

TWO ROCKS MARINA MASTER PLAN



Prepared for Department of Transport
13 February 2020

HASSELL



Executive Summary

The Two Rocks Marina Master Plan provides a long term framework for the Marina's future development. As an important strategic asset in Perth's growing northern corridor, a long term plan for employment, recreation and amenity is needed to help inform future planning, design and decision making.

The master plan has been prepared using a consultative engagement process with the Two Rocks Marina Reference Group, Department of Transport and technical consultants. The plan was initiated in response to the need to replace or refurbish failing infrastructure, and to ensure these works will be consistent with the long term plan for the marina.

In development of the master plan, a range of options were prepared, taking account of identified opportunities and constraints that exist for the site. Both the Department of Transport and Reference Group recognise the need for the marina to remain a working harbour, a place that supports the local fishing industry, and enables community access to the waterfront.

The following vision was established for the project:

Two Rocks is an Oceanside village; the heart of tourism and maritime activity in the north-west, a centre of excellence for fresh local produce and a place for the whole community, new and existing.

To support the vision, eight master planning principles have been established. These will be used to consider future development and planning proposals within the project area, thus ensuring a cohesive outcome:

1. A working harbour
2. A community asset
3. Flexible over the long term
4. A regional destination
5. Responding to the marine environment
6. Delivering safe and efficient access
7. Celebrating the rocks
8. Building on the beachside heritage and character

Using these principles, a master plan has been developed by the stakeholder community, taking into account their expectations and priorities. The plan incorporates seven key initiatives.

The key initiatives are:

1. A new protected swimming beach
2. A central tourism hub
3. A new marina boulevard and improved connectivity
4. A connected waterfront park
5. A southern park and neighbourhood precinct
6. An expanded recreational boating precinct
7. A maritime industry hub

Broadly, the master plan is organised in four precincts (from north to south):

- _ Northern marine industry precinct, comprising the boat stacking facilities, crayfishing receivals and yard space
- _ Recreational boating precinct, containing the car parking and boat ramps, Sea Rescue, yacht club and associated amenities buildings
- _ Tourism and commercial precinct, comprising the beach and commercial hub
- _ Local neighbourhood precinct, offering potential for residential development in association with a new parkland.

The Master plan is an aspirational long-term vision for the future of the marina. To achieve the ultimate vision, the master plan identifies numerous 'projects', generally independent of each other; but that can each contribute to ongoing improvements in the marina over time. There is no current funding commitment to undertake such an ambitious redevelopment, and as such this document contemplates the projects which can reasonably be programmed now. A range of transitional activities are also planned, to enable ongoing functioning of the marina whilst the vision strategy is further developed, and to provide some short term wins for the local community.

The redevelopment of the marina over time is an exciting opportunity for Perth's northern suburbs. While the exact timing relies on funding availability, there remain plentiful opportunities for the marina to refresh and renew, and this Implementation Plan provides a road map to ensuring the facility continues to improve and become the heart of the community once again.

Front cover image Source:
<https://www.atlantisbeach.com.au/fishing-near-two-rocks/>

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Section 01

Introduction and Background



01



Figure 1: Existing Two Rocks context

01 Introduction and Background

Two Rocks Marina

The Two Rocks Marina is an important social, economic and cultural asset for the Two Rocks community, as well as more broadly, for the future North-West Corridor population. As a working harbour, it is one of the few pieces of strategic infrastructure in Perth's northern corridor, and so provides an important base for employment, recreation and associated services.

Located immediately adjacent to the Two Rocks town centre, collectively these two precincts form the cultural and activity hub for the area. The composition and relationship of the marina and town centre therefore need to be carefully considered. Similarly, the existing community has a strong relationship to the project area, using it as a place of employment, recreation and community activities. The marina is utilised by the The Two Rocks Sun City Yacht Club, the Volunteer Sea Rescue and also provides a safe launching point for recreational craft with the existing boat ramps in the south of the marina.

In addition, the marina helps serve Western Australia's crayfishing industry, it being at the southern extent of the crayfish' natural feeding and grazing area. The crayfishing industry is a half a billion dollar industry in WA* and an important aspect of the local economy. A number of crayfishing boats and associated service craft are based at Two Rocks. The marina also benefits from commercial marine services, which provide supporting maintenance and servicing facilities for the marine industry.

*Source: westernrocklobster.org

Project Area

The project focuses on the Two Rocks Marina, including surrounding affected land and marine environment. The project area comprises 38 hectares. The project considers the relationship between the marina and adjacent land, including the existing coastal reserve and town centre.

The study area, being focused on the marina and coastal environment, is set at beach level and below the sand dunes upon which sit much of existing Two Rocks. Immediately to the east, the Two Rocks Town Centre provides existing shopping and commercial services for the local community. A structure plan for the town centre was approved in March 2014 and envisages a broader, mixed use precinct containing commercial, residential, short stay and open space functions. The marina master plan seeks to complement the role of the town centre.

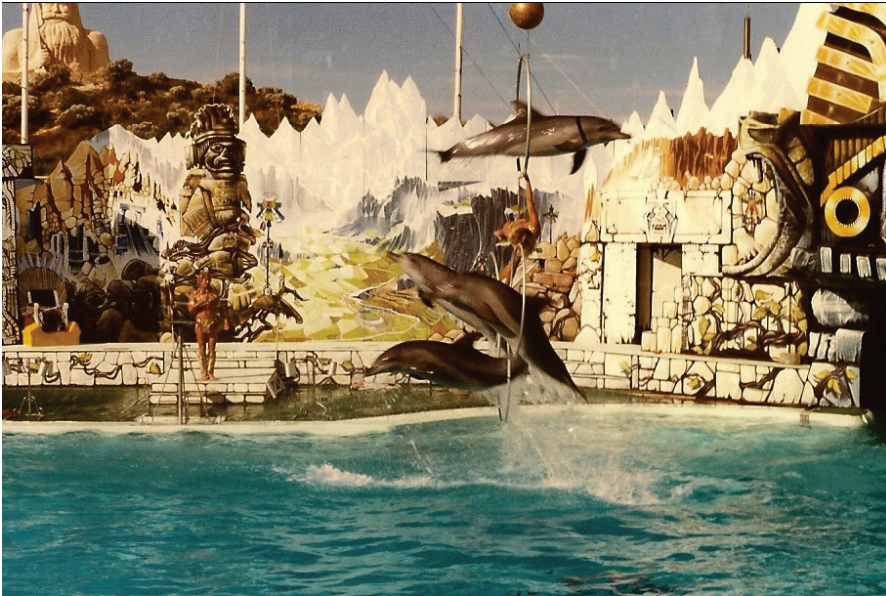
The study area comprises land in public ownership - in the case of the marina, by the Department of Transport; with other land parcels in control of the City of Wanneroo and State Government departments. The master plan establishes a long term framework for these organisations to work together to progress planning and development outcomes.

To that end, part of the study area is subject to Bush Forever designation. This covers the coastal dunes, as well as the existing marina hard infrastructure. The Bush Forever designation needs to be reviewed as part of the ongoing project planning.

The study area is accessed principally by Pope Street, which directly services the existing marine industry area, as well as from Jordan Street and linking to Australis Drive. This road network, contained within the study area, accommodates primarily light vehicles accessing the marina boat ramp and associated marine industry businesses. Truck access is required for marine industry use on a periodic basis.

Pedestrian connections are also available from the town centre to the marina. These are via steps in the limestone wall structure, accounting for the substantial level difference between town centre and marina. Universal access between the town centre and marina is currently not provided.

01 Introduction and Background



Images showing the former Atlantis Marine Park in Two Rocks

01 Introduction and Background

A Long Term Plan

The Department of Transport is responsible for management, maintenance and future planning of the Two Rocks Marina. The Department assumed management responsibility of the facility in 2014, following many years of private management. Upon taking over the facility, a comprehensive asset and maintenance review was undertaken, with a number of immediate actions identified, including reinforcements to the existing marina breakwaters, upgrades to jetties, removal of abandoned boats and associated security fencing.

