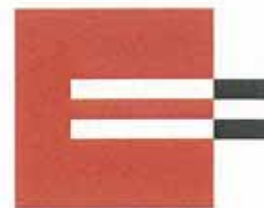




AriadneMarinas



PLACE

PLANNING & DESIGN

## PROJECT APPLICATION

Outline and Preliminary Environmental Assessment



Submitted to NSW Department of Planning  
on Behalf of Ariadne Marinas



## BATEMANS BAY MARINA RE-DEVELOPMENT

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## EXECUTIVE SUMMARY

This report is a Preliminary Environmental Assessment (PEA) which identifies key issues relating to the proposed redevelopment of the Batemans Bay Marina located at Beach Road, Batemans Bay, NSW.

The proposed redevelopment is considered to be a Major Project, which is assessable by the NSW Department of Planning under the provisions of Part 3A of the Environmental Planning and Assessment Act 1979 (EP&A Act). The purpose of this report is to assist Planning in preparing the Director General's requirements for preparation of the Environmental Assessment.

The report provides a description of the intended marina re-development and identifies the key environmental considerations associated with the proposal.

The Batemans Bay Marina represents a highly significant re-development opportunity for the Eurobodalla Shire and the South Coast Region. The project has the potential to provide support and growth to the local marine and tourism industries, to facilitate much needed local employment and to stimulate the local economy.

Environmental management practices, technologies and safeguards relating to the Marina operations are proposed to be vastly improved, while the redevelopment would provide leading tourism, coastal recreation and marine education facilities and infrastructure for the benefit of the Batemans Bay community and visitors to the Region.

## Background

This project was initiated by NSW Department of Lands (Lands) as the current owner of the Batemans Bay marina. A conceptual redevelopment proposal was prepared by Lands in recent years in consultation with and in support of a number of existing and potential marina user groups and stakeholders, including the wider Batemans Bay community.

In July 2006 Lands initiated the procurement of the project by launching an open tender process for the marina redevelopment to the private sector. Under this process a preferred tenderer was selected based on a number of assessment criteria. The successful tenderer was announced as being Ariadne Australia Limited (Ariadne), whose wholly owned subsidiary Batemans Bay Marina Developments Pty Ltd is the applicant of this Major Project Application and Preliminary Environmental Assessment.

In August 2006 the Department of Lands, through its consultants Maunsell Australia Pty Ltd (Maunsell) prepared and submitted a Preliminary Environmental Assessment for the proposed conceptual re-development of the Batemans Bay Marina. During Lands tender procurement process the redevelopment concept was further developed and refined by the successful tenderer, having regard to the preceding environmental investigations and community consultation process.

The current Major Project application is now re-submitted by Ariadne's wholly owned subsidiary, Batemans Bay Marina Developments Pty Ltd, based on the amended redevelopment plans. This revised PEA has therefore been prepared in order to update the August 2006 PEA submitted by Lands to reflect the changes and refinements made to the redevelopment design and to the project applicant.

## Batemans Bay Marina – Site Description

Batemans Bay Marina is located on the southern bank of the Clyde River, approximately 2 km south-east of the Batemans Bay Town Centre on Beach Road. The marina site is located within Crown Land and is known as Lot 11 in DP 124295 and Lot 11 in DP 870049. Both allotments

have a combined area of approximately 12 ha and a land area of approximately 3,500m<sup>2</sup> with the remainder comprising water, sea walls and tidal sand flats.

Existing facilities within the marina comprise:

- Two storey marina administration building with related amenities, storage buildings and 15 place car park.
- A floating marina with capacity for 126 berths. The majority of berths accommodate boats 9m in length and less.
- Boats are accessed via pontoons and timber finger jetties accessed via a series of gangways.
- Vessel maintenance facilities are provided and include a hardstand and inclined slipway.
- Temporary re-fuelling facilities are located adjacent to the hardstand, however no sillage pump out service is provided.
- 25 place car park located adjacent to the Harbour Marine Store, accessed via Beach Road.

Surrounding land uses that are specifically relevant to the re-development of the site include Rotary Park, Hanging Rock Recreation Area, Harbour Marine (boat sales and service), Coach House Marina Resort, the adjacent residential and commercial office properties and the Batemans Bay Town Centre.

Further information relating to the existing marina site, location and surrounding land uses is provided within section 2 of this report.

### **Project Need and Justification**

Lands has experienced strong pressure from a number of user groups and community stakeholders to upgrade and modernise the existing Batemans Bay Marina facility. The redevelopment of the current facility is necessary for the following reasons:

- most of the mooring facilities are inadequate, have reached the end of their intended service life and are in need to be replaced;
- there are no dedicated vessel refuelling and waste pump out facilities;
- the layout for the Marina is restrictive, making manoeuvring of vessels in the channels and fairways quite difficult and dangerous. Approximately 40% of vessels in the marina are oversized for their designed berth;
- non-compliance with current Australian Standards specifically Australian Standard 3962-2001: Guidelines for design of marinas and NSW Maritime Authority Guidelines: Waterways Guidelines for Marine Structures;
- four timber walkways that service 90 berths currently require significant maintenance. These structures will require replacement in the near future.
- there is a need to establish environmentally acceptable facilities and maintenance practices, better managing the adverse effects of boating.
- there is a need to ensure that recreational and commercial uses of the estuary are sustainable and to promote waterway and foreshore based activities consistent with appropriate social and environmental impacts and waterway capability
- there is a growing demand for additional mooring facilities in the Marina. The waiting list at the time of writing this project outline was 90 applications, while approximately 100 swing moorings were being used within Clyde Estuary;
- the availability of up to 25 car parking spaces in the Marina is insufficient and there is a need to provide safe vehicle access to Beach Road from the Marina;
- there is a need for land-based facilities for activities associated with the Marina that are attractive for boat owners, residents and visitors (including tourists/sightseers).





## SITE AND SURROUNDS

Surrounding land use is predominantly low density residential, recreational and commercial uses.

The proposal responds to the local contextual land uses by promoting a built form and a sense of place that are supportive and complementary to the existing, and also amplifying opportunities for enhanced activity levels in the area.



- there is a need for modernisation and expansion of the marina and facilities in order to cater for current user and tourism expectations
- there is limited administrative space for government and community organisations associated with the marine activity
- there is a need for retail and commercial space with connectivity to the marina.
- there is a need for high quality tourism accommodation, facilities and venues with connectivity to the marina.
- there is a need for improved recreational facilities and public access to the foreshore in the location of the marina
- there is a need for employment activities and economic stimulus within the Eurobodalla shire
- there is a need to support local marine and tourism industries locally through provision of more useable, modern and attractive facilities. There is a need for an anchor attraction to reinforce the tourist nature of Batemans Bay and promote access to the foreshore and to water activities.
- A feasibility study undertaken by Maunsell in 2005 concluded that the redevelopment of the existing facility was the most appropriate solution to provide for the needs above. Other alternative sites and solutions were investigated, but were found to be less appropriate than the redevelopment of the existing site.

Further information relating to the need and justification for the redevelopment project is contained within Section 3 of this report.

## **Project Description**

The Batemans Bay marina redevelopment seeks to:

- reconfigure and increase the berth capacity of the existing marina facility;
- provide highly modern and efficient marina maintenance facilities incorporating environmental best practice; and
- establish a range of ancillary and complimentary uses on adjacent and reclaimed lands, whilst improving public access to foreshore area and achieving commercial viability.

The proposed redevelopment design is illustrated in the Masterplan below. Further refinement to the redevelopment design will occur as part of the more detailed Environmental Assessment process, and in response to any specific issues raised by the Department of Planning and other referral agencies in the issue of draft Director-General's requirements.

The proposed redevelopment consists of a new marina and marine village sub-precinct, a community and commercial sub-precinct and a tourism accommodation sub-precinct. A summary of the main components of these three sub-precincts are described below.

Marina and Marine village sub-precinct will provide:

- new high quality public foreshore park and recreation area to the west of the existing Hanging Rock Boat ramp basin
- new 240 berth marina
- Vessel dry stack storage facility (Building B6) providing accommodation for 250 vessels up to 12 m in length with access via the marina basin.
- A multi-use boat maintenance hardstand with boat lift located to the north of the dry stack facility.

- Fuel services facility with pontoon located adjacent to the hardstand accommodating 3-5 vessels at any one time.
- A two storey marina related commercial and administration building (Building B5) is located along the frontage of the Clyde River and adjacent to the hardstand.
- The main entry (via a proposed roundabout at the Beach Road and Miller Street intersection) and at-grade car parking area for approximately 60 cars. An additional 190 car spaces (approximately) will service the Marine Village precinct from within the adjacent Marina – Community and Commercial precinct. This results in a total parking allocation to the Marine Village precinct of approximately 250 vehicles.
- Pedestrian, cyclist and buggy access to the marina will be via a shared boardwalk along the northern rock wall bordering the marina. An automatically raised bridge will be located over the marina vessel entrance, which will provide continuous and unimpeded public access along the foreshore between Corrigan's Beach and the Batemans Bay town centre.

The Community and Commercial sub-precinct will contain a number of ancillary commercial and community based buildings and interrelated spaces. In particular the majority of this precinct will form a vibrant waterfront entertainment, tourism and recreation precinct with a priority on public accessibility and an outdoor emphasis orientated toward the Clyde Estuary frontage. Facilities include:

- A two storey building (Building B2) is proposed to contain retail, restaurant and café tenancies on the ground floor level, whilst a marine based interpretative education research facility is intended for the first floor level.
- A two-storey building (Building B3) fronting the Clyde River is to have provision for a tavern and marine club /restaurant tenancies.
- A three-level building (Building B4) located along Beach Road to the west of the main vehicular entry and is intended to comprise retail activities on the ground floor, conference facilities on the second floor with commercial floor space on the upper level.
- Half basement and at grade car parking for approximately 295 cars, some of which will be utilised by the Marina and Marine Village.

The Tourism Accommodation sub-precinct will primarily comprise ancillary tourist based accommodation and related facilities. It will also provide a transition to the public open space and recreation spaces to the west. This area is intended to be accessed via a secondary 'left-in and left-out' only access point off Beach Road.

A three-level building is proposed comprising approximately 60 units. Half basement and at grade parking is proposed in this precinct for approximately 137 cars.

The re-development design proposal described above fulfils the following guiding design principles, which:

- Improve pedestrian connectivity along the Foreshore area to the northern extremity of the subject site by providing continuous foreshore access.
- Create an ecologically sound and sustainable development with minimal impacts on the existing environment.
- Reduce impacts on, and provide an appropriate frontage to, adjoining development.
- Provide high levels of connectivity and clearly defined access ways within and through the development site for both pedestrians and vehicles.
- Create high quality, well designed and finished architectural elements that are responsive to the coastal location.
- Create a sense of place, particularly within each of the three defined sub-precincts, being the Tourist Accommodation, Community & Commercial, and Marina & Marine Village precinct.
- Provide an appropriately scaled built form that does not visually dominate the site context.





## PROPOSED MARINA RE-DEVELOPMENT CONCEPT - MASTERPLAN



SITE BOUNDARY



TOURIST ACCOMODATION  
SUB-PRECINCT



MAIN VEHICULAR  
ENTRY / EXIT



COMMUNITY / COMMERCIAL  
SUB-PRECINCT



MARINA  
SUB-PRECINCT

BATEMANS BAY MARINA PRECINCT

OCTOBER 2007



- Improve the urban quality of the Beach Road streetscape.
- Connect the surrounding residential areas with the foreshore areas.
- Maintain important sightlines and vistas through the development site to the Clyde Estuary via the strategic placement and design of built elements
- Create an appropriate land-use interface with adjoining existing uses in order to minimise potential amenity conflicts.
- Provide a cohesive and navigable framework of shared spaces that are safe, legible and aesthetically pleasing, whilst avoiding conflicts between pedestrian and vehicle movements.
- Where ever possible provide interpretation of the Batemans Bay area and its rich history through the design process, including its seaside location and maritime industry.
- Create a vital anchor for the burgeoning Tourism Recreation precinct envisaged for the surrounding area in the draft Greater Batemans Bay Structure Plan (Eurobodalla Council) and recognised within the South Coast Regional Strategy (Department of Planning, 2006).

Section 4 of this report contains further information relating to the proposed redevelopment design and contains additional details of the following specific aspects:

- Access and circulation
- Built form and heights
- Land use
- Landscaping
- Views and vistas
- Safety and Security
- Riverfront access
- Urban design sustainability
- Earthworks, dredging and reclamation
- Construction staging

## Statutory and Non-Statutory Planning Framework

### Commonwealth Legislation

Approval may be required under this Act should it be determined that the re-development could potentially have a significant impact on the environment. Investigations are being undertaken to determine the level of impact on matters of NES, particularly in relation to:

- Migratory bird species including the Eastern Curlew and bar-tailed Godwit
- Marine fishes including the Australian Grayling (*Prototroctes maraena*)
- The Clyde River Estuary (important wetland)

### State Legislation and Planning Policies

State Environmental Planning Policies considered relevant to the proposal are summarised in the table below. Compliance with these and any other relevant policies will be documented within the Environmental Assessment.

State Environmental Planning Policy	Comment
State Environmental Planning Policy (Major Projects) 2005	The project is considered to be a Major Project under SEPP (Major Projects).
State Environmental Planning Policy No.11 - 'Traffic Generating Developments'	The proposed redevelopment proposes a gross floor area in excess of that identified in Schedule 1(c) and therefore requires referral to the RTA by

	the consent authority. It is the intention of the proponent to consult with the RTA in relation to the proposed development during the detailed design process.
State Environmental Planning Policy No.55 - 'Remediation of Land'	Detailed contamination assessment and testing will occur and have regard to the relevant provisions of this policy and also the Contaminated Land Management Act, 1997.
State Environmental Planning Policy No.71 – 'Coastal Protection'	This policy was considered during the detailed design process and the concept design is considered to be generally consistent with the relevant aims and objectives of this policy. Compliance with the specific aims and objectives of this policy will be addressed in detail within the Environmental Assessment.
State Environmental Planning Policy No.65 – Design Quality of Residential Flat Development	Where relevant the provisions of this policy will be considered and applied, particularly in relation to the design of the proposed tourist accommodation facility.

State legislation considered relevant to the project has been investigated and is listed below:

- *Environmental Planning & Assessment Act, 1979*
- *Protection of the Environment Operations Act, 1997*
- *Fisheries Management Act 1994*
- *Threatened Species Conservation Act, 1995*
- *Waste Avoidance and Resource Recovery Act, 2001*
- *Contaminated Land Management Act (CLM), 1997*

The following acts may have relevance to the proposal and will be reviewed in detail during the detailed environmental assessment process.

- *OHS Amendment (Dangerous Goods) Act, 2003* and related regulations
- *Maritime transport and Offshore Facilities Security Act, 2003*
- *Coastal Protection Act, 1979*
- *Noxious Weeds Act, 1993*
- *Rail Safety Act, 2002*
- *Road and Rail Transport (Dangerous Goods) Act, 1997*
- *Roads Act, 1993*
- *Water Act, 1912*
- *Maritime Services Act, 1935*

#### Regional Environmental Plans

The following table summarises the regional plans which are applicable to development within the South Coast Region and which were considered in the early stages of the design process.

Regional Environmental Plan	Comment
Regional Environmental Plan No.1 - Lower South Coast	Clause 6(1) of the REP states that a person shall not erect a building on land to which this plan applies if the building has a height of more than 14m. Clause 6(2) goes on to say that nothing in clause 6(1) authorises the erection of a building that does not comply with a development standard relating to a height which is specified in

	another EPI.
Regional Environmental Plan No.2 – Lower South Coast	As the proposed development does not require consent from Council, these sections do not apply, however relevant issues will be addressed during design development and preparation of the Environmental Assessment. Additionally, Schedule 2 lists guidelines for development in waterway catchment which will also be considered where appropriate.

### Local Planning Controls

The subject site is contained within Eurobodalla Shire and is subject to the Eurobodalla Shire Council's Urban Local Environmental Plan (ULEP) 1999. The current zoning for the Marina is identified below:

Property Description	Approximate Site Area	Current Zoning	Zone Objectives
Lot 11 DP 124295:	11.8 Ha	6c1 Private Recreation	<i>The objectives of the 6c1 Private Recreation zone are to recognise and provide for major recreational uses carried out on land not owned by a public authority.</i>
Lot 11 DP870049:	0.5 Ha	5d Car Park	<i>The objectives of the 5d Car Park zone are:</i> <ul style="list-style-type: none"> <li>(a) <i>to identify existing and proposed car parks of key importance to the future development of adjoining commercial land, and</i></li> <li>(b) <i>to ensure that land is available for necessary off-street car parking in future, and</i></li> <li>(c) <i>to provide for acquisition of land identified as necessary for car parking and for its use in the interim period</i></li> </ul>

There are no uses that are identified as "prohibited" within the 5d Car Park Zone.

While marina development, ancillary tourist accommodation and restaurants, car parks are identified as permissible development with the consent of Council under the 6c1 Zone, there are certain proposed uses that are prohibited under the ULEP. These uses include commercial premises, professional offices, shops and hotels.

Eurobodalla Shire Council has recently resolved to prepare an amending LEP in order to facilitate the Bateman's Bay Marina re-development. The amended LEP, once made, will make the presently prohibited uses permissible.

Accordingly, it is envisaged that the Major Project Application will be assessed and processed concurrently with the making of the amending LEP. Once the amending LEP is gazetted, the entirety of the project proposal would be permissible and Regulation 8N would no longer apply to any part of the project. Therefore, the Minister will have the power to approve all components of the project under Part 3A of the EP&A Act.

