

Ballina Marina Master Plan



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ballina
shire council

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THE PROJECT

The Ballina Marina Master Plan aims to encourage and guide redevelopment of the area commonly known as the Trawler Harbour site in West Ballina.

The Master Plan was commissioned by Ballina Shire Council to assist Government and private interests in considering the site for investment and redevelopment. The Ballina Marina Master Plan project includes a number of sub-projects. These are:

1. Redevelopment Concept Master Plan;
2. A Boating and Maritime Demand Analysis;
3. Feasibility Analysis of the Ballina Marina Master Plan; and
4. Community and Stakeholder Engagement.

This document addresses the Redevelopment Concept Master Plan, however, will be referred to as the Ballina Marina Master Plan. The Boating and Maritime Demand Analysis and Community and Stakeholder Engagement informed the preparation of the Master Plan. The Feasibility Analysis had an integrated relationship with the Master Plan. It informed the design process at the commencement of the project and, later, provided a review of the Master Plan options to direct the evolution of the preferred Marina Master Plan. The relationship between the sub-projects is summarised in Figure 1.

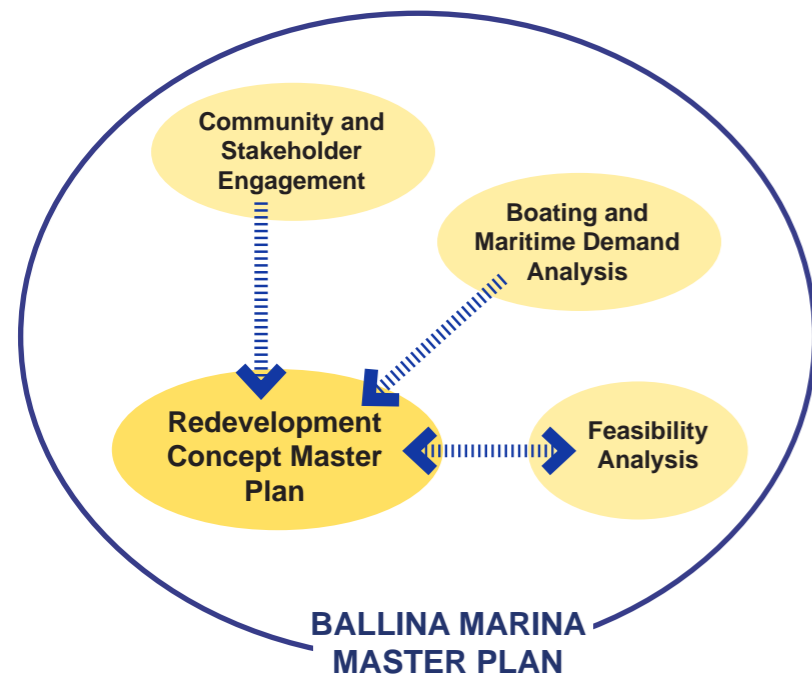


Figure 1: Ballina Marina Master Plan sub-projects

LOCATION



Figure 2: Ballina Trawler Harbour Study Area

The site includes three parcels of Crown Land and an area under the ownership of the NSW State Government. Ballina Shire Council is not a land owner within the study area, but has had a long standing interest in its potential redevelopment and the economic benefits that could be derived from expanded marine infrastructure in the shire. The Ballina community has, over many years, expressed an interest in a greater range of marine infrastructure in Ballina.



The Trawler Harbour site is approximately 9.2 hectares in area and is located 2km west of the Ballina CBD at West Ballina. The site is reached by Boatharbour Road off River Street. The site is bounded to the east by Fishery Creek and to south by the Richmond River. There are residential areas to the west of the site, and to the east, along Fishery Creek. River Street is immediately to the north of the site and provides a connection between the Pacific Highway and Ballina.

The site currently includes an operational NSW Roads and Maritime Services depot, a working harbour with access to Fishery Creek and the Richmond River administered by the Ballina Fisherman's Co-operative and a public boat ramp and associated infrastructure on Fishery Creek. There is an area of mangroves in the southwest corner of the site and an area of open, vacant land, on the northern and western sides of the harbour.

PROJECT OBJECTIVES

to identify preferred land uses for the Ballina Trawler Harbour site as the basis for decision making and redevelopment;

to produce a master plan that encourages investment in the site for the purpose of redevelopment;

to determine site constraints and opportunities, environmental values, planning issues and community views relevant to the site;

to involve key stakeholders in the preparation of the master plan.

THE SITE

The project site is comprised of the following land parcels.

Lot 1 DP 791628 Crown Land
Devolved to Council for management.
Includes licence areas for Ballina Fishermans Co-operative to manage the harbour area.

Lot 232 DP 755684 NSW State Government
Occupied by NSW Roads and Maritime Services depot.

Lot 458 DP 728654 Crown Land

Lot 459 DP 728654 Crown Land
Council appointed as Reserve Trust Manager.

Ballina Local Environmental Plan 2012

The Ballina Local Environmental Plan 2012 applies to the study area. The land is affected by the following land use zones.

RE1 Public Recreation - Lots 458 and 459 DP 728654 Crown Land to the north of the RMS depot and along Fishery Creek;

R3 Medium Density Residential - Lot 232 DP 755684 RMS depot;

IN1 General Industrial - Lot 1 DP791628 Boat harbour and vacant land.

Zone Objectives and Land Use Tables:

RE1 Public Recreation

Zone Objectives:

- to enable land to be used for public open space or recreational purposes;
- to provide a range of recreational settings and activities and compatible land uses;
- to protect and enhance the natural environment for recreational purposes;
- to provide for a diversity of development that meets the social and cultural needs of the community.;
- to provide for public access to open space and natural

- recreation areas;
- to protect and conserve landscapes in environmentally sensitive areas, particularly in foreshore and visually prominent locations;
- to provide for development that is consistent with any applicable plan of management;
- to encourage development that achieves the efficient use of resources such as energy and water.

Permitted without consent:

Environmental protection works, flood mitigation works and roads

Permitted with consent:

Boat launching ramps; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Child care centres; Community facilities; Emergency services facilities; Entertainment facilities; Environmental facilities; Extensive agriculture; Forestry; Function centres; Heliports; Information and education facilities; Jetties; Kiosks; Markets; Public administration buildings; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Research stations; Respite day care centres; Restaurants or cafes; Sewerage systems; Signage; Take away food and drink premises; Water recreation structures; Water supply systems; Wharf or boating facilities

Prohibited:

Any development not specified as permitted with or without consent.

R3 Medium Density Residential

Zone Objectives:

- to provide for the housing needs of the community within a medium density residential environment;
- to provide a variety of housing types within a medium density residential environment;
- to enable other land uses that provide facilities or services to meet the day to day needs of residents;
- to provide development that is compatible with the character and amenity of the surrounding neighbourhood;
- to encourage housing and infrastructure that supports the

- ageing population;
- to provide for development that meets the social and cultural needs of the community;
- to encourage development that achieves the efficient use of resources such as energy and water.

Permitted without consent:

Environmental protection works, home-based child care and home occupations

Permitted with consent:

Attached dwellings; Boarding houses; Child care centres; Community facilities; Extensive agriculture; Group homes; Home industries; Kiosks; Markets; Multi dwelling housing; Neighbourhood shops; Places of public worship; Respite day care centres; Roads; Roadside stalls; Seniors housing; Any other development not specified as permitted with consent or prohibited.

Prohibited:

Advertising structures; Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Dairies (pasture-based); Depots; Eco-tourist facilities; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Highway service centres; Industrial retail outlets; Industrial training facilities; Industries; Marinas; Mooring pens; Moorings; Mortuaries; Recreation facilities (major); Restricted premises; Rural industries; Rural workers' dwellings; Service stations; Sex services premises; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Wharf or boating facilities; Wholesale supplies

IN1 General Industrial

Zone Objectives:

- to provide a wide range of industrial and warehouse land uses;
- to encourage employment opportunities;
- to minimise any adverse effect of industry on other land uses;
- to support and protect industrial land for industrial uses;
- to enable non-industrial uses that are compatible with the industrial nature of the locality;
- to provide for the efficient use of industrial land;
- to encourage development that achieves the efficient use of resources such as energy and water;
- to ensure that development does not expose adjoining uses to hazard risks.

Permitted without consent:

Environmental protection works

Permitted with consent:

Agricultural produce industries; Depots; Freight transport facilities; Garden centres; General industries; Hardware and building supplies; Hospitals; Industrial training facilities; Landscaping material supplies; Light industries; Liquid fuel depots; Neighbourhood shops; Places of public worship; Plant nurseries; Roads; Rural supplies; Take away food and drink premises; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified as permitted with consent or prohibited.

Prohibited:

Amusement centres; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Child care centres; Commercial premises; Community facilities; Correctional centres; Eco-tourist facilities; Environmental facilities; Exhibition homes; Exhibition villages; Function centres; Hazardous industries; Health services facilities; Heavy industrial storage establishments; Highway service centres; Home-based child care; Mooring pens; Moorings; Offensive industries; Recreation facilities (major); Registered clubs; Residential accommodation; Respite day care centres; Rural industries; Schools; Tourist and visitor accommodation; Wharf or boating facilities.

This information has been extracted directly from the Ballina LEP 2012. (Ballina Shire Council). Figure 3 indicates the current zonings and land parcels across the project site.

Part of the project site is Crown Land. The Crown Lands Act 1989 and the "Principles of Crown Land Management" are relevant when considering proposals for the site.



Figure 3: Ballina Trawler Harbour Study Area - Land Use Zoning and Land Parcels

State Environmental Planning Policies

The site is mapped as within 100 metres of a State Environmental Planning Policy (SEPP) 14 Coastal Wetland. The site is within the coastal zone and is identified as a sensitive coastal location pursuant to SEPP71 Coastal Protection.



Figure 4: Ballina Trawler Harbour Study Area - State Environmental Planning Policies

THE PROCESS

The preparation of the Ballina Marina Master Plan involved a range of inputs and considerations including:

- a review of relevant, previous studies and reports;
- a review of relevant statutory and policy framework;
- site investigations; and
- Council input.

Other sub-projects including the Boating and Maritime Demand Analysis; the Community and Stakeholder Engagement and the Feasibility Analysis as well as a preliminary site contamination assessment and investigation into Native Title considerations have also directly informed the master planning process.

Background Research

A number of studies, master plans and strategies have been completed over the last 10 years with relevance to the Ballina Marina site. Most recently, the *Ballina Major Regional Centre Strategy 2016 (BMRCS)* expressed the need to identify a preferred site for a large marina and the need to augment existing marina facilities at Ballina to improve the availability of mooring, storage and servicing facilities.

The *Marine-Based Industry Policy - Far North Coast and Mid North Coast NSW*, prepared by the NSW Department of Planning and Environment, aimed to facilitate the development of marine-based industry in appropriate locations. The strategy identified a range of criteria to determine appropriate locations for marine based industry.

The Trawler Harbour site was studied for redevelopment as an expanded marina in 2010 when Worley Parsons considered the feasibility of redeveloping the site for the NSW Land and Property Management Authority and prepared *The Redevelopment of Ballina Trawler Harbour Feasibility Study*. This study explored a variety of redevelopment options for the marina and considered the financial viability of redevelopment.

In 2005, GHD prepared *The Lower Richmond River Recreational Boating Study* for Ballina Shire Council. This study considered the needs of Ballina in regards to recreational boating. The Trawler Harbour site was one of the sites considered and was found to be important to the Ballina community in terms of what it did, and could, offer for recreational boating. The study identified

the Trawler Harbour site as a strong candidate for redevelopment in relation to marine infrastructure.

In 2007, GHD prepared *The Ballina Foreshore Masterplan* for Ballina Shire Council. The study considered foreshore areas between Burns Point Ferry and Missingham Bridge, including the Trawler Harbour site. The plan considered the current use of the site and available public facilities. It identified parts of the site as having potential for future development.

In 2008, the *Ballina Boat Harbour - Development Feasibility Overview* was prepared by the Department of Lands, Ballina Project Office, Port and Coastal Engineering Services. This study assessed the feasibility for the possible expansion of the Trawler Harbour and was based on GHD's indicative layout included in the *Lower Richmond River Recreational Boating Study*.

In 2015, Geolink Consulting prepared the *Martin Street Boat Harbour Precinct Master Plan* to guide redevelopment of the Martin Street Harbour precinct. Outcomes of the Master Plan have relevance to the Ballina Marina in relation to maritime uses and opportunities for the integrated redevelopment of the two sites.

The *Ballina Local Environmental Plan 2012* describes the current zoning for the site. The site includes Crown Land. The Crown Lands Act 1989 and the "Principles of Crown Land Management" are relevant when considering the site.

Site Investigations and Council Input

The Master Plan process was informed by detailed site investigations. Council has made available its knowledge of the site and existing base information including survey material for the harbour.

Sub-Projects - Community Consultation (Phase 1)

The community has expressed visions for the site in a number of previous studies. Community and stakeholder consultation was undertaken at the commencement of the master planning process by Dr Elizabeth Baker. Stakeholders were given the opportunity to participate in face-to-face meetings. Postcards were delivered to residents in the vicinity of the Trawler Harbour site with an

invitation to complete a written survey or participate in an on-line survey. The broader community was made aware of the same survey via print and broadcast media. The outcomes of this initial consultation have informed the preparation of the Master Plan.

Note: Further community engagement was undertaken in relation to the public exhibition of the draft master plan. This is discussed in the draft master plan exhibition section of this report.

Sub-Projects - Boating and Maritime Demand Analysis

At the project commencement, Hill PDA prepared a Boating and Maritime Demand Analysis. This specifically considered the community's requirements for recreational boating at the Trawler Harbour site. The study provided an indication of physical requirements for any harbour redevelopment such as mooring numbers and servicing requirements. This analysis is integrated into the Hill PDA Feasibility and Demand Analysis Report.

Sub-Projects - Feasibility Analysis

Hill PDA were also commissioned to prepare a Feasibility Analysis associated with the Ballina Marina Master Plan. This analysis provided some information at the start of the master planning process as a guide to potentially viable development options. Following the exploration of the Master Plan options, the Feasibility Analysis provide feedback into these options. As a result of this feedback, two Master Plan options were developed. The Feasibility Analysis then identified the viability of one of these options and this plan has evolved to become the preferred Ballina Marina Master Plan. Together the Demand Analysis and Feasibility Assessment form the Hill PDA Feasibility and Demand Analysis Report.

Other Information – Preliminary Site Contamination Assessment

Tim Fitzroy and Associates were engaged to undertake a preliminary site contamination investigation in relation to the study area. The purpose of the study was to identify any contamination issues requiring further consideration as part of the master planning process and also determine the need for more detailed investigations as part of the redevelopment of the land.

The report identified a number of potential site contamination issues that should be subject to further investigation where the redevelopment of the site is to be progressed (i.e. post master planning). Such investigations should include establishment of a sampling strategy for a detailed site investigation that defines the extent and status of contaminants on the site, assesses potential risk, determines whether further investigation is necessary and addresses the need for a remedial action plan.

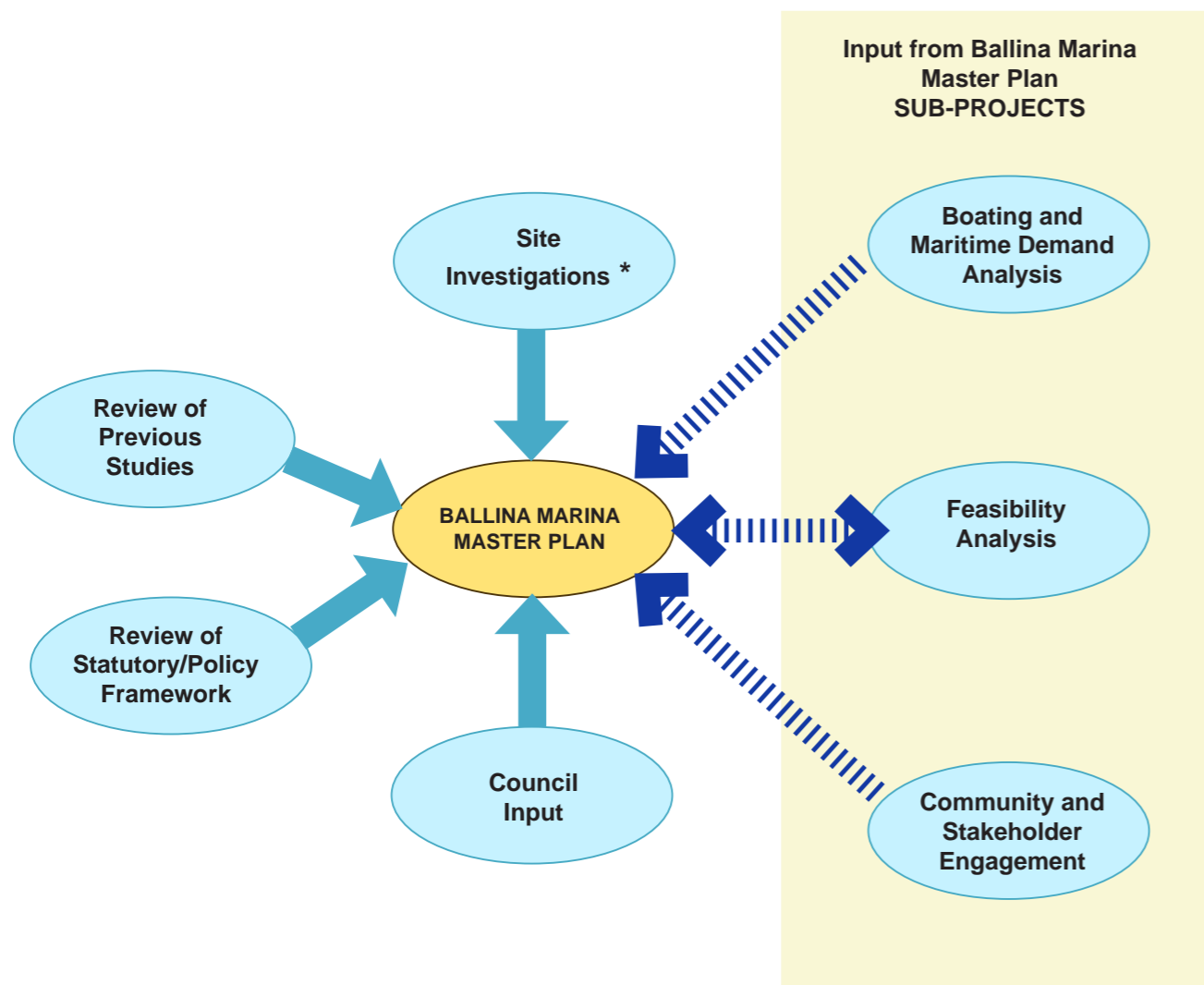
Other Information – Native Title Considerations

The Department of Primary Industries Crown Lands assisted Council in the consideration of Native Title matters in relation to the study area. On review of the land parcels within the study area (Lot 1 DP 791628, Lot 232 DP 755684, Lot 458 DP 728654 and Lot 459 DP 728654), it is considered that Native Title rights and interests have been validly extinguished in relation to the land having regard for the relevant legislation.

On reviewing all information gained from the research phase of the project, and the input provided by the sub-projects, a set of guiding priorities were formulated for the Ballina Marina Master Plan. These priorities were explored in a series of sketch designs. These designs, along with a rationale for each, were presented to Council and considered by Hill PDA as part of their Feasibility Analysis. The findings of these reviews were then applied in the design development of two Master Plan Options. Further review by Hill PDA and Council identified a preferred Marina Master Plan. This preferred Master Plan was explored in more detail as perspectives, written rationale and illustrated master plan proposals.

Figure 5 summarises the sources of input into the master planning process. Figure 6 illustrates the process undertaken in the master plan preparation.

Following the public exhibition phase, and in response to the feedback received, two master plan options were prepared. These two plans, along with associated staging and more detailed designs in the vicinity of the Fishery Creek boat ramp, form the Council adopted master planning for the land and are the basis for ongoing planning of the site. (see the Direction Forward Section of this report for further details.)