Many of the urgent replacement works have now been completed, or are ongoing. This process has highlighted the need for a longer term, strategic vision, to provide guidance on future design and development of the marina. The plan needs to account for a range of ongoing challenges around the operation of the marina, the age and quality of existing buildings, and potential long term expansion, to help bolster the capacity of the local marine industry as well as offer improved tourist and recreational amenities. The long term plan provides context for government's investment in infrastructure replacement, upgrades and improvements to meet the needs of users. The master plan will therefore guide medium and long term investment into the harbour.

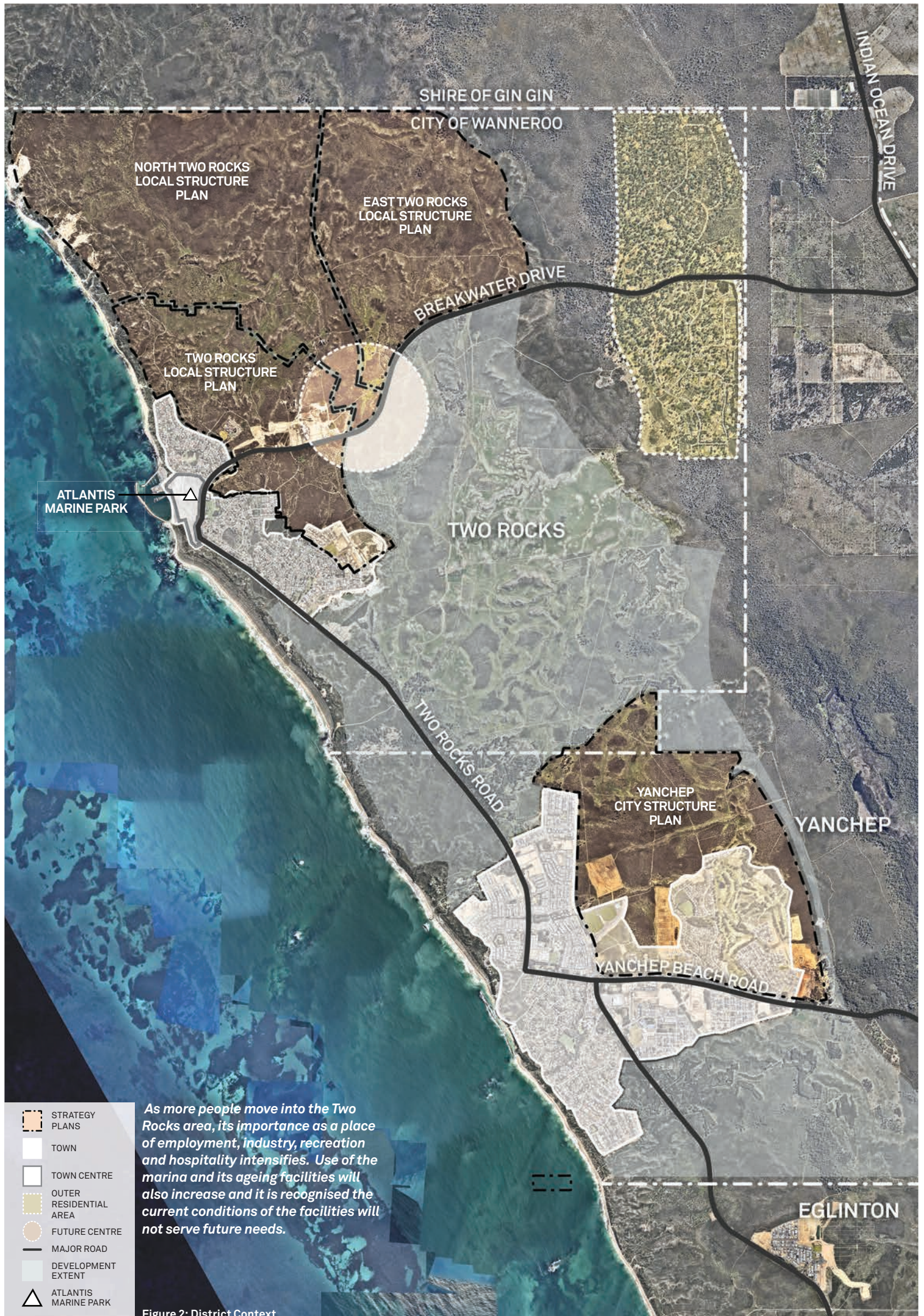


Figure 2: District Context

01 Introduction and Background

The Case for Change

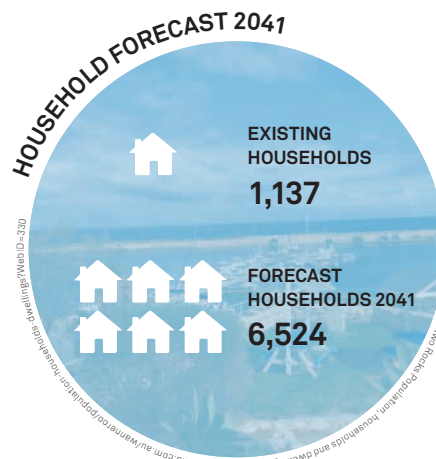
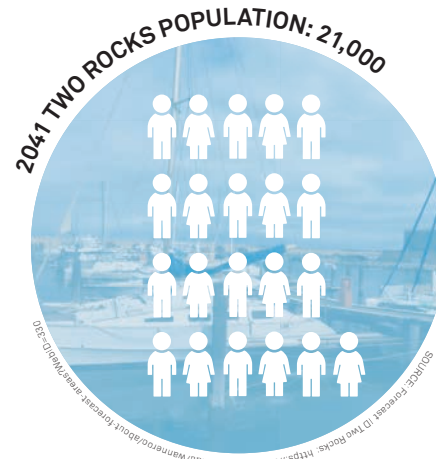
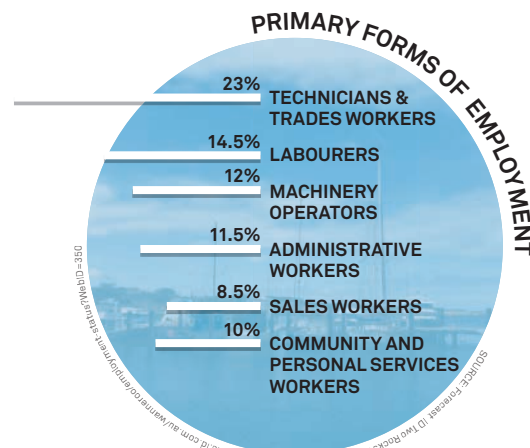
When initially developed in the 1970s, Two Rocks was a distinct coastal village beyond Perth's urban fringe. Its separation from Perth forged a unique community and sense of place. The Two Rocks marina has contributed significantly to that identity, along with the former Atlantis Marine Park (shown left); this area is part of the Two Rocks Town Centre Structure Plan.

With Perth's continued urban expansion, Two Rocks is increasingly part of Perth's urban fabric. The strategic importance of the marina is identified in the State Government's Perth and Peel at 3.5 million and the North West Sub Regional Planning Framework as an employment and recreation hub.

The City of Wanneroo is forecast to grow from approximately 220,000 people in 2019 to around 413,000 people by 2041 (source: Forecast id). Two Rocks itself is forecast to grow from 4,122 to nearly 21,000 people (the area of growth shown on Figure 2 District Context). As more people move into the area, its importance as a place of employment, industry, recreation and hospitality intensifies. Use of the marina and its ageing facilities will also increase and it is recognised the current conditions of the facilities will not serve future needs.