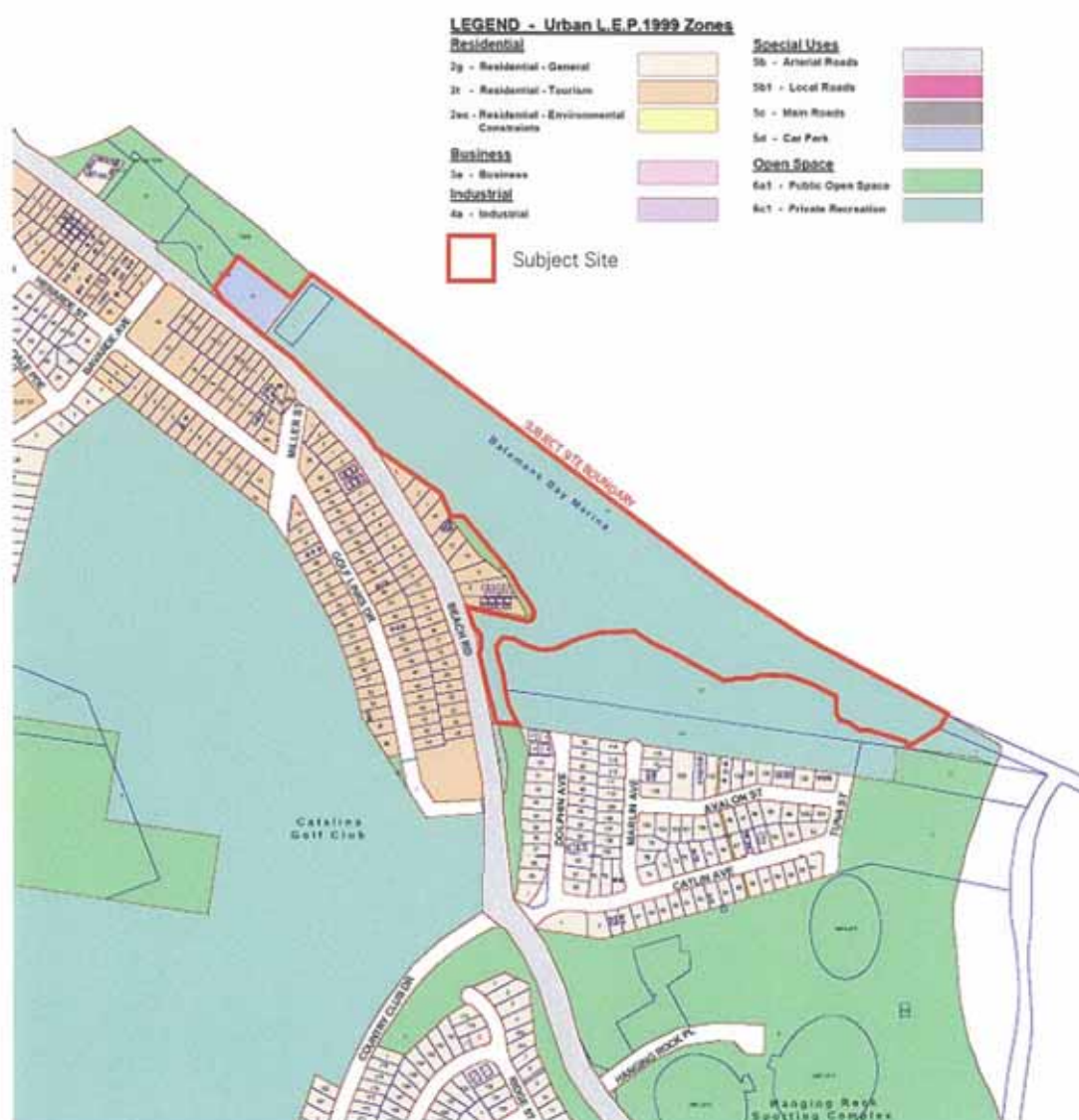
The overall consistency of the integrated marina concept with the general objectives of the ULEP and in particular the 6c1 zone, provides a sound basis for the Marina redevelopment.

### Greater Batemans Bay Draft Structure Plan

Within the area surrounding the marina, the Greater Batemans Bay Structure Plan is recommending a number of significant land use changes to the currently permitted built form. In particular, within land south of Beach Road the plan is proposing 3 to 4 storey residential development. For land to the east of the marina bounded by the marina basin and Hanging Rock Recreation area, the plan is contemplating 3 storey residential development. For certain areas the achievement of the maximum permitted storey's would be subject to satisfying a range of design criteria.

If the recommendations are implemented, the existing low rise (1-2 storey) character of lands surrounding the marina site will have the potential to alter significantly and become more urban and high rise (3-4 storey) in appearance.

Further, more detailed analysis of the structure plan will occur during the Environmental Assessment preparation and involve consultation with Eurobodalla Council.





### Adjoining Lands

Adjoining land is zoned a combination of the following zones:

- Rotary Park crown reserve and foreshore reserve on the boat harbour side of the nine residential properties: Zone 6a1 – Public Open Space.
- The existing residential properties located on the southern side of Beach Road are zoned as '2t – Residential Tourism Zone'.

The development is not considered to adversely impact on adjoining lands zoned 6a1, rather the proposed design including the pedestrian promenade treatment along the riverfront provides improved pedestrian access between the marina facilities with Hanging Rock Recreation area and Rotary Park.

The land-use activities proposed in the re-development of the marina are considered complimentary to the range of permissible uses within the 2t zone. It is also noted the Development Control Plan for the '2t Residential Tourism Development Guidelines' generally allows 2 storey development with a maximum height of 8.5 metres, and a Floor Space Ratio of 1:1. The urban character of this zone may alter should the recommendations of the *Greater Batemans Bay Draft Structure Plan* be implemented. This draft plan is discussed in Section 4.4.

### Other Policies

NSW (State Government) South Coast Regional Strategy was reviewed during the design process. The Strategy identifies Batemans Bay as a "*Major Regional Centre*" and the Batemans Bay Marina as "*regionally significant employment lands and infrastructure within the South Coast*". As part of the overriding objective to add to the available employment lands in the Region, the Strategy states that Local Environmental Plans will protect and add to employment lands within major regional centres, towns and regionally significant sites including the Batemans Bay Marina.

The strategy also promotes the concentration of development for the region in Batemans Bay (along with Moruya and Narooma) and the "*Town Centre type development encouraging mixed use and higher density living strengthening its role as the major residential, commercial and tourism centre for the middle part of the Region*". The Strategy states that tourism is a key growth and opportunity sector (over \$1.2 billion was spent by visitors in the region in 2003).

Other plans, planning policies and guidelines considered relevant to the proposal have also been reviewed as part of the preliminary assessment process and will be addressed in detail as part of the Environmental Assessment. They include:

State Government:

- NSW (State Government) Coastal Policy, 1997
- NSW (State Government) Coastal Design Guidelines
- NSW Estuary Management Policy, 1992

Local Government – Eurobodalla Shire Council:

- Development Control Plan No.132 – Guidelines for Outdoor Advertising
- Development Control Plan No.185 – Outdoor Eating Areas
- Development Control Plan – Parking (Parking Code)
- Development Contributions Plan 2004-2005
- Greater Batemans Bay Structure Plan (2006)
- Draft Batemans Bay Town Centre Structure Plan (2006)

- Batemans Bay Town Centre Development Guidelines
- Batemans Bay Estuary Management Plan (WBM, 2005)
- Eurobodalla Settlement Strategy (December, 2006)
- Batemans Bay Foreshore Park (Concept Plan)
- Eurobodalla Integrated Water Cycle Management Strategy
- Draft Nature Coast Design Guide
- Eurobodalla Residential Design Code
- Neighbourhood Business and Commercial Centre Guidelines
- Draft Eurobodalla Shire Council Greenhouse Action Plan
- Public Art Policy
- Eurobodalla Shire Heritage Strategy (2006)
- Outdoor Advertising Signs
- Social Plan
- Disability Access Action Plan
- Cultural Plan
- Eurobodalla Bike Plan
- Strategies relating to: wharfs, jetties, & boat ramps; stormwater drainage, acid sulphate soils; and public transport.

### Community Consultation

Ariadne in preparing the detailed design for the site's re-development gave detailed consideration to the outcomes of the preliminary community consultation process undertaken as part of the overall tender process by the Department of Lands. The key issues arising from these community engagement exercises are listed within the *Preliminary Environmental Assessment* (refer Appendix 8).

A detailed community consultation plan for the approval and assessment stage, and the construction phase is proposed to be undertaken as part of the approval and development process. This will be detailed within the Environmental Assessment. This will include the establishment of a community liaison group, the establishment of a website, and thorough consultation with key stakeholders.

Further information relating to the statutory and non-statutory planning framework affecting the project is provided in section 5 of this report.

## **PRELIMINARY ENVIRONMENTAL CONSIDERATIONS**

The following issues are identified as being the likely issues and methodologies to be used in undertaking further, more detailed environmental investigations during the Environmental Assessment stage of the planning process. The issue of draft Director-General requirements will guide the conduct of these investigations and identify any other issues worthy of detailed consideration.

### Coastal Processes

Relevant processes include:

- Harbour hydrodynamics – changes to tidal velocities, ranges and wave setup causing a variance in storm surge levels
- Flushing – the time taken for average tidal conditions to reduce the concentration of a conservative constituent inside the harbour.
- Sediment circulation variances including changes in circulation of sand from the entrance bar and near shore shoals onto Corrigan's Beach and northwards along the beach towards the breakwater. This is not considered likely as redevelopment are shoreward of the areas where these processes take place

- Harbour Resonance – impacts to the ability of ocean swell wave groups to cause the harbour to resonate; commonly known as a seiche that can generate horizontal velocities capable of damaging moored vessels. Such impacts are uncommon in NSW and therefore are not considered likely
- Sea level rise and flooding
- Hanging Rock Creek – to determine environmental impacts as a result of marina harbour works and overall re-development.

### Flora and Fauna

Environmental considerations to be addressed include:

- Potential impact on threatened and regionally significant species that potentially occur such as Black Cod and Syngnathiformes
- Potential impact on Hanging Rock Creek and associated mangrove areas.
- Potential impact on shorebird habitat, in particular the potential for impact to migratory bird feeding or roosting habitat
- Potential for dredging and reclamation to result in smothering of benthic habitats and impacts on fish feeding areas
- Increase in boat usage and potential increase in discharge of ballast/sewage waste, oil spills, fuel spills, anchoring, introduction of the invasive algae *Caulerpa taxifolia* and boat movements with the Estuary. The development would reduce the risk of spills

### Water Quality

Key issues to be addressed in terms of water quality impacts include:

- Harbour flushing
- Sediment plumes from dredging and reclamation activities
- Soil erosion due to construction
- Runoff from car park and refuelling facilities
- Runoff from boat wash down
- Illegal discharge of ballast/sewage and other waste materials
- Fuel, lubricant, oil spills
- Mobilisation of contaminants through dredging activities

### Traffic and Transport

Key issues relating to traffic and transport include:

- road access
- pedestrian and cyclist movements
- parking provision and design

A *Traffic Impact Assessment* will be prepared in accordance with the Guide to Traffic Generating Developments (Roads and Traffic Authority, 2002) to ascertain the impact on the local and surrounding road and transport networks. The key issues that will require justification are likely to be access from Beach Road, on site circulation and the provision of sufficient parking for all users.

### Visual and Landscaping issues

Key objectives in assessing the visual impacts of the marina development were identified as follows:

- assess the visual character of the landscape,
- determine the impacts of the proposed marina on the landscape and surrounding areas, and
- determine management strategies to ensure the visual character of the landscape is maintained or improved.

### Noise and vibration

A number of potential impacts have been identified in relation to noise and vibration as a result of the proposed redevelopment of the marina including:

- Environmental noise emission to the surrounding area
- Noise intrusion into the development (from road traffic)
- Construction noise (including dredging) and vibration
- Operational noise sources
- Sleep disturbance
- Traffic generation assessment

### Socio-economic impacts

Potential socio-economic impacts were identified as follows:

- Additional moorings will attract additional people and income to the area.
- The associated retail/commercial development will facilitate new economic activities and create a hub for maritime retail, commercial and community facilities.
- Providing an enhanced public domain through improved access to the waterfront and connections between Rotary Park and the maritime precinct

A socio-economic impact assessment should consider effects on:

- health and safety issues
- employment
- amenity
- access
- potential impacts on existing industries such as fishing and aquaculture
- potential impacts on land values
- potential effect on other marinas
- potential effect on boat users and boat service industry
- assessment of the affordability of marina services
- demand for marinas in the local and wider areas
- existing and proposed commercial activities including Batemans Bay Town Centre

### Air quality

Air quality investigations would aim to determine the fixed and mobile source of pollution from construction and operation of the marina. Any assessment is likely to include:

- Assessment of potential impacts due to dust

- Assessment of potential impacts from increased boat usage
- Total cumulative impacts of all activities
- Proposed management and mitigation measures to control impacts and ensure compliance

#### Indigenous heritage

It is noted that areas of land north of Beach Road have been reclaimed to facilitate urban development and marina construction. Given the disturbed nature of the subject site, it is considered highly unlikely for submerged sites of indigenous heritage significance to be uncovered during dredging activities. However, further assessment in this regard would be necessary and appropriate liaison with local indigenous groups before, during and following the development process.

#### Non-indigenous heritage

There are no listed heritage items at the site, and given the previous disturbance, non-indigenous heritage impacts are not expected from the construction and operation of the marina. However, non-indigenous heritage will be assessed to determine risks of impacting items of heritage significance during the construction of the marina.

#### Land use impacts

The urban design and visual analysis assessment demonstrates the ability of the re-development to fit with existing and future development of the surrounding area. The development is also considered consistent with the zone objectives for surrounding areas which encourage tourist related activities and accommodation, and also the surrounding built form envisaged by the draft *Greater Batemans Bay Structure Plan*.

The concept design has been carefully sited and designed to minimise impacts on adjacent and surrounding areas, in terms of land use, access arrangements and the built form. A detailed analysis and assessment of impacts will be undertaken as part of the Environmental Assessment.

#### Hazard assessment

To ensure no adverse impacts result from the release of hazardous substances during construction and operation of the marina, the following key issues were identified for further investigation:

- potential hazards from construction and operation, including increased boat usage
- nearby sensitive areas or areas and/or sensitive flora and fauna
- potential impact on environmentally sensitive areas
- emergency response to accidental spillage of hazardous substances

#### Greenhouse Gas Emissions and Climate Change

One of the potential consequences of global warming is sea level rise due to the melting of the polar ice caps. Whilst any rises are not expected to occur for many years, possibly decades, consideration of this issue will be assessed as part of the Environmental Assessment along with other coastal processes and their possible impacts on the marina and its design.

As with almost all marine and land based commercial operations and re-development, greenhouse gas emissions are emitted from sources such as the use of diesel powered equipment during the construction phases, increased usage, and indirectly through the use of electricity to power various utilities. However the re-development of the Batemans Bay Marina provides a number of opportunities to address this issue, which will be investigated.



### Construction and Operational Issues

The construction of the marina, and its on-going operation will require careful management to ensure environmental impacts are minimised and do not adversely effect the surrounding environments.

The main potential environmental issues arising during the construction stage are likely to be:

- Water quality
- Noise
- Erosion and Sedimentation
- Waste Management
- Dust (Air Quality)
- Habitat Removal and Replacement

The main environmental issues associated with the operational stage of the marina re-development would include:

- Water Quality
- Solid Waste Management
- Sustainable Resource Use
- Noise

Further information relating to the preliminary environmental considerations for the proposed marina redevelopment are contained within section 6 of this report.

### **SUMMARY AND CONCLUSIONS**

In developing the proposed redevelopment designs that are attached to this document, consideration has been given to the preliminary environmental assessment and other investigations already undertaken as part of tender process.

The key issues that have been, and will be addressed in the detailed design process and environmental assessment stage are as follows:

- Coastal Processes
- Building Design and Visual impact
- Ecological Issues
- Stormwater and Water Quality
- Noise and Vibration
- Air Quality
- Site Contamination and Remediation
- Heritage
- Access, Traffic and Parking
- Social and Economic Impacts
- Land Use Impacts
- Community Consultation
- Site Infrastructure and Services
- Hazard Assessment
- Engineering, Design and Operational Considerations
- Strategic Planning Implications and Eurobodalla Shire Council Planning Considerations
- Public Benefit and Enhancements

The abovementioned issues are intended to be investigated and presented as part of the more detailed environmental assessment stage, in addition to a detailed description of the proposed marina facility and its operation.

The proponent will also prepare a statement of commitments to describe how these issues will be managed through the detailed design, construction and operation of the marina.

This report, together with the accompanying attachments represents a preliminary environmental and project outline assessment under Part 3A of the Environmental Planning & Assessment Act, 1979. Its primary purpose is to outline the re-development as proposed by Ariadne and enable the Department of Planning to establish the level and scope of environmental assessment requirements from the Director-General.

## 1.0 INTRODUCTION

Ariadne has been selected as the preferred proponent for the re-development of Batemans Bay Marina and is now seeking Project Approval under Part 3A of the Environmental Planning & Assessment Act, 1979.

The NSW Department of Lands undertook a detailed tender process to identify a third party who will become responsible for re-developing and assuming operational control over the Batemans Bay Marina for an agreed lease period. The successful proponent will be required to undertake detailed design, assess environmental impact, obtain the necessary statutory planning approvals, and re-construct the marina accordingly.

It is noted that a preliminary concept design and a number of environmental investigations have already been undertaken by Maunsell Australia Pty Ltd (Maunsell) on behalf of the Department of Lands for the re-development of the existing marina facility.

A preliminary environmental assessment was subsequently prepared and submitted to the Department of Planning in 2006 for the Department of Lands concept. The concept design and assessment was made publicly available and consultation was undertaken with the local community. Draft Director-General requirements were also issued to inform the Environmental Assessment process.

This document provides a project outline and preliminary environmental assessment of the Ariadne re-development proposal which was detailed within the tender submission to the Department of Lands.

The proposed development as described in this report will be refined and become the subject of more detailed investigation following issue of the draft Director – General's requirements for the preparation of the Environmental Assessment.

This report is based on the urban design concept prepared by PLACE Design Group and architectural plans prepared by JMA Architects QLD Pty Ltd. The report has also been informed by a range of specialist reports prepared as part of the Ariadne tender submission. Many of the findings of the preceding planning and environmental investigations undertaken on behalf of the Department of Lands are relevant to the Ariadne re-development proposal, and are therefore summarised within this document.

### 1.1 Purpose of report

PLACE Design Group has been engaged by Ariadne to prepare a Project Application and Preliminary Environmental Assessment in accordance with the related provisions of Part 3A of the Environmental Planning and Assessment Act, 1979 (the EP&A Act) for the re-development of the Batemans Bay Marina.

The main purpose of this report is to:

- describe the site and surrounds;
- provide background to the tender process, and preceding design and environmental investigations;
- outline the key elements of the proposed Ariadne Marinas re-development concept;
- provide an environmental overview of the proposal to enable the Department of Planning to confirm the level of and scope of the Environmental Assessment to accompany the Part 3A application;

- discuss the demand and justification for the re-development concept;
- outline the relevant planning framework both statutory and non-statutory;
- inform all stakeholders, including the local community of the Ariadne Marinas re-development concept, and
- seek formal requirements from the Department of Planning and other State government agencies for preparation of the detailed Environmental Assessment and any other relevant matters that need to be addressed as part of the Project Application.

The key objective of this report is to outline in sufficient detail the Ariadne proposal for re-development of the existing marina facility, to highlight key differences with the Department of Lands Concept Design and provide a summary of the planning, environmental and demand issues associated with the proposal.

