

RIVERMOUTH PRECINCT DEVELOPMENT CONCEPT PLAN - DENMARK

NOVEMBER 2017

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













Acknowledgments

The Rivermouth Precinct Development Concept Plan has been produced for the Shire Of Denmark in consultation with and assistance from:

- The Rivermouth Foreshore DP Working Group
- Community Members & Residents
- The Smith Family (Clive Smith)
- Commercial Fishing (George Ebbetts)
- The Rivermouth Caravan Park
- Denmark Riverside Club
- Denmark Boating & Angling Club
- Denmark Yacht Club
- Local Tour Boat Operators
- Department of Water and Environmental Regulation
- Department of Transport



Legend







	VARIOUS TRAILS AS INDICATED ON DRAWINGS		TURF
			TURF MOUND
			GRANITE ROCKS
			ASPHALT PATH
	WAYFINDING TRAFFIC MGT. (BY COUNCIL)		BUSHLAND NATIVE PLANTING
	INTERPRETATION		CONTRASTING BITUMEN SURFACE TRAFFIC CALMING
	SCULPTURE PUBLIC ARTWORK		EXPOSED AGGREGATE CONCRETE PATH
	DRINKING FOUNTAIN		FORESHORE STABILISATION BRUSH-MATTRESSING
	OUTDOOR SHOWER		TIMBER BOARDWALK
	BOLLARDS ILLUMINATION		
	BENCH SEAT		
	RECLINING TIMBER SEAT		
	PICNIC TABLE + BENCHES		
	EXISTING CHANNEL MARKERS		

PHOTOGRAPHS PROVIDED IN THE REPORT ARE INTENDED FOR REFERENCE AND IDEA PRESENTATION PURPOSES ONLY.

Recommended Planting Palette

	AGONIS FLEXUOSA (PEPPERMINT)
	LEPIDOSPERMA GLADIATUM
	FICINIA NODOSA
	ANIGOZANTHOS FLAVIDUS
	BEAUFORTIA SPARSA
	XANTHOSIA ROTUNDIFOLIA

Recommended Material Palette

	STABILISED CRUSHED LIMESTONE
	EXPOSED CONCRETE AGGREGATE
	COMPOSITE TIMBER MATERIALS (LOW MAINTENANCE / DURABLE)
	ASPHALT ROAD
	GRANITE BOULDERS
	BRUSH MATTRESSING STABILISATION



1.0 Introduction

The Denmark Rivermouth Foreshore represents an area of natural, recreational and tourism significance to the Great Southern region. The area is a hub for a variety of activities including caravan park accommodation, commercial fishing, recreational boating, fishing and public recreation. An opportunity exists to enhance the existing infrastructure and natural landscape through considered site development and rehabilitation.

Entry to the Rivermouth Foreshore and Rivermouth Caravan Park is through a junction of several existing trails including the Mokare Heritage Trail, Bibbulmun Track, Karri Walk Trail, Denmark - Nornalup Heritage Rail Trail and the Munda Biddi Trail. This area forms a point of visual significance, and a natural Node / Hub meeting point where the entry meets the Heritage Railway Bridge.

Existing public facilities onsite include limited carparking, boat trailer parking, boat ramp, fish cleaning station, toilet block, non-permanent seating and boat moorings and jetties for commercial, recreational and tourism boating. The majority of existing facilities are situated in appropriate areas, however would benefit from upgrading and design development in keeping with the natural environment.

Enhancing the integration between the Heritage Precinct, the Rivermouth Foreshore and the existing Gazebo and BBQ area adjacent to the Heritage Railway bridge with a future Trail Node / Hub would also benefit the overall development.

While the existing natural layout, contours and progression of the foreshore allows for development and rehabilitation with minimal disruption to the existing landscape, there is significant weed encroachment into riparian vegetation. In addition, the Paperbark trees along the edge of the foreshore towards the Heritage Railway Bridge require protection. Areas of erosion along the foreshore require stabilisation, as well as access and usage formalisation to prevent further erosion.

The Rivermouth Caravan Park facilities adjacent to the foreshore are currently in the process of design development for a new building, with a public access shop / cafe. Design guidelines for the interface between the new facility, and the Rivermouth Foreshore Development Plan, will be an important aspect of the project, to ensure congruent and effective visual design objectives and development.

2.0 Site Analysis Place | Character | Principles

DESIGN PRINCIPLES

Create future Development Principles drawing from the natural Denmark landscape, that incorporate the requirements of Key Stakeholders and the Public.

Utilise the location of the Rivermouth Caravan Park entry to create a visually appealing point of interest and Information / Rest node, connecting through to the rivermouth foreshore.

Develop an accessible, modern and informative natural activity area - incorporating mixed use requirements (Caravan Park, Residents, Pedestrians / Public, Fishing, Boating), enhancing the existing potential for a natural Denmark social hub.

Provide access design elements (Pedestrian and Vehicular) that retain, protect and rehabilitate areas of significant native vegetation.

Create a consistent design language and interface between the Caravan Park and Foreshore.

Create clear zones; identifying public and private areas.

The use of materials, colours and vegetation that are consistent with design principles appropriate for the location and the Shire of Denmark's overall development plans.

DESIGN OBJECTIVES

Ensure due environmental consideration for all development principles.

Enhance the positive tourism and economic contribution that the Rivermouth Foreshore Caravan Park and associated areas provide for Denmark.

Acknowledge and incorporate social aspects of the site (Built, Historical and Indigenous Heritage).

Provide signage and amenities for the public, that are in clearly defined public areas.

Analysis of intersecting trails, and the potential for connections through to Ricketts Reserve and the Heritage Precinct.











The upgrade of existing amenities with a clear design language (shelter, fish cleaning station, toilets, boardwalks, jetties and boat ramp).

Due consideration given for existing usage of the Gazebo area to the west of the Heritage Railway Bridge.

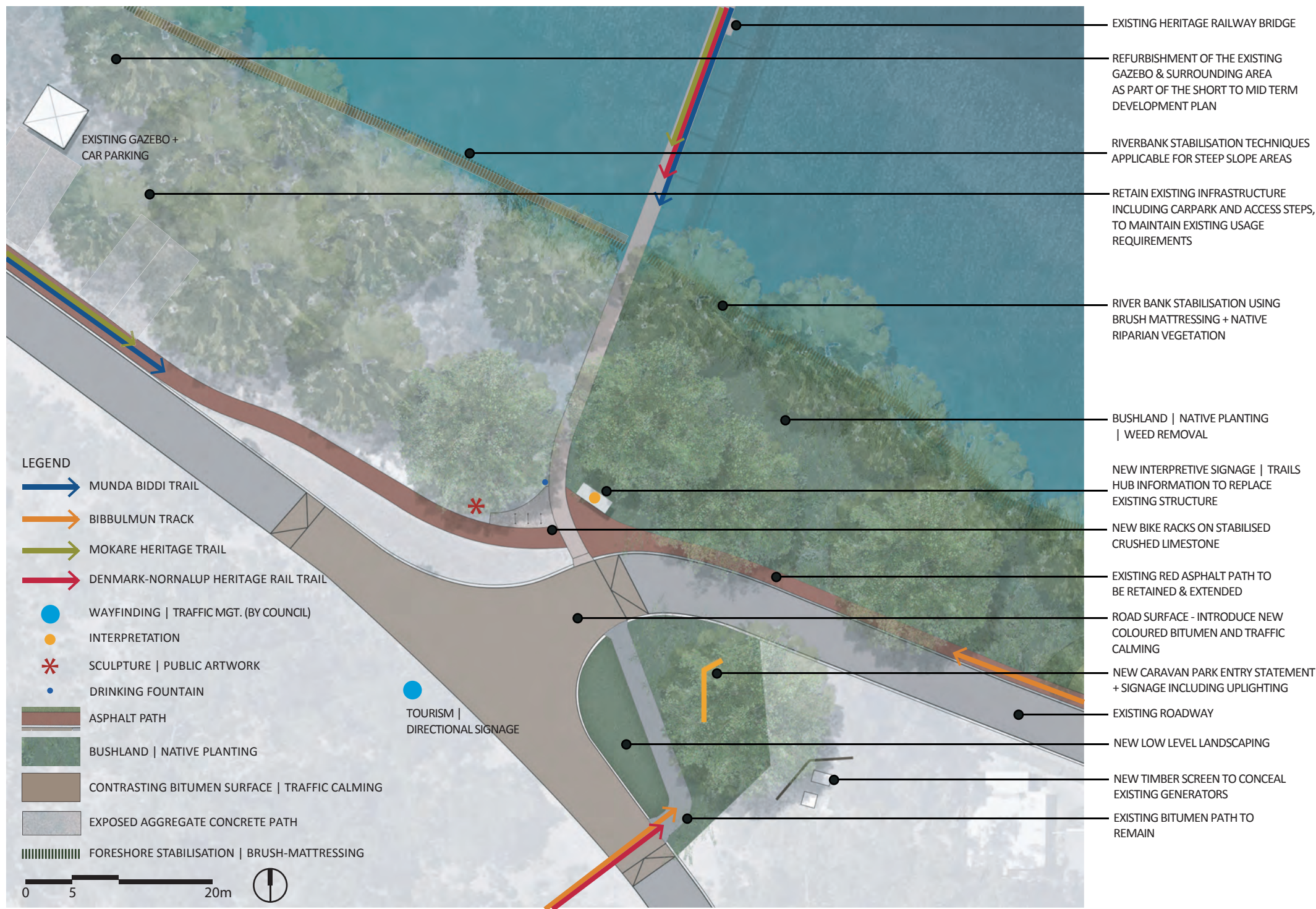
Staged development recommendations for Short to Mid Term (0 - 10 years) and Long Term (10 - 20 years) implementation guidelines.



LEGEND

-  FUTURE CONNECTION THROUGH TO RICKETTS RESERVE
-  WAYFINDING | TRAFFIC MGT. (BY COUNCIL)
-  INTERPRETATION
-  SCULPTURE | PUBLIC ARTWORK
-  EXISTING CHANNEL MARKER
-  RED ASPHALT PATH
-  BUSHLAND | NATIVE PLANTING
-  CONTRASTING BITUMEN SURFACE | TRAFFIC CALMING
-  FORESHORE STABILIZATION | BRUSH-MATTRESSING
-  TIMBER BOARDWALK

- | | | |
|---|---|------------------------------------|
| A ENTRY NODE | C RECREATIONAL AREA | E INLET BOARDWALK EXTENSION |
| B COMMERCIAL FISHING & CLASSIC BOATS | D BOATING / RECREATIONAL FISHING | F RIVERMOUTH CARAVAN PARK |



3.0 Entry Node (Area A)

The Denmark rivermouth foreshore entry is at a meeting point of several trails, including the Mokare Heritage Trail, the Bibbulmun Track, Karri Walk Trail, Denmark - Nornalup Heritage Rail Trail and the Munda Biddi Trail.



An opportunity exists to create a Node | Hub at the meeting point of the Heritage Railway Bridge and the Rivermouth Caravan Park.

This Node can incorporate a new Rivermouth Caravan Park entry statement, and a new timber structure with signage to facilitate information wayfinding, identifying the start of the rivermouth foreshore interpretation | information trail. Traffic slowing elements on Inlet Drive, where pedestrian access to the caravan park intersects with a number of trails, should however be considered.

An aesthetic site line between the trail information Node | Hub at the entry to the rivermouth foreshore through to the new shop / cafe development can be created. Public sculptural art works could also highlight the start of this site line, and connect visually through to the developed rivermouth recreation area. The next interpretation node to visually connect to will be the Commercial Fishing interpretation area.

Existing footpaths should be upgraded to match existing where required, and extended to include a connection through to the Heritage Railway Bridge, as well as a stabilised crushed limestone area for new custom bike racks.

To create a visually appealing entry node, the following design guidelines should be integrated for the caravan park entry and future development of the existing gazebo / rope swing area adjacent to the Heritage Railway Bridge:

- Layered natural timber structures and signage
- Timber screening to existing generators
- Composite timber materials utilised in the existing gazebo / picnic area (low maintenance / durable)
- Stabilised crushed limestone area for new custom bike racks, and exposed aggregate paths as required
- BBQs to be refurbished as part of the Mid-Term development plan
- New stainless steel drinking fountain adjacent to bike racks (wheel chair accessible) - adhering to natural, organic flow design principles
- River bank stabilisation using bio-engineering techniques such as brush mattressing (techniques appropriate for steep bank area required west of the Heritage Railway Bridge)
- Native riparian vegetation planting, and weed removal required
- Standardised signage for trail groups + wayfinding to be incorporated as required



IMAGE: TIMBER SCREENING INCORPORATING SIGNAGE



IMAGE: TIMBER STRUCTURES AND SIGNAGE



IMAGE: TIMBER WAYFINDING | INTERPRETATION SIGNAGE



IMAGE: TIMBER SIGNAGE STRUCTURES



IMAGE: NEW CUSTOM SCULPTURAL BIKE RACKS



4.0 Commercial Fishing (Area B)

Access to the river should be formalised in this area, to assist with and facilitate sustainable and continued small scale local commercial fishing from the rivermouth foreshore.



The use of floating jetties, anchored where there is a natural bank and break through the existing paperbark trees, would increase mooring accessibility.

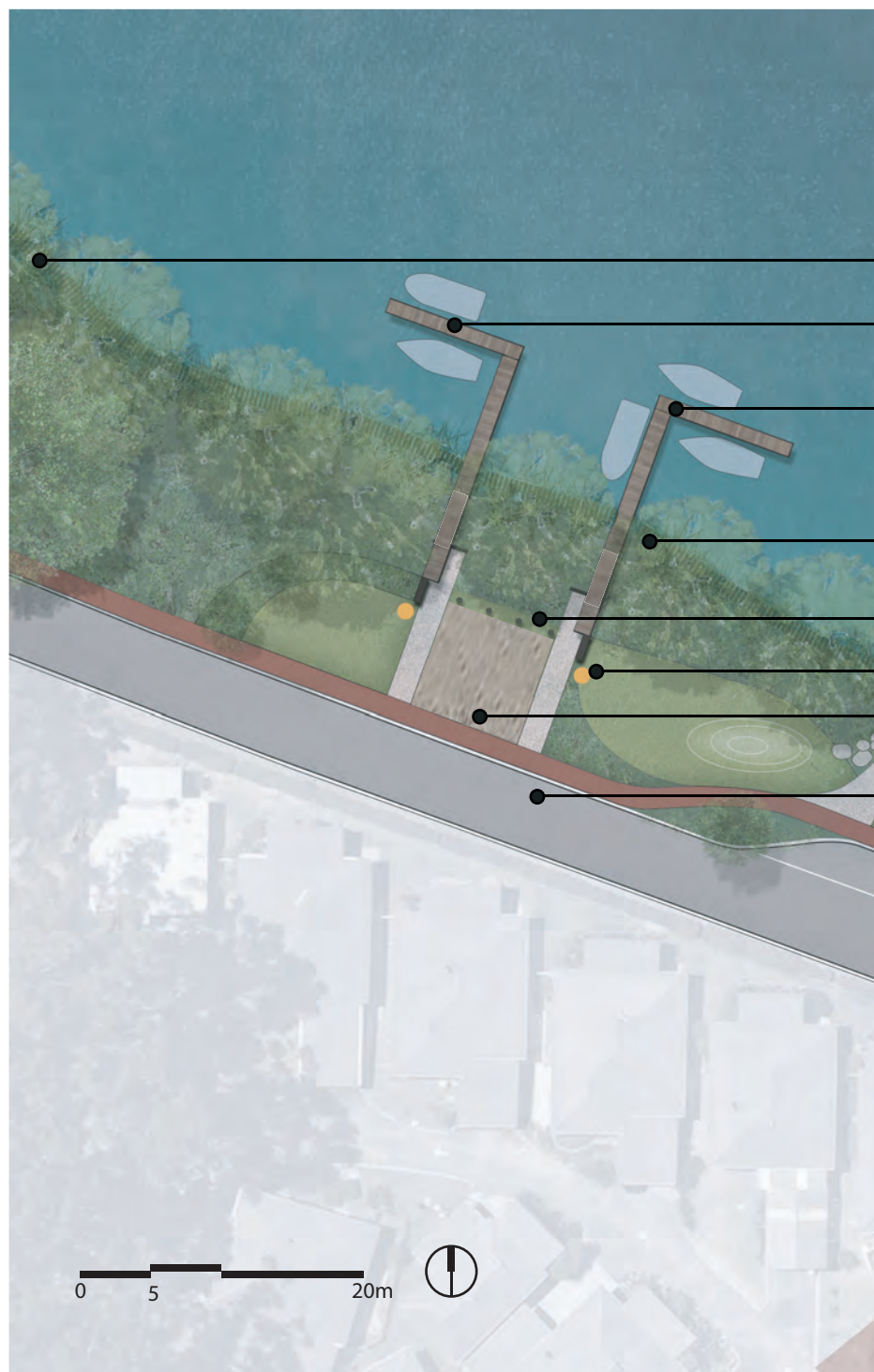
Interpretive signage should be continued along the foreshore; Area B being the second node, describing both the current and historical commercial fishing practices in the area. In addition, imagery of the old finger jetties could be included as a reference to the past river footprint and utilisation, as well as images of local boating groups utilising the river in the past and as they do today.