* including information from preliminary site contamination assessment and Native Title considerations

Figure 5: Inputs for the Master Planning process for the Ballina Marina Master Plan

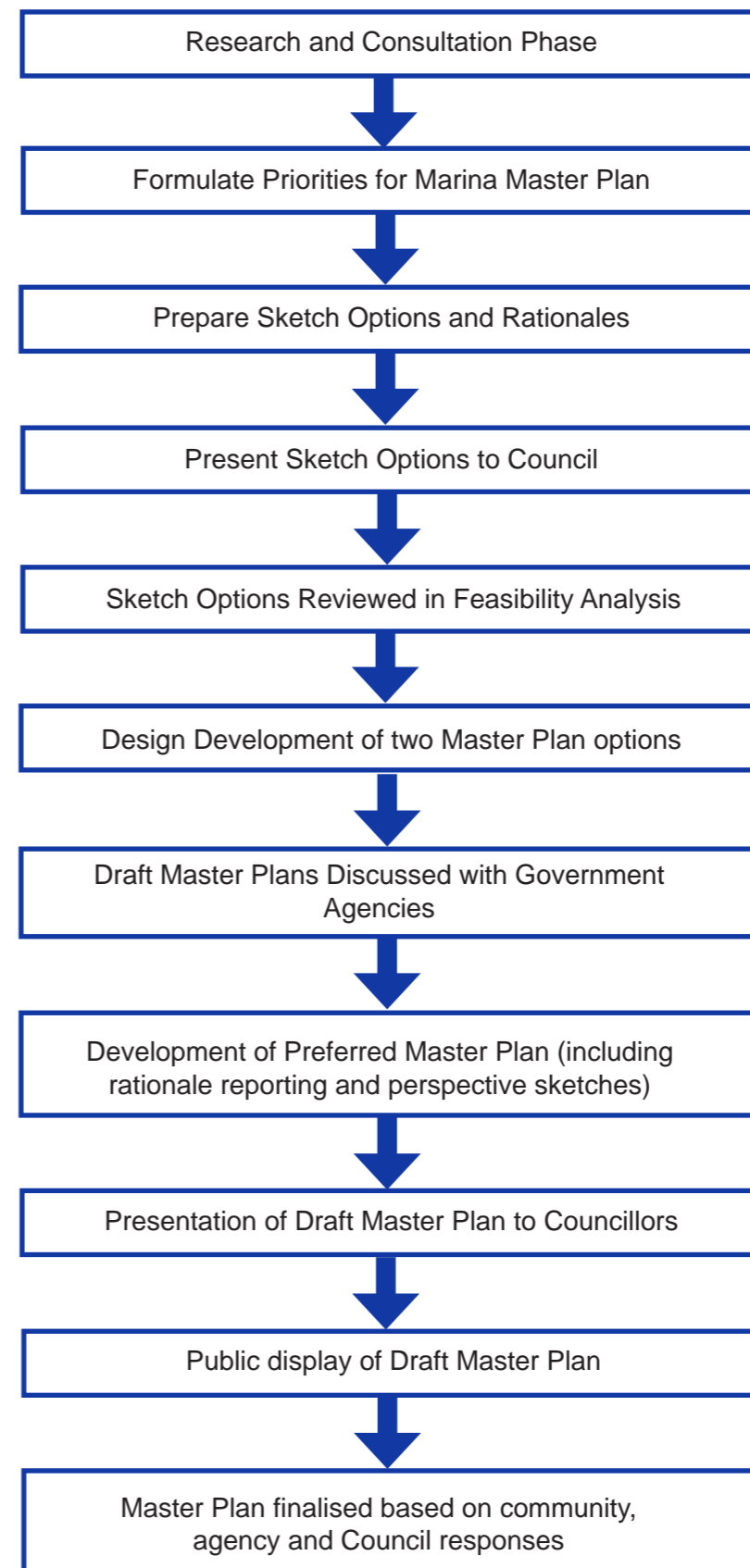


Figure 6: Master Planning Process for the Ballina Marina Master Plan

BACKGROUND RESEARCH

Lower Richmond River Recreational Boating Study

The Lower Richmond River Recreational Boating Study was prepared in 2005 by GHD for Ballina Shire Council. The study established short and long terms goals in response to Ballina's existing and growing needs relative to recreational boating. The study considered:

- existing and potential infrastructure requirements for recreational boating;
- potential tourist and boating linkages upstream;
- maritime infrastructure that would promote Ballina as a destination and servicing centre; and
- the potential for the development of a maritime precinct.

The study provides contextual and historic information about Ballina's maritime history. Ballina is a comfortable "day sail" for vessels travelling along the NSW coast. It sits between the Tweed River entrance and Yamba. Historic towns upstream on the Richmond River are potential drawcards for visiting boats.

Ballina was settled in the 1880s as a commercial port. The trade was initially in timber, then agricultural produce. The port stopped working in 1960s as rail and road transport dominated. The breakwater was established in 1889 and 1911. Ballina Island was established in 1890 when the channel was made between the Richmond River and North Creek. The Trawler Harbour was constructed in 1966 - 1967 for commercial vessels and in the 1970s stored around 33 boats. Shipbuilding activity today is mostly along Emigrant Creek and at Smith Drive.

The study identified that Ballina's population growth, particularly in retirees with plenty of recreation time, and the growing popularity of nature based recreation is contributing to a greater need for maritime infrastructure. With a growth in boating comes a need for maritime based industries.

Consultation with interested community groups identified the need for new and upgraded boat ramps and the development of a new Ballina marina as priorities. The community also expressed a desire for foreshore open space.

The study identified a Ballina marina could provide benefits beyond boat storage including:

- supporting an new annual yachting or power boat race

- with Ballina as the destination or starting point;
- hosting off shore fishing competitions and boating activities;
- use by specific Community Groups with a specific focus e.g. sailing for the disabled;
- as a tourist destination, activity hub and drawcard for Ballina

Boats can be stored by dry or wet storage. Wet storage relates to a boat being stored in the water. Dry storage is either on a trailer at a private residence or in a dry storage at a marina. No dry storage currently exists at Ballina. New marinas can include dry storage. This storage typically provides for boats to be stacked three to four vessels high. The facility operator puts the vessel in the water when required and returns it to storage when not in use.

All vessels dry stored at Ballina have to use one of the eleven public boat ramps to access the water. The Fishery Creek Canal boat ramp is one of the most popular boat ramps. The study noted the following about this boat ramp.

- the grooved ramp has good access to deep water;
- capacity for boats to queue for the boat ramp as well as a pontoon to the north;
- capacity for 45 car and trailer units plus additional informal parking;
- existing facilities include wash down taps, fish cleaning table, lighting and rubbish bins;
- the capacity of 100 boats a day using the ramp is largely restricted by available parking;
- there is an issue with the flow of traffic with a lack of signage identifying the right of way or queuing lane;
- no easy connection between the pontoon and ramp;
- rock revetment either side of the ramp is unsuitable for laying up to by boats.

Recommendations for the boat ramp included:

- formally delineating parking areas;
- signage;
- additional park
- a toilet block.

Wet storage is used for larger vessels. On the Richmond River these boats are generally in the range of 7 - 20m in length and

are motor boats or sailing boats. Commercial vessels also often require wet storage due their size. Wet stored vessels require a range of services for running and maintenance. Ballina's former marina was closed in 2002. It provided 50 wet berths and include some dry storage. The Martin Street Boat Harbour and the existing Trawler Harbour have been used to capacity since the closing of the marina. Martin Street provides 18 berths and has shower and toilet facilities. The Trawler Harbour is run by the Ballina Fishermens Co-op on lease from the State Government. It provides 17 berths for trawlers and 17 berth for yachts. It has no shower or toilet facilities.

Other maritime facilities at Ballina include private jetties, two short stay moorings at Mobbs Bay and short stay jetties at Fawcett Park. Industrial maritime activities are focused at Smith Drive and York Marine upstream at Swan Bay.

Community sentiment supported a marina facility rather than a marina precinct integrated with industrial uses. The preference was for industrial uses to be separated from the marina. The community identified the following as important to a marina:

- must be accessible to the general public;
- must be accessible 24 hours;
- able to be walked to from the Ballina CBD;
- include provisions for disabled persons;
- have minimal impact on adjacent neighbourhood;
- have up to 400 berths with capacity for long term use and to accommodate boats up to 40 foot with a 2m draft;
- include a secure, lock up car park;
- include servicing facilities such as refuelling, pump-out facilities and ship-lift areas;
- be affordable for local boat owners;
- retain open space at foreshore;
- have no environmental impacts.

The study assessed twelve potential marina sites against a range of environmental, social, visual and planning criteria. The study identified the Martin Street and Trawler Harbour as the best candidates for redevelopment, but also suggested that one site is unlikely to provide all requirements for a long-term marina strategy on the Lower Richmond River and a future Greenfield development may be a long term solution.

The study provided the following recommendations strategies and actions relevant to the Trawler Harbour site

- expand the Fishery Creek Canal Ramp (on acquisition of the RMS site) as a regional standard ramp and integrate with a new marina on the adjacent site;
- provide a second two or three lane ramp and adequate parking to accommodate 100 to 150 additional boat movements;
- address access issues off the old highway and visual amenity for local residents;
- establish a new marina at the existing Trawler Harbour/ RTA Depot site incorporating a 200 berth marina and boat ramp complex;
- facilitate discussions with interested parties on the development of this marina with consideration to the commercial trawling interests;
- discuss land use options with the Department of Lands to investigate whether residential/commercial land-uses may offset the cost of developing the site;
- actively encourage and support marine industry to set up in the Smith Drive area.

The following specific requirements were identified as necessary to a new marina.

- boats in wet storage have specific requirements for waste reception (liquid and solid), storage, security, refuelling and maintenance;
- a marine precinct typically includes more involved maintenance and repair facilities as well as significant refit, boat building facilities and related industries;
- a marina needs
 - to be safe place to leave boats;
 - be located off stream with protection from the tidal stream, waves, flood debris and wind;
 - be large enough to be economically viable (at least 200 berths);
 - contain fuel and vessel sewage pump out facilities;
 - provide necessary services such as showers, toilets, laundry facilities as well as key maintenance, reprovisioning and equipment requirements.
- consider the provision of dry storage options as part of new marina or marine precinct.

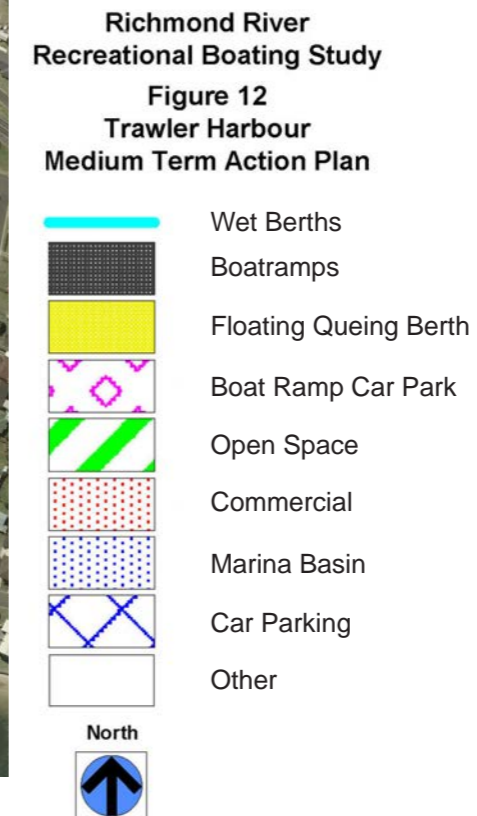
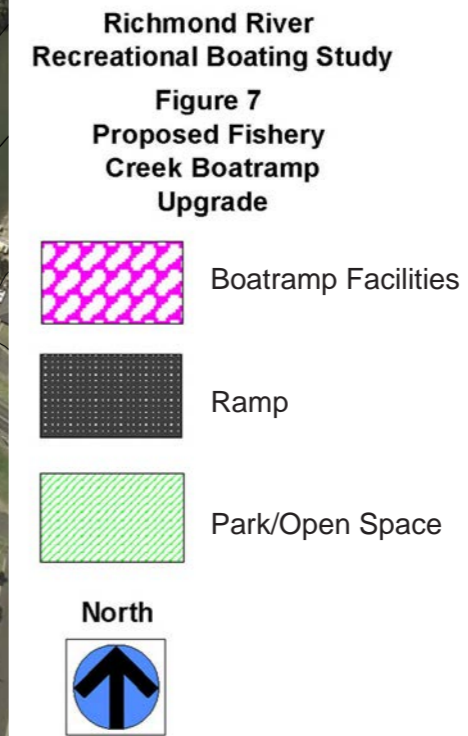
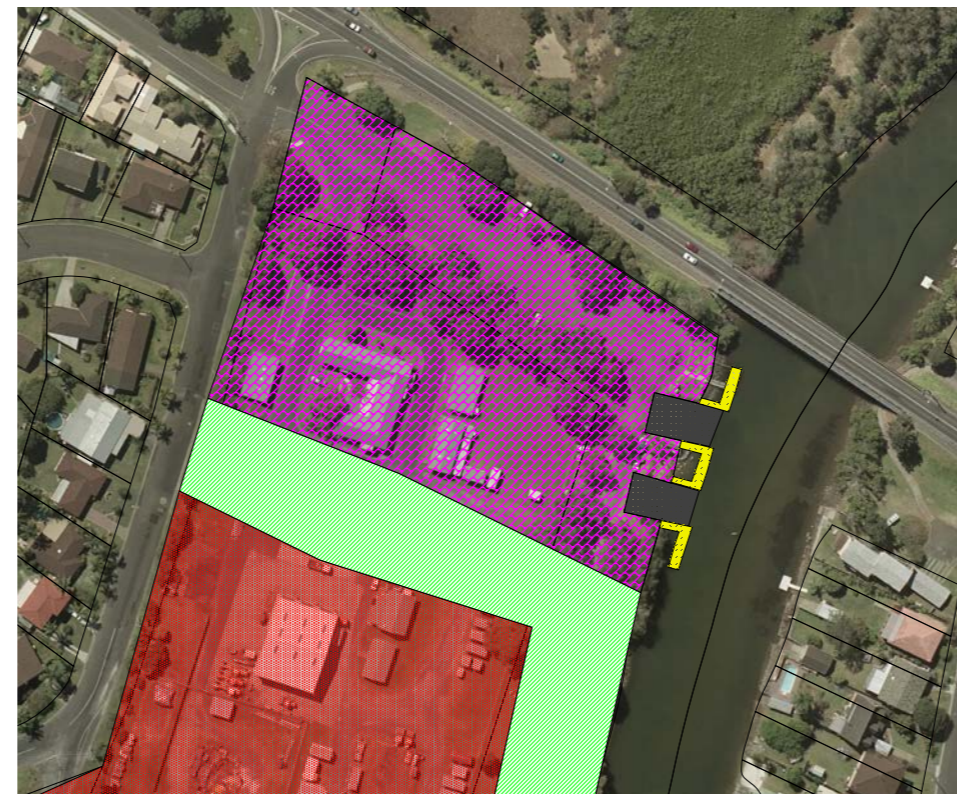


Figure 7: Plan extracts from Lower Richmond Recreational Boating Study

Ballina Foreshore Masterplan

The Ballina Foreshore Masterplan was prepared by GHD in 2007 and considered foreshore areas between Burns Point Ferry and Missingham Bridge. This is a mix of Crown and Council land. The plan determined preferred land use and management strategies for these areas. The plan was to build upon the sustainability framework, *People, Place and Prosperity: A Framework for a more Sustainable Ballina Shire 2025*. The Master Plan established 15 key planning principles, extracted from *People, Place, Prosperity*, to evaluate proposals including:

- good access in public areas and infrastructure that works for people;
- more options for employment;
- better quality of life;
- cleaner water in the Richmond River and the ocean;
- increased visual amenity;
- protection of native plants, animals and their habitats;
- safer swimming, boating and fishing;
- provision of opportunities for walking and cycling and for enjoying natural areas;
- long term protection of cultural values associated with landscape and land use;
- building reconciliation;
- healthier happier people;
- more opportunities for social interaction;
- creating a sense of community;
- development of new industries and industry sectors; and
- better co-ordination across and within levels of government.

Options considered for the foreshore land included:

- land use options;
- Aboriginal art and symbolism in public spaces;
- heritage plaques in historic locations;
- habitat rehabilitation;
- walkways and cycle ways;
- boating facilities; and
- amenities and facilities

The Master Plan noted the more planning principles a foreshore proposal could positively address the greater chance the proposal would move towards sustainability.

The Master Plan included the Trawler Harbour site. It noted this as Crown land including the RMS depot, the existing Trawler

Harbour and the open space to the west of the harbour. The plan described current public facilities at the site as including boat ramps, toilets and fish cleaning facilities. It identified the foreshore area as under utilised and the RMS site as suitable for a mixed use commercial and residential development. It noted Fishery Creek seagrass beds and a stand of Casuarina regrowth on the creek bank for preservation. Specific proposals for the site to achieve the key planning principles were:

1. expand the marine facilities;
2. retain the existing trawler berths;
3. include commercial development such as chandlery, boat dry stack storage, laundry, restaurant, cafe;
4. include fuel facility for all boats;
5. include pump out sewage facility for boats;
6. permit residential and tourism development;
7. expand trailer parking for the boat ramp;
8. provide an additional pontoon for the boat ramp;
9. allow for boat hire business with riverside pontoons;
10. relocate RMS Depot;
11. embellish creek bank vegetation along Fishery Creek;
12. preserve seagrass beds in Fishery Creek;
13. extend existing boat ramp by 1 metre;
14. provide a riverside walkway connection to the west;
15. relocate the existing entrance to the Richmond River to minimise shoaling; and
16. identify potential for environmental education at the site.

GHD undertook consultation with key stakeholders with specific input received relevant to the Ballina Marina site as follows:

Richmond River Fisherman's Co-operative

- the fisherman's co-operative owns the lease/licence for the existing trawler harbour and has an ongoing interest in remaining the lease owner for the commercial harbour;
- the co-op pay the Department of Lands for the lease/licence and recoup that by charging mooring costs to commercial and recreational boat owners;
- it costs about \$ 80 000 to run the boat harbour;
- they sell fuel from on an site facility and would like to retain this to keep fuel costs down to members;
- the harbour has a problem with siltation at the mouth and on the bed of the harbour;
- have had little complaint from neighbours regarding noise, light or smell;

- don't have an issue with the site being redeveloped as a major commercial marina but stress that:-
 1. business costs for professional fisherman must be under the control of the co-operative's members including leasing costs and fuel sales if they are to remain a viable industry; and
 2. there has to be some separation within the marina between the private boat owners and users from commercial operators and trawlers.

NSW Marine Authority

- support the location of a sewage pump out facility in a location suitable for recreational boating; and
- have no objection in principle to an expanded marina site at the existing trawler harbour.

Ballina Boat Hire

- would consider an external riverside location near the trawler harbour and proposed marina and would consider this might yield a viable option as long as was able to have river based pontoons and could be separated from the yachts and professional fishing boats that would use the marina.

Commercial River Users Group

- fishery creek ramp needs an extra pontoon and longer ramp to use at low tide;
- support proposed marina at trawler harbour site as a commercial marina with fuel facility, sewage pump out, access for cruising yachts and boats, permanent moorings and associated commercial development such as chandlery, laundry etc.

Ballina RSL Fishing Club

- support picnic tables and BBQ areas at the Fishery Creek boat ramp;
- need more car and trailer parking at the Fishery Creek boat ramp;
- support increasing the existing marine to include public moorings, refuelling and extra parking;
- support an increase in the size of the Fishery Creek boat ramp to accommodate increased use.

NSW Department of Primary Industries

- commercial fisheries rely on the trawler harbour and boat ramps and access to these should be maintained.

Marine-Based Industry Policy - Far North Coast and Mid North Coast NSW

The Marine-Based Industry Policy - Far North Coast and Mid North Coast NSW was prepared by the NSW Department of Planning and Environment. The policy aims to facilitate the development and operation of marine-based industry in appropriate locations. Marine-based industry is identified as that which depends on access to a navigable waterway. The Richmond River is noted as such a river.

The policy identifies marine-based industry should meet the following criteria:

1. the industry is dependent on access to a navigable waterway;
2. the size of the vessel or product can pass safely through the waterway and the entrance to the sea;
3. the size or bulk of the vessel or product to be built requires transport by water.
4. new dredging required would not adversely affect estuarine habitats, marine vegetation, fisher resources and water quality;
5. site development would not adversely affect water quality or tidal regimes;
6. site development would not adversely affect oyster aquaculture and commercial and recreational fishing activities;
7. the site is not in a high flood risk precinct;
8. access to the site is practicable given river currents and tidal movements;
9. the site does not contain high risk acid sulfate soil that could be disturbed;
10. the main industrial complex could be set back to avoid bank erosion;
11. native vegetation would not be disturbed;
12. the development would not conflict with neighbouring land uses;
13. services and infrastructure could be provided.

The policy indicates marine-based industry should be clustered in a precinct to maximise the efficiency of infrastructure and to minimise environmental impacts.

The policy identifies that rezoning may be appropriate to facilitate suitable marine-based industry and that councils may prepare development control plans to customise controls recognising local conditions.

Ballina Boat Harbour - Development Feasibility Overview, Department of Lands

This report prepared in 2008, assessed the physical, technical, environmental, social and planning constraints and feasibility for the possible expansion of the Trawler Harbour site. It is based on GHD's indicative layout included in the *Lower Richmond River Recreational Boating Study*. It considers provision of a 200 wet berth marina accommodating vessels 5 to 20m long and commercial marine facilities. All major shipwright activities, hull maintenance and refits would be undertaken elsewhere.

The report identified the site constraints and provides information regarding a number of constraints that is of relevance to the Ballina Marina Master Plan.