To provide services, employment, amenity and housing choice, 'activity centres' are provided for in the planning framework for the coastal corridor. The existing Two Rocks town centre is supported by a structure plan, with additional centres being planned in the future that will provide sub-regional and district services. The Town Centre structure plan provides for a range of land uses including additional retail, residential and aged care. Any development within the marina should complement the town centre, so that both are understood by the community as a united activity centre precinct.

In that context, the structural framework of the marina needs to be reviewed. A long term master plan is required to provide a framework for the future arrangement of the marina.



01 Introduction and Background

Project Genesis

Upon the Department of Transport assuming responsibility for the marina 2014, a number of refurbishment projects commenced. This included a \$6m “rescue package” and significant additional financial commitments from government for maintenance and repairs to failing infrastructure.

This work triggered the formation of the Two Rocks Marina Reference Group, established to help the Department of Transport consider the long term vision for the marina, with a view to creating local jobs. Through engagement with the Two Rocks Marina Reference Group, the need for a long term master plan was identified.

Two Rocks and its harbour is an important asset for the existing and emerging communities of the north west corridor. It is a place of strategic employment, with opportunity to expand to address emerging sectors such as tourism, research and education. The harbour’s ongoing function as a place of work and industry is therefore important - particularly within the context of relatively few areas of employment potential within the local region.



Birdman Rally at Two Rocks Marina, 1970s.

01 Introduction and Background

What we are hoping to achieve with the master plan

The intent of the master plan is to capture ideas which establish a common long term vision shared with the community. It is a framework for the overall arrangement of the marina, establishing its key structuring elements such as road networks, intended land uses, recreation spaces, infrastructure and amenities. Because the master plan provides a long term framework, this can guide future design and planning that addresses each area in more detail.

The master plan provides stakeholders, government and the community an understanding of the future intent of the marina, identifying key precincts within which detailed planning can occur. It will inform investment decisions in maintenance and upgrades.

Two Rocks Marina Vision:

Two Rocks is an oceanside village; the heart of tourism and maritime activity in the north-west, a centre of excellence for fresh local produce, and a place for the whole community, new and existing.



Aerial photograph showing the existing Two Rocks Marina



A photograph of a marina with several sailboats docked at a wooden pier. The water is calm and reflects the boats and the sky. The sky is a clear, bright blue. In the background, there are some buildings and trees on a hill.

Section 02

Community and Stakeholder Input

02

02 Community and Stakeholder Input

Visioning

The master plan has been prepared using a collaborative process with the Two Rocks Marina Reference Group, Department of Transport and its expert consultants. This included inputs from marine and coastal engineers.

The visioning process commenced in late 2017 with the announcement of a Reference Group to develop a vision for the long term expansion of the marina. The Reference Group met over the course of 2018, considering typical marina design principles and requirements, the technical studies, user needs and the quality of the existing assets.

Once the basis for design was understood, a workshopping process was undertaken which encouraged the Reference Group to identify long term priorities, help define a vision, and establish the preferred long term layout of the marina.

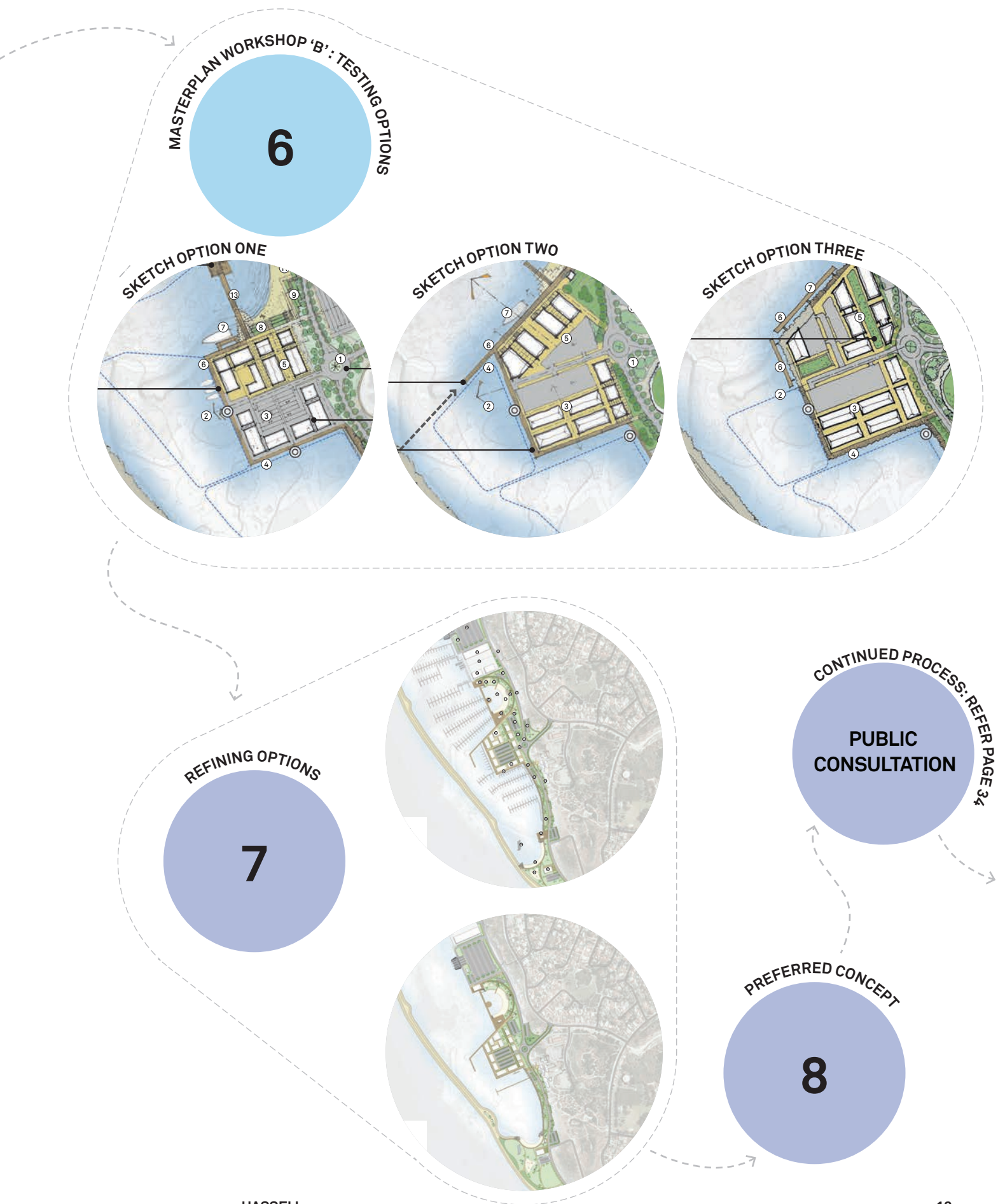
Following the initial workshop sessions, three draft master plan options were prepared for review by the Two Rocks Marina Reference Group and Department of Transport. Options were tested and refined from three to two, where another workshop was held with the Reference Group.