The influence that the Smith family has had in establishing commercial fishing in the Denmark area should be a focal point for the interpretive signage, highlighting that the family continue to utilise the area for commercial fishing today.

Fish can be purchased by the public directly from the fishing boats; this important social aspect specific to the rivermouth foreshore should be maintained and supported.

Design elements that can be incorporated into the area are:

- Core 10 and timber interpretation signage
- Riverbank stabilisation using brush mattressing
- New floating jetties with composite timber materials (low maintenance / durable)
- Stabilised crushed limestone area for the new hardstand
- Composite timber materials for bench seating (low maintenance / durable)
- Solar powered illuminated bollards



- RIVER BANK STABILISATION USING BRUSH MATTRESSING + NATIVE RIPARIAN VEGETATION
- NEW COMMERCIAL FISHING FLOATING JETTY WITH COMPOSITE TIMBER DECKING MATERIALS (LOW MAINTENANCE / DURABLE)
- NEW MULTI-USE FLOATING JETTY WITH COMPOSITE TIMBER DECKING MATERIALS (LOW MAINTENANCE / DURABLE)
- RIVER BANK STABILISATION USING BRUSH MATTRESSING + NATIVE RIPARIAN VEGETATION
- NEW SOLAR POWERED ILLUMINATED BOLLARDS
- INTERPRETATION SIGNAGE FOR COMMERCIAL FISHING
- NEW STABILISED LIMESTONE HARDSTAND AREA FOR COMMERCIAL FISHING TRAILERS AND VEHICLES
- EXISTING ROADWAY

LEGEND

- • • INTERPRETATION | WAYFINDING
- • • BOLLARDS | ILLUMINATION
- BENCH SEAT
- ASPHALT PATH
- TURF
- TURF MOUND
- BUSHLAND | NATIVE PLANTING
- STABILISED CRUSHED LIMESTONE
- EXPOSED AGGREGATE CONCRETE PATH
- ||||||| FORESHORE STABILISATION | BRUSH-MATTRESSING



IMAGE: FLOATING JETTY WITH COMPOSITE TIMBER DECKING



IMAGE: FLOATING JETTY



IMAGE: CORE 10 INTERPRETATION SIGNAGE & WAY FINDING

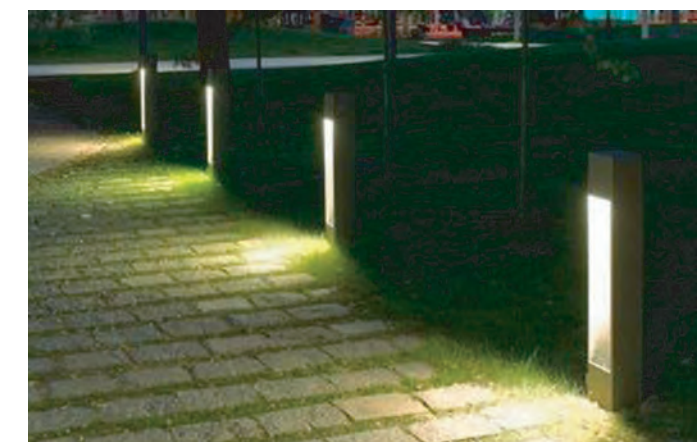
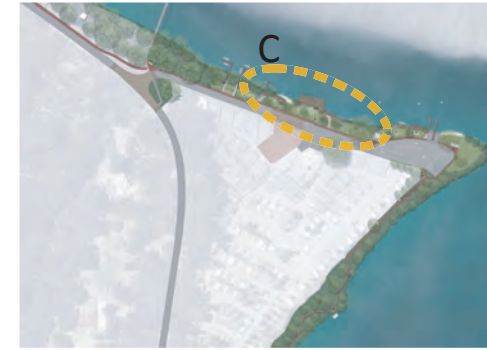


IMAGE: SOLAR ILLUMINATED BOLLARDS

5.0 Recreation & Caravan Park Interface (Area C)

The interface between the new Rivermouth Caravan Park shop / cafe and the foreshore should be developed using a design language consistent with the Rivermouth Foreshore Development Plan. This could include a road treatment to create traffic calming and a pedestrian zone connecting to the foreshore, potentially incorporating flush kerbs for accessibility.



Utilising a consistent design language, will assist in identifying the shop / cafe as a public "zone" versus the remainder of the caravan park. Elements such as a graduated, landscaped, and layered entry to the shop / cafe from the foreshore would create an open approach. A clearly accessible public building will provide much needed amenities and encourage visitors and locals to spend time at the rivermouth foreshore.

The turf area opposite the caravan park is a popular recreation place for the general public, as well as caravan park users. This area should be developed as the primary recreational zone.

Design elements that can be incorporated are:

Short - Mid Term Development Plan

- Informal nature / water play spaces in the overall foreshore recreation zone
- Increase shade facilities by providing trees (refer to Planting Palette), landscaping and structures utilising natural + composite timbers
- Increased seating facilities, including permanent seating, as well as seating that is integrated with the contours of the foreshore utilising composite timber materials (low maintenance / durable)
- Stabilised crushed limestone area for new custom bike racks, and exposed aggregate paths
- Solar powered illuminated bollards
- New outdoor shower to be incorporated with the existing ablution block
- New stainless steel drinking fountain (wheel chair accessible) - adhering to natural, organic flow design principles
- Accessible Floating Jetty with composite timber decking for tour boat operation, allowing side on mooring for commercial boats and greater utilisation (appropriate handrails to be incorporated)
- Short term mooring facilities to minimise informal mooring (preventing the use of star pickets)
- Native vegetation, including sedges, utilised to control pedestrian and vehicular access to the water as well as any potential grass encroachment

Long Term Development Plan

- Stepped access jetties for water craft launching + beach access at varying water levels
- Additional Finger Jetty extension



- NEW PADLEBOAT MOORING JETTY BY OTHERS
- NEW STEPPED ACCESSIBLE BEACH + JETTY ACCESS FOR WATER CRAFT LAUNCHING (LONG TERM PLAN)
- NEW FLOATING JETTY WITH COMPOSITE TIMBER DECKING FOR TOUR BOAT DOCKING
- NEW FIXED TIMBER JETTY WITH BENCH SEATING - POTENTIAL FOR EXPANSION IN LONG TERM PLAN
- NEW BIKE RACKS ON STABILISED LIMESTONE WITH ADJACENT DRINKING FOUNTAIN
- SHORT TERM MOORING (FORMALISED)
- RIVERBANK STABILISATION USING BRUSH MATTRESSING + NATIVE RIPARIAN VEGETATION
- EXISTING ABLUTION BLOCK TO BE REFURBISHED AS PART OF THE SHORT - MID TERM DEVELOPMENT PLAN WITH OUTDOOR SHOWER INCLUDED

- LEGEND**
- INTERPRETATION | WAYFINDING
 - OUTDOOR SHOWER
 - • • BOLLARDS
 - BENCH SEAT
 - PICNIC TABLE + BENCHES
 - EXISTING CHANNEL MARKERS
 - DRINKING FOUNTAIN
 - EXPOSED AGGREGATE CONCRETE PATH
 - ASPHALT PATH
 - TURF
 - TURF MOUND
 - BUSHLAND | NATIVE PLANTING
 - CONTRASTING BITUMEN SURFACE | TRAFFIC CALMING
 - GRANITE ROCKS
 - ||||||| FORESHORE STABILISATION | BRUSH-MATTRESSING



IMAGE: FIXED STEPPED JETTIES WITH COMPOSITE TIMBER DECKING

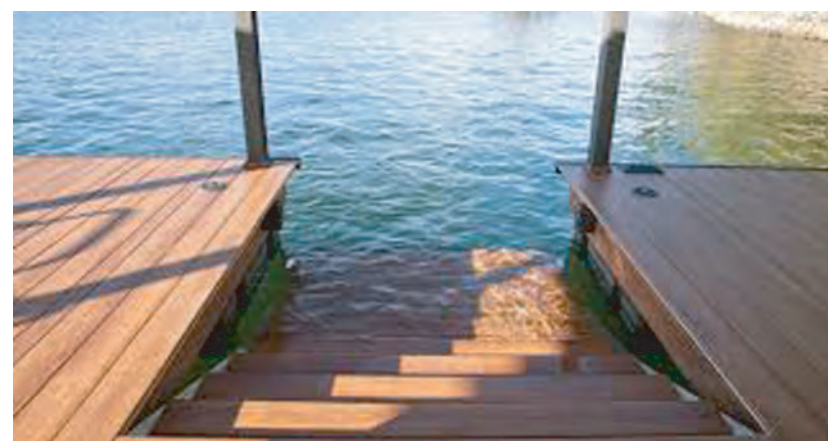


IMAGE: WATER ACCESSIBLE STEPPED JETTIES WITH COMPOSITE TIMBER DECKING



IMAGE: LANDSCAPING, NATIVE SEDGES & FORMALISED RIVER ACCESS



IMAGE: PEPPERMINT TREES FOR SHADING



IMAGE: DRINK FOUNTAIN



6.0 Boating & Fishing (Area D)

This area has been identified as a multi-use zone, incorporating boating, recreational fishing, river access as well as the socially significant boat ramp and fish cleaning station. The overall location of the facilities should be maintained, however they require significant refurbishment and upgrading.



The fish cleaning station is currently a social hub and should be upgraded in line with the development plan design guidelines. The facility should also be extended to include an additional shelter and boat washdown facility.

Areas of erosion along the river and inlet edges should be stabilised using bioengineering techniques including brush matting, and planting native riparian vegetation.

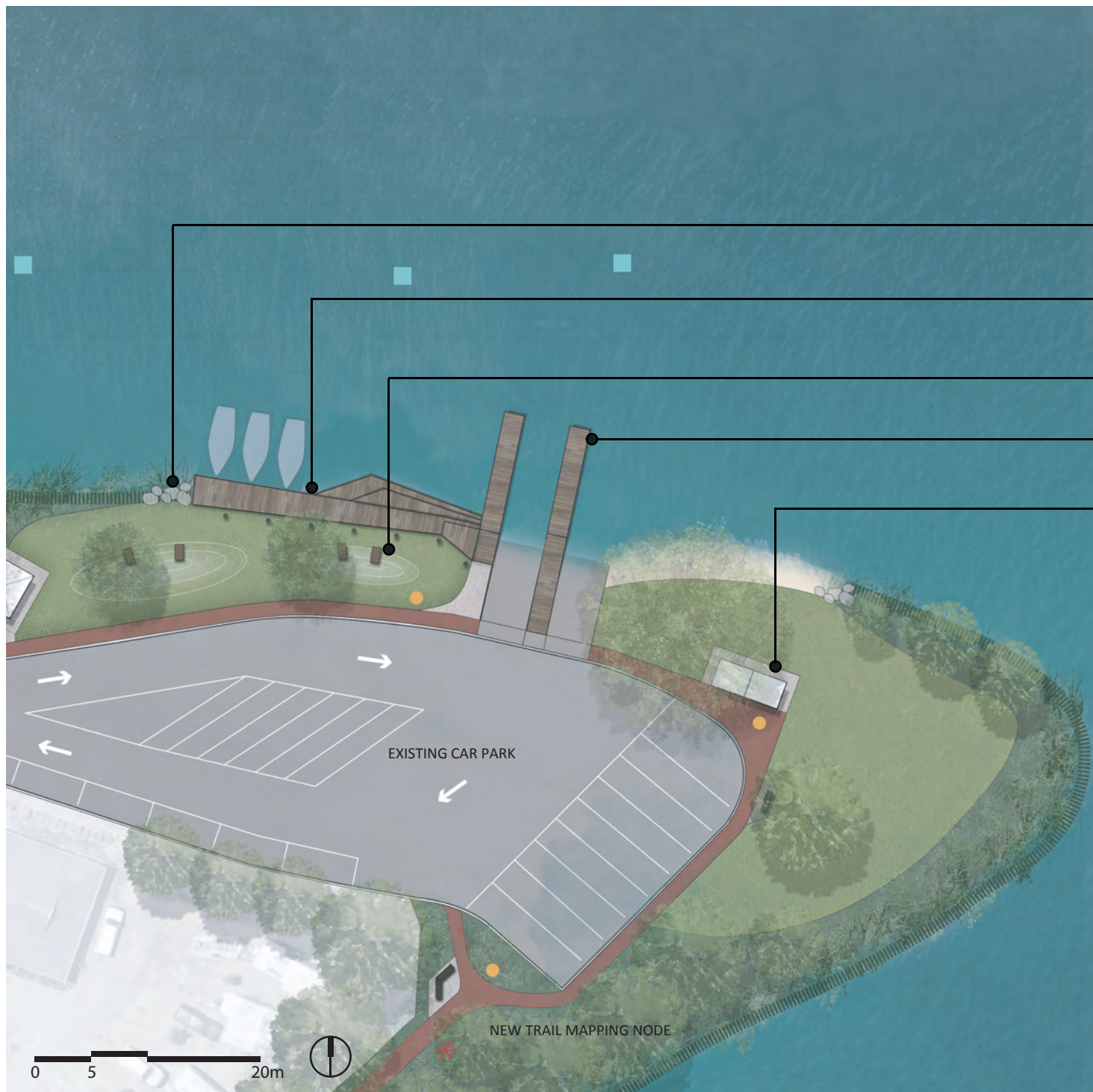
Floating Jetties should be installed to replace the existing jetty infrastructure, which will increase river access and utilisation. Due to the water levels and revised infrastructure, the existing concrete boat ramp level will require re-engineering with revised levels.

A river edge boardwalk and formalised boat mooring points will create safe / user friendly access along the river front. Low native riparian vegetation can be utilised to create a pedestrian barrier to water access.

The sandy beach access point to the river should be increased, to provide additional space for swimming and kayak, sailing and dragon boat launching.

The existing carpark line work should be upgraded. Existing boat trailer parking is to be maintained, and there is the potential for overflow carparking in the Heritage Precinct. The new walk trail signage created will help facilitate pedestrian direction from the Heritage Precinct to the Rivermouth Foreshore area.

