use of the land within the area of Great Lakes; and (b) to provide a basis for the preparation of detailed development control plans; and (c) to protect environmentally sensitive areas and the heritage of the area; and (d) to improve opportunities for ecologically sustainable development; and (e) to provide for the cultural needs of and the equitable provision of services and facilities for the community.	Yes	The proposed development represents an appropriate and orderly development of the site. The proposal has been designed, taking account of the site opportunities and constraints and is in compliance with outcomes of the South Forster Development and Conservation Strategy.
Clause 8 – Zone objectives and development control table		
(3) The Council must not grant consent for development on land within a zone unless it has taken into consideration the aims of this plan and is satisfied that the development is consistent with at least one or more of the objectives of the zone within which the development is proposed to be undertaken.(Amendment No. 25)	Yes	As per this report. It is noted that in this instance the Minister of Planning is the Consent Authority for the Major Projects application. As outlined below, it is considered that the proposal meets the objectives of the relevant land use zones.
Clause 9 – Zone Objectives And Development Control Table		
Zone No. 2(g) Environmental Living and Low-Impact Development Zone		

<p>The objectives of the zone are –</p> <p>(a) to provide for low-impact residential development in areas with special ecological, scientific or aesthetic values, and</p> <p>(b) to ensure that residential development does not have an adverse effect on those values, and</p> <p>(c) to provide for other types of low-impact development that complement and support the residential development and which do not have an adverse effect on the special ecological, scientific or aesthetic values of the land.</p>	<p>Yes</p>	<p>The application includes satisfactory documentation and plans, including a Statement of Commitments, that address the site specific DCP 40 and relevant plans and policies.</p> <p>The aims and objectives of DCP 40 reflect the requirements of the objectives of the land use zone.</p> <p>The proposal includes an Environmental Validation Report indicating compliance with the provisions of the DCP including the MasterPlan and Conservation Land Use Management Plan [CLUMP].</p>
<p>Zone 7(a1) Environmental Protection Zone</p>		
<p>The objective of the zone is to restrict development to that which:</p> <p>(a) will protect the special ecological, scientific, educational or aesthetic values of the terrestrial or aquatic ecosystem, and</p> <p>(b) will protect areas of significant vegetation and promote the regeneration of native plant communities, and</p> <p>(c) will protect the biodiversity of the land, including threatened or migratory species and their habitat, and</p> <p>(d) will protect significant conservation nodes, conservation reserves and linking corridors, and</p> <p>(e) will protect ecological processes and systems.</p>	<p>Yes</p>	<p>The proposal complies with the zone objectives as the ecological, scientific, educational and aesthetic values of the terrestrial environment are retained through the provision of extensive areas set aside for conservation, the provision of native planting throughout the site and the protection of a large portion of significant trees on the site.</p> <p>The proposal is also consistent with the controls of DCP which has been drafted to be consistent with the zone objectives.</p>
<p>Clause 11 – Land Form modification</p>		
<p>Objective of Provision - To control soil erosion, sedimentation and drainage impacts associated with land form modification.</p> <p>Land form modification</p> <p>(1) Despite any other provision of this plan, filling or excavation of land (except as specified in subclause (2)) is permitted only with the consent of the Council.</p> <p>(2) Filling or excavation of land may be carried out without the consent of the Council but only where the development will, in the opinion of the Council, not significantly affect the natural and existing built environment.</p>	<p>Yes</p>	<p>The proposal involves some land form modifications surrounding the previously mined area in the central portion of the site. The current application seeks the requisite approval for such works.</p>
<p>Clause 12 – Services</p>		
<p>Objective of Provision - To ensure that all development has adequate water and sewerage services.</p> <p>Services</p> <p>The Council must not grant consent to the carrying out of development on any land unless:</p> <p>(a) an adequate water supply and facilities for the removal of sewage and for the drainage of the land are available to the land, or</p> <p>(b) arrangements satisfactory to the Council have been made for the provision of that supply and those facilities.</p>	<p>Yes</p>	<p>The proposal provides reticulated water and sewer systems for the site.</p>
<p>Clause 17 – Subdivision</p>		

<p>Objective of Provision - To impose restrictions on the subdivision of land.</p> <p>Subdivision</p> <p>(1) A person may subdivide land to which this plan applies but only with the consent of the Council.</p> <p>(2) The Council may consent to a subdivision in which the boundaries of the proposed allotments do not correspond with a zone boundary only if the Council considers that the departure is minor and that the total area of land available for use or identified for use as public open space will not be reduced.</p> <p>(3) The Council may consent to the subdivision of land within Zone No 1 (a), 1 (c), 7 (a), 7 (a1), 7 (b), 7 (f1) or 7 (f2) only if each allotment to be created will have an area of not less than 40 hectares.</p> <p>(4) n/a.</p> <p>(5) n/a.</p> <p>(5A) n/a.</p> <p>(6) n/a</p> <p>(7) Where land is zoned for the purpose of a proposed new road, the Council must not consent to a subdivision of land of which the proposed road forms part unless the subdivision makes provision for the opening of a road in reasonable conformity with the proposed road.</p>	<p>Yes</p>	<p>Subdivision in the 7(a1) zone is not proposed.</p> <p>Subdivision is only proposed in the 2(g) zone which is permissible development.</p>
<p>CLAUSE 32 (5) Specific developments - Development at Seven Mile Beach, The Lakes Way, Forster</p>		
<p>(1) This clause applies to Part Lots 103, 142 and 178 DP 753168 at The Lakes Way, Forster as shown edged heavy black on the map marked "Great Lakes Local Environment Plan 1996 (Amendment No 45)".</p> <p>(2) The Council must not grant consent to development on land to which this clause applies unless the gross floor area (excluding pedestrian walkways, colonnades, balconies, decks and carparks) of all buildings on the land proposed to be used for shops and commercial premises will not exceed 1,000 square metres.</p> <p>(3) The Council may grant consent to the subdivision of the land only if the Council is satisfied that:</p> <p>(a) adequate measures are to be implemented to achieve the preservation and management of biological diversity on, and ecological integrity of, the land, and</p> <p>(b) adequate measures are to be implemented to achieve the protection and management of significant habitat, including that used by threatened species, for conservation purposes, and</p> <p>(c) adequate measures are to be implemented to facilitate fauna movement within and through the land, and</p> <p>(d) adequate measures are to be implemented to protect the land from bush fire while not unreasonably compromising the ecological values of the land, and</p> <p>(e) adequate controls are to be implemented that:</p> <p>(i) ensure that the buildings on each lot respect the natural features of the land by utilising designs that minimise tree removal and by the use of colours and</p>	<p>Yes</p>	<p>(1) The Major Project application is consistent with this clause as the proposal is consistent with DCP 40 which incorporated these controls.</p> <p>(2) The shops and commercial premises portion of the proposal does not exceed the commercial floor area provisions of 1000 square metres.</p> <p>(3) The proposal incorporates ecological protection, conservation and management through a detailed Conservation Land Use Management Plan [CLUMP] and via the provision of extensive areas set aside for conservation. Furthermore, the application has adopted the CLUMP for the future ecological management of the site.</p> <p>Specific process in the CLUMP and EVR will ensure the ecology of the site is maintained.</p> <p>The CLUMP has identified the retention of existing wildlife corridors and the creation of future north south corridors through the residential competent of the development. The application adopts this plan.</p> <p>The proposal identifies 8 commercial/residential precinct areas, each with their own built form</p>

<p>materials that reflect the surrounding environment, and</p> <p>(ii) reflect a unified design theme for the land whilst providing for differences in character on a precinct basis, and</p> <p>(f) mechanisms are in place (including funding, monitoring, and auditing mechanisms) to ensure the ongoing implementation and effectiveness of the measures and controls referred to in paragraphs (a)–(e).</p> <p>(4) In considering whether to grant consent to development on the land to which this clause applies, the Council must have regard to the following:</p> <p>(a) the capability of the land for the proposed development,</p> <p>(b) the protection of significant vegetation and habitats,</p> <p>(c) the facilitation of fauna movement within and through the land,</p> <p>(d) the protection of the scenic attributes of the land,</p> <p>(e) the protection of the development from bushfire while not unreasonably compromising the ecological values of the land,</p> <p>(f) any controls that are in place in accordance with subclause (3) (e).</p> <p>(5) Despite any other provision of this plan, the Council must not grant consent to any subdivision for residential purposes of the land to which this clause applies unless the Council is satisfied that any building to be erected on a lot created by the subdivision will comply with any controls that are in place in accordance with subclause (3) (e).</p>	<p>theme. All the themes are based on an ecological coastal design character which is appropriate for the site (refer to section 5.2 of this report for the urban design assessment).</p> <p>The application includes a statement of commitments that reflect the development and conservation principles in DCP 40. The statement refers to a variety of studies and management plans to ensure the long term planning goals for the site. Submission by Community Titled will be a major mechanism to achieve this requirement.</p> <p>An extensive Bushfire Management Plan is to be implement over the site to protect the built and natural characteristics of the site. NSW Rural Fire Service signed of on the plan as part of the LES/LEP/DCP process.</p> <p>This will be achieved by the proponent requirements in the community management statement.</p> <p>(4) it is considered that the proposal is suitable for the site, protection of significant vegetation has been achieved, the bushfire threat has been mitigated and the scenic attributes of the site and surrounding sites will be maintained.</p> <p>(5) the proposal is consistent with the planning controls for the site established in the rezoning process.</p> <p>Accordingly, the proposal is consistent with this clause.</p>
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APPENDIX C. COMPLIANCE WITH DCPS AND OTHER PLANS AND POLICIES

(a) Great Lakes DCP 40 Eco Living Residential Development

In respect to the commercial/residential component of the DCP, the application adopts the requirements of the DCP and therefore complies with the aims and objectives of the DCP. The application provides a comprehensive documentation for the following development controls:

PRECINCT	THE BOARDWALK			
	REQUIREMENT	PROPOSED (EXHIBITED)	RELEVANT DCP CONTROL	COMPLIANCE
SITE COVERAGE	Site Coverage of the building footprint not to exceed 25 % of the precinct area as shown on the Site Masterplan.	Building footprint 1,438m ² . Precinct area 22811m ² thus giving a site coverage of 6.3%.	Cl. 9.2 Page 04	YES
HEIGHT	2 Storey	2 Storey	Cl. 9.2 Page 04	YES
SETBACKS	No building elements shall extend into visual, bushfire and wildlife buffers except decks, pools, and other non habitable structures such as maintenance and bushfire facilities.	No habitable structures extend into the zones noted under requirements	Cl. 9.2 Page 04	YES
PARKING	28 spaces	53 spaces - See page 215 of the EA Volume 1 for detailed calculation	Cl. 9.2 Page 04	YES
Proposed Character & Architecture	<p>A thick cathedral of Palms opens to the edge of a curving administration building drawing the eye around the corner into a vibrant communal space between the retail and recreation facilities.</p> <p>Buildings open to create an interactive, busy boardwalk around a central multi-purpose deck and playground areas. Linked across the road to the parking and tennis courts by a circular pedestrian way used to connect the adjacent residential precincts, the buildings are able to sit wholly within the natural environment and enable the trees and decks to intermingle. The siting of the building responds to the natural clearing and existing sight line along the entry road.</p>	The proposed development mirrors the site layout and building design as specified under section 34.1 of the DCP. It is therefore considered that proposed buildings and site layout achieve the proposed character and architecture requirements of the DCP.	CI34.1 Page 29	YES
Materials Palette	<p><u>Building Maintenance</u></p> <ul style="list-style-type: none"> Steel and concrete cladding Aluminium doors and windows Steel and timber shade screens Prefinished steel metalwork <p><u>Retail/Cafe Building</u></p> <ul style="list-style-type: none"> Frameless doors, windows Steel, timber shade screens Glass shop fronts Prefinished steel metalwork 	The submitted colour and materials schedules are considered to be consistent with the materials palette specified within the DCP for the proposed community buildings. The submitted plans have provided sufficient supplementary detail to assess compliance with all aspects of the materials palette requirements of the DCP.	CI34.1 Page 29	YES

	<ul style="list-style-type: none"> • Sculpture element • <u>Administration/Recreation</u> • Polished and textured concrete • Metal sheet and timber cladding • Hardwood curved timber screen • Prefinished stainless steel metalwork • Timber, aluminium doors, windows 			
Landscaping	The character of The Boardwalk Precinct will convey an inviting appeal to visitors and residents alike. The appearance of The Boardwalk vegetation shall contrast with the other adjacent precincts north and south but have a similar character to The Dunes Precinct to the east. The vegetation however, will screen and visually break views into the adjacent areas. Native plants will be used as screening plants and hedges. Massing of flowering plants is intended to be dramatic and appealing as one arrives at the Precinct from the main road.	The proposed landscaping plans, as included within the phasing plans, are considered to be consistent with the species and character of the landscaping indicated within the DCP.	Cl39.1 Page 62	YES

PRECINCT	THE CREST			
NO. OF DWELLINGS	19			
	REQUIREMENT	PROPOSED (EXIBITED)	RELEVANT DCP CONTROL	COMPLIANCE
DENSITY	Maximum number of dwellings not to exceed 19	19	Cl. 9.3 Page 04	YES
	Minimum lot area 400m ² per dwelling	402m ² to 627.2m ²	Cl. 9.3 Page 04	YES
SITE COVERAGE	Maximum dwelling footprint 40% of lot area	24.9% to 36.7%	Cl. 9.3 Page 04	YES
HEIGHT	2 Storey plus loft	2 Storey	Cl. 9.3 Page 04	YES
SETBACKS	Front setbacks to be a minimum of 1 metre from wall of dwelling, garage or carport to front boundary. Preferred setback is 4 metres.	Houses on lots 3, 5, 6, 17 & 18 are within 4 m of the boundary. All are more than 1 m from the boundary.	Cl. 9.3 Page 04	YES
	Side setbacks in accordance with BCA. Zero lot lines are permitted.	Party walls are on the boundaries, otherwise there are no zero lot lines. Other setbacks comply with the BCA.	Cl. 9.3 Page 04	YES
	Buffer setbacks - no building elements to extend into bushfire or wildlife buffers except decks, pools and detached non-habitable structures.	No habitable structures extend into the zones noted under requirements	Cl. 9.3 Page 04	YES
PARKING	2 Covered spaces per dwelling or 1 garaged disabled if house is adaptable	All 2 Garaged or 1 garaged disabled if house is adaptable	Cl. 9.3 Page 04	YES

Proposed Character & Architecture	<p>A delicate enclave of housing gently curves along the natural lip of the dune, broken apart by the natural features of the site. The buildings are sited to provide a series of informal private and communal spaces.</p> <p>The Crest offers the opportunity for both bushland living amidst the existing forest and the more formal introduced landscape.</p> <p>Despite common walls between dwellings, an abundance of natural sunlight is welcomed into the on ground houses via a private, solar north paved courtyard.</p> <p>The common walls are splayed enabling the dwellings to gently curve along the crest of the dune. The dwellings step in/out to enable the existing vegetation to be retained as part of the overall landscape.</p>	The proposed development mirrors the site layout and building design as specified under section 34.2 of the DCP. It is therefore considered that proposed buildings and site layout achieve the proposed character and architecture requirements of the DCP.	Cl.34.2 Page 30	YES
Materials Palette	<p>Like the natural qualities of the precinct, the materials and colours are a collection of imagery derived from the surrounding areas yet sympathetic to the immediate environment.</p> <ul style="list-style-type: none"> Concrete slab on ground, for thermal mass Blockwork or masonry common walls, stone features Timber, plywood and corrugated steel cladding Painted FC or Blueboard cladding and flat metal features Exposed timber or steel roof members, steel roofing timber and steel solar and privacy screens Timber decks and irregular stone paved courts 	The submitted colour and materials schedules are considered to be consistent with the materials palette specified within the DCP.	Cl.34.2 Page 30	YES
Landscaping	Landscaping to be consistent with landscape character detail page 38.	The proposed landscaping plans, as included within the phasing plans, are considered to be consistent with the species and character of the landscaping indicated within the DCP.	Cl.35.2 Page 38	YES

PRECINCT	THE FOREST			
NO. OF DWELLINGS	78			
	REQUIREMENT	PROPOSED (EXIBITED)	RELEVANT DCP CONTROL	COMPLIANCE
DENSITY	Maximum number of dwellings not to exceed 78	78	Cl. 9.4 Page 04	YES
	Minimum lot area 400m ² per dwelling	372m ² to 1194m ²	Cl. 9.4 Page 04	No (this matter is discussed in Section 5 of the report)
SITE COVERAGE	Maximum dwelling footprint 40% of lot area	10.6% to 30.2%	Cl. 9.4 Page 04	YES
HEIGHT	2 Storey	2 Storey	Cl. 9.4 Page 04	YES

SETBACKS	Front setbacks to be a minimum of 4 metres from wall of dwelling to front boundary, unless it impacts on APZ or natural site features	All comply with preferred setback except lots 5.18, 5.20, 5.21, 5.23, 5.25, 5.29, 5.39, 6.06, 6.10, 6.13, 6.15, 6.18, & 6.40 are less than 4 metres to accommodate existing trees or APZ	Cl. 9.4 Page 04	YES
	Front setbacks to be a minimum of 1 metre from wall of garage/carport structure to front boundary unless it impacts on APZ or natural site features	All comply except lot 6.2 which will be relocated to comply	Cl. 9.4 Page 04	YES
	Side setbacks in accordance with BCA and zero lot lines not permitted.	There are no zero lot lines. Side boundary setbacks exceed those required under the BCA.	Cl. 9.4 Page 04	YES
	Buffer setbacks - no building elements to extend into bushfire or wildlife buffers except decks, pools and detached non-habitable structures.	No habitable structures extend into the zones noted under requirements	Cl. 9.4 Page 04	YES
PARKING	2 Car spaces per dwelling, 1 being covered	48 double garages & 30 single with 1 space	Cl. 9.4 Page 04	YES
Proposed Character & Architecture	Houses are designed to nestle into the existing bushland setting with minimal impact on the surrounding environment. The houses are sited to create the enclosure to the communal landscaped space, a focal point for active and passive recreation. These spaces become an extension of the internal living environment. The glassy linked pavilion style houses are designed to adapt to blocks with both north-south and east-west aspects. The Pavilions are elevated slightly off the ground plane minimising ground and vegetation disturbance.	The proposed development mirrors the site layout and building design as specified under section 34.3 of the DCP. It is therefore considered that proposed buildings and site layout achieve the proposed character and architecture requirements of the DCP.	Cl.34.3 page 31	YES
Materials Palette	Materials are used to evoke the colours and textures of the surrounding forest. Textured materials are used to enhance the play of light and shade. Low maintenance materials are utilised with sparing use of paint finishes. <ul style="list-style-type: none"> • Stone feature walls, garden walls, paving • Cladding of timber board; timber, CFC and metal sheet • Timber decking, boardwalks • Steel and timber shade and privacy screens • Prefinished steel & stainless steel metalwork • Louvred glass windows • Prefinished metal water tanks • Prefinished steel roof sheet 	The submitted colour and materials schedules are considered to be consistent with the materials palette specified within the DCP.	Cl.34.3 page 31	YES
Landscaping	The character of the precinct is intended to be a very natural bushland setting with minimal disturbance and retention of existing tree specimens across the precinct. There will be a grassed understorey, both mown and tufting along with a signature plant. The signature plant in this precinct will be <i>Cyathea cooperi</i> , Tree Fern and it will be planted in abundance.	The proposed landscaping plans, as included within the phasing plans, are considered to be consistent with the species and character of the landscaping indicated within the DCP.	Cl.39.2 page 63	YES

PRECINCT	THE PALMS			
NO. OF DWELLINGS	17			
	REQUIREMENT	PROPOSED (EXIBITED)	RELEVANT DCP CONTROL	COMPLIANCE
DENSITY	Maximum number of dwellings not to exceed 17	17	Cl. 9.5 Page 04	YES
	Minimum lot area 400m ² per dwelling	391m ² to 1497m ²	Cl. 9.5 Page 04	NO (this is discussed in section 5 of the report)
SITE COVERAGE	Maximum dwelling footprint 40% of lot area	4.5% to 33.3%	Cl. 9.5 Page 04	YES
HEIGHT	2 & 3 Storey	2 & 3 storey	Cl. 9.5 Page 04	YES
SETBACKS	Front setbacks to be a minimum of 4 metres from wall of dwelling to front boundary	All comply with preferred setback except lots 7.03 7.06, 7.08, 7.09, 7.11 & 7.13 to accommodate existing trees. A condition has been proposed to required dwellings on Lots 7.03 and 7.08 to comply with the preferred setback.	Cl. 9.5 Page 04	YES
	Front setbacks to be a minimum of 1 metre from wall of garage/carport structure to front boundary unless it impacts on APZ or natural site features	All comply Lot 7.02 is less than a metre to accommodate existing trees		YES
	Side setbacks in accordance with BCA and zero lot lines not permitted.	There are no zero lot lines and all dwellings meet the BCA requirements.		YES
PARKING	Buffer setbacks - no building elements to extend into bushfire or wildlife buffers except decks, pools and detached non-habitable structures.	No habitable structures extend into the zones noted under requirements		YES
Proposed Character & Architecture	1covered & 1 hardstand with 2 covered where possible	13 double garages & 4 single garages with 1 hardstand	Cl. 9.5 Page 04	YES
Materials Palette	An almost private community of distinctive housing amidst a lush forest of Palms and Ferns wrapping around a central communal pool area linked by stone paths and timber decks. Opening into the views, both surrounding and within the community, dwellings are sited within and around a pedestrianised ring road which skirts a variety of vegetation communities. Pole platform dwellings sit lightly just above the ground with minimal footprints extruding vertically like a tree house, in sympathy to the tall thin canopies surrounding the dwellings. The buildings reach for the sun light with tall voids carrying the light to the ground floor levels. Small footprints of taller buildings enable greater light penetration and less impact upon the site whilst gesturing toward the tall surrounding forest.	The proposed development mirrors the site layout and building design as specified under section 34.4 of the DCP. It is therefore considered that proposed buildings and site layout achieve the proposed character and architecture requirements of the DCP.	Cl. 34.4 Page 32	YES

Landscaping	Steel and glass structures, screen rooms, floating timber decks at varying levels.	The submitted colour and materials schedules are considered to be consistent with the materials palette specified within the DCP.	Cl. 34.4 Page 32	YES
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PRECINCT	THE DUNES			
NO. OF DWELLINGS	71			
	REQUIREMENT	PROPOSED (EXIBITED)	RELEVANT DCP CONTROL	COMPLIANCE
DENSITY	Maximum number of dwellings not to exceed 71	71	Cl. 9.6 Page 04	YES
	Minimum lot area 400m ² per dwelling	403.9m ² to 792.5m ²	Cl. 9.6 Page 04	YES
SITE COVERAGE	Maximum dwelling footprint 40% of lot area	14.9% to 37.7%	Cl. 9.6 Page 04	YES
HEIGHT	2 Storey	2 Storey	Cl. 9.6 Page 04	YES
SETBACKS	Front setbacks to be a minimum of 1 metre from wall of dwelling, garage or carport to front Boundary. Preferred setback is 4 metres.	Only the D3s (8 off) are closer than 4 m and the closest is 2 m	Cl. 9.6 Page 04	YES
	Side setbacks in accordance with BCA and zero lot lines not permitted.	There are no zero lot lines	Cl. 9.6 Page 04	YES
	Buffer setbacks - no building elements to extend into bushfire or wildlife buffers except decks, pools and detached non-habitable structures.	No habitable structures extend into the zones noted under requirements	Cl. 9.6 Page 04	YES
	Rear setbacks to be a minimum of 1.5 metres from pool area to rear boundary	Pools on Lots 2.20, 2.22 & 2.24 are within 1.5 m. They will be relocated to comply as a condition of consent. Otherwise all pools comply.	Cl. 9.6 Page 04	YES
PARKING	2 Covered spaces per dwelling or 1 garaged disabled if house is adaptable	All 2 Garaged or 1 garaged disabled if house is adaptable	Cl. 9.6 Page 04	YES
Proposed Character & Architecture	External living spaces filter into the dunes and native landscaping whilst offering views to the beach-like pool or surrounding bushland interlaced with Palms. Careful consideration of massing ensures maximum solar penetration to habitable spaces whilst minimising any overshadowing to neighbours or surrounding communal recreation areas. Large open plan living pavilions connect to second storey bedroom and services pavilions around the central courtyard. Bushland or pool side views are maximised by placement of the single storey portion of living pavillion between the views and north court. This minimises overshadowing and privacy issues.	The proposed development mirrors the site layout and building design as specified under section 34.5 of the DCP. It is therefore considered that proposed buildings and site layout achieve the proposed character and architecture requirements of the DCP.	Cl. 34.5 Page 33	YES

Materials Palette	<p>Colours and textures sympathetic to the introduced landscape mimick the sand dune environment. Natural tones and finishes are used with minimal paint detailing. Solid elements and on ground concrete slabs provide thermal massing.</p> <ul style="list-style-type: none"> • Polished exposed aggregate concrete and stone tile courts • Masonry, plywood and timber cladding • Aluminium sliding doors and louvre windows • Prefinished steel corrugated profile roofing • Stone feature walls, planters, irregular paving • Polished and textured concrete features • Timber decking on steel supports • Steel and timber shade screens • Prefinished metal water tanks • Solar hot water roof panels, tank in roof cavity 	The submitted colour and materials schedules are considered to be consistent with the materials palette specified within the DCP.	Cl. 34.5 Page 33	YES
Landscaping	The character of the Dunes precinct will be more resort-like with open lawn areas, taller canopy shade species, lush gardens having deep shade with highlights of sun drenched outdoor rooms. The canopy species here will provide the structure for shade with an understorey of more exotic plants, lawns and flowering species reminiscent of a more resort style than other precincts in the development.	The proposed landscaping plans, as included within the phasing plans, are considered to be consistent with the species and character of the landscaping indicated within the DCP.	Cl. 39.4 Page 65-66	YES

PRECINCT	THE FRONDS			
NO. OF DWELLINGS	14			
	REQUIREMENT	PROPOSED (EXIBITED)	RELEVANT DCP CONTROL	COMPLIANCE
DENSITY	Maximum number of dwellings not to exceed 15	14	Cl. 9.7 Page 04	YES
	Minimum lot area 340m ² per dwelling	370m ² to 1402m ²	Cl. 9.7 Page 04	YES
SITE COVERAGE	Maximum dwelling footprint 45% of lot area	10.1% to 41.6%	Cl. 9.7 Page 04	YES
HEIGHT	2 Storey	2 Storey	Cl. 9.7 Page 04	YES
SETBACKS	Preferred front setback to be a minimum of 2 metres from wall of dwelling to front boundary. Zero setback from wall of garage/carport to front boundary.	Lot2.08 is on the boundary, all others are more than 2 m from boundary	Cl. 9.7 Page 04	YES
	Side setbacks in accordance with BCA and zero lot lines not permitted.	Party walls are on the boundaries, otherwise there are no zero lot lines. All other setbacks comply with the BCA	Cl. 9.7 Page 04	YES
	Buffer setbacks - no building elements to extend into bushfire or wildlife buffers except decks, pools and detached non-habitable structures.	No habitable structures extend into the zones noted under requirements	Cl. 9.7 Page 04	YES
	Rear setbacks to be a minimum of 1.5 metres from pool area to rear boundary. No building element shall extend into the fenced 20 metre diameter scar tree buffer zone.	No pools are within 1.5 m of the rear boundary & no building extends into the fenced scar tree area	Cl. 9.7 Page 04	YES