Many of these issues have largely been identified and are discussed in the *Batemans Bay Marina Re-development Preliminary Environmental Assessment* (August 2006) prepared for the Department of Lands by Maunsell Australia Pty Ltd (Maunsell). This document is attached to this document (refer Appendix 8).

It is noted that the abovementioned assessment is based on the Department of Lands initial concept design. The Ariadne proposal is similar to the concept design however there exist a number of differences which are detailed in this document.

Notwithstanding the above, the vast majority of the environmental considerations and preliminary findings arising from the previous assessment process are still relevant to the Ariadne proposal. Accordingly key findings of the Maunsell report are summarised within this assessment.

This assessment has considered the *Marina and Related facilities – EIS Guidelines* (DUAP, 1996) and specific issues relating to:

- visual impact
- noise
- traffic and parking issues
- hydrological and water quality issues.

## 1.2 Background

The Department of Lands is responsible for the care and control of a number of port facilities along the NSW coast. Many of these facilities were developed in the 1970's and 1980's for local fishing industries and overtime demand has increased for the use of these facilities for recreational boat usage.

There is a general desire and need to upgrade the existing facilities at the marina, particularly in response to the following concerns:

- Inadequate nature of the mooring facilities which have reached their intended service life;
- The lack of dedicated vessel refuelling and waste pump out facilities;
- The layout for the marina is constrictive, making manoeuvring of vessels in and around the marina difficult and dangerous nor does it comply with relevant Australian Standards specifically AS3962: *Guidelines for design of marinas*;
- An increasing demand for additional mooring facilities in the marina;



- Lack of adequate car parking and the need to provide safe vehicle access to Beach Road;
- A need to improve the environmental performance of the existing marina operations including the maintenance facilities, and
- A need for land based facilities and activities associated with the marina that are attractive for boat owners, residents and visitors.

The Department of Lands subsequently commenced a tender process to identify a third party (preferred proponent) who will become responsible for the re-development and operation of the marina. A concurrent process was the development of a preferred concept design and preparation of a range of related environmental investigations co-ordinated by Maunsell Australia Pty Ltd (Maunsell).

Ariadne and its consultants reviewed these preliminary investigations, commenced a comprehensive re-development strategy and prepared a concept design in response to the tender documentation. Ariadne was subsequently selected as the preferred tenderer. The current status of the preferred proponent arrangement is as follows:

- Heads of Agreement for the Development was signed on 14 February 2007.
- Principle terms of development and lease are now finalised.
- Development agreement and Lease over the Marina has been executed, with the commencement date 1 July, 2007.
- Transfer of management of the existing Marina berths and facilities has been effected, with commencement date 1 July, 2007.

The preceding and future steps in the overall development process are summarised in Table No.1 below:

**Table No.1:** Development Process.

	Actions	Status
1	Feasibility Assessment and Options Analysis*	Complete
2	Preferred Base Case Option by Department of Lands*	Complete
3	Concept Design reviewed*	Complete
4	Stakeholder and Community Engagement*	Complete
5	Draft Director-General Requirements issued by Department of Planning*	Complete
6	Prepare Preliminary Environmental Assessment*	Complete
7	Selection of Preferred Tenderer and Design Concept	Complete
8	Instigation of Eurobodalla LEP Amendment to permit certain proposed uses over the marina re-development site. To be processed concurrently with Project Application.	Complete
9	Confirmation sought and obtained that the re-development proposal is a 'Major Project' under <i>State Environmental Planning Policy (Major Projects) 2005</i> to which Part 3A of the EP&A Act, 1979 (as amended) applies.	Complete



10	Submission of Project Application and Preliminary Environmental Assessment to the Department of Planning for consideration (based on Ariadne Marinas Concept Design).	Future Action
11	Issue of Director-General Requirements	Future Action
12	Refinement of design & preparation of detailed Environmental Assessment for consideration by Department of Planning and public exhibition.	Future Action

\* Based on Department of Lands Concept

### 1.3 Project Objectives

The overall aims for redevelopment of the Batemans Bay Marina include:

- meet future demand by increasing long term Marina capacity and an increased range of berthing or boat storage options via the provision of upgraded and additional floating berths and a dry stack - storage facility;
- provide regional community benefits through improving water access and flow-on social and economic benefits;
- improve efficiency of Marina operations at the land water interface;
- establish a commercially viable Marina complex via the inclusion of modern, upgraded boat storage and maintenance facilities, in addition to a range of supporting land uses that support the local tourist economy;
- protect significant ecological areas and minimise environmental impact during the construction and operational phases through improved environmental management practices and modern infrastructure;
- enhance opportunities for local businesses through the incorporation of commercial, retail and tourist related facilities and accommodation; and
- provide high quality and modern Marina facility with high levels of accessibility to surrounding areas and adjacent open space facilities.

Based on the project requirements established by the Department of Lands in the tender process, Ariadne subsequently undertook an extensive opportunities and constraints analysis involving a number of disciplines. This was followed by the development of a master plan proposal that was considered to satisfy all of the project aims.

An overall vision was subsequently established for the project by Ariadne, as follows:

*'The Batemans Bay Marina Redevelopment Project addresses the current and future boating needs of the both the existing population and visitors. This is achieved through state of the art marina technologies and management processes, delivering a service orientated facility.*

*Public water fronting facilities will be established, offering an inviting and unique experience of Batemans Bay. The inclusion of an educational and research centre for marine biological systems, waterfront dining, social marine club facilities, public open spaces, interactive moving structural elements and improved tourism accommodation facilities will assist in*

*attracting tourists and locals who will experience a new Batemans Bay marina precinct.'*

## 1.4 The Proponent

Ariadne Australia Limited ("Ariadne") is a leading Queensland based public company, listed on the Australian Stock Exchange. Ariadne employs a diversified investment strategy with capital and human resources applied in the areas of:

- commercial, residential, tourist and industrial property development;
- car-park development and operations;
- management of hotels, apartments and resorts;
- maritime infrastructure development, ownership and operation; and
- investments

With respect to maritime infrastructure, Ariadne is a leading owner, manager and developer of marinas on the east coast of Australia and New Zealand. In particular, Ariadne has developed an extensive portfolio of marina assets in the strategic waterfront locations of Southport, Brisbane's trade coast precinct, Port Macquarie in NSW Australia and Auckland in New Zealand.

Ariadne has a dedicated in-house Marina acquisitions, development and operations team. The team's operational responsibilities include the day-to-day management of the retail, berthing and fuel businesses, while its development activities have been successful in making significant operational and customer service improvements to various marine facilities.

The company's recent purchase of Orams, New Zealand will allow its marina business to build on this well respected and established marina operation and brand.

The company has strong links and support networks within boating communities and maritime service providers, and understands the requirements of these specialist industry groups. In all of its activities Ariadne seeks to maintain close ties to key stakeholders, including commercial marine industries, tourism and leisure operators, aboriginal and community bodies, and statutory authorities.

Further, it has developed significant capability and experience in respect to the environmental, social and cultural considerations associated with developments in sensitive environments. Ariadne understands its responsibility to preserve and embrace the Australian water-based lifestyle that is an intrinsic focus of these coastal communities. It also manages this responsibility through a careful and considered planning approach, involving a high level of community involvement in the master planning phase.

It is noted that Batemans Bay Marina Developments Pty Ltd (being a wholly owned subsidiary of Ariadne) will have primary responsibility for the intended re-development of the Batemans Bay marina precinct, subject to obtaining the necessary planning approvals.

## 1.5 Report Structure

This report is presented in the following Sections:

### **Section 2 - Site Description:**

This section describes the existing marina facility, surrounding land uses, the Batemans Bay area and the wider regional context for the development.

**Section 3** - *Project Need and Justification:*

This section discusses the demand for the proposal and justification from a social, environmental and economic viewpoint and highlights key differences between the Department of Lands concept and the Ariadne Marina re-development design.

**Section 4** - *Project Description:*

This section describes the Ariadne proposal for the re-development of the existing marina including the floating berth component, associated infrastructure and land based ancillary uses. It discusses the Marina design rationale and key outcomes.

**Section 5** - *Statutory and Non-Statutory Planning Framework:*

This section provides an overview of the statutory and non-statutory planning framework considered relevant to the proposal, including relevant Commonwealth and State environmental planning legislation as well as local planning instruments and policy objectives.

**Section 6** - *Preliminary Environmental Considerations:*

This section identifies the likely environmental issues associated with the re-development of the marina that will warrant further, more detailed investigation as part of the Environmental Assessment. It also identifies probable methodologies for undertaking this work.

**Section 6** - *Summary and Conclusions.*

This section summarises the report and main findings.

**Section 7** - *Appendices.*

This section contains various supporting plans and documents, as follows:

- Site Master Plan by Place Design Group Pty Ltd
- Architectural Drawings by JMA Architects QLD Pty Ltd
- Marina Master Plan by Place Design Group Pty Ltd
- Marina – Typical Details by Superior Group
- Artists Impression of Proposed Marina
- Urban Design Analysis by Place Design Group Pty Ltd
- *Batemans Bay Marina Re-development Preliminary Environmental Assessment* (August 2006) by Maunsell Australia Pty Ltd for the Department of Lands



## 2.0 SITE DESCRIPTION

A detailed analysis of the site and its surrounds is provided within the *Preliminary Environmental Assessment* (refer Appendix 8). A summary is provided below.

### 2.1 Location

The existing marina facility is located within Batemans Bay, which is approximately 300 km from Sydney. Batemans Bay is located within the local government area of Eurobodalla Shire Council on the NSW South Coast.

The subject site is located on the southern bank of the Clyde River, approximately 2 km south-east of the Batemans Bay Town Centre.

The regional and local context is shown on the locality plans – Figures 1, 2 and 3.

### 2.2 Description

The subject site is located within Crown Land and is known as Lot 11 in DP 124295 and Lot 11 in DP 870049. The site is accessed from and has partial frontage to, Beach Road.

Both allotments have a combined area of approximately 12 ha and a land area of approximately 3,500m<sup>2</sup> with the remainder comprising water, sea walls and tidal sand flats.

The subject site includes the following main components:

- Batemans Bay Boat Harbour, which includes an undeveloped area (to the east of the existing marina facility) and comprises tidal sand flats. This harbour is protected from the Clyde River by a training wall and breakwaters that regulate entry to the river for navigational and boating purposes.
- The existing marina comprising existing floating berths.
- The existing ship maintenance facility including a boat hardstand and slipway.
- 'Port Land' (Lot 11 DP 870049) located to the north of Beach Road, west of the maintenance area and to the east of Rotary Park.
- Hanging Rock Boat Ramp is located at the eastern extremity of the site and comprises a small enclosed boat harbour, providing a protected publicly accessible boat ramp. Car and trailer parking is provided in an adjacent car park with access from beach Road via the Hanging Rock recreation area. An administration office and storage for the surf rescue service is also located within the immediate vicinity (but not within the subject site)

### 2.3 Existing Batemans Bay Marina Facility

Existing facilities within the marina component of the site comprise the following:

- Two storey marina administration building with related amenities, storage buildings and 15 place car park.

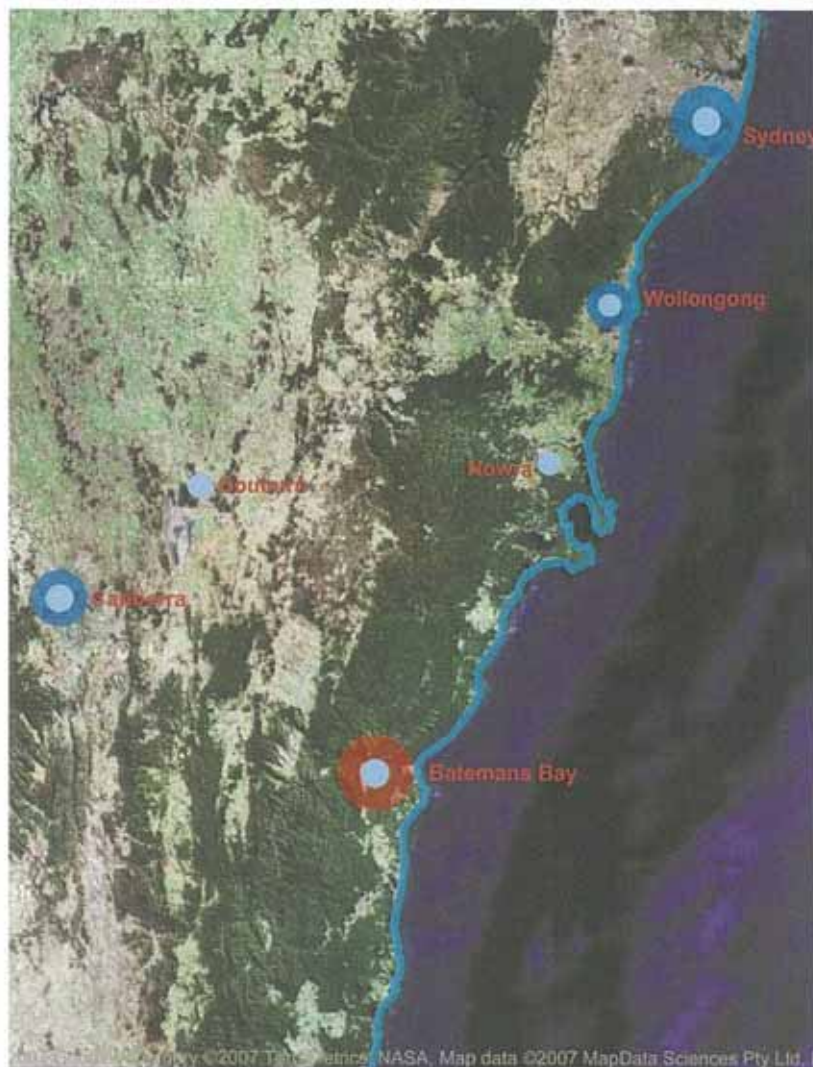


Figure 1 - Bateman Bay Marina ( Regional Location)



Figure 2 - Local Context



Figure 3 - Site Location and Boundary



- A floating marina with capacity for 126 berths. The majority of berths accommodate boats 9m in length and less.
- Boats are accessed via pontoons and timber finger jetties accessed via a series of gangways.
- Vessel maintenance facilities are provided and include a hardstand and inclined slipway.
- Temporary re-fuelling facilities are located adjacent to the hardstand, however no sullage pump out service is provided.
- 25 place car park located adjacent to the Harbour Marine Store, accessed via Beach Road

## **2.4 Surrounding Existing Development**

Surrounding land uses that are specifically relevant to the re-development of the site include Rotary Park, Hanging Rock Recreation Area, Harbour Marine (boat sales and service), Coach House Marina Resort, the adjacent residential and commercial office properties and the Batemans Bay Town Centre.

Surrounding zonings, land use and permitted development types are discussed further in Section 5.0.

### Rotary Park

Located to the west of the subject site it contains a public car parking area accessed from Beach Road. The park contains scattered mature trees and grass cover with limited recreational facilities.

The reserve contains a helicopter-landing pad, used during emergencies as access to the regional hospital located in Batemans Bay.

### Coachhouse Marina Resort

Located to the south-east of the subject site is the Coachhouse Marina Resort. The facility mainly contains holiday accommodation including cabins and motel style units, in addition to a restaurant and function centre. Access is gained to the resort from Beach Road.

### Hanging Rock Recreation Area

Located further to the east of the subject site is a large recreation area comprising a number of open space areas, playing fields and associated facilities accessed from Beach Road. The recreation area provides a point of access to the publicly accessible boat launching ramp, contained within a small harbour area.

### Harbour Marine

Located along the eastern side of the Marina car park is situated a marine retail and sales operation comprising a two-storey building, hardstand for boat display, timber pontoon and informal boat ramp.

### Residential Properties to the South

Nine residential properties are located immediately south of the subject site, between Beach Road and the boat harbour. Three properties have direct water frontage and marina access via pontoon, ramps and small jetty. A Council owned strip of land (identified as public reserve) is

located between six of the residential properties and the boat harbour, and is intended for public foreshore access.

Land further to the south (on the opposite side of Beach Road) is characterised by mostly 1 to 2 storey single detached dwellings and businesses with frontage to the roadway. They are located within a *2t Residential Tourism* zone which permits both residential development and tourist related accommodation and facilities.

#### Hanging Rock Creek

Located to the south-east of the site, this tidal waterway drains into the southern part of boat harbour. Below the tidal limit, it is characterised by mangroves and other estuarine vegetation.

#### Batemans Bay Town Centre

The town centre is located approximately 2 km to the west of the Batemans Bay boat harbour. Beach Road is the major arterial road connecting the marina with the town centre. Pedestrian and cyclist pathways are located along side the roadway.

The town centre is undergoing a process of re-development including:

- Stockland Shopping Centre
- Proposed expansion of other retail supermarkets
- Proposals to improve the foreshore areas including reconstruction of the Coalbunker Wharf, extension of the Murra Murra walkway, additional timber jetties and foreshore parklands.

A Structure Plan has been prepared for the Town Centre which seeks to provide an overall strategic framework for future growth within the town centre area and ultimately define the form and scale of development.

### 3.0 PROJECT NEED AND JUSTIFICATION

This section provides a discussion regarding the need and justification for the project and consideration of possible alternative scenarios.

It summarises both the project need discussions contained within the Preliminary Environmental Assessment and also the key findings of a re-development feasibility investigation previously undertaken by Maunsell Australia Pty Ltd (Maunsell) on behalf of the Department of Lands

This assessment also highlights the main differences between the Ariadne design and the Department of Lands concept, and outlines the main reasons and justification for the Ariadne concept proposal and its various project components.

#### 3.1 Demand

The key market areas for boat moorings within Batemans Bay Marina are the Eurobodalla local government area, the Australian Capital Territory (ACT) and the Queanbeyan Statistical Sub-Division (SSD), which collectively account for close to 75% of current demand. As such, the Marina is a strategic local and regional asset.

Vessel registration growth within key market areas has been above the NSW average of 3.0% over a ten-year period since 1994. Vessel registrations have increased by 5.9% p.a. within the Eurobodalla region whilst increasing by 3.4% p.a. within the ACT–Queanbeyan region.

Increasing population growth within the South Coast Region and increasing levels of tourist activity have resulted in an increased demand for boat storage and charter boat operators. Consequently, high vessel registration growth rates have contributed to unmet demand for Marina berths at Batemans Bay, indicated by growing waiting lists, long waiting times and greater use of swing moorings. As at October 2004, the Batemans Bay Marina Co-operative estimated waiting lists at 60 applications whilst the average waiting time stood at approximately two years. The waiting list at the time of writing this project outline was 90 applications.

In the absence of vacancies at the Marina, a significant number of swing moorings have been used. Approximately 100 swing moorings are being used within the Clyde Estuary. With the number of vessel registrations in the two key markets areas for the Batemans Bay Marina set to increase, pressure on waiting lists and demand for swing moorings can also be expected to increase.