A continuous path can be developed along the foreshore towards the inlet point, linking the existing foreshore and inlet trails. The opportunity for a trail mapping node can be created where the trails meet.



- RIVER BANK STABILISATION USING BRUSH MATTRESSING, GRANITE BOULDERS + NATIVE RIPARIAN VEGETATION
- NEW FIXED STEPPED JETTY WITH COMPOSITE TIMBER DECKING AND DURABLE NON-SLIP MATERIALS ON SUBMERGED SURFACES SUITABLE FOR MARINE CONDITIONS (POTENTIALLY REINFORCED FIBREGLASS GRATING); LONG TERM MOORINGS + ILLUMINATED BOLLARDS TO BE INCORPORATED
- COMPOSITE TIMBER RECLINING CHAIRS FOLLOWING THE CONTOURS OF NEW TURF MOUNDS
- EXISTING JETTIES TO BE REPLACED WITH NEW FLOATING JETTIES UTILISING COMPOSITE TIMBER DECKING + REVISED BOAT RAMP LEVELS
- EXISTING FISH CLEANING STATION TO BE REFURBISHED, AND EXTENDED TO INCLUDE A SEPARATE SHELTER, AS PART OF THE SHORT TO MID TERM DEVELOPMENT PLAN

- LEGEND**
- INTERPRETATION | WAYFINDING
 - * SCULPTURE | PUBLIC ARTWORK
 - BOLLARDS | ILLUMINATED
 - BENCH SEAT
 - RECLINING TIMBER SEAT
 - EXISTING CHANNEL MARKERS
 - EXPOSED AGGREGATE CONCRETE PATH
 - ASPHALT PATH
 - TURF
 - TURF MOUND
 - BUSHLAND | NATIVE PLANTING
 - CONTRASTING BITUMEN SURFACE | TRAFFIC CALMING
 - GRANITE ROCKS
 - ||||||| FORESHORE STABILISATION | BRUSH-MATTRESSING

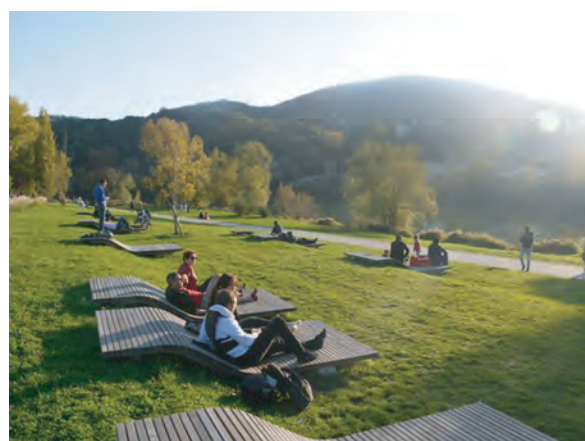


IMAGE: RECLINING SEATS CONTOURED TO TURF



IMAGE: FLOATING JETTY CONCEPT



IMAGE: DESIGN LANGUAGE FOR NEW SHELTERS



IMAGE: UPDATED FISH CLEANING STATION



7.0 Boardwalk (Area E)

From the trail mapping node created in Area D, there is the potential to create a boardwalk from the existing carpark, through to Ricketts Reserve.

Bird Hides and bird watching nodes can be incorporated into the boardwalk. There is also the opportunity to create a sculpture walk with installations by local artists.



Formalised bench seating, low level landscaping, illuminated bollards and low level boardwalk lighting would create a destination walk trail for the public and locals to enjoy.

Short to Mid Term Development Plan

- New timber boardwalk extension from the existing asphalt path
- Low level planting buffer between caravan sites and footpath
- Bird hide and bird watching | rest nodes
- Bushland | native planting | weed removal
- Composite timber materials for bench seating (low maintenance / durable)
- Solar powered illuminated bollards | low level boardwalk lighting
- Interpretive signage at rest nodes | points of interest

Mid to Long Term Development Plan

- Timber boardwalk extension from the existing carpark through to Ricketts Reserve
- Sculptural walk trail with installations by local artists
- Additional bird hide and bird watching | rest nodes
- Bushland | native planting | weed removal
- Additional composite timber bench seating (low maintenance / durable)
- Additional solar powered illuminated bollards | low level boardwalk lighting

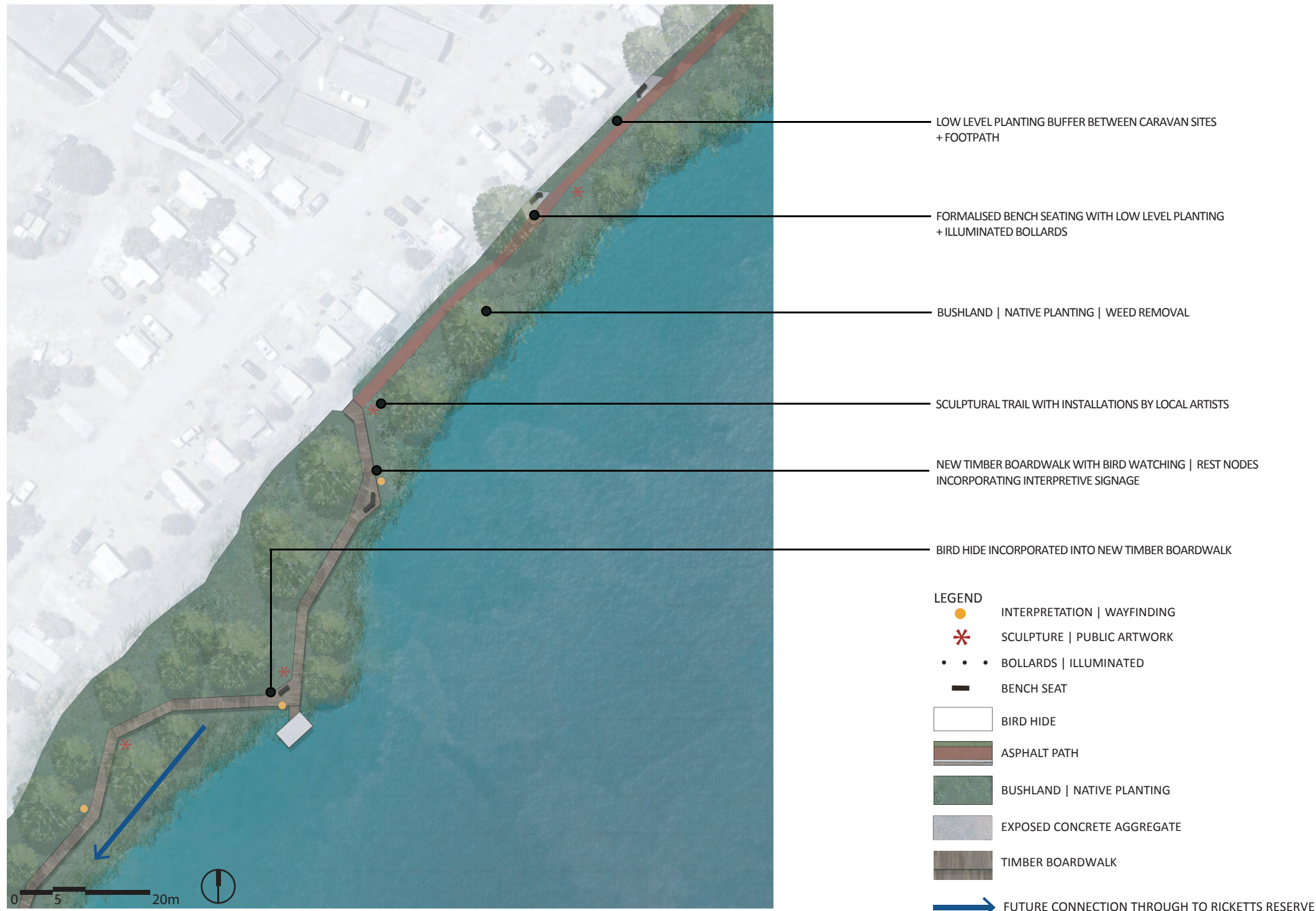


IMAGE: BOARDWALK



IMAGE: TIMBER INTERPRETIVE SIGNAGE

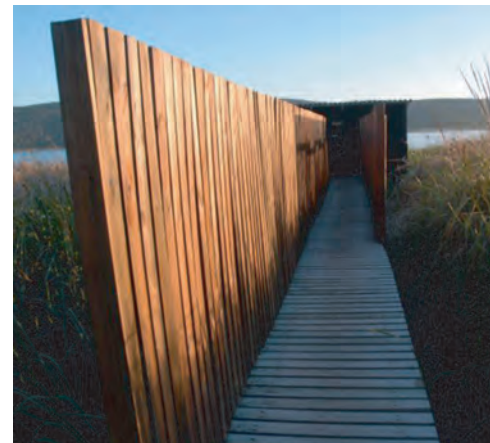


IMAGE: BIRD HIDE



IMAGE: BOARDWALK SEATING + LOW LEVEL LIGHTING



IMAGE: SCULPTURAL TRAIL

8.0 Rivermouth Caravan Park Precinct (Area F)

The future development of the Rivermouth Caravan Park will play a vital role in retaining and enhancing the recreational and social importance of the Rivermouth Foreshore area, for the Denmark community, and visitors to the Great Southern region.

The Rivermouth Caravan Park contributes significantly to the tourism industry in Denmark, and forms an integral part of the Rivermouth Foreshore recreational hub.

Improving the amenities and services provided at the Rivermouth Foreshore (cafe / shop / amenities / improved river activity access), specifically through the Caravan Park, will assist in creating an accessible and user friendly area, as well as a tourism draw card for the region, where both the community and visitors will want to stay and enjoy the foreshore's natural beauty and resources.

This report and associated plan are intended as a resource to upgrade and supersede the existing 2004 Development Plan, encapsulating work that has occurred onsite to date, and providing guidelines for future development areas identified across the site (Reserve 46241). The guidelines are intended to consider the potential needs and requirements of the community, the Rivermouth Caravan Park lessees and the Shire of Denmark (*in the capacity of the Management body for the Reserve*).

The plan has been separated into a number of Development Areas to allow flexibility and development options for the Caravan Park lessees. Design principles adopted in the Foreshore Development Plan should guide future Caravan Park development designs, ensuring consistency throughout the site (Rivermouth Caravan Park & Foreshore).

Design principles that can be incorporated are:

- Shade facilities by providing trees (refer to Planting Palette), landscaping and structures utilising natural + composite timbers
- Seating and other facilities utilising composite timber materials (low maintenance / durable)
- New built structures to follow the design language established for the Rivermouth Foreshore Development Plan, and incorporate layered natural + composite timbers and materials
- Stabilised crushed limestone areas for feature areas, and exposed aggregate paths
- Solar powered illuminated bollards
- Where stainless steel amenities are required, they should adhere to natural, organic flow design principles
- Native vegetation utilised to control pedestrian and vehicular access & egress



- PERMANENTS AREA (INCL. MANAGER'S RESIDENCE)
- RECEPTION OFFICE / CAFE / SHOP
- RECREATION + FACILITIES AREA
- CHALET AREA
- MAINTAIN 12m NATURAL LANDSCAPE BUFFER BETWEEN CARAVAN PARK + INLET DRIVE
- CARAVAN + CAMPING SITE AREA
- BBQ / RECREATION AREA

LEGEND	
	EXISTING SITE BOUNDARY
	RECEPTION / OFFICE / CAFE / SHOP
	PERMANENTS (INCL. MANAGER RESIDENCE)
	RECREATION & FACILITIES
	CHALETS
	CARAVAN & CAMPING SITE
	BBQ / RECREATION AREA



IMAGE: CARAVAN PARK RECEPTION / SHOP / CAFE AESTHETIC



IMAGE: CHALET AND LANDSCAPING DESIGN TO MATCH EXISTING



IMAGE: NATURAL CAMPING GROUND FACILITIES MAINTAINING TREES AND TURF AREAS



IMAGE: BBQ AREA FIXTURES USING NATURAL MATERIALS

9.0 Site Sections (Conceptual)



Section Location Plan



SCHEDULE OF SUBMISSIONS: DRAFT RIVERMOUTH PRECINCT DEVELOPMENT CONCEPT PLAN

Submission Number	Name & Address	Verbatim Submission	Comments <ul style="list-style-type: none"> • Rivermouth Precinct Development Concept Plan Working Group • Shire Officers (post-Working Group Meeting)
1.	[REDACTED]	<p>My comments on the concept plan are:</p> <ol style="list-style-type: none"> 1. It must be very clear that the public can access the area off Inlet Drive. 2. The parking along the foreshore across from the cafe should be available to the public, not park clientele. 3. Swimming should be mentioned and catered for; if not considered safe, then major steps should be made to make it so. 	<p>Working Group:</p> <ul style="list-style-type: none"> • Acknowledged; this is the intent of the improvement works – in particular the tourism/directional signage component at the entrance to the precinct off Inlet Drive. • The parking is available for public use. • The improvement works provide the opportunity for those who wish to swim.
2.	Department of Water & Environmental Regulation (Water)	<p>Thank you for referring the above proposal to the Department of Water and Environmental Regulation (DWER) for comment. DWER has no objection to the Rivermouth precinct development concept plan and provides the following advice.</p> <p>Waterways Conservation Act 1976 Wilson Inlet is a declared Waterways Management Area under <i>the Waterways Conservation Act 1976</i>. Under this Act, DWER has management responsibility for the protection of the waters and the associated foreshore areas. DWER also has approvals processes for certain works affecting waterways and foreshore areas and can provide advice on other developments affecting, or likely to affect, the condition and public amenity of these waterways.</p> <p>This includes:</p> <ul style="list-style-type: none"> • Changes or intensification of land use adjacent to or impacting on waterways or their foreshore areas. • Dredging, reclamation, dewatering, drainage and construction activities including retaining walls, jetties, private boat ramps or public facilities. • Other activities that may affect the declared management areas. <p>The Shire is advised to contact the South Coast regional office of DWER for further advice prior to the construction of the individual elements (jetties, boardwalks, ect.) included in the concept plan.</p> <p>Denmark River Foreshore DWER is supportive of the proposal to undertake riverbank stabilisation and revegetation works in the precinct area. DWER notes that the proposed works are consistent with the objectives of the Wilson Inlet Foreshore Reserves Management Plan 2008.</p>	<p>Working Group: Noted.</p>