Consideration of the options crystallised stakeholder preferences for the marina's long term, with significant convergence of ideas amongst the group. This allowed a number of refinements to be identified, which have been captured in the final master plan. A detailed summary of all Reference Group meetings and workshop outcomes can be found on the project website.

www.transport.wa.gov.au/projects/two-rocks-marina-upgrade.asp



02 Community and Stakeholder Input



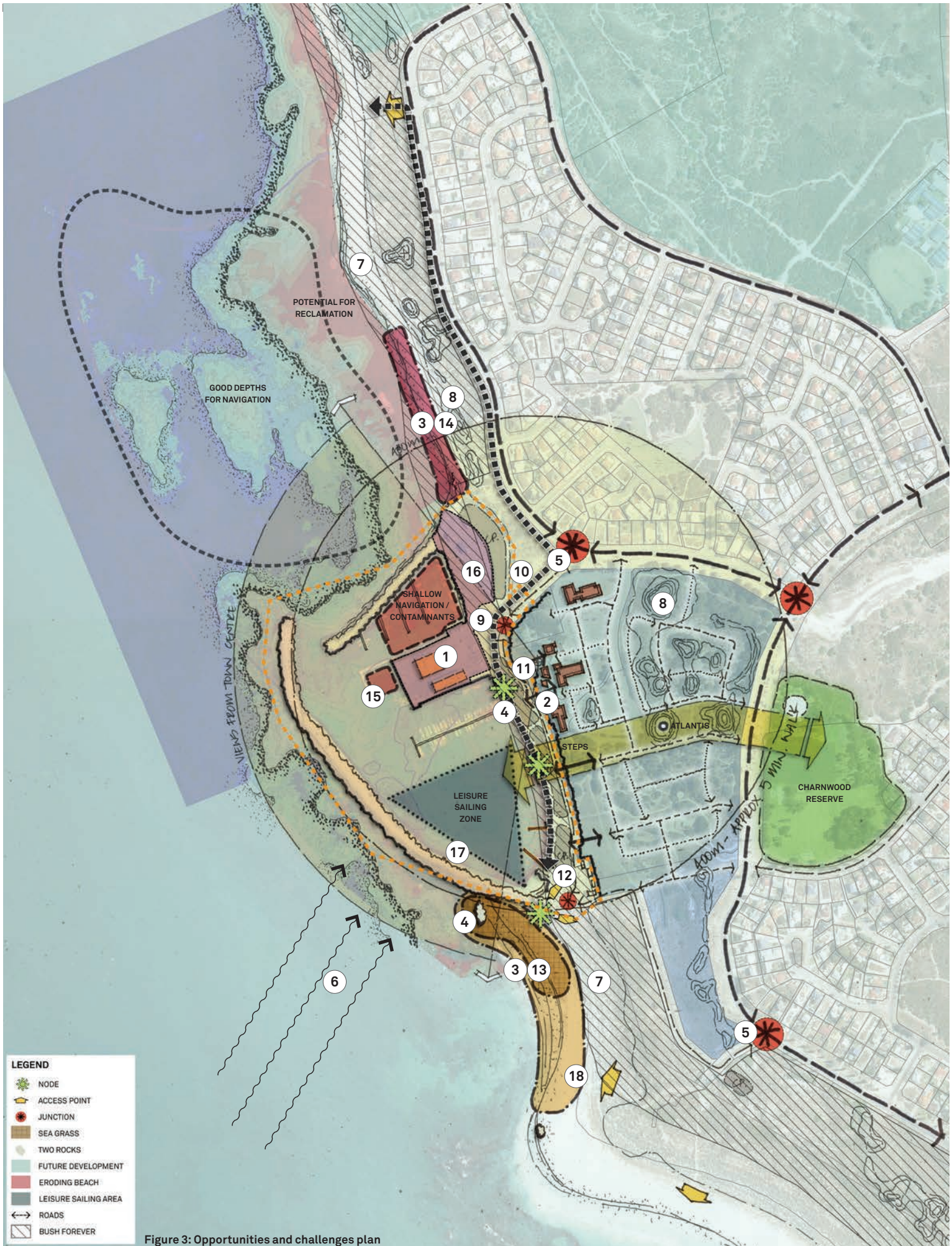


A coastal scene featuring a large, rugged rock formation in the background. Waves are breaking against the base of the rock and further out to sea. The foreground is a sandy beach with some seaweed and small pools of water. The sky is blue with some light clouds.

Section 03

Opportunities and Challenges Analysis

03

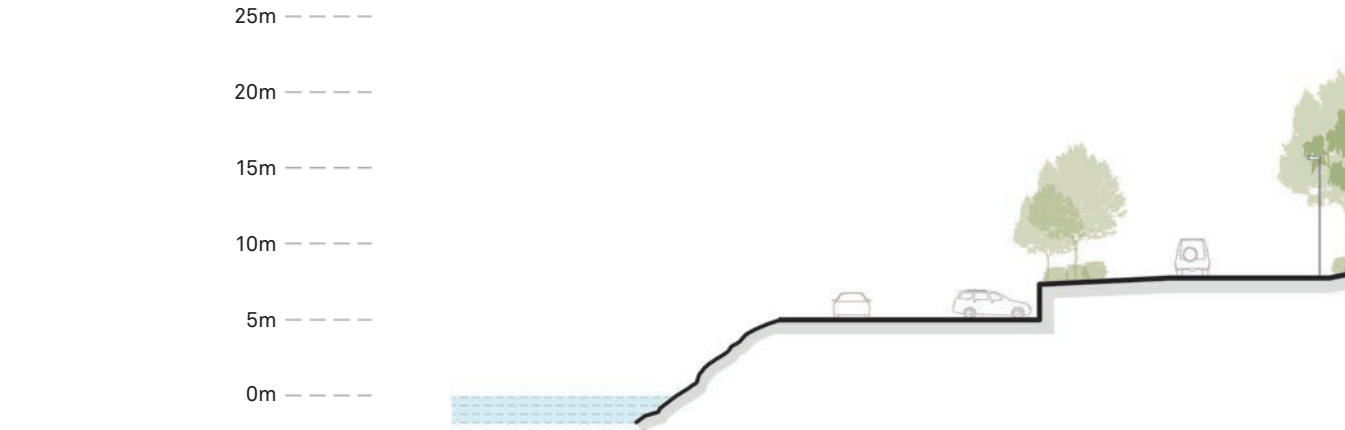


03 Opportunities and Challenges Analysis

This table outlines a brief description of the opportunities and challenges identified by the project team and Two Rocks Marina Reference Group. These are represented spatially on the opportunities and challenges plan (opposite). These matters need to be addressed in the master plan.