PARKING	2 Car spaces per dwelling	All 2 Garaged	Cl. 9.7 Page 04	YES
Proposed Character & Architecture	A delicate enclave of housing is broken apart by natural features which are highlighted as places of interest, utilised as quiet communal parklands for relaxation and as pedestrian links between the road and the peripheral cycle and pedestrian paths. The dwellings slowly rise off the ground becoming pole platform structures with boardwalk connections at the tip of the development, responding to the changing environment. The townhouse developments slowly breaking into smaller groups and eventually a single dwelling.	The proposed development mirrors the site layout and building design as specified under section 34.6 of the DCP. It is therefore considered that proposed buildings and site layout achieve the proposed character and architecture requirements of the DCP.	Cl.34.6 Page 34	YES
Materials Palette	<p>Lightweight materials and fine edges to decks and roofs create the appearance of a floating dwelling over the landscape and associated water features, anchored only by the solid party walls. The material tones and colours are predominantly soft and muted blending into the surrounding environment, with the occasional splash of colour for detail. Smooth textures and high level detailing provide fine lines floating over a textured landscape.</p> <ul style="list-style-type: none"> • Plywood and sheet metal cladding • Stone clad or concrete party walls • Slide away walls and doors • Louvred glass windows • Prefinished steel roofing • Prefinished steel & stainless steel metalwork • Steel and timber screens • Prefinished steel water tanks • Natural timber decks and bridges • Paved courts filtering into the landscape 	The submitted colour and materials schedules are considered to be consistent with the materials palette specified within the DCP.	Cl.34.6 Page 34	YES
Landscaping	The character of this precinct displays the essence of the beach meeting the forest. Shade trees will provide the habitat for small plants. Lawns will meet the sand and vast swathes of grasses and meadow style plants will meld with the shade loving ferns to impart that feeling of being near the beach.	The proposed landscaping plans, as included within the phasing plans, are considered to be consistent with the species and character of the landscaping indicated within the DCP.	Cl.39.5 Page 67	YES

PRECINCT	THE COVE			
NO. OF DWELLINGS	39			
	REQUIREMENT	PROPOSED (EXIBITED)	RELEVANT DCP CONTROL	COMPLIANCE
DENSITY	50 apartments in 2 buildings	39 apartments in 2 buildings	Cl. 9.8 Page 04	YES
	Site Coverage of the building footprint not to exceed 35 % of the precinct area as shown on the Site Masterplan	Building footprint 1938m ² . Precinct area 13,202m ² thus giving a site coverage of 14.68%.	Cl. 9.8 Page 04	YES
SITE COVERAGE	5 Storeys plus basement carparking	5 Storeys plus basement carparking	Cl. 9.8 Page 04	YES
HEIGHT	No habitable building elements shall extend into buffers reserved for bushfire. This	No habitable structures extend into the zones	Cl. 9.8 Page 04	YES

	excludes decks, pools, and other non habitable structures, including the basement car parking.	noted under requirements		
PARKING	65 spaces calculated in accordance with Council's DCP 21 – Tall Buildings	93 spaces within the basement car park – complies with Council's carparking code for tall buildings	Cl. 9.8 Page 04 Council's carparking code for tall buildings	YES
Proposed character & architecture	<p>The Cove apartment complex forms the activated eastern end of the site. It is a hub for contemporary living set in a coastal environment. Facilities provided include; cafe, restaurant, and ancillary retail. Recreational facilities include; lap pool, lagoon pool and spas, sauna and gymnasium.</p> <p>Each building has four principle stories accommodating apartments. A partial fifth storey setback from the facade below contains roof top pavilions which provide access to the private roof terraces from the apartment below. These pavilions accommodate living spaces to compliment the recreational function of the roof terrace and provide supplementary habitable space for the penthouse apartment below.</p> <p>Large cuts through the building separate the 'retail' function from the ground and first level apartments. The cut created by the lap pool through the north building reveals views of the bushland beyond. Cooling summer breezes circulate through the breaks separating the north and south buildings.</p> <p>The buildings are designed with a strong horizontal expression, hugging the ground. The line of the façade is reinforced with glass louvres and infills of timber screening for privacy and weather protection. Punched windows have a horizontal proportion.</p> <p>The horizontal banding of balconies are punctuated by the blade walls separating apartments.</p> <p>Entries are vertically expressed as glazed elements that spill natural light into lobby spaces.</p> <p>Apartments have a dual aspect providing north and south internal and external living areas.</p>	The proposed development mirrors the site layout and building design as specified under section 34.7 of the DCP. It is therefore considered that proposed buildings and site layout achieve the proposed character and architecture requirements of the DCP.	Cl. 34.7 Page 35	YES
Materials Palette	<p>Natural materials are selected to evoke the colours and textures of the coastal environment. Colours are generally light to mid tones. Textured materials are used to enhance modelling of the façade through the play of light and shade. High durability, long life, low maintenance materials suitable for high marine exposure are to be utilised, with minimal use of paint finishes.</p> <ul style="list-style-type: none"> • Stone clad building base, feature walls and courtyard walls. • Cladding of painted concrete, tiling & metal panels. • Shade and privacy screens of timber, prefinished aluminium louvres & stainless steel mesh. • Balustrades clear glass & painted concrete. • Timber & stainless steel handrails. • Prefinished steel & stainless steel architectural metalwork. • Prefinished aluminium doors and windows. • Colorbond stainless steel roofing. • Roof terrace pergolas of prefinished aluminium louvres. 	Materials palettes have not been provided, however the submitted plans provide sufficient detail on material selection to make an informed assessment. The proposed development is considered to be consistent with the materials palette requirements of the DCP.	Cl. 34.7 Page 35	YES

	<ul style="list-style-type: none"> Shade awnings of perforated weather resistant tensile fabric. 			
Landscaping	The character of this precinct will be more commercial or formal while still utilising many indigenous species. Grevilleas and other species will be formally trimmed and there will be an extension of the resort style landscape from the Dunes into gardens and planters around the buildings. sprawling plants will be positioned so they can spread over garden edges and soften the built form.	The proposed landscaping plans, as included within the phasing plans, are considered to be consistent with the species and character of the landscaping indicated within the DCP.	Cl. 35.7 Page 68	YES

PRECINCT	THE POINT			
NO. OF DWELLINGS	79			
	REQUIREMENT	PROPOSED (EXIBITED)	RELEVANT DCP CONTROL	COMPLIANCE
DENSITY	Maximum 80 apartments in 4 buildings	79 apartments in 4 buildings	Cl. 9.9 Page 04	YES
SITE COVERAGE	Site Coverage of the building footprint not to exceed 35 % of the precinct area as shown on the Site Masterplan	Building footprint 2,989m2. Precinct area 26,428m2 thus giving a site coverage of 11.31%.	Cl. 9.9 Page 04	YES
HEIGHT	5 Storeys plus basement carparking	5 Storeys plus basement carparking	Cl. 9.9 Page 04	YES
SETBACKS	No habitable building elements shall extend into buffers reserved for bushfire. This excludes decks, pools, and other non habitable structures, including the basement car parking.	No habitable structures extend into the zones noted under requirements	Cl. 9.9 Page 04	YES
PARKING	144 spaces	211 spaces	Cl. 9.9 Page 04	YES
Proposed Character & Architecture	<p>A complex of low rise apartments that reflect the coastal ambience of the vicinity, arranged around an internal landscaped courtyard which opens to bushland views and sun.</p> <p>The Point is a complex of four low rise apartment blocks sited around a 'V' shaped private communal courtyard. The courtyard opens out to bushland views, a northeast aspect and welcomes cooling summer breezes. Each building has four principle stories accommodating apartments. A partial fifth storey set back from the facade below, containing roof top pavilions which provide access to the private roof terraces from the apartments below. These pavilions accommodate living spaces to compliment the recreational function of the roof terrace and supplementary habitable space for the penthouse apartments below.</p> <p>The buildings are designed with a strong horizontal expression, hugging the ground. The line of the façade is reinforced with glass louvres and infills of timber screening for privacy and weather protection. Punched windows have a horizontal proportion. The horizontal banding of balconies are punctuated by the blade walls that separate apartments. Entries are vertically expressed as glazed elements that spill natural light into lobby spaces. Apartments are a combination of single storey dual aspect, two storey single aspect and two storey cross over types. Private roof terraces contain hard and soft landscaped elements and offer a vantage point to share the</p>	The proposed development mirrors the site layout and building design as specified under section 34.8 of the DCP. It is therefore considered that proposed buildings and site layout achieve the proposed character and architecture requirements of the DCP.	Cl. 34.8 Page 36	YES

	view.			
Materials Palette	<p>Colours are generally light to mid tones. Textured materials are used to enhance modelling of the façade through the play of light and shade. High durability, long life, low maintenance materials suitable for high marine exposure are to be utilised, with minimal use of paint finishes</p> <ul style="list-style-type: none"> • Stone clad building base, feature walls and courtyard walls. • Cladding of painted concrete, tiling & metal panels. • Shade and privacy screens of timber, prefinished aluminium louvres & stainless steel mesh. • Balustrades clear glass & painted concrete • Timber & stainless steel handrails. • Prefinished steel & stainless steel architectural metalwork. • Prefinished aluminium doors and windows. • Colorbond stainless steel roofing. • Roof terrace pergolas of prefinished aluminium louvres. • Shade awnings of perforated weather resistant tensile fabric. 	The submitted colour and materials schedules are considered to be consistent with the materials palette specified within the DCP.	Cl. 34.8 Page 36	YES
Landscaping	The character of this precinct will be more modern and formal while still utilising many indigenous species. Grevilleas and other species will be formally trimmed and there will be an extension of resort style landscape from the Dunes into gardens and planters around the buildings. Sprawling plants will be positioned so they can spread over garden edges and soften the built form.	The proposed landscaping plans, as included within the phasing plans, are considered to be consistent with the species and character of the landscaping indicated within the DCP.	Cl. 39.7 Page 69	YES

(b) Coastal Design Guidelines

The Adoption of Great lakes LEP [amendment 45] and DCP 40, incorporated the requirements of the Coastal policy and guidelines as outlined below.

Matters	Compliance	Comments
PART 1 – DETERMINING A HIERARCHY OF SETTLEMENTS		
Coastal towns	Yes	The site reflects the coastal character of Forster township, its natural attributes, which enhance the coastal village character of the locality.
Relationship to the environment	Yes	Any potential environmental impacts have been minimised through planning policy, design, commitments and conditions of approval.
Visual sensitivity	Yes	The EA submitted for the proposal adopted the provisions of DCP 40 which controls the form of future development on the site and ensure that it is in character with existing coastal attributes of the site.
Edges to the water and natural areas	Yes	The proposal provides direct pedestrian and cyclist linkages and indirect vehicle access to the coastal foreshore.
Streets	Yes	The street layout responds to the topographical, geotechnical and ecological constraints of the site.
Buildings	Yes	The form of the proposed buildings on the site reflects the Master Plan and design principles of DCP 40 for the site.
Heights	Yes	The height of the proposed buildings on the site reflects the Master Plan and design principles of the DCP for the site.
PART 2: DESIGN PRINCIPLES FOR COASTAL SETTLEMENTS		
Defining the footprint and boundary	Yes	The site is at the southern boundary of the Forster Development and Conservation Area and has been designed in accordance with strategic planning documents prepared by the Council..
Connecting open spaces	Yes	The proposed development will enhance the existing vegetation corridor with the adjoining national park. The site will also have pedestrian and cycle links to Forster.
Protecting the natural edges	Yes	Extensive conservation strategies are to be implemented within the site and will protect the natural edges of the adjoining coastal National Park.
Reinforcing the street pattern	Yes	The proposed development has a unique road pattern due to the topographical, geotechnical and ecological constraints. Pedestrian and cyclist linkages are provided throughout the site.
Appropriate buildings for a coastal context	Yes	The proposed dwellings and residential flat buildings are appropriate for the coastal context as outlined in the Urban Design assessment in section 5.2 of this report..

(c) NSW Coastal Policy 1997

Matters	Compliance	Comments
Protecting, rehabilitating and improving the natural environment of the coastal zone.	Yes	The proposed development will rehabilitate the riparian corridor both on and adjoining the site. The proposal will also contribute to the ongoing management of the adjoining national park and public access requirements.
Recognising and accommodating the natural processes of the coastal zone.	N/A	Following a thorough assessment, it was considered that the site was not adversely affected by coastal processes, including climate change. This issue is discussed in detail in Section 5.15 of this report.
Protecting and enhancing the aesthetic qualities of the coastal zone	Yes	The visual impact assessment for the proposal concluded that the proposal would result in a minor visual impact on part of the national park land but not the coastal foreshore. Minimal visual impact is expect to The lakes Way with additional landscaping proposed which will enhance the existing natural vegetation screen to this road.
Protecting and conserving the cultural heritage of the coastal zone.	Yes	Appropriate studies have been formulated and endorsed by DECC.
Providing for ecologically sustainable development and use of resources.	Yes	The proposal provides for ESD by protecting the existing significant coastal vegetation and ensuring its ongoing viability through the design of the water cycle management system and Conservation Land Use Management plan. The recycling of water on the site, orientation of lots, the provision of cycleways and pedestrian paths and reuse of treated effluent for non-potable uses on the site demonstrate the proposal's compliance with ESD principles.
Providing for ecologically sustainable human settlement in the coastal zone.	Yes	The proposal allows for ecologically sustainable settlement through designing the proposal around the site constraints. The site is also in close proximity to existing services ensuring that future residents will have access to these services.
Providing for appropriate public access and use.	Yes	The proposal will not adversely impact on existing public access to the foreshore. The development will provide some commercial public goods and services. The proposal includes replacing the existing national park access road with an improved and safer road and foreshore car parking.
Providing information to enable effective management of the coastal zone.	Yes	Through the LES/LEP/DCP process, appropriate conservation and development strategies have been formulated and adopted for this development.
Providing for integrated planning & management of coastal zone.	Yes	The proposal includes a DCP for the site that will ensure appropriate future development on the site and a Community Management Statement will ensure ongoing management and maintenance of common areas, in particular the conversation areas..


APPENDIX D. SUMMARY OF SUBMISSIONS

Eco Residential and Mixed Use Community Title Subdivision, The Lakes Way, Forster
MP 05_0125
Summary of public submissions received for this application

Issue raised	Department's response
Traffic Generation <ul style="list-style-type: none"> Extra traffic turning into the narrow Lakes Way Increased traffic on the Lakes Way Traffic impacts on school (Forster High) Driver behaviour – speeding Increase boat and caravan traffic; impact on caravan parks and Wallis Lake Lack of sufficient parking at Stocklands – increased population 	<ul style="list-style-type: none"> A comprehensive Traffic Report was submitted with the development application. Extensive discussions were undertaken with the proponent resulting in the provision of a roundabout. The speed limit is to be decreased to 80kms per hour on the Lakes Way from the south. It is considered that the road network with the provision of a roundabout and decreasing the speed limit will effectively mitigate traffic concerns. It is unlikely that the development will impact upon Forster High School given the distance between the development and the High School. The roundabout and decreased traffic speed should have the effect of slowing down traffic. The proposed development in itself would not be considered to have any adverse impact upon driver behaviour. Increased boat and caravan traffic will occur in the vicinity of the development. The local roads are considered capable of the increased demand traffic volumes. The Stockland Shopping Centre has recently undergone substantial improvements that included an increase in retail space and associated parking. It is considered that the Shopping Centre is capable of providing for the proposed increased population.
Companion animals, etc. <ul style="list-style-type: none"> Impact on native flora and fauna Impact on National Park 	<ul style="list-style-type: none"> Cats and Dogs (other than 'Assistance animals: as defined in the Disability Discrimination Act 1992) will not be introduced or permitted within the development.
Water supply/usage <ul style="list-style-type: none"> Sustainable supply of water for proposed water features/lagoons/pools 	<ul style="list-style-type: none"> The development includes a sustainable supply of water for the proposed water features/lagoons/pools. Water features are provided with a recirculating low flow supply of water.
Over development <ul style="list-style-type: none"> Too much development in a small area (housing density, floor space ratio's etc) Building height and scale (5 storey buildings) out of proportion to existing character of the area (National Park). 	<ul style="list-style-type: none"> The total area of the site is approximately 70 hectares. The total development area is approximately 30 hectares. Site coverage is considered acceptable. The five (5) storey component of the development is located at the rear of the development site. Surveyor site lines from the coastal foreshore show that the existing vegetation shield

<ul style="list-style-type: none"> Five (5) storey apartment buildings, visible from seven mile beach and surrounding National Parks, a great eyesore sticking up the middle of pristine, rare, vulnerable and yet stunningly beautiful environment, that should be protected and preserved for all to share, not just the rich and greedy! 	<p>the development from the foreshore. Light to mild tones with natural timber are to be used for the buildings. The development layout has been designed giving consideration to the natural bushland environment. Full details of visual impact are contained within Section 5.6 of this report.</p>
<p>Stormwater Management</p> <ul style="list-style-type: none"> Off-site impacts on Wallis Lake – quality and quantity 	<ul style="list-style-type: none"> A stormwater management strategy has been submitted and assessed as being adequate to mitigate stormwater impact, on both the site and Wallis Lake.
<p>Ecological impacts</p> <ul style="list-style-type: none"> The impact and pressure on the Janie's corner ecosystem, being the sand dunes and grasses, bird life that feed and breed in the area, right down to the little sand crabs, from increased human traffic (presumably generated by the development and improved public road system). One of the last Cabbage Palm (Livistona Australia) forests in the area and maybe the East Cost of Australia. A number of these trees have mechanically moved already and in the process some have died from transplantation shock and then removed and destroyed without a word. Also this is an area that has a large number of swamp paper barks (Melaleuca Ericfolia) that provide pollen to Gliders, Foxes, honey eaters and possums just to name a few that rely on them to survive. Gated community would restrict fauna access from CapeHawke/McBrides Beach to the national park, by way of fencing barriers. Fauna would be forced to cross Lakes Way at a concentrated point only to dodge increasing traffic to cross the road (increasing road kill fatalities). The pressure put on all uncommon rare, fragile and endangered flora, fauna, avifauna being; Cabbage palms, flowing gums, Flying Foxes, Swamp Wallaby's Glossy black Cockatoos', Square Tailed kits, goannas, Sugar Gliders, Brahminey kites. 	<ul style="list-style-type: none"> It is considered that the existing situation at Janies corner will be improved with the provision of a formalised car park to be located approximately 150m from the end of the current road which will then be fenced with walking access only past the fence. Further to this a new bushfire control track to be constructed by National Parks will provide access to the beach well away from Janies Corner. There is no intention to remove any of the existing Cabbage Palms from the site. Approximately 400 trees have been moved with a loss of three. The current edge of the Palm Forest is being extended to the east with further transplantation proposed for trees within building foot prints. The proposal was subjected to the PVP developer tool and received the endorsement of the CMA based on results of the PVP. The Statement of Commitments also requires the proponent to monitor tree health and replace trees that may die. The only gates proposed are the entry gates. All boundaries of the development area to the conservation zones to the north and south, together with the boundary to the National Park to the east will be delineated by the placement of posts in the ground with no wire between. There are no fences defining individual lots, allowing free movement of all fauna both within the development and from surrounding area. Wildlife corridors have been created in the development. As with dot point two above the proposal was subjected to the PVP developer tool and received the endorsement of the CMA based on results of the PVP. The proposal includes significant amounts of native regeneration with specific measures being taken in relation to the Gliders.

APPENDIX E DEED OF AGREEMENT



Deed for the carrying out of works – Lakes Way, Forster

Seven Mile Beach Holdings Pty Limited (**SMB**)

Director-General of the Department of Environment and
Climate Change (**Director-General**)

Minister for Climate Change and the Environment (**Minister**)

Deed for the carrying out of works

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Details

Date 24TH MAR, 2008.

Parties

Name	Seven Mile Beach Holdings Pty Limited
	ACN 112 160 719
Short form name	SMB
Notice details	Level 2, Edgecliff Centre 203-233 New South Head Road EDGECLIFF NSW 2027 Attention Robin Wise
Name	Lisa Corbyn
	Director-General of the Department of Environment and Climate Change
Short form name	Director-General
Notice details	P O Box A 290 SYDNEY SOUTH NSW 1232
Name	The Honourable Verity Firth
	Minister for Climate Change and the Environment
Short form name	Minister
Notice details	Level 31 Governor Macquarie Tower 1 Farrer Place SYDNEY NSW 2000

Background

- A SMB has lodged the Application with the Minister for Planning for approval to carry out the Project on the Land.
- B The application seeks approval for the subdivision of the Land which adjoins the National Park and development of residential dwellings on the Land.
- C In order to provide public access from the Lakes Way to the National Park, SMB have agreed to construct the Park Road and the Development Road.
- D Providing approval is granted for the Project, SMB will undertake the Park Works within the National Park such as the construction of a new carpark, for the benefit of the public entering and utilising the National Park.

- E Park Works will be governed by this Deed, together with *Environmental Planning and Assessment Act 1979*, Part 5 approval by DECC and appropriate consents and licences under the *National Parks and Wildlife Act 1974* and Regulation.

Agreed terms

1. Defined terms & interpretation

1.1 Defined terms

In this document:

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

Application means the application for approval of the Project under Part 3A of the Act by SMB.

Approvals means any approvals, consents, certificates, permits, endorsements, licences, conditions or requirements issued by or on behalf of any Authority which are required by law for the commencement, carrying out or use of the Works.

Bank Guarantee means the bank guarantee required by clause 12 and from a bank and in a form approved by the Minister and Director-General for \$35,000 to be held by the Director-General for emergency remedial or any other works necessary in order to protect the environment surrounding the Park Works.

Business Day means:

- (a) for receiving a notice under clause 8, a day that is not a Saturday, Sunday, public holiday or bank holiday in the place where the notice is sent; and
- (b) for all other purposes, a day that is not a Saturday, Sunday, bank holiday or public holiday in New South Wales, Australia.

Business Hours means from 9.00am to 5.00pm on a Business Day.

Claim means any action, suit, demand, proceedings, claim for any loss, damage or other liability, or any other form of claim, whether based in contract, tort (including negligence), misrepresentation, breach of warranty or on any other statutory, legal or equitable grounds.

Commencement Date means the date that the Application is approved by the Minister for Planning.

Community Association means a corporation that:

- (a) is constituted under the Community Land Development Act 1989 by the registration of a community plan as a deposited plan, and
- (b) has for its corporate name "Community Association D.P. No " (the number inserted being that of the deposited plan).

Consents means the consent issued under Part 2 of the NPW Regulation by the Director-General for the carrying out of works within a National Park.

DECC means the Department of Environment and Climate Change.

Development Road means that part of the two coat bitumen seal public access road extending from the Lakes Way to the south eastern corner of the Land as illustrated at Annexure A to be constructed concurrently with the Park Works.

Emergency means a fire, flood or any other natural disaster or event posing a threat of injury or harm to public persons.

EP&A Act means the *Environment Planning and Assessment Act 1979*

GST has the same meaning as in the GST Law.

GST Law has the meaning given to that term in *A New Tax System (Goods and Services Tax) Act 1999* (Cth) and any other Act or regulation relating to the imposition or administration of the GST.

Land means Lots 103, 142 and 178 DP 753168 known as The Lakes Way, Forster.

Licence means a licence granted by the Minister under section 151 of the *National Parks and Wildlife Act 1974* (NSW).

National Park means the Booti Booti National Park.

NPW Act means the *National Parks and Wildlife Act 1974*.

NPW Regulation means the *National Parks and Wildlife Regulation 2002*.

Park Road means that part of the two coat bitumen seal public access road extending from the Lakes Way located within the National Park illustrated at Annexure A to be constructed as part of the Park Works.

Park Works means the works described in Schedule 1.

Project means the proposed residential development and conservation works on the Land including a community title subdivision, 317 dwellings and apartments with support facilities and associated infrastructure.

Regional Manager means the manager in charge of the Hunter Region, Parks and Wildlife Group, DECC or person acting within that role or any equivalent role.

Schedule 1 means Schedule 1 of this Deed.

Works means any of the works which are the subject of the Application.

1.2 Interpretation

In the interpretation of this Deed, the following provisions apply unless the context otherwise requires:

- (a) the singular includes the plural and vice versa, and a gender includes other genders;
- (b) another grammatical form of a defined word or expression has a corresponding meaning;
- (c) a reference to a clause, paragraph, schedule or annexure is to a clause or paragraph of, or schedule or annexure to, this Deed, and a reference to this Deed includes any schedule or annexure;
- (d) a reference to a document or instrument includes the document or instrument as novated, altered, supplemented or replaced from time to time;
- (e) a reference to a party is to a party to this Deed, and a reference to a party to a document includes the party's executors, administrators, successors and permitted assigns and substitutes;
- (f) a reference to a person includes a natural person, partnership, body corporate, association, governmental or local authority or agency or other entity;
- (g) a reference to a statute, ordinance, code or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them;

- (h) the meaning of general words is not limited by specific examples introduced by including, for example or similar expressions;
- (i) any schedules and attachments form part of this Deed;
- (j) a rule of construction does not apply to the disadvantage of a party because the party was responsible for the preparation of this Deed or any part of it; and
- (k) if a day on or by which an obligation must be performed or an event must occur is not a Business Day, the obligation must be performed or the event must occur on or by the next Business Day.

1.3 Headings

Headings are for ease of reference only and do not affect interpretation.

1.4 Unfettered discretion

SMB acknowledges and agrees that:

- (a) the Minister and the Director-General have an unfettered discretion to exercise any or all of their functions and powers pursuant to any legislation;
- (b) nothing in this Deed will in any way unlawfully restrict or otherwise unlawfully affect the unfettered discretion of the Minister or the Director-General to exercise any of its functions and powers pursuant to the NPW Act, the NPW Regulation or any other legislation; and
- (c) without limiting clause 1.4(a), anything which the Minister or the Director-General, fails to do or purports to do pursuant to its functions and powers under any legislation will be deemed not to be, or to have caused or contributed to, an act or omission by the Minister or the Director-General under this Deed and SMB will have no claim against the Minister or the Director-General arising out of the subject matter of this Deed.

2. Conditions Precedent

2.1 Commencement of Park Works

For the purposes of this Deed, SMB is not required to commence construction of the Park Works within the National Park under this Deed unless and until all of the following events have occurred:

- (a) SMB have obtained approval of the Application from the Minister for Planning;
- (b) SMB has obtained approval under Part 5 of the EP&A Act and any appropriate consents and licences under the NPW Act or NPW Regulation to undertake Park Works within the National Park.

2.2 Conduct of parties

Subject to any contrary provision of this Deed, if the fulfilment of any of the Conditions Precedent requires or would be assisted by the conduct of a party, that party must use its reasonable endeavours to ensure that the Condition Precedent is fulfilled.

2.3 Consequence of non satisfaction

- (a) If the Conditions Precedent in clause 2.1 are not satisfied within 24 months of the Commencement Date, then SMB may terminate this Deed by notice in writing.