- vehicle access to a new marina would require an upgraded intersection and as a minimum would need to accommodate rigid bodied fuel trucks in excess of 10 tonnes;
- the proximity of residential development would require an appropriate layout to the redevelopment;
- the existing harbour approach requires a "hard to port" steer which can be made even more difficult with a falling tide, strong southerlies and strong river currents. The Fishery Creek tides are quite small, however, during large tides (1.9m to 2m) the river currents which are typically .2m increase to .5m and more. The tidal range in the harbour is approximately 1.8m;
- on-going shoaling of the harbour and entrance will require future maintenance and dredging. At low tide trawlers "sit" on the harbour floor;
- an expanded marina would result in greater noise generation from maintenance activities, hydraulic equipment, vessel and vehicle movements. Trawler activity generally commences from 1am to 2am in the morning. Mitigation strategies could include bunds, sound barriers, limits on operation hours, traffic calming devices and quiet road pavements;
- additional port lighting could cause light pollution;
- expansion of facilities at the Fishery Creek boat ramp would require additional car/trailer parking that may utilise prime waterfront land for parking. The boat ramp expansion may also be dependant on improved access from the old highway and shoaling in the creek. Consideration may be given to the provision of a boat ramp with the expanded harbour facilities;
- the high water table and low lying land offer poor

foundations;

- potential for acid sulphate soil and contamination of boat harbour sediments;
- the site varies from RL 1.85m AHD at the harbour to RL 1.46m AHD at the Boatharbour Road/Sunnybank Drive intersection. The 100 year ARI inundation level at this site is RL1.9m. Flooding issues could include flooding from the Richmond River, damage to vessels, debris deposition, the need for flood buoyancy pontoons, siltation and potential fuel spillage;
- potential impacts on seagrass and mangrove habitats;
- potential visual impacts and loss of river/harbour views for neighbouring residents;
- Native Title will be a consideration;
- RMS depot and timing/cost associated with relocation.

This study found that, in relation to technical, environmental and planning constraints, it was feasible to expand maritime facilities at the Trawler Harbour site, that there were no technical aspects not typical of such a setting, that there were no planning constraints that would prevent the expansion and that the most challenging constraint was designing with consideration to the immediate neighbours.

Worley Parsons Redevelopment of Ballina Trawler Harbour Feasibility Study

In 2010 Worley Parsons considered the feasibility of redeveloping the Ballina Trawler Harbour site for the NSW Land and Property Management Authority. The study explored three options for the harbour. Option 0b was to retain the existing harbour with no redevelopment. Option 1E involved the expansion of the harbour to the north and siting land based facilities west of the harbour. Stage 2 of this option replaced the RMS depot with residential development and an expanded car park for the public boat ramp. Option 5d extended the harbour to the north and west and sited land based facilities to the west and north of the harbour. Stage 2 of this option replaced the RMS depot with residential development and relocated the public boat ramp to another location nearer the Ballina town centre.

The study identified the following site constraints:

- boat harbour mooring limitation;
- navigability and vessel access;
- proximity to residential development;
- noise generation - maritime activities and vehicle noise;
- impact of port lighting;
- regional boat launching ramp;
- poor foundation conditions;
- potential acid sulphate soil;
- contamination;
- river flooding;
- poor site drainage;
- sea grasses;
- mangrove habitat;
- aesthetic impacts;
- native title; and
- current RMS works depot.

The study included a number of options for redevelopment of the trawler harbour based on:

- maintaining the current harbour position;
- expanding the harbour but with one option that retained the existing loading wharf;
- maintaining the existing boat ramp;
- applying a 60%/40% water area/land use proportion to the total trawler harbour facility;
- retain the RMS depot, develop the harbour and open space to the west as stage one and develop the depot, boat ramp and Fishery Creek open space as stage two;

- excluding relocation costs for the RMS depot.

The study considered 8 redevelopment options determined as most appropriate for the site. These options were various combinations of approaches to the harbour expansion/retention, the RMS depot and the boat ramp. These options were:

1. retain the existing harbour layout, boat ramp and RMS depot;
2. expand the harbour north and west, relocate the boat ramp off-site and retain the RMS depot;
3. expand the harbour north and west, in 5 years replace the RMS depot with an expanded boat ramp and residential development;
4. expand the harbour north and west, in 5 years replace the RMS depot with residential development and relocate the boat ramp off-site;
5. expand the harbour north and add residential development to the harbour, retain the RMS depot and relocate the boat ramp off-site;
6. expand the harbour north and add residential development to the harbour, in 5 years replace the RMS depot with an expanded boat ramp and residential development;
7. expand the harbour north and add residential development to the harbour, in 5 years replace the RMS depot with residential development and relocate the boat ramp off-site;
8. expand the harbour north and add residential development to the harbour, in 5 years replace the RMS depot with residential development and relocate the boat ramp off-site. All works to be undertaken as a single stage development.

The financial analysis found that if monetary cash flows resulting directly from the development are the only criterion, the favoured option would be the without-project Option 0b - 0b.

The financial analysis identified that given the significant non-monetary and excluding monetary benefits of a development of the boat harbour, development may be favoured over the without-project option. In this case, the best with-project outcome was determined to be Option 1e - 5d being the smaller harbour expansion with residential development at the harbour and the

RMS depot and the boat ramp relocated off-site.

The study also assessed the options against a range of non-financial criteria and found that the smaller harbour expansion combined with the complete redevelopment of the RMS depot for residential/commercial use had positive benefits in terms of contributing to a marine precinct, providing economic stimulus and providing improvements to vessel access.

Feasibility Study update (WorleyParsons 2011)

In 2011 Worley Parsons undertook an update to the feasibility study. The update included:

- updated construction costs for 2-storey and 3-storey development in line with Rawlinsons 2010;
- adjusted floor space ratios for residential construction to more conservative values;
- inclusion of a 5.6% inflation rate for future costs and benefits; and
- maintained a discount rate of 13% for the net present value calculation.

The study found:

- the best with-project outcome was from Option 1e - 0b;
- the best overall financial outcome was the *Status Quo Minimum Works* situation, Option 0b - 0b. This does however not involve any redevelopment at the site; and
- the worst financial outcome was from Option 5d - 1e.

Martin Street Boat Harbour Precinct Master Plan

This masterplan was prepared in 2015 by Geolink Consulting, ENV Solutions and Red Belly Landscape Architecture to guide the redevelopment of the harbour precinct. Project aims were:

- to enhance and increase boat moorings and passenger exchange facilities for private, community, government and commercial operators;
- to create a vibrant and attractive foreshore precinct;
- to improve pedestrian and vehicle access; and
- to create a tourist hub and generate economic potential.

The Martin Street Boat Harbour Precinct includes the riverside land from the Ballina Memorial Olympic Pool to Martin Street, the boat harbour, the Richmond River, the Ballina Naval and Maritime Museum, infrastructure along the foreshore, the car park and Regatta Avenue and the southern ends of Martin and Norton Streets. The east of the precinct is Council managed. The western area, including the harbour, is managed by NSW Crown Lands.

The harbour, known as the 'little boat harbour' had a development linked with the history of Ballina including its cedar getting industry, the development of the town centre and government services and management of the river entry and channel. Other changes affecting the harbour included the reclamation of parts of the river front, development of the river front in the nineteenth century, river transport and its decline, recognition of the heritage sites and the development of recreational and cultural facilities including the baths and the Ballina Naval and Maritime Museum.

The precinct includes a large area of public park on the river front and around the museum and harbour. The park has unrestricted car access, a path along the river front and limited facilities. The harbour is a small artificial inlet located within the reclaimed shoreline of the Richmond River. It has berths for recreational boat owners, government agencies, commercial operators and a surf rescue organisation. The harbour is owned and operated by NSW Crown Lands and is currently leased to the Regatta Avenue Boatharbour Association. The harbour has moorings for 15 to 20 boats and these have been occupied for many years. There are boat sheds on the northern side of the harbour and a public toilet and shower block next to the NSW Maritime shed. The precinct includes the Ballina Maritime and Naval Museum.

Surrounding land uses include the Ramada Hotel, shops,



Figure 8: Martin Street Boat Harbour precinct

restaurants and alfresco dining. At the western end of Regatta Avenue are properties occupied by NSW statutory and departmental offices. Other land uses include a residence, a child care centre, Ballina Library and the Ballina Visitor Information Centre. The precinct is accessed from River and Martin Streets and Las Balsas Plaza and Regatta Avenue border the northern side of the precinct. There is a large public car park at the junction of Las Balsas Plaza and Regatta Avenue.

The master plan identified the following site issues and potentials:

- there is greater demand for berths than those available;
- there is a variety in type and condition of mooring infrastructure;
- the eastern wall of the harbour caters poorly for vehicles and pedestrians;
- lack of coordination of management of the site compromises public access at the harbour;
- the harbour could be a key destination for tourists;
- low tide reveals unattractive infrastructure;

- an existing fig has potential as a site feature;
- Regatta Avenue is not working as an access;
- the historical significance of the site could be explored and enhanced;
- the Ramada Hotel is a busy focus with an interface with the precinct;
- uncontrolled vehicular movement is negatively affecting the foreshore;
- the foreshore walk and park lacks infrastructure;
- the car park occupies a large are of foreshore land;
- the museum entry is ineffective and cluttered;
- the museum turns its back on the river;
- poor legibility and connectivity across the precinct; and
- there are limited views to the river.

The master plan included consultation with key stakeholders. Consultation occurred with the Ballina Naval and Maritime Museum, the Ballina Chamber of Commerce, NSW Maritime, the Ballina Visitor Information Centre, Ballina Shire Council, the Regatta Avenue Boatharbour Association and additional Boat Harbour Members, MV Richmond Princess, the Ballina Memorial Olympic Pool, the Ramada Hotel, NSW DPI Fisheries, Telstra and the River Street Children's Centre. The stakeholders identified the following values, issues, ideas and opportunities for the site:

Values

- the harbour is an important visual, commercial, recreational and tourism resource to Ballina;
- the proximity of the harbour to the river bar is an advantage;
- proximity to the town centre is an advantage for visitors and shoppers as well as boat harbour users;
- the foreshore park is a valuable asset for passive relaxation;
- stakeholders value the mix of private and public users in the harbour;
- the harbour has historical importance;
- the museum is a unique facility and is enhanced by its proximity to the harbour;
- low mooring costs are important in sustaining the viability of the local boating community;
- the harbour is a quiet, intimate water setting allowing interaction with marine life; and
- the capacity of the carpark is important at peak times.

Issues

- the harbour is too small with too few berths;
- siltation affects the harbour's depth and use;
- stormwater pipes add to the siltation;
- there is a range of mooring and marine infrastructure;
- the harbour lacks basic infrastructure such as navigational lights;
- short term tenure affects the likelihood of investment;
- the harbour lacks services and facilities for the boating community and for visitor interest;
- there is illegible pedestrian/cycle access in the precinct;
- Regatta Avenue is in poor condition;
- the park is under utilised with few facilities;
- the museum is not integrated with the precinct;
- there is a lack of historical reference; and
- many properties back onto the precinct

Ideas and Opportunities

- redevelop and reorganise the precinct;
- increase the harbour capacity and moorings
- incorporate new boating services;
- consider the expansion of the harbour;
- install new consistent, contemporary maritime infrastructure in the harbour;
- incorporate commercial and recreational opportunities to increase visitor interest and vibrancy in the precinct;
- provide a continuous walkway along the foreshore;
- explore opportunities for residential uses as part of redevelopment options;
- upgrade the foreshore park;
- connect the maritime museum to the park and harbour;
- consider installing outdoor displays or public art to enhance public interest in museum exhibits;
- explore opportunities to interpret the site's maritime history;
- feature the existing fig as part of redevelopment works;
- upgrade Regatta Avenue;
- provide amenities for visiting boat owners;
- consider allowing RVs to use the large car park; and
- encourage property owners at the edge of the precinct to improve their presentation to the adjoining public domain.

Two master plan options were prepared. Option A included the retention of the museum at its current location. Option B included a new purpose-built mixed use building providing for new uses and existing uses such as the museum. Council endorsed the master planning outcomes in October 2016.

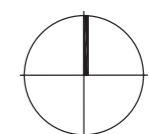
3. MASTER PLAN: OPTION A



4. MASTER PLAN: OPTION B



Figure 9: Martin Street Boat Harbour Precinct Master Plans



The NSW Government's Far North Coast Regional Strategy identified Ballina as a developing major regional centre. The Ballina Major Regional Centre Strategy (BMRCS) was prepared to assist Council in determining strategies to achieve balance between prosperity, social wellbeing, lifestyle and environmental outcomes for Ballina over the next 20 years. The strategy involved community consultation to ensure it reflected the community's sentiment for Ballina's future. Actions were identified to support the economic future, to preserve the environment and sense of place, to support social cohesion and cultural expression and to facilitate healthy lifestyles. The strategy considered key issues including housing density and affordability, urban design, an ageing population, economic development, healthy living, infrastructure, recreation opportunities, open space, natural assets and environmental management. The strategy addresses the following six key themes:

- Open Space and Healthy Living
- Economic Development
- Character, Culture and Amenity
- Community Facilities and Infrastructure
- Environment
- Housing

Community consultation identified a number of aspirations. Those with relevance for the Ballina Marina site are:

- a desire to preserve the natural and scenic qualities that contribute to Ballina's amenity and character;
- a desire for enhanced recreational opportunities associated with open space area, the coast and waterways, through improved infrastructure and amenities;
- recognition that the community's wellbeing will be underpinned by economic opportunities and employment growth and that these require us to support creativity, innovation and entrepreneurship;
- a need to ensure public places and facilities, beaches and waterways, commercial areas and our pathway network are connected and accessible by all;
- a desire for enhanced cultural expression through more public art, interpretive signage, community events and activities;
- a recognition that the nature of housing stock will need to change to ensure we have a variety of dwelling types

suitable for a wide range of households.

The strategy identifies a number of key drivers in planning for Ballina's future. Those drivers particularly relevant to the Ballina Marina site include:

- the **Ballina Byron Gateway Airport** and the opportunity it represents as a gateway to the region and new economic opportunities,
- **Maritime Opportunities** and the need for appropriate investment in infrastructure and embellishments to promote community and business opportunities associated with access to the coast and waterways; and
- **Visitor Economy** and the harnessing of opportunities for local businesses associated with the growth of the visitor economy whilst maintaining a sense of place for the local community.

The BMRCS includes specific strategies that are relevant to master planning for the Ballina Marina Master Plan. These are under the theme of **Community Facilities and Infrastructure**. Objective D3 says *Ensure that maritime infrastructure keeps pace with the needs of our community, tourism and maritime industry*. Actions to achieve this objective include:

- *Augment existing marina facilities to improve the availability and standard of boat mooring, storage and servicing facilities.*
- *Identify a preferred site for a large upstream marina facility and/or maritime industry precinct.*

The BMRCS includes a range of other actions that are not site specific, but are also relevant to planning for the Ballina Marina as a significant facility including public open space. Those actions have been listed according to the associated BMRCS theme.

Open Space and Healthy Living

Objective A1 - Provide improved amenities and facilities in association with key foreshore and open space areas.

- *Ensure the accessibility of change rooms and public amenities at key locations in the open space network (activity nodes).*

- *Extend the shared pathway network.*
- *Progressively embellish the shared pathway network to incorporate improved public amenities, exercise stations, shelter, drinking fountains, public art, play spaces, pop-up activity spaces and bicycle and mobility scooter parking at key activity nodes.*

Character, Culture and Amenity

Objective C1 - Foster social cohesion and build our community's capacity to respond to change.

- *Encourage healthy lifestyle culture through the provision and promotion of open space infrastructure that encourages outdoor activity.*

Objective C2 - Provide public spaces and facilities that contribute to the cultural identity of Ballina and enhance sense of place.

- *Facilitate networking within the public domain, through, the provision of infrastructure and activities that encourages people to linger.*

Objective C4 - Protect and enhance the qualities that contribute to the amenity and character of Ballina.

- *Preserve the natural assets that contribute to the amenity of Ballina, including natural stands of vegetation, wetlands and waterway features.*
- *Enhance the amenity of the shared pathway network and improve public access to waterways by extending riparian pathways and boardwalks at key locations.*

Housing

Objective F1 - To ensure that the future housing stock is appropriate, accessible and affordable.

- *Ensure suitable and adequate housing opportunities are available to cater to the diverse needs of our community.*

Ballina Shire Local Growth Management Strategy

The Ballina Shire Growth Management Strategy establishes Council's strategic planning policy for urban development in Ballina Shire for the period 2012 to 2031. The strategy sets out local growth management arrangements for each of the shire's urban localities. The strategy outlines the desired future character for a particular locality, identifies key locality objectives and proposed actions to achieve those objectives.

The strategy refers to marine-based commercial activity and notes that marine related industry is already clustered around the Smith Drive Industrial Estate. The strategy recommends the investigation of further enhancing this hub of marine-based industry either at, or adjacent to the Smith Drive Industrial Estate.

The strategy identifies West Ballina as a locality that is a hub for recreational boating activities. It recognises that West Ballina currently provides a mixture of residential opportunities and that the type and character of existing land uses has largely been driven by the previous existence of the Pacific Highway through the locality. The strategy identifies that the removal of the highway is likely to change the mix of commercial activities at West Ballina.

The strategy identifies that proposals for West Ballina should recognise the natural and economic values of the Richmond River and associated waterways. It includes objectives to investigate the broadening of marine based activity in the Smith Drive locality and to investigate potential locations for a marina facility.

The Trawler Harbour site is identified as a Strategic Urban Growth Area.

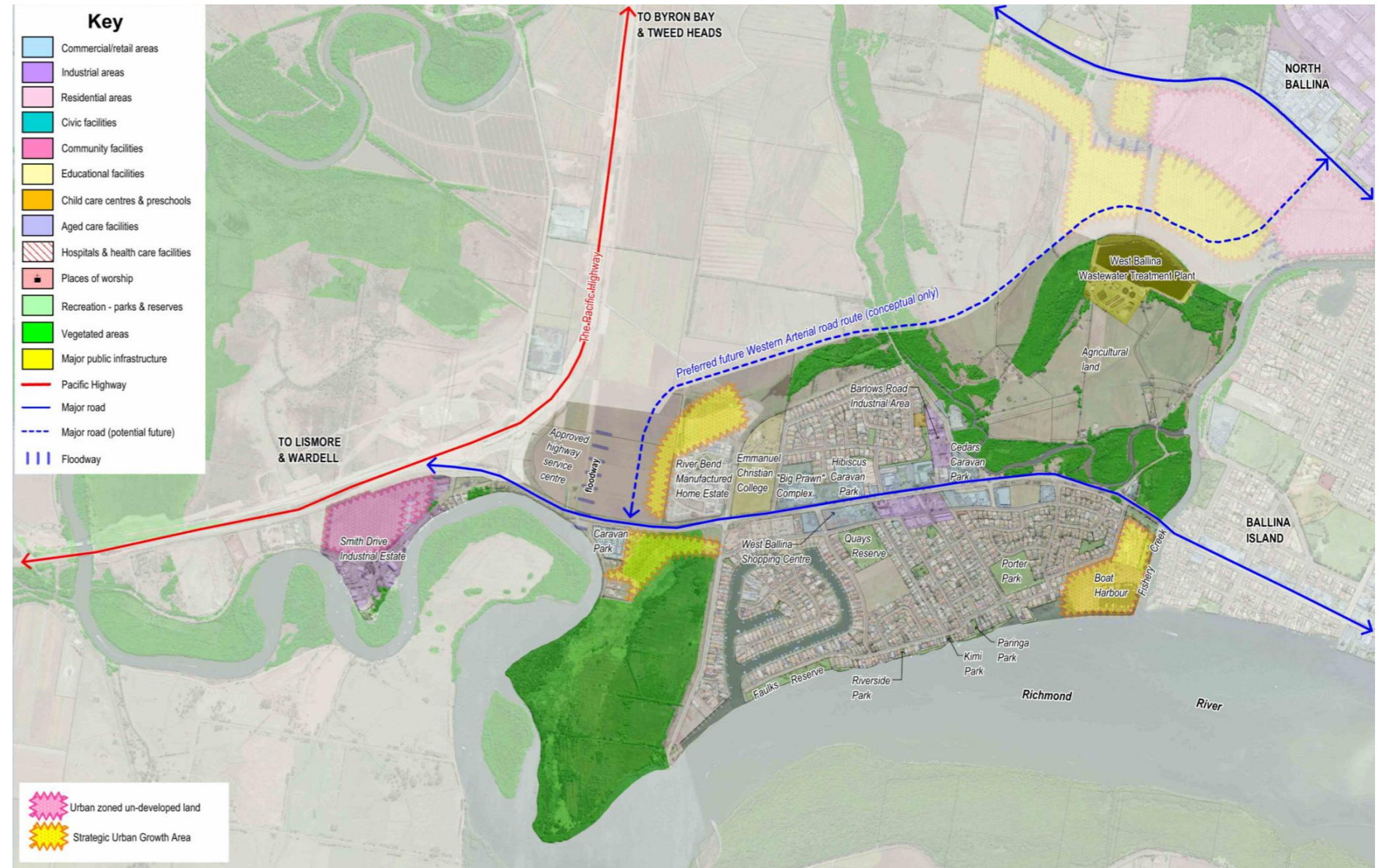
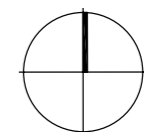
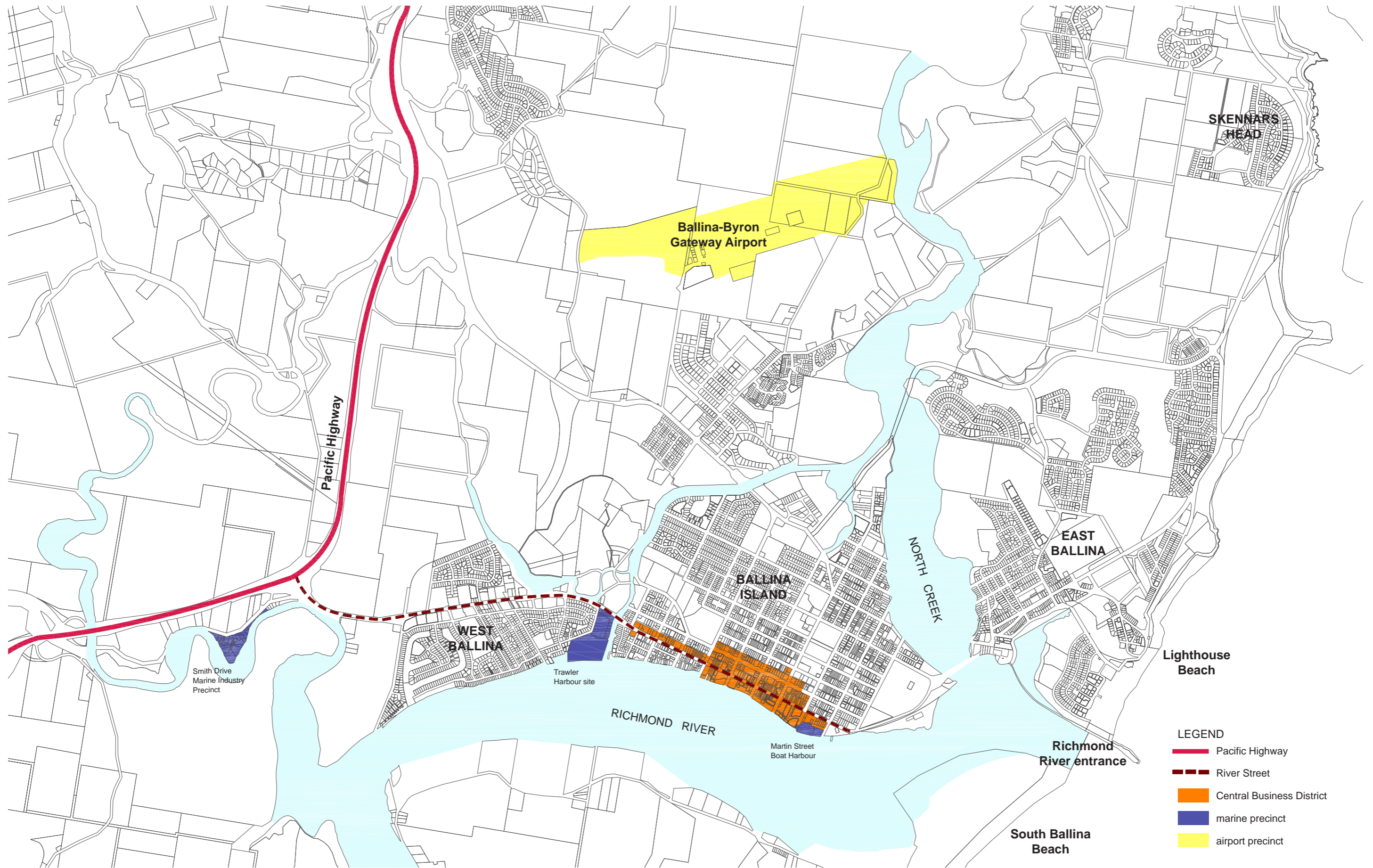