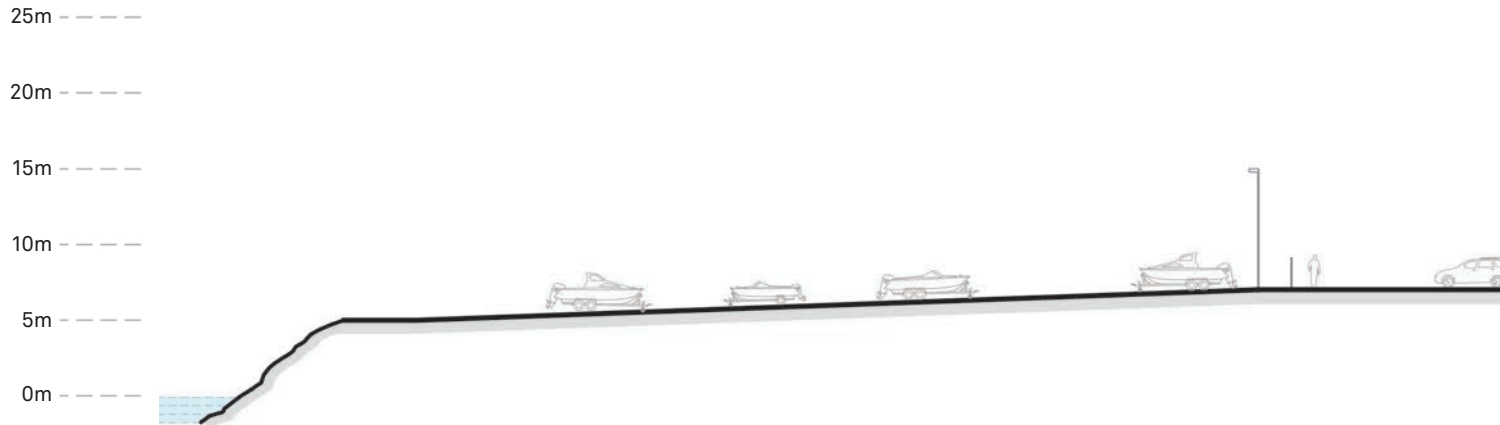
Opportunities	Challenges
1. Supporting Local Industry <ul style="list-style-type: none"> _ Improve arrangement of marine industry area and its access to wharf / jetties _ Improve access to marine industry area _ Opportunity for tourism and hospitality uses that complement the town centre and capture benefit from waterside location _ Provide ongoing commercial fishing access to the marina 	9. Access and Parking <ul style="list-style-type: none"> _ Current entry road is confusing _ Parking areas are poorly arranged and inefficiently designed _ Footpaths lack shade and seating
2. Links and Relationship to Town Centre <ul style="list-style-type: none"> _ Provide improved pedestrian access to the town centre _ Marina arrangement complements the future town centre form 	10. Entry Impression <ul style="list-style-type: none"> _ Security fencing is visually unappealing
3. Address Coastal Management Processes <ul style="list-style-type: none"> _ Design future infrastructure to minimise seagrass mounding on beaches _ Design future infrastructure to help minimise beach erosion 	11. Separation from Town Centre <ul style="list-style-type: none"> _ Marina arrangement turns its back on the town centre – there should be better integration.
4. Two Rocks as Destination <ul style="list-style-type: none"> _ Improve recreation amenities such as pedestrian and cycle paths, seat and shade areas, barbecue facilities and parks _ Respect the 'rocks' as part of Two Rocks identity _ Create a hospitality 'offer' with restaurants and cafes 	12. Comfort <ul style="list-style-type: none"> _ Lack of shade and tree planting _ Lack of amenities for marina users, such as toilets / change rooms _ Lack of amenities near boat ramp
5. Clearer Entries <ul style="list-style-type: none"> _ Improve the entry road and visual appearance of the marina 	13. Seagrass Buildup <ul style="list-style-type: none"> _ Existing marina wall helps trap seagrass on the beach, causing odour problems
6. Microclimate <ul style="list-style-type: none"> _ Opportunity for future design to mitigate against strong south westerly winds and summer sun in identified locations to allow comfortable people spaces 	14. Beach Erosion North of Sea Wall <ul style="list-style-type: none"> _ Beach below Sovereign Drive is eroding
7. Bush Forever <ul style="list-style-type: none"> _ Opportunity to review the designation of Bush Forever over existing marina hardstand and sea walls _ Opportunity to enhance management and conservation of dune areas 	15. Marina Water Depths <ul style="list-style-type: none"> _ Depths vary across the marina seafloor, with some areas being unnavigable for larger boats
8. Topography and Level Changes <ul style="list-style-type: none"> _ Significant level changes between the town centre, residential areas and the marina allow for views to be preserved and amenity impacts to be managed 	16. Marine Industry Constrained <ul style="list-style-type: none"> _ Conflict of movement between marine uses _ Existing marina buildings in poor state _ Existing marina buildings do not suit current industry practice
	17. Marina water quality <ul style="list-style-type: none"> _ Need to ensure any marina expansion considers water circulation and replenishment
	18. Existing Dog Beach <ul style="list-style-type: none"> _ Marina expansion may impact on access to the existing dog beach

03 Opportunities and Challenges Analysis



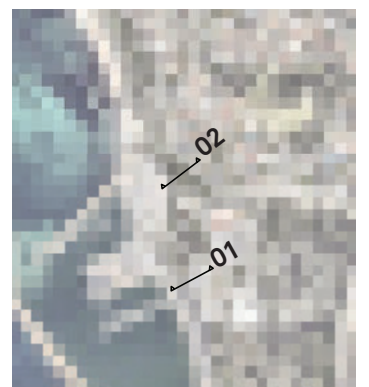
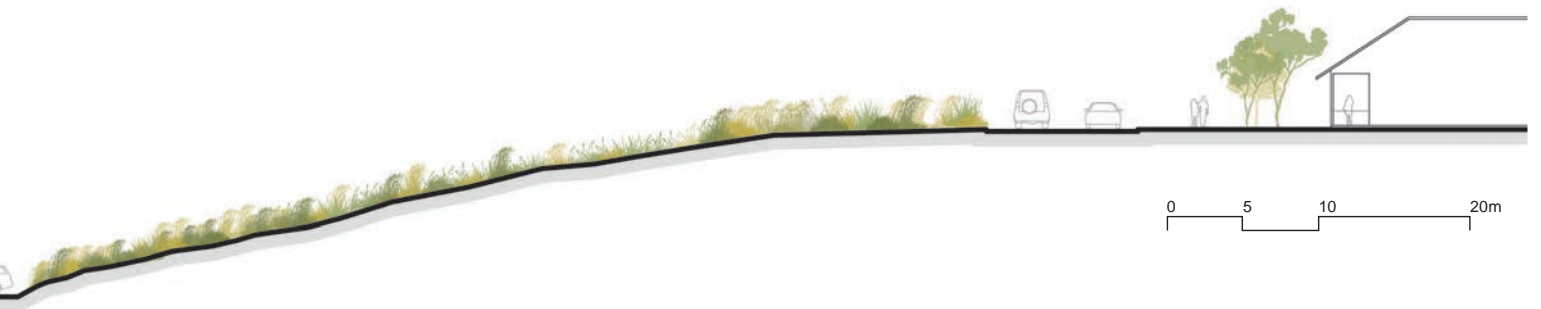
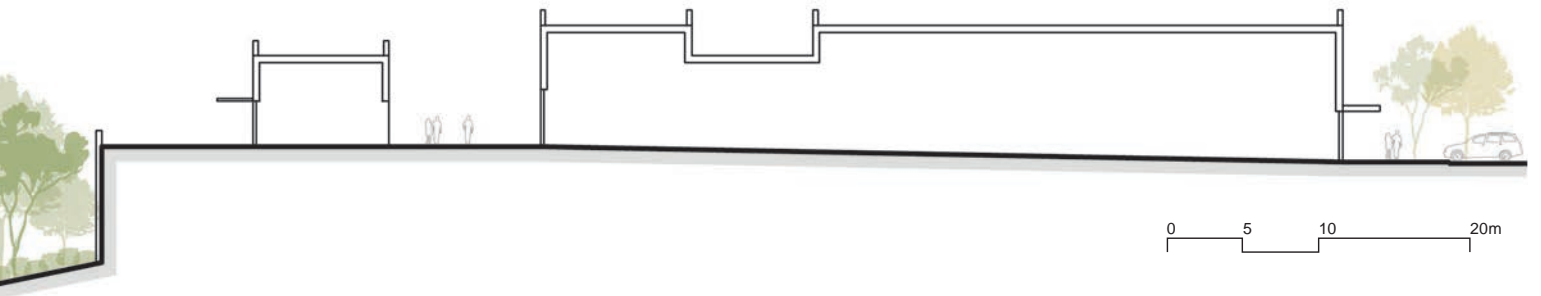
Upper level shopping centre to waterfront car park

Two large retaining walls act as a barrier between the town centre and the waterfront.



Sovereign Drive to Pope Street car park

Roughly 10 metres grade separation between Sovereign Drive and the marina and beach.





Section 04

Master Plan Principles

04

04 Master Plan Principles

To support the vision, eight master planning principles have been established. These will be used to consider future development and planning proposals within the project area, thus ensuring a cohesive outcome:



A Working Harbour

Two Rocks Marina will continue to support marine industries and job creation, through access to water and landside spaces.



A Community Asset

Two Rocks Marina will be welcoming to the community through provision of recreation spaces and access to the water.



Flexible over the Long Term

The marina will be designed so that land uses and activities are functional, fit for purpose and arranged to minimise visual impact. Elements need to adhere to broader spatial precincts but be flexible over time to respond to emerging trends and needs.



A Regional Destination

The marina provides facilities and services for the surrounding region associated with its marine function, such as boat ramps, tourism and hospitality uses and marine industry for employment.

