



## **COASTAL ACCESSIBILITY PROJECTS**

BRUCE STEER POOL – BERMAGUI

SHORT POINT – MERIMBULA

PAMBULA BEACH RESERVE – PAMBULA BEACH

Inspiring people and places

Coastal Accessibility Projects was commissioned by Bega Shire Valley Council and was prepared by Spiire Australia, 445 Townsend St. PO Box 3400 Albury NSW 2640

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# 01 INTRODUCTION

Bega Valley Shire Council (BVSC) has engaged Spiire Australia Pty. Ltd. to develop Coastal Accessibility Plans for three key sites within the municipality. The sites are Bruce Steer Pool in Bermagui, Short Point in Merimbula and Pambula Beach Reserve at Pambula Beach.

The overarching objective of the project is to improve accessibility to facilities and features at each site. Further aims and objectives specific to each site are outlined further below.

The project has explored issues and opportunities, site specific challenges and community comments and ideas for site improvements. The information gathered has been distilled in order to prepare the Coastal Accessibility Plans. The Plans describe the design intent, recommendations and estimates of cost which provide a framework for the future implementation of prioritised and budgeted works.

## 1.1 THE PROJECT BRIEF

The Project Brief recognises that the unique coastal environment of the Bega Valley Shire is one of its greatest attractions for residents and visitors. The rugged coastline is dynamic, varied and generally pristine. The Shire's coastal environments provide a range of recreational opportunities such as swimming, surfing, fishing, strolling along the beach or resting to absorb the magnificent views.

While the coastline is a key identifying feature of the Shire, it also severely restricts people with mobility limitations and in many cases completely prevents them from enjoying the natural assets of the coast. This project is focused on improving accessibility to three key coastal locations to break down some of the barriers that those with a disability or suffering injuries, the elderly and the very young are presently subjected to.

## 1.2 WHAT IS A COASTAL ACCESSIBILITY PLAN?

A Coastal Accessibility Plan is a strategic document that outlines the intended developments for a site. In the case of this project the Plans will investigate and provide guidance on:

- ▶ Improving accessibility to all features and facilities of the sites.
- ▶ Promoting a more active and inclusive local community.
- ▶ Providing facilities which will benefit those with mobility limitation as well as those living with injury and/or disability.
- ▶ Protecting and enhancing coastal vegetation, reducing weed infestation and improving erosion and environmental values through revegetation.
- ▶ Improving visual amenity and enhancing recreational opportunities.
- ▶ Improving community engagement and educational opportunities inherent to the site.
- ▶ Recognition of sites of Aboriginal and European heritage.
- ▶ Enhancing visitor and tourist experience.



*Bruce Steer Pool, Bermagui*



*Pambula Beach*



*Short Point, Merimbula*

### 1.3 WHY THESE SITES?

#### BRUCE STEER POOL – BERMAGUI

Bruce Steer Pool has a number of pre-existing aspects that make it a suitable location for the development of a fully inclusive aquatic recreational area. These include:

- ▶ The car park and grass/beach area have a gentle grade into the water.
- ▶ There are existing amenities including showers, toilets and shelter.
- ▶ The swimming area is netted and the water is typically calm.
- ▶ Its close proximity to other recreational and leisure facilities including the skate park, sports field and boat ramp, and social infrastructure of the town centre, school and library.
- ▶ The picturesque setting of the Bermagui Harbour and headland.

#### SHORT POINT – MERIMBULA

Short Point is a famous coastal destination that has been a traditional recreational destination for generations of Merimbula and Bega Valley residents and countless visitors and tourists.

Given the site's significant environmental, cultural, recreational and social values, Bega Valley Shire have included Short Point in its "Coastal Icon's" program. Short Point has experienced high levels of visitation and use since the start of last century by beach goers, fishermen, surfers, picnickers, whale watchers and walkers. As a result of this long history of intensive usage, Short Point has a range of management issues including:

- ▶ Native vegetation loss.
- ▶ Degraded beach and headland access.
- ▶ Environmental weeds intrusion.
- ▶ A range of standards of visitor infrastructure.

Given the physical extent of the Short Point headland, long history of use, its high visitation and the lack of a holistic solution to the sites issues, there is a need to improve access to the beach and headland for all members of the community, protect and expand areas of native vegetation and better locate and improve visitor facilities.

#### PAMBULA BEACH RESERVE

The NSW Department of Family and Community Services has identified Surf Life Saving NSW (SLSNSW) as an organisation which can contribute to the NSW Government's reforms for people with disabilities. Funding has been allocated to SLSNSW to develop and implement strategies to improve the inclusion of people with disabilities at three beach example and trial precincts on the NSW coast. Pambula Beach is one of the sites, having been selected based on the establishment and success of its Special Nippers program.

The development of a landscape master plan for the parkland surrounding the Pambula Beach Surf Life Saving Club will focus on access and inclusion for people with a disability. There is a need to provide an accessible recreational space that includes pathways connecting facilities. This will be complemented by a semi-permanent pathway to enable an unencumbered passage from the car park and across the soft sand to the beach and thus enabling everyone in the community the opportunity to enjoy the beach.



*Revegetation and bank stabilisation are key considerations for the future development of Short Point, Merimbula.*

# 02 PROJECT SITE LOCATIONS

## 2.1 SITE CONTEXT

The figure adjacent shows the location of the three project sites relative to each other within the Bega Valley Shire Council municipal boundary.