Figure 10: Ballina Shire Local Growth Management Strategy - West Ballina Locality

Note: The preferred western arterial road route has been amended with the adoption of the Ballina Shire Roads Contribution Plan, Version 4.0. The current proposed route is shown as '1a' on page 36 of the plan.

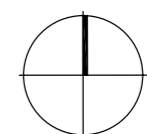




- LEGEND**
- Pacific Highway
 - - - River Street
 - Central Business District
 - marine precinct
 - airport precinct

Ballina Marina Master Plan

Site Context



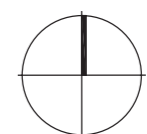
SITE INVESTIGATIONS

SITE ELEMENTS

- existing RMS works depot
- Crown Reserve
- Crown Reserve
- existing trawler and boat harbour
- existing boat ramp
- existing pontoon
- existing car & trailer parking
- existing public toilets
- existing fish cleaning facility
- existing fuel storage
- existing concrete wharf
- existing jetties
- residential precinct
- interface with residences

SERVICES AND INFRASTRUCTURE

- River Street (connection to Pacific Highway & CBD)
- Boatharbour Road
- Sunnybank Drive
- vehicular/pedestrian bridge to Fishery Creek
- future bridge & River Street duplication
- pedestrian connection
- power pole with overhead power lines
- existing bus stop
- existing sewer pump station
- existing bitumen accesses
- access to site from River Street
- access from harbour to river
- rock wall



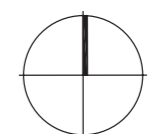
SITE INVESTIGATIONS

NATURAL, ENVIRONMENTAL AND VISUAL FEATURES

- existing planted trees
- existing vegetation (*Casuarina, Eucalyptus spp*)
- existing Mangroves
- open grassed area
- high amenity views to river
- high amenity views to creek
- filtered views to creek through vegetation
- vista along road to Richmond River


TOPOGRAPHY

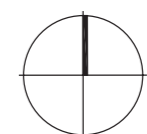
- direction of fall
- stormwater swale
- steep bank
- relatively level area
- low lying mud bank
- low point



SITE INVESTIGATIONS

FLOODING

 flood affected land within the site
(land in flood hazard zone, being adjacent to the Richmond River)

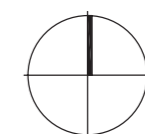


SITE ISSUES



CURRENT SITE ISSUES

- ① large area of river side open space is under utilised
- ② works depot utilises large waterfront site without being dependant upon or maximising its proximity to the water
- ③ river and creek frontage represents a substantial length of water frontage that is under utilised with limited public facilities
- ④ lack of visual and physical connection to the waterfront
- ⑤ no public connection along the waterfront
- ⑥ the popular Fishery Creek boat ramp experiences congestion
- ⑦ there is limited surveillance of the site
- ⑧ the future bridge/road duplication may have impacts on the current functions of the boat ramps/pontoons
- ⑨ potential conflicts between residential precinct and current land uses
- ⑩ limited capacity for existing intersection
- ⑪ the existing trawler harbour is small and has limited berths
- ⑫ there are inadequate refueling facilities and limited marine facilities at the existing harbour
- ⑬ trawler catches have to be transported off site
- ⑭ very limited facilities for visitors with recreational vessels and no facilities for visitors to stay overnight

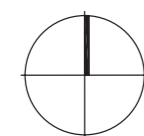


SITE OPPORTUNITIES



SITE OPPORTUNITIES

- ① opportunity for physical and transport connection to CBD
- ② opportunity for transport link to Ballina-Byron Gateway Airport
- ③ access upstream and downstream for vessels
- ④ access to creek and river for water based recreation
- ⑤ native vegetation as feature to redevelopment
- ⑥ create strong visual and physical connection water
- ⑦ opportunity for public foreshore parkland
- ⑧ opportunity for strong links between neighbourhood and redevelopment site to create integrated precinct (visual and physical)
- ⑨ opportunity to create precinct with a focus on marina and waterfront
- ⑩ opportunity to expand and enhance harbour
- ⑪ opportunity to expand/upgrade boat ramp facilities



SITE PHOTOGRAPHS



A looking north along Boatharbour Road with RMS site to right of photo



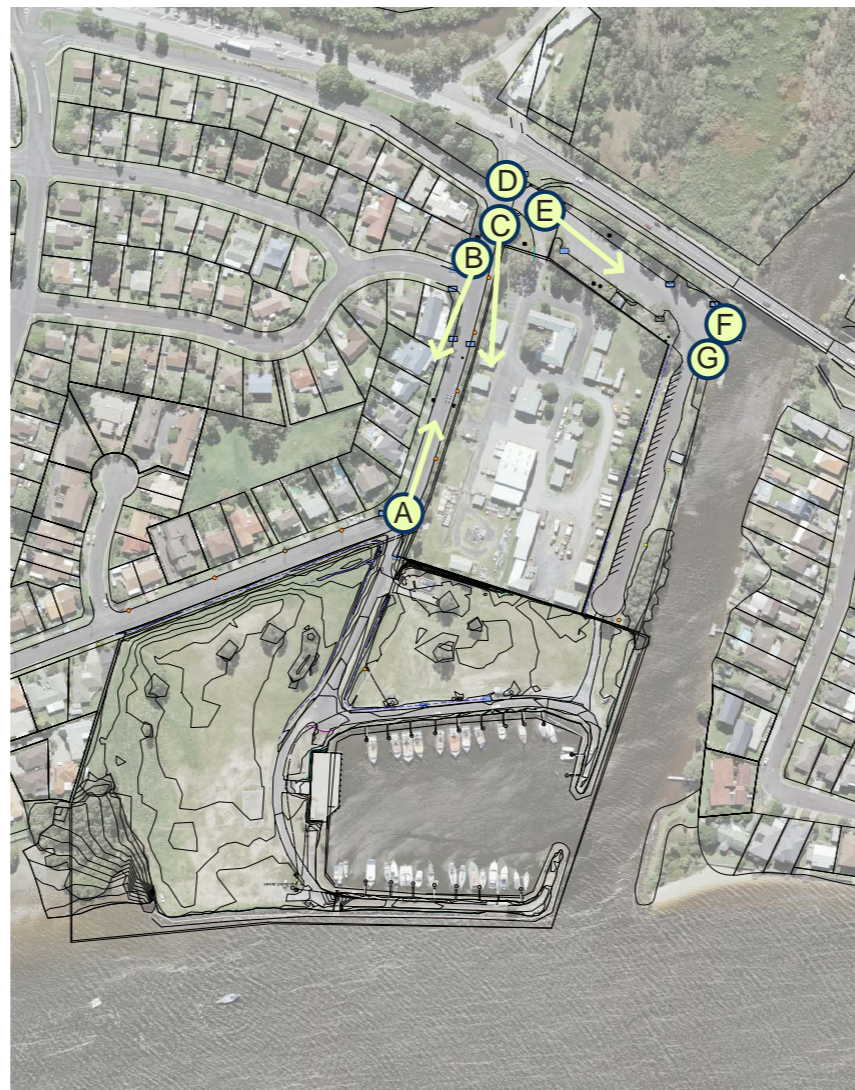
B looking south along Boatharbour Road with existing residences to right of photo



C looking south along Boatharbour Road to RMS works depot



D River Street and Boatharbour Road intersection



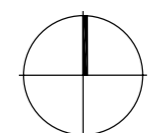
F existing pontoon and Fishery Creek



E carpark at the northern extent of the RMS works depot



G existing boat ramp and Fishery Creek



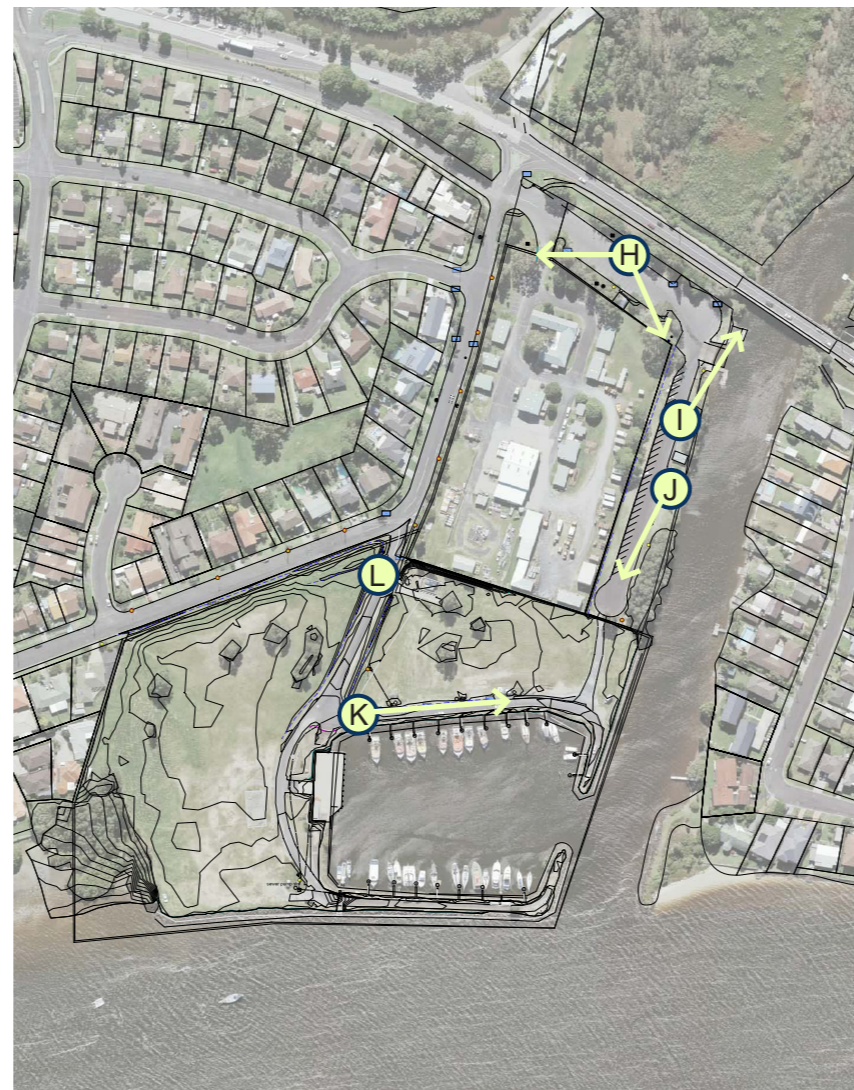
SITE PHOTOGRAPHS



H looking at northern extent of RMS site with parking in foreground



I creek side open space and Fishery Creek



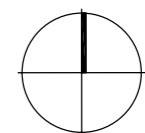
K vehicular access northern side of harbour



J creekside open space and boat trailer parking



L existing fuel storage and southern extent of RMS depot



SITE PHOTOGRAPHS



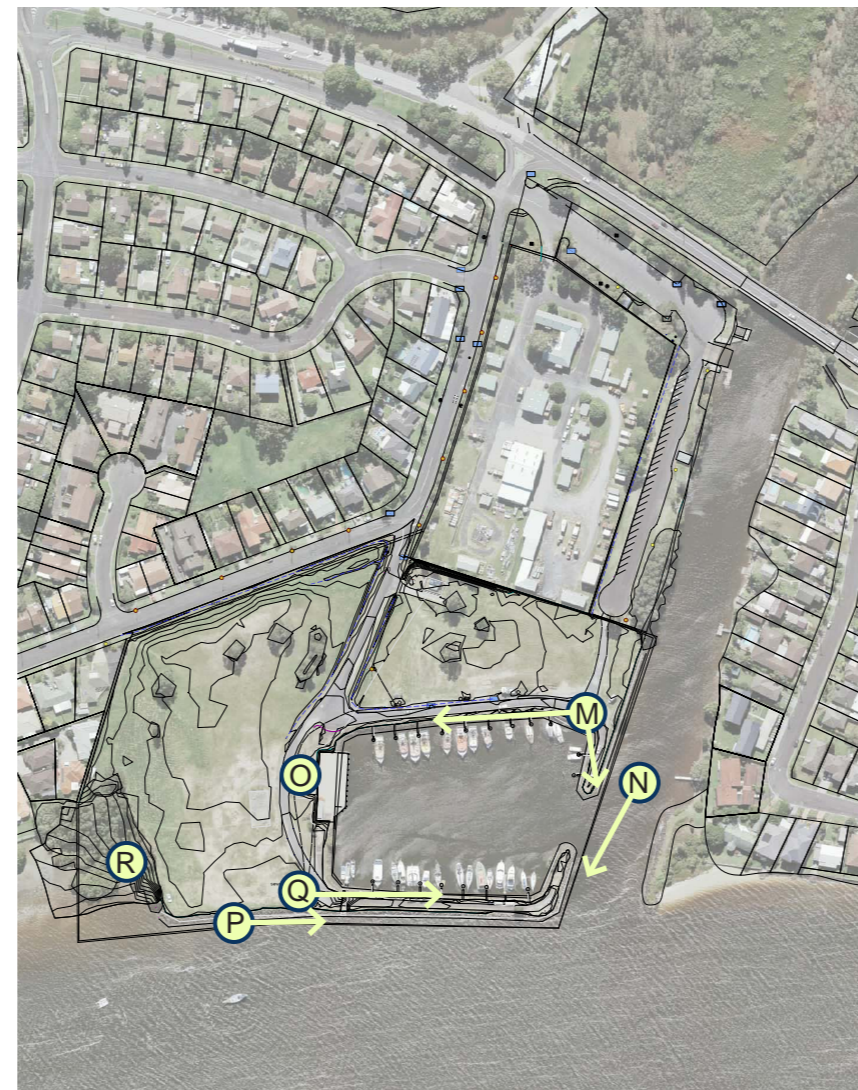
M view across harbour from northeast corner of harbour



N harbour entrance and access to the Richmond River



O existing concrete wharf at the harbour



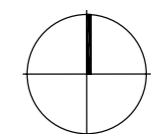
Q vehicular access along the southern harbour wall



P south wall to the harbour, adjacent to the Richmond River



R existing mangroves in the southwest corner of the site



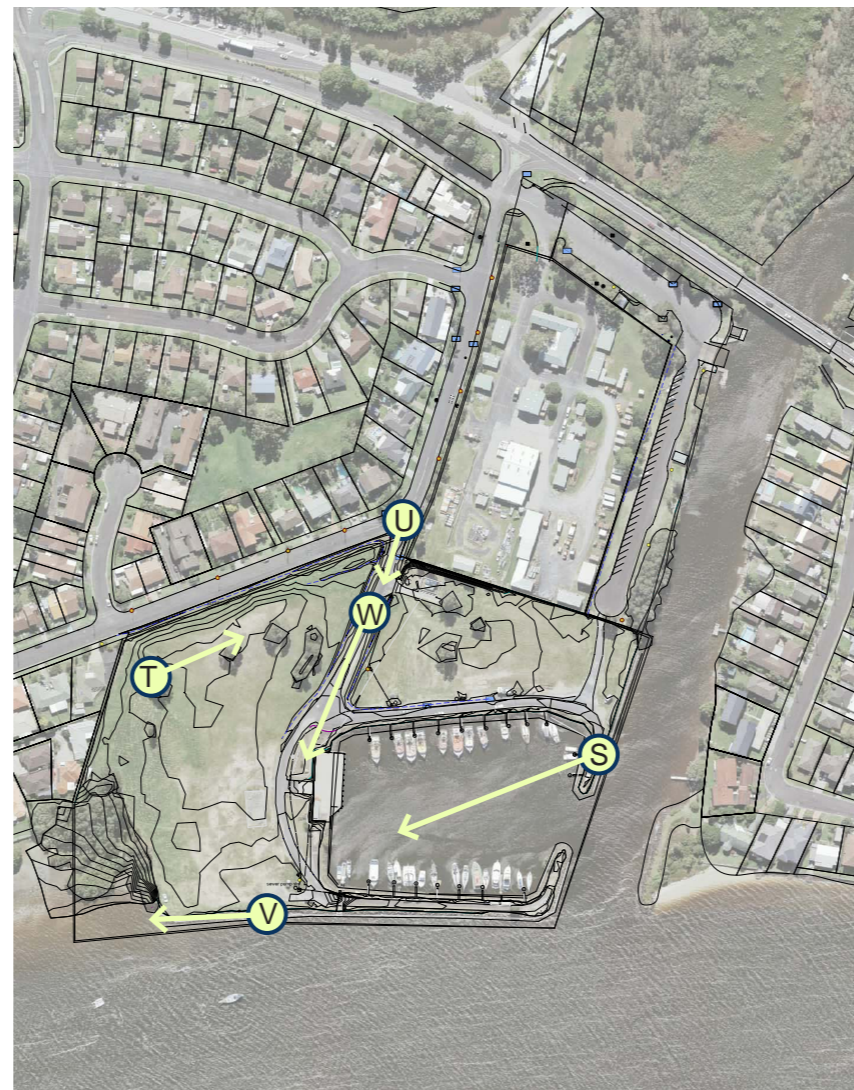
SITE PHOTOGRAPHS



S south side of existing harbour with Richmond River behind



T vacant land at foreshore



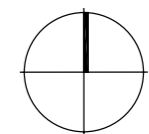
V rock wall along the Richmond river and vacant land



U access to harbour and vacant land to west



W view along access road to harbour and the Richmond River



COMMUNITY CONSULTATION

Community and Stakeholder Consultation for the Ballina Harbour Master Plan was conducted as a sub-project by Dr Elizabeth Baker. The processes and outcomes of that consultation is included in the *Ballina Marina Master Plan Project - Community Engagement Report*, prepared in July 2016 by Dr Baker. The consultation process included face-to-face meetings with key stakeholder groups and representative of groups. Residents in the proximity to the harbour site were notified of the project via a postcard. These residents were invited to either send in a submission to Council or to respond to an on-line survey. The broader community was notified of the same survey via media outlets.