- (b) If this Deed terminates pursuant to clause 2.3(a), no party will have any Claim against, or obligations to, any other party arising on, or out of, such termination or otherwise out of this Deed.

2.4 Commencement

The parties each agree that the terms of this Deed will operate and be effective from the Commencement Date.

3. Park Works

3.1 SMB to do Park Works

SMB agrees to construct the Park Works in accordance with the provisions of this Deed and Schedule 1.

3.2 Conditions Precedent

The parties acknowledge that the undertaking of the Park Works within the National Park is conditional upon satisfaction of clause 2.1 of the Conditions Precedent.

3.3 Timing

- (a) With the exception of the works to be carried out in accordance with the Eastern Habitat Corridor Restoration Plan, SMB will use reasonable endeavours to complete the construction of the Park Works prior to 30th June, 2009.
- (b) With the exception of the works to be carried out in accordance with the Eastern Habitat Corridor Restoration Plan, if the Park Works are not completed by 1 January 2010, the Minister or the Director-General may terminate this Deed by notice in writing to SMB.
- (c) If SMB does not complete the Park Works by 1 January 2010 and this Deed is terminated under clause 3.3(b), SMB will indemnify the Minister or the Director-General for the costs incurred by the Minister or Director-General in completing the Park Works.

3.4 Standard of Park Works

The planning, design, construction and commissioning of the Park Works will be in accordance with the specifications referred to in Schedule 1 and in accordance with any consents, licences or approvals issued under the NPW Act, NPW Regulation or EP&A Act.

4. Road Works

4.1 SMB to construct Development Road and Park Road

- (a) SMB agrees to construct the Development Road and Park Road in accordance with the provisions of this Deed and Schedule 1 of this Deed.
- (b) SMB agrees to maintain the Development Road to the appropriate standard required by the Road and Transport Authority ("RTA") and/or the Great Lakes Council. This covenant is to be in the form of Annexure C to this Deed.
- (c) SMB agrees to appoint an independent, suitably qualified engineer to certify that the specifications and construction drawings for the Development Road and the Park Road conform with the appropriate standards of the RTA and the Great Lakes Council. The engineer appointed must also inspect and certify the construction of the Park Road at stages consistent with the Great Lakes Council's road construction holding points.

4.2 Director-General to maintain Park Road

The Director-General agrees to maintain the Park Road in accordance with the provisions of this Deed.

4.3 Public use of Development Road

Immediately upon completion of construction of the Development Road or at any time prior to completion of construction of the Development Road:

- (a) SMB must grant a right of carriageway over the Land in accordance with section 88A of the *Conveyancing Act 1919* granting an easement in gross for the benefit of the Minister for public use of the Development Road; and
- (b) the easement is to be in the form of Annexure C to this Deed.

4.4 Location of Development Road and Park Road

- (a) The Development Road and Park Road are to be constructed generally in accordance with the location of the Park Road and Development Road as identified on the draft survey plan attached at Annexure A to this Deed.
- (b) Prior to commencing construction of the Park Road and Development Road, SMB is to submit final survey plans to the Regional Manager for approval by the the Regional Manager.
- (c) The approval of the Regional Manager under clause 4.4(b) must not be unreasonably withheld.
- (d) The agreed final location of the Park Road and Development Road is to be within 10 metres of the location of the Park Road and Development Road as shown in the draft survey plan.
- (e) Subject to clause 4.4(d), SMB may change the final location of the Development Road and Park Road in the final survey plans from the location provided in the draft survey plan in order to preserve trees, wildlife or for any other reason relating to the conservation or protection of the environment on the Land.

4.5 Timing

- (a) SMB will use reasonable endeavours to complete the construction of the Park Road and Development Road prior to 30th June, 2009.
- (b) If the Park Road and Development Road are not completed by 1 January 2010, the Minister or the Director-General may terminate this Deed by notice in writing to SMB.
- (c) If SMB does not complete the Development Road by 1 January 2010 and this Deed is terminated under clause 4.5(b), SMB will provide access to the Land for the Minister or the Director-General to complete construction of the Development Road and will indemnify the Minister or the Director-General for the costs incurred by the Minister or the Director-General in completing the Development Road.

4.6 Standard of Park Road and Development Road

The planning, design, construction and commissioning of the Park Road and Development Road will be in accordance with the specifications contained at Annexure A.

4.7 Public access to Janie's Corner

SMB will ensure that the Park Works and works in relation to the Park Road and Development Road are timed in such a way as to ensure that public vehicle access to Janie's Corner is maintained at all times.

5. Access to Road

5.1 Minister may restrict access

The Director-General may restrict access to or close the Park Road from within the National Park at any time and for any reason without notice to SMB.

5.2 SMB not to restrict access

- (a) Except in the case of an Emergency or for maintenance purposes, SMB or its successors in title must not restrict access to or close the Development Road at any time without first receiving written approval from the Director-General.
- (b) If SMB must restrict access to or close the Development Road for maintenance purposes, SMB will use its best endeavours to carry out the maintenance works as soon as practicable and will only close those parts of the Development Road necessary to maintain the safety of the public while carrying out maintenance.
- (c) The Director-General and its employees must use their best endeavours to report any need for maintenance to the Development Road to SMB as soon as practicable.

6. Conduct by SMB

6.1 Use of the National Park

In the case that the approvals are granted under clause 2.1, SMB must:

- (a) use the land within the National Park pursuant to any Licence granted by the Minister under clause 2.1(a) for the construction of the Park Works as described in Schedule 1 of this Deed; and
- (b) carry out the Park Works within the National Park pursuant to any Consents granted by the Director-General.

7. Indemnity

7.1 SMB to indemnify in respect of use of Development Road

- (a) SMB agrees to indemnify the Minister, the Director-General, the employees or officers of the Minister or the Director-General, any other person acting under the direction or control of the Minister or the Director-General for any purpose and the Crown in right of New South Wales against all expenses, losses, damages and costs (on a solicitor and own client basis or full indemnity basis whichever is the higher and whether incurred by or awarded against the Minister or the Director-General) that the Minister and/or the Director-General may sustain or incur as a result, whether directly or indirectly, arising from the use of the Development Road by members of the public. This covenant is to be in the form of Annexure C to this Deed.
- (b) The indemnity given by SMB does not cover any loss or damage that is caused or contributed to by a negligent act or omission of any of the parties listed in clause 7.1(a). This covenant is to be in the form of Annexure C to this Deed.
- (c) This indemnity by SMB ceases to have effect when the title to that part of the Land within which Development Road is located, is transferred to any successors in title, including the Community Association.

- (d) In accordance with clause 8.5, SMB must procure from successors in title, a deed on terms acceptable to the Minister and Director General which includes an indemnity on the terms set out in clause 7.1(a) & (b).

7.2 SMB to indemnify in respect of construction of Park Road and Park Works

- (a) SMB agrees to indemnify the Minister and the Director-General against all expenses, losses, damages and costs (on a solicitor and own client basis or full indemnity basis whichever is the higher and whether incurred by or awarded against the Minister or the Director-General) that the Minister and/or the Director-General may sustain or incur as a result, whether directly or indirectly, arising from the construction of the Park Road and the Park Works by SMB or its contractors.
- (b) The indemnity given by SMB does not cover any loss or damage that is caused or contributed to by a negligent act or omission of the Minister or the Director-General or its personnel.
- (c) This indemnity ceases to have effect 6 months after the Park Road and Park Works have been completed.
- (d) Notwithstanding clause 7.2(c) the indemnity in relation to that part of the Park Road shown in sheet 3 of 13 of Annexure A from chainage 1182.49 to the termination of the Park Road at Janie's corner, ceases to have effect after the Park Road has been completed.

7.3 Acknowledgment

SMB acknowledges that the exercise of its rights under this Deed is at the risk of SMB.

7.4 Release

- (a) SMB releases to the full extent permitted by law the protected persons from all claims and demands as set out in this clause arising out of, in connection with, in respect to or as a consequence of SMB's activities under this Deed.
- (b) SMB's obligations under this clause continue after the termination, expiration or other determination of this Deed in respect to any matter or thing happening before such termination, expiration or determination.
- (c) In this clause:
 - (i) 'protected person(s)' means
 - (A) the Minister;
 - (B) the Director-General;
 - (C) the employees or officers of the Director-General;
 - (D) any other person acting under the direction or control of the Minister or the Director-General for any purpose;
 - (E) the Crown in right of New South Wales.
 - (ii) 'Claims and demands' means all actions, suits, claims, demands, proceedings, losses, damages, compensation, sums of money, costs, legal costs, charges and expenses to which the protected persons or any one thereof is or may become liable in respect to loss of or damage to the fixtures or property of SMB, financial or economic loss, loss of opportunity or other consequential loss of SMB, injury to or death of any person claiming through the SMB of any kind and however sustained and whether sustained on or outside the National Park the subject of this Deed.

- (d) It is immaterial to the obligations of SMB under this clause that a claim or demand arises out of any act, event or thing that SMB is authorised or obliged to do under this Deed or that any time waiver or other indulgence has been given to SMB in respect to any such obligation under this Deed.
- (e) The obligations of SMB under this clause do not apply to the extent that the loss, damage, injury or death arises from or is contributed to by any wilful or negligent act, default or omission on the part of any protected person except as provided in subclause 7.4(f).
- (f) The obligations of SMB under this clause do apply to loss, damage, injury or death arising from or contributed to or occurring in connection with:
 - (i) the carrying out of any fire management activity by or on behalf of the protected persons;
 - (ii) the failure to carry out any fire management activity by or on behalf of the protected persons;
 - (iii) any other act or omission any protected person, whether or not negligent, in respect to the management of fire hazards in the National Park.

8. General

8.1 Review of this Deed

This Deed may be reviewed or modified by the agreement of the parties using their best endeavours and acting in good faith.

8.2 Dispute Resolution

- (a) If a dispute arises out of this Deed (**Dispute**), a party must comply with this clause 8.2 before starting arbitration or court proceedings (except proceedings for interlocutory relief).
- (b) A party claiming a Dispute has arisen must give the other parties to the Dispute notice setting out details of the Dispute.
- (c) During the 14 days after a notice is given under clause 8.2(b) (or longer period if the parties to the Dispute agree in writing), each party to the Dispute must use its reasonable efforts to resolve the Dispute. If the parties cannot resolve the Dispute within that period, they must refer the Dispute to a mediator if one of them so requests.
- (d) If the parties to the Dispute cannot agree on a mediator within seven days after a request under clause 8.2(c), the chairman of LEADR or the chairman's nominee will appoint a mediator.
- (e) The role of a mediator is to assist in negotiating a resolution of the Dispute. A mediator may not make a binding DECC decision on a party to the Dispute except if the party agrees in writing.
- (f) Any information or documents disclosed by a party under this clause 8.2:
 - (i) must be kept confidential; and
 - (ii) may only be used to attempt to resolve the Dispute.
- (g) Each party to a Dispute must pay its own costs of complying with this clause 8.2. The parties to the Dispute must equally pay the costs of any mediator.

- (h) A party to a Dispute may terminate the dispute resolution process by giving notice to each other after it has complied with clauses 8.2(a) to 8.2(c). Clauses 8.2(f) and 8.2(g) survive termination of the dispute resolution process.

- (i) If a party to a Dispute breaches clauses 8.2(a) to 8.2(h), the other parties to the Dispute do not have to comply with those clauses in relation to the Dispute.

8.3 Notices

- (a) A notice, demand, consent, approval or communication under this Deed (**Notice**) must be:

- (i) in writing, in English and signed by a person duly authorised by the sender; and
- (ii) hand delivered or sent by prepaid post or facsimile to the recipient's address for Notices specified in the Details, as varied by any Notice given by the recipient to the sender.

- (b) A Notice given in accordance with clause 8.3(a) takes effect when taken to be received (or at a later time specified in it), and is taken to be received:

- (i) if hand delivered, on delivery;
- (ii) if sent by prepaid post, on the second Business Day after the date of posting (or on the seventh Business Day after the date of posting if posted to or from a place outside Australia);
- (iii) if sent by facsimile, when the sender's facsimile system generates a message confirming successful transmission of the entire Notice unless, within eight Business Hours after the transmission, the recipient informs the sender that it has not received the entire Notice,

but if the delivery, receipt or transmission is not on a Business Day or is after 5.00pm on a Business Day, the Notice is taken to be received at 9.00am on the next Business Day.

8.4 Approvals and consent

The parties acknowledge that:

- (a) except as otherwise set out in this Deed, and subject to any statutory obligations, a Party may give or withhold an approval or consent to be given under this Deed in that Party's absolute discretion and subject to any conditions determined by the Party;
- (b) a Party is not obliged to give its reasons for giving or withholding consent or for giving consent subject to conditions; and
- (c) this Deed does not impose any obligation on a consent authority to:
 - (i) grant an approval under the NPW Act or NPW Regulation; or
 - (ii) exercise any function under the NPW Act or NPW Regulation in relation to a change in an environmental planning instrument.

8.5 Successors in Title

- (a) With respect to the Land until such time as the registration of a community plan of subdivision wherein the Development Road and the land on which it is constructed become part of the community property in such plan, any agreements made pursuant to this Deed shall bind any successors in title and SMB covenants with the Minister and the Director-General that prior to any disposal or transfer of the whole or any part of the Land, or assignment of the benefits of this Deed, to a third party, it shall notify the third party of its obligations under this Deed and procure from the third party prior to such

disposal, transfer or assignment, a Deed on terms acceptable to the Minister and the Director-General (including regarding this clause 8.5) whereby the third party agrees with the Minister and the Director-General to be bound by the terms of this Deed for the benefit of the Minister and the Director-General and accepts the benefits of this Deed. SMB must notify the Minister and the Director-General within a reasonable time following the disposal or transfer of the Land to a third party.

- (b) Upon the registration of a community plan of subdivision as provided in clause 8.5(a) and formation of the Community Association, SMB shall notify the Community Association of its obligations under this Deed and procure from the Community Association a Deed on terms acceptable to the Minister and the Director-General (including regarding this clause 8.5) whereby the Community Association agrees with the Minister and the Director-General to be bound by the terms of this Deed.
- (c) A party must not assign this Deed or any right under this Deed without the prior written consent of the other party which must not be unreasonably withheld.

8.6 Costs

Each party must bear its own costs of preparing and executing this Deed.

8.7 Entire agreement

This Deed, including its schedules and annexures:

- (a) constitutes the entire agreement between the parties as to its subject matter; and
- (b) in relation to that subject matter, supersedes any prior understanding or agreement between the parties and any prior condition, warranty, indemnity or representation imposed, given or made by a party.

8.8 Further acts

Each party must promptly execute all documents and do all things that another Party from time to time reasonably requests to affect, perfect or complete this Deed and all transactions incidental to it.

8.9 Governing law and jurisdiction

- (a) This Deed is governed by the law of New South Wales.
- (b) Each party irrevocably and unconditionally submits to the exclusive jurisdiction of the courts of New South Wales

8.10 Severability

- (a) The parties agree that a construction of this deed that results in all provisions being enforceable is to be preferred to a construction that does not so result.
- (b) If, despite the application of clause 8.10(a), a provision of this deed is illegal or unenforceable:
 - (i) if the provision would not be illegal or unenforceable if a word or words were omitted, that word or those words are severed; and
 - (ii) in any other case, the whole provision is severed,and the remainder of this deed continues in force.

8.11 Alteration

This Deed may be altered only in writing signed by each party.

8.12 Adverse construction

No provision of this deed will be construed adversely against a party solely because that party was responsible for drafting that particular provision.

8.13 Waiver

- (a) The failure of a party at any time to require performance of any obligation under this Deed is not a waiver of that party's right:
 - (i) to claim damages for breach of that obligation; and
 - (ii) at any other time to require performance of that or any other obligation under this Deed,

unless written notice to that effect is given in accordance with clause 8.3.

- (b) Waiver of any provision of or right under this Deed:
 - (i) must be in writing signed by the party entitled to the benefit of that provision or right; and
 - (ii) is effective only to the extent set out in any written waiver.

8.14 GST

- (a) Words or expressions used in this clause 8.14 which are defined in the *A New Tax System (Goods and Services Tax) Act 1999* (Cth) ('GST Act') have the same meaning in this clause.
- (b) Subject to clause 8.14(c), if GST is payable on any supply made under or in connection with this Deed, the recipient of that supply must pay to the supplier, an additional amount equal to the GST payable on that supply provided that no additional amount is payable under this clause until the supplier issues a tax invoice to the recipient for the supply.
- (c) If an Approval is granted and this Deed becomes operative and effective in accordance with clause 2.4, the parties agree to co-operate to determine whether Division 81 or Division 82 of the GST Act applies to any supplies or payments made under this Deed.
- (d) If a payment to a party under this deed is a reimbursement or indemnification, calculated by reference to a loss, cost or expense incurred by that party, then the payment will be reduced by the amount of any input tax credit to which that party is entitled on its acquisition of the taxable supply to which that loss, cost or expense relates.

8.15 Survival

The provisions of clauses 3.3(c), 4.3, 4.5(c) and 7 shall survive any termination of this Deed.

9. Insurance

9.1 Required insurance

- (a) SMB must ensure that before commencing any activity under this Deed a public liability policy covering personal injury and property damage, including financial, economic or consequential loss arising as a result of such personal injury or property damage in an amount of not less than \$10,000,000 (or such other higher amount as the Director-General or Minister may from time to time require being the amount which may be paid arising out of any one single accident or event) in connection with the activities of SMB under this Deed **is in place** whereby the Minister, the Director-General, DECC and the Crown in right of New South Wales shall be included as joint insured parties;

- (b) The public liability insurance cover must include a cross liability clause in which the insurer agrees:
 - (i) to waive all rights which entitle it to enforce the rights of others (otherwise known as "rights of subrogation"), or to take action against any of the persons insured; and
 - (ii) for this purpose, to act as if a separate policy had been issued to each of those persons insured.
- (c) SMB must ensure that, before commencing any activity under this Deed, SMB and each subcontractor hold the workers compensation insurance required by law. A subcontractor taken to be an employee of SMB under the law must be covered by SMB's workers compensation insurance.
- (d) SMB must ensure that it has such other special insurances as may be appropriate and required by the Director-General or Minister from time to time.

9.2 Required Arrangements

The following provisions shall apply to all policies of insurance referred to in clause 9.1:

- (a) all such policies of insurance shall be effected with an insurance office or company approved by the Director-General or Minister (which approval shall not be unreasonably withheld) and shall be for such amounts and cover such risks and contain such conditions, endorsements and exclusions as are reasonably acceptable to or required by the Director-General or Minister;
- (b) no exclusions, endorsements or alterations are to be made in or to any such policy of insurance unless first approved in writing by the Director-General or Minister (which approval shall not be unreasonably withheld);
- (c) all such policies are to be taken out in the names of the Director-General, Minister and SMB for their respective rights and interests;
- (d) duplicate or certified copies of all such policies and all renewal certificates and endorsement slips are to be lodged by SMB with the Director-General or Minister immediately on receipt by SMB;
- (e) SMB shall provide full true and particular information to the office or company with which such policies are effected on all matters and things the non-disclosure of which might in any way prejudice or affect any such policy or payment of any monies thereunder;
- (f) SMB shall punctually pay all premiums and other monies payable in respect to all such policies on or before the due date for payment of the same and shall in respect to any such policy of insurance produce to the Director-General or Minister receipts for the payment of each premium and any other monies payable thereunder (or other proof of payment to the Director-General or Minister's satisfaction);
- (g) SMB shall not do or permit to be done any act, matter or thing upon or in the vicinity of the National Park whereby any insurance policy may be vitiated or rendered void or voidable or (except with the written approval of DECC) whereby the rate of premium for any such insurance shall be liable to be increased;
- (h) The Director-General and Minister shall be entitled in his or her own name and as the attorney of SMB in the name of SMB or otherwise to institute all proceedings against any such office or company to recover from it any amount for loss, damage, destruction or

injury or other monies payable under any indemnity in favour of the Director-General, Minister or the Crown in right of New South Wales.

10. Occupational Health and Safety

- (a) SMB acknowledges that it is an occupier of that part of the National Park on which the Park Works are undertaken, within the meaning of the Occupational Health and Safety Act 2000 or any act replacing same.
- (b) SMB shall carry out the Park Works in a safe and reliable manner and must comply with the Occupational Health and Safety Act 2000, its amendments and regulations.
- (c) SMB shall notify the Director-General of any natural events or activities in the National Park or the surrounding area, which it becomes aware of, which may endanger the public.
- (d) SMB shall take all reasonable steps to protect the safety of all persons present in the National Park and shall, without limitation, take all reasonable steps to eliminate any dangers to persons that may arise as a result of SMB's activities.

11. Aboriginal Objects and Historic Relics

11.1 Discovery of Objects

SMB shall immediately report to the Director-General the discovery of any Aboriginal Object or Historic Relic during the course the Park Works and in such event such work shall cease immediately and SMB shall comply with all directions made by the Director-General in relation to the Objects in accordance with the National Parks and Wildlife Act 1974.

11.2 Protection of Objects

SMB shall carry out and perform at its cost all necessary protection or salvage works specified by the Director-General in connection with all known Objects affected by SMB's activities in accordance with the directions of the Director-General and to his or her satisfaction.

11.3 Definition of Objects

For the purpose of this clause the terms:

Aboriginal Object shall have the same meaning as that term has in the *National Parks and Wildlife Act 1974*;

Historic Relic shall have the same meaning as the term 'relic' as defined in the *Heritage Act 1977*; and

Objects shall mean Aboriginal Objects and/or Historic Relics.

12. Bank Guarantee

SMB will prior to commencing the Park Works provide to the Director-General the Bank Guarantee provided that:

- (a) the said guarantee shall continue in force until all the obligations of SMB under this Deed have been complied with to the satisfaction of the Minister and Director-General;
- (b) the Minister and Director-General may claim against the Bank under his or her guarantee for any emergency remedial or any other works necessary in order to protect the environment surrounding the Park Works;

- (c) the Minister or Director General shall inform the Bank that his or her guarantee is no longer required by the Minister or Director-General within a reasonable time after the expiration or other determination of the Deed;
- (d) the giving of such a guarantee by the Bank shall not operate to relieve SMB from any of the obligations on its part to protect the environment surrounding the Park Works;
- (e) in the event of the Bank making any payment or payments to the Minister or Director-General in full or partial discharge of the guarantee SMB will immediately provide to the Minister or Director-General a substitute Bank Guarantee for an amount not less than \$35,000.


Schedule 1 - Park Works Schedule

Description of works	Party responsible for carrying out of works	Plan detailing works
<ul style="list-style-type: none">Construction of a road and car parks within the National Park .	SMB	Annexure A
<ul style="list-style-type: none">Works within part of the National Park consistent with the Eastern Habitat Corridor Restoration Plan	SMB	Annexure B

Signing page

EXECUTED as a deed.

Signed by **Seven Mile Beach Holdings Pty Limited** in accordance with Section 127(1) of the Corporations Act 2001:


Signature of Director

ROBIN F.C. WISE
Name of Director:


Signature of Director/Secretary

BRUCE DOUGLAS PORTER
Name of Director/Secretary

Signed sealed and delivered for and on behalf of the **Director-General of the Department of Environment and Climate Change** in the presence of:


Signature of witness

KAREN GARLAND
Name of witness


Signature of Authorised Signatory

LISA CORBYN
Name of Authorised Signatory (print)


Signed sealed and delivered for and on behalf of the **Minister Climate Change and the Environment** in the presence of:


Signature of witness

Athea Kannane
Name of witness in full


Signature of Authorised Signatory

VERITY FIRTH
Name of Authorised Signatory (print)



Annexure A – Survey plan of Park Road and Development Road

Deed for the carrying out of works | page 22

LIDBURY, SUMMERS & WHITEMAN

LS&W

CONSULTING SURVEYORS, PLANNERS & ENGINEERS

Incorporating Degotardi Smith & Partners (Forster)

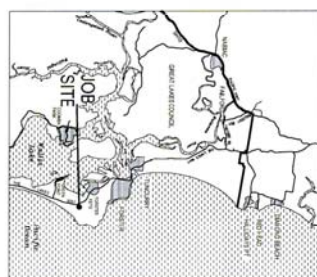
1st FLOOR, 3 WHARF ST. FORSTER 2428 (02) 65547988 FAX (02) 65549378
PO BOX 510 FORSTER NSW 2248 EMAIL consult@iswureyors.com.au

**SEVEN MILE BEACH
ECOLIVING RESIDENTIAL DEVELOPMENT.
THE LAKES WAY, SOUTH FORSTER.**

SHEET INDEX

NO SHEET DETAILS

- 2 LAYOUT PLAN AND LONGITUDINAL PLAN CH 00 - 681.92
- 3 LAYOUT PLAN AND LONGITUDINAL PLAN CH 689.12 - 1182.487
- 4 CROSS SECTION ROAD 17 CH 00 - 210
- 5 CROSS SECTION ROAD 17 CH 225 - 405
- 6 CROSS SECTION ROAD 17 CH 420 - 575
- 7 CROSS SECTION ROAD 17 CH 585 - 750
- 8 CROSS SECTION ROAD 17 CH 765 - 960
- 9 CROSS SECTION ROAD 17 CH 975 - 1155
- 10 CATCHMENT PLAN & CROSS SECTION ROAD 17 CH 1170 - 1187.487
- 11 DRAINAGE CALCULATIONS
- 12 STORMWATER MANAGEMENT PLAN AND DOCUMENTATION
- 13 STORMWATER MANAGEMENT PLAN DIAGRAMS



LOCALITY PLAN



RESEARCH, NOTED

2. SITE WORKS ARE TO BE UNDERTAKEN IN ACCORDANCE WITH GREAT LAKES COUNCIL EROSION AND SEDIMENT CONTROL POLICY AT THE CONSTRUCTION COST.

3. ALL THE PHOTOCOPIES TO BE CLEARED SHALL CARRY A WRITTEN AFFIDAVIT FROM THE CLAIMANT TO THE EFFECT THAT ALL INFORMATION SPECIFIED IS NOT RESIDENT.

COLUMBIA UNIVERSITY LIBRARY

CUTTING DOWN, FELLING, THINNING, LOGGING OR REMOVING NATIVE VEGETATION, INCLUDING: DESTROYING, REMOVING, INJURING OR DAMAGING NATIVE VEGETATION, INCLUDING: STOPPING OR LOGGING BRANCHES, LIMBS, STEMS OR TRUNKS OF NATIVE WOOD SPECIES, SIGNIFICANTLY DAMAGING OR REMOVING NATIVE VEGETATION IN ANY OTHER MANNER.

[illegible]

5. IT IS THE CONTRACTORS RESPONSIBILITY TO INSURE THAT ALL EROSION AND SEDIMENT CONTROL WORKS ARE MAINTAINED AS REQUIRED IN THIS SPECIFICATION AND CONSTRUCTED FOLLOWING THE STANDARDS STATED IN THE GREAT LAKES COUNCIL EROSION AND SEDIMENT CONTROL POLICY.

THESE ARE SOME OF THE REASONS WHY

6. CONCURRENT WITH THIS PLAN, ALL IN NO WAY REDUCE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ADJACENT WATERS OR AND DAMAGE DURING THE COURSE OF THE CONTRACT.