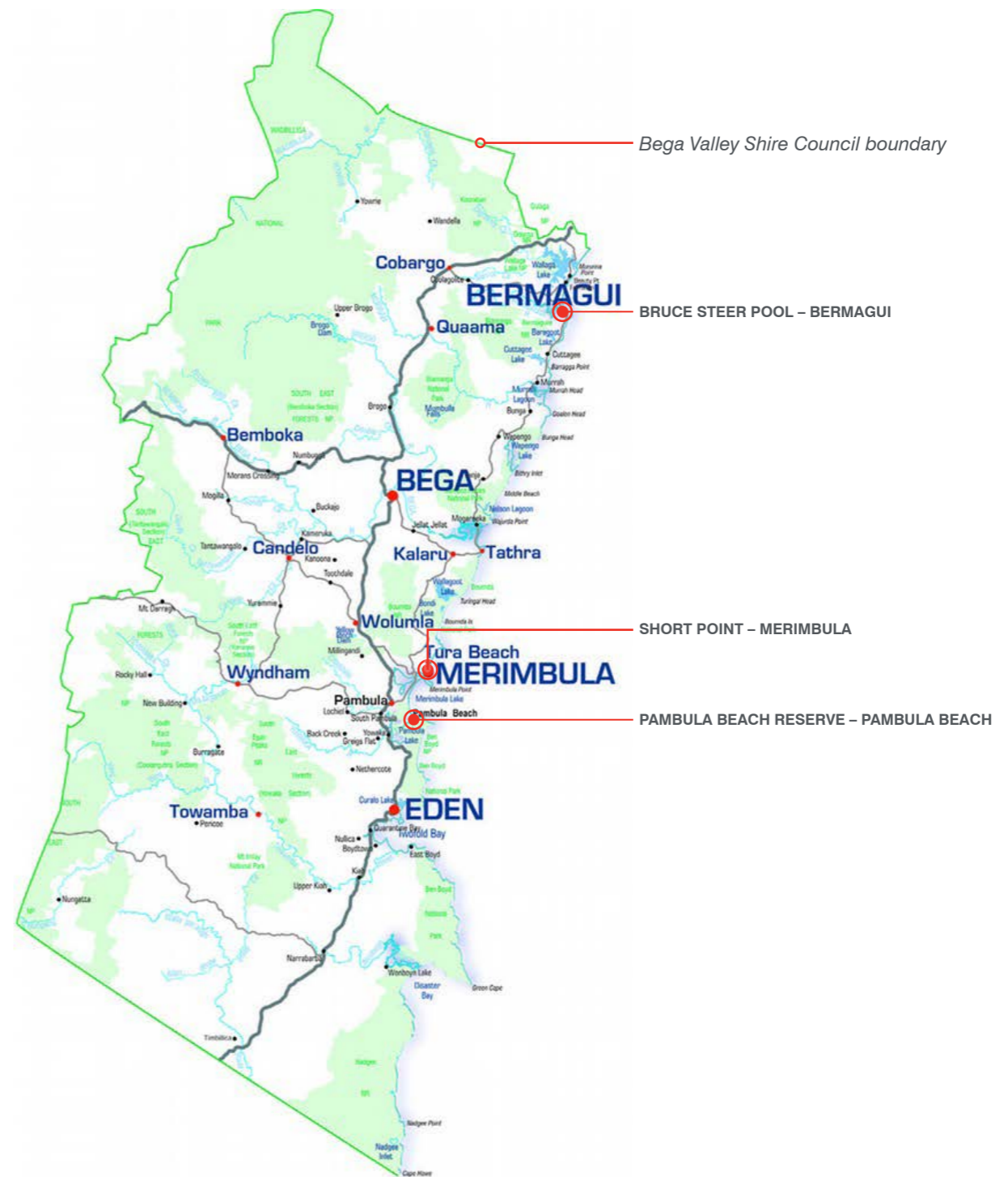


Figure 1: Bega Valley Shire Council Coastal Accessibility Projects context map

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## 2.2 SITE LOCATIONS

The aerial photographs below outline the location of each project site within each township



Figure 2: Bruce Steer Pool location within the Bermagui township.