In total, five interviews were held with stakeholder groups, 12 submissions were received and 103 people responded to the on-line survey.

The key findings extracted from that report are:

- *There is overwhelming community support for the improvement of marine infrastructure and amenity at the Trawler Harbour Marina site.*
- *The community expressed clear dissatisfaction with the current provision of marine infrastructure and facilities available in Ballina.*
- *The highly desirable nature of facilities such as toilets and showers, a wharf or jetty, a public boat ramp, re-fuelling facilities, waste pump out facilities and public open space was indicated clearly.*
- *There are mixed feeling about other facilities and features that might be included in the redevelopment of the site.*
- *The community perceives that the impacts of changes to the site will be positive for them.*

The majority of the survey respondents live in Ballina and 37% live around the harbour site. The stakeholders were mostly those with a business interest. Most of the respondents were involved in recreational boating. Only a small group were involved in commercial fishing. Over half of respondents owned a motor boat and this boat was usually stored at their home.

Many of those respondents who live within the harbour surrounds indicated they currently use the site for its boat ramp, for fishing and walking. Members of this group expressed concerns that

redevelopment of the site may negatively affect their amenity.

A large number of respondents from the broader Ballina area also enjoyed recreational boating. Again most of their craft were stored at home. 60% of that group do not currently use the harbour site, but the majority of the group saw that development at the site could have benefits for them in terms of providing additional recreational and social opportunities. This group expressed varying views about the potential nature of development at the site, indicating a need to 'put the community first'.

There was an overall sentiment that existing marine infrastructure in Ballina is poor. The respondents clearly identified a desire for toilets and shower, a wharf or jetty, a public boat ramp, re-fuelling facilities, waste pump out facilities and public open space. A range of other facilities were also identified as being useful including a boardwalk, boat washing facilities, boat repairers, fish cleaning facilities, private moorings, restaurant/cafe, chandlery, marine mechanic, general convenience shop, picnic facilities and boat storage facilities.

The least desirable options were retail shops, permanent residential apartments, dog exercise area and a swimming platform. However, there was a small component of respondents who did express these as desirable.

Respondents identified potential positives associated with the harbour's redevelopment as the provision of additional recreational opportunities, employment opportunities, opportunities to socialise, local business opportunities and potential moorings. Perceived negatives were an increase in traffic and an impact on amenity and views.

The consultation highlighted issues that have implications for planning for the future redevelopment of the site. Dr Baker groups these as:

- *the nature and extent of accommodation*
- *the style and feel of the development*
- *community access and use of the site*
- *the provision of services/facilities for a wide range of marine users*
- *the commercial fleet*
- *the Ballina Bar*

BOATING AND MARITIME DEMAND ANALYSIS

Hill PDA Planning Consultants prepared a *Boating and Maritime Demand Analysis* as a sub-project for the Ballina Marina Master Plan project. The analysis initially identified that the following be considered as part of the redevelopment of the harbour.

- there should be approximately 100 marina berths and this would be an increase of approximately 64 berths from the current harbour moorings;
- the harbour expansion should also allow for a possible additional future expansion of another 50 moorings;
- the redevelopment of the harbour should include public toilets and showers;
- typically the harbour office would also incorporate toilet/shower facilities for those using the moorings;
- incorporate 5 - 10 commercial suites within the redevelopment. These could provide marine equipment, retail outlets etc;
- the commercial spaces could be quite small e.g. approximately 60m² each;
- consider including an area for a commercial seafood outlet and this should be about 2000m² in floor space to allow for a cafe/restaurant outlet as well as a factory floor;
- consider the inclusion of a dry storage facilities for watercraft;
- one side of the harbour should be allocated for the mooring of working boats;
- a potential restaurant/cafe should overlook the working boat unloading area as this is a 'big drawcard' for the area;
- include refuelling facilities.

The Feasibility and Demand Analysis Report, subsequently produced by Hill PDA following more detailed analysis, is based on 110 marina berths. This is an increase of approximately 76 berths.



MASTER PLAN PRIORITIES

The Master Plan priorities have been collated based on the site investigations, background research, community consultation and input from the Boating and Maritime Demand Analysis. The Master Plan priorities are:

Access

- recognise the future expansion of River Street will have potential impacts on the project site;
- identify future planning for the redevelopment of the site must consider an appropriate access from River Street;
- allow for increased traffic movements including rigid bodied trucks;
- incorporate carparking to accommodate the increase in residents and visitors;
- locate roads to maximise access to facilities whilst keeping the foreshore and marina pedestrian friendly.

Respect the Community

- respect the community, their concerns for amenity loss and desire for views and access to the foreshore;
- propose viable development options that maintain and enhance public access to the Richmond River and Fishery Creek and provide new recreational opportunities for locals;
- create strong links between the neighbourhood and the marina to create a broader precinct that is integrated visually and physically;
- recognise the community has mixed feelings about potential development and propose a development character in keeping with the feel of Ballina;
- recognise Aboriginal cultural heritage.

Connection

- create strong physical and visual connections to the waterfront and marina;
- consider opportunities for connections to the CBD and to Ballina-Byron Gateway Airport.

Amenity

- create a vibrant precinct with a range of recreational opportunities where people can live, play, relax and socialise;
- create a hub of activity where there is natural ongoing surveillance of the site;
- note future planning must consider potential noise and light pollution associated with the marina.

Marina Expansion

- expand the existing marina to improve the availability and standard of boat mooring, storage and servicing facilities;
- consider 110 berths as the target goal for the marina expansion;
- note future planning must consider potential shoaling of the marina floor and safe access to the Richmond River;
- note future planning must consider potential flooding issues and potential site contamination;
- provide for a range of moorings to accommodate cruising yachts and boats, working trawlers and motor boats associated with government agencies;
- provide for both permanent and temporary moorings;
- retain and increase the number of available moorings for working trawlers;
- note that marina management needs to ensure business costs for professional fisherman are a key if they are to remain a viable industry;
- provide separation in the marina between the privately owned boats and commercial operators and trawlers;
- complement the expansion of the Martin Street Boat Harbour Precinct.

Marina Facilities

- provide facilities to support the function of the marina including boat refuelling, sewage pump out, waste removal, laundry, showers, toilets, reprovisioning and equipment requirements;
- provide access to the marina for users with appropriate vehicular and pedestrian access and parking;
- provide a secure location for patrons to moor boats;
- note that major boat repair and building facilities will be located at the Smith Drive marine industry precinct;
- provide a wharf for working boats relative to a desired unloading and processing area and to replace the existing facility.

Fishery Creek Facilities

- maintain a boat ramp facility that supports the popularity of this boat launch location inclusive of an enhanced boat ramp, pontoons and adequate car/boat trailer parking.

Commercial Opportunities and Development

- integrate development at the site as a means of financially facilitating the harbour expansion;
- consider a range of housing opportunities;
- consider opportunities for commercial development such as a chandlery, boat hire and laundry;
- consider the provision of dry storage options as part of the marine precinct and as a strategy to minimise car/boat trailer movements at the Fishery Creek boat ramp;
- incorporate between 5 to 10 commercial suites of approximately 60m² each within the redevelopment that could provide for marine related outlets;
- consider including an area for a seafood restaurant/cafe of approximately 2100m² in floor space to allow for a cafe/restaurant outlet as well as a factory floor;
- locate a restaurant/cafe overlooking the working boat unloading area as this is a 'big drawcard' for the area.

Public Space and Facilities

- support the community's desire to have access to public facilities such as jetties, boat ramps, foreshore open space, toilets, showers and water front walkways;
- enhance public open space with appropriate facilities and infrastructure such as picnic tables, BBQ areas, play areas and areas for passive and active recreation;
- ensure the accessibility of public facilities, amenities and open space;
- enhance the shared pathway network for Ballina;
- encourage a healthy lifestyle with a distinctively 'Ballina feel' through access to Ballina's waterways, a quality open space and vibrant marina;
- provide a range of opportunities for the community and visitors to spend time at and enjoy the marina;
- maximise potential access to the creek and river by the provision of foreshore public open space and walkways;
- incorporate opportunities to reflect upon the natural environment and the history of the site through public art works and interpretive signage.

Environment

- cluster marine-based industry to minimise environmental impacts;
- protect and enhance creek bank vegetation, mangroves and seagrass beds for its habitat value and as a natural features to the site;
- identify potential for environmental education at the site.

EXPLORATION OF OPTIONS

The master plan priorities were then explored in a series of eight sketch designs considering the redevelopment of the site. Each option sought to achieve the master plan priorities and in doing so, consideration was given to:

- different configurations of the marina expansion to achieve the 110 capacity identified as ideal by Hill PDA;
- the location of the boat ramp and the configuration of its supporting facilities;
- the relationship between the marina and the siting of supporting facilities;
- appropriate locations for residential/commercial development;
- different configurations of residential/commercial development;
- access to, and circulation around, the marina and new development;
- the relationship and connectivity between different land uses and types of spaces;
- the community preference for public open space, particularly, on the foreshore;
- the relationships between the existing neighbourhood and the redevelopment;
- the interface between the redevelopment and the existing neighbourhood;
- the footprint and character of the development;
- the configuration of open space and strong connectivity between open spaces and public facilities; and
- the relationship between development and the harbour.

The proposals and layout to each sketch option is explained in a written rationale.

EXPLORATION OF OPTIONS



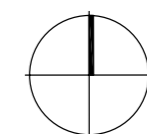
CONCEPTS

- ① precinct for boat ramp with parkland, parking and associated facilities
- ② residential apartments with green links to harbour and creek
- ③ public creekside parkland
- ④ seafood outlet and commercial premises
- ⑤ mixed used - commercial shopfronts with residential above
- ⑥ townhouse/villa style development with green space to maintain connections for existing residential precinct
- ⑦ public foreshore parkland
- ⑧ harbour extended west and into the Richmond River

rationale

- create a direct physical and visual link to the marina along Boatharbour Road
- maintain the northern extent of the harbour to increase development areas and push the harbour expansion west and into the Richmond River
- relocate the boat ramp and parking to the north of the site to allow multistorey development to have waterfront views and to provide public creekside parkland
- site 4-5 storey development along Boatharbour Road
- create communal green space around multi storey development for amenity
- set development back from Boatharbour Road and create a wide, shaded esplanade
- locate commercial facilities associated with the marina close to the harbour
- keep parking for the commercial area away from the marina
- incorporate 2 to 3 storey residential development close to marina
- provide public access around the marina and in the foreshore park on the river
- locate mixed use development (commercial/residential) close to the marina
- maintain 'green' links between new development for views to the water and for potential public access

Scale 1:2500



EXPLORATION OF OPTIONS



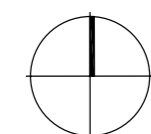
CONCEPTS

- 1 precinct for boat ramp with parkland, parking and associated facilities
- 2 residential apartments with green links to marina
- 3 marina extended along Fishery Creek creating increased opportunity for development with waterfront frontage
- 4 seafood outlet and commercial premises
- 5 plaza overlooking marina to create focal point on vista
- 6 public parkland providing connection to river and marina
- 7 apartment style development
- 8 marina extended west

rationale

- expand the existing marina predominantly westwards
- create a second marina area along the edge of Fishery Creek to provide marina frontage to multistorey residential development
- create a direct physical and visual link to the harbour along Boatharbour Road
- relocate the boat ramp and parking to the north of the site to allow multistorey development to have waterfront views
- site 4-5 storey development along Boatharbour Road
- set development back from Boatharbour Road and create a wide, shaded esplanade
- provide communal green space around the proposed multistorey residential development
- create a plaza at the end of Boatharbour Road
- locate commercial facilities and potential seafood outlet with direct access to the marina
- locate a multistorey residential building overlooking the western end of the marina
- create a green space around the end of the marina giving access to the foreshore and the marina
- keeping parking away from the marina
- provide public access around the marina

Scale 1:2000



EXPLORATION OF OPTIONS



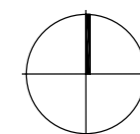
CONCEPTS

- ① precinct for boat ramp with parkland, parking and associated facilities
- ② dry storage for boats
- ③ residential apartments with green links to marina
- ④ marina extended along Fishery Creek creating increased opportunity for development with waterfront frontage
- ⑤ seafood outlet and commercial premises
- ⑥ plaza overlooking marina to create focal point on vista and public connection to marina
- ⑦ apartment style development
- ⑧ public foreshore parkland
- ⑨ marina extended west

rationale

- expand the existing marina predominantly westwards
- create a second marina area along the edge of Fishery Creek to provide marina frontage to multistorey residential development
- create a direct physical and visual link to the marina along Boatharbour Road
- relocate the boat ramp and parking to the north of the site to allow multistorey development to have waterfront views
- incorporate dry boat storage at the boat ramp facility
- site 4-5 storey development along Boatharbour Road
- set development back from Boatharbour Road and create a wide, shaded esplanade
- provide a large development footprint to maximise returns
- create a public esplanade around the marina to maximise public access to the marina and the water
- locate commercial facilities and potential seafood outlet overlooking the harbour and with a connection to the wharf
- locate 2-3 storey residential development west of the marina with a public green space linking the neighbourhood to the marina and foreshore park
- maximise access with carparking around the marina esplanade

Scale 1:2000



EXPLORATION OF OPTIONS



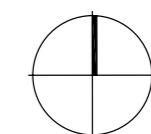
CONCEPTS

- ① retain and upgrade existing boat ramp and facilities
- ② residential apartments with green links to marina and creek
- ③ seafood outlet and commercial premises
- ④ marina facilities and commercial premises, opportunity for residential development above
- ⑤ public access to foreshore
- ⑥ marina extended to west

rationale

- expand the existing marina westwards
- create a direct physical and visual link to the marina along Boatharbour Road
- create an area of harbourside park at the end of Boatharbour Road as a focal point
- retaining the Fishery Creek boat ramp and parking in their current locations
- site 4-5 storey development along Boatharbour Road with communal green space between to maintain links to Fishery Creek
- set development back from Boatharbour Road and create a wide, shaded esplanade
- located a commercial seafood processor and outlet close to the marina with a link to the wharf
- locate commercial facilities and government agencies along the northern edge of the marina
- provide parking north of the commercial outlets
- provide marina side park and link along south wall of marina for public recreation
- provide limited vehicular access around the marina for access to boats

Scale 1:2000



EXPLORATION OF OPTIONS



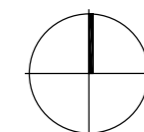
CONCEPTS

- ① precinct for boat ramp with parkland, parking and associated facilities
- ② dry storage for boats
- ③ residential apartments with green links to marina and creek
- ④ seafood outlet and commercial premises
- ⑤ mixed used with commercial premises and residential above
- ⑥ commercial premises and marina facilities
- ⑦ apartment style development
- ⑧ public foreshore parkland
- ⑨ marina extended west

rationale

- expand the existing marina north and west
- create a physical and visual link to the marina along Boatharbour Road
- provide a roundabout at the end of Boatharbour Road to facilitate better movement of traffic
- relocate the boat ramp and parking to the north of the site to allow multistorey development to have waterfront views and to allow for a park along Fishery Creek
- incorporate dry boat storage at the boat ramp facility
- set development back from Boatharbour Road and create a wide, shaded esplanade
- integrated the 4-5 storey development within a park like setting to maintain views to the creek and to create potential links to the creekside park and the marina
- create a shaded public esplanade around the marina to maximise public access to the marina and the water
- provide parking around the esplanade to maximise access to the commercial precinct and the marina
- locate commercial facilities and potential seafood outlet overlooking the marina and with a connection to the wharf
- locate 2-3 storey residential development west of the marina
- provide a foreshore parkland on the Richmond River

Scale 1:2000



EXPLORATION OF OPTIONS



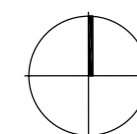
CONCEPTS

- 1 retain and upgrade existing boat ramp and facilities
- 2 residential apartments with green links to the marina
- 3 residential apartments with green links to foreshore and marina
- 4 seafood outlet, commercial premises and marina facilities
- 5 public foreshore parkland
- 6 marina extended to north

rationale

- expand the existing marina north
- locate commercial buildings including a seafood outlet/processing facility close to the existing marina wharf
- create a road link to new 2-3 storey development west of the marina
- site 4-5 storey development along Boatharbour Road with a central 'green' link providing a connection to the marina
- set development back from Boatharbour Road and create a wide, shaded esplanade
- integrated the 4-5 storey development within a park like setting to maintain views to the creek and to create potential links to Fishery Creek and the marina
- retain the existing Fishery Creek boat ramp and trailer parking
- provide for through vehicular circulation by connecting the Fishery Creek access with a road to the north of the marina
- provide a public green space to the north of the marina
- provide a public walkway to the foreshore and foreshore parkland on the Richmond River

Scale 1:2000



EXPLORATION OF OPTIONS



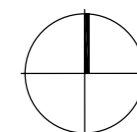
CONCEPTS

- ① retain and upgrade existing boat ramp and facilities
- ② residential apartments with green links to the marina
- ③ townhouse development overlooking the marina
- ④ dry storage for boats
- ⑤ plaza along marina edge
- ⑥ townhouse style development with green links for public access to foreshore and the marina
- ⑦ seafood outlet, commercial premises and marina facilities
- ⑧ public foreshore parkland
- ⑨ marina extended to north

rationale

- expand the existing marina north and west
- provide a roundabout at the end of Boatharbour Road to facilitate vehicle movement
- provide an esplanade at the edge of the marina as a focal point on Boatharbour Road
- retain the Fishery Creek boat ramp and parking
- create a through road using the Fishery Creek access
- site 4-5 storey development along Boatharbour Road with 'green' links providing connections to Fishery Creek and the marina
- establish a wide green link along the eastern side of Boatharbour Road to provide for public connection to the marina
- integrate the 4-5 storey development in a park like setting to maintain views to the creek and to create potential links to Fishery Creek and the marina
- locate commercial development and government agencies at the western extent of the marina close to a new wharf
- site 2-3 storey residential development to the west of the marina with a wide 'green' link to maintain neighbouring views to the marina and to provide a public link to the foreshore
- create a public foreshore park on the Richmond River
- locate 2 storey residential development and dry storage for boats on the northern edge of the marina
- locate parking away from the marina edge

Scale 1:2000



EXPLORATION OF OPTIONS



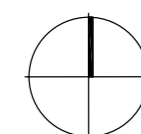
CONCEPTS

- ① retain and upgrade existing boat ramp and facilities
- ② residential apartments with green links to the marina
- ③ commercial premises and marina facilities
- ④ dry storage for boats
- ⑤ plaza along marina edge
- ⑥ apartment style development with green space
- ⑦ seafood outlet/cafe with links to parkland and marina
- ⑧ public foreshore parkland
- ⑨ marina extended to north

rationale

- expand the existing marina north
- create a visual and physical link between Boatharbour Road and the marina
- maximise the development potential and site 4-5 multistorey development along Boatharbour Road
- provide a 'green' edge to the new northern development with public link to Fishery Creek and the marina
- retain the Fishery Creek boat ramp and parking
- provide a through road between Boatharbour Road and Sunnybank Drive
- provide carparking for the marina along the through road
- site new 2-3 storey residential development on this through road and within a communal green space
- create a large public open space on the Richmond River
- locate a new commercial outlet for seafood retail and processing relative to the existing wharf
- locate other commercial outlets along the northern side of the marina
- create a public esplanade around the western and northern edges of the marina
- locate parking away from the marina edge

Scale 1:2000



REVIEW OF SKETCH OPTIONS

Process

The eight sketch options were reviewed by Ballina Shire Council. The sketch options were also reviewed by Hill PDA as part of the ongoing relationship between the master plan preparation and the feasibility analysis of the master plan. The sketch options were also reviewed internally by the project engineer, to provide input into suitable road widths, the location and size of the roundabout, carparking and appropriate development footprints.

Initial Option Refinement

Ballina Shire Council indicated a preference for two of the sketch options, *Creek Option 2* and *West Option 2*. Council's preference for *West Option 2* noted this design allowed for the harbour expansion, maximised the potential for public access to the harbour, Fishery Creek and the Richmond River and provided good opportunities for both residential and commercial development. *Creek Option 2* was identified for further design development as it provided an alternative to the expansion of the single harbour, allowing for separate marinas for working and recreational boats and for its potential to maximise development opportunities with close proximity to a marina. Council requested as the design development continued the following be considered:

- a place be allocated as a community building for meetings and potential storage. The facility could be used by groups such as the dragon boats, yacht and sailing clubs and rowing clubs.
- providing facilities for government agencies including office spaces. This did not have to be within the commercial areas, but could be separate. These agencies did need access to the marina.
- the marina and boat ramp facility should be separate
- multi-storey development of 4 to 5 stories in relation to financial viability of the project subject to detailed financial analysis as part of the Feasibility Analysis.
- residential development of 2 to 3 stories west of the marina in relation to financial viability of the project and the adjacent residential areas subject to analysis in the Feasibility Analysis

The refined designs for the two options considered are shown on the following pages.