<p>3.</p>	<p>Great Southern Centre for Outdoor Recreation Excellence</p>	<p>I am writing to provide feedback on the draft Rivermouth Precinct Development Concept Plan. The range of initiatives outlined in the draft Concept Plan promise to deliver an enhanced outdoor recreation experience for both residents and visitors and the Shire is to be congratulated on its plan to improve the amenity and functionality of this area. I am pleased to offer the following detailed feedback on the Concept Plan:</p> <p>1) Entry Node (Area A) The Concept Plan correctly identifies this area as a key trail node for a number of walking and cycling trails and thus the importance of ensuring that trail signage and interpretation is prominent and relevant to a range of trail users. In particular, the intersection of two nationally significant long-distance trails (the Bibbulmun Track and the Munda Biddi Trail) at this location demonstrates the importance of developing appropriate signage. Development of the trail and signage should take into consideration the following issues:</p> <ul style="list-style-type: none"> • Linkages to existing trail hub signage (e.g. Denmark Visitor Centre) • Linkages to other local and regional trails networks • Aquatic trails – the Denmark River and Wilson Inlet are both sites for informal aquatic-trails. The Trail Hub Information structure should refer to the Rivermouth precinct as an aquatic trail launch point and include maps of these trails. <p>2) Recreation & Caravan Interface (Area C)</p> <ul style="list-style-type: none"> • The location of the paddle craft launch area adjacent to the boat slipway (Area D) poses a range of safety concerns (see below). For this reason, consideration should be given to building the stepped down accessible beach and jetty (Area C) in the short to medium term (currently identified as a long-term strategy). • “Road treatments to create traffic calming and a pedestrian zone” – these treatments should also take into account cyclists. The existing trail from the Heritage Bridge is effectively a dual-use trail. <p>3) Boating and Fishing (Area D) The Concept Plan identifies the sandy beach access area as a key site for launching kayaks, and Dragon Boats. It is also a key site for launching stand-up paddleboards (SUPs). In developing this site, consideration should be given to:</p>	<p>Working Group:</p> <ul style="list-style-type: none"> • Acknowledge need for appropriate signage; the actual detail of signs will be considered further in due course noting the comments provided in this submission. • Current boat traffic in this area is low hence it is considered that the safety risks are low. • The timeframes for the improvement works provided for in the Development Concept Plan, not just the accessible beach and jetty, will be dependent on funding. • The design considerations for the improvement works provided for in the Development Concept Plan were acknowledging multi-use of the trails (noting the existing paths service this dual function already). • Acknowledge that the sandy beach area is available for launching stand-up paddleboards as well; do not consider there is a need to reference every activity that may use this area. • The parking bay closest to the lawn area can be designated as the drop-off/pick-up bay for this purpose. • At this stage informal access arrangements are satisfactory; if more formal access is required in the future it should be a low key appropriate treatment option. • In light of submissions received and from a sustainability perspective, the boat washdown facility should be deleted from the improvement works. • Current boat traffic in this area is low hence it is considered that the safety risks are low. This sandy area is perfect for kayakers and paddleboarders to access the river or inlet; noting that this area is currently used for this purpose due to the adjoining car parking area, access opportunities etc. • Acknowledge the boardwalk should be constructed to a dual use path standard such that can be accessed by all (pedestrians, cyclists and people with disabilities). • The image of bike racks was not to be taken that those specific bike racks would be built; moreso that there is a need for bike racks that within reason will try to accommodate the variety of bike users that are
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		<ul style="list-style-type: none"> • Parking and/or trailer access to launch water craft. Canoes and kayaks are often placed on vehicle roof tops and to safely remove the vessel the car parking bays need to have extra width and/or adequate additional space at the rear of the vehicle in order to lay the vessel on the ground. Consideration could be given to a temporary bay close to the launch site where vehicles can unload vessels. • Foot access to the launch site. At the moment, there is no designated path from the car park to the kayak launch site and the grassed area is uneven and blocked by other structures. This makes using hand manoeuvrable canoe/kayak trailers difficult to use. Using the boat slipway to carry vessels down to the water's edge is risky and dangerous, particularly during peak periods. Consideration should be given to a dedicated path that enables disabled access to the launch site. • Boat Washdown Facility. The Concept Plan recommends the upgrading of the fish cleaning station to include additional shelter and a boat washdown facility. It is not clear from the site map how this would impact on the grassed area adjacent to the beach where swimmers and paddlers typically rest. If a washdown station is built, consideration should also be given to other users, including paddlers and cyclists that may wish to use the washdown area. A washdown station suitable for bikes would enable the site to become a key node in the Shire's cycle trails. • Conflict between users. The location of the sandy beach on the inlet side of the slipway and mooring area creates dangers for swimmers and paddle craft. The majority of kayakers and paddleboarders head up river from this site and thus have to cross the paths of motorized vessels. Consideration should be given to building the stepped down accessible beach and jetty (Area C) in the short to medium term. <p>4) Boardwalk (Area E) The plan to build a boardwalk in this area will significantly improve the amenity and linkages to other parts of the foreshore. Consideration should be given to ensuring that this trail is dual-use and accommodates cyclists.</p> <p>5) Other Issues: The plan identifies the need for a number of new bike racks. Please note that the image used (page 4) of "New custom sculptural bike racks" does not comply with best practice rack design. Namely, it should:</p>	<p>compliant with the Australian Standards whilst also seeking to provide a sculptural element with the aim of "keeping it Denmark".</p>
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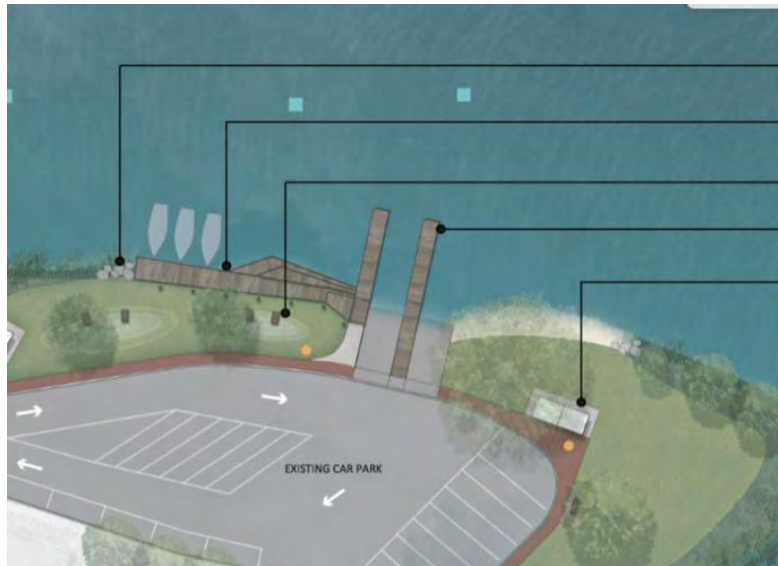
- provide two points of contact between the bicycle and the rack to provide stability and security
- allow for the locking of the frame and one or both wheels
- compatible with standard locking devices — particularly the standard u-lock

Given the proximity to the Munda Bididi Trail (particularly Area A), the bike racks should also be able to accommodate touring bikes laden with heavy panniers and/or trailers.

4.

I have read the Draft Rivermouth Foreshore Development Concept Plan – Denmark dated Nov 2017 and applaud its content and approach. I have also had a look through the Denmark Strategic Boating Plan and other related documents on the strategies for the sustainable development of the Wilson Inlet.

As a yacht owner and having previously had some experience in managing yacht moorings as Commodore of Nedlands Yacht Club, I would like to particularly comment on the recreational mooring facilities.



Page 7, Section 6 Boating and Fishing (Area D) shows moorings for only 3 boats adjacent to each other at right angles to a fixed jetty.

To moor boats like this requires a method of preventing them swinging in the flow of the river or to the wind which would normally be provided in a marina by posts or finger jetties fixed to posts.

Working Group:

- The boat layout is indicative; during the detailed design considerations suitable mooring arrangements will be explored further.
- As the submitter has identified, the finger jetty proposal for every 2 boats is quite expensive; noting that that the mooring of boats in this area was intended not to be of a permanent nature but moreso a short-term mooring arrangement (i.e. laydown area for drop-off or retrieval of boats, when using the foreshore area facilities etc).
- The proposal for moorings on the northern side of the river is not supported nor considered warranted at this stage; noting that the plan does provide opportunities for consideration of additional moorings in Area C and Area B – potentially providing room for an additional 6-9 boats depending on the arrangements).
- In terms of future sites for a yacht club and/or launching ramps, this should be considered as part of the Sport and Recreation Master Plan as is outside of the terms of reference/scope for this Development Concept Plan.

Currently boats are being secured by a combination of a stern mooring block and diagonal guys/springs to the sterns of the boats from star pickets.

The ideal situation would be a long floating jetty parallel to the bank with floating finger jetties every two boats. A fixed jetty is too limiting with the changes of water level that occur in the Wilson Inlet. As the population of Denmark grows and more moorings are required finger jetties can be added. I realise the cost of this arrangement may be prohibitive but as a 10 year plan I think we should be expecting an expansion beyond the current 4 yachts that are moored there today.

A cheaper and possibly more environmentally sound alternative is to put moorings in the river which fix the boats by bow and stern moorings parallel to the flow of the current. The far bank closer to the railway bridge could be used for this. Boats will then be accessed by dinghy which will require a small dinghy storage / lock up area possibly next to the planned commercial fisherman's car park.

The other advantage of moorings for boat owners is security. Boats tied up to jetties are very easy to access by those wishing to steal an outboard or other equipment. Ugly barbed wire security gates at the beginning of jetties are standard in marinas and yacht clubs around the country and would sadly become a requirement here.

I have roughed up an image of what these alternative plans might look like in plan.



Sadly the river mouth is really not big enough to cope with many moorings. The Denmark Strategic Boating Plan points out two major problems with the gazetted Yacht Club area to the west of the river mouth; shallow/rocky water and no protection from the summer's SE winds making it a lee shore launch which is dangerous to impossible for most sailing boats in shallow water. A further problem with the sewerage plant outfall here has also recently been in the news.

I believe a good alternative is the old Denmark caravan park site protected by Honeymoon Island to the east and a much shorter SE wind fetch to the Nullaki. There is a grassy rigging area for dinghies. The water is slightly deeper. There is the foundations of an old building in the scrub at the south western end of the bay that could be used as the basis for a basic yacht club and a launching ramp could use the adjacent gently sloping granite as a base.



I realise that this is a half formed plan but it could be investigated further and is a much better location from the point of view of winds from all directions.

In the interim before any of these options are funded or built the current use of star pickets to moor our boats could be replaced by timber or steel mooring bollards concreted into the bank of the river.

5.




The plan seems to lean heavily to the commercial use of the foreshore. The short-term plans are all for the benefit of the Caravan Park's additional enterprises.

Working Group:

- The Terms of Reference for this project was for the development of a Development Concept Plan to

		<p>The plan also leans heavily towards facilities for commercial fisherman and neglects local residents. At present we have one local commercial fisherman using the area consistently, but there are two jetties proposed for their use.</p> <p>It should be remembered that the foreshore is specially excluded from the Caravan Park lease because the enjoyment of the area is for residents and ratepayers primarily, not commercial ventures or tourist despite their contribution to the town's economy. Any development must reflect this.</p> <p>At last count there were two fisherman's dinghies, one tour boat, one ex-mussel boat making up the commercial operations. There were two short-term Caravan Park visitor's and one resident's boats. There were four local resident's classic wooden boats and yet these are not even mentioned in your concept plan apart from an indirect reference to past and present boating groups. Further, the Denmark Classic Boat Association is not mentioned in your acknowledgments even though Greg Harwood personally invited me as a representative. By text, at the last minute, during work hours.</p> <p>To the plan itself:</p> <p>Area A:</p> <ul style="list-style-type: none"> • There is an opportunity to place buoyed moorings in the river in this area to cater for additional watercraft. <p>Area B:</p> <ul style="list-style-type: none"> • The second (Southern) L-shaped jetty will interfere with the entrance to the existing finger jetty (not on your map). • It is unclear from the map whether the proposed finger jetty for paddleboats replaces or is in addition to the existing jetty amid the paperbarks that provides mooring for two boats. <p>Area C:</p> <ul style="list-style-type: none"> • The tour-boat floating jetty should have facilities for the pump out of boat holding tanks. The proximity of a sewage line makes this feasible. Power and water should also be provided. <p>Area D:</p> <ul style="list-style-type: none"> • Firstly, there are no stern moorings posts or buoys for the yachts. They will swing from the bank. • Secondly, there are spaces for only three boats. At last count there were four yachts, three of which are wooden classics. 	<p>guide the future usage and development of the Caravan Park and the Rivermouth Precinct, noting such plan was to form basis for a new lease discussions in relation to the Rivermouth Caravan Park located on Reserve 46241.</p> <ul style="list-style-type: none"> • The plan provides for only one jetty for commercial fishing as the second jetty in Area B is designated as multi-use (i.e. classic boater, private mooring requests (by application) etc). • The acknowledgements to Denmark Riverside Club is reflective of the relevant groups that come under this umbrella – being Classic Boats, Dragon Boating and Kayaking. • Area A is not considered an appropriate area for mooring activities to occur having regard to the existing vegetation and foreshore environment in this area. • The proposed I-shaped jetty in Area B would replace the existing finger jetty hence it is not shown. • The current tour boat that uses this jetty as holding tanks that are removed when the boat is out of the water negating the need for pump-out facilities on the foreshore. • The sewerage line in this area is a private sewer main installed by the operators of the Rivermouth Caravan Park and by agreement the Shire of Denmark can use for the disposal of sewerage from the public toilets on the foreshore. • The Working Group did discuss at length whether fuelling and/or pump out tank facilities should be provided, with the final position being that such facilities were not warranted at this point in time as other suitable arrangements could be provided. • During the detailed design considerations suitable mooring arrangements will be explored further. • The multi-use jetties in Area B provide opportunities for the more permanent moorings that currently exist in the area. • The plan seeks to balance a range of uses of the foreshore and on balance it is considered that there are appropriate areas for mooring opportunities without utilising all of the foreshore bank as suggested by the submission.
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		<ul style="list-style-type: none"> The section of riverbank between these moorings and the Caravan Park's tour boat mooring is the widest navigable part of the Rivermouth area but moorings are excluded for riverbank stabilisation. A boardwalk and mooring area here would solve both problems. 	
6.		<p>The Shire of Denmark is to be congratulated on the concept plan for this area.</p> <p>The time period for the plan is divided into a two stage period, thus short – medium term (0 - 10 years) and long term (10 - 20 years). I would consider the longer term period too long as expectations may change in that period or be considered inappropriate.</p> <p>It is certainly to be considered that an upgrade of the area is a requirement as use of the foreshore has been abused by some of the public and professional fishermen boat usage with some boats having sunk and others as an inappropriate boat storage facility.</p> <p>What is not mentioned in the plan is the removal of remnants of old jetties and concrete blocks that are currently a hazard at the fringes of the shoreline.</p> <p>It is also considered disappointing that no provisional costing has been attempted as a whole, or per time period, or per section. Nor any indication whether the financial burden will be carried by the shire, attempt to obtain grants, or that primary users will foot the bill.</p> <p>Another issue is there does not appear to be any disability fishing facilities made available for this areas.</p> <p>Area A – THE ENTRY NODE The existing roadway is marked in the legend as exposed aggregate concrete path, obviously in error. Some signage to indicate the various trails is good idea as there are visitors to the area that make use of the trails and is also of interest to the general visitors to the area.</p> <p>It is felt with all the proposed signage/screening in a small area as proposed is over the top as shown in the attached images.</p> <p>The parking areas for the gazebo/picnic users and the Heritage trail walkers/cyclists is to be retained.</p> <p>A clean-up of the area east of the bridge is a requirement.</p> <p>Area B/Commercial Fishing</p>	<p>Working Group:</p> <ul style="list-style-type: none"> There is an opportunity to review Concept Plans should there be a need to do so; acknowledging that expectations may change in the future. By definition, implementation of the improvement works will result in removal of any old jetties, unapproved jetties/moorings (noting the Shire is aware, based on previous advice from the Department of Transport, that there may be some unapproved moorings in this area) etc. Comments noted regarding no costings – this was outside of the scope of this process; noting for future concept plan processes this will be factored into the work required to be undertaken. Implementation of the Concept Plan will be dependent upon access to grant funds, Council budget priorities and/or private contributions where considered appropriate to undertake the recommended works in due course. Improved access and facilities for people with disabilities was a key objective; specific use facilities have not been provided however the detailed design considerations for the improvement works will ensure such objectives are considered and accounted for. The existing roadway colour is not shown as exposed aggregate concrete path – it is acknowledged that the colour grades are very similar and this will be addressed in the modifications. Trails hub signage at the entrance to the precinct is a key improvement work provided for in the plan already. The images are indicative for illustration purposes only and not reflective of the extent of signage. The retention of the parking areas near the gazebos off Inlet Drive is provided for. Weed removal works and a general tidy-up are proposed to be undertaken in the area east of the bridge.