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and information: 01 61 433 60 00 - 433 60 01

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CONTRACTOR AT THEIR COST.

12. CONTROLS SHOW DEFECTIVE TROPOCALIN EXPRESSION IN SPOT LESIONS
BROOD CONTROLS DO NOT REPRESENT THE EXPECTED LEVEL AT ANY
PARTICULAR POINT.

13. SUBJECTS SHOWN TO PARTICIPATE WERE NOT
EXCLUDED FROM THE STUDY.

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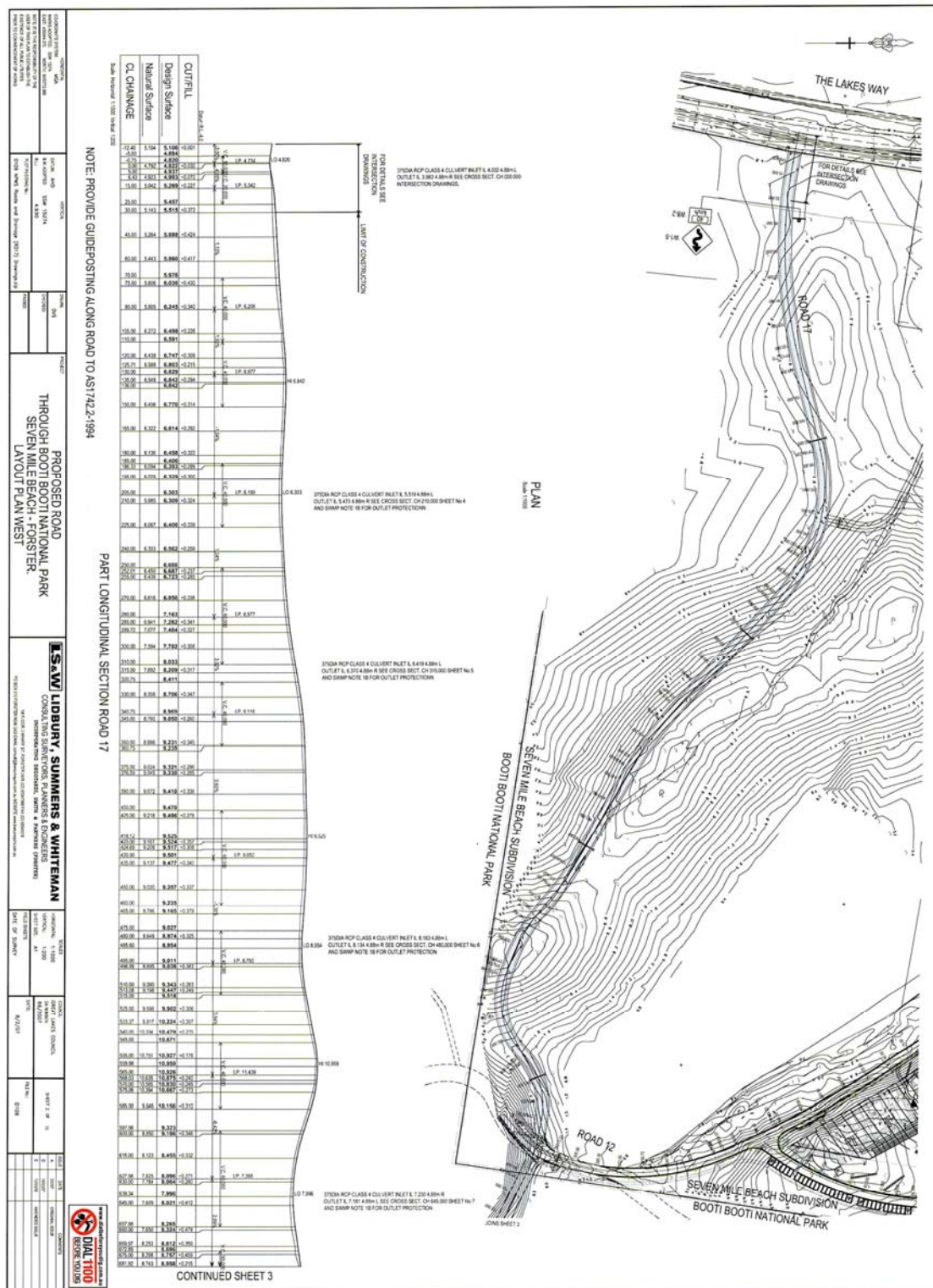
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US Manufacturing Index, 1997 to 2007

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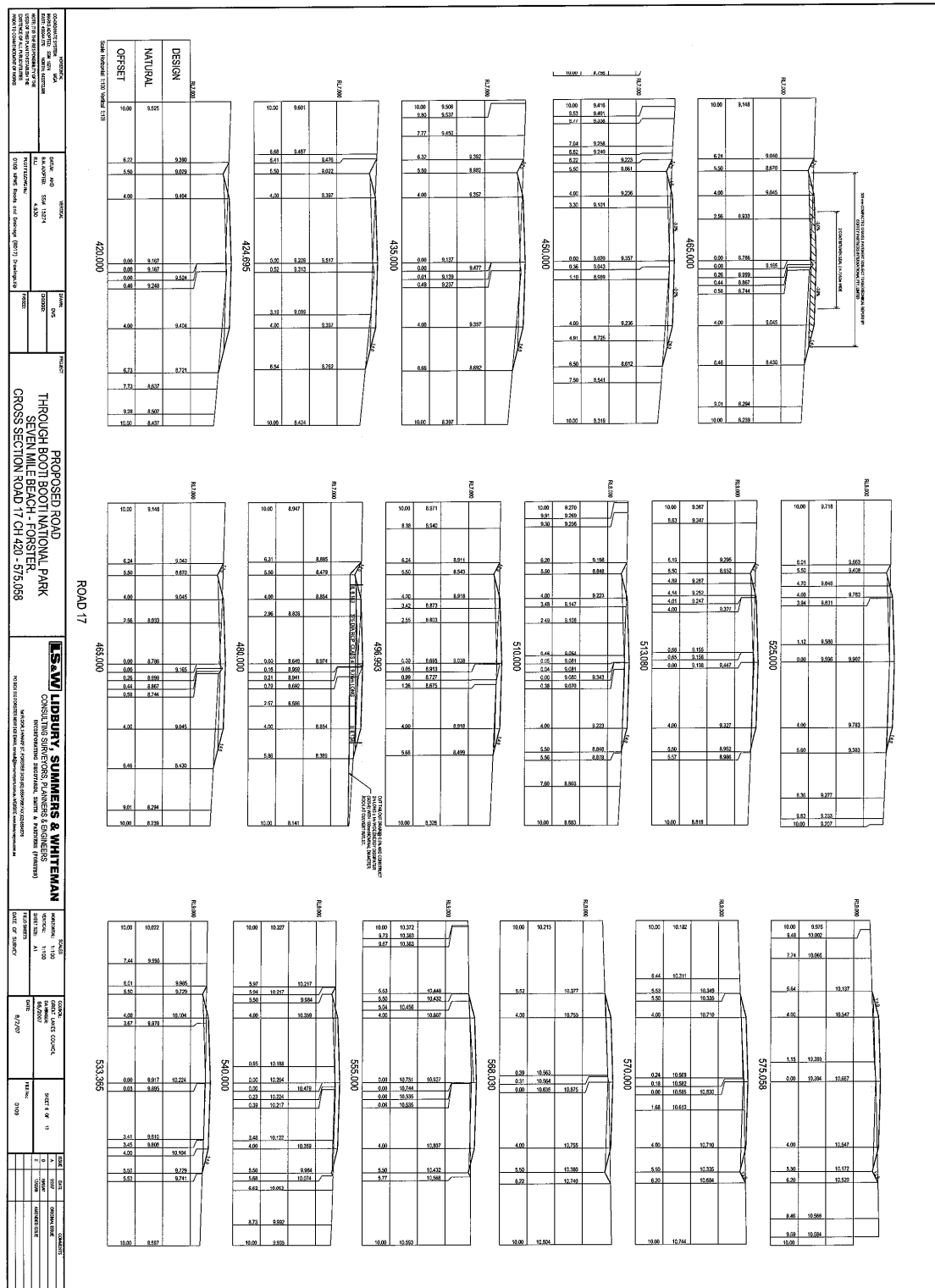
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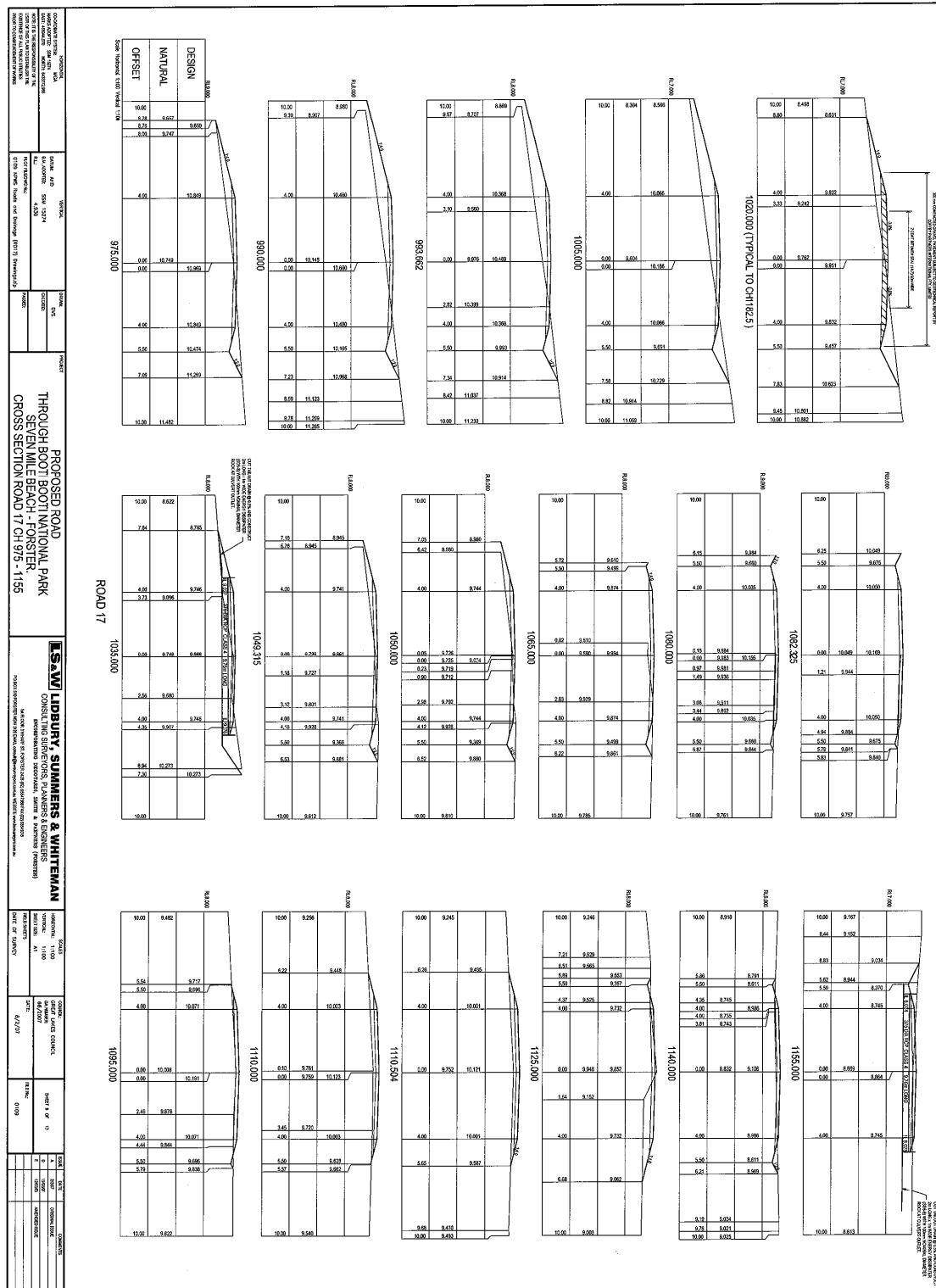


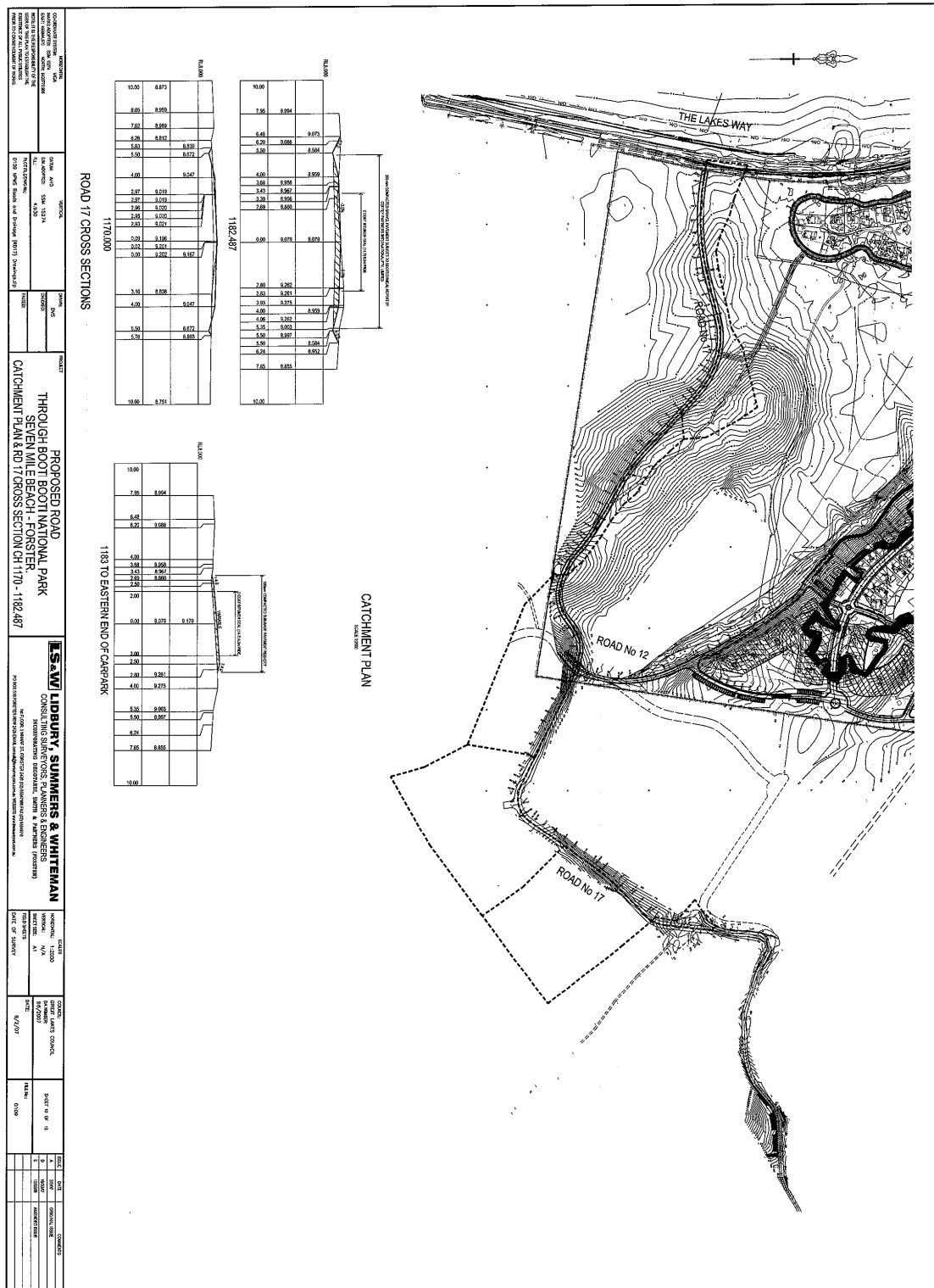












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<p>PROPOSED ROAD THROUGH ROOFTOP PARK SEVEN MILE BEACH - FORSTER STORMWATER MANAGEMENT PLAN DIAGRAM</p>		<p>STOCKPILES SD 4-1</p> <p>1. Pile of material to be stockpiled. 2. Pile of material to be stockpiled. 3. Pile of material to be stockpiled. 4. Pile of material to be stockpiled. 5. Pile of material to be stockpiled.</p>	
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SPECIFICATIONS

**ROAD & DRAINAGE CONSTRUCTION FOR AN ALTERNATIVE ACCESS
ROAD TO BOOTI BOOTI NATIONAL PARK**

Council Ref:

Our Ref: 109

EXTENT OF WORK:

THE SITE: SEVEN MILE BEACH & BOOTI BOOTI NATIONAL PARK

1. DRAINAGE: ALL DRAINAGE AS SHOWN ON THE PLANS

2. ROAD WORK: ROAD NO. 17 THE LAKES WAY TO CH695 (BITUMEN SEALED) & CH695 TO CH1175 & GRAVEL CAR PARKS

The current edition of Great Lakes Council Construction and Quality Control Requirements Specification forms part of the overall specification as follows:-

C101	General
C201	Control of Traffic
C211	Control of Erosion and Sedimentation
C212	Clearing and Grubbing
C213	Earthworks
C220	Stormwater Drainage
C221	Pipe Culverts
C222	Precast Box Culverts
C223	Drainage Structures
C224	Open Drains including Kerb and Gutter
C230	Sub-Surface Drainage
C231	Subsoil and Foundation Drains
C232	Pavement Drains
C233	Drainage Mats
C241	Stabilisation
C242	Flexible Pavements
C244	Sprayed Bituminous Surfacing
C262	Signposting
C263	Guide Posts
C264	Guardfence
C265	Boundary Fencing
C271	Minor Concrete Works
C273	Landscaping

Lidbury, Summers & Whiteman
DATE: 19/03/07

SCHEDULE TO
STANDARD DRAWINGS

CONSTRUCTION OF ROAD & DRAINAGE AN ALTERNATIVE ACCESS
ROAD TO BOOTI BOOTI NATIONAL PARK

Our Ref: 109

Council Ref:

LOCAL GOVERNMENT AREA: GREAT LAKES

PROPRIETOR: SEVEN MILE BEACH SYNDICATE

DESCRIPTION OF WORK:

The work covered in this specification comprises the construction of Road & Drainage as shown on the accompanying plans prepared by Lidbury, Summers & Whiteman & numbered 109 (14 sheets).

All work is to be carried out to the approval of Lidbury, Summers & Whiteman and to the Local Government Council referred to above.

The Superintendent referred to in this specification shall be a representative of Lidbury, Summers & Whiteman.

PLANS

The following standard drawings from the Great Lakes Council and Department of Main Roads refer to the works, and are explanatory of and/or supplementary to the specifications.

DMR STD NO. 143
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NOTE: A copy of each of the standard drawings and/or annexure listed above must be available on site with the approved plans for Council's inspecting officer's referral.

Lidbury, Summers & Whiteman
DATE: 19/03/07

THE CONTRACT

The contract will be a lump sum contract in accordance with Australian Standard 2124-1992 that forms part of these specifications. All insurances are to be in accordance with the contract aforesaid.

The Contractor shall submit to the Superintendent prior to commencement of any work details of Public Risk and Workers' Compensation policies in respect of this particular work.

All works are to be in accordance with the specification and attached to Great Lake Council's Schedules to Specification and annexure and the approved drawings.

DESCRIPTION OF WORK

The work covered in this specification comprises the construction of road and drainage works as shown on the accompanying plans prepared by Lidbury, Summers & Whiteman and numbered 109 (14 sheets).

All work is to be carried out to the approval of Lidbury, Summers & Whiteman and to the Council referred to above. The Superintendent referred to in this Specification shall be a representative of Lidbury, Summers & Whiteman.

COMPLIANCE AND LIAISON WITH COUNCIL

The work shall be carried out in accordance with the requirements of Great Lakes Council to the approval of the Engineer or other duly accredited Officer of that Council. Any item requested by Great Lakes Council, which will be an extra to the Contract, shall require the prior approval of the Superintendent.

Notwithstanding that the contract will be administered by Lidbury, Summers & Whiteman, the Great Lakes Council's Engineer is to be given at least 24 hours notice of the following stages of construction.

Such notice will be given by the superintendent or a representative after consultation with the Contractor on commencement of job.

- (a) Commencement of job.
- (b) Completion and consolidation of formation.
- (c) Commencement of pipe laying.
- (d) Completion of pipe laying prior to backfilling of trenches.
- (e) Completion of conduits prior to backfilling.
- (f) Construction of kerb and gutter.
- (g) Placing of base course.
- (h) Placing of surface course.
- (i) Surfacing of pavement.

NATURE OF GROUND

Where trial shafts, trenches or borings have been made and for the guidance of tenderers are shown on the drawings, tenderers are advised that the Principal assumes

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no responsibility whatsoever regarding the information so supplied and tenderers must satisfy themselves in all particulars as to the nature of the ground and the requirements occasioned by the work.

The Contractor shall not have any claim on the Principal for extra payment on account of the nature of material found in excavations whether the nature of the materials is shown on the drawings or otherwise.

DIVERTING WATER & DEWATERING

The Contractor at his own expense shall take all necessary action to divert any surface and/or subsoil water from interfering with the progress of the works. He shall keep these free from such water and shall take all reasonable measures to prevent any injury to the works by water due to flood, seepage or other causes.

Any work or material damaged by water from any source shall be taken up, replaced with fresh material and reconstructed by the Contractor at his own cost, to the satisfaction of the Superintendent.

Subject to any Act of Parliament, Ordinance or Regulation the Contractor shall satisfy himself as to the necessity of timbering and/or dewatering any excavation and shall accept sole responsibility as to its being required.

The Contractor shall obtain any necessary permits from the Department of Industrial Relations at his own cost and pay any necessary fees. In withdrawing timbering the Contractor shall exercise every precaution against slips and falls by means of intermediate shoring, planking or props. Filling in shall be carried out concurrently with withdrawing the timber.

Attention is directed to the requirement of the Scaffolding and Lifts Act 1912-1960 that prescribe conditions to be observed for the safety of workmen engaged in the excavation work, and in particular Regulations 95 and 98 (part vii) inclusive.

Tenderers are to make provision in the prices tendered for the full observance of these Regulations.

INFORMATION SUPPLIED

The Principal does not represent that information made available to the Contractor shows completely the existing site or sub-surface conditions. The Principal is not responsible for any interpretations, deductions and conclusions made by the Contractor from the information made available and the Contractor shall accept full responsibility for any such interpretations, deductions or conclusions.

SITE CONTROL

The Contractor and all Sub-Contractors shall observe all Rules and Regulations in force in the area in which the works are to be carried out and shall comply with all notices and instructions issued by the Superintendent in relation to such Rules and Regulations.

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The Contractor shall provide proper fencing, guarding, lighting and watching of all works comprised in the Contract and such temporary roadways, footways, guards and fences as may be rendered necessary for the accommodation and protection of foot passengers, vehicles, animals and the public.

The cost of the work under provisions of this Clause shall be included in the contract lump sum price.

The Contractor shall comply with directions from the Superintendent regarding provisions for traffic within 24 hours of being notified otherwise other arrangements may be made by the Superintendent and charged to the Contractor.

WORKING HOURS AND COUNCIL INSPECTIONS

Normal working hours are to apply.

7.00 am - 5.00 pm Monday to Friday and 8.00 am - 5.00 pm Saturday.

CARE OF SURVEY MARKS

In addition to the survey marks necessary for setting out the works as defined in Clause 28 of the General Conditions of Contract, the Principal may have other survey marks for its own purposes.

The Contractor shall preserve and maintain in their true position all such survey marks. Should any survey marks be disturbed or obliterated, the contractor shall immediately notify the Superintendent. The cost to the Principal for the replacement of these marks shall be borne by the Contractor.

REINSTATEMENT

Prior to the issue of a *Certificate of Practical Completion*, all surplus material and rubbish shall be removed and the whole of the site left clean and neat in appearance. Any road pavement, footpaths or kerb and gutter disturbed or destroyed during construction shall be reinstated to a condition at least equal to that existent before commencement of operations.

Similarly, the whole work shall be left in a neat and tidy condition at the end of the Defects Liability Period.

MAINTENANCE

Upon the Superintendent certifying that the works have achieved practical completion the Contractor shall lodge a deposit with Council or make other suitable guarantee arrangements with Council.

The amount of deposit or guarantee shall be 5% of the cost of constructing the works, excluding clearing costs.

The deposit shall be held by Seven Mile Beach Syndicate and is to cover any defects that may arise in the period of 1 year after the release of the subdivision plan.

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During this period any defects brought to the attention of the Contractor shall be rectified to the satisfaction of the Council's within one month of such notification. If not rectified, the Council shall be at liberty to rectify same and apply the deposit towards or in payment of the cost thereof.

After the end of 1 year after practical completion and it is the Contractor's responsibility to apply for the return of the maintenance bond or, any unexpended balance of deposit shall be refunded or guarantee cancelled, notwithstanding operation of the option in the previous paragraph.

The Contractor shall provide proper fencing, guarding, lighting and watching of all works comprised in the Contract and such temporary roadways, footpaths, guards and fences as may be rendered necessary for the accommodation and protection of foot passengers, vehicles, animals and the public.

The cost of the work under the provision of this Clause shall be included in the contract lump sum price.

ASSOCIATED ACTS

Listed below are some of the Acts related to the *Occupational Health and Safety Act*. The Contractor is required to observe the requirements of these Acts and the associated regulations, orders and rules and any relevant current OH & S requirements.

Construction Safety Act 1912.
Dangerous Goods Act 1975
Mines Inspection Act 1901.
Factories, Shops & Industries Act 1962.

The Contractor must, at all times, exercise any other necessary and reasonable precautions appropriate to the nature of the work and the conditions under which the Contract is to be performed for the safety of all persons on the work site, or in the vicinity.

MANDATORY SAFETY REQUIREMENTS

Safety precautions must include, but not limited to the following matters:-

- (a) Safety Helmets as defined in AS 1801 - must be worn by all supervisors, employees and visitors on the building or demolition work sites. This is an essential requirement of the Contract, notwithstanding the requirements of any Acts or Regulations.
- (b) Overhead protection and fencing - must be provided as is requirement by Regulations or obviously necessary for the protection of persons or property from falling or flying material or objects.
- (c) Safety protective clothing, footwear and equipment - must be provided and worn where required by law or otherwise where necessary for safety and occupational health.

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- (d) Scaffolding, handrails, ramps, ladders etc. - must be provided where necessary and must comply as a minimum with the relevant legal requirements.
- (e) Trenches and excavations - must be shored, strutted, battered or benched as required by the Acts and Regulations.
- (f) Lighting - must be adequate and must not produce unsafe glare.
- (g) Explosive powered tools - must be operated by personnel holding appropriate certification.
- (h) Blasting explosives - must only be taken onto the site with the written permission of the Superintendent and used, handled and stored in accordance with relevant Acts and Regulations.
- (i) Asbestos and asbestos cement - products must be handled in accordance with the Regulations.
- (j) Work in confined spaces - proper care is to be exercised whenever a person is required to enter or work in a confined space. Smoking and naked lights are to be prohibited at all times in any confined space and within six (6) metres outside of any access opening. If adequate natural ventilation is not available, then forced ventilation must be used. When live sewage is involved an attendant is to remain as an observer outside near the entrance while any person is inside the confined space. When entry is first made to any confined space at the start of a shift or after a meal break, there shall be at least one attendant located outside. Attention is also drawn to AS 2865 - Safety in Confined Spaces.