In response to a demand to modernise and upgrade the existing facility at Batemans Bay Marina, the Department of Lands prepared the Batemans Bay Redevelopment Feasibility Study (prepared by Maunsell Australia) in October of 2005.

#### 3.2 Project Need

##### Need for Re-Development

The Department of Lands has been experiencing pressure from a number of user groups to upgrade and modernise the existing Batemans Bay Marina. In particular the following limitations and reasons for re-development were identified:

- most of the mooring facilities are inadequate, have reached the end of their intended service life and are in need to be replaced;
- there are no dedicated vessel refuelling and waste pump out facilities;

- the layout for the Marina is restrictive, making manoeuvring of vessels in the channels and fairways quite difficult and dangerous;
- non-compliance with current Australian Standards specifically *Australian Standard 3962-2001: Guidelines for design of marinas*;
- there is a growing demand for additional mooring facilities in the Marina;
- the availability of up to 25 car parking spaces in the Marina is insufficient and there is a need to provide safe vehicle access to Beach Road from the Marina;
- there is a need for land-based facilities for activities associated with the Marina that are attractive for boat owners, residents and visitors (including tourists/sightseers).

This main objective of the abovementioned Maunsell study was to investigate the feasibility of redeveloping the subject site, in particular the commercial viability of upgrading marina berths and the required ancillary services and infrastructure associated with any upgrade.

The key findings of the *Batemans Bay Marina Redevelopment Feasibility Study* (Maunsell, 2005) included the following:

- There is a need to redevelop the Marina.
- An unmet demand of 60 berths (from a waiting list, therefore not representative of latent demand).
- Commercial floor space for land based related activities is needed to financially support the construction of Marina facilities.

The overall findings of the economic analysis means that for a developer to achieve a return on the initial capital investment (the investment that is required to upgrade the Marina) and for the community to gain maximum benefit in the long term through economic growth, the Marina redevelopment must include the development of complementary commercial opportunities.

The *South Coast Regional Strategy* (Department of Planning, 2006) also identifies Batemans Bay as a "Major Regional Centre" and the Batemans Bay Marina as "regionally significant employment lands and infrastructure". As part of the overriding objective to add to the available employment lands in the Region, the Strategy states a key action is the protection of all available employment lands near to the Marina through the local planning process.

Due to its location in the heart of Batemans Bay, the Marina has the potential to become a significant regional asset that caters not just for boat owners, but for a range of user groups.

The findings of these previous investigations have been considered in the development of the Ariadne proposed concept design, intended uses and density of development.

### **Other Factors**

In addition to a need to satisfy existing and future demand for vessel storage, there are a number of other factors which contribute to an overall need to re-develop the existing facility.

#### **Need for maintenance and replacement of seaside facilities:**



Four timber walkways that service 90 berths currently require significant maintenance. These structures will require replacement in the near future.

#### Limited facilities:

In comparison to similar sized coastal NSW marinas, the Batemans Bay Marina is limited in the range of facilities provided. The Marina is limited in the following aspects:

- absence of permanent refuelling facilities
- absence of sewerage pump-out facilities
- limited car parking
- limited administrative space for government and community organisations
- limited retail space.

A redevelopment of Marina facilities will provide opportunities to increase service levels and amenity to users and to the wider/non-boating community.

#### Non-compliance with standards:

The current Marina configuration is unlikely to comply with current Standards Australia design requirements (AS 3962-2001) and NSW Maritime Authority Guidelines (Waterways Guidelines for Maritime Structures) and does not cater appropriately for vessels of all sizes, with 40 percent of boats at the Marina oversized for their designated berth

#### Better manage safety and environmental outcomes:

Potential for establishment of additional swing moorings on the Clyde Estuary to cater for extra demand is not seen as being attractive for safety, environmental, access and traffic management reasons.

There is also a need to establish environmentally acceptable facilities and maintenance practices, better managing the adverse effects of boating.

Improved safety and environmental outcomes are expected through the removal of potentially unsafe structures and the installation of permanent sewerage pump-out and refuelling facilities. Also the Marina will generate environmental benefits as a result of providing sullage pump out facilities, which currently impact on the aquatic ecology in the Clyde River through indiscriminate discharge of wastes/pollutants.

### **3.3 Alternative Sites and Site Suitability**

#### **Alternative Sites**

The Feasibility Study (Maunsell, 2005) found that there are limited options other than expanding the existing Marina to cater for current unmet demand and future demand for Marina berths. As such, additional capacity is required to cater for permanent private vessel storage in the Marina.

The establishment of other marinas along the South Coast is uncertain in timing and capacity and are unlikely to conveniently cater for demand from the key market areas of the Eurobodalla, the ACT and Queanbeyan regions.

The further establishment of swing moorings may provide some opportunity to alleviate demand for berths at the Marina. However, the establishment of swing moorings is seen as undesirable

as they can have a number of adverse safety, environmental and traffic management impacts, including the creation of additional navigational hazards, potential for an increase in water pollution, health and safety implications and the destruction of native sea grass beds.

The *Batemans Bay & Clyde River Estuary Management Plan - FINAL REPORT* (2005), prepared for Eurobodalla Shire Council by WBM Oceanics Australia contained a number of recommendations to "assist government authorities and other stakeholder groups to sustain a healthy estuary through appropriate waterway, foreshore and catchment usage and in the longer-term achieve the "vision" for the estuary".

In accordance with this aim, a High Priority Object (Objective No.2) is to ensure "recreational and commercial uses of the estuary are sustainable". In particular, the objective seeks to promote waterway and foreshore based activities consistent with appropriate social and environmental impacts and waterway capability.

Having regard to this objective, one of the strategies of the Estuary Management Plan is to "expand the existing Marina at Batemans Bay as a regional centre". This proposal is considered to be consistent with this strategy. Further, in the interests of minimising resource usage over time, the most appropriate method for increasing Marina berths and promoting economic growth of the region is to utilise the existing Marina basin.

### **Site Suitability**

The existing Batemans Bay Marina contains a range of existing infrastructure, including:

- proximity to existing utilities (electricity, sewerage)
- existing training wall for the length of the existing boat harbour
- existing Marina berths and associated improvements
- existing access to Beach Road.

Due to the importance of water activities for recreation and for economic prosperity in the region the Batemans Bay Marina has been identified for expansion in the *Draft South Coast Regional Strategy*. Rather than create a new Marina, it is appropriate to expand the existing Marina to take advantage of available infrastructure.

Locating all maritime activities within a secure compound with direct water access maximises efficiencies in relation to administration, managing hazards, concentrating maintenance activities and reinforcing the importance of the Marina.

Integrating ancillary commercial development as part of the Marina proper creates a maritime precinct that will generate significant public interest and maximise flow on benefits to the wider community. The site is suitable for such a maritime precinct due to its visibility from the public domain, easy access, proximity to the Batemans Bay Town Centre and location adjacent to land zoned for tourist development (Residential 2T zone). The Project, including ancillary development supporting the Marina, is consistent with the requirements of the Eurobodalla Urban LEP and in particular the objectives of the relevant land use zones.

The proposal provides an anchor attraction to reinforce the tourist nature of Batemans Bay and promote access to the foreshore and to water activities.

## **3.4 Relationship between Department of Lands Concept and Ariadne's Proposal**

### **Revisions / Improvements to Lands Concept Proposal**

The current revised proposal acknowledges and builds upon the studies undertaken by NSW Department of Lands. These studies include investigations into community requirements and



desires, feasibility investigations and environmentally sustainable design. The investigations undertaken by Lands outlined within the Preliminary Environmental Assessment (August 2006) formed the key criteria by which Lands tendered for the Marina redevelopment. These key concerns, as noted previously within this report, are as follows:

- Inadequacy of mooring facilities which have reached their intended service life;
- Lack of dedicated vessel refueling and waste pump out facilities;
- The layout for the marina is constrictive, making manoeuvring of vessels in and around the marina difficult and dangerous nor does it comply with relevant Australian Standards.
- Increasing demand for additional mooring facilities in the marina;
- Lack of adequate car parking and the need to provide safe vehicle access to Beach Road; and
- A need for land based facilities and activities associated with the marina that are attractive for boat owners, residents and visitors.

The current revised proposal was identified by Lands and its advisors as producing the best overall solution to the above issues and for the community based on Lands tender criteria and improves upon the concept proposal previously prepared.

This successful proposal submitted by Ariadne has implemented a number of refinements to, and further developed, the concept proposal previously lodged by Lands. These changes have been proposed for the following reasons:

- Lands concept was a minimum, base-case redevelopment scenario and did not address the operational / commercial requirements that are known to an experienced Marina operator
- Ariadne's commercial and operational experience has guided a number of changes to ensure the redevelopment is more functional and better meets market, community and commercial demands. These changes bring the proposal into line with comparable other Marina operations within Australasia.
- Design development and further studies have significantly advanced the intelligence of the current proposal from the original concept design. As a result the current proposal has been designed to a much higher level and quality than the previous proposal, resulting in a number of revisions and amendments.
- The current proposal is a significantly higher quality design solution than Land's base concept proposal with enhanced benefits to amenity and facilities as a result of the input of further investigative work and operational expertise. This redevelopment proposal better meets community needs and market expectations than the previous concept.
- The current proposal has been developed within the context of operational and commercial viability constraints, which have determined more precise product mix and critical mass requirements.
- The previous concept design did not meet commercially viable levels determined by Lands under its tender requirements.

A comparison of the base concept proposal by Lands to the current revised proposal is provided in the table below. These changes are explained on following pages.

Redevelopment Component	Base Case Concept Proposal	Current Revised Proposal
Wet Berths	Minimum 270	240
Dry Berths	Minimum 60	250
Maintenance hardstand	Provided	Provided
Marine Support Services <ul style="list-style-type: none"> <li>- Boat Lift</li> <li>- Fuel Services</li> <li>- Sullage Pump Out</li> </ul>	Provided	Provided
Marina Workshops	240 m2 (shed)	241 m2
Marina Retail	1,500 m2	1,100 m2
Tourism / Entertainment / Hospitality Tenancies		1,360 m2
Marina Commercial Offices		3,145 m2
Community Club Tenancy	3,000 m2	1,150 m2
Conference Facilities	Not Provided	1,100 m2
Research / Interpretive Centre	Not Provided	558 m2
Tourist Accommodation	Not Provided	4,374 m2
Open Space and Outdoor Facilities	Provided	Revised and improved to include: <ul style="list-style-type: none"> <li>- More effective use of view lines through site.</li> <li>- New lifting bridge concept to facilitate foreshore walkway from Corrigan's Beach to Town Centre.</li> <li>- Provision of high quality architecture, urban design and landscaping features.</li> <li>- Recreation park proposed between Boat ramp basin and new marina basin.</li> </ul>
Impact on Rotary Park	Encroachment due to road access	No impact / encroachment
Car Parking (vehicles)	Minimum 207 bays (all at grade)	499 bays (mixture of at grade and half basement)
Environmental	Acknowledged	Vastly improved through

<b>Sustainability</b>		provision of new marina technologies
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The following comments are made in relation to the table above:

1) Wet / Dry Berthing Facilities:

An adjustment has been necessary to the capacity of both wet and dry berths being provided in the current proposal to reflect a greater proportion of dry berths, an increase in the range of berthing options and an overall increase to the total capacity of berths provided. As a result the number of wet berths has decreased and the number of dry berths has increased under the current proposal. Reasons for this change are as follows:

- A market trend continues to show preference for dry boat stack storage. The boating market is continuing to acknowledge the cost advantages, environmental and maintenance benefits and greater convenience offered by dry boat storage solutions
- Dry boat storage offers significant environmental advantages over wet berthing by eliminating the need for antifouling processes and enabling containment and processing of any waste products associated with vessel storage.
- Dry boat storage provides for greater affordability in boat storage than does wet boat storage. A more proportionate mix of wet versus dry boat storage therefore provides greater vessel storage options to the boating market
- Overall the combined wet and dry stack vessel storage capacity has been increased from the previous concept proposal in order to reflect accelerating growth forecasts for boat storage. - It is anticipated that the previous concept proposal was inadequate in meeting future demand for boat storage based on operational experience and market trends.
- The trend of wet berthing across the world is a reflection of the purchasing of larger vessels by the boating public. This increase in size has seen the standard berth 25 years ago of 10m increase to today's desired minimum berth length of 15m. The marina design could accommodate further wet berths if the sizes of the berths were reduced however this will not meet the existing market requirements or the future reality of wet berthing size requirements. We have as mentioned above adequately catered for the smaller vessels with access to the more efficient dry stack facility catering for vessels up to 12m in length.

2) Maintenance Hardstand and Marine Support Services:

The scale of maintenance Hardstand and marine support service facilities to be provided under the current proposal remains similar to that proposed under the original concept submission. Facilities will meet state of the art service levels.

3) Marina Workshops:

The scale of marina workshop space remains similar to that proposed under the original concept proposal and is seen to be adequate. Under this current proposal this space will be incorporated within the marina building.

4) Marina Retail and Tourism / Entertainment / Hospitality Tenancies:

Due to industry experience and further market guidance refinement has been made to the design of marina retail and tourism / entertainment / hospitality tenancies.

The current proposal is for Marina retail space of approximately 1,100 m<sup>2</sup> and tourism / entertainment / hospitality space of approximately 1,360 m<sup>2</sup>. The base case scenario identified by Department of Lands in regards to this component was insufficient in providing for adequate space for tourism support businesses and facilities.

The provision of increased space is seen as an advantage to the economic and tourism benefits that this redevelopment will provide to the Batemans Bay community and is essential from a successful operational viewpoint. The current revised proposal is supportive of the aims of the Eurobodalla regional tourism strategy and is in keeping with the scale of other similar Marina complexes along the East Coast of Australia. It is also an employment creator for the local community with job descriptions within these facilities ranging from youth employment through to pre-retiree and retiree employment opportunities.

5) Marina / Commercial and Community Club Tenancies:

Industry experience and further market guidance has enabled the refinement of the design of marina / commercial and community club tenancies.

The current proposal is for marina commercial space of approximately 3,145 m<sup>2</sup> and Community club space of approximately 1,150 m<sup>2</sup>. The previous base concept proposal was insufficient in this respect and it has been necessary to increase the minimum capacity of tenancy space allocated to these uses for the following reasons:

- Demand from Marina supporting and commercial businesses within the redevelopment is anticipated to be significant and space has been brought in line with benchmark requirements exemplified at other Marina facilities within Australasia.
- A number of community groups are currently known to be active within the existing Batemans Bay Marina and have indicated an inadequacy in space provided for under the original concept proposal to house their clubhouse and social facilities.
- Space provided to community groups and clubs is at an incentive based rate and adequate marina commercial tenancies are required to compliment the precinct to ensure commercial viability is achieved given the associated costs these incentives place on the project.

6) Interpretive / Research Facilities, Conference Facilities and Tourist Accommodation:

A significant opportunity for the provision of an interpretive research facility, conference facilities and tourist accommodation has been identified under the current proposal with the following significant benefits:

- Creation of sustainable long term employment and tourism opportunities through provision of an educational / research centre and associated off-shore business operations.
- Opportunity to address a shortage of high quality conference facilities within Batemans Bay, thus increasing corporate participation and tourism within the region by the local and Canberra based business community. This is anticipated to provide significant benefits to the regional economy both directly and indirectly.
- Fulfilment of a severe lack of high quality tourist accommodation catering particularly for boating tourists and Canberra corporate and tourist markets with flow on economic benefits to the regional economy.
- The above proposed uses are aimed at increasing tourism and economic benefits of the Marina facilities in support of the regional tourism strategy for Eurobodalla.

- These facilities are supportive of one another and will strengthen the commercial viability of the operations as a whole.

These facilities, particularly the tourist accommodation and conference facilities are commonly found within or in close proximity to other Marina / Tourism precincts and are required to ensure the commercial viability of the supporting community infrastructure is provided over and above that described within the previous base concept proposal.

#### 7) Carparking, Common facilities, Open space and Landscaping:

Through design development a focus on innovation has ensured that the current proposal has substantially improved the carparking and common facilities, open space and landscaping provisions previously addressed in Land's base concept design. Significant improvements are:

- Removal of a large number of at grade carparks to a half basement level, while increasing the total capacity of carparking bays to 499. This has significant benefits to the visual amenity of the proposal, and reduces the potential for spill-over of parking onto the street and its associated effects. This is achieved at a significantly greater construction cost, however has a significant positive impact to the quality of the redevelopment allowing better utilisation of the at-grade site area to the uses mentioned above.
- More effective use of view lines through the site to increase transparency of the development and ensure views towards the River from Beach Road remain visible. This is achieved through more considered and strategic placement of buildings and the removal of significant numbers of at-grade carparks to a half basement level.
- Provision of a lifting bridge over the marina entrance to enable uninterrupted pedestrian access from Corrigan's Beach to Batemans Bay town centre along the waterfront. This is a significant tourism and community benefit and an improvement to the amenity of the Batemans Bay township.
- High quality and more appropriate architectural built form with an Australian coastal theme.
- Provision of high quality urban design and landscaping features which enhance the tourism value of the Marina precinct
- Provision of additional open space parkland to be located between the existing boat ramp basin and the proposed new marina basin
- Vastly improved environmentally sustainable design features including full waste recycling facilities and associated environmental benefits of dry stack vessel storage.
- Elimination of any impact and encroachment on Rotary Park previously mooted under Land's concept proposal. This is achieved through a reconfiguration of civil infrastructure introducing a more effective traffic engineered solution of a round-a-bout entering the site in a central location opposite the existing Miller Street.

The changes detailed above have been made in response to the community's desires and suggestions generated through the consultation process undertaken. They represent the results of improved and more innovative design solutions targeting a higher quality, more appropriate end solution to the Marina precinct redevelopment.

It should be noted that Ariadne's response to the Department of Land's key redevelopment outcome requirements must be viewed as a whole solution, since the commercial viability of the redevelopment proposal is reliant on the interrelation of the individual components. It is therefore, little value in undertaking an in-depth interrogation of the worth of each individual component of the redevelopment on a stand-alone basis without consideration for the impact



of each component on the viability of the proposal as a whole. The concepts of this design will, however, be further refined during the development of the Environmental Assessment under the NSW Part 3A application process.

### 3.5 Intended public benefits

The re-development of the marina will result in significant benefits to the local recreational boat users and the wider community, which are discussed below.

Increased amenity can be generated to benefit the wider community from the development of the boat harbour for boat owners and non-boat owners (i.e. tourists, sightseers, residents and visitors), which results from increased numbers of berths and greater access to the boat harbour foreshore.