		<p>The current “commercial fishing jetty” area is a mess and a disgrace to the general area.</p> <p>To have 2 floating jetties to service 5 commercial fishing boats seems very excessive when there is normally one boat moored there and at one stage the “mussel farm boat” was moored there (has not been there for at least 2 years). It may also happen that commercial fishing be closed to the Inlet in the future.</p> <p>At this stage one floating jetty should suffice. To have a stabilised surface for 2 vehicles with trailers seems to defeat the purpose of the jetties. For launching their boats, the public facilities can be used (Area D). I am not aware that fish could sold at this location currently, there would be health requirements of this was the case.</p> <p>The costing for this facility should be known and also would the fishermen be liable for it or would they lease their mooring.</p> <p>There is no time period mentioned for this facility.</p> <p>Area C/Recreational & Caravan Park Interface. What is apparent in this area is that the caravan park owners have up graded their area for their Tour Boat and their smaller craft in the last couple of years. Whether it is considered adequate is a matter of debate, I assume the Caravan Owners consider it adequate.</p> <p>Most of the short term elements can be completed and enhance the area substantially and will be cheap to do and can start in the very near term.</p> <p>It is not clear what is meant by short term mooring (what time period), is it for the period of a yacht race?</p> <p>Reference to stabilised crushed limestone and aggregate paths would indicate to me that they will be unsuitable for wheelchairs, this is contrary to the disability facilities the Shire aspires to. The whole of the grassed areas should be made suitable for wheelchair access.</p> <p>Access to this area should therefore have flush curbs along this section.</p> <p>The Jetty to service the Tour Boat seems very excessive and probably very costly to build, a better design is required.</p> <p>The issue of costing raises its head again, will there be a mooring lease agreement?</p>	<ul style="list-style-type: none"> • Noted; hence the proposal for upgrading/replacement works in this area. • From the consultation that occurred with all users of the Rivermouth area it is considered that the one jetty for commercial usage and the other jetty for multi-use is appropriate for current and future needs for the next 10 years or so. • The Working Group note that the submitters comment that “it may also happen that commercial fishing be closed to the Inlet in the future” is not a Shire comment and the background/justification to such comment is not known. • The stabilised area is not for launching of boats; is to facilitate the selling of fish for those commercial operators; noting that all relevant Shire approvals (Health Act requirements, Trading in Public Places permit etc) and/or Fisheries approvals would need to be obtained and complied with should such activity wish to take place. • As further planning for the facility takes place, discussions will include licensing requirements and associated costings (lease, upfront costs etc etc). • The works associated with the tour boat operations facilities on the foreshore were approved by Council and/or the Department of Transport. • Short-term mooring arrangements, particularly in Area C, were for those boats that were wanting to access the foreshore area and/or use the associated facilities on the foreshore or the adjoining Caravan Park. Whether this extends to an overnight stay or not is subject to further consideration but it definitely was not intended for permanent moorings. • Wheelchair access can be accommodated for on stabilised crushed limestone or aggregate paths; noting that improved access for people with disabilities was a key objective and will be a key consideration of the detailed design process. • The use of flush curbing is a design consideration, noting there may be other appropriate treatments – all will be considered when works towards detailed design commences. • The expanded jetty for tour boat docking is to provide for a number of commercial operators in the future and not just solely for the current operator. The final design, costings and lease arrangements
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		<p>In general, the development for this area appears to be over the top.</p> <p>Area D/Boating and Fishing There is currently one floating jetty that has been fairly recently installed (during Rob Whooley’s engineering term), it does not require replacement but an upgrade. It could be argued that another floating jetty is a requirement to replace the permanent jetty fixture.</p> <p>The existing concrete ramp again is a recent structure put in at the time of the floating jetty and is considered adequate.</p> <p>It is suggested that the shallow section of the shoreline west of current floating jetty is dug out with an excavator and stabilized. This could reduce the size of the suggested stepped jetty. Again the permanent moorings would be leased?</p> <p>The expansion of the fish cleaning is probably necessary, but a boat wash facility is considered over the top and not necessary, also it will consume water that can be better used elsewhere. It can also result in a wet area unless adequate drainage is installed.</p> <p>It is suggested that disabled fishing facility be installed on the eastern perimeter of the sandy beach.</p> <p>The path to the “board walk” needs a flush curb from the parking area to wheelchair access.</p> <p>Adequate refuse bins need to be located at strategic points to cater for the increased patronage in the area especially if the caravan park will upgrade some of their facilities.</p> <p>Area E/Boardwalk Any boardwalk with its associate infrastructures in this area is considered too expensive to be even contemplated. It is a pie in the sky concept only suitable if money is not an issue.</p> <p>Furthermore a continuation to Ricketts Reserve will cross the sewage outlet into the Inlet, not very nice. Furthermore the gazebo at Ricketts Reserve is currently very suitable for bird watching.</p> <p>I am the secretary of the Wilson Inlet Restoration Group. The views I have expressed are my own and not WIRG.</p>	<p>will all be required to be considered in due course; noting the current tour boat operators has a licence.</p> <ul style="list-style-type: none"> • Noted; plan to be modified to read “Existing jetty”. • The suggestion for excavating the shallow section of the shoreline is a detailed design consideration associated with the proposed jetty in this area in due course. • The use of flush curbing is a design consideration, noting there may be other appropriate treatments – all will be considered when works towards detailed design commences. • The provision of rubbish bins in foreshore areas is acknowledged and agreed. As the area develops due consideration will be given to ensuring appropriate rubbish disposal facilities are in place. • Comments noted regarding boardwalks costs; it is however considered the provision of a boardwalk is likely to best achieve the aims of access improvements in this area that can be inundated for lengthy periods of time dependent on inlet levels - that said a boardwalk is not required for the whole length and during the detailed design considerations this can be addressed accordingly. • The continuation of the access path to Ricketts Reserve, although referenced on the plan, will be the subject of further consideration in due course, particularly noting the comments regarding crossing of the sewerage outlet etc.
7.	Department of Planning, Lands &	Thank you for referring the above for comments in relation to State Planning Policy No. 2.6 – State Coastal Planning Policy (SPP 2.6).	<ul style="list-style-type: none"> • Comments noted; noting that the Director Sustainable Development specifically discussed this matter with the Department as part of the CHRMAP

	Heritage (Land Use Planning)	<p>The proposal is for a tourism and recreational node on Crown land vested to the shire and comprising a leasehold caravan park, commercial fishing, and public recreational activities such as boating and fishing.</p> <p>The Department of Planning, Lands and heritage is not able to determine if SPP2.6 is applicable in this instance, as it is unclear whether the subject land adjacent to Wilson Inlet is predominantly controlled by coastal related processes such as tides and fluctuations in sea level. The Shire should seek advice from the Department of Water and Environmental Regulation on this matter.</p> <p>If the adjacent waters are found to be predominately driven by coastal processes, it is recommended that the shire completes coastal hazard risk management and adaptation planning (CHRMAP) for the proposed development area. This would identify potential adaptation pathways and inform future lease arrangements for the caravan park.</p> <p>The shire is familiar with CHRMAP having recently released for public comment draft Concept Plans for peaceful Bay and Ocean Beach. As part of their concept planning, a CHRMAP was prepared to guide future management and adaptation to coastal erosion and inundation.</p>	<p>process and following advice that the Denmark River is influenced by the catchment levels and not coastal processes then these comments are no longer relevant as they are not applicable in this instance.</p>
8.	Department of Planning, Lands and Heritage (Heritage Projects)	<p>I have had a quick look and obviously at this stage it is just a concept plan. I think it is probably quite sensitively addressing management of the area but it does intersect with the Denmark River which is a registered site. The boundaries shown on our system reflect current registration but more recently boundaries of other rivers with mythological and significant cultural associations have been reassess as only extending the to the high water mark of the banks (the actual width of the river not the 30m either side of its banks).</p> <p>None the less even the river itself will be impacted by the kind of works proposed and legal approvals under the AHA are likely to be required and should be addressed as part of more detailed planning. I would encourage the shire to start consultation with the Aboriginal community & SWALSC as early in the process as practicable.</p>	<p>Working Group:</p> <ul style="list-style-type: none"> As detailed design processes progress for improvement works, obtaining the relevant Aboriginal Heritage Act approvals, as well as any other approvals required, will form part of the process.
9.	[REDACTED]	<p>Thank you for the opportunity to comment.</p> <p>Key areas of concern for myself and other users is the conflict between sailing, canoeing, swimming and general boating activity in the same area as fishing – ie from shore or jetty/walkway.</p> <p>The two activities do not mix well together.</p> <p>Certainly fishing from the jetties or future proposed structures beside launching ramps are activities fraught with danger.</p>	<p>Working Group:</p> <ul style="list-style-type: none"> The level and scale of usage currently, and into the future, is manageable and consequently it is considered that the safety risks are low. Do not agree that fishing beside a boat launching ramp is not appropriate. Permanent moorings are not proposed to be facilitated in Area D. The Shire is aware, based on previous advice from the Department of Transport,

		<p>I suggest irrespective of any actual further development taking place that fishing from the jetties beside the boat launch/retrieval ramps be banned.</p> <p>The draft plan shows walkways and stepped boardwalks directly in front the area currently being used to moor at least four sailboats (one of them mine) on a permanent basis.</p> <p>Observation over time both in Denmark and other estuarine locations suggests that provision of such board walking would increase visitation and usage for swimming, fishing, paddling and all sorts of activity, much of it in a way that would compromise safety and increase likelihood of damage to equipment and people. Think fishing hooks and lures being cast out amongst moored sailboats (and others) being snagged in rigging, sails, motors and moorings and swimmers and paddlers. This currently does happen and I suggest developing this area to decrease the likely hood of these interactions would be important.</p> <p>I suggest there is an opportunity to :</p> <ul style="list-style-type: none">a) Place a jetty for fishing from between the existing moored yachts and the tour boat jetty.b) Have jetties developed further into the river at the area identified in the plans as the commercial fish area. <p>There is also the opportunity to have mooring piles located a little way off this same shore line, between the commercial area and the foot bridge, with boats moored in the river, parallel with the flow, accessed by dinghies locked on the shore. A variety of mooring situations being available going forward should be planned for.</p> <p>The draft document is supposed to be one that plans for the next ten years of activity and development, as I understand, yet there is apparently provision for fewer boats than are currently located there. This, I suggest, is a major oversight.</p> <p>This especially when I, and other boat owners and sailors on the inlet, are the subject of much admiration from all and sundry who see us sailing on the Denmark River and inlet waters – I refer to our boats, not persons!</p> <p>I suggest that we contribute greatly to the ambience, the historical context and simple beauty of the Denmark environs, enhancing the beauty and allure of our town and district.</p>	<p>that there may be some unapproved moorings in this area; noting this requires Department of Transport to address this issue accordingly.</p> <ul style="list-style-type: none">• The plan seeks to balance a range of uses of the foreshore and on balance it is considered that there are appropriate areas for fishing opportunities in the nodal areas provided for without utilising all of the foreshore bank as suggested by the submission.• The length of the actual jetties will be determined as part of the detailed design process, noting need to ensure that such structures do not obstruct safe passage of the river my users.• The proposal for moorings on the northern side of the river is not supported nor considered warranted at this stage; noting that the plan does provide opportunities for consideration of additional moorings in Area C and Area B – potentially providing room for an additional 6-9 boats depending on the arrangements).
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		<p>With this in mind I would appreciate the opportunity to help shape further planning with respect to the foreshore's development.</p> <p>And I would add that I see great opportunity and indeed necessity in well thought out development for this area to help preserve and enhance the amenity of the area.</p>	
10.		<p>At the November 2017 Council Meeting Mr Craig Chappelle pointed out the need for Council to "keep in mind that the area could also, in the future, be a potential site for an alternative river crossing" (Public Question Time §4.2.3, Item 8.2.1).</p> <p>I wish to expand on Mr Chappelle's comment now that Council has commissioned a traffic study that focuses on a new river crossing that will specifically include a 'southern bridge' as one of the options. Although traffic flows in emergencies may be the contextual framework of this study I believe that the questions of minimising the impact of through-traffic and the circulation of local traffic are equally important and will emerge naturally in that study. Both issues were identified in the LPS 2011 but no planning solutions were offered.</p> <p>In an earlier submission to Council ("<i>Traffic Management in Denmark – A Proposed Southern Link</i>", June 2017) I have argued that a bridge in the vicinity of Rivermouth would address all three issues ... through-traffic, local circulation and emergency access. That submission suggests that a crossing aligned with Crellin Street would be far superior to one near Riverbend Lane from the emergency ingress/egress perspective. Moreover it also shows that it would improve local traffic circulation and, in the long term, would allow heavy through-traffic to by-pass the town centre as part of a southern ring road.</p> <p>Clearly Mr Chappelle's comment is relevant to the design of the Entry Node (i.e. §3.0 Entry Node (Area A) in the Draft Rivermouth Precinct Development Concept Plan.</p> <p>When the opportunity arises I would like to submit a revised version of the June 2017 paper that may integrate better with the Concept Plan. In the meantime I hope that when Council reflects on the Concept Plan it will bear in mind the larger issues of traffic management ... in terms of emergencies, everyday circulation and (for the long term) minimising the impact of heavy through traffic.</p>	<p>Working Group:</p> <ul style="list-style-type: none"> • Comments noted however is not within the scope of the current Concept Development Plan. <p>Shire Officers:</p> <ul style="list-style-type: none"> • Should Council determine at some point that a trafficable bridge crossing is to be provided for in this location, any associated impacts will need to be duly considered. Given Council has not determined a position on this matter, it would be appropriate to progress with the current process accordingly.
11.		<p>Please see below my comments on the Rivermouth Precinct Development Concept Plan</p> <p>2.0 Site Analysis Signage and Lighting</p>	<p>Working Group:</p> <ul style="list-style-type: none"> • Comments noted; this was a design objective established by the Working Group at the onset. • There is no proposal to up-light the trees in this area.