Engine exhaust gases and toxic fumes are to be prevented in enclosed or poorly ventilated working areas.

REPORTS

The Contractor is to promptly report to the Superintendent all accidents involving death or serious personal injury. If requested by the Superintendent, the Contractor must furnish a written report in the form directed by the Superintendent.

Reports of all accidents involving loss of time or incidents with serious accident potential such as equipment failures, slides, cave-ins etc, giving such information as may be required by the Superintendent must be promptly submitted by the Contractor. The reports are to be submitted in the form directed by the Superintendent.

OCCUPATIONAL HEALTH AND SAFETY COMMITTEE

The Occupational Health and Safety Act requires a Committee to be established, if;

- (a) there are 20 or more persons employed at a place of work and a majority of the persons so employed requests the establishment of a Committee; or
- (b) The Occupational Health, Safety and Rehabilitation Council of New South Wales directs the establishment of a Committee at the place or work.

If an Occupational Health and Safety Committee is established in accordance with the Act, such a Committee must be formed and operated in accordance with the Regulations. The Superintendent or nominee shall have the right to attend and to address all meetings of the Safety Committee.

ENVIRONMENTAL PROTECTION

The Contractor shall take all steps necessary to protect the environment at all times. The Contractor shall ensure that Council's Ordinances regarding the preservation of trees etc. and other requirements of the preservation of the local environment and amenity of the area are strictly adhered to. The Contractor shall obtain the written approval of Council for the removal of any trees or shrubs and these shall be identified and flagged onsite in conjunction with the Superintendent prior to removal.

Any disturbance to existing vegetation or natural features shall be minimised and the extent of areas required for carrying out the works will be subject to the approval of the Superintendent.

All natural areas disturbed during the execution of the works shall be restored and all rubbish or surplus materials removed and disposed of to the satisfaction of the Superintendent.

DAMAGE

The Contractor shall make good all damage or present proof of settlement of all claims for damage caused by his works before the issue of the Certificate of Practical Completion for the section of the work in which the damage has occurred provided that in the case of insurance claims still in dispute at that time, the Contractor shall present from the insurance company with which the insurance policy is held, a list of outstanding claims and undertaking to meet all payments on claims which are decided in favour of the claimant.

The Contractor shall present proof of settlement of all claims by Public Authorities for works carried out by the Authorities as a result of works under this contract before the Final Certificate will be issued.

TEMPORARY FENCES/STOCK CONTROL

The Contractor shall supply all materials and construct where and when directed by the Superintendent a temporary fence comprising "Ringlock" type mesh or equivalent, a single barb and 2.4m long steel star pickets driven 1m into the ground at 5m intervals.

Temporary fencing shall be arranged to prevent any accidental access to the work area by unauthorised persons or stock, but at no stage shall it prevent stock from access to water or to the balance of a property being traversed.

At completion of each days work, safety childproof fencing shall be installed along edges of open excavations to insolate them from the public. The fence shall be at least equivalent to one sheep wire netting tied to firmly driven star pickets at 3m centres. Where necessary fenced walkways and vehicular crossways shall be provided across

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trenches to maintain access from carriageways to individual properties or within individual properties. All such installations shall be of adequate size and strength and satisfactorily lit.

FILLING

The subdivision area shall be filled to the contour lines shown on the plan and the finished surface shall have a minimum of 100mm of approved topsoil. Care shall be taken with the filling to ensure approved topsoil remains uncontaminated. Care shall be taken with the filling to ensure that there shall be no resultant ponding on any of the surrounding properties. All disturbed areas shall be topsoiled and grass seeded.

Filling shall be carried up in horizontal layers, extending the full width of the fill area, not more than three hundred millimetres thick, loose measurement.

Each layer shall be compacted to 95% of the standard maximum dry density when tested in accordance with AS1289 E1-1977 and AS1289 E3-1977 in accordance with attached geotech report.

During compaction the material shall be maintained at the optimum moisture content. If it is necessary to increase moisture content, the layers shall be watered by sprinkling with an approved sprayer which gives uniform distribution of water over the whole area. The Contractor shall have sufficient watering equipment available at all times.

SEDIMENT AND EROSION CONTROL

- 1) All works shall be carried out in accordance with plans approved by Council's specification C211.
- 2) All plans for civil construction works involving site disturbance, excavation or filling must be accompanied by an Erosion and Sediment Control Plan (ESCP) which details the proposed method of erosion and sediment control on the construction site.
- 3) Any cut and fill operations of the site shall be approved by Council's Engineer or shown on approved plans with suitable erosion control measures prior to the commencement of any work.
- 4) All access to and within the construction site shall be controlled restricting vehicle and plant access to a single, well defined area to avoid excessive ground disturbance. All accesses shall be provided with temporary protection from surface erosion, by suitable design and standard control measures.
- 5) Stockpiles of topsoil, construction and landscaping materials and other site debris, shall be located clear of drainage lines, easements or natural water courses.
- 6) Topsoil shall only be stripped from approved areas and shall be stockpiled for re-use during site rehabilitation and landscaping. Where topsoil cannot be effectively used on site, eg roadways, the material shall be transported and used effectively on other construction sites. Adequate protection of topsoil stockpiles, access tracks and disturbed areas from wind erosion shall be provided during dry periods at Contractor's cost.

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7) Uncontaminated run-off such as surface water drainage shall be intercepted on the higher level of the site and diverted via approved channels around all disturbed areas. Diversion drains should be rendered erosion-proof and should discharge safely to a sediment control structure at non-erosive velocities in accordance with the guidelines.

8) Where an open drain or watercourse flows through the construction site the contractor shall provide measures to decrease flow velocities, and prevent soil and building materials entering the easement or watercourse.

9) All sediment control techniques including catchment drains, contour banks, detention basins, settling ponds, hay bale or gabion barriers, sediment traps, silt fences and the like shall be constructed to prevent sediment and other debris leaving the site or entering downstream drainage lines or natural watercourse or drainage easements prior to the commencement of work. All such control measures shall be maintained in a sound and workable condition at Contractor's cost and shall not be removed from the site until permanent rehabilitation measures have been completed to the satisfaction of Council.

10) Trenches shall be backfilled, capped with topsoil and compacted to a level at least 75mm above adjoining ground level and shall be turfed or sown with an approved seed and fertiliser mix where not within road pavements.

11) All disturbed areas shall be rendered erosion-resistant by turfing, mulching, paving, grass seeding or otherwise suitably stabilised within 14 days of completion. Disturbed areas without such protection shall not exceed sizes as shown on approved plans.

12) Material imported to the site for road base construction should be free from living weed material, weed propagules and soil borne pathogens (such as the fungus *Phytophthora*).

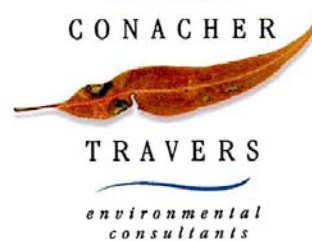
13) Machinery employed in the construction of the road should be free from weed propagules and soil borne pathogens. Machinery is to be washed down and cleaned before entry into Booti Booti National Park, unless the same machinery has been utilised within the confines of the Seven Mile Beach Eco-living Residential Development precinct.

14) The use of grass seeding as an erosion control measure as stated under "Sediment and Erosion Control" (*sheet 11*) will only be permitted where the grass species is sterile and no spread is possible eg Sterile Rye Grass, Annual Rye Grass and Sterile Annual Rye Corn.

Dated: 19/03/07

Deed for the carrying out of works | page 23

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**EASTERN HABITAT CORRIDOR
RESTORATION PLAN**

FOR

SEVEN MILE BEACH

**LOT 103, 142 AND 178
THE LAKES WAY,
FORSTER**

**DECEMBER 2005
(AMENDED MARCH 2008)
(REF: 5242DA)**

**EASTERN HABITAT CORRIDOR
RESTORATION PLAN**

FOR

SEVEN MILE BEACH

**LOT 103, 142 AND 178
THE LAKES WAY,
FORSTER**

**DECEMBER 2005
(AMENDED MARCH 2008)**

Conacher Travers

Environmental Consultants
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5242DA	March 2008	Final	September 2005	JT	JT

Seven Mile Beach
Eastern Habitat Corridor Restoration Plan

PREFACE

This management plan has been prepared as a supporting document required by the Ecological Site Management Plan (ESMP).

The Ecological Site Management Plan (*Conacher Travers*, 2005c) supports the Great Lakes Development Control Plan No. 34 – Seven Mile Beach, Forster (DCP No. 40) and should be read in conjunction with the following supporting documents:

- Bushland Management Plan (*Conacher Travers*, 2005a),
- Pest Species Management Plan (*Conacher Travers*, 2005d),
- Squirrel Glider Habitat Management Plan (*Conacher Travers*, 2005e), and
- Tree Management Plan (*Conacher Travers*, 2005f)

This Eastern Habitat Corridor Restoration Plan (EHCPR) has been prepared by *Conacher Travers Pty Ltd* to provide details on the restoration of flora and fauna habitat within the Eastern Habitat Corridor and selected portions of the development area. Most importantly, the EHCPR identifies the restoration measures within Booti Booti National Park within and adjacent to the Eastern Habitat Corridor. All of these restoration measures aim to enhance canopy connectivity for Squirrel Gliders, provide replacement foraging habitat and to minimise negative impacts associated with the development on Booti Booti National Park.

Sections 1 and 2 of this document provide background and supporting information of the Site. This places the management of the Eastern Habitat Corridor within the context of the development as a whole. The remainder of this Plan outlines more specifically the management strategies to be implemented within the Eastern Habitat Corridor.

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SECTION 1.0 - INTRODUCTION AND BACKGROUND



1.1 INTRODUCTION

This Eastern Habitat Corridor Restoration Plan (EHCPR) has been prepared to provide details on the restoration of flora and fauna habitat during and after construction of the proposed Eco-residential development at Lot 103, 142 and 178, The Lakes Way, Forster (referred to herein as "the Site").

The primary objective of this EHCPR is the provision of an alternative habitat corridor unaffected by the proposed development on secure conservation lands. The Eastern Habitat Corridor is located across the boundary of the Seven Mile Beach development and the adjacent Booti Booti National Park. The secondary objective is restoration of canopy and sub-canopy habitat throughout the development to provide:

- Consolidated vegetated corridors both within and surrounding the site,
- Restoration of arboreal connectivity,
- Vegetative restoration of previously sand mined or disturbed areas,
- Supplementary planting within existing regenerating vegetation.

Consideration has been given to identifying appropriate vegetation communities that previously occurred within Booti Booti National Park which in turn have become the target vegetation communities to be established within and immediately adjacent to the Eastern Habitat Corridor.

1.2 SUPPORTING DOCUMENTATION

The Ecological Site Management Plan (Conacher Travers, 2005c) supports DCP No. 40 – Seven Mile Beach and should be read in conjunction with the following supporting documents:

- Environmental Validation Report (December 2004)
Conacher Travers Pty Ltd
- Conservation Land Use Management Plan (CLUMP) (December 2004)
Conacher Travers Pty Ltd

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Eastern Habitat Corridor Restoration Plan

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- Bushfire Protection Assessment (amended February 2005)
Conacher Travers Pty Ltd
 - Bushfire Emergency Response Plan (December 2004)
Conacher Travers Pty Ltd
 - Bushfire Contingency Plan (December 2004)
Conacher Travers Pty Ltd
 - Bushfire Fuel Management Plan (December 2004)
Conacher Travers Pty Ltd
 - Tree Management Plan (August 2005)
Conacher Travers Pty Ltd
 - Bushland Management Plan (October 2005)
Conacher Travers Pty Ltd
 - Aboriginal Heritage Impact Assessment (2004)
Andrew Roberts, ARC Consulting
 - Species Impact Statement (2003)
Ecotone Ecological Consultants Pty Ltd
 - The addendum to the Species Impact Statement (2004)
Ecotone Ecological Consultants Pty Ltd

1.3 FAUNA ROOSTING AND MOVEMENT

The Site provides suitable movement opportunities for a variety of fauna species including birds, terrestrial and arboreal mammals, reptiles and amphibians. These include movement as part of a species home range and also for the purposes of dispersal and migration.

Fauna habitat within the Site adjoins extensive areas of similar habitat to the north, south, east and west including Booti Booti National Park. This connectivity provides a movement corridor from north to south and east to west across the Site. Fauna species may move in response to seasonal foraging resources (eg Squirrel Glider, Eastern Blossom-bat), suitable weather conditions (eg Wallum Froglet), and for dispersal or migration.

As part of seasonal movement, any particular species is likely to utilise differing habitat niches, as availability and type of resources changes between areas. For example, Squirrel Gliders will forage on Cabbage Palms (*Livistonia australis*) in inundated closed forest during October then move to dryer Red Gum Forest when Blackbutt (*Eucalyptus pilularis*) starts flowering in early November. Squirrel Gliders will move to a den closer to

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their current foraging habitat. Consequently Squirrel Gliders need arboreal connectivity to a variety of den sites.

Recent survey work has been undertaken by *Conacher Travers* as part of the verification process as outlined in the Environmental Validation Report. Additional surveys were undertaken on site for Squirrel Gliders, micro-chiropteran bats and amphibians during optimal seasonal conditions.

The results of these surveys have verified the occupation and movement of Squirrel Gliders, micro-chiropteran bats and amphibian species within the entirety of the Site. This EHCRP supports the establishment of a secure habitat corridor for the movement of Squirrel Gliders and other threatened species around the Site and into Booti Booti National Park. Through the opportunistic amphibian surveys it has also been confirmed that the Northern and Southern Conservation Precincts are ideal habitat for Wallum Froglet and other amphibian species. The protection measures to be implemented across the development and within the habitat corridors will provide critical support for these populations.

These surveys have identified local movement patterns and foraging resources utilised by locally occurring fauna species. Radio-tracking of Squirrel Gliders has identified the weekly movements of four (4) Squirrel Gliders across the Site and within adjacent lands. Approximately ten (10) den sites or shelter trees have been identified during surveys, but as a total of 26 Squirrel Gliders have been tagged, we expect that further den sites are actively used throughout the development area.

Two (2) tracked Squirrel Gliders have been recorded crossing The Lakes Way from the Site towards private property to the west. One of these gliders appears to periodically den across the road and utilises foraging resources both on the Site and on adjacent lands to the west.

Further evidence has also shown these Squirrel Gliders regularly foraging on both sides of The Lakes Way gliding across the road as required. Two (2) Gliders were observed foraging together in *Acacia longifolia* within the study area, and five (5) minutes later observed foraging in *Acacia longifolia* adjacent to the road on its opposite side of the Lakes Way.

One (1) Squirrel Glider which dens in the north-eastern section of the Site frequently travels approximately 250 metres each night to forage within Booti Booti National Park. One (1) other Glider which dens within the Northern Conservation Precinct, forages throughout the north-western section of the study area adjacent to the Northern Habitat Corridor and also further north along Sweet-pea Road.

The Species Impact Statement (Ecotone 2003) produced for the Study Area recorded the presence of one (1) threatened micro-chiropteran bat species, Little Bentwing-bat (*Miniopterus australis*). Other local records included the Eastern Freetail-bat (*Mormopterus norfolkensis*) and the

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Greater Broad-nosed Bat (*Scoateanax rueppellii*). The Little Bentwing bat usually roosts in caves, which do not occur within the Site or on adjacent lands. The Eastern Freetail-bat and the Greater Broad-nosed Bat roost and breed within hollow-bearing trees. Although no bats have been recorded utilising hollow trees within the Site they have been observed roosting underneath the stems of Cabbage Palm fronds and gleaning dew off the palm fronds. Bats are likely to be using a number of hollows within the Site and throughout the local area.

1.4 SITE CHARACTERISTICS

The planning and cadastral details of the subject site are provided in Table 1 while Table 2 summarises the geographical characteristics of the site.

Table 1 - Site Details

Location	Lot 103, 142 and 178, The Lakes Way, Forster
Area	Approximately 69 hectares
Topographic Map	Forster 1:25 000 9433-IV-S
Grid Reference	457200E 6433700N
Local Government Area	Great Lakes Council
Existing Land Use	Vacant (disused sand mine)
Proposed Development	Eco-residential development

Table 2 - Geographical Site Characteristics

Elevation	Less than 10m AHD
Topography	Low rolling sand dunes
Slope	Mostly 0 to 2 degrees with some slopes to 6 degrees
Aspect	Various
Soil Type	unconsolidated Quaternary alluvium
Catchment	Wallis Lake
Drainage	Overland flow into un-named tributary connecting to Wallis Lake to the west of the site. Perched water table within the site and Booti Booti National Park created by an impermeable clay layer.
Vegetation	Broad-leaved Paperbark Open Forest Paperbark / Saw Sedge Open Forest Paperbark / Twig-rush Open Forest Forest Red Gum / Swamp Oak Open Forest Blackbutt Closed Forest Cabbage Palm Closed Forest Smooth-barked Apple Open Forest Blackbutt Open Forest Mixed Eucalypt Open Forest Tall Open Heathland Low Closed Heathland Disturbed Land

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1.5 PROPOSED DEVELOPMENT

An eco-residential development is proposed to be constructed within the Site. The proposed development has been sited mostly within previously disturbed areas. Additionally, areas within the site and adjacent to the eastern boundary within Booti Booti National Park are to be restored and managed to provide consolidated flora and fauna habitat and arboreal corridors through and adjacent to the Site. Native tree species will be planted to restore canopy habitat hence providing additional arboreal fauna connectivity through the proposed residential areas.

The location of the Eastern Habitat Corridor Restoration Area (EHCRA) and the Canopy Restoration Area (CRA) within the proposed development are shown on Figure 1.

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SECTION 2.0 - HABITAT RESTORATION STRATEGY



2.1 RESTORATION MEASURES AND MANAGEMENT STRATEGIES

The vegetation within the site will be managed and protected as discussed in Section 1.4.2 of the Conservation and Land Use Management Plan (CLUMP). Protective measures and management strategies recommended within the site are as follows and as shown on Figure 1:

- The establishment of a Vegetation Protection Zone which shall include the Eastern Habitat Corridor Restoration Area (EHCRA), the Northern and Southern Conservation Precincts and the Northern and Western Habitat Corridors;
- Removal and control of exotic weeds and invasive species from the whole of the subject site including all Conservation Precincts and habitat corridors;
- Restoration or replacement of the native vegetation in highly disturbed areas within the Eastern Habitat Corridor Restoration Area (EHCRA) to complement vegetation communities within Booti Booti National Park;
- Supplementary planting of suitable endemic native tree species within the Canopy Restoration Areas (CRA) to provide canopy connectivity within the proposed development area;
- Continued monitoring and maintenance of the condition of the vegetation within the whole of the subject site;
- The establishment of arboreal fauna bridges at strategic locations if required due to tree removal.

The rehabilitation of vegetation and habitats within and adjacent to the subject site will result in the increase in area and quality of roosting and foraging habitat available, provide better vegetative and arboreal connectivity and will also protect and enhance the current and future value of the habitats within the local area.

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2.1.1 Current Condition of Vegetation

The vegetation within and immediately adjacent to the Site consists of the following vegetation types (Ecotone 2003),

Table 3 - Vegetation Communities

Vegetation Community	Dominant Species
1 Swamp Forest* (1a, b, c)	Paperbark (<i>Melaleuca quinquenervia</i>)
2 Open Woodland	Forest Red Gum (<i>Eucalyptus tereticornis</i> / <i>Casuarina glauca</i>)
3a Closed Forest	Blackbutt (<i>Eucalyptus pilularis</i>)
3b Closed Forest	Cabbage Palm (<i>Livistona australis</i>)
4a Open Forest	Smooth-barked Apple (<i>Angophora costata</i>)
4b Open Forest	Blackbutt (<i>Eucalyptus pilularis</i>)
4c Open Forest	Mixed <i>Eucalyptus</i> species
5 Tall Open heath	<i>Banksia aemula</i> , <i>Allocasuarina defungens</i> , various species
6 Low Closed Heathland	<i>Banksia oblongifolia</i> , <i>Leptospermum laevigatum</i> , various species
7 Cleared/ disturbed land	Various species dominated by <i>Melaleuca quinquenervia</i> and <i>Leptospermum laevigatum</i> (Coastal tea Tree)
8 Littoral Rainforest	<i>Cupaniopsis anacardioides</i> .

* Note: Vegetation Community 1a consists of a canopy of Broad-leaved Paperbark with very little understorey. Vegetation Community 1b is distinguished from 1a by an additional *Melaleuca* (*Melaleuca linariifolia*) and an understorey of *Gahnia sieberiana*, whilst 1c is distinguishable by a sedge understorey of predominantly *Baumea juncea*.

The condition of the Disturbed Land within the Site is generally poor, containing sparse regenerating *Melaleucas* and Coastal Tea Trees.

The remainder of the vegetation communities are generally of medium to high quality. However, there are large areas in the central, northern and western parts of the subject site where regular underscrubbing have been undertaken.

Woody weeds such as Lantana and Blackberries are present in the less disturbed areas of native vegetation, but do not occupy large contiguous areas. Whisky Grass, Crafton Weed, Lantana & Bitou Bush are common within disturbed areas of Booti Booti National Park.

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2.1.2 Identified Management Issues

A summary of the management issues are presented below.

- Retention of Native Vegetation – This will be achieved through the retention of all canopy vegetation, not impacted by building envelopes or roads, the implementation of Tree Protection Zones (TPZ) and the promotion of endemic species.
- Loss of Bio-diversity & Native Fauna Habitat within Local Area – This will be addressed through restoration and supplementary planting using endemic native species, bush regeneration within remnant native vegetation areas and supplementary planting of endemic canopy trees or shrubs
- Domestic and feral animal control – this will be addressed across the development through providing limitations on the ownership of pets, education and suitable fencing. Feral animal control measures will be undertaken in accordance with Council guidelines and the Pest Species Management Plan (*Conacher Travers, 2005d*)
- Noxious & Environmental Weeds – targeted weed control will be undertaken including Cut & Paint, Drill & Poison, Scrape & Paint, Spot Spray Herbicides according to the Bushland Management Plan (*Conacher Travers, 2005a*)
- Control of Garden Escapes & Introduced Plants - targeted weed control will be undertaken within and around lots and general weed control will be undertaken throughout whole of site. This will primarily be implemented and enforced through the provisions of the Community Management Statement.
- Erosion and Sediment Control – methods to be implemented include the installation of erosion control fencing around building sites, sediment basins and in critical drainage lines according to Councils guidelines. Monitoring of erosion control structures will occur on a daily basis throughout the construction phase and on a monthly basis during the post-construction phase, particularly following heavy rainfall.
- Nutrients and pollutants – this will be addressed through the re-direction of overland flow to open swales, restricting the use of high phosphate household chemicals and installation of nutrient control devices such as bioswales. Gross pollutant traps will be installed, including grills and traps, within the stormwater collection system.
- Asset Protection – Asset Protection Zones (APZ) will be provided as per Schedule 1 of Bushfire Protection Assessment measures (*Conacher Travers, 2005g*). The management methods employed for these areas include underscrubbing, retaining threatened species and removing noxious & environmental weeds.

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2.2 HABITAT REGENERATION

Generally it is proposed to undertake regeneration activities (including supplementary planting) within the Northern and Southern Conservation Precinct, habitat corridors and the Eastern Habitat Corridor Restoration Area with the aim of providing habitat for the following fauna groups:

- Amphibians
- Reptiles
- Birds
- Arboreal Mammals
- Terrestrial Mammals
- Flying Mammals and Microchiropteran Bats
- Gliders

Consequently a variety of vegetation communities will be restored throughout the site corresponding to topography, water tables and existing surrounding vegetation (Figure 1). The target vegetation communities include:

- Forest Red Gum / Swamp Oak Forest
- Blackbutt Closed Forest / Smooth-barked Apple Open Forest
- Cabbage Palm Closed Forest
- Tall Open Heath
- Littoral Rainforest

In addition, superfluous tracks will be closed, ripped, brush matted and replanted restoration near natural surface drainage patterns. Any useable road base will be recovered and utilised throughout the park.

Amphibians

Amphibians require a water body and suitable waterplants, surrounding vegetation or other debris such as logs or rocks for shelter. Threatened amphibian species known to occur within the local area include the Wallum Froglet (*Crinia tinnula*).

The Northern and Southern Conservation Precincts provide ideal habitat for threatened and other amphibian species. During the recent verification surveys, *Conacher Travers* has identified that the Wallum Froglet is utilising the Northern and Southern Conservation Precincts.

It is anticipated that the Wallum Froglet would be likely to utilise the Eastern Habitat Corridor as an overland linkage between the lower lying areas of the Northern and Southern Conservation Precincts.

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Reptiles

The proposed habitat restoration and supplementary planting within the site will stabilise the sandy soil surface and provide vegetation suitable for a large variety of reptiles. The proposed regeneration works will consolidate the local habitat corridors enabling the movement of reptile species within the local area and will also increase and consolidate the area of habitat available to them. One threatened reptile is known to occur within a 10km radius of the site. This is Stephen's Banded Snake (*Hoplocephalus stephensii*) (DEC, 2005).

Birds

Forest birds require a range of habitats provided by the various tree, shrub and ground layers of vegetation. Food resources of forest birds range from seeds to fruits, nectar, insects and invertebrates. Additionally forest birds require suitable nesting and roosting resources such as suitable hollows or branches with suitable cover.

There is suitable habitat throughout the site for a variety of avian fauna species. The loss of habitat due to selected removal of existing vegetation within development areas will be compensated by the rehabilitation of native vegetation within landscaped beds habitat corridors and canopy restoration across the site.

Arboreal Mammals

This group includes possums, koalas and gliders. Possums are almost exclusively arboreal and feed on fruits, flowers, nectar and insects. Koalas feed on a limited number of eucalypt species. The Atlas of NSW Wildlife has records of Koalas less than 1km from the subject site and of Eastern Pygmy Possum approximately 3km from the site (DEC, 2005).

The Squirrel Glider is found from rainforest through sclerophyll forest to tree heath. Banksia and myrtaceous shrubs and trees are favoured (Turner and Ward, 1995). An important determinant of habitat quality may be the proportion of the year in which pollen is available and the species is usually associated with a floristically diverse shrub community, especially those including *Banksia* species. The vegetation within the Open Forest vegetation communities provides good habitat for Squirrel Gliders which have been identified within or adjacent to the subject site.

Restoration of the Eastern Habitat Corridor situated partially within the subject site and also within Booti Booti National Park will provide additional and better quality vegetation. The vegetation restoration within and adjacent to the subject site will consolidate and enhance the Habitat Corridor network enabling the movement of gliders throughout the local area.

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Planting of native species within selected areas of the site and the Habitat Corridor will provide high quality vegetation (especially with regards to increased diversity and the presence of large numbers of *Banksia* species) suitable for the Eastern Pygmy Possum. The restored vegetation will also provide vegetated cover over currently cleared parts of the site and adjacent areas and will therefore increase the area of foraging habitat available to the Eastern Pygmy Possum. The vegetation restoration within and adjacent to the subject site will consolidate and enhance the Habitat Corridor network enabling the uninhibited movement of arboreal mammals throughout the local area.