Improved safety and environmental outcomes are expected through the removal of potentially unsafe structures and the installation of permanent sewerage pump-out and refuelling facilities.

Additional benefits of the proposal are to improve safety and navigation in the Clyde River through providing permanent Marina berths that would facilitate reduction of swing moorings. Also the Marina will generate environmental benefits as a result of providing sillage pump out facilities, which currently impact on the aquatic ecology in the Clyde River through indiscriminate discharge of wastes/pollutants.

As part of the design process undertaken by Ariadne, detailed analysis was undertaken of the site, surrounds, local community and wider region so as to ensure the community was not isolated from the design and development process.

A number of physical design elements and land use components have also been incorporated into the design to facilitate public access and local community involvement. They are summarised below and will be detailed within the Environmental Assessment.

#### Public access and Connectivity

Key benefits arising from the design in relation to access include:

- Access to the marina precinct will be rationalised via the creation of a main access point for the majority of vehicular traffic and pedestrian movements.
- High levels of pedestrian and cyclist connectivity are proposed from the marina precinct to the Hanging Rock Recreation area to the east and Rotary Park (and the Batemans Bay CBD) to the west.
- A waterfront pedestrian esplanade is planned along the entire northern edge of the site, fronting the Clyde Estuary. This will require the installation of a hydraulic ram operated bridge structure, allowing continuous pedestrian access, and also tall vessels to enter and exit the marina basin.
- Designated pathways and pedestrian corridors will allow access from Beach Road and developments to the south to the marina facilities, particularly the waterfront edge.

#### Tourism, Commercial and Employment Benefits

Key economic and tourism related benefits would include:

- The marina re-development is expected to result in significant employment particularly from the local area. It is estimated that approximately 350 persons will be employed



during the construction phase and 175 full time, part time and casual positions during operation.

- The proposed retail and commercial facilities will cater for needs of the Batemans Bay region.
- The proposed conference facility will service the conference market in the area, and would also allow community entertainment, public forums and displays.
- A club facility is also identified as a possible use in Building B3 with the potential to house a locally based club and member functions.
- The proposed 240 vessel wet berth marina and the 250 vessel dry stack storage will satisfy an increasing demand for boat storage within the Region.
- The proposed tourism accommodation facility will satisfy demand for this type of accommodation in the area and potentially encourage an increase in tourism within the Batemans Bay area.

#### Marine Interpretative Research Centre

- Consultation has occurred at a very preliminary level with a number of educational providers and locally based organisations with the aim of establishing a marine related research, educational and interpretative centre within proposed Building 2. Further investigations and stakeholder discussions will be required to develop this facility further.

#### Interactive Iconic Features

- Interpretation of the marine environment with particular relevance to South Coast Region will be included throughout the site, but will be focussed along the publicly accessible waterfront promenade.
- A range of interpretative methods are proposed and will potentially involve local environmental groups, marine clubs, fishing clubs, local Aboriginal representatives and educational institutions in their design and implementation.

## 4.0 PROJECT DESCRIPTION

This section provides an overview of the proposed re-development of the Batemans Bay Marina and discusses key elements of the Ariadne Marina design concept.

It is noted that further refinement will occur as part of the more detailed Environmental Assessment process, and in response to any specific issues raised by the Department of Planning and other referral agencies in the issue of draft Director-General's requirements.

### 4.1 Design Overview

As part of the tender submission, Ariadne and its consultants undertook extensive investigations in relation to the site's physical characteristics, environmental considerations, community needs and expectations, engineering constraints, operational and commercial requirements, and the legal and town planning framework.

Following a detailed urban design analysis and examination of the subject site and surrounds, an overall marina master plan was subsequently prepared, in addition to a number of architectural and engineering drawings which are appended to this document.

In summary, the re-development proposal as documented by this report seeks to:

- reconfigure and increase the berth capacity of the existing marina facility;
- provide highly modern and efficient marina maintenance facilities incorporating environmental best practice; and
- establish a range of ancillary and complimentary uses on adjacent and reclaimed lands, whilst improving public access to foreshore area and achieving commercial viability.

The proposed Ariadne Marinas development is shown via a series of plans and drawings in the following Appendices:

**Appendix 1** - Master Plan showing indicative site treatments

**Appendix 2** - Architectural Plans

**Appendix 3** - Engineering Details

**Appendix 4** - Urban Design Plans

**Appendix 5** - Artists Impressions

**Appendix 6** - Urban Design Analysis

### 4.2 Design Principles

#### 4.2.1 Overall Planning and Design Principles

The development of the master plan and re-development proposal was largely based on a number of guiding design principles which can be summarised as follows:

- Improve pedestrian connectivity along the Foreshore area to the northern extremity of the subject site by providing continuous foreshore access.
- Create an ecologically sound and sustainable development with minimal impacts on the existing environment.
- Reduce impacts on, and provide an appropriate frontage to, adjoining development.

- Provide high levels of connectivity and clearly defined access ways within and through the development site for both pedestrians and vehicles.
- Create high quality, well designed and finished architectural elements that are responsive to the coastal location.
- Create a sense of place, particularly within each of the three defined sub-precincts, being the *Tourist Accommodation, Community & Commercial*, and *Marina & Marine Village* precinct.
- Provide an appropriately scaled built form that does not visually dominate the site context.
- Improve the urban quality of the Beach Road streetscape.
- Connect the surrounding residential areas with the foreshore areas.
- Maintain important sightlines and vistas through the development site to the Clyde Estuary via the strategic placement and design of built elements
- Create an appropriate land-use interface with adjoining existing uses in order to minimise potential amenity conflicts.
- Provide a cohesive and navigable framework of shared spaces that are safe, legible and aesthetically pleasing, whilst avoiding conflicts between pedestrian and vehicle movements.
- Where ever possible provide interpretation of the Batemans Bay area and its rich history through the design process, including its seaside location and maritime industry.
- Create a vital anchor for the burgeoning Tourism Recreation precinct envisaged for the surrounding area in the draft *Greater Batemans Bay Structure Plan* (Eurobodalla Council) and recognised within the *South Coast Regional Strategy* (Department of Planning, 2006).

#### 4.2.2 Key Design Outcomes

Based on the urban design analysis and guiding principles listed above, an overall Master Plan showing indicative site treatments was prepared. The plan achieves the following key outcomes (refer Appendix 1):

##### Access & circulation

A comprehensive, clearly defined, and legible movement network throughout the re-development precinct is proposed for pedestrians, cyclists, vehicles and also boating movements.

In particular a water edge promenade is proposed along the Clyde Estuary edge of the site, including the marina breakwater rock wall, providing continuous pedestrian access between the Hanging Rock recreation area to the east and Rotary Park (and potentially the Batemans Bay Town Centre) to the east. The proposed introduction of an opening bridge allows for the alternative interchange of boats, pedestrians and lightweight vehicles at the marina harbour entrance.

The main point of vehicular access to the site will be from the proposed roundabout at the intersection of Beach Road and Miller Street. A secondary restricted access point is proposed from Beach Road.

##### Built Form and Heights

The proposed built form is described in the section below. The design and siting of the buildings are particularly responsive to their surrounding urban context, as well as their maritime seaside location. They have been designed to be intentionally 'lightweight' in appearance using articulated facades to break up building mass and are sited within relatively open, accessible and well landscaped spaces.

The height of the proposed buildings are to be generally restricted to two and three storeys so as to ensure the buildings do not visually dominate the site context, and to create a 'human' scale particularly adjacent to existing and proposed publicly accessible open space.

The buildings have been carefully sighted and designed to allow numerous views and vistas through and from within the site out to the Clyde Estuary and land mass beyond.

It is noted that the height of the buildings is generally consistent with the built form envisaged for the surrounding residential-tourism lands to the immediate south of the subject site, on the opposite side of Beach Road. Within these areas the draft *Greater Batemans Bay Structure Plan* recommends a building height of between 3 and 4 storey's. This draft plan is discussed within Section 5.0 of this report.

### Land Use

The site can be divided into three distinct precincts referred to as the Tourist Accommodation, Community & Commercial, and Marina & Marine Village precinct. The range of land uses and activities within each sub-precinct are discussed in greater detail in the Section below.

A range of active and leisure based uses are proposed along the water edge promenade, taking advantage of the waterfront location and impressive views of the Batemans Bay area.

### Landscaping

A combination of both hard and soft landscaping is proposed in and around the marina with the primary objective of ensuring a visually cohesive and attractive development. The landscaping has also been designed to best direct circulation throughout the site through visual cues such as unique pavement designs, bollards and soft landscaping.

One of the overriding design principles was to ensure the landscape design interprets the areas rich history both Aboriginal and European, its cultural development overtime, and unique coastal location. For example signature trees, tree groups and green edges utilised within the development reflect those from the surrounding natural landscape and culturally significant species located within the nearby Batemans Bay township. Species selection has also been influenced by the need to reduce the reliance on constant irrigation and conserve the collection of rainwater within the site.

Hardscape details such as the use of local stone and timbers typically seen in coastal locations are also proposed to be utilised.

The re-development of the site provides excellent opportunities to incorporate public art particularly in publicly accessible areas along the Clyde Estuary foreshore promenade, and to facilitate implementation of Eurobodalla Council's Public Art Strategy.

Eurobodalla Shire Council has recognised *'the potential benefit of public art to enhance public spaces; reflect and explore issues of Aboriginal culture, local heritage and identity, engage members of the community; increase amenity and provide innovation'*.

Further the policy states that *'in commercial developments of a suitable scale, Council will consider making approval contingent on the inclusion of public art projects compliant with this policy. This strategy is not intended to be financially prohibitive but to encourage private*



*developers to integrate public art in the creation of more attractive public spaces and resulting economic benefit’.*

### Views and Vistas

One of the primary planning and design objectives for the marina re-development was the retention and enhancement of physical access as well as views/vistas from the adjacent existing residential-tourist development through to the Clyde Estuary.

Significant sightlines were identified and considered as part of the urban design analysis, which is attached as Appendix 6. The identification of these sightlines and vista's has heavily influenced the siting and design of the various built elements.

Purpose made openings have been achieved to allow the retention of the views and vistas from surrounding areas and from within the site itself, out to the Clyde River Estuary and surrounding landforms. Custom made viewing platforms are also proposed along the waterfront promenade.

### Safety and Security

'Crime Prevention Through Environmental Design' principles have guided the Ariadne's design process, whereby buildings have been sighted to provide clear views and vistas around them. Landscaping also recognises the need for enclosure but avoids where possible the potential for concealing spaces. All proposed construction materials are considered to meet the relevant safety standards.

The development seeks to minimise pedestrian and vehicular conflicts by the creation of a pedestrian orientated environment, with clearly defined dedicated pedestrian thoroughfares and vehicular access ways.

### Riverfront Access

Riverfront access is a key feature of the Master Plan through the implementation of a continuous boardwalk on the northern edge of the land based development and marina, creating a link from Corrigan's Beach with the marina, Rotary park and beyond to the township. Public accessibility will therefore be greatly enhanced from its current state and the marina has the potential to become a key tourist and recreational destination.

### Urban Design Sustainability

The design embraces sustainable urban design principles and incorporates a number of measures to achieve best practice in this regard, including:

- The re-use of existing timber piers within the landscape design;
- The harvesting of roof rainwater from the site;
- Buildings have been planned and designed to be climatically responsive and energy efficient; and
- Landscape species chosen include endemic species requiring minimum maintenance and watering.

The broader issue of sustainability and other related design and operational measures that are proposed to be incorporated in the development are discussed in Section 4.4.

#### **4.2.3 Land Use and Water Based Precincts**

The proposed configuration of land uses is intended to achieve a functional arrangement of interrelated spaces and create a particular 'sense of place'. The land uses as identified in the

master plan and accompanying drawings will be subject of further investigation and consultation during the detailed environmental assessment stage.

The development is characterised by 3 distinct precincts and land uses, which are described below and are shown in the architectural plans in Appendix 1 entitled 'Master plan' (Ground Level).

#### Marina and Marine Village

The new marina will run east from the existing marina entrance towards the existing trailer boat ramp harbour. The existing rock wall will be widened and upgraded and will border the northern edge of the new marina. A wall fronting the existing private landholdings bordering the southern boundary of the site will also be required. This will be discussed and jointly undertaken with adjoining landowners to achieve the desired outcomes.

Pedestrian, cyclist and buggy access to the marina will be via a shared boardwalk along the northern rock wall bordering the marina. An automatically raised bridge will be located over the marina vessel entrance, of which the opening and closing would be managed from the adjacent marina administration building.

A new marina containing 240 wet berths is to be located to the east of the existing marina. Fire and services infrastructure such as sillage removal points may be integrated into the marina finger and walkway design, dependant upon layout and design practicalities.

The marine village precinct will contain land based marina related infrastructure, and is located to the west of the water based component. Facilities to be located within this precinct include:

- Vessel dry stack storage facility (Building B6) providing accommodation for 250 vessels up to 12 m in length with access via the marina basin.
- A multi-use boat maintenance hardstand with boat lift located to the north of the dry stack facility.
- Fuel services facility with pontoon located adjacent to the hardstand accommodating 3-5 vessels at any one time.
- A two storey marina related commercial and administration building (Building B5) is located along the frontage of the Clyde River and adjacent to the hardstand.
- The main entry (via a proposed roundabout at the Beach Road and Miller Street intersection) and at-grade car parking area for approximately 60 cars. An additional 190 car spaces (approximately) will service the Marine Village precinct from within the adjacent Marina – Community and Commercial precinct. This results in a total parking allocation to the Marine Village precinct of approximately 250 vehicles.

The re-development of the existing marina and provision of modern maintenance facilities and will result in improved environmental managements practices and outcomes.

It is noted that a dedicated passive recreation zone is also proposed, and will adjoin and surround the existing public boat harbour and launching ramp within the Hanging Rock Rock Recreation Area. This area is reclaimed between the western edge of the current boat ramp basin and the eastern edge of the proposed marina, and will form a new recreation parkland area with appropriate facilities. It will have high levels of pedestrian connectivity between the marina (via the proposed share-way along the rock wall) and the public recreation area to the west.

#### Marina - Community and Commercial

This precinct will contain a number of ancillary commercial and community based buildings and interrelated spaces. In particular the majority of this precinct will form a vibrant waterfront entertainment, tourism and recreation precinct with an outdoor emphasis orientated toward the Clyde Estuary frontage. Facilities include:

- A two storey building (Building B2) is proposed to contain retail, restaurant and café tenancies on the ground floor level, whilst a marine based interpretative education research facility is intended for the first floor level.
- A two-storey building (Building B3) fronting the Clyde River is to have provision for a tavern and marine club /restaurant tenancies.
- A three-level building (Building B4) located along Beach Road to the west of the main vehicular entry and is intended to comprise retail activities on the ground floor, conference facilities on the second floor with commercial floor space on the upper level.
- Half basement and at grade car parking for approximately 295 cars, some of which will be utilised by the Marina and Marine Village.

#### Marina - Tourism Accommodation

This precinct will primarily comprise ancillary tourist based accommodation and related facilities. It will also provide a transition to the public open space and recreation spaces to the west. This area is intended to be accessed via a secondary 'left-in and left-out' only access point off Beach Road.

A three-level building is proposed comprising approximately 60 units. Half basement and at grade parking is proposed in this precinct for approximately 137 cars.

It is noted that the helipad located to north of this precinct within Rotary Park primarily services the local hospital and emergency retrievals. Its possible relocation will become the subject of further investigation and discussions with the Department of Lands, Eurobodalla Shire Council and hospital. Alternative locations may include the hospital site or on a fixed or floating pontoon structure within the Estuary adjacent to the marina administration complex.

### **4.3 Project Description**

#### **4.3.1 Marina Design and Berths**

The marina has been designed to comply with relevant design standards which govern the width of berths, safe lengths and fairways, including:

- AS 3962 -2001 Guidelines for marina design
- AS 2000 Electrical Code
- AS 4997 Guidelines for the design of marina structures

The marina basin is safely protected from swells by the rock groin with the entrance maintained at the western end. Water movement and flushing of the new marina is provided via box culvert connections at mid-point and eastern end of the basin.

The design depth of the marina is to RL -4mAHD which is considered adequate for the majority of vessels that will use the marina.

The scheme entails 10 marina arms that will accommodate approximately 240 vessels. The number and mix of berth types is summarised in the table below.

**Table No.2: Estimated Vessel Size and Capacity**

Vessel Size	Proposed Quantity
10 metres	95
12 metres	86
14 metres	26
16 metres	33
Emergency vessels	4 included



**TOTAL****240**

The mix of berths to be provided is compliant with the Department of Lands requirements for berthing in the region and will provide berthing facilities to satisfy the current demand, whilst accommodating future growth.

Typical details of the proposed floating pontoon system and support infrastructure such as gangways and main walkway pontoons are provided in Appendix 3.

The marina is intended to include a comprehensive compliment of services with a water outlet and dual 15A power outlets at each berth service pedestal. A secondary water system will be plumbed for fire fighting, with a hydrant available every 40m on the marina in accordance with code requirements.

#### 4.3.2 Training Walls

A number of works will be required to the existing training wall which appears to have been re-armoured. Further investigations will be necessary in order to determine its condition and extent of the existing wall. Should the wall not extend to the required depth RL -4mAHD then sections of the wall will need to be reconstructed during the staged dredging program for the basin.

It is also likely that the height of the wall will be raised to RL 3m AHD, however the final level will be determined through subsequent site investigation and survey, and also through discussions with the Department of Lands, Maritime Authorities and Council.

The need for access along the crest of the training wall will require widening of the existing structure, so that a permanent pavement can be established for pedestrian movements and occasional use by emergency or maintenance and delivery vehicles.

The existing basin entry is proposed to be widened to 35m. As discussed previously the basin entrance will have an opening bridge approximately 5m in width. The bridge will be of a structural configuration to accommodate two-way pedestrian and small motorised buggy movements, and in an emergency allow a single vehicle to pass.

When closed the bridge will allow passage of non fly bridge or non-masted motor vessels to pass underneath with a height of approximately RL 4m AHD, and will be raised to enable passage of taller and masted vessels. Openings will be determined through management optimisation, but are expected to occur at half hourly intervals, or as required for arriving or departing fleets. Pedestrian access during these times would be prevented through the operation of safety boom gates.

After hours the bridge is expected to be open as per a managed scenario to accommodate night time vessel movements.

The bridge is located directly in sight of the harbour master's office and as such will be operated from this location.