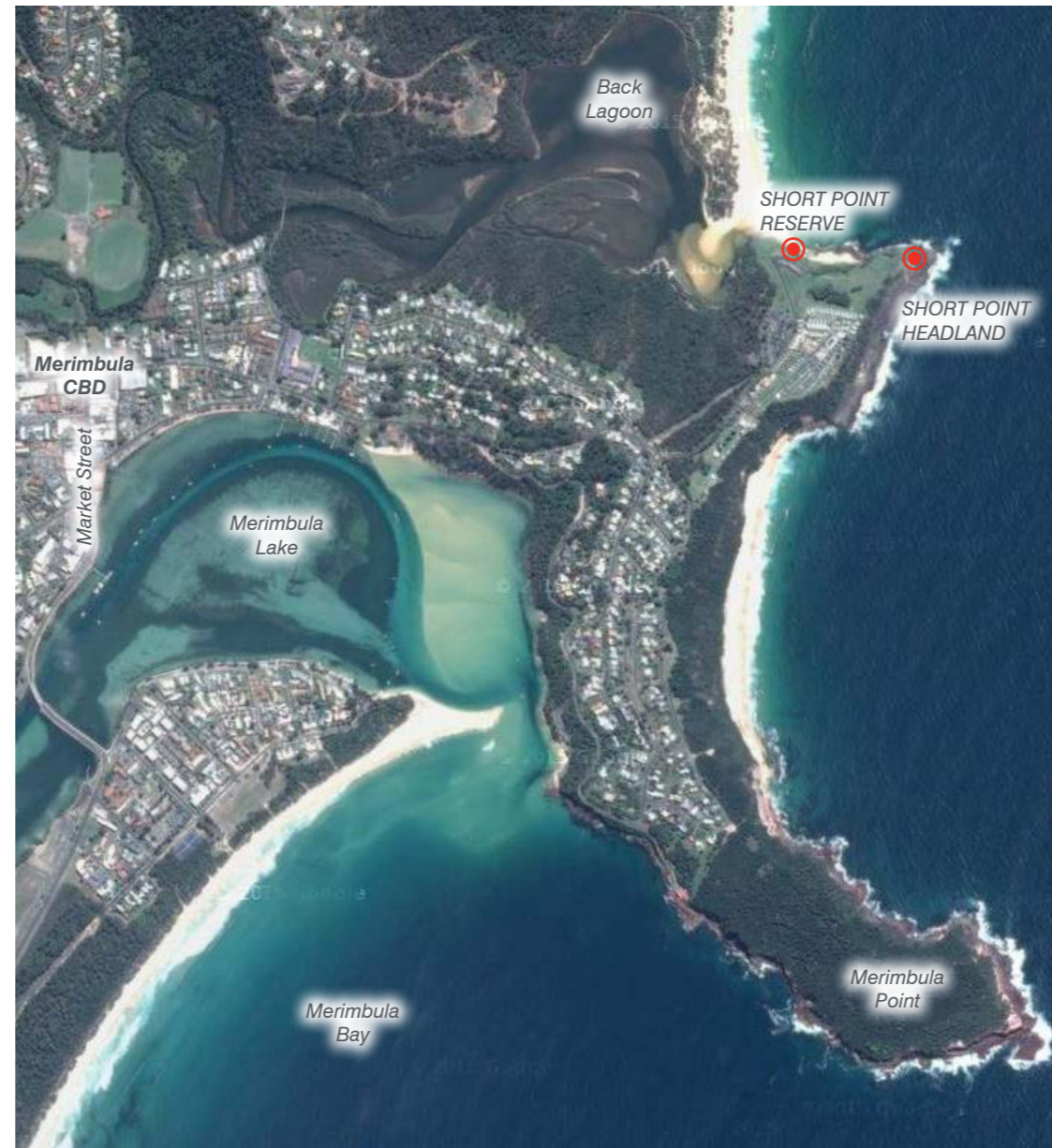


Figure 3: Short Point location within the Merimbula township.



Figure 4: Pambula Beach Reserve location within the Pambula Beach township.

# 03 AIMS AND OBJECTIVES

## 3.1 SITE SPECIFIC AIMS AND OBJECTIVES

The Aims and Objectives to be achieved through the Project for each site are outlined below.

### BRUCE STEER POOL – BERMAGUI

The Aim for the Bruce Steer Pool project is:

*'In consultation with the community and other stakeholders develop and implement an overall plan for the redevelopment of the Bruce Steer Pool area with a view to it becoming a fully inclusive and accessible aquatic recreational space'.*

The Objectives are:

- ▶ Improve accessibility elements to the parkland and beach area surrounding Bruce Steer Pool.
- ▶ Promote a more active and inclusive community locally.
- ▶ Provide a facility that will benefit all with mobility limitations living in and visiting the Bega Valley as well as the broader community.
- ▶ Provision of a facility that will leave a legacy for the broader community of people living with injury and/or disability.
- ▶ Minimise environmental impacts on the site and surroundings.

### SHORT POINT – MERIMBULA

The Aim of the Short Point Merimbula project is:

*'The rehabilitation of the Short Point area through the restoration and enhancement of the site's accessibility and environmental, recreational and social values'.*

Objectives include:

- ▶ Improved, safe access to beach, estuary and headland.
- ▶ Protect and expand the coastal vegetation communities.
- ▶ Reduction in area impacted by environmental weeds.
- ▶ Stabilisation and revegetation of all areas subject to erosion.
- ▶ Improve visual amenity of Short Point.
- ▶ Enhanced recreational environments and opportunities.
- ▶ Improved community engagement and education and opportunities focusing on coastal ecosystems, coastal processes, cultural heritage, entrance management and weed management.

- ▶ Recognition of sites of Aboriginal and European heritage.
- ▶ Enhanced visitor and tourist experience.

### PAMBULA BEACH RESERVE – PAMBULA BEACH

The Aim for the Pambula Beach Reserve is:

*'In consultation with the community and other stakeholders develop and implement an overall plan for the redevelopment of the Pambula Beach Surf Life Saving Club precinct with a view to it becoming a fully inclusive and accessible recreational space'.*

The Objectives are:

- ▶ Improve accessibility elements to the parkland and beach area surrounding Pambula Surf Life Saving Club.
- ▶ Promote a more active and inclusive community locally.
- ▶ Provide a facility that will benefit all with mobility limitations living in and visiting the Bega Valley as well as the broader community.
- ▶ Provision of a facility that will leave a legacy for the broader community of people living with injury and/or disability.
- ▶ Minimise environmental impacts on the site and surroundings.
- ▶ Increase participation in sport and recreational activities by people with disabilities, including Surf Life Saving Clubs and their activities.
- ▶ Reports be provided on the success or otherwise of the project, including recommendations that might be of benefit to the many other Councils and Surf Clubs looking to improve beach and recreation access for those with mobility difficulties.



# 04 PROJECT METHODOLOGY

## 4.1 PROJECT STAGING

The Objectives will be achieved through undertaking the project stages as set out in the Brief and as outlined below:

- ▶ Stage 1  
Situation review and information gathering – demographics, facilities, strategic and corporate planning, relevant industry practice and examples of similar sites and projects.
- ▶ Stage 2  
Consultation – gather project specific information including current uses, issues and opportunities.
- ▶ Stage 3  
Analysis – working with information to identify primary facility requirements, secondary facility requirements and future opportunities.
- ▶ Stage 4  
Reporting – delivery of draft report identifying priorities recommendations and actions.
- ▶ Stage 5  
Completion – delivery of final report incorporating feedback and discussion from public exhibition.