		<p>As a principle, group signs near built structures: do not clutter the view with individual signs scattered across the site. (As at present.)</p> <p>Keep all signage on right hand side of entrance, with low level lighting. Take care that lighting in these areas is illuminating rather than blinding. (The spotlight in the Caravan Park shines into oncoming traffic on Inlet Drive.)</p> <p>Please, no uplighting of trees. Visitors especially value the night sky.</p> <p>3.0 Entry Node (Area A) Area indicated for native planting and weed removal: please confer with Denmark Weed Action Group and Mark Parre, Shire Revegetation Manager, who have been carrying out work in this area. Two of the species suggested, <i>Beaufortia sparsa</i> and <i>Xanthosia rotundifolia</i>, do not occur naturally in this area.</p> <p>Take care that unwanted species are not introduced with brush matting.</p> <p>The entry signage at Inlet Drive should indicate that this is a public recreation area, and incorporate information on all activities and amenities including "Entry to Rivermouth Caravan Park 50m".</p> <p>(The Caravan Park entry is opposite Section C. Where is the Caravan Park exit?)</p> <p>Use international symbols where possible, eg for toilets, boat launching, picnic area, walk trails.</p> <p>Keep sculpture in the built sight lines. Preserve natural view-sheds.</p> <p>4.0 Commercial Fishing (Area B) Turf mounds – take care not to introduce unwanted species and consider ease of future management.</p> <p>5.0 Recreation and Caravan Park Interface (Area C) Paddle boat moorings: how many and for how long? Casual or permanent?</p> <p>6.0 Boating and Fishing (Area D) Looks good!</p> <p>7.0 Boardwalk (Area E) There is no need to construct boardwalks in this area as there is an existing walk trail between the Caravan Park boundary and the Inlet.</p>	<ul style="list-style-type: none"> • Comments noted regarding some non-local species of vegetation referenced on the plan; primarily local species would be sourced and utilised however depending on the specific area and design philosophy other species may be considered appropriate; final decisions on plant species will be determined when such improvement works are progressed. • Comment noted regarding consultation with DWAG. • Acknowledged; improvements to the tourism/directional signage is proposed to highlight the services and facilities that the Rivermouth Foreshore Precinct has to offer residents and tourists alike. • The access points to the Caravan Park are also egress points. • Symbols on signs are to comply with Australian Standards for road sign symbols. • Future management of the precinct was a key consideration of the improvement work proposals. • There is a current approval in place for the paddleboat business activity to occur in this part of the foreshore. • Noted. • Comments noted regarding boardwalks costs; it is however considered the provision of a boardwalk is likely to best achieve the aims of access improvements in this area that can be inundated for lengthy periods of time dependent on inlet levels - that said a boardwalk is not required for the whole length and during the detailed design considerations this can be addressed accordingly. • The provision of a bird hide is listed as a mid-long term proposal, noting that such final design and location would be subject to extensive consultation with relevant agencies to ensure something appropriate is constructed. • Comments noted and acknowledged regarding locations of sculptures and signs. • There is an existing emergency exit on the western boundary of the Caravan Park; plan to be modified to indicate this emergency exit for reference. • Dolichos and Watsonia are listed in the Shire's Pest Plants Local Law, whilst Tagasaste is not a recognised pest plant at State, Federal or local level.
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		<p>This can be extended on the same alignment (along the boundary) to connect up with trails in R14376 through to Ricketts Reserve.</p> <p>Boardwalks through this narrow strip of fringing vegetation will be damaging to the vegetation, expensive to install and a nightmare to maintain.</p> <p>Similarly, bird hides in this limited area may displace habitat. (Confer with bird experts on this.)</p> <p>Keep sculpture out of natural areas – let nature inspire art, and put decorations near built structures, such as fish cleaning stations etc.</p> <p>Do not obscure views with signs and sculptures please.</p> <p>8.0 Rivermouth Caravan Park Precinct (Area F) Where is the exit in case of emergency?</p> <p>To “Maintain the 12m Natural Landscape Buffer between Caravan Park and Inlet Drive” control of Dolichos pea, Watsonia and Tagasaste is required. This is part of the park lease area.</p>	<p>Consultation will occur in due course with the lessees regarding the control of the listed pest plants.</p>
12.	[REDACTED]	<p>I have owned a property in Inlet Drive, Denmark since 2005. I love Denmark.</p> <p>Although I have missed the closing date of 22 February for formal submissions, may I please take this opportunity to let you know that I have examined the proposals for the Rivermouth Precinct Development, and that I wholeheartedly approve.</p>	<p>Working Group:</p> <ul style="list-style-type: none"> • Noted.

RIVERMOUTH PRECINCT DEVELOPMENT CONCEPT PLAN ~~DENMARK~~

Adopted at 19 June 2018 Ordinary Meeting
of Council (Res No: -- 0618)

~~NOVEMBER 2017~~

ROBERTS GARDINER ARCHITECTS



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









Acknowledgments

The Rivermouth Precinct Development Concept Plan has been produced for the Shire Of Denmark in consultation with and assistance from:

- The Rivermouth Foreshore DP Working Group
- Community Members & Residents
- The Smith Family (Clive Smith)
- Commercial Fishing (George Ebbetts)
- The Rivermouth Caravan Park
- Denmark Riverside Club
- Denmark Boating & Angling Club
- Denmark Yacht Club
- Local Tour Boat Operators
- Department of Water and Environmental Regulation
- Department of Transport



Legend


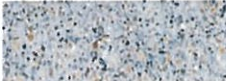



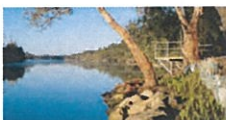
-  VARIOUS TRAILS AS INDICATED ON DRAWINGS
- 
- 
- 
-  WAYFINDING | TRAFFIC MGT. (BY COUNCIL)
-  INTERPRETATION
-  SCULPTURE | PUBLIC ARTWORK
-  DRINKING FOUNTAIN
-  OUTDOOR SHOWER
-  BOLLARDS | ILLUMINATION
-  BENCH SEAT
-  RECLINING TIMBER SEAT
-  PICNIC TABLE + BENCHES
-  EXISTING CHANNEL MARKERS
-  TURF
-  TURF MOUND
-  GRANITE ROCKS
-  ASPHALT PATH
-  BUSHLAND | NATIVE PLANTING
-  CONTRASTING BITUMEN SURFACE | TRAFFIC CALMING
-  EXPOSED AGGREGATE CONCRETE PATH
-  FORESHORE STABILISATION | BRUSH-MATTRESSING
-  TIMBER BOARDWALK

PHOTOGRAPHS PROVIDED IN THE REPORT ARE INTENDED FOR REFERENCE AND IDEA PRESENTATION PURPOSES ONLY.

Recommended Planting Palette

-  **AGONIS FLEXUOSA (PEPPERMINT)**
-  **LEPIDOSPERMA GLADIATUM**
-  **FICINIA NODOSA**
-  **ANIGOZANTHOS FLAVIDUS**
-  **BEAUFORTIA SPARSA**
-  **XANTHOSIA ROTUNDFOLIA**

Recommended Material Palette

-  **STABILISED CRUSHED LIMESTONE**
-  **EXPOSED CONCRETE AGGREGATE**
-  **COMPOSITE TIMBER MATERIALS (LOW MAINTENANCE / DURABLE)**
-  **ASPHALT ROAD**
-  **GRANITE BOULDERS**
-  **BRUSH MATTRESSING | STABILISATION**



1.0 Introduction

The Denmark Rivermouth Foreshore represents an area of natural, recreational and tourism significance to the Great Southern region. The area is a hub for a variety of activities including caravan park accommodation, commercial fishing, recreational boating, fishing and public recreation. An opportunity exists to enhance the existing infrastructure and natural landscape through considered site development and rehabilitation.

Entry to the Rivermouth Foreshore and Rivermouth Caravan Park is through a junction of several existing trails including the Mokare Heritage Trail, Bibbulmun Track, Karri Walk Trail, Denmark - Nornalup Heritage Rail Trail and the Munda Biddi Trail. This area forms a point of visual significance, and a natural Node / Hub meeting point where the entry meets the Heritage Railway Bridge.

Existing public facilities onsite include limited carparking, boat trailer parking, boat ramp, fish cleaning station, toilet block, non-permanent seating and boat moorings and jetties for commercial, recreational and tourism boating. The majority of existing facilities are situated in appropriate areas, however would benefit from upgrading and design development in keeping with the natural environment.

Enhancing the integration between the Heritage Precinct, the Rivermouth Foreshore and the existing Gazebo and BBQ area adjacent to the Heritage Railway bridge with a future Trail Node / Hub would also benefit the overall development.

While the existing natural layout, contours and progression of the foreshore allows for development and rehabilitation with minimal disruption to the existing landscape, there is significant weed encroachment into riparian vegetation. In addition, the Paperbark trees along the edge of the foreshore towards the Heritage Railway Bridge require protection. Areas of erosion along the foreshore require stabilisation, as well as access and usage formalisation to prevent further erosion.

The Rivermouth Caravan Park facilities adjacent to the foreshore are currently in the process of design development for a new building, with a public access shop / cafe. Design guidelines for the interface between the new facility, and the Rivermouth Foreshore Development Plan, will be an important aspect of the project, to ensure congruent and effective visual design objectives and development.



- LEGEND**
- FUTURE CONNECTION THROUGH TO RICKETTS RESERVE
 - WAYFINDING | TRAFFIC MGT. (BY COUNCIL)
 - INTERPRETATION
 - * SCULPTURE | PUBLIC ARTWORK
 - EXISTING CHANNEL MARKER
 - ▬ RED ASPHALT PATH
 - ▬ BUSHLAND | NATIVE PLANTING
 - ▬ CONTRASTING BITUMEN SURFACE | TRAFFIC CALMING
 - ▬ FORESHORE STABILIZATION | BRUSH-MATTRESSING
 - ▬ TIMBER BOARDWALK

- | | | |
|---|---|------------------------------------|
| A ENTRY NODE | C RECREATIONAL AREA | E INLET BOARDWALK EXTENSION |
| B COMMERCIAL FISHING & CLASSIC BOATS | D BOATING / RECREATIONAL FISHING | F RIVERMOUTH CARAVAN PARK |

2.0 Site Analysis

Place | Character | Principles

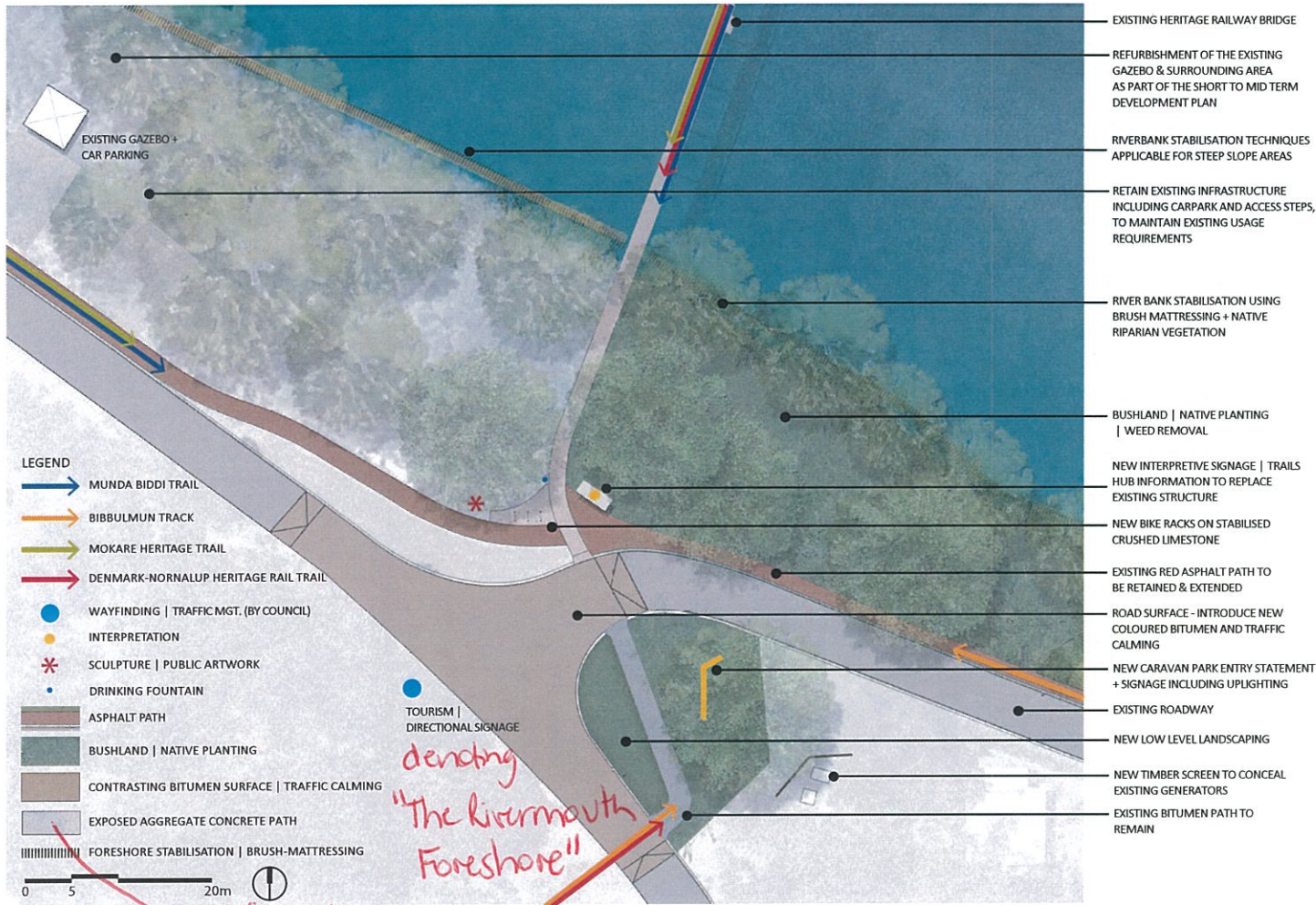
DESIGN PRINCIPLES

- Create future Development Principles drawing from the natural Denmark landscape, that incorporate the requirements of Key Stakeholders and the Public.
- Utilise the location of the Rivermouth Caravan Park entry to create a visually appealing point of interest and Information / Rest node, connecting through to the rivermouth foreshore.
- Develop an accessible, modern and informative natural activity area - incorporating mixed use requirements (Caravan Park, Residents, Pedestrians / Public, Fishing, Boating), enhancing the existing potential for a natural Denmark social hub.
- Provide access design elements (Pedestrian and Vehicular) that retain, protect and rehabilitate areas of significant native vegetation.
- Create a consistent design language and interface between the Caravan Park and Foreshore.
- Create clear zones; identifying public and private areas.
- The use of materials, colours and vegetation that are consistent with design principles appropriate for the location and the Shire of Denmark's overall development plans.

DESIGN OBJECTIVES

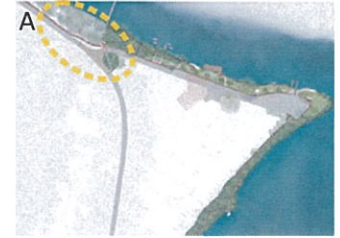
- Ensure due environmental consideration for all development principles.
- Enhance the positive tourism and economic contribution that the Rivermouth Foreshore Caravan Park and associated areas provide for Denmark.
- Acknowledge and incorporate social aspects of the site (Built, Historical and Indigenous Heritage).
- Provide signage and amenities for the public, that are in clearly defined public areas.
- Analysis of intersecting trails, and the potential for connections through to Ricketts Reserve and the Heritage Precinct.
- The upgrade of existing amenities with a clear design language (shelter, fish cleaning station, toilets, boardwalks, jetties and boat ramp).
- Due consideration given for existing usage of the Gazebo area to the west of the Heritage Railway Bridge.
- Staged development recommendations for Short to Mid Term (0 - 10 years) and Long Term (10 - 20 years) implementation guidelines.





3.0 Entry Node (Area A)

The Denmark rivermouth foreshore entry is at a meeting point of several trails, including the Mokare Heritage Trail, the Bibbulmun Track, Karri Walk Trail, Denmark - Normalup Heritage Rail Trail and the Munda Biddi Trail.



An opportunity exists to create a Node | Hub at the meeting point of the Heritage Railway Bridge and the Rivermouth Caravan Park.

This Node can incorporate a new Rivermouth Caravan Park entry statement, and a new timber structure with signage to facilitate information wayfinding, identifying the start of the rivermouth foreshore interpretation | information trail. Traffic slowing elements on Inlet Drive, where pedestrian access to the caravan park intersects with a number of trails, should however be considered.

An aesthetic site line between the trail information Node | Hub at the entry to the rivermouth foreshore through to the new shop / cafe development can be created. Public sculptural art works could also highlight the start of this site line, and connect visually through to the developed rivermouth recreation area. The next interpretation node to visually connect to will be the Commercial Fishing interpretation area.

Existing footpaths should be upgraded to match existing where required, and extended to include a connection through to the Heritage Railway Bridge, as well as a stabilised crushed limestone area for new custom bike racks.