04 Master Plan Principles



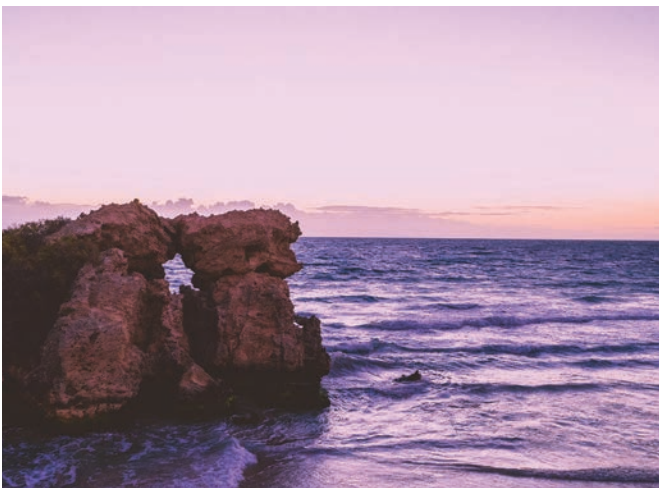
Responding to the Marine Environment

Marina design will work with coastal movement processes, helping to mitigate against erosion and seagrass build up.



Delivering Safe and Efficient Access

The marina area will be designed to provide continuous pedestrian and cycle access north and south along and provide clear access for vehicles to areas of parking / marine industry.



Celebrating the Rocks

Marina design will ensure the 'two rocks' are retained as distinct landscape elements contributing to the local identity.



Building on the beachside heritage and character

The marina will be designed to be a comfortable and attractive place. It will contain activities, facilities and uses that continue Two Rocks culture of fun, relaxed and recreational activities.



Section 05

The Master Plan Concept

05



Figure 4: Two Rocks Marina Master Plan

05 The Master Plan Concept

The Concept

The master plan concept is the culmination of an extensive engagement process undertaken by the Department of Transport with its key stakeholders, represented by the Two Rocks Marina Reference Group. The master plan establishes a framework for future development of the marina and allows the Department to effect short term improvements without impeding the longer term vision. Short term improvements have already been identified and are set out in the subsequent implementation chapter.

The engagement process established a core set of ideas, which form the ten key moves outlined below.

Long term Marina and Employment Capacity

The basis for long term expansion of the marina relates to two key fundamentals within Perth's north west corridor. Firstly – the population is growing rapidly and will require access to regional recreation amenities that marinas can provide; secondly and most importantly, people living in the north west corridor require access to jobs within a convenient distance from home. Expansion of the marina enables a sustainable pathway forward for local marine and fishing industries.

Considerations

- _ Focus expansion to the north of the existing marina to account for underlying seabed depths and conditions.
- _ Provide sufficient area for anticipated demand for boat ramp access and mooring pens based on the region's identified population growth.
- _ Where possible utilise existing marina infrastructure to provide a staging launchpad. The existing seawalls are continued along current alignments; existing marine industry hardstand is used for future building zones – for short stay accommodation and food and beverage activities.
- _ Design the southern extension of the sea wall to help minimise seagrass build up.
- _ Design of the northern extension needs to mitigate against erosion impacts to residential property.

The Key Moves

Through engagement with the Two Rocks Marina Reference Group, Department of Transport and expert consultants, seven key moves have been identified for the marina's long term. Each one aims to deliver on the key objectives and vision for the Two Rocks Marina.

1. A New Protected Swimming Beach

In recognition of WA's relationship with the water and acknowledging the beaches removed as a result of expansion, a new marina beach is identified central to the project area. The size and location of the beach is based on case study comparison with other Department of Transport marinas, including Hillarys, its relationship to the adjacent future 'tourism and restaurant hub' and an area required to provide a secure foundation for retention of beach sand. The marina beach is supported by adjacent car parking, pedestrian access to Sovereign Drive and a boardwalk extension to create a safe swimming environment away from boat movements. Associated shade, play, seating and barbecue nodes are located nearby.

Considerations

- _ Provide universal access to the beach and park areas.
- _ Separate boat movements from any swimming zone.
- _ Provide opportunities for complementary activities and community celebration, such as with a focal stage area.
- _ Ensure design will result in suitable water quality.

2. A Central Tourism and Restaurant Hub

A tourism and restaurant hub located centrally within the project area will allow improved activity and connectivity relationships with the existing town centre. It will allow the marina to be a destination beyond boating activities, ensuring it has relevance to the broader regional population. Boardwalks allow users to enjoy the marina environment and move continually around it. Short stay accommodation offers benefits for boat users requiring overnight stay, or as a tourist destination more broadly. The food and beverage offer enables local seafood to be enjoyed, and any associated 'experience centre' to be established. A public berth is located off the hub, offering potential for ferry connections to Rottnest, or short term visitor berthing. Importantly, space is provided for economic activity and jobs. Exact building heights need to be further tested, however a scale that promotes pedestrian comfort and protects views from the existing Two Rocks town centre and residential neighbourhood is an appropriate consideration. This may be generally three storeys.

Considerations

- _ Buildings designed and arranged to provide views through to the water, and especially from Pope Street.
- _ Building scale limited to ensure continued views for existing residents along Sovereign Drive.
- _ Any car parking to be provided centrally, allowing continual pedestrian movement around the hub.
- _ Connection pathways provided up to the existing town centre.
- _ Buildings designed to provide areas shielded from strong breezes.

05 The Master Plan Concept

3. A New Marina Boulevard and Improved Connectivity

A key organising element to the master plan is the new marina boulevard. This road provides pedestrian, cyclist and vehicle access to the various landside parts of the marina. It is connected to Jordan Street and Marcon Street in the south, with potential for emergency vehicle access from Sovereign Drive. It is intended that public vehicle access to the marina will remain via Pope street, or the connection from Marcon Street onto Two Rocks Road. The new marina boulevard will be designed to contain shade tree planting, embayed parking, a shared use path and lighting. In the north, a turn around facility is provided for vehicles.

A number of pedestrian connections are provided within the master plan to offer improved integration between the marina and town centre area. The primary connection in the short term will be a level crossing from the town centre to a new central plaza & boardwalk. Owing to the difference in level, with the town centre being higher than the marina area, pedestrian pathways connect to existing stairs in the heritage listed wall and then integrate with ramps and stairs in the new development. There is also potential for a universally accessible pedestrian bridge identified, offering opportunities for an elevated lookout precinct.

Considerations

- _ Pedestrians and cyclists will be safely and comfortably accommodated with tree planting, lighting and ample path areas.
- _ Road to be designed to accommodate vehicles and trucks servicing marine industry and tourism hub.
- _ Further investigation required for any future emergency vehicle access to Sovereign Drive.
- _ Integrate pedestrian connections with existing stair locations in the town centre wall.
- _ Highlight the pedestrian crossings of the marina boulevard to help slow traffic.
- _ Staged Infrastructure upgrades to meet current and future demand for a safe boating and harbour precinct.

4. A Connected Waterfront Park

Running north to south throughout the project area, a connected series of park spaces is provided, offering substantial public amenity. Containing a variety of activity spaces and areas, the park provides public access and enjoyment of the marina. The intent is to greatly improve comfort and amenity of the marina area, which is currently a harsh environment with extensive hard stand areas and limited shade. Barbecue and seating nodes will be provided throughout, with a number of boardwalk nodes providing access to boat pens. Play spaces and passive lawn areas will provide opportunity for young and old to enjoy Two Rocks marina.

As a means of compensating for lost access to existing beach as a result of marina expansion, potential for an ocean pool is identified at the northern edge of the marina. This location was determined with the input of the Reference Group, and would be supported with adjacent car parking. The pool could be incorporated into the northern sea wall design, and other public amenities also included, such as access for fishing.

Considerations

- _ Provide a continual shared path and boardwalk system, allowing public access throughout.
- _ Provide a restaurant and deck nodes at points along the foreshore park.
- _ Integrate drainage functions into landscape design.
- _ Evenly disperse seating throughout, with barbecue and shade focused around key park locations.
- _ Design of the northern seawall to provide potential for public access and ongoing safety.
- _ Ocean pool subject to further detailed investigation, requiring longer term consideration of the coastal environment and management and maintenance regimes.