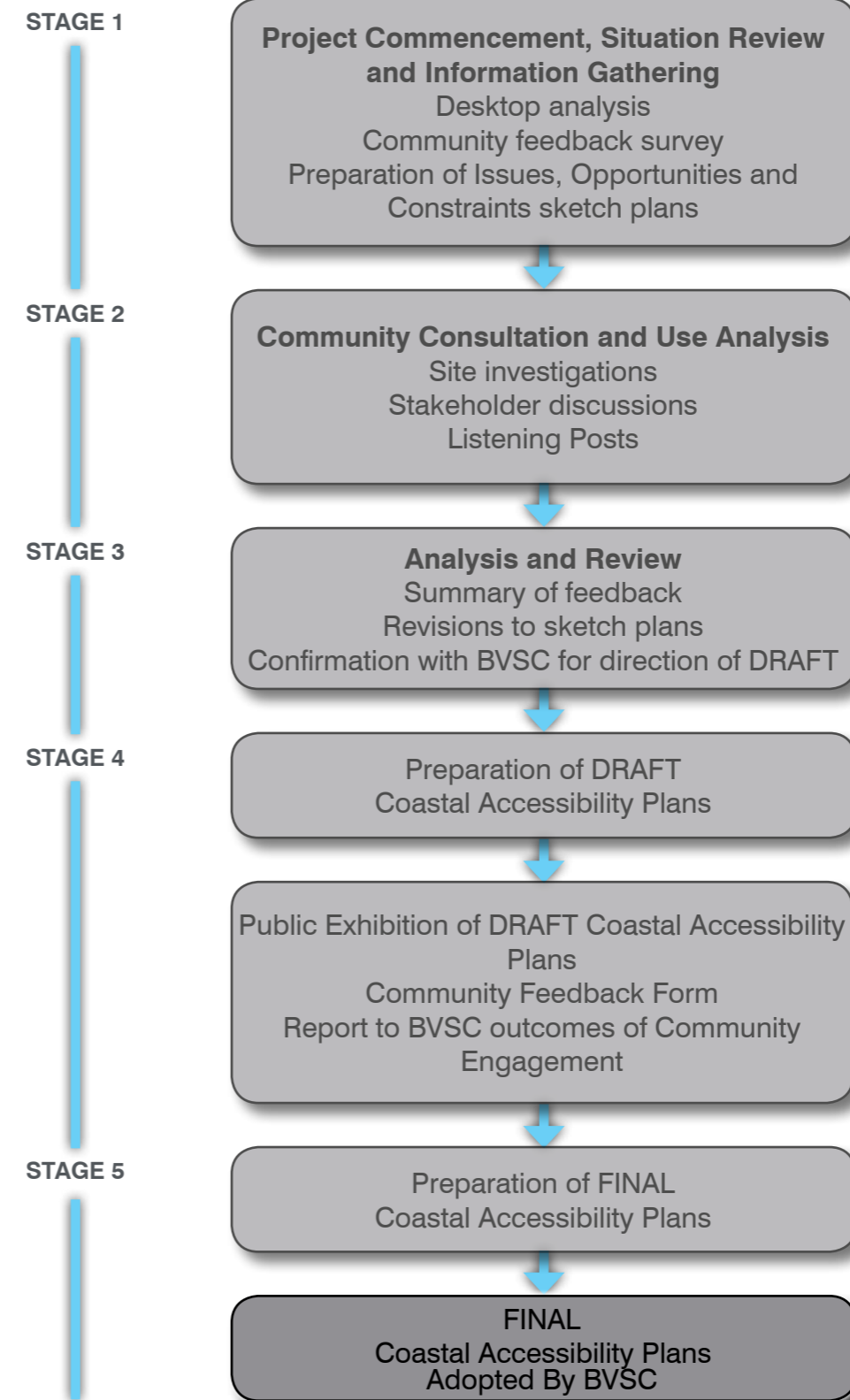
## 4.2 PROJECT OUTLINE, TASKS AND PROCESS

The completion of a complex project such as this requires a considered approach. It is critical for Bega Valley Shire Council and the community to be involved in the project in a meaningful way. To ensure that this was the case, a detailed methodology has been undertaken that aligns with the project staging. The tasks undertaken in each stage are outlined below and shown in the adjacent flow chart.

### STAGE 1 – PROJECT COMMENCEMENT, SITUATION REVIEW AND INFORMATION GATHERING

An initial period of investigation and analysis was undertaken during Stage 1 that included the following tasks:

- ▶ A project inception meeting was held to discuss project scope, outputs and current issues and opportunities to be addressed in the project.
- ▶ A community feedback form was developed to obtain the thoughts and ideas of the community. The feedback form was available on the Council’s website and hard copies were available from the Council Offices and Libraries.
- ▶ Desktop research and analysis was undertaken to determine current industry information, recreational trends and best practice to establish a framework for accessibility and design criteria.
- ▶ Issues, Opportunities and Constraints sketch plans were prepared for use in the Stage 2 consultation phase with stakeholders and the wider community.



## STAGE 2 – COMMUNITY CONSULTATION AND USE ANALYSIS

The second stage of the project involved extensive site investigations and consultation at each project site. The consultation phase identified and confirmed issues, opportunities, key user groups and patterns of use within the study areas. Specific tasks included the following:

- ▶ Extensive site investigations and meetings with BVSC officers and key stakeholders at Bruce Steer Pool, Short Point and Pambula Beach Reserve. The investigations included detailed context analysis, review of the relationships and interaction with other facilities and confirmation of opportunities and constraints. A photographic record of each site was also completed.
- ▶ Site meetings with key BVSC stakeholders including Access Committee, Engineering Team, Leisure and Recreation Team, Environmental Management Officers and Aboriginal Liaison Officer to confirm uses, access requirements, maintenance and management obligations.
- ▶ Meetings were also held at each site with key local stakeholders who were identified by BVSC Officers as having a significant amount to add to the project. The invitations to key local stakeholders were limited to ensure attendees had the best opportunity to express their views, while the remainder of the community were given the opportunity to attend the Listening Posts. The key stakeholder meetings were held as outlined below and attended by representatives from the key local stakeholders listed:
  - ▶ **Key Stakeholder Meeting held at Bruce Steer Pool on Tuesday 8 March 8am to 9am**  
Bermagui Life Saving Club, Bermagui Swimmers, Bermagui Information Centre, Bermagui Chamber of Commerce, Bermagui Tourist Park.
  - ▶ **Key Stakeholder Meeting held at Short Point Merimbula on Wednesday 9 March 9am to 10am**  
Merimbula Beach Holiday Park, Merimbula Chamber of Commerce, Merimbula Tourism, Merimbula Special Events Committee, Sapphire Coast Boardriders, Merimbula Rotary.
  - ▶ **Key Stakeholder Meeting held at Pambula Beach Reserve on Thursday 10 March 2pm to 3pm**  
Pambula Beach Discovery Holiday Park, Pambula Beach Surf Life Saving Club (SLSC) Reserve Development Committee, Pambula Beach SLSC President, Lumen Christi Catholic College, Sapphire Coast Boardriders.
- ▶ Listening Posts were held at each project location to provide the Community with the opportunity to talk to the project team and have their say about what they liked and what they would like to see improved. The Listening Posts and attendance numbers are outlined below:
  - ▶ **Bruce Steer Pool Listening Post held on Tuesday 8 March between 10am and 2pm**, with approximately 20-30 people visiting.
  - ▶ **Short Point Listening Post held on Wednesday 9 March between 10am and 2pm, and 3pm to 6pm**, with approximately 15-20 people visiting.
  - ▶ **Pambula Beach Reserve Listening Post held on Thursday 10 March between 3pm and 6pm**, with approximately 10-15 people visiting.

- ▶ Given the SLNSW funding allocation for Pambula Beach Reserve, a demonstration of the Pambula Beach Assisted Access Ramp trial was undertaken at Pambula Beach on Friday 11 March. BVSC staff and Spiire were in attendance to view example panels of the access ramp assembled by manufacturer Replas. The trial is looking at the challenges, costs and practicalities of having an assisted access path in the exposed and changing environment of the foreshore and beach.
  - ▶ Following the installation of the Assisted Access Ramp, a violent storm and 21 metre swells in June washed away around 40 metres of the pathway. Council is working with the manufacturer Replas to find solutions to the challenges of the pathway in the environment. Council is working towards returning the pathway to the beach when the level of sand returns to an appropriate height.



### STAGE 3 – ANALYSIS AND REVIEW

Following the extensive consultation period, the next stage of the project involved review and analysis of the consultation outcomes, the issues and opportunities and identified facility requirements. Specific tasks included the following:

- ▶ A summary of feedback and results was prepared from the stakeholder engagement.
- ▶ Revisions to sketch plans were undertaken and issued to BVSC to confirm consultation and site investigations outcomes.
- ▶ Confirmation with BVSC officers on the direction and design outcomes to be included in the DRAFT Coastal Accessibility Plans.

### STAGE 4 – DRAFT COASTAL ACCESSIBILITY PLANS

This important stage of the project included preparation of the DRAFT Coastal Accessibility Plans. The DRAFT Accessibility Plans Report outlined findings from the early stages of the project, the intended design outcomes to be achieved, recommendations for works, prioritised actions and cost estimates. The DRAFT Report was subject to a further round of community consultation through a public exhibition period.

### STAGE 5 - FINAL COASTAL ACCESSIBILITY PLANS

The final stage of the project involved the assessment of submissions received during the public exhibition period and liaison with BVSC to confirm agreed amendments. Following the agreed direction for the plans as a result of community and Council feedback, the FINAL Coastal Accessibility Plans were prepared and are contained in this report.



# 05 COMMUNITY CONSULTATION SURVEY OUTCOMES

## 5.1 STAKEHOLDER AND COMMUNITY ENGAGEMENT

The stakeholder and community engagement undertaken during Stage 2 of this project has targeted and received considerable responses from a broad cross section of the community. This has been through the discussions with Stakeholders, User Groups, local community representatives and members, Project Team Meetings, Listening Posts, Community Feedback Form and correspondence with local residents.

While it is possible to analyse the metrics of statistical data produced from the online survey, it is important to note that these statistics provide a relatively small snapshot of the feedback received from the wider community. The survey results do however generally concur with other feedback received during on site consultation.

The range of views and ideas heard during the consultation period have been given due consideration in preparing the DRAFT Coastal Accessibility Plans.

## 5.2 COMMUNITY FEEDBACK SURVEY

The community feedback survey was undertaken from December 2015 to early February 2016.

The questions on the Community Feedback Survey were aimed at gaining some information about respondents including age, gender and where they live. The questions were then tailored to each project site of Bruce Steer Pool, Short Point and Pambula Beach Reserve. Typical questions included the following:

- ▶ How often do you visit the site?
- ▶ How do you usually travel there?
- ▶ What are the three main activities you like to participate in at the site?
- ▶ What are three things that make the site enjoyable?
- ▶ Please specify three things that most need improving?
- ▶ Please provide an indication of how important a series of access requirements are (such as parking, pedestrian safety, access, furniture, shade, views, coastal revegetation, community events, facilities).
- ▶ Please provide any further comments.

The survey had a total of 170 responses when it closed in mid February. While this number of responses is not statistically significant, responses to this survey have provided a snapshot of the views and attitudes in the community.

Some interesting general points to note about the survey respondents are:

- ▶ The highest proportion of respondents lived in Bermagui (41%), with 14% from Merimbula, 7% from Pambula and the balance from surrounding and other areas.

- ▶ 64% of respondents were female.
- ▶ The majority of respondents fell within the 56-74 age bracket followed by the 35-55 age bracket.
- ▶ Respondents were largely made up of couples with no dependent children (45%) and family with young children (39%).
- ▶ 60% of respondents commented on Bermagui, while 30% commented on Merimbula and 20% on Pambula respectively (note some respondents commented on more than one site).