Preferred Sketch Options



Creek Option 2



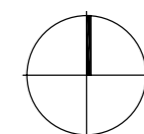
West Option 2

DESIGN DEVELOPMENT



- LEGEND**
- residential development
 - dry storage for boats
 - commercial development
 - community building
 - community title open space
 - public open space
 - vehicular access to residential development
 - commercial access
 - public esplanade around harbour
 - car parking
 - boulevard with avenue
 - pedestrian connections
 - tree planting & green space
 - existing vegetation retained
 - new harbour
 - recreational boat mooring
 - government agency boat mooring
 - trawler/commercial/tourist boat mooring
 - 1 boat trailer parking
 - 2 boat ramp
 - 3 seafood sales and restaurant

Scale 1:2000



WEST OPTION 2 - RATIONALE

Harbour Expansion

- expand the existing marina north and west to allow for around 110 berths, potentially more, depending on the size of vessels accommodated;
- maintain the existing access to Fishery Creek as a safer option than direct access to the Richmond River;
- provide separation between recreational, commercial and government agency vessels;
- provide access from the working boats to an unloading facility and potential seafood processing facility;
- locate commercial berths in proximity to the potential seafood processing/retail facility;
- locate “working” boats in a highly visible location as part of the visitor attraction to the marina;
- provide the potential for boat servicing facilities to be located at the marina.

Marina as a Public Space

- create a physical and visual link to the marina along Boatharbour Road;
- provide direct public access to the marina along Boatharbour Road along a tree lined boulevard;
- establish the marina as a focal point and attraction at the end of Boatharbour Road;
- create a shaded public esplanade around the marina to maximise public access to the marina and the water;
- provide infrastructure to encourage visitation to the marina including car parking, shade trees, seating and walkways.

Residential Development at RMS site

- redevelop the RMS depot site as 4-5 storey residential apartments;
- set development back along Boatharbour Road to create a wide, shaded esplanade that provides direct public access to the marina;
- integrated the 4-5 storey development within a park like setting to maintain views to the creek and to create potential links to the creekside park and the marina;
- provide a public parkland along Fishery Creek to enhance views to the creek, to provide a public link to the marina and to provide public foreshore facilities.

Residential Development west of marina

- locate 2-3 storey residential development west of the marina;
- integrate this development in communal parkland to provide a park like setting and to retain views between buildings to the marina;
- provide public access from west of the marina to the marina and the surrounds.

Commercial Development/Office Space

- locate commercial facilities and a potential seafood outlet overlooking the marina and with a connection to the wharf;
- locate other potential commercial spaces close to the marina and carparking;
- provide for potential mixed use along the marina frontage with residential/commercial mixes;
- provide potential 2 storey office spaces for government agencies close to the water and related berths.

Public Open Space

- provide a public foreshore parkland on the Richmond River;
- provide a community building within the Richmond River foreshore park for meetings and storage for community groups;
- link all public areas so that there is a continuous network of public access to and around the marina, along the foreshore and along Fishery Creek.

Fishery Creek Boat Ramp Precinct

- relocate the boat ramp and parking to the north of the site to maximise the function and amenity of public open space along Fishery Creek;
- maximise the development potential of the RMS site by providing waterfront views to new development;
- incorporate dry boat storage within the boat ramp precinct to reduce potential car/trailer movements in the area.

Vehicular Circulation and Access

- provide a roundabout at the end of Boatharbour Road to facilitate better movement of traffic;
- provide access into new development away from Boatharbour Road to maximise traffic flow along this road;
- maximise car parking around the marina to facilitate access to the public open space and marina commercial areas.

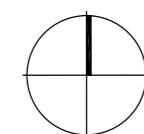
DESIGN DEVELOPMENT



LEGEND

- residential development
- dry storage for boats
- commercial development
- community building
- community title open space
- public open space
- vehicular access to residential development
- public esplanade around harbour
- car parking
- boulevard with avenue
- pedestrian connections
- tree planting & green space
- existing vegetation retained
- new harbour
- recreational boat mooring
- government agency boat mooring
- trawler/commercial/tourist boat mooring
- 1 boat trailer parking
- 2 boat ramp
- 3 seafood sales and restaurant

Scale 1:2000



CREEK OPTION 2 - RATIONALE

Harbour Expansion

- expand the existing marina predominantly westwards to accommodate approximately 70 berths, potentially more, depending on the size of vessels accommodated;
- create a second marina area of approximately 40 berths along the edge of Fishery Creek to provide a broader marina frontage;
- maintain the existing access from the marinas to Fishery Creek as a safer option than direct access to the Richmond River;
- provide separation between recreational, commercial and government agency vessels;
- provide access from the working boats to an unloading facility and potential seafood processing facility;
- locate commercial berths in proximity to the potential seafood processing/retail facility;
- locate “working” boats in a highly visible location as part of the visitor attraction to the marina;
- provide the potential for boat servicing facilities to be located at the marina.

Marina as a Public Space

- create a physical and visual link to the marina along Boatharbour Road;
- provide direct public access to the marina along Boatharbour Road along a tree lined boulevard;
- establish the main marina as a focal point and attraction at the end of Boatharbour Road;
- create a shaded public esplanade around the main marina to maximise public access to the marina and the water;
- provide a public connection to and along the creekside marina;
- provide infrastructure to both marinas to encourage visitation including car parking, shade trees, seating and walkways;
- incorporate the marinas as part of a broader public network of walkways and open spaces.

Residential Development at RMS site

- redevelop the RMS depot site as 4-5 storey residential apartments with east facing units having marina/ waterfront views;
- consider the potential for links between use of the marina and use of tourist apartments in this development;
- set development along Boatharbour Road to create a wide, shaded esplanade that provides direct public access to the marina;
- integrated the 4-5 storey development within a park like setting;
- provide a public west/east link from Boatharbour Road to the Fishery Creek marina;
- provide public access and marina esplanade along the Fishery Creek marina.

Residential Development west of harbour

- locate 2-3 storey residential development west of the marina;
- integrate this development in communal parkland to provide a park like setting and to retain views between buildings to the marina;
- provide public access from west of the marina to the marina and surrounds.

Commercial Development/Office Space

- locate a 2 storey commercial precinct north of the marina and close to Boatharbour Road;
- consider including a potential seafood outlet within the commercial precinct overlooking the marina and with a connection to the wharf;
- locate potential office spaces northeast of the marina and with a direct link to government agency berths within the marina.

Public Open Space

- provide a public foreshore parkland on the Richmond River with links to the marina esplanade, the existing neighbourhood and along the southern marina wall;
- provide a community building with car parking at the end of Boatharbour Road for meetings and storage for community groups;
- link all public areas so that there is a continuous network of public access to and around the marinas, along Boatharbour Road and along the foreshore.

Fishery Creek Boat Ramp Precinct

- relocate the boat ramp and parking to the north of the site to allow for the Fishery Creek marina;
- maximise the development potential of the RMS site by providing marina views to new development;
- incorporate dry boat storage within the boat ramp precinct to reduce potential car/trailer movements in the area;
- provide a public link from the Fishery Creek boat ramp precinct, along the Fishery Creek marina to the main marina and foreshore parkland.

Vehicular Circulation and Access

- provide a roundabout at the end of Boatharbour Road to facilitate better movement of traffic;
- provide access into new development away from Boatharbour Road to maximise traffic flow along this road;
- maximise car parking around the marina to facilitate access to the public open space and marina commercial areas;
- provide vehicular access to both marinas to maximise public access to these areas;
- ensure ‘working’ boats are accessible.

DESIGN DEVELOPMENT REVIEW

Government Agency Working Group Meeting

The two preferred options, *Creek Option 2* and *West Option 2* were explored in more detail taking into account feedback from Ballina Shire Council, Hill PDA and the project engineer, de Groot and Benson Consulting Engineers. On the completion of the plans, Council held a Government Agency Working Group meeting in December 2016. Participants were:

- Ballina Shire Council;
- Roads and Maritime Services;
- Roads and Maritime Services;
- Industry NSW;
- Transport for NSW;
- DPI - Lands;
- Industry NSW;
- Project Consultant.

The purpose of the meeting was to provide an update on the progress of the project and to provide an overview of the community engagement, master planning and feasibility analysis undertaken. Ballina Shire Council provided participants with an update on the progress of the project outlining the process undertaken to reach the two preferred design development options and the status of the Feasibility Analysis and a site contamination assessment. Ballina Shire Council provided an overview of the community engagement and input.

Ballina Shire Council provided an overview of the two redevelopment designs. This included an overview of key design elements being open space and boulevard entry, harbour-side esplanade, enlargement of the harbour area, provision for commercial and residential development and retention of the boat ramp in the northern part of the site.

West Option 2 was identified as being most likely to be viable based on the initial feasibility analysis undertaken. Creek Option 2 arose in relation to stakeholder feedback.

An overview of the feasibility assessment undertaken to date was provided including the following key points:

- Expansion of the existing harbour area is the approach to a bigger wet area mostly likely to be feasible on the site;
- A redevelopment is most likely to be feasible based

on a staged release of super lots tied to gradual public domain improvements;

- Expansion of the wet area is most likely to be feasible in stages (nomimally two stages of 50 berths).

A number of issues arose in relation to the discussion of the design options and feasibility analysis including:

- the interface with existing housing at West Ballina (implications for both existing residents and future harbour development). It was noted there was opportunity to discuss the interface with Housing NSW given the volume of public housing in the area;
- the mixture of berths within the harbour, including consideration of commercial berths (fishing and other enterprise), Government berths and private berths (including potential for berths to be linked to residential accomodation);
- alternative uses to residential accommodation, including potential for tourist accommodation uses;
- provision for government office space;.
- recognition that the potential for government involvement and funding would be informed by availability of cost benefit information;
- recognition of impact on RMS (both financially and operationally) in the event that the RMS depot requires relocation.

Ballina Shire Council indicated that the the next project steps would be to refine the design development options and to complete the Feasibility Analysis.

Feasibility Analysis and Direction Forward

Council's original project brief was to develop two preferred master plan options for the harbour's redevelopment. In response, two design development options were initially pursued. As the Feasibility Analysis into the financial viability of each options progressed, it became apparent that the *Creek Option 2* did not represent a viable option from a financial feasibility perspective. Given this, Council made a decision to pursue more detailed exploration of *West Option 2*. This is shown in this report as the Draft Ballina Marina Master Plan.



West Option 2

DRAFT BALLINA MARINA MASTER PLAN



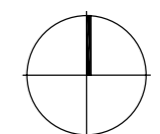
- LEGEND**
- residential development
 - dry storage for boats
 - commercial development
 - community building
 - community title open space
 - public open space
 - vehicular access to residential development
 - commercial access
 - public esplanade around harbour
 - car parking
 - boulevard with avenue
 - pedestrian connections
 - tree planting & green space
 - existing vegetation retained
 - new harbour
 - recreational boat mooring
 - government agency boat mooring
 - trawler/commercial/tourist boat mooring
 - 1 boat trailer parking
 - 2 boat ramp
 - 3 seafood sales and restaurant

Scale 1:2000

Ballina Marina Master Plan

Draft Ballina Marina Master Plan

Jackie Amos Landscape Architect + Keiley Hunter Town Planning + de Groot and Benson Consulting Engineers + Andrew Tremelling Perspective Artist



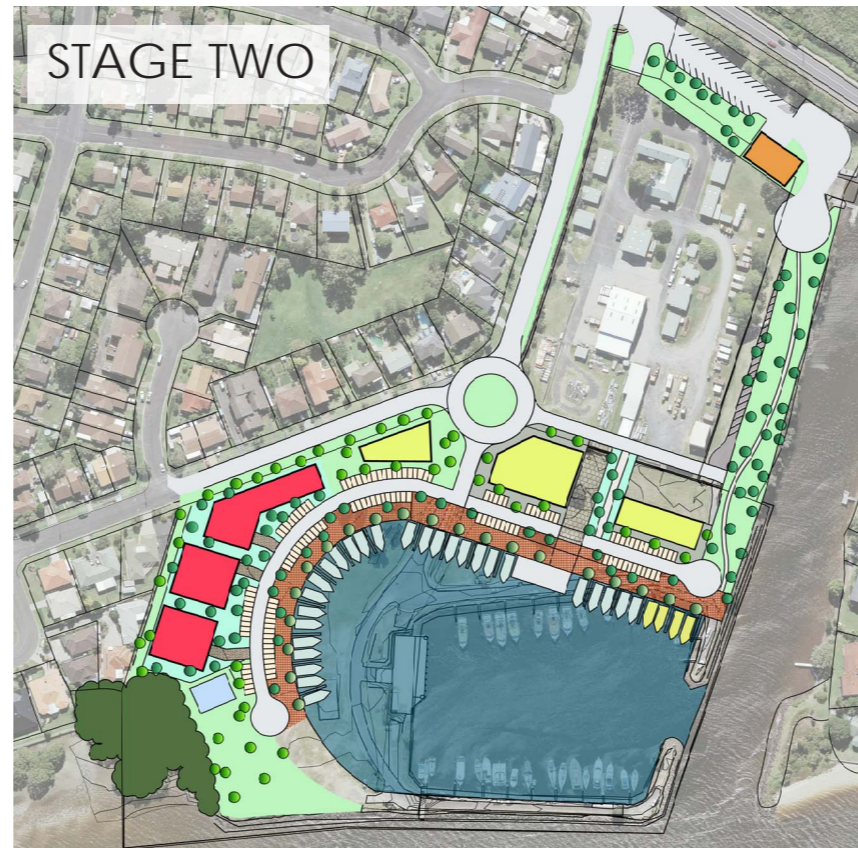
DRAFT PROPOSED STAGING

Based on the outcomes of the feasibility analysis, the marina is considered to be most viable under a staged development approach. This most likely involves a progressive redevelopment of the site through the release of super lots for urban uses in association with public domain enhancements and marina works. This might be supported through the application of a voluntary planning agreement to tie public works to each stage of the overall development. The following table and plan outlines the key elements of each planned stage. The staging plan and table align with assumptions made in the Hill PDA feasibility analysis.

Staging Table

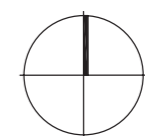
Stage	Key Aspects
1	Residential development along Sunnybank Drive (2-3 storeys), roundabout and road access, car parking, community building and public parkland (south west of the site).
2	Commercial development, road and car parking infrastructure, dry boat storage facility, marina esplanade, public parkland (Fishery Creek area) and marina wet area expansion (northward and westward).
3	Residential development adjacent to commercial area and Fishery Creek (4-5 storeys).
4	Residential development expanding northward of commercial area and along Fishery Creek (4-5 storeys).
5	Residential development expanding northward of commercial area and along Fishery Creek (4-5 storeys) and expansion of marina (boat berthing areas).

DRAFT PROPOSED STAGING



LEGEND

- 2 - 3 storeys residential development
- 4 - 5 storeys residential development
- dry storage for boats
- commercial development
- community building
- community title open space
- public open space
- vehicular access to residential development
- commercial access
- public esplanade around harbour
- car parking



DRAFT MASTER PLAN EXHIBITION

Community Feedback

The draft Ballina Marina Master Plan was publicly exhibited in May 2017. The *Ballina Marina Masterplan Project Community Engagement Stage 2 Report*, prepared by Dr Elizabeth Baker, outlines the findings of this process. The feedback, particularly as it relates to the evolution of the final marina master plan, is summarised below.

The key findings on reviewing public input about the Ballina Marina Master Plan were:

- *The response to the potential re-development of the Trawler Harbour marina site remains positive.*
- *Dissatisfaction with the potential re-development focused on the provision of residential / accommodation and the proposed height of the residential / accommodation buildings.*
- *Consistent concern over a perceived loss of public access and community facilities / open space.*
- *Significant layout/design issues were raised alongside potential solutions to resolve these issues.*
- *Staging and financing were raised, with alternative options suggested.*
- *There was strong support for Ballina Shire Council's ongoing involvement.*

Community input into the draft master plan covered all aspects of the master plan proposals. Community sentiment was both positive and critical. Critical feedback was often accompanied by suggestions for improving the master plan. Specific input relating to the finalisation of the draft master plan has been listed relative to its focus and is:

Marina development

- linkages to the Martin Street marina need to more clearly defined and the two marinas need to work in-tandem;
- staging of the re-development should focus on the rebuild of the marina and its immediate surrounds first.

Marina facilities

- 'utility space' is needed on the ground next to mooring space'
- include an access road around the edge of the harbour for emergency services;
- the boardwalk around the marina should be pedestrian only and link the marina and commercial areas; and
- a boat launching area is needed at the marina.

Marina design

- expand north rather than west;
- locate the trawler fleet on the river-side; and
- include a dock for short term stopping.

Trawler / commercial fishing fleet

- include a service pontoon for this fleet; and
- provide a work area adjacent to the commercial fleet moorings that can be fenced off.

Off-water boat storage

- the dry storage for boats will need a separate launch area from the public ramp; and
- an open yard area is required next to the dry storage for sailing boats and trailer yachts to allow for the height of their masts.

Residential / accommodation

- the preference is for no residential development or very much reduced from what is in the draft master plan;
- preferred maximum height limits ranged from 2 storeys to 4 storeys;
- the orientation and positioning of buildings need to take into consideration the amenity and outlook of existing residences along Sunnybank Drive; and
- note the land is flood affected and is in a flood hazard zone.

Community facilities

- at least maintain provision of facilities for recreational fishers; and
- provide boardwalks along Fishery Creek and the River.

Open space

- more open space is needed;
- publicly accessible open space should be prioritised; and
- ensure there is public access from Sunnybank Drive through the west of the site to the river.

Commercial / retail facilities

- a marina office is required.

Roads, traffic and parking

- more parking is required;
- trailer parking and parking for fishers needs to be close to the boat ramp;
- retain the existing available trailer parking;
- consider that the bridge duplication will consume land; and
- consider the location of driveways onto the roundabout.

There was a range of other input received and this is addressed in Dr Baker's consultation report. It has been omitted from this summary either because it was positive feedback or is relevant in the future at the detailed design phase of planning for the marina.

THE DIRECTION FORWARD

The direction forward was discussed with Council and a framework was provided for the amendments that would be made to the draft Ballina Marina Master Plan based on the community's input.

The following lists the changes made in response to the exhibition outcomes.

A Existing master plan amended to incorporate community input. Key changes include:

- mix up shape of residential buildings to reflect a variety of buildings with open space around;
- include a marina office building, service dock and visitor dock;
- maintain visual links to the Richmond River from Sunnybank Drive;
- bring the retail space closer to the water front with parking behind;
- note the potential for commercial buildings to include shop top housing;
- include a swim platform, boardwalks or public jetty along Fishery Creek and the Richmond River as part of the public space;
- extend pedestrian focused, but vehicle accessible, access around the harbour including on the break wall;
- avoid dedicated road and parking on the water front area;
- swap the configuration of the marina layout and note the marina design is subject to future specialised marina design;
- highlight public access through the western portion of the reserve to the mangroves and the river;
- include a ferry wharf as a water connection with the CBD and the Martin Street wharf;
- include a pedestrian/cycle path link on the Fishery Creek bridge;
- provide more space for the boat ramp and trailer parking;
- remove the roundabout on Sunnybank Drive;
- located the trawler fleet on the river side of the harbour;
- indicate a shared zone along the riverfront wall that can be a work zone for the commercial fleet when required and a public access when not.

This has become Ballina Marina Master Plan Option One for the marina redevelopment.

B Addition of a sketch plan at a more detailed scale for the 'boat ramp precinct' at the northern extent of the site with an indication of the provision of trailer parking, associated facilities and public access.

C Preparation of an alternative master plan layout incorporating:

- expansion of the existing harbour north;
- retention of the existing wharf;
- a lower density of residential buildings;
- a greater emphasis on marine infrastructure rather than residential development;
- the inclusion of retail/commercial development around the western perimeter of the harbour;
- the inclusion of a haul out facility and hard stand area for maintenance;
- a larger dry boat storage area and office; and
- a second launching facility for dry boat storage.

This alternative has become the Ballina Marina Master Plan Option Two for the marina redevelopment.

D Inclusion of an alternative staging based on redevelopment of the marina first, with the caveat that any such option would be dependent on funding, likely from the NSW State Government or Federal Government.

E Inclusion of a description of what may be the anticipated 'next steps' in the potential marina redevelopment.

F Discussion of how the linkage with the Martin Street marina could work and how the redevelopment of both could work in tandem.

G Inclusion of indicative photographs from other marinas showing what the retail/boardwalk/marina interface may look like.

H Finalisation of the master plan report.

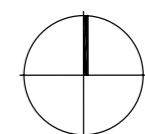
The new and revised plans are shown in the following pages.