Terrestrial Mammals

This group includes the macropods (kangaroos and wallabies), potoroos and quolls. The Atlas of NSW Wildlife has a record of the Vulnerable Spotted-tailed Quoll approximately 7km from the subject site (DEC, 2005). Potoroos prefer some shrubby cover and it is expected that the proposed habitat restoration will increase and enhance the foraging and movement opportunities for this species.

Flying Mammals and Microchiropteran Bats

This category includes Microchiropteran Bats and the Grey-headed Flying-fox.

Microchiropteran bats require a range of habitat features such as small hollows or cracks in bark for diurnal roosting, and a variety of foraging habitats such as the canopy tops, open water and flyways through forest. A number of bats not listed as threatened inhabit the local area as well as a number of threatened bats such as the Greater Broad-nosed Bat (*Scoteanax rueppellii*), Common Blossom-bat (*Synconycteris australis*), Eastern Freetail-bat (*Mormopterus norfolkensis*), Large-footed Myotis (*Myotis adversus*), Little Bentwing-bat (*Miniopterus australis*) and the Eastern Bentwing-bat (*Miniopterus schreibersii oceanensis*).

Regeneration and supplementary planting will provide quality habitat providing a wide variety of foraging and future roosting habitat suitable for microchiropteran bats.

The Grey-headed Flying-fox inhabits a wide range of habitats including rainforest, mangroves, paperbark forests, wet and dry sclerophyll forests and cultivated areas. This species requires suitable trees for establishing a camp or colony, where large numbers congregate for daytime roosting. No colonies were observed within the proposed development area. The subject site contains a number of species identified in the diet of the Grey-headed Flying-fox (Parry-Jones & Augee, 2001; and Parry-Jones and Augee 1991). These are *Angophora* sp., *Banksia* sp., *Corymbia* sp., *Eucalyptus* sp., *Grevillea* sp., and *Pinus* sp.

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2.3 PROPOSED WEED CONTROL METHODS

The primary objectives of weed management are to protect natural vegetation and assist the regeneration of disturbed vegetation within and adjacent to the site. Various areas within the subject site and in the adjoining Booti Booti National Park will require differing strategies or treatments. These treatments may involve the removal of weed infestations, planting of suitable locally occurring native species and ongoing maintenance.

There are three approaches to weed control: -

1. Targeted weed control involves selective removal of noxious and environmental weeds. Weed control is prioritised according to species invasiveness and noxious weed category under the Noxious Weeds Act (NSW).
2. Bush regeneration progressively promotes regeneration of native species from the soil seed stock and involves hand removal of weeds that are competing with native species.
3. Bush restoration involves preparation of an area by weed control followed by planting of endemic native species to restore native vegetation to areas previously devoid of natural vegetation.

Targeted weed control is an instantaneous approach requiring 1-3 months to effectively kill weeds and follow up to control regrowth. Bush regeneration or restoration requires a minimum of 2 years (primary & secondary) and up to 10 years (maintenance) to control weeds and effectively regenerate native species.

A detailed plan and methods for vegetation restoration, rehabilitation and weed control within the subject site and also within the adjacent areas of Booti Booti National Park are provided in Appendix 2.

2.4 PROPOSED RESTORATION AND REGENERATION WORKS

It is recommended that natural recruitment of the tree, shrub and groundcover layers be encouraged within areas presently occupied by, or adjacent to, native vegetation wherever possible. This will require the establishment of Vegetation and Tree Protection Zones within the Northern and Southern Conservation Precincts, the Eastern Habitat Corridor Restoration Area (EHCRA) and the Canopy Restoration Area (CRA). A summary of the works required within each of the habitat restoration zones is provided below.

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Northern and Southern Conservation Precincts

These precincts occupy approximately 16.75ha in the northern and approximately 20.44ha in the southern parts of the site as shown in Figure 1. The impacted periphery areas of the Northern and Southern Conservation Precincts require weed control to facilitate the natural regeneration of the native vegetation from the existing propagules present in the soil. This will rely on the natural seedbank present in the soil and upon other propagules such as stolons, creepers and the deposition of seeds via various vectors (eg. bird droppings) from outside the site. It is not expected that planting of native species will be required in these precincts. Ongoing monitoring and maintenance of weeds is also to be undertaken in these precincts.

Eastern Habitat Corridor Restoration Area (EHCRA)

This area occupies approximately 12ha straddling the south-eastern boundary of the subject site and is part of the Eastern Habitat Corridor as shown in Figure 1. The majority of this area is within Booti Booti National Park, while 0.8ha is within the subject site. Works within this area will include primary weed control; soil preparation; planting of native tree, shrub and groundcover species; ongoing monitoring for weeds and health of planted vegetation and maintenance such as weeding and watering.

Canopy Restoration Area (CRA)

This area is situated wholly within the subject site in the north-western portion and occupies approximately 11.96ha of the site as shown in Figure 1. Works within this area will include primary and ongoing weed control; planting of native tree species to enhance and consolidate the canopy cover in this area; ongoing monitoring for weeds and health of planted vegetation; and maintenance such as weeding and watering. The enhancement and consolidation of tree canopy cover in this area will provide better canopy connectivity for arboreal mammals including Gliders, and will supplement the connectivity of the Central Habitat Corridor by providing peripheral canopy cover.

Sections 1 and 2 of this document have provided background and supporting information of the Site. This places the management of the Eastern Habitat Corridor within the context of the development as a whole. The remainder of this Plan outlines more specifically the management strategies to be implemented within the Eastern Habitat Corridor.

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SECTION 3.0 - RESTORATION WORKS PROGRAM



The restoration works program is to be implemented across two broadly defined areas including the Eastern Habitat Corridor Restoration Area and the Canopy Restoration Area. Initial works will be undertaken over a period of two (2) years, whilst ongoing regeneration and weed control works will be conducted over the remainder of the ten (10) year program. The focus of this program will be the Eastern Habitat Corridor Restoration Area, as the works associated with the Canopy Restoration Area will be part of the landscaping measures undertaken in accordance with the Squirrel Glider Management Plan.

3.1 MANAGEMENT CONTEXT

The restoration works will occur in two phases:

- Project Initiation
- Project Implementation

Project Initiation involves:

1. Preparation of a Restoration Project Management Plan.
2. Preparation of a Restoration Works Brief.
3. Preparation of detailed Restoration Plans.
4. Engagement of Contractor(s) and/or Site Manager.

Project Implementation involves:

1. The implementation of restoration works.
2. Monitoring, auditing and reporting on all works.
3. Project review and contingency restoration works.

3.2 PROPOSED RESTORATION WORKS

The proposed restoration works will be undertaken in accordance with an "assisted regeneration" approach. This involves the identification of all naturally regenerating vegetation and choosing appropriate rehabilitation tasks for the purposes of reconstructing the vegetation communities that naturally occur.

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In the case of the Eastern Habitat Corridor Restoration Area, there is significant natural regeneration, but important structural components are missing from certain areas. Therefore, whilst this program will include all the normal restoration activities, the primary aim will be to complement and enrich the natural regeneration processes using supplementary planting, seeding and brush matting.

3.2.1 Proposed Restoration Works

The following works are required within the Habitat Corridors and restoration areas:

1. Collection of locally occurring native seeds in accordance with Appendix 5 and species contained in Appendix 1;
2. Primary weed control – slashing, target spraying and selective cut and paint works;
3. Bed preparation, install erosion control banks and filter fences;
4. Install protective fencing / erosion control fences;
5. Track closure by stripping and reuse any gravel road base, ripping and reshaping the surface, installation of erosion control banks, seeding, brush matting and supplementary revegetation;
6. Revegetation using direct seeding, utilising locally occurring native plant species in accordance with Appendix 3 and species contained in Appendix 1 to promote and enrich local biodiversity;
7. Enrichment planting of tree and shrub species;
8. To eradicate all weeds within the restoration zones in accordance with the weed control and bush regeneration methodology – Appendix 4;
9. Continued monitoring and maintenance (weed control) of the vegetation within the subject site;
10. Disposal of all rubbish such as vegetative waste at authorised waste transfer stations or tip;
11. Tree protection measures to be implemented as per the Tree Management Plan (*Conacher Travers 2005*);
12. Engagement of a Project Ecologist / Environmental Project Manager to implement and co-ordinate works.

Where relevant to activities within the National Park, the Project Ecologist is to work in consultation with the nominated DECC representative, and is to seek DECC sign off at the commencement and completion of pre-construction, construction and post-construction phases of the restoration works program.

3.2.2 Vegetation Management of Asset Protection Zone (APZ).

The majority of the vegetation within the asset protection zones has been under-scrubbed and will be maintained in accordance with the relevant bushfire protection measures. To meet the requirements of the Rural Fire

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Service the following proportions of clearing need to be applied within the proposed asset protection zones (Inner and Outer Protection Areas).

Inner Protection Area (IPA)

- Retain 15-25% of the understorey and shrub layers in one or more discontinuous clumps.
- Ensure canopy gap of 2 metres to the next tree.
- Remove all ground layer litter on an annual basis.

Outer Protection Area (OPA)

- Retain 50-75% of the understorey and shrub layers in one or more discontinuous clumps.
- No canopy removal required.
- Remove all ground layer litter on an annual basis.
- The removal of weeds within the asset protection zone will largely achieve the required fuel reduction.

3.3 WORKS PROGRAM

Table 4 identifies a typical works program for the restoration project.

Table 4 - Typical Works Program (10 year)

Action	Responsibility
<i>Pre-construction</i>	
<ul style="list-style-type: none"> • Identification (flagging) of vegetation areas to be retained (TPZ) • Erection of erosion control fencing • Installation of protective fencing and signs around vegetation to be retained (TPZ) • Commencement of seed collection and propagation • Commencement of weed control & regeneration • Commencement of revegetation works • Preparation of a landscape/tree planting program • Consult with nominated DECC representative 	<ul style="list-style-type: none"> Project Ecologist/Arborist Contractor under supervision of Project Ecologist Contractor under supervision of Project Ecologist Qualified Bushland Regenerator Qualified Bushland Regenerator Contractor under supervision of Project Ecologist Contractor under supervision of Project Ecologist Project Ecologist
<i>Construction – construction certificate released</i>	
<ul style="list-style-type: none"> • Monitor erosion control fencing (monthly – especially after heavy rain) and replace if required • Inspect habitat trees during clearing and relocate fauna if required, prior to clearing • Mulching and shredding of removed vegetation in developed and rehabilitated areas • Track closure and reinstating near natural topography • Continue regeneration works 	<ul style="list-style-type: none"> Contractor under supervision of Project Ecologist Project Ecologist Contractor under supervision of Project Ecologist Contractor under supervision of Project Ecologist Contractor under supervision of Project Ecologist

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Table 4 - Typical Works Program (10 year) (Cont.)

Action	Responsibility
<i>Construction – construction certificate released</i>	
<ul style="list-style-type: none"> Monitor tree protection fencing and signs and replace if required Continuation of revegetation works within restoration zones Continuation of weed control and regeneration Consult with nominated DECC representative 	<ul style="list-style-type: none"> Contractor under supervision of Project Ecologist Contractor under supervision of Project Ecologist Qualified Bushland Regenerator Project Ecologist
<i>Post-construction</i>	
<ul style="list-style-type: none"> Remove tree protection fencing and signs Enrichment planting and monitoring of regeneration Enrichment planting and monitoring of revegetation of restoration zones Monitoring of retained trees at 12 months and two years post construction. – conduct maintenance if required Continuation of weed control and regeneration works Consult with nominated DECC representative 	<ul style="list-style-type: none"> Contractor under supervision of Project Ecologist Contractor / Qualified Bushland Regenerator Contractor / Qualified Bushland Regenerator Project Ecologist Contractor / Qualified Bushland Regenerator Project Ecologist

3.4 PROJECT COSTS

The detailed costs of implementing this program of works will be estimated with the preparation of the Restoration Works Project Management Plan and the Restoration Works Brief. These will be prepared for tendering purposes.

3.5 ENVIRONMENTAL AUDIT AND COMPLIANCE CERTIFICATION

The environmental audit and compliance certification (Appendix 7) is the responsibility of the Project Ecologist. It identifies typical auditing tasks that are expected by Local Government & regulatory agencies in implementing the works.

Typical audits include:

1. Receipt of seed collection licence.
2. Certification of Provenance for all seed stocks used in the project.
3. Certification of correct installation of protective and erosion control fencing.
4. Auditing plant survival, species diversity, plant cover and weed control.

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5. Monitor the impact of animal grazing and restoration areas and recommend appropriate protection and control measures.

6. To certify landscape plans / construction plans are consistent with the approved vegetation management plans.

The Project Ecologist plays a critical role of ensuring the successful implementation of restoration works and to advise on the most cost effective methods.

Where relevant to activities within the National Park, the Project Ecologist is to work in consultation with the nominated DECC representative, and is to seek DECC sign off at the commencement and completion of pre-construction, construction and post-construction phases of the restoration works program.

3.6 TIMETABLE OF WORKS

The typical timetable of works is provided in Appendix 6. Restoration works will be undertaken in conjunction with construction operations within developable areas of the site and will be staged accordingly.

3.7 IMPACT MITIGATION

The mitigation of potential adverse impacts of works adjacent to restoration areas will be implemented through the following procedures:

- Implementation of erosion and sediment control measures
- Identification and marking of areas to be cleared and areas to be protected before and during development / construction / regeneration works
- Protection of trees and native vegetation outside of the development areas
- Application of correct clearing techniques incorporating:
 - > Avoidance of *tree protection zones*
 - > Identification and protection of hollow-bearing trees during clearing operations
 - > Appropriate chipping of cleared vegetation and spreading of chips on-site
 - > Removal of weeds and weed propagules in such a manner that they are not spread to other areas
- Regular inspections and reports on native vegetation protection and vegetation management measures
- Retention or replacement of natural logs and rocks
- Regeneration and enrichment planting of disturbed areas
- Relocation or replacement of tree hollows into nearby trees that are in good condition.

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SECTION 4.0 - CONCLUSIONS AND RECOMMENDATIONS



Approximately 4ha of land within Booti Booti National Park will form part of the Eastern Habitat Corridor. A total of approximately 20 hectares (including the Eastern Habitat Corridor) will be rehabilitated within Booti Booti National Park providing habitat for threatened and other native species (Figure1). This plan has been developed to provide a secure habitat corridor for the Squirrel Glider, Wallum Froglet, microbats, owls and general fauna species. This corridor forms a key support mechanism for fauna movement through the development site into adjacent secure reserves.

The proposed restoration works will enrich the site's floral and faunal habitat diversity. Existing vegetation will be conserved within the conservation precincts and improved by weed removal and revegetation works.

To facilitate the restoration works, a Project Ecologist will be appointed. The Project Ecologist will undertake the following tasks:

1. To prepare and review a restoration project management plan to identify the most cost effective rehabilitation methods and to minimise the costs of each stage.
2. Preparation of contract briefs (inclusive of landscape plans) for Contractors.
3. Assessing/Revising submissions from appropriately qualified and experienced contractors.
4. Manage restoration contracts to ensure compliance with all relevant management plans.
5. Issuing compliance certificates at the successful completion of key tasks.
6. Monitor and audit key performance criteria and to report to the regulatory authorities.
7. Liaise with client, contractors, regulatory authorities (including DECC representative) and Great Lakes Council where required.

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In order to commence the restoration works within the Corridor, the following items will need to be addressed:

1. Seek approval from the Department of Environment and Climate Change (DECC) to undertake works on National Parks land.
2. Apply for licences through DECC for seed collection within National Parks lands.
3. Set up a working group in conjunction with a National Parks and Wildlife Service representative.
4. Commence preparation of a restoration works contract brief inclusive of estimated costs.
5. Seek quotation to verify all estimated costs, restoration process and contract tasks.

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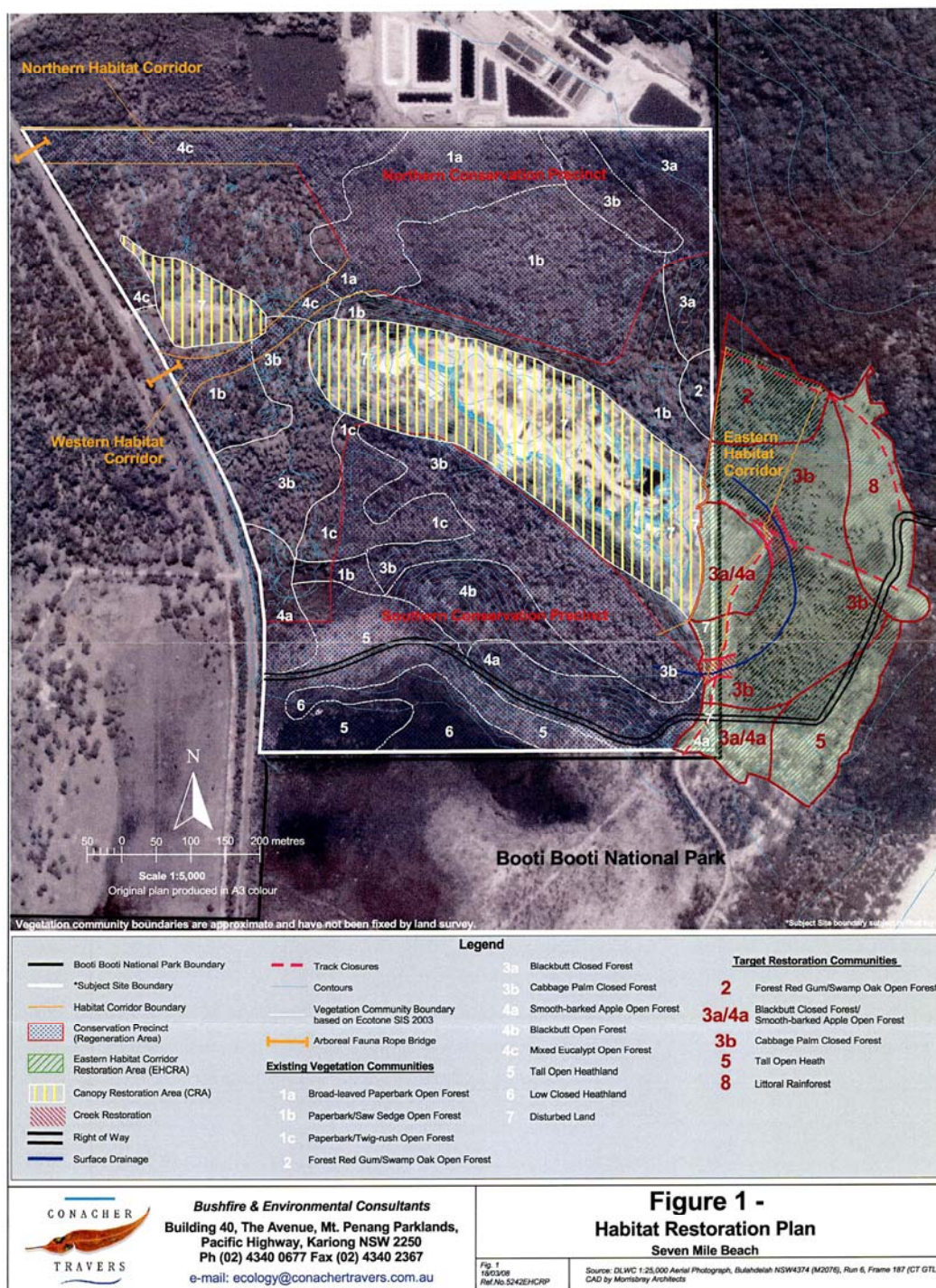
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APPENDIX 1

FLORA CHARACTERISTICS OF THE SITE

**Extracted from Species Impact Statement prepared by
Ecotone Ecological Consultants Pty Ltd (2003)**

Appendix 1. Vegetation Communities Present within the Study Area and their Floristic Composition

Vegetation Communities:

1a	<i>Melaleuca quinquenervia</i> Swamp Forest	5	Tall Open Heathland
1b	<i>Melaleuca/Gahnia</i> Swamp Forest	6	Low Closed Heathland
1c	<i>Melaleuca/Baumea</i> Swamp Forest	7	Regenerating Sand Extraction Area
2	<i>E. tereticornis/ C. glauca</i> Open Woodland	8	Cleared/Disturbed Land
3a	<i>E. pilularis</i> Closed Forest		
3b	<i>L. australis</i> Closed Forest		
4a	<i>A. costata</i> Open Forest		
4b	<i>E. pilularis</i> Open Forest		
4c	Mixed Eucalyptus Open Forest ?		

* = introduced/non-indigenous species

Species Observed:	Vegetation Community												
	1a	1b	1c	2	3a	3b	4a	4b	4c	5	6	7	8
CLASS LYCOPSIDA (Clubmosses and quillworts)													
SELAGINELLACEAE													
<i>Selaginella uliginosa</i>		X	X										
CLASS FILICOPSIDA (Ferns)													
BLECHNACEAE													
<i>Blechnum indicum</i>	X	X	X										
DENNSTAEDTIACEAE													
<i>Hypolepis muelleri</i>					X	X	X	X					
DICKSONIACEAE													
<i>Calochlaena dubia</i>		X			X	X	X	X	X	X		X	X
<i>Pteridium esculentum</i>				X	X		X	X	X	X		X	X
SINOPTERIDACEAE													
<i>Cheilanthes sieberi</i>				X			X	X	X			X	
CLASS CYCADOPSIDA (Cycads)													
ZAMIACEAE													
<i>Macrozamia communis</i>							X	X					
CLASS MAGNOLIOPSIDA (Flowering Plants)													
Subclass Magnoliidae (Dicotyledons)													
ACANTHACEAE													
<i>Brunoniella australis</i>		X		X			X	X	X				
AIZOACEAE													
<i>Carpobrotus glaucescens</i>												X	X

PHORMIACEAE											
Dianella caerulea var. caerulea						X	X	X	X		X
Dianella caerulea var. vannata					X						
POACEAE											
Agrostis aemula		X			X		X	X	X		
Andropogon virginicus *	X				X					X	X
Briza maxima *	X									X	X
Chloris gayana *											X
Cynodon dactylon *	X										X
Dichelachne micrantha		X			X		X	X	X	X	X
Echinopogon caespitosus var. caespitosus					X		X	X	X		
Echinopogon ovata					X		X	X	X		
Entolasia marginata					X		X	X	X		
Eragrostis brownii					X		X	X	X	X	
Imperata cylindrica var. major					X	X	X	X	X	X	X
Oplismenus imbecillis					X	X	X	X	X		
Panicum simile					X		X				
Paspalum dilatatum *					X						X
Pennisetum clandestinum *	X										X
Poa labillardieri					X						
Pseudoraphis paradoxa	X	X	X				X	X	X	X	X
Themeda australis					X	X	X	X	X		
RESTIONACEAE											
Hypolaena fastigiata		X	X						X	X	
Leptocarpus tenax			X						X	X	
Lepyrodia caudata									X	X	
Lepyrodia scariosa			X						X	X	
Restio pallens	X	X	X			X				X	
Restio tetraphyllus ssp. meiostachyus	X	X	X			X				X	
SMILACACEAE											
Smilax australis					X	X		X	X		
XANTHORRHOACEAE											
Xanthorrhoea macronema					X		X	X		X	
Xanthorrhoea media							X	X	X	X	
ZINGIBERACEAE											
Alpinia caerulea		X	X			X					

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APIACEAE									
Actinotus helianthi						X	X		
Centella asiatica	X	X	X						
Hydrocotyle verticillata ?	X	X	X						
Platysace ericoides						X	X	X	
Platysace lanceolata						X	X	X	
Trachymene incisa ssp incisa						X	X	X	
Xanthosia pilosa						X	X	X	
APOCYNACEAE									
Parsonsia straminea	X	X			X	X			
ARALIACEAE									
Polyscias sambucifolia ssp. A		X			X	X	X	X	
ASCLEPIADACEAE									
Gomphocarpus fruticosus *				X					X
Marsdenia rostrata				X	X				X
ASTERACEAE									
Ageratina adenophora *	X								X
Bidens pilosa *	X	X		X					X
Cassinia aculeata								X	X
Conyza sp. *								X	X
Gnaphalium coarctatum *?								X	X
Hypochoeris radicata				X					X
Olearia nernstii				X		X	X	X	X
Ozothamnus diosmifolius						X	X	X	X
Senecio madagariensis *	X			X					X
Sonchus asper ssp. glaucescens *	X								X
BIGNONIACEAE									
Pandorea pandorana				X	X	X	X		
CAMPANULACEAE									
Wahlenbergia stricta ssp. stricta						X	X	X	X
CASUARINACEAE									
Casuarina glauca				X					X
CHLOANTHACEAE									
Chloanthes stoechadis							X	X	
CONVOLVULACEAE									
Dichondra repens	X	X	X						X
Polymeria calycina	X	X	X						X
DILLIENACEAE									
Hibbertia acicularis						X	X	X	
Hibbertia aspera				X	X	X	X	X	X
Hibbertia dentata		X							
Hibbertia fascicularis						X	X	X	X
Hibbertia linearis						X	X	X	X
Hibbertia obtusifolia s. str.				X		X	X	X	X
Hibbertia scandens									
EPACRIDACEAE									
Brachyloma daphnoides							X	X	
Epacris pulchella							X	X	
Epacris obtusifolia							X	X	
Leucopogon ericoides						X	X	X	X
Leucopogon lanceolata var. gracilis				X		X	X	X	X
Monotoca elliptica				X		X	X	X	X
Monotoca scoparia						X	X	X	X
Trochocarpa laurina				X					



APPENDIX 2
WEED MANAGEMENT TECHNIQUES



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WEED MANAGEMENT TECHNIQUES FOR USE IN AREAS OF NATIVE VEGETATION RETENTION

Weeds are to be progressively removed in accordance with the following techniques recommended by the National Trust, NSW National Parks and Wildlife Service and Australian Association of Bush Regenerators.

Woody Weeds Removal Techniques:

Cut and Paint (Woody weeds to 10 cm basal diameter)

- Make a horizontal cut close to the ground using secateurs, loppers or a bush saw; and
- Immediately apply herbicide to the exposed flat stump surface.

Considerations:

- Cuts should be horizontal to prevent herbicide from running off the stump, sharp angle cuts are hazardous;
- Herbicide must be applied immediately before the plant cells close (within 30 seconds) and translocation of herbicide ceases;
- If plants resprout cut and paint the shoots after sufficient regrowth has occurred; and
- Stem scraping can be more effective on some woody weeds.

Stem Injection

- At the base of the tree drill holes at a 45 degree angle into the sapwood;
- Fill each hole with herbicide immediately; and
- Repeat the process at 5 cm intervals around the tree.

Frilling or Chipping

- At the base of the tree make a cut into the sapwood with a chisel or axe;
- Fill each cut with herbicide immediately; and
- Repeat the process at 5 cm intervals around the tree.

Considerations:

- Plants should be actively growing and in good health;
- Deciduous plants should be treated in spring and autumn when leaves are fully formed;
- For multi-stemmed plants, inject or chip below the lowest branch or treat each stem individually; and
- Herbicides must be injected immediately before plant cells close (within 30 seconds) and translocation of herbicide ceases.