#### 4.3.3 Maintenance Facilities

Boat lifting and maintenance facilities are proposed to be located at the western end of the basin and will include the following:

- Hardstand
- Slip ramp access to the marina basin with cradle forklift removal system, or a fixed boat lift system.
- Re-fueling facilities located adjacent to the hardstand including a 40m long pontoon accommodating 3-5 vessels with 3 double bowsers



A two storey marina related commercial and administration building (Building B5) is located along the frontage of the Clyde River and adjacent to the hardstand. The lower ground floor of this building is proposed to accommodate a chandlery, ship maintenance facilities, marina amenities, laundry facilities, and café/retail tenancies. Marina management and administration will be located on the upper level with visual control over the marina and associated maintenance areas including the hardstand and re-fueling facility.

It is intended for temporary fuel and boat maintenance facilities to be maintained during the Marina construction phase. This will comprise a temporary hardstand and related maintenance and boat servicing facilities. These are proposed to be located in the existing car parking area, west of the Harbour Marine property, and adjacent to the marina basin. Detailed design and other details of these temporary works will be provided in the Environmental Assessment.

#### 4.3.4 Dry Stack Facility

A dry stack facility is proposed which is intended to satisfy existing and potential demand for this type of facility within the region. This facility is intended to cater for changing recreational boating trends whereby owner's demands are increasingly focussed on minimising maintenance, storage and other ownership responsibilities.

Located to the west of the proposed marina basin, this building will provide the capacity to accommodate 250 vessels up to 12m in length. Access will be from the basin and the entrance will provide undercover protection and waiting berth facilities. A negative lift forklift system and/or gantry crane will be employed to lift and stack boats within the structure.

The dry stack facility and other buildings have been carefully sighted and designed to minimise their visual impact on the immediate setting, surrounding land uses and to maintain important sightlines through the site to the Clyde Estuary.

The dry stack structure will be constructed as a steel framed portal building with translucent wall materials that will create a sense of transparency during daylight hours and a lantern effect at night. This will assist in the visual integration of the structure. In addition, a 'veil' of trees is proposed to be located between the dry stack and Beach Road.

The design and lighting of the structure will be subject to further refinement, and will need to give due regard to potential light spill at night on surrounding properties, along with strict visual integration in the urban fabric.

#### 4.3.5 Other Buildings and Uses

A description of the various buildings on-site and uses is provided in Section 4.2.3. The following table summarises the space located within each of the Building components. Each of the buildings are shown and numbered 1 to 6 in the architectural plans in Appendix 1 entitled 'Master plan' (Ground Level).

**Table No.3:** Buildings and Floorspace

Building	Level	Intended Uses	Floorspace (m2)
<b>B1 Tourist Accommodation</b>	Ground, First and Second	60 tourist accommodation units	4,374
<b>B2 Interpretive Centre/Commercial</b>	Ground	Retail	480
	First	Interpretive Centre	540
		Balcony	18

<b>B3 Marina Club Building</b>	Ground	Retail Tavern	880
	First	Marina Club	880
		Balcony	270
<b>B4 Commercial/Conference Facility</b>	Ground	Retail	1,100
	First	Commercial Conference	1,100
	Second	Commercial Office	1,165
		Balcony	280
<b>B5 Marina Commercial Building</b>	Ground	Retail (workshop)	241
		Retail (chandlery/shop)	413
	First	Commercial	1,700

#### 4.3.6 Site Access and Car parking

The main point of vehicular and pedestrian access to the site will be from the proposed roundabout at the intersection of Beach Road and Miller Street. A secondary 'left-in left-out' access point to the Tourism and Community-Commercial precincts is proposed from Beach Road.

The main entry will allow two-way access to all sub-precincts, including larger articulated vehicle access to the marina village. The main entry spine will ensure permeability to the precinct, but also organising legibility and way finding to the Marina Village facilities to the east and commercial and community uses to the west.

Pedestrian and cyclist movements along the main entries, and throughout the entire site are separated from vehicular access-ways where ever possible through the use of dedicated pathways. To reduce conflict within lower order access-ways, 'shared' low speed environments, such as the 'Marina Lane' are proposed.

A total of approximately 500 vehicles are proposed to be accommodated in both half basement and at grade parking areas. Car parking provision within each of the three distinct site precincts is summarised below. The dedicated parking areas are shown in the architectural plans in Appendix 1 entitled 'Master plan' (Ground Level and Basement Level).

The overall objective of the proposed parking design and provision is to satisfy the demand generated on-site, and minimise the potential for 'spillover' parking within the surrounding local streets.

**Table No. 4:** Car Parking Provision

Precinct	Level	Car Spaces
<b>Tourist Accommodation</b>	Basement	122
	Podium (at grade)	14
<b>Commercial - Marina</b>	Basement	257
	Podium (at grade)	106



<b>TOTAL</b>	<b>499</b>
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#### 4.3.7 Earthworks, Dredging and Reclamation

Significant earthworks are required to establish the site for re-development.

A portion of the existing sand flats inside the training wall will be excavated to form a basin sufficient to establish the new harbour. The works will be carried out by dredge and the anticipated quantum of material to be relocated off site is approximately 150,000m<sup>3</sup>.

The estimated volumes needed to reach desired levels in the marina basin and land components associated with the earthworks are as follows:

- Total excavation required to reduce the marina basin to RL -4.0m AHD = 238,800m<sup>3</sup>;
- Total fill required to establish building levels in reclaimed marina = 66,600m<sup>3</sup>;
- Total fill required for preloading = 24,300m<sup>3</sup>.
- Net fill to be dredged off site = 147,900m<sup>3</sup>;
- Approximate volume of treated material = 15,000m<sup>3</sup> – 30,000m<sup>3</sup> (Estimate only – subject to contamination assessment of basin sediments)

Strategies and measures to relocate and store the excess sand are currently being investigated by the proponent and its consultants. These options would obviously involve more detailed engineering and environmental impact investigation, and discussions with relevant authorities.

A detailed contamination assessment will be undertaken for the sediment at the base of the existing basin, and if deemed necessary a remediation strategy will be prepared. There exists the potential for any treated or surplus sands to be re-used as working course under proposed buildings, or backfill behind retaining walls within the marina re-development site.

The remainder of the sand bay will be excavated and used to fill in the existing marina basin to the landside design levels. A previously prepared Geotechnical Report produced by Sinclair Knight and Partners (1986) notes that preloading of the fill may be necessary to ensure that resultant settlement is controlled. Accordingly it will be worthwhile providing a preloading in the order of 1 – 1.5m of sand over 3-6 months to achieve a stable embankment. This will be subject to a detailed geotechnical investigation and settlement analysis.

#### 4.3.8 Indicative Marina Construction Staging

Indicative marina construction and dredging sequencing is provided in Appendix 7. Staging of works will be the subject of further refinement as part of the more detailed environmental assessment and design process. Each stage of construction process, timing and the extent of planned works will be detailed within the Environmental Assessment report.

The four basic stages of the marina re-development process are identified as follows:

- |          |  |
|----------|--|
| Stage 1: | Relocation of wet berth tenants within part of the new marina (180 new wet berths to be created in this Stage) |
| Stage 2: | Remediation of the existing marina basin   |
| Stage 3: | Dredging of the balance of the new marina and filling of the old marina basin                                  |
| Stage 4: | Completion of building works.  |

### 4.4 Ecologically Sustainable Design Rationale and Principles

The proposed marina re-development is intended to have a strong sustainability focus across all project disciplines including architecture, urban design, engineering and environmental science.

The principles of ecologically sustainable design included in the Urban Local Environmental Plan for the Eurobodalla Shire were considered as part of the design process. They are:

- (i) *to integrate economic, environmental and social goals into policies, practices and decision-making, and*
- (ii) *to take a precautionary approach to decision-making to ensure that resources are utilised in a sustainable manner, and*
- (iii) *to protect biological diversity, and*
- (iv) *to ensure that natural and environmental assets are properly valued, and*
- (v) *to provide for equity within and between generations.*

Further, the four accepted principles of ecologically sustainable development to be considered when assessing development include:

- *The precautionary principle,*
- *Social equity including inter-generational equity,*
- *The conservation of biological diversity and ecological integrity, and*
- *Improved valuation and pricing of environmental resources*

These principles have been applied to the conceptual design of the marina and associated facilities. Ecologically sustainable development practices will be applied to the following key aspects of the proposed re-development proposal:

- Environmental Management
- Ecological values
- Social values
- Energy conservation
- Water conservation
- Materials choice
- Indoor environment quality
- Waste control
- Control of harmful emissions
- Construction management approaches that minimise adverse impacts on the environment

It is noted that proposal will essentially utilise an existing boat harbour that has been substantially modified overtime for the purposes of boat storage, maintenance and related facilities such as car parking. Re-development of an existing facility is preferred to the creation of a new marina within a 'Greenfields' situation, bring a remnant river or coastal location unaffected by urban development and recreational boat usage. Further, the proposal will facilitate a reduction in swing moorings which have a negative impact on the ecology of the river and sea bed.

The project will create a high quality maritime precinct to attract visitors to the area and promote access to water activities. The project should act as a catalyst for the revitalisation of the surrounding tourist precinct and Batemans Bay Town Centre, attracting investment opportunities and thereby employment generation.

The proposal through its design will provide significant enhancements to the public domain in the locality, which would improve access to the waterfront and enhance the community's sense of place.

The preliminary environmental assessment undertaken as part of this project has identified a range of issues or methodologies for the conduct of the more detailed investigations. However preliminary analyses indicate that the impacts generated by the proposal can be mitigated or avoided by the implementation of appropriate management measures. The impacts and mitigation measures will detailed in the Environmental Assessment report.



A range of management measures are also proposed to be implemented and adhered to, during both the construction and operational phases to minimise environmental mismanagement and risks, thereby largely avoiding adverse harm to the immediate environment. These are discussed within Section 6.14.

It is noted that the long term impacts of the Project are discussed in the following section, and will be addressed in detail via the Environmental Assessment report.

## 5.0 STATUTORY AND NON-STATUTORY PLANNING FRAMEWORK

The following legislation, planning instruments and policy were considered in the Ariadne's design and preliminary environmental assessment process.

Further detailed analysis and discussion of these plans will be provided in the Environmental Assessment.

### 5.1 Commonwealth Legislation

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) provides for the protection and assessment of matters of "National Environmental Significance" (NES). These matters include, amongst other things, Commonwealth Marine Areas, threatened and migratory species and wetlands of international importance.

The EPBC Act defines proposals that are likely to have an impact on matters of NES as a 'controlled action'. Proposals that are, or may be, a controlled action are required to be referred to the Commonwealth Minister for the Environment and Heritage for determination as to whether or not the action is a controlled action.

Approval may be required under this Act should it be determined that the re-development could potentially have a significant impact on the environment. Investigations are being undertaken to determine the level of impact on matters of NES, particularly in relation to:

- Migratory bird species including the Eastern Curlew and bar-tailed Godwit
- Marine fishes including the Australian Grayling (*Prototroctes maraena*)
- The Clyde River Estuary (important wetland)

### 5.2 State Legislation and Planning Policies

#### 5.2.1 State Environmental Planning Policies

State Environmental Planning Policies considered relevant to the proposal are discussed below. The design of the marina has taken into consideration the relevant provisions of these policies. Compliance with these and any other relevant policies will be documented within the Environmental Assessment.

- State Environmental Planning Policy (Major Projects) 2005

State Environmental Planning Policy – (Major Projects) 2005 (Major Projects SEPP) identifies development that is subject to assessment under Part 3A of the Environmental Planning & Assessment Act, 1979 (EP&A Act) (Part 3A of the EP&A Act is discussed below under the heading 'Environmental Planning & Assessment Act, 1979 - Section 5.2.2).

Specifically, clause 6 of the Major Projects SEPP states that development of a kind specified in Schedules 1 and 2 (amongst other schedules) of the SEPP are "*declared to be a project to which Part 3A of the EP&A Act applies*".

Under Clause 1(1)(d) of Schedule 2 of Major Projects SEPP "*development within the coastal zone*" for the purposes of "*marinas that are designated development and that are wholly or partly in a sensitive coastal location*" are major projects to which Part 3A applies.

The Batemans Bay Marina is located within the "coastal zone", by virtue of Section 4(1)(b) of the *Coastal Protection Act, 1979*.

The project proposal is also considered to fit within the definition of *Designated Development* under Clause 23(1)(c) of Schedule 3 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), which includes in the classification of "designated development":

*"(1) marinas or other related land or water shoreline facilities that moor, park or store vessels (excluding rowing boats, dinghies or other small craft) at fixed or floating berths, at freestanding moorings, alongside jetties or pontoons, within dry storage stacks or on cradles on hardstand areas:*

- (a) that have an intended capacity of 15 or more vessels having a length of 20 metres or more, or*
- (b) that have an intended capacity of 30 or more vessels of any length and:*
  - (i) are located in non-tidal waters, or within 100 metres of a wetland or aquatic reserve, or*
  - (ii) require the construction of a groyne or annual maintenance dredging, or*
  - (iii) the ratio of car park spaces to vessels is less than 0.5:1, or*
- (c) that have an intended capacity of 80 or more vessels of any size. [emphasis added]"*

Under Clause 1(4) of Schedule 2 of the Major Projects SEPP, "sensitive coastal location" is defined as meaning, amongst other things, "land within 100m above mean high water mark of the sea, a bay or an estuary". The marina is located immediately adjacent to the Clyde Estuary and mean high water mark.

The project proposal incorporates an additional 115 (approximate) floating berths and accommodates an additional 250 vessels within a dry stack facility. It also proposes a new hardstand and boat maintenance facility with an inclined slipway.

Having regard to the above, the project proposal is a major project within the meaning of the Major Projects SEPP and Part 3A of the EP&A Act. The Minister for Planning has also issued a 'clause 6 Determination' (based on the Department of Lands Concept Design) declaring the project proposal to be a 'major project' to which Part 3A of the EP&A Act applies.

The project proposal is also appropriately classified as a 'major project' under Schedule 1, Clause 14 (1) (Marina Facilities) of the SEPP, which states:

- (1) Development for the purpose of marinas or other related land or water shoreline facilities that moor, berth or store vessels (excluding dinghies and other small craft) at fixed or floating berths, at freestanding moorings, alongside jetties or pontoons, within dry storage stacks or on cradles in hardstand areas and that:*

- (a) moor, berth or store more than 30 vessels in Sydney Harbour, Middle Harbour, North Harbour, Botany Bay, Port Hacking, Broken Bay or associated tidal waters, or*
- (b) moor, berth or store more than 80 vessels in other waters, or*
- (c) are located in environmentally sensitive areas of State significance, but excluding any development that, in the opinion of the Minister, is only of local environmental planning significance.*

- (2) A reference in this clause to the number of vessels moored, berthed or stored includes a reference (in the case of an existing facility) to the additional number of vessels moored, berthed or stored at the facility.*

▪ State Environmental Planning Policy No.11 - 'Traffic Generating Developments'

The aim of State Environmental Planning Policy No. 11 – Traffic Generating Developments (SEPP 11) is to ensure that the Roads and Traffic Authority (RTA) is made aware of and given the

opportunity to make a representation in respect of developments referred to in Schedules 1 and 2 of the SEPP.

Schedule 1(c) includes *'the erection of a building for the purposes of shops and commercial premises where the gross floor area of the building is or exceeds 4000 square metres.'* The proposed redevelopment proposes in excess of this figure and therefore requires referral to the RTA by the consent authority. It is the intention of the proponent to consult with the RTA in relation to the proposed development during the detailed design process.

- State Environmental Planning Policy No.55 - 'Remediation of Land'

The objectives of State Environmental Planning Policy No 55 – Remediation of Land (SEPP 55) include the promotion of remediation of contaminated land for the purpose of reducing the risk to human health or the environment. Clause 7 of SEPP 55 requires a consent authority to consider whether the land is contaminated, and whether it is suitable (or can be made suitable) for the proposed development.

Detailed contamination assessment and testing will occur and have regard to the relevant provisions of this policy and also the *Contaminated Land Management Act, 1997*.

- State Environmental Planning Policy No.71 – 'Coastal Protection'

State Environmental Planning Policy No 71 – Coastal Protection (SEPP 71) commenced in 2002 with the aim of ensuring there is a consistent and strategic approach to coastal planning and management.

The SEPP applies to the coastal zone and relevant matters for consideration are listed in Clause 8 of the SEPP. This policy was considered during the detailed design process and the concept design is considered to be generally consistent with the relevant aims and objectives of this policy. Compliance with the specific aims and objectives of this policy will be addressed in detail within the Environmental Assessment.

- State Environmental Planning Policy No.65 – Design Quality of Residential Flat Development

Where relevant the provisions of this policy will be considered and applied, particularly in relation to the design of the proposed tourist accommodation facility.

## 5.2.2 State Legislation

State legislation considered relevant to re-development is discussed below.

- Environmental Planning & Assessment Act, 1979

Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) consolidates the assessment and approvals process for all major projects requiring approval of the Minister for Planning, which were previously dealt with under Parts 4 and 5 of the Act.

Part 3A applies to State government infrastructure projects, developments previously classified as State significant and any other projects, plans or programs declared by the Minister. It provides a separate streamlined and integrated development assessment and approvals regime for projects of significance to the State.

Clause 75E of the EP&A Act provides that a proponent may apply for approval of the Minister to carry out a major project. Accordingly, the current project proposal will be subject to assessment by the Director General of the Department of Planning and determination by the Minister for Planning in accordance with Part 3A of the EP&A Act.



Part 3A of the EP&A Act and the related clauses of the *Environmental Planning Assessment Regulation 2000* (EPA Regulation) were recently amended to modify the effect of Part 3A in relation to certain types of development that are prohibited under an environmental planning instrument.

In short, Clause 8N of the EPA Regulation effectively prevents the Minister from approving a major project or any part of a major project that:

- (a) is located within an "environmentally sensitive area of State significance" or a "sensitive coastal location", and
- (b) is prohibited under an environmental planning instrument.

As set out in Section 5.2.1 above, the Batemans Bay marina is located in a "sensitive coastal location".

Certain proposed uses of the project proposal are also prohibited under Eurobodalla Shire Council's *Urban Local Environmental Plan 1999*. This issue is addressed in more detail in Section 5.4.

- Protection of the Environment Operations Act, 1997

The *Protection of the Environment Operations Act 1997* (POEO Act) regulates the protection, restoration and enhancement of the quality of the environment in the context of ecologically sustainable development (ESD) and has as its objective, the minimisation of risks to human health and prevention of the degradation of the environment.

It is understood that, notwithstanding the proposed development is a Part 3A project, where a licence is required under the POEO Act, that licence will still need to be obtained. The applicant is aware that the operation of "marina and boat repair facilities" is an activity that may require an Environment Protection Licence from the Department of Environment and Conservation.

- Fisheries Management Act 1994

The objects of the Fisheries Management Act 1994 are to conserve, develop and share the resources of the State for the benefit of present and future generations. Liaison with the Department of Primary Industries would be beneficial in relation to any proposal to disturb seagrass and the like, or for dredging and reclamation.