5. A Southern Park and Neighbourhood Precinct

Public realm amenities culminate at the southern edge of the marina with a new park. A playground, turf areas and commercial development opportunity are complemented with areas of parking and pedestrian footpaths. To the east of the new marina boulevard, the potential for residential development lots has been identified. This would allow passive surveillance and a degree of activity at the southern edge of the marina, and allow a smooth transition to future residential development within the town centre. The potential for residential lots requires further investigation, particularly with regard to the designation of the existing coastal reservation, City of Wanneroo controlled land and relationship to future development east of Jordan Street.

Considerations

- _ Further investigation required for identified residential development lots, including designation of Bush Forever land.
- _ Provide a commercial lease opportunity within the parkland enabling activation, passive surveillance and amenity for park users.

05 The Master Plan Concept

6. An Expanded Recreational Boating Precinct

A critical component of the marina master plan is long term provision for boat ramps and associated car parking demand. Eight boat ramps are provided for, a number expected to cater for the increasing population over time. A substantial car and trailer parking area is provided immediately adjacent to the boat ramps. The car parking area can also be used by visitors to the beach, yacht club and adjacent commercial buildings. The Sun City Yacht Club is provided with a long term lease opportunity adjacent to pens and the boat ramps. The Volunteer Sea Rescue is also provided a location with good oversight of the boat ramps and boating lanes. Toilets and shower/changeroom facilities are provided for boat users.

Considerations

- _ Provide boat trailer parking bays to accommodate for 8 boat ramps as required by the Australian Standards
- _ Provide flexible opportunities for recreational clubs and community facilities including boat and fishing clubs, yacht club and sea rescue.

7. A Marine Industry Hub

A zone for marine industry is provided in the north of the master plan area. A substantial secured yard offers space for boat lifting and maintenance of large vessels. A large boat stacker for approximately 200 vessels is accommodated, along with associated office space for marine businesses. A receivals depot provides ongoing certainty for the local crayfishing industry, with associated commercial jetty and pens providing ease of access. A fuel facility and turnaround for fuel trucks is incorporated, with fuel tanks located below ground to minimise visual impacts. Area is provided around the marine industry zone for screening planting.

Considerations

- _ Consider opportunities to enable short and long range views throughout.
- _ Improve waterfront access throughout the precinct whilst managing secure access where it is required.
- _ Introduce better urban water management tools to control water quality.



Section 06

Implementation



06

06 Implementation

Implementation Plan

The Two Rocks Marina Master plan (the Master plan) is an aspirational long-term vision for the future of the marina. To achieve the ultimate vision, the master plan identifies numerous 'projects', generally independent of each other; but that can each contribute to ongoing improvements in the marina over time.

Several of the projects are located in areas that are currently part of the water body. Figure 5 shows the Master plan overlain with the existing boundary and land area of the marina, clearly identifying a number of key projects that require substantial reclamation and breakwater construction in order to be implemented.

There are also several projects that are implicit in the design but not shown. For example, the upgrading of infrastructure and the provision of adequate underground services are fundamental elements of the marina to achieve the long term vision.

Finally, there are several elements that will require ongoing design discussions before being implemented. An example includes the long-term location of the Yacht Club, which is currently in the southern area of the marina. The existing location provides the optimal training ground for new sailors, in well protected water, whilst a longer term growth scenario could consider an additional or alternative location to the north with direct access to pens that is typical of yacht clubs elsewhere. These types of projects have been provided as much flexibility as possible in the Master Plan to allow for decision making at the relevant time.



Existing land and sea wall
extent

Figure 5: The Master Plan and Coastline Overlay

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Project Priorities

The master plan represents a collection of diverse stakeholder interests and the implementation strategy is defined to achieve a balanced approach to meet all stakeholder interests. The implementation priorities are therefore informed by the following criteria, which are each essential considerations for the State in delivering best practice marina facilities.

Priority Maintenance

– for infrastructure improvements in the marina that are deemed to be of an urgent or critical nature to maintain functional and safe operations of the marina. In many cases these projects will be undertaken as necessary, but may also stimulate investment in other projects.

Community Benefit

– projects that meet a priority need as expressed by the community. These can include small projects that assist in the enjoyment of the marina such as seating and benches, or larger projects such as the development of entertainment and recreational sites or facilities.

Commercial Needs

– those projects that deliver a commercial benefit to the marina, such as maritime industry infrastructure and boating infrastructure, but can also include commercial development for cafes and restaurants.

Governance

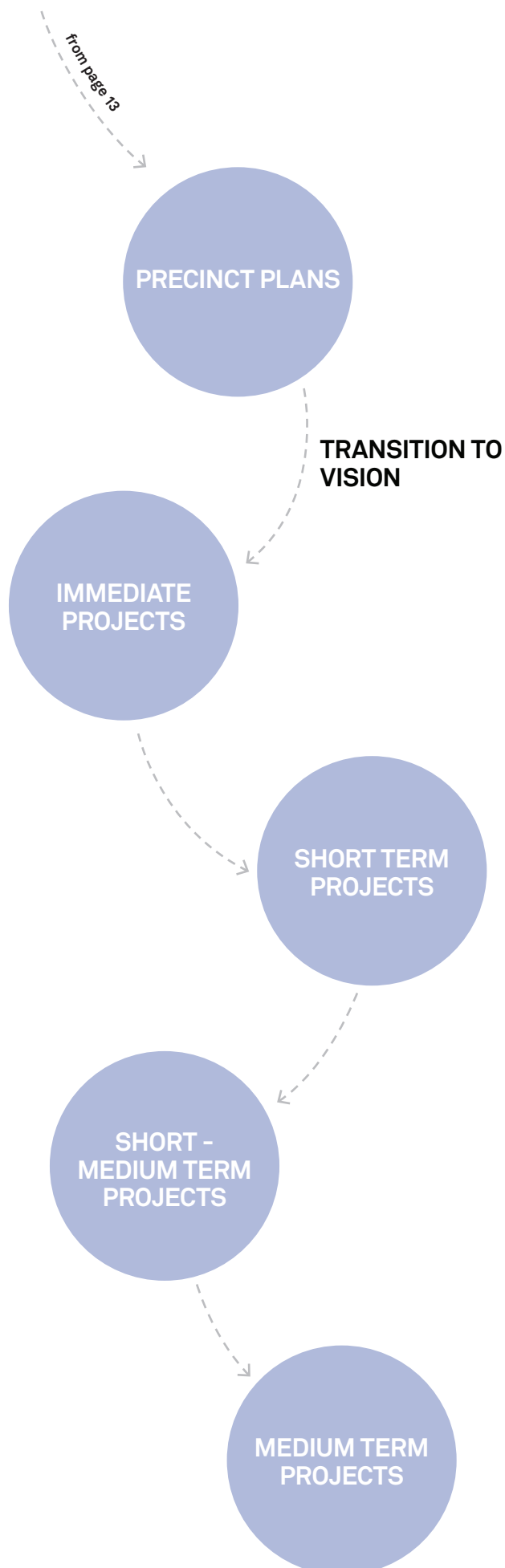
– projects that are necessary for the responsible management of the marina, to ensure it meets the needs of the community and industry and establishes a high quality and enduring investment in the marina.

Essential Infrastructure

– those projects that are considered essential in marinas, and without which the marina cannot achieve its full potential. These projects may include infrastructure upgrades and extensions to the breakwaters to enable other development and may also include staged interim infrastructure before longer term expansion.

Land and Water Site Assembly

– the availability of the land and marina area required to deliver projects. This is significant in the context of Two Rocks Marina, where most of the long-term projects will be in areas that are currently in water and/or outside of the existing marina reserve boundary.



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Timeframes

There is no current commitment from government to undertake the full extent of the proposed redevelopment and as such this Implementation Plan contemplates some projects which can be programmed now and which will begin to deliver the activation and community goals of the long term vision.