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Small Hand-Pullable Plants Removal Techniques:

Hand Removal

- Remove any seeds or fruits and carefully place into a bag;
- Grasp stem at ground level, rock plant backwards and forwards to loosen roots and pull out; and
- Tap the roots to dislodge any soil, replace disturbed soil and pat down.

Considerations:

- Leave weeds so roots are not in contact with the soil eg. hang in a tree, remove from site or leave on a rock.

Vines and Scramblers Removal Techniques:

Hand Removal

- Take hold of one runner and pull towards yourself;
- Check points of resistance where fibrous roots grow from the nodes;
- Cut roots with a knife or dig out with a trowel and continue to follow the runner;
- The major root systems need to be removed manually or scrape/cut and painted with herbicide; and
- Any reproductive parts need to be bagged.

Stem Scraping

- Scrape 15 to 30 cm of the stem with a knife to reach the layer below the bark/outer layer; and
- Immediately apply herbicide along the length of the scrape.

Considerations:

- A maximum of half the stem diameter should be scraped. Do not ringbark;
- Larger stems should have two scrapes opposite each other; and
- Vines can be left hanging in trees after treatment.

Weeds with Underground Reproductive Structures Removal Techniques:

Hand Removal of Plants with a Taproot

- Remove and bag seeds or fruits;
- Push a narrow trowel or knife into the ground beside the tap root, carefully loosen the soil and repeat this step around the taproot;
- Grasp the stem at ground level, rock plant backwards and forwards and gently pull removing the plant; and
- Tap the roots to dislodge soil, replace disturbed soil and pat down.

Appendix 2 – Weed Management Techniques
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Crowning

- Remove and bag stems with seed or fruit;
- Grasp the leaves or stems together so the base of the plant is visible;
- Insert the knife or lever at an angle close to the crown;
- Cut through all the roots around the crown; and
- Remove and bag the crown.

Herbicide Treatment – Stem Swiping

- Remove any seed or fruit and bag; and
- Using a herbicide applicator, swipe the stems/leaves.

Considerations:

- Further digging may be required for plants with more than one tuber;
- Some bulbs may have small bulbils attached or present in the soil around them which need to be removed;
- It may be quicker and more effective to dig out the weed;
- Protect native plants and seedlings; and
- For bulb and corm species the most effective time to apply herbicide is after flowering and before fruit is set.

Exotic vegetation should be removed and stockpiled in a clear area away from adjoining bushland. This stockpile should be removed from the site at a convenient time. As part of the regular maintenance of the restored area any regrowth of the exotic plant species should be removed and disposed of appropriately.

Use of Herbicides

Herbicides should not be applied prior to rain occurring. This reduces the herbicides effectiveness as well as being transported in runoff to creeklines and waterways.

An advantage of herbicide use is the low time taken to spray weeds as compared to physically removing them, particularly for large infestations of weeds.

Buchanan (1989), recommends that the use of herbicides should be considered when:

- there are small areas of dense weeds with few or no native plants to protect;
- there are large areas of weeds;
- the weeds are growing too rapidly for physical removal; and
- the weeds are located in areas with a high potential for erosion if vegetation is removed.

Appendix 2 – Weed Management Techniques
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The spraying of weeds must only be undertaken by experienced persons. The success of each treatment must be evaluated by the operator after a set period of time according to the labelled effectiveness for each herbicide. Care must be taken when applying herbicides near drainage lines to avoid excess use due to the sensitivity of the waterbodies into which runoff will eventually flow.



APPENDIX 3
REVEGETATION METHODS

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REVEGETATION METHODS

1. Timetable of Work

The Contractor shall provide a preliminary planting schedule which incorporates a draft timetable of works for the planting activities. This shall be submitted at the time of tendering. A final planting schedule shall be prepared in consultation with the Project Ecologist, and approved by the Project Ecologist within 14 days of award of Contract. This schedule should be designed to minimise the time the sites are exposed and take into account seasonal factors, availability of tubestock plants, and timing of construction works.

2. Site Preparation

Site preparation activities for all planting sites will include preliminary weed control, rubbish removal and (where necessary) minor earthworks (levelling, ripping). It is expected that any bare soil areas will be sown with a nurse crop to provide temporary soil stabilisation, and (where applicable) soil erosion control measures installed.

3. Plant Material

Plant material used for revegetation within the project area shall be sourced only from local bushland areas. Contractors are responsible for obtaining all necessary permits and licenses.

All plants are to be provided in a healthy condition. They must have good root development and a sturdy shoot system. Plant with an elongated or yellowed shoot system shall not be accepted.

Planting shall be undertaken immediately after delivery. If this is not possible, the Contractor shall be required to provide appropriate storage to keep the plants in good condition on the site, adequately protected from frost, wind, sun and vermin, and secured from vandals.

4. Planting Guidelines

Planting Densities and Niche Species

Planting densities will be identified within the Restoration Brief and the Restoration Plans. These will detail the required species and their distribution across the bushland reconstruction and landscaping sites and will be supplied to the successful Contractor. The Contractor shall be responsible for planting according to these documents.

Appendix 3 - Revegetation Methods
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Only locally indigenous plants will be used. Niche preferences shall be considered in planting, with plants being placed in the correct position with regard to soil type, moisture, aspect and slope.

Planting Methods

Planting holes shall be excavated to a depth of 150 mm and a diameter of 200 mm. Slow-release native plant fertiliser (low phosphorous formulated native plant fertiliser tablet/granules) shall be placed into the planting hole. In poorly structured soils, approximately 200 cubic centimetres of native plant soil mix is to be placed and incorporated into the planting hole with fertiliser and water storing granules.

Plants must be placed into moistened soil preferably by soaking 1-2 litres of water into each hole. After planting the soil shall be replaced and carefully firmed, leaving a slight depression around each plant to allow for water collection. Soil is to be replaced in the hole so that the base of the stem is level with the soil surface, not set below the soil, or sitting above.

All plants are to be thoroughly watered before planting and again after planting. If the weather is hot, a third watering shall be carried out within two (2) days or a t-tape or drip irrigation system set up to water plants on a weekly basis.

Plant Protection

The Contractor shall be responsible for adequately protecting plant material from frost, wind, sun, vermin and animals. Two (2) Litre cardboard guards (including 2 stakes) shall be around each plant and maintained throughout the maintenance period of up to 3 years. The use of Jute mats (mulch mats) is recommended where annual or grass regrowth is expected.

Mulching

After planting, the exposed ground should be thickly mulched with low-nutrient mulch such as chipped eucalyptus. A depth of approximately 75 mm and a diameter of 400 mm around each plant are recommended. No exotic plant material is to be used. Pine bark is not considered to be a suitable mulch material. The provenance of all mulch material must be known and approved by the Project Ecologist.

Mulch is not to be used in sand dunes ecosystems as the mulch inhibits plant establishment and provides a nutrient source for the growth of weeds in dune ecosystems.

Care should be taken to keep mulch material away from the stems of the newly planted tubestock. Alternately, a light sowing of a suitable nurse crop (Rye Corn or Japanese Millet) can be made between plantings to provide a protective microclimate. Sowing rates to be used are those recommended by the supplier and agreed with the Project Ecologist.

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Maintenance and Weed Control

Tube stock must be suitably maintained (watering and weeding) are to be maintained over a 5 year period on the following basis:-

- 1-3 months post planting – weekly watering and maintenance.
- 4-12 months post planting – monthly watering and maintenance.
- 13-60 months post planting – quarterly watering and maintenance.

During the maintenance phase any plant losses in excess of 15% of the total number planted must be replaced at the expense of the Contractor.

Site maintenance shall consist of the following tasks:

- Weeding throughout the planting area;
- Watering tubestock;
- Replacing lost plants (as required); and
- Removing wind-blown or other rubbish from the planting area.

The Contractor shall provide a preliminary maintenance schedule which incorporates a timetable of works for each of the activities listed above.

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Page 3



APPENDIX 4
BUSH REGENERATION METHODS



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BUSH REGENERATION METHODS

General Description of Work

This document outlines the general principles to be used in a bush regeneration and rehabilitation program. The term bush regeneration includes both weed control and re-vegetation (planting) in bushland and semi-bushland areas.

Definitions

Bush regeneration is defined as "the practice of restoring bushland by focusing on reinforcing and reinstating the ecosystem's on-going natural regenerative processes" (Australian Association of Bush Regenerators).

Aims of Bush Regeneration

- To create an environment where native plants are able to re-colonise degraded/cleared areas.
- To restore degraded areas far as possible, to viable, manageable ecosystems.
- To protect the bushland from further external disturbance events.
- To preserve and enhance local and regional biodiversity.
- To enhance and extend habitat for native fauna.
- To protect the site's special features (natural, geological, landscape and cultural)

Process

The Bush Regeneration process involves:

- *Primary Weeding* - initial weed clearance, through hand weeding and/or the use of herbicides.
- *Secondary or Follow-up Weeding* - maintenance of sites which have already received primary weeding.
- *Maintenance weeding* - monitoring/removal of weed re-growth and care of native plant seedlings (naturally occurring and planted).
- *Re-vegetation* - the use of locally indigenous species to restore an area via tubestock planting, direct seeding, transplanting and/or brush matting.

In areas where degradation has been serious enough to severely deplete or extinguish native regenerative capacity, it may be necessary to reconstruct or fabricate a plant community as close as possible to the original. This will involve a variety of techniques, including weeding, soil remediation, planting and on-going site maintenance. Small-scale soil stabilisation, earthworks, and remedial drainage works are often required.

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Weed Control

Weed removal shall include any species likely to significantly invade bushland, prevent natural regeneration, or impede native seedling growth. Priority shall be given to species listed as 'noxious plants' in Great Lakes LGA in the Schedules of the *NSW Noxious Weeds Act 1993*. A list of target weed species within the bushland works site has been included with the tender documents (see *Table 4.2*).

Weeding Techniques

See Appendix 2 for detailed weed control techniques. Within the bush regeneration context weed control is described as the removal or control of weeds using hand removal and/or the application of selected herbicides. In specific circumstances, the use of machinery is used when the extent of the infestation is very large and will not cause significant erosion or destabilisation. Weeding techniques should be appropriate to the weed type, growth form and to the existing site conditions.

Wherever possible, weed removal should be carried out prior to annual seed set. Herbicide application via stem injection or foliar spray must not be applied to plants bearing ripe or semi-ripe fruit. It is important to plan herbicide control of target species according to a weeding calendar that recognises the weed's life form and seasonality (i.e. flowering, fruiting and seed set).

The techniques and methodologies used for bush regeneration shall conform to those identified in the *National Trust Bush Regenerators Handbook (1991)* and currently taught through the *NSW TAFE Bushland Regeneration Certificate Course*.

Labour

Bush regeneration work shall be carried out in a competent manner by experienced and qualified bush regenerators. A minimum 50% of the workforce must have completed a *TAFE Bushland Regeneration Certificate Course* or equivalent, and have suitable field experience (e.g. Minimum 200 hour's prior employment as a bush regenerator).

In assessing tenders, preference will be given to bush regeneration contractors with prior experience in the rehabilitation of bushland in the Western Sydney Region.

Use of Herbicides

The herbicide of choice for bush regeneration work is glyphosate (Roundup). Roundup Biactive shall be used in wet areas (e.g. drainage lines, sediment basin).

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The Contractor shall not use any other herbicide or chemical contrary to herbicide label.

Herbicide application shall be limited to the following techniques:

- Cut-stump and poison (cut and dab)
- Stem injection
- Stem-scrape and poison
- Basal bark painting
- Selective spot-spraying

Mulch and Cut Brush

Any mulch imported onto the site shall be weed-free eucalyptus leaf mulch or woodchip. Mulch from Privet, Camphor laurel, Coral Tree, Poplar, Willow, aquatic or declared noxious weeds are not to be used. The Contractor shall ensure that any mulch used is properly composted before use.

Brush cut for erosion control and/or re-vegetation purposes shall be used only when cut branches are seed-laden. Branches shall be spread as quickly as possible to reduce seed loss during stockpiling. The collection of cut brush shall be limited to species occurring naturally in the bushland area. If seed and or brush are required to be collected from nearby Reserves, written permission must be obtained from the Bushland Management Officer, Great Lakes City Council. Collection sites are to be agreed between the Contractor and the Project Superintendent prior to any collection of brush.

Weed Debris and Rubbish

Disposal of weed debris and other rubbish generated as a result of the work shall be the responsibility of the Contractor. Costs for disposal of rubbish (collection and tipping fees) shall be clearly stated in the tender proposal.

Disposal of weed material via burns piles is permitted only after approval has been obtained from the Project Superintendent. Any burning must be carried out as advised by the Environment Protection Authority and NSW Fire Brigade.

Soil Erosion

Where bush regeneration works have the potential to destabilise slopes or embankments, action such as the use of fibre matting and/or the placing of logs across the slope and fixing in place shall be employed to minimise the problem. Erosion matting and/or silt fencing may be required in a number

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of sites. These sites are to be identified in the tender document and allowance made for the purchase and placement of erosion control matting.

Reconstruction of Bushland (planting)

The Contractor is required to supply a set number of locally indigenous plants to be used in the bushland reconstruction areas. All plant material used on-site shall be grown from seed or cuttings collected in local bushland.

Plant material may be supplied as tubestock or as hykos. Virocells are not considered to be suitable for this site. The method of delivery (as above) should be clearly stated in the tender documents.

Planting methods are to conform to the *Revegetation Specifications*.

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APPENDIX 5
DEPARTMENT OF INFRASTRUCTURE PLANNING AND NATURAL
RESOURCES (DIPNR) GUIDELINES
NATIVE SEED COLLECTION METHODS

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HOW TO COLLECT NATIVE PLANT SEED RESPONSIBLY (VERSION 1)

To select seeds that will grow into plants that are best adapted to local conditions, collect seed from near the area where it is proposed to do the planting. If there are no suitable native species immediately nearby, then collect seed from as close as possible and from the same general habitat (same soil type, distance from watercourse, exposure etc.). The more similar the habitat, the greater the likelihood of the propagated seedlings being suitable for the planting site. As a guide, plants within about a 3 km radius can be considered satisfactory.

Seed collected from too far away may not be adapted to the local conditions and may introduce new genes to the site, thereby altering local genetic integrity.

There is one exception to the "local" rule. If the population of any of the native species has fallen to a very low level (eg. less than ten individuals of any species), then *for those species* it is advisable to supplement that seed with collections from elsewhere (but as close as possible) to ensure that there is sufficient genetic diversity to minimise the potential for inbreeding.

Where there are no native species left in the area, and no reasonable stands of native species within 3 km, then the site will probably be better treated as a garden and plants could be obtained from commercial sources. Even so, seed derived from closer to the site is preferred over seed collected further away.

Principles to follow when collecting native plant seed:

- (a) Before collecting, obtain any necessary permit from National Parks & Wildlife Service and seek permission from the land owner (private, council, Crown Lands, etc.).
- (b) Collect seed from as many different plants of the same species as possible (minimum of 5).
- (c) Collect seed from plants of varying vigour, but not individuals with obvious disease symptoms.
- (d) Collect seed from plants with different growth forms (straight, branching, straggly etc.).
- (e) Try to maintain at least 100 m between each parent of the same species, but do not collect only from the edges of a population and always include the central areas in the collection.
- (f) Do not strip plants of seed - collect no more than about 20 % of seed from any one tree.
- (g) Collect from various parts of each plant and collect equal amounts of seed from each plant.

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-
- (h) If possible, avoid collecting from solitary plants and concentrate on stands or groups of plants (this is to minimise the risk of collecting self-pollinated seed).
 - (i) Label seed containers: *species name, location, date collected, collector's name, how many plants collected from - and preferably: position in the landscape (e.g. water's edge), % of ripe seed, soil/geology, plant associations, aspect/altitude/slope, weeds present.*
 - (j) Dry out seed and store in a cool and dry place (a refrigerator is ideal) in air-tight containers.

Source: Royal Botanic Gardens Sydney, Greening Australia (NSW) & "Seed Collection of Australian Native Plants" (Ralph, M., 1994). [G:\RAW\L\RESACCES\LANDUSE\3A_GENER\Vegetation Mgt\Seed1.doc March, 1996]

Appendix 5 – DIPNR Guidelines
Page 2

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As required to 2018

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ENVIRONMENTAL AUDIT CHECKLIST

DATE	TASK	COMMENTS	ACTION TAKEN	INITIALS
Immediately prior to the start of the Construction Phase	Engage bush regeneration (seed collection and propagation) contractors. Ensure Bush regeneration consultant has applied for a Section132C licence under the TSC Act (1995) to NPWS. Initiate a weed control program targeting noxious and problem environmental weeds. Initiate propagation of native indigenous seed for revegetation works at the site. Seed collected according to the appropriate Guidelines or obtained from Local Council Check with the contracted seed regeneration consultants that seed collection permit from NPWS has been issued.			
Monthly until the initiation of the Construction Phase.	Implement weed control program. Liaise with bush regeneration contractors regarding the progress of seed collection and propagation, including equivalent species diversity as per the Planting Guide. Provenance certification of seed and tubestock by contract seed collector. Finalise a starting date for the bulk earthworks with the Construction Engineers. Order necessary planting, erosion and sediment control materials. Continually install and maintain erosion and sediment control devices as per the necessary guidelines.			
2 months prior to the Construction Phase	Revegetate in accordance with EHCRP Monitor and maintain the plantings weekly for the first 10 weeks then monthly thereafter until construction is complete. Maintain and decommission the sediment and erosion control devices as per the guidelines.			
Construction Phase	Contingency Revegetation works			
Post-Construction Phase	Monitor and maintain plantings monthly for 12 months, and quarterly after that for the remainder of the 3 year post-construction period. Maintain and decommission the sediment and erosion control devices as per the guidelines.			

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Page 1

Annexure C – Easement (section 88A)

Deed for the carrying out of works | page 24

Instrument setting out terms of Easements or Profits à Prendre intended to be created or released and of Restrictions on the Use of Land or Positive Covenants intended to be created pursuant to Section 88A Conveyancing Act 1919.

(Sheet 1 of 2 sheets)

Plan: Plan of Certificate No.

covered by Subdivision

Full name and address of the owner of the land: Seven Mile Beach Holdings Pty Ltd
c/- Suite 202, 203-233 New South Head Road, Edgecliff NSW 2027

Part 1 (Creation)

Number of item shown in the intention panel on the plan	Identity of easement, profit à prendre, restriction or positive covenant to be created and referred to in the plan	Burdened lot(s) or parcel(s):	Benefited lot(s), road(s), bodies or Prescribed Authorities:
1	Right of Carriageway	[SMB Land as marked on the plan]	Minister administering the <i>National Parks and Wildlife Act 1974</i>
2	Positive Covenant	[SMB Land as marked on the plan]	Minister administering the <i>National Parks and Wildlife Act 1974</i>
3	Positive Covenant	[SMB Land as marked on the plan]	Minister administering the <i>National Parks and Wildlife Act 1974</i>

Part 2 (Terms)

Terms of easement, profit à prendre, restriction, or positive covenant numbered 1 in the plan

Full and free right for the body in whose favour this easement is created, and every person permitted by it, to go, pass and repass at all times and for all purposes with or without animals or vehicles or both over the land indicated herein as the servient tenement.

Terms of easement, profit à prendre, restriction, or positive covenant numbered 2 in the plan

The owner of the burdened lot must erect and maintain beach warning signs in accordance with the requirements of the body in whose favour this covenant is created.

Terms of easement, profit à prendre, restriction, or positive covenant numbered 3 in the plan

The owner of the burdened lot must maintain the land indicated herein to the appropriate standard required by the body in whose favour this covenant is created.

The owner of the burdened lot must indemnify the body in whose favour the covenant is created, including the employees or officers of the benefited body, and any other person acting under the direction or control of the benefited body for any purpose and the Crown in right of New South Wales against all expenses, losses, damages and costs (on a solicitor and own client basis or full indemnity basis whichever is the higher and whether incurred by or awarded against the benefited body) that the benefited body may sustain or incur as a result, whether directly or indirectly, arising from the use of the servient tenement by members of the public.

This indemnity given by the owner of the burdened lot does not cover any loss or damage that is caused or contributed to by a negligent act or omission of any of the benefited body, including

s:\shared\project\smb1701 (seven mile beach)\section 1\national park - deed of agreement 10 april 2008\annexure c - decc deed 020408 (final).doc

APPENDIX F RESPONSE TO SUBMISSIONS (FROM APPLICANT)

Pursuant to Section 75H(5) of the Act, copies of the submissions received by the Director-General in response to the exhibition and notification of the proposal were provided to the proponent (by the Council under delegation in this instance). The Director-General required, pursuant to Section 75H(6) of the Act, the proponent to submit to the Director-General a response to the issues raised in those submissions. In this instance, a preferred project report was not required.

The response from the proponent is reproduced below:

Re: Response to issues raised pursuant to public exhibition of Proposed Integrated Eco-Residential and Mixed Use Community Titled Subdivision. MP 05 0125.

Thank you for promptly providing the responses to the Public Exhibition and Agency Notification by way of your letter dated 13 August, 2007.

With respect to the issues raised we respond as follows:

PUBLIC SUBMISSIONS.

Traffic Generation.

- Extra traffic turning into the narrow Lakes Way - This issue is dealt with comprehensively in the GHD Traffic Assessment dated July, 2005 which appears as **Specialist Report 9**. More particularly at section 4. Future traffic generation has been modelled and examined together with the performance of the proposed intersection at the Lakes Way. The conclusions of the report which appear under section 5 on page 19 clearly states at the first dot point " The proposed development has no unacceptable traffic implications in terms of road network capacity with projected peak hour traffic volumes within acceptable limits". The supplementary study dated 20 December, 2005 further confirms in the conclusions section on page 5 that the minor changes made to the development after the first report have little impact on both traffic flow and performance of the roundabout and that the additional volume is total acceptable.
- Increased traffic on the Lakes Way - Again, this issue is dealt with comprehensively in the GHD traffic assessments as set out above.
- Traffic impacts on school (Foster High) - The high school is situated to the north of the proposed development and within the 60 kilometres zone. A designated bus drop-off zone has been constructed outside the school including lead in and lead out lanes. Further, a School Zone which restricts speed to 40 kilometres per hour operates during both the morning and afternoon. As the vehicular access to the school is not situated on the Lakes Way but rather in the adjacent street which is connected to the Lakes Way via a roundabout there should be zero impact. Council also commissioned GHD to undertake a VISUM Network Model which we understand has been used to formulate the appropriate allocations in the section 94 plans for the upgrading of the road when necessary.
- Driver behaviour -speed - As it is proposed to reduce the speed limit from the existing 100 kilometres per hour down to 80 kilometres per hour on the Lakes Way starting from south of the curve in the road to south of the proposal together with the installation of the roundabout at the main entrance to the development this will significantly slow down traffic on this section of the road and prior to entering the existing residential portion of Foster thus improving safety and traffic conditions generally.
- Increase boat and caravan traffic; impacts on caravan parks and Wallis Lake -It is difficult to understand this point however we presume it again refers to increased traffic generation which has been answered in the first dot point above. It is hard to imagine how residents of the development would impact on local caravan parks. As to impacts on Wallis Lake with the large number of on-site facilities which are to be provided the impact from residents of this development on the Lakes system would be lesser than that from a typical subdivision. Given that the Foster area is bound to grow impacts from this development will be minimal.
- Lack of sufficient parking at Stockland's - increased population - The recent upgrade of the Stockland's shopping centre included substantial improvements and additions to the parking areas which have no

doubt been planned to accommodate significant future growth in the area. Traffic generated from this development is a natural part of the growth of the area and therefore is catered for.

COMPANION ANIMALS etc.

- Impact on native flora and fauna - Cats and dogs are not allowed within the development and only guide dogs are allowed subject to approval from the Executive Committee of the Community Association. This is clearly set out in BY-LAW 16 of the draft Community Management Statement which appears on page 202 of Volume 1 of the Environmental Assessment Statement. Accordingly, we believe there will be no impact generated from these animals.
- Impact on National Park - As in the point above due to the restrictions contained within the Community Management Statement that will be no impact on the adjacent National Park.

WATER SUPPLY/USAGE.

- Sustainable supply of water for proposed water features/lagoons/pools -The only water features on site are located at the entry to each precinct in the form of a recirculating low flow facility that will have a total capacity each of approximately .6 cu/m and will be powered by a low voltage submersible pump. Additionally, some of the homes will also have a water feature of a similar nature again with a capacity of approximately .45cu/m. The amount of evaporation from these units would be absolutely minimal and therefore the top-up requirements also minimal particularly given that as they are all outdoor they will receive natural top-up from rainfall. There are no lagoons on site. All of the pools are proposed to be topped up from bore water which is to be extracted locally on-site. This is part of the total water strategy for the site which includes recycled water from the adjacent sewage treatment works which will be used for toilet flushing and subsurface irrigation of individual lots. All roof water is to be returned to the ground locally at each home by way of an infiltration cell in the rear garden of each thus replicating the natural flow of water into the ground as it now exists. The only stormwater which is to be collected is off only some of the roads and again this is returned to the ground by way of infiltration through bio-retention ponds which are situated around the perimeter of the development area. Irrigation for common area landscaping, which is majoritively native in any event and therefore requires minimal watering, is also to come from the proposed bore water system and again will be returned into the ground. Accordingly, we believe that the impact of the development on local water supply will be significantly less than any other current demand for homes of a similar size and that through the proposed management techniques as outlined above the impact on groundwater will also be significantly less than conventional development and in fact should create a balance on the site.

OVER DEVELOPMENT.

- Too much development in a small area (housing density, floor space ratios, etc.) - The essence of the development proposal is to preserve sensitive vegetation on site both within the proposed north and south conservation zones as well as within the development area. Accordingly, development has been concentrated in the area of site which is either totally cleared or where the impact on the existing vegetation is minimal. As the total area of site is approximately 70 hectares and the proposed houses and apartments total 317 this equates to a density of 4.532 hectare which is extremely low by any standard. Further, it is simply take the development area of approximately 30 hectares and divide that by the total proposed development this equates to 10.572 hectare which again is more than acceptable. If you apply the classic subdivisional analysis technique of allocating 20 percent of the site area to roads etc this leaves 24 hectares (of the 30 hectares) which when divided by the 317 dwellings shows an average area per dwelling of 800 m². Again this is more than generous particularly considering a third of the dwellings are apartments. Whilst individual titles are created for each allotment within the development the lots are not fenced in a traditional sense with privacy being created by way of landscaping. In all precincts with the exception of part of the Forest one of the homes have any rear neighbours and pass open out onto common open areas which the conservation zones beyond. Accordingly a simple analysis of the lot areas created is not appropriate. The proposal also fully complies with the provisions of the adopted DCP which clearly sets out all the appropriate planning controls start
- Building height and scale (five-storey buildings) out of proportion to existing character of the area (National Park) - The proposed apartment buildings have been placed at the eastern edge of the development area as this is the part of site where the surrounding land form with the National Park rises. At the northeastern corner Janies Headland rises steeply with the land to the east of the proposed apartments also rising and

containing quite tall vegetation which forms a significant buffer between the beach and the development. A 10 hectare bush land regeneration is also to be undertaken by us on the eastern edge of site which will in due course again introduce quite tall vegetation. There is no overshadowing created into the National Park by the proposed buildings as has been demonstrated in the proposal. In fact it is only the top floor of the proposed apartments that obtained water views over the top of the existing canopy with this view being quite some kilometres out to sea. When viewed from the beach no part of the development will be visible as demonstrated on the sidelines which appear in the bottom left hand corner of **Figure 3.3**. Again, the proposed apartment development is total in accordance with the provisions of the adopted DCP and is a permitted use within the zone.