To create a visually appealing entry node, the following design guidelines should be integrated for the caravan park entry and future development of the existing gazebo / rope swing area adjacent to the Heritage Railway Bridge:

- Layered natural timber structures and signage
- Timber screening to existing generators
- Composite timber materials utilised in the existing gazebo / picnic area (low maintenance / durable)
- Stabilised crushed limestone area for new custom bike racks, and exposed aggregate paths as required
- BBQs to be refurbished as part of the Mid-Term development plan
- New stainless steel drinking fountain adjacent to bike racks (wheel chair accessible) - adhering to natural, organic flow design principles
- River bank stabilisation using bio-engineering techniques such as brush mattressing (techniques appropriate for steep bank area required west of the Heritage Railway Bridge)
- Native riparian vegetation planting, and weed removal required
- Standardised signage for trail groups + wayfinding to be incorporated as required



IMAGE: TIMBER SCREENING INCORPORATING SIGNAGE



IMAGE: TIMBER STRUCTURES AND SIGNAGE



IMAGE: TIMBER WAYFINDING | INTERPRETATION SIGNAGE



IMAGE: TIMBER SIGNAGE STRUCTURES



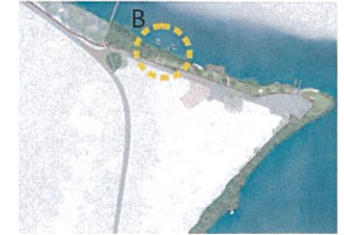
IMAGE: NEW CUSTOM SCULPTURAL BIKE RACKS



4.0 Commercial Fishing (Area B)

Access to the river should be formalised in this area, to assist with and facilitate sustainable and continued small scale local commercial fishing from the rivermouth foreshore.

The use of floating jetties, anchored where there is a natural bank and break through the existing paperbark trees, would increase mooring accessibility.



Interpretive signage should be continued along the foreshore; Area B being the second node, describing both the current and historical commercial fishing practices in the area. In addition, imagery of the old finger jetties could be included as a reference to the past river footprint and utilisation, as well as images of local boating groups utilising the river in the past and as they do today.

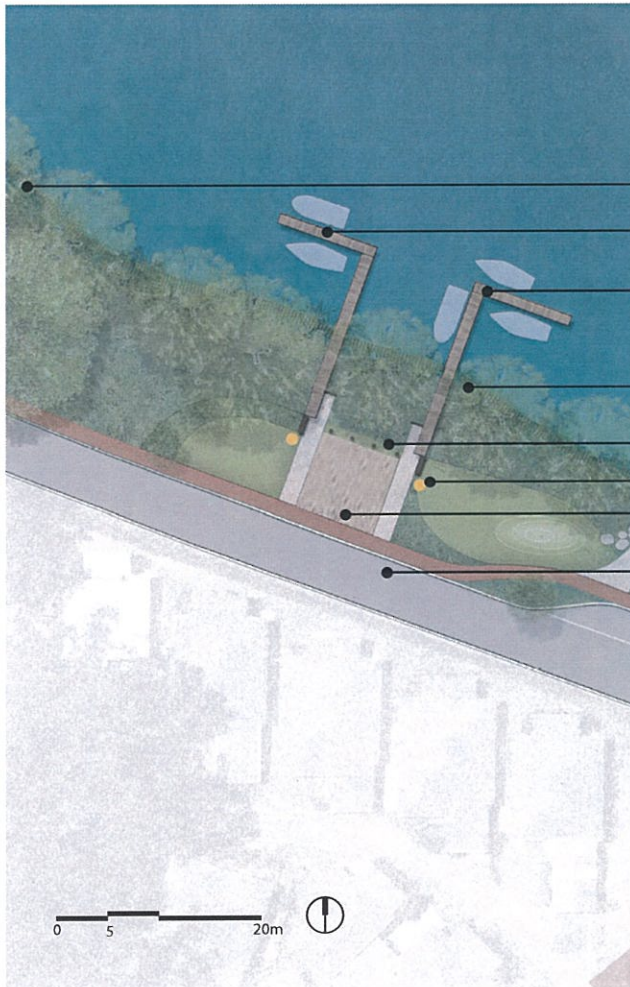
The influence that the Smith family has had in establishing commercial fishing in the Denmark area should be a focal point for the interpretive signage, highlighting that the family continue to utilise the area for commercial fishing today.

Fish can be purchased by the public directly from the fishing boats; this important social aspect specific to the rivermouth foreshore should be maintained and supported.

Design elements that can be incorporated into the area are:

- Core 10 and timber interpretive signage
- Riverbank stabilisation using brush mattressing
- New floating jetties with composite timber materials (low maintenance / durable)
- Stabilised crushed limestone for the new hardstand
- Composite timber materials for bench seating (low maintenance / durable)
- Solar powered illuminated bollards

*Long Term Development Plan
• Jetties (financial contributions may be sought - construction and/or leasing)
The multi-use floating jetty could include use by, but not limited to, classic boaters, permanent mooring requestors (by application) etc.*



- RIVER BANK STABILISATION USING BRUSH MATTRESSING + NATIVE RIPARIAN VEGETATION
- NEW COMMERCIAL FISHING FLOATING JETTY WITH COMPOSITE TIMBER DECKING MATERIALS (LOW MAINTENANCE / DURABLE)
- NEW MULTI-USE FLOATING JETTY WITH COMPOSITE TIMBER DECKING MATERIALS (LOW MAINTENANCE / DURABLE)
- RIVER BANK STABILISATION USING BRUSH MATTRESSING + NATIVE RIPARIAN VEGETATION
- NEW SOLAR POWERED ILLUMINATED BOLLARDS
- INTERPRETATION SIGNAGE FOR COMMERCIAL FISHING
- NEW STABILISED LIMESTONE HARDSTAND AREA FOR COMMERCIAL FISHING TRAILERS AND VEHICLES
- EXISTING ROADWAY

- LEGEND
- INTERPRETATION | WAYFINDING
 - • • BOLLARDS | ILLUMINATION
 - BENCH SEAT
 - ASPHALT PATH
 - TURF
 - TURF MOUND
 - BUSHLAND | NATIVE PLANTING
 - STABILISED CRUSHED LIMESTONE
 - EXPOSED AGGREGATE CONCRETE PATH
 - FORESHORE STABILISATION | BRUSH-MATTRESSING

modify colour



IMAGE: FLOATING JETTY WITH COMPOSITE TIMBER DECKING



IMAGE: FLOATING JETTY



IMAGE: CORE 10 INTERPRETATION SIGNAGE & WAY FINDING

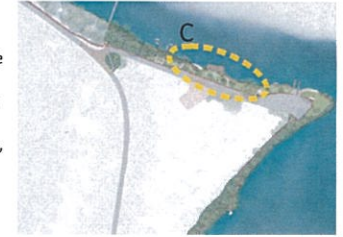


IMAGE: SOLAR ILLUMINATED BOLLARDS



5.0 Recreation & Caravan Park Interface (Area C)

The interface between the new Rivermouth Caravan Park shop / cafe and the foreshore should be developed using a design language consistent with the Rivermouth Foreshore Development Plan. This could include a road treatment to create traffic calming and a pedestrian zone connecting to the foreshore, potentially incorporating flush kerbs for accessibility.



Utilising a consistent design language, will assist in identifying the shop / cafe as a public "zone" versus the remainder of the caravan park. Elements such as a graduated, landscaped, and layered entry to the shop / cafe from the foreshore would create an open approach. A clearly accessible public building will provide much needed amenities and encourage visitors and locals to spend time at the rivermouth foreshore.

The turf area opposite the caravan park is a popular recreation place for the general public, as well as caravan park users. This area should be developed as the primary recreational zone.

Design elements that can be incorporated are:

Short - Mid Term Development Plan

- Informal nature / water play spaces in the overall foreshore recreation zone
- Increase shade facilities by providing trees (refer to Planting Palette), landscaping and structures utilising natural + composite timbers
- Increased seating facilities, including permanent seating, as well as seating that is integrated with the contours of the foreshore utilising composite timber materials (low maintenance / durable)
- Stabilised crushed limestone area for new custom bike racks, and exposed aggregate paths
- Solar powered illuminated bollards
- New outdoor shower to be incorporated with the existing ablution block
- New stainless steel drinking fountain (wheel chair accessible) - adhering to natural, organic flow design principles
- Accessible Floating Jetty with composite timber decking for tour boat operation, allowing side on mooring for commercial boats and greater utilisation (appropriate handrails to be incorporated)
- Short term mooring facilities to minimise informal mooring (preventing the use of star pickets)
- Native vegetation, including sedges, utilised to control pedestrian and vehicular access to the water as well as any potential grass encroachment

Long Term Development Plan

- Stepped access jetties for water craft launching + beach access at varying water levels
- Additional Finger Jetty extension

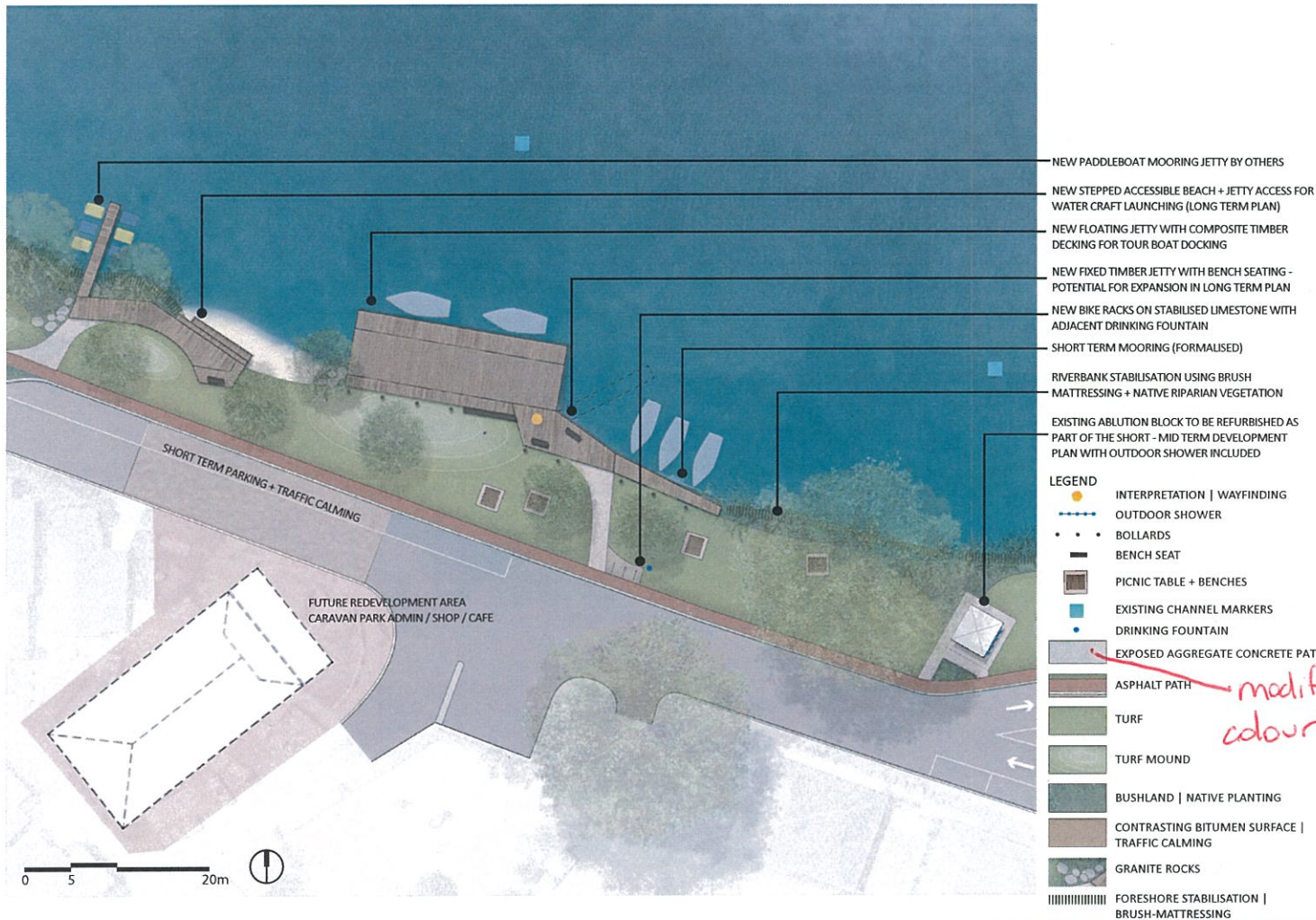


IMAGE: FIXED STEPPED JETTIES WITH COMPOSITE TIMBER DECKING



IMAGE: WATER ACCESSIBLE STEPPED JETTIES WITH COMPOSITE TIMBER DECKING



IMAGE: LANDSCAPING, NATIVE SEDGES & FORMALISED RIVER ACCESS



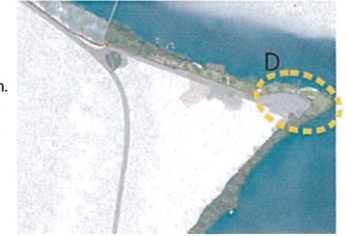
IMAGE: PEPPERMINT TREES FOR SHADING



IMAGE: DRINK FOUNTAIN

6.0 Boating & Fishing (Area D)

This area has been identified as a multi-use zone, incorporating boating, recreational fishing, river access as well as the socially significant boat ramp and fish cleaning station. The overall location of the facilities should be maintained, however they require significant refurbishment and upgrading.



The fish cleaning station is currently a social hub and should be upgraded in line with the development plan design guidelines. The facility should also be extended to include an additional shelter and ~~boat washdown facility~~.

Areas of erosion along the river and inlet edges should be stabilised using bioengineering techniques including brush mattressing, and planting native riparian vegetation.

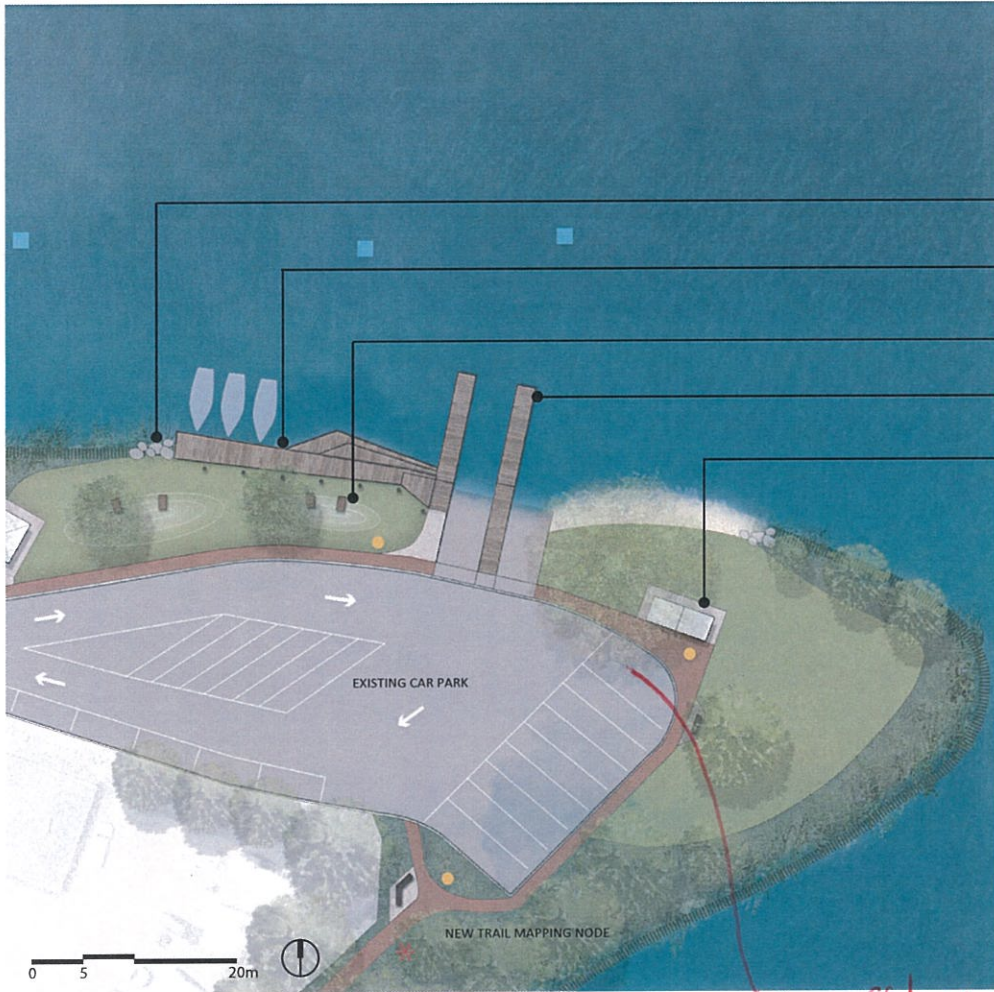
Floating Jetties should be installed to replace the existing jetty infrastructure, which will increase river access and utilisation. Due to the water levels and revised infrastructure, the existing concrete boat ramp level will require re-engineering with revised levels.