Delivery time frames for the identified projects are broken down into Immediate, Short Term, Short-Medium Term and Medium Term, reflecting realistic business case process, design, approvals and construction timeframes, and the logical delivery of projects in relation to land and site assembly. Projects are subject to State Government funding priorities.

A single 'Long-term' project is noted. This project embodies multiple projects that will be required to deliver the northern expansion of the marina. A second implementation strategy will be required at a time when the likelihood of the expansion is more imminent.

Immediate Projects

There are several projects including repairs to the breakwater, demolition planning and replacement for the existing marine industry buildings and new floating jetties that are already underway due to priority maintenance needs. These projects have already been communicated to the broader community.

In addition, the Department of Transport has recently completed a condition assessment of 'P' Jetty, and it has been determined that 'P' Jetty requires replacement. To ensure continuity of pen availability, the 'P' Jetty works will include construction of a new 'R' Jetty to the south. 'R' Jetty will accommodate some future growth and serve as a temporary pen facility during repairs and replacements to the commercial pens (jetties A-E). Immediate projects are likely to be either complete or substantially complete within the next 2 years.

Short Term Projects

Beyond the critical immediate projects, the Department of Transport will look to deliver core infrastructure to support the growing marina economy. The improvement of underground services and marina pathways, as well as construction of pen holder amenities and public ablutions within a landscaped area will establish the nucleus of the central hub in the marina, near to the existing marine industry area.

A second precinct will also be established in the south adjacent to the boat launching ramps, to significantly improve the community experience in this location. The southern precinct will include upgrades to the waters edge pathway, barbecue nodes, seating, shelter and public ablutions.

The design of the both areas will be such that the spaces can be utilised for casual relaxation whilst being serviced to support temporary activities such as food trucks. The central hub will also provide a suitable development site for private industry should there be interest in commercial development (for example; café/restaurant, chandlery etc).

A significant renewal of infrastructure is also likely in this second stage of development, with pen jetties A-E generally requiring staged replacement in the coming years. These boats will be temporarily located in a new 'R' Jetty location until a longer term commercial pen solution is completed adjacent the wharf. During this phase, the public will have high visibility of commercial fishing boats, adding to the relationship between the community and the business activity of the marina.

During this timeframe, Department of Transport will be undertaking southern breakwater investigations and preliminary design, to support the preparation of the necessary approvals documentation for environment, town planning and land tenure approvals.

Short-Medium Term Projects

Short-Medium term projects deliver substantial improvement to the user experience in the marina, including the provision of a central plaza and arrival point that links the marina to the upper lands of the town centre. The development of this node will support commercial and retail opportunities for private industry and a harbour managers office, but will also be a significant first step in setting the long-term character of the marina.

This plaza will be supported by much improved access infrastructure including pathways and road upgrades, a performance space and will be supported by landscaping, seating and shade.

Jetties A-E are located in an area comprising shallower water and some bedrock, which is not ideal for mooring. As these jetties are relocated in the previous stage, the reclamation of that area is now possible. The reclaimed area will be used to prepare for long term land development and may include an expanded area for boat servicing, storage and boat lifting, or for new boat ramps if additional ramp capacity is required before the northern expansion occurs. This area will be highly flexible, until the northern expansion occurs when maritime commercial activities are permanently relocated.

Dependant on approvals timeframes, it will also be possible to prepare detailed design for the southern breakwater expansion and recreation precinct during this stage, setting the stage for a significantly improved southern precinct at the marina.

Medium Term Projects

Medium term projects set the basis for longer term and much more substantial expansion. These projects will complete the southern vision for the marina and include the construction of the southern breakwater expansion and the resolution of the seagrass wrack concerns, as well as the resolution of the Yacht Club location.

An opportunity exists to work with the Yacht Club to achieve an improved facility that provides for long term operation of the club in a more optimal arrangement, which may include separate training and senior club facilities. This will need to be resolved as this stage of the marina expansion.

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Table 1: Master Plan Projects

Legend	Project/Development	Timing	Maintenance Priority	Community Benefit	Commercial Needs	Governance	Essential Infrastructure	Relies Upon
A*	Services preliminary design	I	●			●	●	
B#	Demolition of Building A & B	I	●	●	●	●		
C#	Development of new receivals building	I	●	●	●	●	●	Project B
D#	P Jetty Redevelopment & R Jetty construction (partial length, could include 25m vessels pens to support commercial vessels	I	●	●		●	●	
E*	Services upgrade and pathway improvements	S		●	●	●	●	Project A
F#	Pen holder amenities, public ablutions, harbour management and landscaped area	S		●		●	●	Project E
G#	Pathway upgrades, landscaping, barbecues, seating, shelter and public ablutions	S		●		●	●	Project E
H	Replace jetties A-E and complete dredging	S	●		●	●	●	Project D
I	Southern breakwater investigation	S		●		●		
J*	Commence southern breakwater approvals documentation - environmental and planning, land tenure	S		●		●		Project H
K#	Public plaza/arrival point connecting upper and lower lands to developing marina hub	SM		●	●	●		Project E
L*#	Procure new commercial/retail opportunities	SM		●	●	●		Project K
M#	Upgrade to entrance road, linemarking and waters edge pathways	SM	●	●	●	●	●	Project K
N	Reclamation to the northern extents to prepare land for longer term development; (i) boat service area; (ii) boat ramp if demand requires; or (iii) for increased boat lifter area, commercial leases	SM	●	●	●	●	●	Project G
O*	Southern breakwater expansion and recreation precinct detailed design	SM		●		●		Project H
P	Construct Southern Breakwater and Recreation Precinct	M		●	●	●	●	Project N
Q	Relocation of Yacht Club and New Commercial opportunities	M		●	●	●		Project O
R	Planning Northern breakwater and harbour expansion	L		●	●	●	●	

* Not all projects are identified on the plan as they are underground or administrative in nature

See Figure 7 for detailed concepts

Timing	
I	Immediate (0-2 years)
S	Short Term
SM	Short-Medium Term
M	Medium term (>15 Years)
L	Projects not listed but unlikely to commence without extension to northern breakwater. Long Term

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Short and Short-Medium Term Activation Projects

Short and Short-Medium term projects have been identified that will deliver infrastructure to activate and energise the marina.

The delivery of an exciting central plaza, amenities cafes and restaurants in a landscaped area create a community focus to the marina, whilst a second precinct in the south adjacent to the boat launching ramps including barbecues, seating and shelter will significantly improve the community experience in this area.

The projects may evolve as funding becomes available, but these small projects will begin to build a strong community at the harbour and underpin the vision for the future of the marina.

Figure 7: Short Term Activation Plan

Table 2: Master Plan Projects

Legend	Project/Development	Timing	Maintenance Priority	Community Benefit	Commercial Needs	Governance	Essential Infrastructure	Relies Upon
A*	Services preliminary design	I	●			●	●	
B	Demolition of Building A & B	I	●	●	●	●		
C	Development of new receivals building	I	●	●	●	●	●	Project B
D	P Jetty Redevelopment & R Jetty construction (partial length, could include 25m vessels pens to support commercial vessels	I	●	●		●	●	
E*	Services upgrade and pathway improvements	S		●	●	●	●	Project A
F	Pen holder amenities, public ablutions, harbour management and landscaped area	S		●		●	●	Project E
G	Pathway upgrades, landscaping, barbecues, seating, shelter and public ablutions	S		●		●	●	Project E
H	Remove jetties A-E and reclaim for future use	S	●		●	●	●	Project D
K	Public plaza/arrival point connecting upper and lower lands to developing marina hub	SM		●	●	●		Project E
L*	Procure new commercial/retail opportunities	SM		●	●	●		Project K
M	Upgrade to entrance road, linemarking and waters edge pathways	SM	●	●	●	●	●	Project K

* Not all projects are identified on the plan as they are underground or administrative in nature

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