## BRUCE STEER POOL – BERMAGUI

Outcomes from the Feedback Survey in regard to Bruce Steer Pool are as follows:

- ▶ Respondents visit a few times a week (31%) followed by weekly and monthly (both 27%).
- ▶ 75% of respondents travel to Bruce Steer Pool by car.
- ▶ The three activities that respondents participate in most at Bruce Steer Pool are swimming (96%), enjoying the scenery (43%) and exercising/fitness (36%).
- ▶ Key things that respondents think most need improving at Bruce Steer Pool include:
  - ▶ amenities including disabled toilets and improved showers
  - ▶ ramp and hand rail providing access to the water
  - ▶ shade and picnic settings
  - ▶ repairs to the stingray net
  - ▶ disabled parking
  - ▶ pathways from parking areas to beach
  - ▶ vegetation maintenance and revegetation.



Word graphic showing responses to 'Please specify three things that most need improving at Bruce Steer Pool'.



Word graphic showing responses to 'What are the three things that make Bruce Steer Pool enjoyable?'



Word graphic showing responses to 'Please provide any further comments you wish to make about Bruce Steer Pool'.

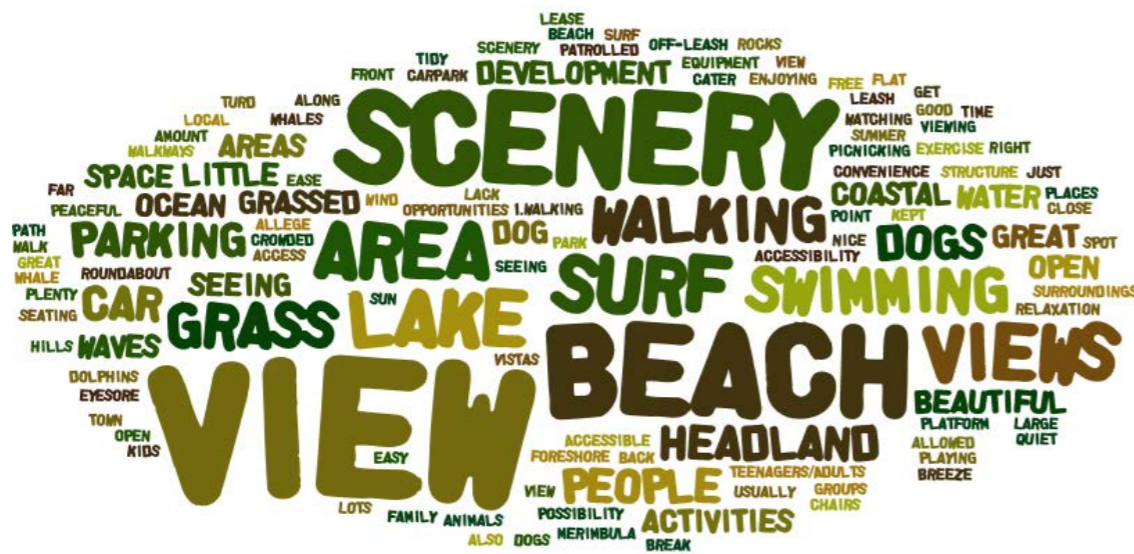
## SHORT POINT – MERIMBULA

Outcomes from the Feedback Survey in regard to Short Point are as follows:

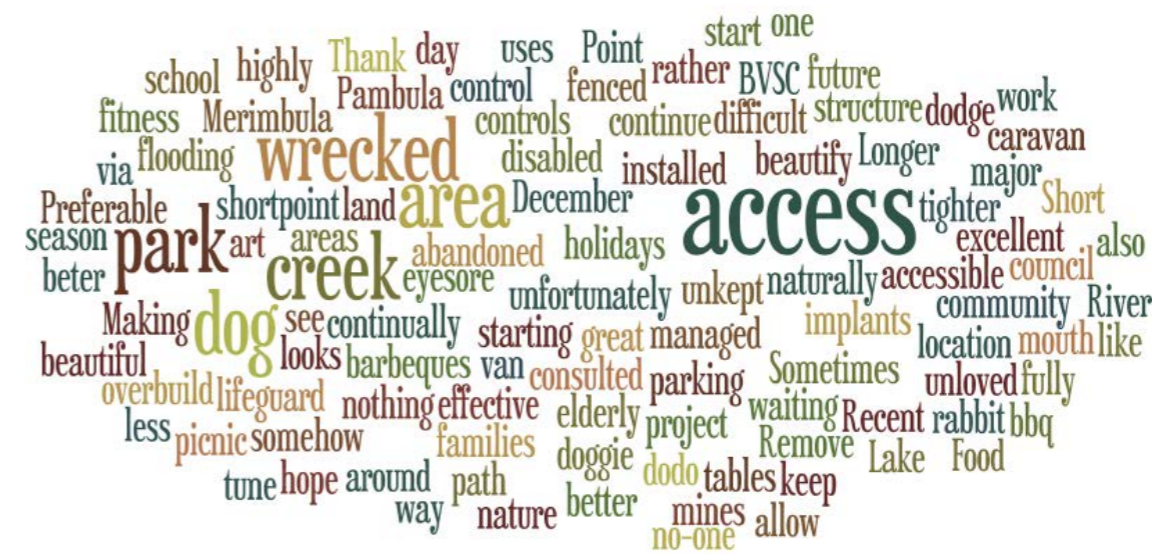
- ▶ 60% of respondents visit this facility both daily and weekly.
- ▶ 84% of respondents travel to Short Point by car.
- ▶ The three activities that respondents participate in most at Short Point are enjoying the scenery (78%), coastal/beach walking (68%) and swimming (47%). Nature based activities/whale was fourth highest at 39% of respondents, followed by surfing at 36%.
- ▶ Key things that respondents think most need improving at Short Point include:
  - ▶ improved access and walkways connecting site features and facilities
  - ▶ walkway access to seating and grass areas
  - ▶ shelter, barbecues, seating and tables
  - ▶ improved showers and toilets
  - ▶ protection of indigenous sites
  - ▶ ensure scenic values maintained
  - ▶ retain off leash area however ensure provision of adequate facilities and waste management.