BALLINA MARINA MASTER PLAN - OPTION ONE



LEGEND


















- multi-storey residential buildings with open space
 - dry storage for boats
 - commercial development
 - shop top housing
 - community building
 - marina office
 - community title open space
 - public open space
 - vehicular access to residential buildings
 - commercial access
 - public esplanade around harbour
 - car parking
 - boulevard with avenue
 - pedestrian connections
 - public boardwalk
 - tree planting & green space
 - existing mangroves retained
 - riparian vegetation retained
 - new harbour
 - indicative berth - subject to specialised marina design (trawler fleet south side of harbour)
-
- 1 boat trailer parking
 - 2 boat ramp
 - 3 seafood sales and restaurant
 - 4 marina office service/visitor dock
 - 5 ferry wharf for connection with Martin Street wharf
 - 6 public jetty with swim platform
 - 7 pedestrian/cycle link
 - 8 service dock with pump out, refuelling and haul out facilities
- Scale 1:2000



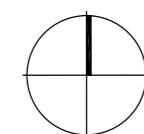
BOAT RAMP PRECINCT - OPTION ONE



LEGEND

-  minimum area required for bridge duplication
-  dry storage for boats (approx. 72 boats)
-  public open space
-  shade tree planting
-  pedestrian pathway
-  lighting
-  1 entry landscape & sign for precinct
-  2 car and trailer parking
-  3 area for boat assemblage/crane out facilities
-  4 existing boat ramp
-  5 existing pontoon
-  6 new pontoon
-  7 fish cleaning facilities
-  8 public toilets
-  9 car parking
-  10 picnic shelter and setting
-  11 manoeuvring area (rigging wash down area)

Scale 1:800



BALLINA MARINA MASTER PLAN OPTION ONE - RATIONALE

(Note: tested but in context of original approach)

Harbour Expansion

- expand the existing marina north and west to an approximate size of 25 000m² in size. The actual extent and configuration of the harbour would need to be the subject of detailed marina design and may need to be larger depending on the number of required berths;
- maintain the existing access to Fishery Creek as a safer option than direct access to the Richmond River;
- provide separation between recreational, commercial and government agency vessels;
- provide the potential to also separate the management of vessel types;
- provide for commercial vessels, particularly commercial fishing vessels, to be located in the southern part of the marina to avoid high use public areas;
- provide a shared zone along the south harbour wall that could be a work area for the commercial fleet when required and a public access when not;
- provide a new wharf for unloading of commercial vessels with an unloading facility and vehicular access to the potential seafood processing facility;
- locate “working” boats in an area accessible to the public as part of the visitor attraction to the marina;
- provide the potential for boat servicing facilities to be located at the marina;
- provide a marina office and associated visitor dock.

Marina as a Public Space

- create a physical and visual link to the marina along Boatharbour Road;
- provide public access around all sides of the marina;
- create a marina frontage with a pedestrian focus and avoid, where possible, road and parking on the water front area;
- provide direct public access to the marina along Boatharbour Road along a tree lined boulevard;
- establish the marina as a focal point and attraction at the end of Boatharbour Road;
- create a shaded public esplanade around the marina to maximise public access to the marina and the water;
- provide infrastructure to encourage visitation to the marina including car parking, shade trees, seating and walkways.

Residential Development at RMS site

- redevelop the RMS depot site as 4-5 storey residential apartments;
- set development back along Boatharbour Road to create a wide, shaded esplanade that provides direct public access to the marina;
- integrate the development within a park like setting to maintain views to the creek and to create links to the creekside park and the marina;
- provide a public parkland along Fishery Creek to enhance views to the creek, to provide a public link to the marina and to provide public foreshore facilities.

Residential Development west of marina

- locate 2-3 storey residential development west of the marina;
- integrate this development in communal parkland to provide a park like setting and to retain views between buildings to the marina;
- provide public access from west of the marina to the marina and the surrounds.

Commercial Development/Office Space

- locate a potential seafood outlet overlooking the marina and with a connection to the wharf;
- locate other potential commercial spaces close to the marina and car parking;
- provide for potential mixed use along the marina frontage with residential/commercial mixes;
- bring retail space close to the water frontage with parking behind;
- include potential shop top housing to waterfront commercial areas;
- provide potential 2 storey office spaces for government agencies close to the water and related berths.

Public Open Space

- provide a public foreshore parkland on the Richmond River;

- provide a community building within the Richmond River foreshore park for meetings and storage for community groups;
- link all public areas so that there is a continuous network of public access to and around the marina, along the foreshore and along Fishery Creek;
- include public facilities with a focus on the river within the Richmond River foreshore park including a swim platform, public jetty and public boardwalks;
- provide public access through the foreshore park to the mangroves and the Richmond River.

Fishery Creek Boat Ramp Precinct

- relocate the boat ramp parking to the north of the site to maximise the function and amenity of public open space along Fishery Creek;
- continue to provide all facilities already associated with the ramp including public toilets, trailer parking, fish cleaning facilities, lighting, wash down areas and turn around capacity;
- maximise the development potential of the RMS site by providing waterfront views to new development;
- incorporate 600m² of dry boat storage (72 boats) within the precinct.

Vehicular Circulation and Access

- provide a pedestrian/cycle way connection on River Street to the Ballina CBD;
- provide a junction at the end of Boatharbour Road with access behind the marina and to the foreshore park;
- provide access into new development away from Boatharbour Road to maximise traffic flow along this road;
- provide car parking behind the marina buildings where possible to keep the marina pedestrian focused.

Connections to the Martin Street Marina

- provide for ‘water’ connections to the Martin Street Marina and the Ballina CBD with a public ferry wharf.

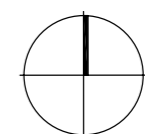
BALLINA MARINA MASTER PLAN - OPTION TWO



LEGEND

- multi-storey residential buildings with open space
- dry storage for boats
- commercial development
- shop top housing
- community building
- marina office
- community title open space
- public open space
- vehicular access to residential buildings
- commercial access
- public esplanade around harbour
- car parking
- boulevard with avenue
- pedestrian connections
- public boardwalk
- tree planting & green space
- existing mangroves retained
- riparian vegetation retained
- new harbour
- indicative berth - subject to specialised marina design (trawler fleet south side of harbour)
- 1 boat trailer parking
- 2 boat ramp
- 3 seafood sales and restaurant
- 4 marina office service/visitor dock
- 5 ferry wharf for connection with Martin Street wharf
- 6 public jetty with swim platform
- 7 pedestrian/cycle link
- 8 service dock with pump out, refuelling and haul out facilities


















Scale 1:2000



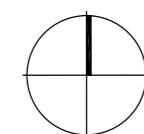
BOAT RAMP PRECINCT - OPTION TWO



LEGEND

-  minimum area required for bridge duplication
-  dry storage for boats (approx. 72 boats)
-  public open space
-  shade tree planting
-  pedestrian pathway
-  lighting
-  1 entry landscape & sign for precinct
-  2 car and trailer parking
-  3 area for boat assemblage/crane out facilities
-  4 existing boat ramp
-  5 existing pontoon
-  6 new pontoon
-  7 fish cleaning facilities
-  8 public toilets
-  9 picnic shelter and setting
-  10 public boardwalk
-  11 washdown area

Scale 1:800



BALLINA MARINA MASTER PLAN OPTION TWO - RATIONALE

(Note: not tested in terms of feasibility)

Harbour Expansion

- expand the existing marina north to an approximate size of 31 000m². Actual extent and configuration of the marina would need to be the subject of detailed marina design and may need to be larger depending on the number of required berths;
- maintain the existing access to Fishery Creek as a safer option than direct access to the Richmond River;
- provide separation between recreational, commercial and government agency vessels with the potential to also separate management of these vessels;
- retain the existing wharf and provide a haul out facility and 100m² hard stand area for basic maintenance;
- provide for commercial vessels, particularly commercial fishing vessels, to be located in the south of the marina to avoid high use public areas;
- provide a shared zone on the southern harbour wall that could be a work area for the commercial fleet when required and a public access when not;
- site a commercial building close to the 'working' boats and wharf as a seafood processing and retail outlet;
- provide for an access connecting the commercial fleet directly with the potential seafood processing facility;
- ensure 'working' boats are visible and part of the visitor attraction to the marina;
- provide for boat servicing facilities at the marina;
- provide a marina office and associated visitor dock.

Marina as a Public Space

- extend Boatharbour Road to the marina and foreshore parkland to maximise public access;
- provide parking along the Boatharbour Road extension;
- create strong physical and visual links to the marina;
- provide public access around all sides of the marina;
- create a marina frontage with a pedestrian focus and avoid road and parking on the water front area;
- provide direct public access to the marina along Boatharbour Road along a tree lined boulevard;
- create a shaded public esplanade around the marina to maximise public access to the marina and the water;
- provide infrastructure to encourage visitors to the marina including parking, trees, seating and walkways;
- create a hub of activity around the marina with commercial areas, cafes and shop top housing.

Residential Development at RMS site

- redevelop the RMS depot site as 2-3 storey residential apartments set in landscaped gardens;
- set development back along Boatharbour Road to create a wide, shaded esplanade with direct public access to the marina;
- maintain views to Fishery Creek and provide a link from the boat ramp precinct to the marina;
- provide vehicular access around the development for access to the residential development, the commercial development to the south and Fishery Creek facilities.

Residential Development west of marina

- locate 2-3 storey residential development west of the marina;
- integrate this development in communal parkland to provide a park like setting and to retain views from residences along Sunnybank Drive to the river;
- provide public access from Sunnybank Drive to the marina and the Richmond River.

Commercial Development/Office Space

- locate commercial facilities to the north and west of the harbour to maximise the potential for sunny orientations;
- locate a potential seafood outlet and seafood processing facility south of the existing wharf and provide parking and pedestrian links to this facility;
- consider the potential to include shop top housing or office spaces above commercial areas at the marina;
- integrate commercial areas with the marina esplanade with awnings and outdoor areas to create a vibrant esplanade with shop fronts opening out to the waterfront.

Public Open Space

- provide a public foreshore parkland on the Richmond River;
- provide a community building within the Richmond River foreshore park for meetings and storage for community

groups;

- link all public areas so that there is a continuous network of public access to and around the marina, along the foreshore and along Fishery Creek;
- provide an east-west connection through the park with a public boardwalk at the mangroves;
- include public facilities with a focus on the river within the Richmond River foreshore park including a swim platform, public jetty and public boardwalks.

Fishery Creek Boat Ramp Precinct

- provide additional trailer parking north of the RMS site and reduce some parking along Fishery Creek to facilitate development;
- continue to provide all facilities already associated with the ramp including public toilets, trailer parking, fish cleaning facilities, lighting, wash down areas and turn around capacity;
- maximise the development potential of the RMS site by providing waterfront views to new development;
- incorporate 600m² of dry boat storage (72 boats) within the precinct.

Vehicular Circulation and Access

- provide a pedestrian/cycle way connection on River Street to the Ballina CBD;
- extend Boatharbour Road into the foreshore park to facilitate public access;
- provide a through road around the northern development;
- provide access into new development away from Boatharbour Road to maximise traffic flow along this road;
- provide car parking along Boatharbour Road and around the marina to facilitate access to the public areas.

Connections to the Martin Street Marina

- provide for 'water' connections to the Martin Street Marina and the Ballina CBD with a public ferry wharf.

MASTER PLAN STRATEGIES

Expanded Harbour

Master Plan Option One proposes expanding the existing harbour north and westwards. Master Plan Option Two proposes expanding the harbour northwards and retaining the existing wharf. Both proposals provide for additional berths and establish the harbour as the destination at the end of Boatharbour Road. Actual berth numbers and the marina configuration would be subject to specialised marina design to be undertaken in the future. This design could reconfigure the arrangement and size of berths to facilitate a greater number of berths.

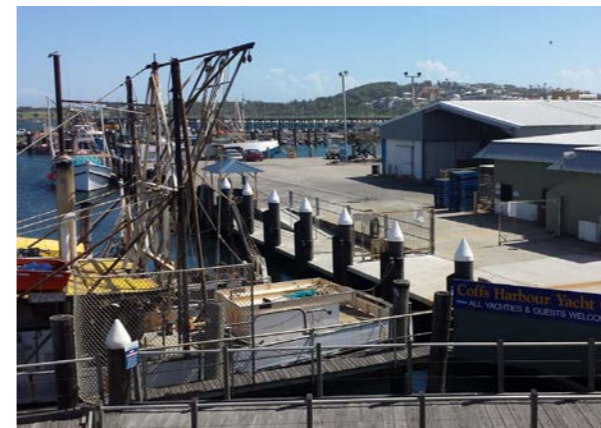
The trawler harbour fleet would be sited along the south side of the harbour, adjacent to the Richmond River. Access along the south side of the harbour would be a shared zone that could be closed off to the public when needed so it could be utilised as a work zone for the commercial fleet. At other times, the access could be open to the public.

Both options retain the existing harbour entry to Fishery Creek as stakeholder input indicated that direct access to the Richmond River could result in greater conflict with tides and flood debris. Further design will need to consider issues associated with the build up of silt on the harbour floor.

The expanded marina, under both options, would provide for recreational vessels, working fishing vessels, other commercial boats and government agency vessels. Both master plan options provide for a visitor dock located relative to the proposed marina office. Option One provides a new wharf which would provide for servicing and unloading of commercial vessels. Option Two retains the existing wharf for these functions and provides a 100m² hardstand area close to the wharf for maintenance purposes.

The location of the road and car parking around the marina would facilitate the location of the relevant servicing facilities at the marina. Refuelling facility and waste disposal services could be located on the marina, but at sites away from the public focus. The new marina would include other supporting services including showers and toilets for marina users, public toilets and a laundry.

The marina would include the latest infrastructure in terms of accessing, loading and unloading boats. Floating walkways would provide access to berths. Vessels could have access to power and water. The marina would provide for both long term and visiting vessels.



Additional boat berths could be provided, under both options, through the provision of moorings within the Richmond River. This would require more detailed consideration.

Boatharbour Road Development

Master Plan Option One proposes that most of the RMS works depot becomes the focus of redevelopment as 4 - 5 storey residential development. The development could include a mix of apartment sizes and could also potentially include a mix of residential and tourist accommodation. Residential accommodation should seek to create a neighbourhood and to facilitate a sense of community that is 'attached' to the place and the marina.

Apartment buildings could be distributed across the site and set within a park like setting. The surrounds could be a combination of communal spaces for the residences as well as public land set aside to establish connections between the existing neighbourhood and the new public spaces.

The new buildings should have awnings and verandahs that address Boatharbour Road, Fishery Creek park and the green setting. The intention is to create an 'integrated' interface between residences and the surrounds where buildings embrace their setting and there is the potential for interaction between residents, visitors and activity at the site. The residential development is intended to contribute to the liveliness and hub of activity at the new marina.

Proposed residential development would be sited within a park like setting. This green space could provide a range of opportunities for outdoor recreation for residents as well as providing locations for public links across to the Fishery Creek park and the marina. This open space could include path/cycle ways, seating and BBQ areas, play spaces as well as planting of a scale and extent appropriate to the development footprint.

Master Plan Option Two proposes that part of the RMS works depot is utilised for residential development. The northern extent would be public open space and the southern extent would be associated with the harbour extension and harbourside commercial development. Option Two proposes 2-3 storey residential buildings sited within landscaped open space. Pedestrian connections would be provided linking the public open space to the marina. Buildings would be designed and sited to maintain visual links from Boatharbour Road to Fishery Creek.



Boatharbour Road Boulevard

Both Master Plan Option One and Option Two propose that new development to Boatharbour Road would have a generous setback from the road to allow for a boulevard with a pedestrian focus along the eastern side of the road. This could incorporate an avenue, seating locations, awnings and landscaped entries to the residential buildings. For Master Plan Option Two this boulevard would extend to the commercial development along the northern edge of the marina and would link it with a pedestrian connection along the western side of the marina and to the foreshore public open space. The Boatharbour Road boulevard is to encourage public access to the marina and the intention is that it would be a hub of activity with pedestrians, people meeting and even potential commercial outlets, at ground level, closer to the marina.



Access

Both Master Plan Option One and Option Two identify Boatharbour Road as retained and enhanced as the marina access. Boatharbour Road would be a strong visual and physical connection to the marina and the Richmond river. Tree planting and the boulevard would define this as a route to a major Ballina destination.

Master Plan Option One indicates a junction and a road that provides access to parking and development around the marina. Master Plan Option Two identifies Boatharbour Road continuing west of the harbour and terminating at the foreshore open space. A second road provides a link around the residential development at the RMS depot site.

Both master plan options provide an opportunity to establish a landmark 'announcing' the arrival at the marina. For Option One, the opportunity is where Boatharbour Road terminates at the marina. For Option Two, an area of widened marina esplanade provides an opportunity to 'celebrate' the arrival at the marina.

Public art could be sited at either of these locations or along Boatharbour Road to reflect the significance of the location. A clear view along Boatharbour Road to yacht masts and boats, with the Richmond River as a backdrop, will create a landmark view and one that could become synonymous with Ballina.

Both master plan options propose access to the new residential precinct at the RMS site either from a road to the south or north of the site. The intention would be to minimise direct access from this development onto Boatharbour Road.

The marina will be a destination with no available through road. To minimise traffic congestion and to maximise access to the marina, Master Plan Option One provides a road along the northern and western sides of the marina with turnaround capacity either end. Master Plan Option Two provides a road terminating on the foreshore with turnaround capacity. A through road is provided around the northern residential precinct.



Car Parking

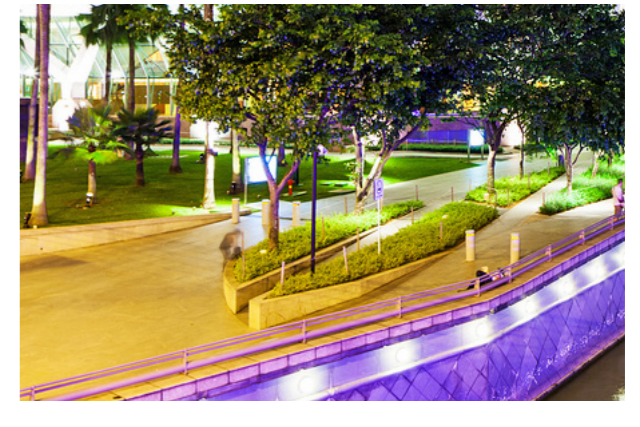
Car parking would be dispersed around the marina to maximise public access to the marina, the commercial precinct and the foreshore parkland. Parking would also be located for potential government agency office spaces. Both options seek to limit parking immediately on the waterfront and instead site carparking behind the commercial/residential areas fronting the marina. This will prioritise the marina edge for pedestrians. Both master plan options provide limited vehicular access to the southern side of the marina. It is intended this would be utilised as working access for the commercial fleet. It could also be used for the unloading of commercial vessels, particularly the commercial fishing fleet. Car parking areas would incorporate low planting and shade trees and would be linked to public areas with pathways.



Marina Esplanade

Both Master Plan Option One and Option Two provide a marina esplanade around the northern and western sides of the new marina. This esplanade provide a generous public space around the marina and maximises opportunities to enjoy the waterfront. Master Plan Option One locates commercial development along the northern side of the marina. It is anticipated this development would include cafes and shops that would front onto and maximise the use of the esplanade in this precinct. Master Plan Option Two includes commercial development along the northern and western sides of the marina. This development would also front and engage with the esplanade.

This esplanade would be highly visible on arriving at the marina. The esplanade would be the key public space for the marina with a wide pavement, shade trees and a range of contemporary urban furniture for the passive enjoyment of the marina. The esplanade would be the hub of social activity at the marina, giving public access to the marina and to the commercial precinct. The marina esplanade should be a landmark public space for Ballina.



Marina Residential Development

Master Plan Option One proposes residential development west of the marina and it is anticipated this would be 2 - 3 storey residential development. This option utilises a greater extent of the area west of the marina for residential development. Master Plan Option Two also proposes 2 - 3 storey residential development but limits the extent of this development and retains a greater area for public open space on the foreshore.

For both options, the aim is that buildings would be sited in this area to retain some views through to the marina and river for existing residences. It is recognised that this development would represent a dramatic change in the landscape from the existing vacant land. The design of this development should be sympathetic to this and result in buildings of a suitable style, mass and materials. The new development could be sited in communal gardens with public access retained through to the marina and the foreshore parkland. New buildings should be of an appropriate setback to existing residences.



Commercial Precinct

Master Plan Option One locates a commercial precinct to the north of the marina. This could incorporate a seafood processing and retail outlet, retail opportunities such as a general store, chandlery and cafe. The commercial precinct may include 1-2 storey buildings and may be an opportunity for mixed uses with commercial at ground level and residences above.

The commercial precinct will be easily accessible with plenty of parking behind the commercial buildings and with wide pedestrian links through to the marina esplanade. Retail and dining areas should embrace the marina with outdoor dining, broad awnings and glass shop fronts. The commercial precinct could also incorporate office spaces for the relevant government agencies. At this location these agencies would have direct access to the marina.