- Threatened Species Conservation Act, 1995

The *Threatened Species Conservation Act 1995* aims to conserve threatened species, populations and ecological communities of animals and plants. Ecological investigations are to be undertaken as part of the Environmental Assessment to determine the extent of impact and any permit or approval requirements under this Act.

- Waste Avoidance and Resource Recovery Act, 2001

The objective of this Act is to encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ESD and to establish a waste management hierarchy of avoidance of unnecessary resource consumption and resource recovery (including re-use, recycling, reprocessing, energy, recovery and disposal). Any required licences for generating or storing hazardous wastes during construction and or operation will be obtained.

- Contaminated Land Management Act (CLM), 1997

The CLM Act enables the Environment Protection Authority to respond to contamination that is causing a significant risk of harm to human health or the environment, and sets out criteria for determining whether such a risk exists.

Detailed contamination assessments will be undertaken to determine the location and extent of any contaminated sediments. Upon further environmental investigation, the applicant will consider the implications of the presence of contamination in the context of notification and remediation obligations under the CLM Act.

The applicant is also aware of the National Environment Protection Measure (NEPM) relating to the investigation of site contamination and will investigate and remediate contamination in respect of the NEPM and all relevant guidelines and regulations.

- Other Statutory Approvals

The following acts may have relevance to the proposal and will be reviewed in detail during the detailed environmental assessment process.

- *OHS Amendment (Dangerous Goods) Act, 2003*
- *Coastal Protection Act, 1979*
- *Maritime transport and Offshore Facilities Security Act, 2003*
- *Noxious Weeds Act, 1993*
- *National Parks and Wildlife Act, 1974*
- *Rail Safety Act, 2002*
- *Road and Rail Transport (Dangerous Goods) Act, 1997*
- *Roads Act, 1993*
- *Water Act, 1912*
- *Maritime Services Act, 1935*

### 5.3 Regional Environmental Plan's

The following regional plans are applicable to development within the South Coast Region and were considered in the early stages of the design process.

- Regional Environmental Plan No.1 - Lower South Coast

The *Lower South Coast Regional Environmental Plan No 1* (LSCREP 1) applies to land within the Shires of Bega Valley and Eurobodalla (an area declared by order to be a region called 'The Lower South Coast Region'). Aims, objectives, policies and strategies of the REP include:

- *to conserve the scenic and environmental character of the Region,*
- *to maintain the scale and character of the built environment, and*
- *to enable flexibility in building design consistent with the general aims and objectives of this plan.*

Clause 6(1) of the REP states that a person shall not erect a building on land to which this plan applies if the building has a height of more than 14m. Clause 6(2) goes on to say that nothing in clause 6(1) authorises the erection of a building that does not comply with a development standard relating to a height which is specified in another EPI.

- Regional Environmental Plan No.2 – Lower South Coast

The *Lower South Coast Regional Environmental Plan (No 2)* (LSCREP 2) also applies to the Lower South Coast Region. Aims of the LSCREP 2 include:

- *to develop regional policies that protect the natural environment and promote the orderly and economic development and use of land and other resources in the region, consistent with conservation of natural and man-made features,*
- *to consolidate and amend various existing policies applying to the region, to make them more appropriate to regional needs, and to place them in the context of regional policy, and*
- *to establish a regional planning framework for identifying priorities for further investigation to be carried out by the Department of Planning and other agencies.*

Part 2 of the REP discusses environmental aspects including natural areas, coastal and waterway environments, environmental hazards (e.g. bush fires and flooding), heritage and rural land. This plan describes policies and matters that Council should consider before granting consent. As the proposed development does not require consent from Council, these sections do not apply, however relevant issues will be addressed during design development and preparation of the Environmental Assessment. Additionally, Schedule 2 lists guidelines for development in waterway catchment which will also be considered where appropriate.

## 5.4 Local Planning Controls

### ▪ Eurobodalla Urban Local Environmental Plan

The subject site is contained within Eurobodalla Shire and is subject to the Eurobodalla Shire Council's Urban Local Environmental Plan (ULEP). The current zoning for the Marina is identified below:

Property Description	Approximate Site Area	Current Zoning	Zone Objectives
<b>Lot 11 DP124295:</b>	11.8 Ha	6c1 Private Recreation	<i>The objectives of the 6c1 Private Recreation zone are to recognise and provide for major recreational uses carried out on land not owned by a public authority.</i>
<b>Lot 11 DP870049:</b>	0.5 Ha	5d Car Park	<i>The objectives of the 5d Car Park zone are: (d) to identify existing and proposed car parks of key importance to the future development of adjoining commercial land, and (e) to ensure that land is available for necessary off-street car parking in future, and (f) to provide for acquisition of land identified as necessary for car parking and for its use in the interim period</i>

The proposed uses of the subject site and the permissibility of these proposed uses are summarised in the following table. There are no uses that are identified as "prohibited" within the 5d Car Park Zone.

Proposed Development	ULEP Definition	Permissibility
<b>Marina</b>	Marina	With Consent
<b>Commercial</b>	Professional	Prohibited



	Offices/Commercial Premises	
<b>Shop</b>	Shop	Prohibited
<b>Café</b>	Restaurant	With Consent
<b>Tavern</b>	Hotel	Prohibited
<b>Units</b>	Tourist Accommodation	With Consent
<b>Restaurant</b>	Restaurant	With Consent
<b>Car Park</b>	Car Park	With Consent

While marina development, ancillary tourist accommodation and restaurants, car parks are identified as permissible development with the consent of Council under the 6c1 Zone, there are certain proposed uses that are prohibited under the ULEP. As indicated previously, the proposed redevelopment of the Marina will be assessed under Part 3A of the EPA Act.

As identified in the table above, there are a number of proposed uses that are currently prohibited within the 6c1 zone under the ULEP. These uses include commercial premises, professional offices, shops and hotels.

Recently, Part 3A of the EP&A Act and the related clauses of the EP&A Regulation were amended to modify the effect of Part 3A in relation to certain development that is prohibited under an environmental planning instrument.

Clause 8N of the EP&A Regulation, which commenced on 20 July, 2007, states:

*"(1) For the purposes of sections 75J(3) and 75O(3) of the Act, approval for a project application may not be given under Part 3A of the Act for any project, or part of a project, that:*

- (a) is located within an environmentally sensitive area of State significance or a sensitive coastal location, and*
- (b) is prohibited by an environmental planning instrument that would not (because of section 75R of the Act) apply to the project if approved.*

*(2) To avoid doubt, a project is not prohibited for the purposes of subclause (1) (b) if:*

- (a) it is not permitted because of the application of a development standard under the environmental planning instrument, or*
- (b) it is prohibited under the environmental planning instrument but is permitted to be carried out because of the application of another environmental planning instrument to the environmental planning instrument.*

*(3) In this clause:*

*environmentally sensitive area of State significance has the same meaning as it has in State Environmental Planning Policy (Major Projects) 2005.*

*sensitive coastal location has the same meaning as it has in clause 1 of Schedule 2 to State Environmental Planning Policy (Major Projects) 2005."*

Clause 8N of the EPA Regulation effectively prevents the Minister from approving the retail and commercial components of the proposed marina re-development that are prohibited under the LEP.



However, Eurobodalla Shire Council has recently resolved to prepare an amending LEP in order to facilitate the Bateman's Bay Marina re-development. The amended LEP, once made, will make the presently prohibited uses permissible.

Accordingly, it is envisaged that the Major Project Application will be assessed and processed concurrently with the making of the amending LEP. Once the amending LEP is gazetted, the entirety of the project proposal will be permissible and Regulation 8N would no longer apply to any part of the project. Therefore, the Minister will have the power to approve all components of the project under Part 3A of the EP&A Act.

While the amending LEP is being drafted and exhibited, the Minister has the power to assess the Major Project Application under section 72J(b) of the EP&A Act, notwithstanding the presently prohibited components, but cannot approve the prohibited components of the project until they are first made permissible by the amending LEP.

The overall consistency of the integrated marina concept with the general objectives of the ULEP and in particular the 6c1 zone, provides a sound basis for the Marina redevelopment for the following reasons:

- The marina will increase public accessibility for residents, visitors and recreational boat users to the foreshore and Clyde Estuary.
- The marina will satisfy demand for boat storage (via floating berths) and modern maintenance facilities within the Region, and provide improved services to the boating community such as the provision of fuel and supplies.
- The marina and ancillary commercial and tourist related activities will provide a significant increase in full-time and part-time employment opportunities for Batemans Bay and surrounding areas during both the construction and operational phases.
- The re-development of the existing facility will seek to minimise environmental impact and where possible improve environmental outcomes via the incorporation of 'best practice' controls.
- The marina and its operation will incorporate a range of ecologically sustainable design measures.
- The development will provide easily accessible and well designed publicly accessible buildings and interrelated spaces orientated toward the adjacent river system.
- The marina is proposed to include a range of community related functions and facilitate the inclusion of existing residents, community related groups and other stakeholders throughout the development process and long term operation.
- The re-development is expected to provide a catalyst for investment within the township and wider South Coast Region.
- Greater Batemans Bay Draft Structure Plan

According to Council, the *Greater Batemans Bay Structure Plan* will set out the strategic planning framework for protection of the environment and major transport priorities. It will also guide the scale, pattern and broad location of development including provision for new housing and business for the Greater Batemans Bay area. The stated purpose of the Structure Plan is to guide the preparation of an amending Local Environmental Plan and provide a framework within which decisions on future land use zoning can be made.

It is also noted that a Structure Plan is not a planning scheme and does not have a role in development assessment. It does not zone individual sites, rather this is performed via a Local Environmental Plan. The Structure Plan is a strategy for understanding and managing growth and development in the study area.

It is also proposed to include more detailed development controls within a comprehensive Development Control Plan.

Within the area surrounding the marina, the Structure Plan is recommending a number of land use significant changes to currently permitted built form. In particular, within land south of Beach Road the plan is proposing 3 to 4 storey residential development. For land to the east of the marina bounded by the marina basin and Hanging Rock Recreation area, the plan is contemplating 3 storey residential development. For certain areas the achievement of the maximum permitted storey's would be subject to satisfying a range of design criteria.

If the recommendations are implemented, the existing low rise (1-2 storey) character of lands surrounding the marina site will have the potential to alter significantly and become more urban and high rise (3-4 storey) in appearance.

The re-development of the marina will no doubt increase the level of interest and potentially accelerate property investment and re-development within these areas

Further, more detailed analysis of the structure plan will occur during the Environmental Assessment preparation and involve consultation with Eurobodalla Council.

▪ Development Control Plans and Other Policy (Eurobodalla Shire Council)

The following Development Control Plans and policy are considered relevant to the proposal. The proposed re-development is considered to be consistent with the aims and objectives of these plans.

- Development Control Plan No.132 – Guidelines for Outdoor Advertising
- Development Control Plan No.185 – Outdoor Eating Areas
- Development Control Plan – Parking (Parking Code)
- Development Contributions Plan 2004-2005

Other plans and policy that have been reviewed in preparation of this assessment, and will be assessed in detail during the Environmental Assessment stage include:

- Greater Batemans Bay Structure Plan (2006)
- Draft Batemans Bay Town Centre Structure Plan (2006)
- Batemans Bay Town Centre Development Guidelines
- Batemans Bay Estuary Management Plan (WBM, 2005)
- Eurobodalla Settlement Strategy (December, 2006)
- Batemans Bay Foreshore Park (Concept Plan)
- Eurobodalla Integrated Water Cycle Management Strategy
- Draft Nature Coast Design Guide
- Eurobodalla Residential Design Code
- Neighbourhood Business and Commercial Centre Guidelines
- Draft Eurobodalla Shire Council Greenhouse Action Plan
- Public Art Policy
- Eurobodalla Shire Heritage Strategy (2006)
- Outdoor Advertising Signs
- Social Plan
- Disability Access Action Plan
- Cultural Plan
- Eurobodalla Bike Plan

- Strategies relating to: wharfs, jetties, & boat ramps; stormwater drainage, acid sulphate soils; and public transport.

## 5.5 Adjoining Lands

Adjoining land is zoned a combination of the following zones.

- Rotary Park crown reserve and foreshore reserve on the boat harbour side of the nine residential properties: Zone 6a1 – Public Open Space.
- The existing residential properties located on the southern side of Beach Road are zoned as '2t – Residential Tourism Zone'.

The objectives of the '6a1 Public Open Space' zone that are relevant to the study area include:

- *to recognise the importance of land in the zone as open space and allow a limited range of uses compatible with keeping the land as open space and in public ownership;*
- *to permit a range of uses, especially recreational uses, where those uses comply with the plan of management for the land; and*
- *to allow development on the foreshores where that development is water-related and enhances the recreational use or natural environment of the foreshore*

The development is not considered to adversely impact on adjoining lands zoned 6a1, rather the proposed design including the pedestrian promenade treatment along the riverfront provides improved pedestrian access between the marina facilities with Hanging Rock Recreation area and Rotary Park.

The objectives of the 2t Residential - Tourism zone are:

- (a) *to provide a variety of residential opportunities at relatively higher densities in localities where full services are provided and which are close to commercial centres and community facilities, and,*
- (b) *to encourage tourist facilities and accommodation in areas close to commercial centres, and*
- (c) *to provide for limited commercial activities*

The development as proposed is considered to be consistent with the zone objectives for the following reasons:

- The proposal incorporates both tourist related facilities and accommodation which will both satisfy the demand for these type of facilities within the South Coast Region, whilst also attracting additional tourists and visitors to the facility.
- The marina re-development is located within close proximity to the Batemans Bay Town Centre, with the potential for future continuous pedestrian connections along the Clyde River frontage.
- The concept design also includes an ancillary commercial component including office space. These functions are considered subservient to the marina and tourist related activities.

The Residential 2t zone allows a wider range of land uses than other traditional residential zones under the Urban Local Environmental Plan. Apart from typical dwelling houses, development allowed with consent includes general stores, hospitals, seniors housing, indoor recreation facilities, manufactured home estates, medical centres, passenger transport terminals, professional offices, service stations and tourist accommodation.

Having regard to the above, the proposed land-use activities proposed in the re-development of the marina are considered complimentary to the range of permissible uses within the 2t zone.

It is also noted the Development Control Plan for the *'2t Residential Tourism Development Guidelines'* generally allows 2 storey development with a maximum height of 8.5 metres, and a Floor Space Ratio of 1:1.

The urban character of this zone may alter should the recommendations of the *Greater Batemans Bay Draft Structure Plan* be implemented. This draft plan is discussed in Section 4.4.

## 5.6 Other Policies

The following policies and guidelines were also reviewed during the design process.

- NSW (State Government) South Coast Regional Strategy

This strategy (Department of Planning, 2006) applies to the local government areas of Shoalhaven, Eurobodalla and Bega Valley, and acknowledges the status of the South Coast as one of the high growth regions in NSW. The primary purpose of the Strategy is to ensure that the regions significant natural and scenic assets are not compromised by growth, and the strategy aims to achieve this by ensuring that appropriate land is available to sustain the necessary growth in housing, employment and environmental needs over the next 25 years.

The Strategy identifies Batemans Bay as a *"Major Regional Centre"* and the Batemans Bay Marina as *"regionally significant employment lands and infrastructure within the South Coast"*. As part of the overriding objective to add to the available employment lands in the Region, the Strategy states that Local Environmental Plans will protect and add to employment lands within major regional centres, towns and regionally significant sites including the Batemans Bay Marina.

The strategy also promotes the concentration of development for the region in Batemans Bay (along with Moruya and Narooma) and the *"Town Centre type development encouraging mixed use and higher density living strengthening its role as the major residential, commercial and tourism centre for the middle part of the Region"*. The Strategy states that tourism is a key growth and opportunity sector (over \$1.2 billion was spent by visitors in the region in 2003).

- Other Plans, Policies and Guidelines

Other plans, planning policies and guidelines considered relevant to the proposal have also been reviewed as part of the preliminary assessment process and will be addressed in detail as part of the Environmental Assessment. They include:

- NSW (State Government) Coastal Policy, 1997

The policy applies to most development within the coastal zone, including the subject Batemans Bay Marina site.

The Policy provides a framework for the balanced and coordinated management of the coast's physical, ecological, cultural and economic attributes.

The policy is primarily designed for use by local Council's along the NSW coastline, and for the specific aims, objectives and directions to be considered in the preparation of Local Environmental Plans and other planning policy that control development within these areas. However, it has been reviewed in the preparation of the modified design proposal and where relevant influenced the overall design of the re-development.



It is noted that the planning goals, objectives, and strategic actions and other provisions contained in the coastal policy have largely been addressed in the consideration of SEPP No.71 – Coastal Protection.

- NSW (State Government) Coastal Design Guidelines

This document provides design guidance and principles for coastal settlements. This document is primarily for use during the 'plan' making stage within established or new coastal settlements.

The guidelines have been reviewed in the preparation of the design proposal and where relevant influenced the design and overall appearance of the structure.

- NSW State Rivers and Estuary Policy, 1993

Whilst the legislative and institutional framework for the management of river systems within the State have altered, the overriding objectives of the policy are to be considered in the marina re-development process.

## 5.7 Community Consultation

Ariadne in preparing the detailed design for the site's re-development gave detailed consideration to the outcomes of the preliminary community consultation process undertaken as part of the overall tender process by the Department of Lands. These included:

- Notification of all affected landowners and boat owners on 30 May, 2006.
- Two stakeholder workshops convened by the Department of Lands on 3 August, 2006.
- A public meeting also convened by the Department of Lands on 9 August, 2006.

The key issues arising from these community engagement exercises are listed within the *Preliminary Environmental Assessment* (refer Appendix 8).

A detailed community consultation plan for the approval and assessment stage, and the construction phase is proposed to be undertaken as part of the approval and development process. This will be detailed within the Environmental Assessment.

It is proposed to establish a Batemans Bay Marina Re-development Community Liaison Group (CLG) to participate in regular meetings/workshops throughout the project planning and development phases. It is intended for this group to include representatives of economic, environmental, recreational and community groups, government agencies, local business operators and other key stakeholders residing in the Batemans Bay region.

The CLG will function in an advisory role to Ariadne and the Batemans Bay marina project team. It will allow in depth discussion and stakeholder input into matters of land-use, environmental, economic and social concern that is directly relevant to Batemans Bay marina. The CLG will be in addition to other community consultation processes to be undertaken by Ariadne.

It is also the intention of the proponent to establish a website early in the approval and development phase, which will contain an interactive element to facilitate on-going community responses to the project.