Word graphic showing responses to 'Please specify three things that most need improving at Short Point'.



Word graphic showing responses to 'What are the three things that make Short Point enjoyable?'



Word graphic showing responses to 'Please provide any further comments you wish to make about Short Point'.



# 06 SITE INVESTIGATIONS AND ANALYSIS

## 6.1 SITE INVESTIGATIONS

Site investigations were undertaken by the Project Team which enabled a thorough review of the Analysis, Opportunities and Constraints which had been identified through desktop analysis, Council comments and community feedback survey. The site investigations included 'walk and talk' discussions amongst the project team which focused around the key issues to be addressed at each site.

## 6.2 ANALYSIS, OPPORTUNITIES AND CONSTRAINTS

Issues, Opportunities and Constraints sketch plans were prepared for use in consultation with stakeholders and the wider community at the Listening Posts. The plans were based on the results of desktop analysis, Spiire's existing knowledge of the study areas, comments from BVSC and feedback from the community feedback survey.

The plans and images following were tabled at Stakeholder meetings and Listening Posts during the consultation period. The images and plans were a useful tool during discussions with the community as they highlighted existing conditions, opportunities for connectivity and access, and other considerations to be addressed.

Records of discussions held were noted on the plans and used in the preparation of further design work.

## 6.3 KEY STAKEHOLDER MEETINGS

The Project Team engaged with key community stakeholders at each location in on-site discussions prior to each Listening Post. The meetings were an opportunity for key user groups, business representatives and Access Committee representatives to share ideas with the Project Team. The stakeholders brought valuable knowledge and ideas in response to the issues, particularly in terms of 'day to day' use and function of each site.

## 6.4 LISTENING POSTS

Listening Posts were held at each location in early March 2016 to provide the community with the opportunity to come and chat with the Shire and consultant team regarding the Accessibility Projects. The Listening Posts were held as follows:

- ▶ Bruce Steer Pool, Bermagui 10am – 2pm on Tuesday 8 March
- ▶ Short Point, Merimbula 11am – 2pm and 3pm – 6pm on Wednesday 9 March
- ▶ Pambula Beach Surf Life Saving Club, Pambula Beach 3pm – 6pm Thursday 10 March.

There was great community attendance at each location with stimulated discussion and sharing of ideas. Feedback was positive in relation to the project and supported the ideas put forward in the Analysis, Opportunities and Constraints Plans. The feedback received has been captured in the Consultation Results and Summary Plans section below.

## 6.5 SUBMISSIONS

Bega Valley Shire received a number of written submissions during the initial consultation period. The written submissions were from various Committees, user groups and local community members. Comments received were considered during the development of the DRAFT Accessibility Plans.

## 6.6 DESIGNING FOR ACCESSIBILITY

### BACKGROUND

Improving access to facilities and features of the coastline to break down some barriers for the community presents an exciting opportunity for Bega Valley Shire. This Accessibility Project is in line with a number of current reforms for people with disabilities, the elderly and those suffering injuries.





Some interesting points to consider in regard to trends are as follows:

- ▶ Legislation has been set in place. In 2014 the NSW Government passed the Disability Inclusion Act and by 2017 all LGA's must have a Disability Inclusion Plan.
- ▶ Demand for improving access is increasing. 18.5% of our population have some sort of disability and a further 13.5% have either medical or aging issues.
- ▶ The NSW Department of Family and Community Services has identified Surf Life Saving NSW as an organisation which can contribute to the NSW Government's reforms for people with disabilities.
- ▶ Australia is a beach oriented nation with a large proportion of the population living on the coast. Many people retire to the beach, while an annual beach holiday is a rite of passage for others.
- ▶ Australia's beaches represent some of our best public open spaces, they are free and available for anyone to enjoy. While these spaces may be financially accessible for all they are often not physically accessible for the elderly, disabled and injured.
- ▶ Good consultation with users groups is important when planning improvements to accessibility to beaches. Disabled surfers, for example, do not seek the biggest waves, but rather beaches with small waves, plentiful car parking, disabled toilets, ramps and beach wheelchairs, as well as choosing beaches where they did not inconvenience with surfers.

While the aim of this Accessibility Project is to improve current access and provide more opportunities for the local community and visitors, there are some site constraints that limit the ability for Council to meet strict compliance with standards that also meet community expectations. The Accessibility Project aims to find a balance between working with existing site and environmental conditions and the ability to meet relevant standards. As such, the project identifies a number of recommendations that are within Council's capacity to deliver within the constraints of the environments that will provide improved features and facilities.

### SIMILAR PROJECT EXAMPLE

Lakes Beach Budgewoi on the NSW Central Coast is considered a landmark project for accessibility design and disability tourism. The project involved the construction of 33 metre long disability ramp which provides continuous beach access from the car park to the surf club and beach. The beach has a large accessible car park, a pedestrian drop-off area, a cordoned off safety zone and tactile indicators and handrails for the visually impaired. Also included is a wheelchair compatible BBQ area and two beach showers.

### ACCESSIBILITY ELEMENTS

There are a variety of elements and products which may be considered appropriate in coastal accessibility designs. While these products are available, consideration must be given to Council's capacity to implement, manage and maintain such features, as outlined below.