- Five (5) storey apartment buildings, visible from seven mile Beach and surrounding national parks, a great eyesore sticking up the middle of pristine, rare, vulnerable and yet stunningly beautiful environment, it should be protected and preserved for all to share, not just the rich and greedy! - Considering the significant amount of conservation because proposed by the development both within the northern and southern conservation zones as well as within the development area itself we find this comment totally offensive and ignorant. Not only is conservation the central theme of the proposal significant amounts of replanting of native vegetation are proposed over the whole site and particularly in the currently destroyed old quarry area. Accordingly, we believe that this development will provide integration of housing into the natural environment that has previously not been evidenced in the Great Lakes area.

STORM WATER MANAGEMENT.

- Off-site impacts on Wallis Lake - quality and quantity - this issue has been dealt with extensively in specialist report 10 prepared by Boyden and Partners (Coast). In section **7.0 Conclusion** that appears on page 24 of the report it states in paragraph one "The stormwater quantity and quality modelling undertaken using the RAFTS and MUSIC computer models indicates that the proposed stormwater management system would achieve the objective of limiting flow rates and pollutant export loads from the development to below existing levels". It further states in paragraph four " The analysis of the proposed stormwater quality measures predicts that the proposed stormwater management system would reduce the mean annual pollutant load exported from the development, discharging into Wallis Lake." Accordingly, it can be clearly seen that by adoption of the recommendations of the Boyden report which has been occurred in the proposal this issue has been dealt with.

ECOLOGICAL IMPACTS.

- The impact and pressure on the Janies Corner eco-system, being the sand dunes and grasses, birdlife that feed and breed in this area, right down to the little sand crabs, from increased human traffic (presumably generated by the development and improved public road system).- The current access to Janie's Corner is by way of the national parks gravel road known as Scenic Drive. As part of the development agreement that has been reached with National Parks it is proposed to replace over two kilometres of the existing road with a new sealed road passing through our property which is to be constructed and maintained by us and will thus allow the existing two kilometres of gravel road to be regenerated into natural bush land. Further, the existing road runs all the way onto the beach at the northern end of Seven Mile Beach which allows significant four wheel drive traffic onto the beach which is having a major detrimental impact on the dunal area as well as vehicles attempting to turn round on the uninformed section at the end of the road. Further part of our agreement with National Parks is to provide a 12 car carpark situated some hundred 150 metres from the end of the current road which will then be fenced off at this point and the road turned into a walking track for access to the northern end of the beach. Accordingly it can be seen that these actions will significantly reduce the damage which is currently being occasioned to this area and through regeneration over time substantially improve the plant and animal life as well as ecosystems in the area generally. Access from our site is to be by way of a new bushfire control track to be constructed by National Parks which will connect to the southeastern end of our site thus providing access to the beach well away from Janie's Corner. The improved bushfire control which will be achieved by this additional track together with the bushfire control measures proposed within our development will significantly enhance the opportunity to prevent damage to the adjacent National Park by way of bushfire.
- One of the last Cabbage Palm (*Livistona Australis*) forests in the area and maybe the East Coast of Australia. A number of these trees have mechanically moved already and in the process some have died from transplantation shock and then removed and destroyed without a word. Also this area that has a

large number of swamp Paper barks (*Melaleuca Ericfolia*) that provide pollen to Gliders, foxes, honeyeaters, and possums just to name a few that rely on them to survive. - To say that the Cabbage Palms within the site are the last in the area and maybe the Eased Coast of Australia is a totally erroneous statement. In any event it is our intention not to destroy any of the palms currently on site and to that end every single Cabbage Palm within the Palm's and Boardwalk precincts where they are most prolific has been surveyed in tagged and numbered. We have already moved some 400 trees on site date with a loss of only three. By way of the movements the current edge of the Palm Forest is being extended significantly to the east and with the further transplantation that is proposed for trees within building foot prints and the roads in the Palm's precinct which are to be relocated into the Dune's precinct the original vegetation character of site will be recreated with the palm's being evidenced over all site and not just in a small part. Further, natural propagation of the Palm's will again lead to significant extension of their existence on the site. As to the *Melaleuca's* whilst some are proposed to be removed we will also be replanting significant numbers of new trees particularly in areas which are currently barren. The proposal was subjected to the PVP developer tool by the CMA which is the most comprehensive vegetation assessment tool available and which specifically tests the impact on various species. The proposal received the endorsement of the CMA based on results of the PVP. Accordingly, it can be seen that not only is impact on the site being kept to a minimum but the significant regeneration and enhancement which is to be undertaken will positively improve the vegetation in the development area as well as the areas which are to be totally preserved.

- Gated community would restrict fauna access from Cape Hawk/ McBrides Beach to the National Park, by way of fencing barriers. Fauna would be forced to cross Lakes Way at a concentrated point only to dodge increasing traffic to cross the road (increasing road kill fatalities). - The title of Gated Community is often misconstrued such that a totally Fenced environment is envisaged. This certainly is not the case with this proposal in fact on the contrary the gates which are at the entry to the precincts (rather than the entry to the site) are to achieve traffic control as well as a level of security. Indeed, all of the boundaries of the development area to the conservation zones to the north and south of the site together with the boundry to the National Park to the east will be delineated only by the placement of posts in the ground with no wire between. There are no fences defining individual lots within the development thus allowing totally free movement of all fauna both within the development and from surrounding areas. Specific wildlife corridors have been created on both the eastern edge of the development, by creation of the northern and southern conservation zones and by way of the corridor which runs northeast to southwest on the western edge of the development area. Simply, the development is extremely fauna friendly and as compared to traditional development is vastly superior.
- The pressure put on all uncommon rare, fragile and endangered flora, fauna avifauna being: Cabbage Palms, Flowing Gums, Flying Foxes, Swamp Wallabies, Glossy Black Cockatoos, Square Tailed Kites, Goannas, Sugar gliders, Brahminey kites. - This issue has been dealt with in the points above as well as specifically through the various flora and fauna specialist reports for site dating back over many years. Further, the PVP process as stated above resulted in endorsement of the proposal by the CMA. The preservation of site as enshrined in the development proposal together with the significant amounts of native regeneration which is proposed will add to the habitat of many species. Specific measures have been taken in relation to the Gliders by way of a tracking and monitoring program which has resulted in a management plan for them.

AGENCY SUBMISSIONS.

RTA.

The RTA in paragraph four of its response states that" *it has no objections to the proposed development provided the issues, raised in its letter dated 21 February, 2006 are addressed and included in councils conditions of development consent*".

The issues raised by the RTA and specifically our responses to those issues are as follows:

- The proposed intersection at the Lakes Way which will be the access and egress point for the development has been documented as a roundabout in the application which was the preferred option after extensive discussion with Council's Traffic Engineers. The preliminary design for this roundabout

has been provided both to the Council and as part of the application which was considered by the RTA.

The agency's comment that if a roundabout is adopted the speed limit should be reduced to 80 kilometres per hour is supported by us. We also note that at the Traffic Committee meeting held on 15 August, 2007 the preferred option of the roundabout with a reduced speed limit to 80kph was recommended at point 2(a) and that this recommendation was adopted by Council on 12 September, 2007.

- With respect to the secondary accesses onto the Lakes Way to the north and south of the main intersection both of these are clearly designated on the plans which form part of the application as an emergency access points only which are to be secured by way of locked gates. The access however at the most northern end of site whilst having a locked gate to prevent vehicles from entering and leaving the site is proposed to provide a cycleway link from the extensive network of internal cycleways/pathways onto the Lakes Way where a new cycleway is proposed to be constructed by us connecting into the existing network to the north which currently terminates near the Lake's Estate. We presume the RTA's comment regarding access from both these points relates to vehicular rather than pedestrian access.
- The agency's next comment relates to the funding of road and transport infrastructure improvements that arises as a consequence of the development. This issue is dealt with by way of the Planning Agreement which has been entered into between Council and ourselves.
- The RTA's final comment relating to the dedication to the public at no cost to the RTA or Council of land associated with the intersection is agreed and would become a condition of consent. We note however that it would appear that the roundabout as designed fits within the existing Lakes Way road reserve which is quite wide.

ADDITIONAL RTA ISSUE.

We understand that following the provision of additional information to the RTA regarding the proposed relocation of the access into the adjacent national park through our southern conservation zone the RTA has objected in principle to the new proposed road on the grounds that it would represent a second access/egress point from the development.

Whilst it is true that the road would be located within the boundaries of the site it will not represent an additional traffic path onto the Lakes Way as the existing road into the National Park will be closed simultaneously with the opening of the new road once it is constructed.

In order to appropriately address this issue we engaged traffic engineers G. H. D. to undertake an assessment of the proposed relocation of the National Park access road and in this regard their report is provided herewith.

The report not only examines the performance of the new proposed road and intersection but also the condition and performance of the existing road both now and in the future with anticipated increased traffic flows.

The findings of the report are unequivocal insofar as it finds the existing intersection to be inadequate and unsuitable for future potential traffic increases whilst however endorsing the new proposed intersection and road as being a significant improvement on the existing arrangements and also meeting all required current and future safety requirements.

In addition it is clear that apart from providing the public with a much safer and more direct route to the National Park and the beach the impost on National Parks of maintaining almost two kilometres of existing gravel road will be removed particularly given that the first section of the new proposed road which is within our property is to be sealed and fully maintained by us.

Further, as part of the arrangements with National Parks a car park is to be constructed by us adjacent to the beach which will allow proper and safe parking and turning movements and combined with the closing of last part of existing road will prevent four wheel drive traffic from gaining access to the beach which is currently causing considerable damage to the duneal structure.

In summary the proposed new road will provide a much more appropriate and safe access to the Park and beach, remove a significant financial impost from National Parks and provide appropriate and safe parking arrangements for people wishing to access the beach.

DEPARTMENT OF PRIMARY INDUSTRIES.

- The Department clearly states in its response that it has no objection to the proposal.

MIDCOAST WATER.

- Midcoast Water states in points 1. and 2. of its response that the site is serviced by reticulated water and sewage and the the Department of Planning has provided conditional approval for a reticulated recycled water supply. Further, Midcoast has now provided approval for the water and sewer layout for the entire site.
- As stated by Midcoast Water it is proposed that the recycled water supply be used for toilet flushing and sub-soil drip irrigation to the individual landscaped areas of each home. Common area irrigation is proposed to be provided by way of a good supply of bore water which exists on the site.
- In point 3. of its response Midcoast also clearly states that "*it accepts the demonstrated compliance with NSW odour criteria as contained in the Odour Modelling Assessment prepared by GHD*". This statement is significant given the comment from the Department of Environment and Climate Change on page 2 of its response wherein it recommends that council seek advice from Midcoast Water regarding this specific issue.

DEPARTMENT OF ENVIRONMENT AND CLIMATE CHANGE.

Draft Statement of Commitments.

- The Department specifically states that with respect to Approvals and Licences and proposed works within the adjacent National Park it is fully supportive of the manner in which these items are dealt with by the Statement of Commitments. With respect to the Deed of Agreement with the Department this has been under negotiation with the Department's legal representatives for sometime and a final draft of the agreement which has been forwarded back to be Department is provided herewith. It is our belief that this final draft deal's with all issues raised and should be to the satisfaction of both parties.
- With respect to the issue of Tree Protection and replacement the Department's preferred replacement ratio of 2:1 is agreed and accordingly be should be adopted into any amended Statement of Commitments and subsequent consent conditions.

Aboriginal cultural heritage.

- As noted by the Department Consent to Destroy permit NO.2251 has been granted and accordingly the Department considers that all Aboriginal cultural heritage issues have been addressed.

Threatened Species.

- Again the Department notes that extensive examination of the reports and Management Plans relating to the proposal have been undertaken and that the outcomes and action's as designated in those documents are supported. The Department again also states that the Deed of Agreement needs to be executed which has been dealt above.

Potential Offensive Odours from Foster Waste Water Treatment Plant.

- The Department has raised concerns that the modelling undertaken by GHD was not appropriately detailed to account for unusual events such as Plant maintenance, increased loads and weather induced fluctuations. The Department further comments that "*a significant percentage of proposed residential properties will be located within 400 metres of Midcoast Water Foster Waste Quarter Treatment Plant*". We do not agree with this comment as is demonstrated on page 11 of the DCP which clearly shows that the 400 meter line as marked from the inlet of the treatment Plant does not actually affect any dwellings at all. Further, as the GHD report confirms the real criteria is the influence of the 2.5OU which in fact only extends 100 metres into the subject property (figure 6), which is in the northern conservation zone, and is thus well away from any potential residences.
- In any event Midcoast Water stated categorically that it accepts the outcomes of the report in its response letter to Council.

RFS.

The RFS response does not set out any objections or issues with respect to the proposal but rather confirms certain conditions and wishes to see embodied into the approval for the site.

Following the numbering used in the RFS score respondents will comment as follows:

1. This condition has been met as confirmed by the previous acceptance of the RFS of all of the bushfire study and management plans for site which were part of the LES/DCP/LEP process. Within these reports all of the road widths and alignments are clearly set out.
2. This proposed condition refers to a previous Bushfire report prepared by Conacher Travers wherein all proposed APZ's for the site are nominated. All these have been adopted both into the DCP and the subject application documentation.
3. This point refers to proposed future fuel management for the site which as the correspondence states is clearly set out in the Conacher Travers Fuel Management Plan. This plan is part of series of Management Plans for the site which are brought together in one operational plan under the Environmental Site Management Plan which in turn is specifically referenced in the Community Management Statement wherein each of the actions called up by the individual management plans set out in an Operational Works Table. The said table then states who is responsible for undertaking each action and each of the individual Management Plans also provide for a review process both for their performance and future amendment for changed conditions.
4. The issue of proposed hydrant positions is one that can be handled by way of a condition of consent and will be documented at the Construction Certificate stage when the detailed plans for the water mains for the site will be submitted as part of the engineering package.
5. The level of construction of each of the proposed buildings as stated in this point is set out in a Conacher Travers report in respect to the site in again will be a condition of consent.

Simply, the RFS has endorsed all of the previous bushfire work in respect to the site and reaffirmed its requirements that certain of the findings of those reports are carried out by way of imposition of consent conditions.

DEPARTMENT OF WATER AND ENERGY.

The initial part of the correspondence from this Department talks of administrative changes wherein it states that it was, until recently, part of the Department of Natural Resources and further states that it was not consulted as part of the Director General's Requirements. Whilst this is a matter for Council our understanding is that the Director General sets out the Department's which it requires to be consulted and further it is probable that this matter was referred on numerous occasions through the LES/DCP/LEP process to the Department of Natural Resources.

In general the thrust of the Department's objections appear to be related to their perception that we are proposing to intercept groundwater through the proposed stormwater systems for the development. This is in fact **not** the case as is demonstrated by the response which appears below to each of the points raised by the Department.

Groundwater and Groundwater Dependant Ecosystems.

In this section the Department is concerned about potential pollution of the groundwater aquifer by stormwater collected from the site. We do not believe that this will be the case.

The area of the site is approximately 70 hectares of which some 40 hectares is to be left untouched by way of the Northern and Southern Conservation Zones. The said Conservation Zones whilst containing some low-lying wet areas currently receive the majority of surface stormwater flows from site via a series of natural flow paths which then find their way to the north and into Council's table drain which sits in the Lakes Way road reserve. The water then passes through the culvert under the Lakes way and travels to the West to the lake.

The stormwater system which is proposed for the site seeks to maintain the groundwater balance and replicate the existing flow of surface waters.

Accordingly, there appear to be three main concerns for DWE:

1. Draining the perched aquifer to the underlying aquifer.
2. Pollution of the aquifer through infiltration of polluted surface water.
3. Impact of the development on GDE.

In response to these points we comment as follows:

1. There should be no impact (over existing) to the perched groundwater table since lowering of the perched groundwater table was initiated during the sand mining of the site. The proposed development does not plan to modify the perched groundwater table, but maintains the existing drainage regime. In summary, there is no intention to penetrate through the separating indurated sands to cross connect the perched water table lense with the underlying deeper aquifer.
2. There will be interaction with the underlying perched groundwater table through the swales, biofiltration basins and infiltration cells (from roofs). This interaction is intentional and is designed to replicate the existing infiltration regime and mitigate the effects of increasing the impervious fraction of the site by providing higher efficiency infiltration in localized areas, in lieu of the infiltration capacity lost through the increase in impervious areas. In terms of pollution of the groundwater from the surface water:
 - The water from the roofs will be required to pass through a sump / first flush treatment device to allow settlement of suspended solids and removal of gross solids (e.g. leaf litter) together with a fabric filter immediately prior to entering the infiltration cells. All gutters will also have leaf guards fitted. This water will be relatively free of pollutants by virtue of the fact it has come from a roof and has undergone sedimentation, prior to infiltration.
 - The water from the other impervious surfaces (Roads, Driveways, etc) will flow through a treatment train prior to infiltration to the groundwater. The swales will have a biofiltration media which will treat water prior to it infiltrating to the groundwater and the biofiltration basins will also have treatment media which will remove pollutants prior to the water entering the groundwater. Driveways will use pervious pavement which by their nature allow a significant amount of pre-treatment (e.g. up to 99% collection of hydrocarbons) to treat stormwater prior to it entering the groundwater. The alternative to allowing infiltration is to have sealed treatment infrastructure which will treat the stormwater then discharge it direct to each of the surrounding swamps (from where it will interact with the groundwater anyway). This could cause significant changes to the hydrology within the GDE's and accordingly we do not believe that this option is appropriate. (see point 3 below).
3. One of the main methods of limiting impact on the GDE is by replicating the existing surface and groundwater drainage regime as much as possible (wetting and drying cycles). The best way of doing this is to replicate the existing infiltration scenario, which means, since we are increasing the impervious fraction (which allows no infiltration), we need to promote increased infiltration in localised areas close to the runoff generation source to compensate. It should also be noted that the majority of the infiltration will occur within the development footprint where localised raising of the groundwater during events will not affect GDE.

In summary the SWMP aims to:

1. Limit the interaction of untreated surface water with groundwater by a combination of prevention, at source and conveyance controls in a treatment train; and
2. Promoting distributed, localized infiltration to compensate for lost infiltration capacity associated with the increases in impervious area as a result of the development.

The SWMP balances these two needs by treating the surface water prior to allowing infiltration.

Based on the Departments perception of the proposed Storm Water Management Systems for the site they have requested that we revise the EA however considering the responses provided herein we do not believe this is necessary.

More specifically in response to the list of bullet pointed items which the Department has requested us to address in any revised EA we comment:

- There is no significant interception and/or connection with and/or infiltration of the underlying groundwater table. Accordingly there is no necessity to examine alternative stormwater management Systems.
- There will be no mobilisation of acid sulphate soils into the groundwater. The report prepared by Coffey

which appears as specialist report number 13 clearly states that the only potential for Acid Sulphate Soils on the site would be below the water table and typically between AHD 0 to 2. As none of the excavations for either the roads, dwellings or apartments will either intercept the identified groundwater level or be below the AHD 2 this position is confirmed. Further, the Coffey report references earlier testing undertaken on the site which goes back to as early as 1994 wherein the same conclusions were reached. Whilst there is a possibility that the well for one of the two sewer pumping stations to be constructed on site may be partly below the current groundwater level is proposed that this be dealt with as a localised situation with appropriate testing at that time and a management plan to be instigated as required.

- The existing vegetation on the site will not have its local groundwater conditions changed. The whole thrust of the SWMP is to maintain the groundwater regime as it currently exists both locally and over the site as a whole. As stated earlier all roof water will be returned to the ground where it is collected, driveways will be partly impervious and again will return water to the ground locally with the only collection of water being off some of the roads which again is limited by virtue of them being private roads with significantly reduced carriageway widths. Even this water is collected in a series of very small catchments and redistributed locally. In any event more than 50 percent of the development area has no significant vegetation on it as it is the site of the old sand mining operation. The balance of the development area which is more heavily vegetated being the Palms, Fronds and Forest precincts have only minor road's within them with very narrow carriageways.
- With respect to the issue of the highest predicted groundwater level for the site this has been provided by way of the recent correspondence from Coffey and is based on testing which has occurred on the site over a period of almost 15 years and includes over 12 permanent peizometers from which readings have been regularly taken.
- In light of the information supplied herein if it is still considered that a contingency plan or ongoing monitoring of surface water and groundwater is required this can be a condition of consent .
- We believe that the response provided herein more than adequately demonstrates that water sensitive urban design principles in accordance with the current best practice have been applied to the site and that the predicted outcome from the instigation of the Storm Water Management Plan is the best available and is significantly superior to any traditional approach.

Riparian and Wetland Vegetation.

The proposed Strategic Fire Management Zones definitely do not affect any riparian or wetland areas.

GREAT LAKES COUNCIL – INTERNAL RESPONSES.

Malcolm Hunter - Wastewater Management Coordinator.

In response to the issues raised we comment as follows:

- The recycled water is to be conveyed to the site by a separate second metered water main directly from the adjacent Mid Coast Water STP. This water will be used for toilet flushing as well as being connected to one external marked tap. It is also proposed to be used for sub-surface irrigation for the landscaping of each of the individual homes. Mid Coast Water have assured us that the quality of the water that they will provide is entirely appropriate for these purposes. A full layout of the proposed mains has been provided to and approved by Mid Coast water.
- The only potential for impact on groundwater would arise through the subsoil irrigation system and, as stated above, Mid Coast Water have assured us that the quality of water to be supplied is appropriate for the purpose. If it was considered that the water quality was not appropriate then the localised irrigation to each home could be undertaken using potable water.
- There are no on-site wastewater management Systems.

Geoff Dowling - Engineering Development Officer.

With respect to Mr Dowling's further correspondence to the RTA regarding the relocation of the National Parks access road this been dealt with extensively earlier in this submission.

As to Mr Dowling's main response we comment as follows using the same headings and numbering:

Traffic.

- I. The curves which are evidenced in the road alignments in various at the precincts are a direct result of

placing the roads between existing trees thus negating the necessity for them to be removed.

ii. All road and footpath widths were negotiated and agreed with Council at the DCP stage and then embodied into that document. All road's in this application comply totally with the DCP.

III. This point is dealt with in the response provided by Lidbury Summers and Whiteman dated 11 October, 2007.

iv. This point is dealt with in the response provided by Lidbury Summers and Whiteman dated 11 October, 2007.

v. This point is dealt with in the response provided by Lidbury Summers and Whiteman dated 11 October, 2007.

vi. This point is dealt with in the response provided by Lidbury Summers and Whiteman dated 11 October, 2007.

vii. Again, the DCP contains detailed plans of all the traffic and pedestrian route to the site and the application here with is totally in accordance with those plans. Further, as stated earlier truck and garbage truck turning paths have been checked and confirmed throughout the site.

viii. The initial design for the proposed roundabout on the Lakes Way has been provided to Council and has also been checked and commented upon and endorsed by GHD. Any detailed requirements in relation to the roundabout construction such as kerb and gutter on the approaches and kerb returns can be dealt with at the Construction Certificate stage. The issue of a future bus shelter and cycleway was discussed at some length at the recent meeting at Council and again be dealt with as either a condition of consent or at the Construction Certificate stage.

ix. This point is dealt with in the response provided by Lidbury Summers and Whiteman dated 11 October, 2007.

x. This point is largely dealt with in the response provided by Lidbury Summers and Whiteman dated 11 October, 2007. In addition we note that the deed with National Parks has been approved by their lawyers including the instrument creating the right of access and all maintenance obligations. A copy of the agreement is provided herewith for Council's information. Further, an analysis of the proposed relocation of the National Parks access road prepared by GHD has been provided herewith.

Stormwater.

Points i. to iv. have been dealt with in the response provided by Lidbury Summers and Whiteman dated 11 October, 2007.

Miscellaneous.

Points i. to v. have been dealt with in the response provided by Lidbury Summers and Whiteman dated 11 October, 2007

Mathew Bell - Senior Environmental Officer/Ecologist.

This issue has been comprehensively dealt with by way of the response provided by Conacher Travers.

Alan Bawden - Senior Developments Assessment Planner.

1. The replacement plan sheets relating to the roof of the Point building have been provided. The said replacement plans show that there are no protrusions above the upper surface of the roof sheeting which the exception of the solar panels which in any event sit at a very low angle. What appeared to be " viewing decks " have also been removed and all heights shown on the drawings. The mast for the cameras will be a temporary structure initially as it is only to be used to demonstrate the views from each of the floors of the proposed five-storey apartment buildings. Accordingly, the top of this mast will be below the ceiling height of the top floor of the apartment buildings. In due course once the first apartment building is constructed a small mast will be erected to house a single camera which will hardly be above the roof sheeting and any event most unobtrusive.

2. The buildings shown in figure 3.3 are in fact shown as five storeys high whereas the measurements you refer to appears to be the heights of the ground floors with reference to AHD. The ground floor is a shown at different heights on different parts of site as a result of the apartments being broken into 6 buildings and therefore having slightly varying ground level's. It is clear however from the diagrams that there is no possibility of viewing the buildings from the beach. The figure was compiled from information supplied by Quasco who conducted a photogramatic digitally corrected survey of the entire site and surrounding areas.

3. The issue of car parking for the apartments is dealt with comprehensively in the GHD report dated **23 June, 2006** and titled **Addendum to January 2006 Report** (Specialist Report 9). Section 4 of the report which appears on page 4 and 5 confirms compliance with Council's Parking Code. The detailed tables showing how the summarised numbers were calculated appear on the following two pages. With respect to the future commercial areas in the Boardwalk Precinct whilst the final uses in that area have not yet been determined two Parking areas have been provided with a total of 53 spaces including three disabled. Additionally, a further 10 spaces have been provided behind those buildings adjacent to the maintenance area for staff parking. Appendix J which appears on page 215 of Volume 1 of the Environmental Assessment Statement contains a table which calculates the required parking for this area and demonstrates a significant surplus. The GHD reports which appear as Specialist Report 9 state that all turning paths throughout the site had been checked and comply however should further information be required prior to the submission of detailed plans for the basement areas as part of the Construction Certificate Applications this can be quickly supplied upon request. The Lidbury Summers and Whiteman response which is attached hereto also addresses all aboveground car parking dimensions.

4. Safer by Design principles have been addressed throughout site and this is confirmed by way of the report

5. Detailed drawings for the new proposed National Park roads and other works have been provided with the Lidbury Summers and Whiteman response. This road **will not** be used as a temporary haulage road as part of stage one works as previously indicated. With respect to the environmental issues surrounding this road the report of Conacher Travers concerning this matter has been provided to Council.

Yours Faithfully,

Robin Wise

APPENDIX G ENVIRONMENTAL ASSESSMENT

To be provided on disk.