Key stakeholders proposed to be consulted during the detailed investigation, approval process and construction phases include:

- Stakeholder Groups already engaged by the Department of Lands
- Eurobodalla Shire Council

- Batemans Bay Marina Co-operative Ltd
- Beach Road Property Owners Representative
- Coachhouse Marina Resort
- Royal Volunteer Coastal Patrol
- Batemans Bay Sailing Club Inc.
- Batemans Bay Chamber of Commerce
- The Coastwatchers Association
- Clyde River Oyster Farmers Association Inc.
- Marine Park Authority
- Stockland (Batemans Bay)
- Eurobodalla Coast Tourism (Batemans Bay)
- Woolworths (Batemans Bay)
- Beach Road (North side) waterfront property owners
- Beach Road (South side) property owners
- Eurobodalla Coast Tourism (ESC)
- Existing encumbered tenants and users of the marina property
- Other adjoining and surrounding property owners-residents
- Marine based clubs and other recreational groups
- Local Aboriginal representatives
- Local Environmental and Heritage groups
- Local Chamber of Commerce
- Key business operators in the Batemans Bay township and surrounding area

## 6.0 PRELIMINARY ENVIRONMENTAL CONSIDERATIONS

The purpose of this overview was to identify the likely issues and methodologies to be used in undertaking further, more detailed environmental investigations during the Environmental Assessment stage.

It is largely derived from the environmental considerations identified by the Maunsell *Preliminary Environmental Assessment* prepared for the Department of Lands concept design (refer Appendix 8).

Section 5.13 identifies the envisaged construction and operational stage impacts as identified by the proponent, Ariadne.

Further investigations are proposed to be undertaken which respond to the outcomes of this preliminary review, and will specifically relate to the Ariadne design concept. The issue of draft Director-General requirements will obviously guide the conduct of these investigations and identify any other issues worthy of detailed consideration.

### 6.1 Coastal Processes

Coastal processes are an important consideration due to the proposal's potential to alter the hydrodynamic processes as a result of dredging and reclamation of the western edge of the boat harbour.

A number of coastal processes were identified as being potentially impacted on by the redevelopment of the marina. These include:

- Harbour hydrodynamics – changes to tidal velocities, ranges and wave setup causing a variance in storm surge levels
- Flushing – the time taken for average tidal conditions to reduce the concentration of a conservative constituent inside the harbour.
- Sediment circulation variances including changes in circulation of sand from the entrance bar and near shore shoals onto Corrigan's Beach and northwards along the beach towards the breakwater. This is not considered likely as redevelopment are shoreward of the areas where these processes take place
- Harbour Resonance – impacts to the ability of ocean swell wave groups to cause the harbour to resonate; commonly known as a seiche that can generate horizontal velocities capable of damaging moored vessels. Such impacts are uncommon in NSW and therefore are not considered likely
- Sea level rise
- Hanging Rock Creek – to determine environmental impacts as a result of marina harbour works and overall re-development.

Further assessments involving simulations may be required to derive basic harbour hydrodynamic information including impacts on tidal velocities and ranges.

The potential for flooding of marina facilities will be investigated and addressed, however based on the initial investigations it is not considered to be a significant threat to the viability and continued operation of the marina.

All of the above issues will be investigated and their impacts assessed as part of the Environmental Assessment process.



## 6.2 Flora and Fauna

Batemans Bay and the Clyde River is a high quality marine environment which has recently been incorporated into the Bateman's Bay Marine Park. The proposed marina is located on the developed southern shoreline of Bateman's Bay and is not expected to have a significant impact on marine and terrestrial habitats. However, given the sensitivity and conservation significance of the surrounding environments, managing impacts is of key importance.

Environmental considerations to be addressed include:

- Potential impact on threatened and regionally significant species that potentially occur such as Black Cod and Syngnathiformes
- Potential impact on Hanging Rock Creek and associated mangrove areas.
- Potential impact on shorebird habitat, in particular the potential for impact to migratory bird feeding or roosting habitat
- Potential for dredging and reclamation to result in smothering of benthic habitats and impacts on fish feeding areas
- Increase in boat usage and potential increase in discharge of ballast/sewage waste, oil spills, fuel spills, anchoring, introduction of the invasive algae *Caulerpa taxifolia* and boat movements with the Estuary. The development would reduce the risk of spills

An aquatic survey, shorebird assessment, and consultation with relevant agencies and other relevant users of the Clyde Estuary will be undertaken to accurately determine the extent and significance of these impacts and mitigative measures.

## 6.3 Water Quality

Key issues to be addressed in terms of water quality impacts include:

- Harbour flushing
- Sediment plumes from dredging and reclamation activities
- Soil erosion due to construction
- Runoff from car park and refuelling facilities
- Runoff from boat wash down
- Illegal discharge of ballast/sewage and other waste materials
- Fuel, lubricant, oil spills
- Mobilisation of contaminants through dredging activities

Further investigation would be required in relation to any contaminated sediments contained within the basin bed.

Mitigation and management measures for these impacts are likely to include water sensitive urban design measures, pump out and waste collection facilities, sediment controls during construction and dredging, oil/water separators, gross pollutant traps, bonding chemical areas and the like, response strategies to spills and dredge spoil management.

## 6.4 Traffic and Transport

Key issues relating to traffic and transport include:

- road access
- pedestrian and cyclist movements
- parking provision and design

### Road Access

Access to the proposed developments will be assessed from the perspective of:



- Maintaining safety standards;
- Maintaining traffic flow standards; and
- Maintaining pedestrian flow along footpaths.

The design of the proposed site access will be assessed against Austroads Standards and RTA Guidelines and Council's traffic and transport objectives for the immediate area.

Internal to the site, the proposed access roads will be reviewed for cross-section and alignment. Access to parking areas will also be reviewed, together with the form of any internal intersections.

#### Cyclists

Provision for cyclists will be reviewed against the Guide to Traffic Engineering Practice Part 14: Cyclists (Austroads, 1999) and the NSW Bicycle Planning Guidelines (RTA, 2003).

#### Pedestrians

Provision for pedestrians will be reviewed against the Guide to Traffic Engineering Practice Part 13: Pedestrians (Austroads, 1995) and the Planning Guidelines for Walking and Cycling (DoP, 2004).

#### Parking

The design of parking areas within the Proposal will be reviewed against Eurobodalla Council Development Control Plans and AS:2890.2 (Standards Australia).

Here a detailed understanding of the nature and scale of land uses on the site will become important and consideration will be made of the time of day and length of stay that parking is likely for these types of usage. Other factors to be considered include the alignment of pedestrian walkways to and from parking areas, and also provision for cars with boat trailers, etc.

Design issues such as the location of parking areas and their relationship to buildings will be considered to ensure that connectivity within the site is maximised.

A *Traffic Impact Assessment* will also be prepared in accordance with the Guide to Traffic Generating Developments (Roads and Traffic Authority, 2002) to ascertain the impact on the local and surrounding road and transport networks. The key issues that will require justification are likely to be access from Beach Road, on site circulation and the provision of sufficient parking for all users.

On the basis of the analysis undertaken in the preceding tasks, the Traffic Impact Assessment will identify mitigation measures required to ameliorate any impacts or issues that are caused by the Proposal. This may include traffic intersection improvements or pedestrian/cyclist network upgrades.

## **6.5 Visual and Landscaping issues**

Key objectives in assessing the visual impacts of the marina development were identified as follows:

- assess the visual character of the landscape,
- determine the impacts of the proposed marina on the landscape and surrounding areas, and
- determine management strategies to ensure the visual character of the landscape is maintained or improved.

As the marina is undergoing significant redevelopment, major changes to the visual context and urban landscape in the locality will result. Whilst this has been a key consideration in the design process so far, these considerations will need to be examined in further detail.

In particular, the need for visual and landscape management strategies are recommended for input into the detailed planning, design, implementation and as appropriate, ongoing management of the various components of the development.

## **6.6 Noise and vibration**

A number of potential impacts have been identified in relation to noise and vibration as a result of the proposed redevelopment of the marina including:

- Environmental noise emission to the surrounding area
- Noise intrusion into the development (from road traffic)
- Construction noise (including dredging) and vibration
- Operational noise sources
- Sleep disturbance
- Traffic generation assessment

An assessment is recommended to be undertaken in accordance with relevant noise management policies to ensure noise and vibration resulting from the proposed redevelopment is within acceptable levels.

## **6.7 Socio-economic impacts**

Batemans Bay is identified as the largest commercial centre in the Eurobodalla Shire. The area has experienced significant growth, and the redevelopment of the marina will provide further retail, commercial and community facility floor space. Potential socio-economic impacts were identified as follows:

- Additional moorings will attract additional people and income to the area.
- The associated retail/commercial development will facilitate new economic activities and create a hub for maritime retail, commercial and community facilities.
- Providing an enhanced public domain through improved access to the waterfront and connections between Rotary Park and the maritime precinct

Key considerations for the preparation of the socio-economic impact assessment were identified:

- health and safety issues
- employment
- amenity
- access
- potential impacts on existing industries such as fishing and aquaculture
- potential impacts on land values
- potential effect on other marinas
- potential effect on boat users and boat service industry
- assessment of the affordability of marina services
- demand for marinas in the local and wider areas

Any investigation of the socio-economic issues will include consideration of the potential impacts upon existing commercial activities within the immediate area and Bateman's Bay commercial centre.

With respect to employment opportunities the assessment will need to identify the potential number and type of jobs to be made available as a result of the site's re-development.



## 6.8 Air quality

Air quality investigations would aim to determine the fixed and mobile source of pollution from construction and operation of the marina. Any assessment is likely to include:

- Assessment of potential impacts due to dust
- Assessment of potential impacts from increased boat usage
- Total cumulative impacts of all activities
- Proposed management and mitigation measures to control impacts and ensure compliance

Whilst air quality impacts were deemed to be a matter of moderate significance, the following assessment tasks were identified:

- preparation of emissions inventory
- preparation of meteorological data
- qualitative assessment of potential air quality impacts
- determine necessary mitigation measures

## 6.9 Indigenous heritage

Aboriginal occupation of the coastal area has been dated to at least 20,000 years from a site at Burrill Lake, and many midden sites have been found along the coast due to the rich food resources present. Given the disturbed nature of the subject site, it is considered highly unlikely for submerged sites of indigenous heritage significance to be uncovered during dredging activities.

However, further assessment in this regard would be necessary and appropriate liaison with local indigenous groups before, during and following the development process.

It is noted that areas of land north of Beach Road have been reclaimed to facilitate urban development and marina construction.

## 6.10 Non-indigenous heritage

There are no listed heritage items at the site, and given the previous disturbance, non-indigenous heritage impacts are not expected from the construction and operation of the marina.

However, non-indigenous heritage will be assessed to determine risks of impacting items of heritage significance during the construction of the marina. This would involve a review of relevant heritage registers and if necessary, assessment of significant and heritage impact.

## 6.11 Land use impacts

The urban design and visual analysis assessment demonstrates the ability of the re-development to fit with existing and future development of the surrounding area.

The development is also considered consistent with the zone objectives for surrounding areas which encourage tourist related activities and accommodation, and also the surrounding built form envisaged by the draft *Greater Batemans Bay Structure Plan*.

The concept design has been carefully sited and designed to minimise impacts on adjacent and surrounding areas, in terms of land use, access arrangements and the built form. A detailed analysis and assessment of impacts will be undertaken as part of the Environmental Assessment.

## 6.12 Hazard assessment

To ensure no adverse impacts result from the release of hazardous substances during construction and operation of the marina, the following key issues were identified for further investigation:

- potential hazards from construction and operation, including increased boat usage
- nearby sensitive areas or areas and/or sensitive flora and fauna
- potential impact on environmentally sensitive areas
- emergency response to accidental spillage of hazardous substances

## 6.13 Greenhouse Gas Emissions and Climate Change

### Climate Change and Sea Level Rises

The weight of scientific opinion supports the generally held view that the world is warming due to the release of carbon dioxide and other CHG's from human activity including industrial processes, fossil fuel combustion and other changes in land use such as forest removal (Pew Center, 2006).

One of the potential consequences of global warming is sea level rise due to the melting of the polar ice caps. Whilst any rises are not expected to occur for many years, possibly decades, consideration of this issue will be assessed as part of the Environmental Assessment along with other coastal processes and their possible impacts on the marina and its design.

### Greenhouse Gas Emissions

As with almost all marine and land based commercial operations and re-development, greenhouse gas emissions are emitted from sources such as the use of diesel powered equipment during the construction phases, increased usage, and indirectly through the use of electricity to power various utilities. However the re-development of the Batemans Bay Marina provides a number of opportunities to address this issue.

Ariadne will obviously reduce energy consumption and greenhouse gas emissions (where possible) through equipment selection and management initiatives during the various stages of the marina project including construction and long term operation. This issue will be further addressed as part of the Environmental Assessment including identification of possible sources of greenhouse gas emissions, to assess the extent and impact of emissions, and possible mitigation strategies.

The potential use of wind, solar and hydro power generation to supplement the main power supply will also be investigated in order to mitigate potential effects of the project on greenhouse gas emissions.

## 6.14 Construction and Operational Issues

The construction of the marina, and its on-going operation will require careful management to ensure environmental impacts are minimised and do not adversely effect the surrounding environments.

It is proposed to prepare environmental management plans for both phases of the project – a Construction Environmental Management Plan and a Marina Environmental Management Plan. These documents will be prepared in draft form following completion of Environmental Assessment and final approval of the master plan, and will be used in consultation with relevant stakeholders.



A discussion of potential impacts and how they may be addressed is provided below. Detailed mitigation measures will arise from the various environmental investigations to be undertaken as part of the Environmental Assessment.

#### 6.14.1 Construction Environmental Issues

The main potential environmental issues arising during the construction stage are likely to be:

- Water quality

One of the major environmental issues during construction will be the potential impacts on water quality through the release of any contaminated sediments and particulates into the marine waters. It is proposed to undertake detailed site assessments in this regard to define the extent and nature of any contamination.

If necessary a Remediation Action Plan (RAP) will be prepared. Maintaining water quality will involve proven methods to control disturbance during dredging such as silt curtains and containment of any de-watering areas. Any land disturbances will need to be accompanied by suitable bunding and containment systems, and also adherence to relevant NSW environment legislation and guidelines.

- Noise

Control of construction noise is proposed to be accomplished through adherence to set and agreed time periods for machinery operation, and also regular maintenance of exhaust systems for powered machinery. This would be documented in the Management Plan.

- Erosion and Sedimentation

All earthworks are proposed to be planned and undertaken according to an earthworks plan which will include sedimentation and erosion control methods adhering to required standards.

- Waste Management

Waste management during construction will seek to prevent the creation of any unnecessary wastes and re-use where possible. All wastes would be segregated on site and re-cycled if possible. Existing marina infrastructure will also be re-used within the re-development where permitted and possible, such as piles in the decorative finishes in the proposed marina village and community/commercial sub-precinct built environs.

- Dust (Air Quality)

Dust will be minimised through the use water sprays, and the use of chemical suppressants will be avoided particularly within the vicinity of the marine environment.

Any sources of offensive emissions that cause nuisance or offensive odour will be required to be maintained to acceptable limits.

- Habitat Removal and Replacement

It is recognised that during construction certain marine and land based habitats could possibly be disturbed. The extent of any such impact will be determined through more detailed ecological investigations and strategies to avoid, minimise or relocate such habitat will be prepared.

### 6.14.2 Operational Environmental Issues

The main environmental issues associated with the operational stage of the marina re-development would include:

- Water Quality

Water quality within and around marinas can be influenced by many factors including refuelling of vessels, liquid waste management, runoff from hard surfaced areas, litter, bilge pump outs, wash down areas, outboard engine wash throughs and offsite stormwater discharges, and vessel maintenance.

Each of these issues has been addressed in the design of the conceptual marina layout and proposed control systems. For example, wastewater from the hardstand and dry boat storage will be bunded and water collected for on-site treatment. The hardstand area is also proposed to encompass water bunding catchment systems to prevent contaminants from vessel repairs, wash downs, and antifouling leaching into the basin through rainfall or gravity. The water treatment system will be documented in the environmental assessment and detailed documentation stage.

- Solid Waste Management

The objective for waste management during operation of the marina will be to reduce, re-use and re-cycle waste products. Minimisation of any wastes will be a primary objective, however all wastes generated by both public and private users will be segregated in accordance with relevant Commonwealth and State policy guidelines.

- Sustainable Resource Use

Throughout the conceptual design process, consideration has been given to sustainable resource use, and also the Eurobodalla Shire Urban LEP objectives for sustainable development. The collection of wastewater, its on-site treatment and reuse for non-potable applications such as vessel wash downs and watering is proposed. The use of grey water is intended to reduce the reliance on potable water supply wherever possible.

The potential use of wind, solar and hydro power generation to supplement the main power supply will also be investigated.

- Noise

Noise from the operation of the marina is proposed to be limited through the careful design and location of buildings in relation to the nearest residential receptors. An increase in the range of land uses, and capacity of the marina will lead to increased usage and traffic movements. However it is noted that the adjoining road system (Beach Road) experiences significant traffic volumes. The extent of potential noise pollution will be determined and mitigation measures developed to minimise any adverse impact.

The approach taken to operational noise minimisation would include consideration of the following noise generators:

- Environmental noise emission from the site to the surrounding areas from operational noise sources.
- Environmental noise emission from activities within the site affecting other activities and buildings on the site.
- Noise intrusion into the site from external sources such as road traffic.
- Noise transfer from space to space from within the proposed buildings.
- Noise and vibration generated from the site during construction phase.

## 7.0 SUMMARY AND CONCLUSIONS

The Ariadne proposal to re-develop the existing Batemans Bay Marina is considered to be consistent with the Department of Lands strategy for improving regional marina facilities, and in particular the specific need to upgrade and expand the Batemans Bay facility.

In developing the Ariadne conceptual designs that are attached to this document, consideration has been given to the preliminary environmental assessment and other investigations already undertaken as part of tender process.

The key issues that have been, and will be addressed in the detailed design process and environmental assessment stage are as follows:

- Coastal Processes
- Building Design and Visual impact
- Ecological Issues
- Stormwater and Water Quality
- Noise and Vibration
- Air Quality
- Site Contamination and Remediation
- Heritage
- Access, Traffic and Parking
- Social and Economic Impacts
- Land Use Impacts
- Community Consultation
- Site Infrastructure and Services
- Hazard Assessment
- Engineering, Design and Operational Considerations
- Strategic Planning Implications and Eurobodalla Shire Council Planning Considerations
- Public Benefit and Enhancements

The abovementioned issues are intended to be investigated and presented as part of the more detailed environmental assessment stage, in addition to a detailed description of the proposed marina facility and its operation.

The proponent will also prepare a statement of commitments to describe how these issues will be managed through the detailed design, construction and operation of the marina.



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