Master Plan Option Two locates commercial precincts both along the northern and western sides of the marina. Both these areas, could incorporate shop top housing. Again potential uses could be retail, cafe and offices. A commercial building on the southwest corner of the marina could provide an opportunity as a seafood processing and retail outlet. Commercial and residential development along the western side of the harbour has the opportunity to maximise a sunny orientation overlooking the marina.

Both options provide a location for a marina office. Option One identifies a location north of the marina and Option Two a location in the western commercial precinct. Both are located relative to a service and visitor dock.



Boat Ramp Precinct and Fishery Creek Parkland

The popularity of the Fishery Creek boat ramp is recognised. The boat ramp and pontoons are retained but each Master Plan option reconfigures the existing trailer parking.

Master Plan Option One removes the existing trailer parking from the Fishery Creek frontage and relocates it north of the RMS site to maximise public open space along the creek. This allows the creek frontage to be dedicated as public foreshore space with a focus on pedestrians rather than vehicles. The new parking would be located south of the River Street road widening. The Fishery Creek park land would then incorporate toilets, fish cleaning facilities, picnic and seating facilities and pedestrian pathways to the creek and marina. This precinct would also include dry storage for smaller vessels. This could reduce the potential number of cars/trailers needing to access the precinct. Master Plan Option One allows for 600m² of dry boat storage, approximately 72 boats.

Master Plan Option Two retains some trailer parking along Fishery Creek and supplements it with additional parking north of the RMS site. Again this parking must be located beyond the River Street road widening. Public parkland south of the parking includes a public toilet, fish cleaning facilities and picnic and seating facilities. Dry storage for boats is also included and allows for 600m² of storage, approximately 72 boats.

Detail design for either option would need to consider the provision of a launching area for boats from dry storage.

Master Plan Option One provides extensive public parkland along Fishery Creek. Master Plan Option Two retains approximately the existing extent of parkland along the creek. Both options would include a pathway/cycle way providing a scenic link to the marina. Both options could incorporate a boardwalk walkway along the creek edge and both options could retain areas of the existing Casuarina vegetation along the creek edge. The Fishery Creek parkland could incorporate picnic and seating areas and new shade trees.

Master Plan Option One proposes an integrated interface between the new development and the park which would provide for natural surveillance of the park. Seating/picnic and BBQ areas would be sited to take in the creek views. The wider creek parkland, provided by option one, could include exercise facilities, interpretive signage and play areas.



Public Access

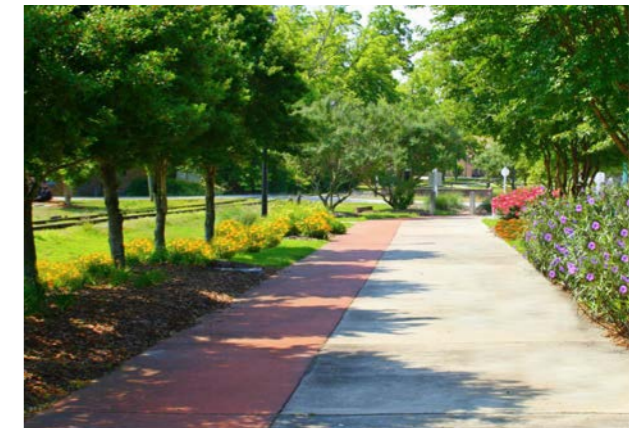
Community sentiment regarding the site expressed a need for improved maritime facilities and a desire for better public open space on the foreshore. There was mixed feelings about development at the site. It is recognised that the proposed development will be in contrast to the character of the surrounding neighbourhood. Residential development has been proposed for the site to financially facilitate the harbour expansion. The development type and extent also needs to be viable in terms of providing funds to allow for the harbour expansion and improved public facilities.

The master plan seeks to achieve a balance between providing appropriate development options to the site, retaining foreshore areas as public open space, providing public access to the marina and providing public connections across and throughout the site. Proposed residential buildings are set within a park like setting and are spaced to maintain views across to Fishery Creek, the marina and the Richmond River. Detail design could consider establishing west/east public accesses that link the residential area to the west of the site to the creek and the marina.

Both options propose a pedestrian/cycle link from the site, along River Street to the CBD. Both options propose a pedestrian/cycle link along Boatharbour Road to the marina. Master plan options one and two provide a pedestrian/cycle link along Fishery Creek to the marina, a north-south link through the northern residential precinct and a link from Sunnybank Drive to the foreshore.

Pedestrian access is provided by both options around the marina. Pedestrian access along the south side of the harbour could be temporarily closed when this zone is a 'working zone' for the commercial fleet.

There is the potential within both master plan options to incorporate public boardwalks to provide variety in recreational facilities. Boardwalks could be located along Fishery Creek or within the mangroves in the southwest corner of the foreshore public open space.



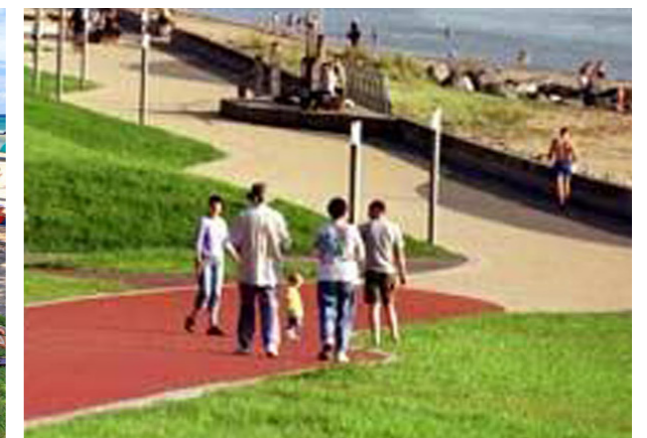
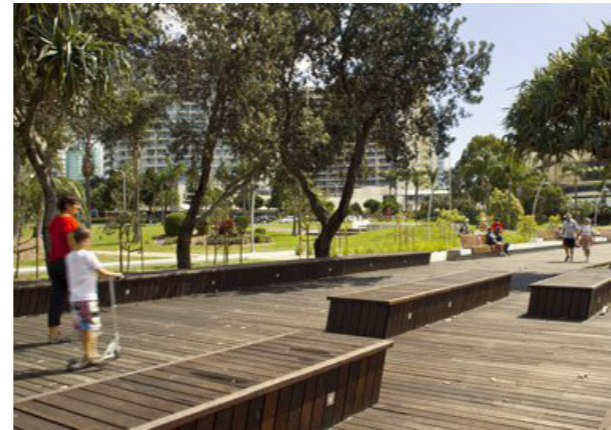
Richmond River Foreshore Park

A large area of foreshore public open space would be established on the Richmond River. The park would be linked to all parts of the broader precinct with public walkways and by the marina esplanade. A foreshore walkway would extend from the park along the southern wall of the marina and there is the potential to also link this pathway to the west with a boardwalk through the area of remnant mangroves. The park design should maximise views and access to the river and could include a variety of recreational infrastructure. Facilities could include play areas for children, picnic and BBQ facilities, seating areas, shade structures and spaces for groups to gather. A community building at the northern extent of the park will provide an opportunity for groups to meet and store equipment.

Master Plan Option One provides a connection to the foreshore open space from Sunnybank Drive and from the marina esplanade.

Master Plan Option Two extends the vehicular access and parking further into the foreshore park. A pedestrian connection continues along the extension of Boatharbour Road and links with a connection to Sunnybank Drive.

Both options include a pedestrian link to the south side of the marina. Both options incorporate public facilities on the riverfront such as a public jetty, a swim platform and boardwalks through the mangroves in the southwest corner of the site.



Existing Vegetation

The existing site vegetation includes a stand of mangroves on the Richmond River in the southwest corner of the site, Casuarina stands along Fishery Creek and scattered planted trees across the balance of the site. Previous studies have identified seagrass within Fishery Creek. Any detailed proposals for the site would need to consider the existing site vegetation. At a minimum the mangroves and seagrass communities and Casuarina stands should be protected and enhanced as part of any redevelopment.

The Master Plan options indicate a public walkway along Fishery Creek and to the public foreshore park on Richmond River. There is the opportunity to reflect upon the remnant indigenous vegetation as part of this walkway, both through revegetation and enhancement strategies and interpretive signage to convey its significance. Public boardwalks along Fishery Creek or at the mangroves on the Richmond River could also incorporate interpretive signage.



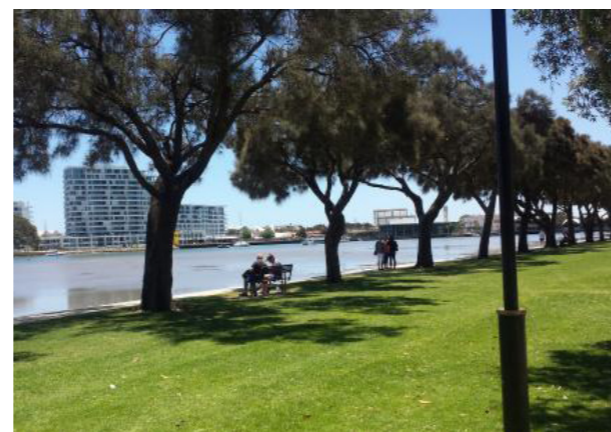
New Plantings

New planting to the development should consider the site setting, the function of the space and the overall character of the redevelopment. The marina has the potential to be a significant maritime facility and open space for Ballina. Tree planting to the marina should add amenity, provide shade, enhance marina views and suit the climatic conditions of the riverside setting. Planting within public open spaces should provide shaded areas for play and passive recreation.

Tree planting along Boatharbour Road should establish this as the main connection to the marina. The boulevard planting should ensure this major public link is shaded and attractive with plenty of locations to sit, meet and relax.

The surrounds to the new residential development should incorporate a variety of species with a focus on indigenous species. The intention is to create an outdoor setting that encourages a healthy lifestyle and outdoor recreation. Tree planting needs to be of a scale and extent that reflects the scale of the new development.

Tree planting across the redevelopment site should establish a landmark 'green' precinct. Repetition of species and the use of signature species will help to create a distinct visual character to the new marina and to establish the marina as a Ballina landmark.



Links to the Martin Street Marina

The Martin Street Marina Master Plan identified a range of ideas and opportunities for the Martin Street Boat Harbour Precinct including:

- an increase in the harbour capacity and moorings;
- the addition of new boating services;
- the potential expansion of the harbour;
- new commercial and recreational opportunities to increase visitor interest and vibrancy in the precinct;
- enhancement of the maritime museum;
- opportunities to interpret the site's maritime history;
- the provision of amenities for visiting boat owners;
- considering allowing RVs to use the large car park; and
- provisions to improve the public foreshore space.

The redevelopment of both the Martin Street Marina and the Ballina Marina represents an opportunity to establish Ballina as a maritime destination and one that provides facilities that will draw local and interstate visitors. The redevelopment of the marinas will also provide a range of recreational and social opportunities for Ballina locals.

The two marinas are distinctly different and will have the capacity to offer different facilities and experiences to users. The Martin Street Marina has historical significance and is in close proximity to the Ballina Maritime Museum. It is closer to the river entrance and is within walking distance of the Ballina CBD. The Martin Street Marina is close to existing hotels, restaurants and shops. Its proximity to the CBD and other tourist destinations, makes it ideal as a starting point for tourist vessels such as whale watching excursions, fishing trips and river cruises.

The Ballina Marina site is further from the CBD but has more extensive redevelopment potential. The marina has the potential to provide more berths and the capacity to continue to house the commercial fleet. In addition, the Ballina Marina site has the capacity for new development options including residential and commercial development. It has the capacity to provide necessary facilities such as fuel, waste management and support services for visiting vessels. As part of its redevelopment, the Ballina Marina could include a seafood processing facility and seafood outlet/restaurant. The proximity of Fishery Creek, the availability of open space and the potential to include community buildings and facilities also make this marina area more suitable for community groups focused on water based recreation.

Both marinas represent an opportunity to create destinations for not just locals, but for visitors to the region. Their attractions will be the maritime facilities they provide but also the commercial, social and recreational opportunities that could be incorporated at each facility.

Each marina will be different in the facilities, surrounding land uses and berthing options that it offers, however, there is the potential for strong linkages to exist between the two marinas. The marinas could co-exist and benefit from each other.

Both marinas represent an opportunity to be a collection and drop off point for water based tours, river cruises and fishing trips. The Ballina Marina will include a marina office and a ferry wharf has been identified close to the marina in Fishery Creek.

The Ballina Marina ferry wharf would also provide an opportunity to establish a regular service providing a water based taxi or ferry service for visitors to the marina who may want to reach the CBD. This ferry service could also provide a public transport option for residents wanting to reach the CBD. A regular ferry service could provide a tourist connection to attractions at the Martin Street Marina such as the maritime museum, the Missingham Spit, restaurants and the CBD shops. Residential development at Ballina Marina may also provide some residential accommodation for visitors using the Martin Street Marina and a ferry service would provide the opportunity for visitors to reach this accommodation.

Other opportunities for linkages between the marinas may include maritime based festivals that utilise both facilities, a connection in servicing for vessels where space at the Martin Street marina may not allow the provision of certain services and a ferry based link of foreshore public open space.



MARINA ESPLANADE



Artist's perspective showing the marina esplanade area looking west

FISHERY CREEK PARK



Artist's perspective showing residential and open space areas looking south along Fishery Creek

PROPOSED STAGING

Project Staging (Private Funding)

The staging plan that formed part of the exhibition draft master plan (refer to page 46) was based on private development funding the redevelopment of the site. This was the staging approach considered under the feasibility analysis conducted as part of the project. This was done to determine whether the project could be delivered through private development interests as opposed to significant public funding.

The exhibition version of the plan has been adjusted to align with the revised Ballina Marina Master Plan Option One post exhibition. This plan remains based on a private funding model.

Project Staging (Initial Public Funding)

Having regard for the feedback received in response to the exhibition draft Ballina Marina Master Plan (refer to page 47), an alternative approach to staging of the development has been identified, also based on the Ballina Marina Master Plan Option One. This approach to the redevelopment of the site assumes the availability of public funding to initiate the project.

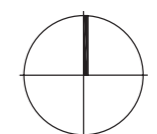
More specifically, this staging approach relies on public funding to meet the costs associated with the enlargement of the harbour water body and the provision of the public esplanade and open space in the vicinity of the harbour as well as the road network into the site and around the harbour. This contrasts with the initial staging plan prepared for the redevelopment which is based on private funding meeting the site development costs.

MASTER PLAN OPTION ONE - PROPOSED STAGING (private funding)



LEGEND

- 2 - 3 storeys residential development
- 4 - 5 storeys residential development
- dry storage for boats
- commercial development
- community building
- community title open space
- public open space
- vehicular access to residential development
- commercial access
- public esplanade around harbour
- car parking

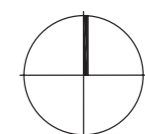


MASTER PLAN OPTION ONE - PROPOSED STAGING (initial public funding)



LEGEND

- 2 - 3 storeys residential development
- 4 - 5 storeys residential development
- dry storage for boats
- commercial development
- community building
- community title open space
- public open space
- vehicular access to residential development
- commercial access
- public esplanade around harbour
- car parking



FUTURE PLANNING

Future Planning Framework

Future development within the site in accordance with the Ballina Marina Master Plan will be subject to relevant Environmental Planning Instruments (EPIs) including State Environmental Planning Policies (SEPPs), the Ballina Local Environmental Plan (BLEP) 2012 and the Ballina Development Control Plan (BDGP) 2012.

The Ballina Marina Master Plan study area is presently zoned RE1 Public Recreation, R3 Medium Density Residential and IN1 General Industrial. The present zonings are not entirely compatible with the land uses proposed under the Ballina Marina Master Plan.

The mix of land uses proposed under the master plan includes:

- Commercial premises
- Marinas
- Public recreation areas
- Environmental facilities
- Shop top housing
- Residential flat buildings
- Multi dwelling housing

The **B4 Mixed Use zone** could be a suitable zone in terms of meeting the zone objectives and land use compatibility.

The objectives of the B4 zone are:

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.
- To maintain a distinct retail hierarchy as identified in Council's strategic planning framework.
- To enable residential and tourist development that is compatible with the commercial nature of activities in the zone.
- To ensure a safe and accessible built environment.
- To encourage development that recognises natural, cultural and built heritage.
- To encourage development that achieves the efficient use of resources such as energy and water.

The Ballina Marina Master Plan proposal to integrate waterfront and marina activities with a medium density residential neighbourhood generally meets the B4 zone objectives.

“**Boat building and repair facilities**” and “**Jetties**” are prohibited in the B4 zone. It is noted in the ‘list of priorities’ for the marina area, that major boat repair and building facilities will be located at the Smith Drive industrial precinct, therefore, it is not considered necessary to include this as a permissible land use. Council may consider including “jetties” as a land use that is permissible with development consent in the B4 zone under a future LEP amendment.

Alternatively, Council may consider a mixture of existing and new zonings. This could include retaining the strip of RE1 Public Recreation zoned land located along the north-eastern corner of the study area adjacent to Fishery Creek and the River Street frontage.

Rezoning of the site or other use of special planning policies to accommodate the Ballina Marina Master Plan land uses will involve the preparation of a Planning Proposal and an amendment to the BLEP 2012.

Council may also consider preparing a chapter of the Ballina Development Control Plan 2012 that will provide site specific controls and a Precinct Map for the master plan area.

Part 6 of the BLEP 2012 provides for **Urban release areas** and requires that certain development cannot be undertaken within an urban release area unless adequate arrangements for essential public utility infrastructure are in place and a development control plan has been prepared to manage development staging, environmental controls, transport movement, higher density living, urban design and the like.

Other provisions of the BLEP 2012 that are relevant to future development within the study area are:

Clause 4.1 Minimum Lot Size – consideration should be given to nominating a minimum lot size for the B4 zoned area of the precinct that would discourage land holding fragmentation through Torrens Title subdivision. The exception to this is the western residential precinct located between the harbour and Sunnybank Drive. This area may be suitable for attached dwellings or semi-detached dwellings and Torrens Title subdivision.

Clause 4.3 Height of Buildings - The master plan indicates buildings of up to five storeys. Mixed use buildings (2 x 3.6 m retail/commercial + 3 x 3m residential) can be accommodated within an 18 m to 19 m height limit. Presently the maximum Height of Buildings for this precinct is 8.5 m, therefore an LEP amendment will be necessary to increase the permissible building height to achieve the master plan objectives.

There may be other suitable zone mixes that will accommodate the mix of land uses identified in the Ballina Marina Master Plan. In this regard, the alternative approach is to allocate areas of the site for the following zones:

- R3 Medium Density
- R4 High Density
- RE1 Public Recreation
- B4 Mixed Use

The preferred approach, however, is to provide a flexible and ‘open’ zone, such as the B4 Mixed Use zone, across the site. This will provide for flexibility in the eventual location of the various land use elements that have been identified as suitable within the marina precinct.

SUMMARY AND NEXT STEPS

The preparation of a master plan for the Ballina Marina is intended to set overarching direction for future redevelopment of the West Ballina Trawler Harbour site. It is designed to enable and underpin further more detailed site investigations and planning as well as illustrate fundamental intentions and support decision making.

It is not expected that the site will be developed exactly as shown in the master plan material. Rather, the aim is to enable the establishment of a marina on the land over time, with the development including the core elements identified through the master planning process. That is, based on the master planning process, it is expected that the site will provide for increased boating berths through a larger wet area, a place for the local fishing fleet as well as private recreational boats and other commercially operating vessels, a mixture of commercial development outcomes, public open space including pathways around the marina and the site more generally, residential development, new road infrastructure, space for community uses, dry boat storage and boat launching facilities. It is also envisaged that the site will have connection with the Martin Street Harbour in the Ballina CBD.

The master planning for the site has considered two options for the configuration of an enlarged harbour, the aim being to demonstrate that there is likely to be more than one way to achieve the intended redevelopment outcomes. The precise nature of the redevelopment will continue to be refined over time, noting that any redevelopment of the site for a marina is likely to be a ten to 15 year project from beginning to end. The marina master plan should not be viewed as a static document but more as a starting point or platform to progress the provision of enhanced marina facilities in Ballina and more specifically on the site.

Importantly, the master plan should be viewed as a package of information that sets overarching direction and supports further and more detailed site planning. The key documents in terms of direction are master plan options one or two, being the overarching design plans resulting from the master planning process.

With respect to further advancing the marina project, there are a number of key steps necessary to further ready the site for redevelopment in line with the master plan. These steps include:

- Amending the local environmental plan to enable mixed use development of the site.
- Preparation of site specific development controls to guide the nature and form of development on the land over time.
- Detailed geotechnical and sediment assessments in relation to the enlargement of the harbour area.
- Detailed site contamination assessment and associated remediation works.
- Detailed marina design planning (including berthing infrastructure).
- Detailed design of internal road network and external road configurations to service the redevelopment.
- Further testing and assessment of development feasibility as more detailed information becomes available.
- Analysis of marina management models and options.
- Identification of an appropriate commercial development mix, including tourism and retail elements.
- Engagement with Department of Primary Industries - Lands and Roads and Maritime Services as key government agencies with interests in the land.
- Ongoing stakeholder and community engagement.

REFERENCES

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