A river edge boardwalk and formalised boat mooring points will create safe / user friendly access along the river front. Low native riparian vegetation can be utilised to create a pedestrian barrier to water access.

The sandy beach access point to the river should be increased, to provide additional space for swimming and kayak, sailing and dragon boat launching.

The existing carpark line work should be upgraded. Existing boat trailer parking is to be maintained, and there is the potential for overflow carparking in the Heritage Precinct. The new walk trail signage created will help facilitate pedestrian direction from the Heritage Precinct to the Rivermouth Foreshore area.

A continuous path can be developed along the foreshore towards the inlet point, linking the existing foreshore and inlet trails. The opportunity for a trail mapping node can be created where the trails meet.



RIVER BANK STABILISATION USING BRUSH MATTRESSING, GRANITE BOULDERS + NATIVE RIPARIAN VEGETATION

NEW FIXED STEPPED JETTY WITH COMPOSITE TIMBER DECKING AND DURABLE NON-SLIP MATERIALS ON SUBMERGED SURFACES SUITABLE FOR MARINE CONDITIONS (POTENTIALLY REINFORCED FIBREGLASS GRATING); LONG TERM MOORINGS + ILLUMINATED BOLLARDS TO BE INCORPORATED

COMPOSITE TIMBER RECLINING CHAIRS FOLLOWING THE CONTOURS OF NEW TURF MOUNDS

EXISTING JETTIES TO BE REPLACED WITH NEW FLOATING JETTIES UTILISING COMPOSITE TIMBER DECKING + REVISED BOAT RAMP LEVELS

EXISTING FISH CLEANING STATION TO BE REFURBISHED, AND EXTENDED TO INCLUDE A SEPARATE SHELTER, AS PART OF THE SHORT TO MID TERM DEVELOPMENT PLAN

LEGEND

- INTERPRETATION | WAYFINDING
- ✳ SCULPTURE | PUBLIC ARTWORK
- ● ● BOLLARDS | ILLUMINATED
- BENCH SEAT
- RECLINING TIMBER SEAT
- EXISTING CHANNEL MARKERS
- EXPOSED AGGREGATE CONCRETE PATH
- ASPHALT PATH
- TURF
- TURF MOUND
- BUSHLAND | NATIVE PLANTING
- CONTRASTING BITUMEN SURFACE | TRAFFIC CALMING
- GRANITE ROCKS
- ||||| FORESHORE STABILISATION | BRUSH-MATTRESSING

Drop-off / pick-up area.



IMAGE: RECLINING SEATS CONTOURED TO TURF

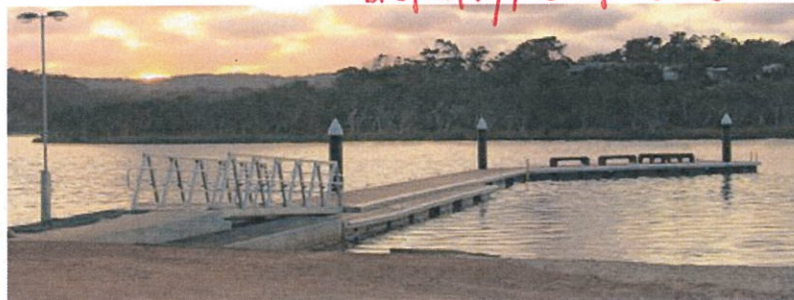


IMAGE: FLOATING JETTY CONCEPT



IMAGE: DESIGN LANGUAGE FOR NEW SHELTERS



IMAGE: UPDATED FISH CLEANING STATION





- LOW LEVEL PLANTING BUFFER BETWEEN CARAVAN SITES + FOOTPATH
- FORMALISED BENCH SEATING WITH LOW LEVEL PLANTING + ILLUMINATED BOLLARDS
- BUSHLAND | NATIVE PLANTING | WEED REMOVAL
- SCULPTURAL TRAIL WITH INSTALLATIONS BY LOCAL ARTISTS
- NEW TIMBER BOARDWALK WITH BIRD WATCHING | REST NODES INCORPORATING INTERPRETIVE SIGNAGE
- BIRD HIDE INCORPORATED INTO NEW TIMBER BOARDWALK

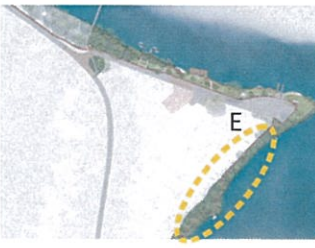
LEGEND

- INTERPRETATION | WAYFINDING
- * SCULPTURE | PUBLIC ARTWORK
- • • BOLLARDS | ILLUMINATED
- BENCH SEAT
- BIRD HIDE
- ▬ ASPHALT PATH (dual use)
- BUSHLAND | NATIVE PLANTING
- EXPOSED CONCRETE AGGREGATE
- TIMBER BOARDWALK (dual use)
- ➔ FUTURE CONNECTION THROUGH TO RICKETTS RESERVE

modify colour

7.0 Boardwalk (Area E)

From the trail mapping node created in Area D, there is the potential to create a boardwalk from the existing carpark, through to Ricketts Reserve.



Bird Hides and bird watching nodes can be incorporated into the boardwalk. There is also the opportunity to create a sculpture walk with installations by local artists.

Formalised bench seating, low level landscaping, illuminated bollards and low level boardwalk lighting would create a destination walk trail for the public and locals to enjoy.

Short to Mid Term Development Plan

- New timber boardwalk extension from the existing asphalt path
- Low level planting buffer between caravan sites and footpath
- Bird hide and bird watching | rest nodes
- Bushland | native planting | weed removal
- Composite timber materials for bench seating (low maintenance / durable)
- Solar powered illuminated bollards | low level boardwalk lighting
- Interpretive signage at rest nodes | points of interest

Mid to Long Term Development Plan

- Timber boardwalk extension from the existing carpark through to Ricketts Reserve
- Sculptural walk trail with installations by local artists
- Additional bird hide and bird watching | rest nodes
- Bushland | native planting | weed removal
- Additional composite timber bench seating (low maintenance / durable)
- Additional solar powered illuminated bollards | low level boardwalk lighting



IMAGE: BOARDWALK



IMAGE: TIMBER INTERPRETIVE SIGNAGE



IMAGE: BIRD HIDE



IMAGE: BOARDWALK SEATING + LOW LEVEL LIGHTING



IMAGE: SCULPTURAL TRAIL

8.0 Rivermouth Caravan Park Precinct (Area F)

The future development of the Rivermouth Caravan Park will play a vital role in retaining and enhancing the recreational and social importance of the Rivermouth Foreshore area, for the Denmark community, and visitors to the Great Southern region.

The Rivermouth Caravan Park contributes significantly to the tourism industry in Denmark, and forms an integral part of the Rivermouth Foreshore recreational hub.

Improving the amenities and services provided at the Rivermouth Foreshore (cafe / shop / amenities / improved river activity access), specifically through the Caravan Park, will assist in creating an accessible and user friendly area, as well as a tourism draw card for the region, where both the community and visitors will want to stay and enjoy the foreshore's natural beauty and resources.

This report and associated plan are intended as a resource to upgrade and supersede the existing 2004 Development Plan, encapsulating work that has occurred onsite to date, and providing guidelines for future development areas identified across the site (Reserve 46241). The guidelines are intended to consider the potential needs and requirements of the community, the Rivermouth Caravan Park lessees and the Shire of Denmark (*in the capacity of the Management body for the Reserve*).

The plan has been separated into a number of Development Areas to allow flexibility and development options for the Caravan Park lessees. Design principles adopted in the Foreshore Development Plan should guide future Caravan Park development designs, ensuring consistency throughout the site (Rivermouth Caravan Park & Foreshore).

Design principles that can be incorporated are:

- Shade facilities by providing trees (refer to Planting Palette), landscaping and structures utilising natural + composite timbers
- Seating and other facilities utilising composite timber materials (low maintenance / durable)
- New built structures to follow the design language established for the Rivermouth Foreshore Development Plan, and incorporate layered natural + composite timbers and materials
- Stabilised crushed limestone areas for feature areas, and exposed aggregate paths
- Solar powered illuminated bollards
- Where stainless steel amenities are required, they should adhere to natural, organic flow design principles
- Native vegetation utilised to control pedestrian and vehicular access & egress

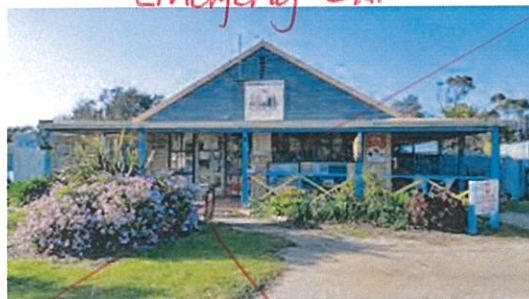
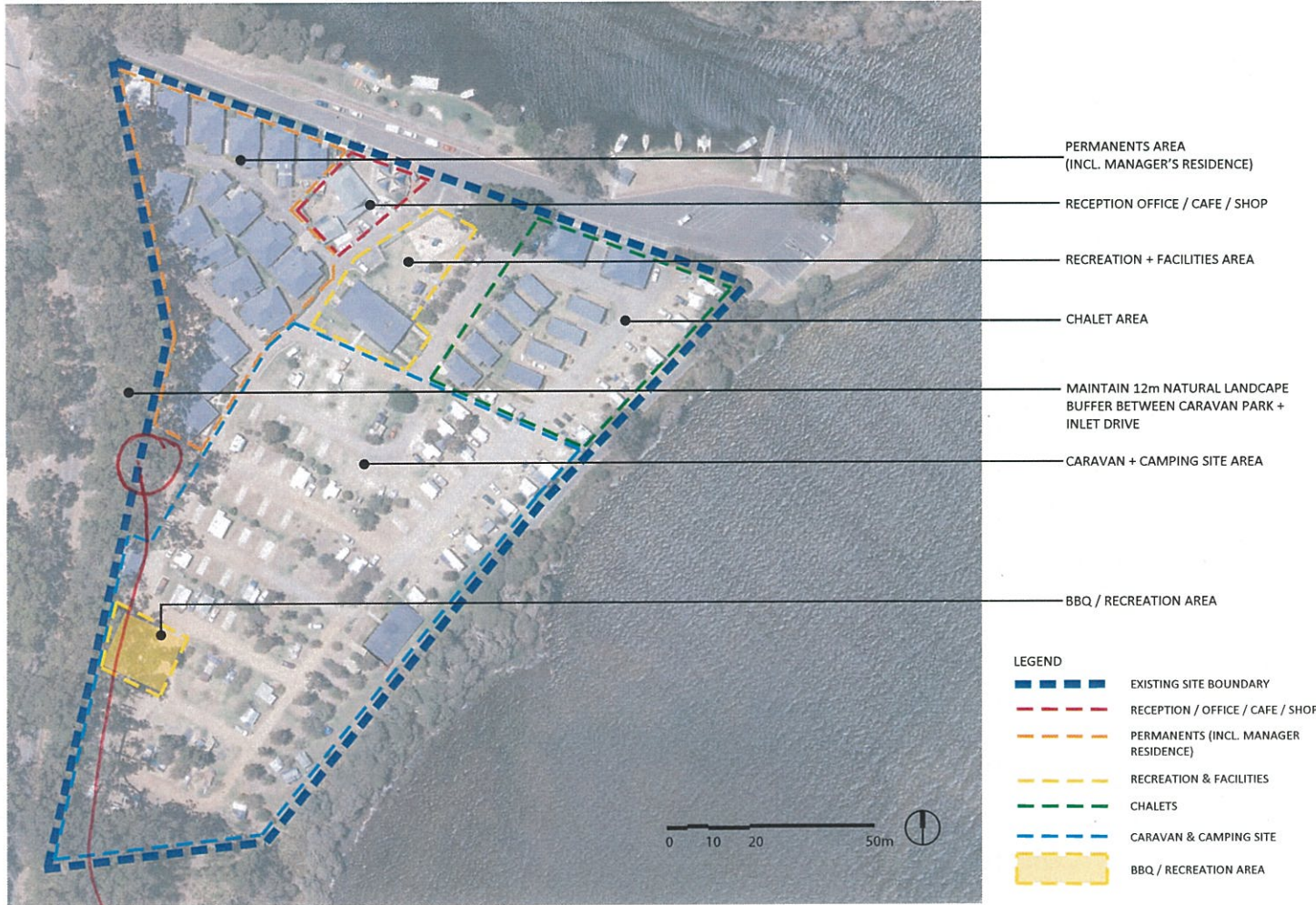
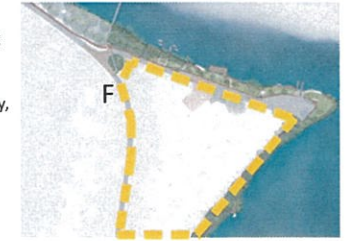


IMAGE: CARAVAN PARK RECEPTION / SHOP / CAFE AESTHETIC



IMAGE: CHALET AND LANDSCAPING DESIGN TO MATCH EXISTING



IMAGE: NATURAL CAMPING GROUND FACILITIES MAINTAINING TREES AND TURF AREAS

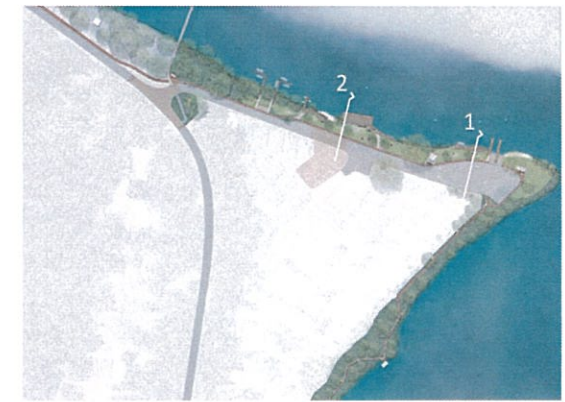


IMAGE: BBQ AREA FIXTURES USING NATURAL MATERIALS

Delete image.



9.0 Site Sections (Conceptual)



Section Location Plan