- ▶ Ramps/walkways and handrails
  - ▶ Where possible and practical. Also consider sub-surface footings and base materials, suitability for emergency access, length of ramps/walkways to achieve DDA grades, rust proof fixtures and finishes, environmental factors.
- ▶ Beach matting/pathways (such as Replas recycled plastic products)
  - ▶ Consideration must be given to installation techniques, modular systems, fixings and ability to remove sections, environmental factors. The recent storm damage and erosion at Pambula Beach demonstrate the challenges faced with installation and management of such pathways.
- ▶ Beach wheelchairs
  - ▶ Added possibilities with improved beach access include provision of beach suitable wheelchairs. There are challenges for Council around security, storage, keys, loans/bonds, damage and repairs.
- ▶ Inclusive furniture
  - ▶ Ensuring access to site furniture such as seating, picnic settings, viewing platforms can be achieved where grades and access requirements can be met. Consideration must be given to locations of furniture or features and installation details to ensure adequate accessibility, for example connecting pathways, suitable edge and surface treatments.
- ▶ Inclusive play spaces
  - ▶ Numerous products are available which provide accessible structured play opportunities. Consideration must be given to play space layout, connecting pathways and the equipment itself to ensure maintenance obligations can be met for maximum longevity of features and fixtures.



Well designed ramps negotiate slope, fit with the environment and can provide access to the beach and into the water.



Recycled plastic pathway can be laid on sand and incorporate access to signage and seating.



Inclusive play

## 6.7 BRUCE STEER POOL EXISTING CONDITIONS PHOTOS AND ANALYSIS PLANS



Existing features including rock groyne, navigational beacon and cairn to be retained.

Opportunity for improvements to amenities, access and fish cleaning area were identified.

Opportunity to address issues such as lack of shade, erosion and weed infestation.

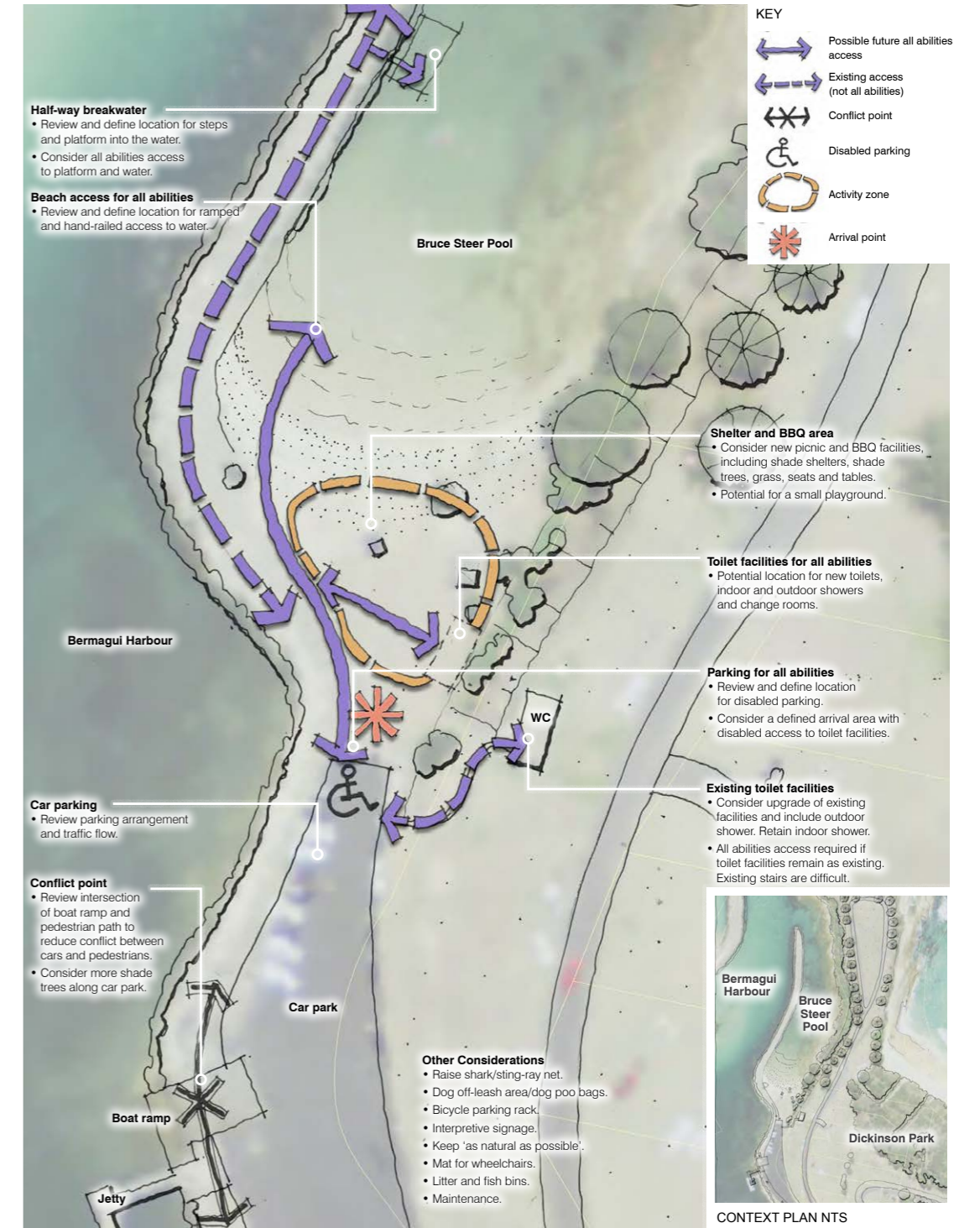


Figure 5: Bruce Steer Pool Bermagui – Analysis, Opportunities and Constraints Plan

NOT TO SCALE

## 6.8 SHORT POINT EXISTING CONDITIONS PHOTOS AND ANALYSIS PLANS



Existing features including selected furniture, sweeping views and access to headland to be retained and enhanced.

Opportunity to address access limitations, weed infestation and amenity.

Opportunity to address dog control, car parking arrangements, access to grass, lack of shade and erosion.

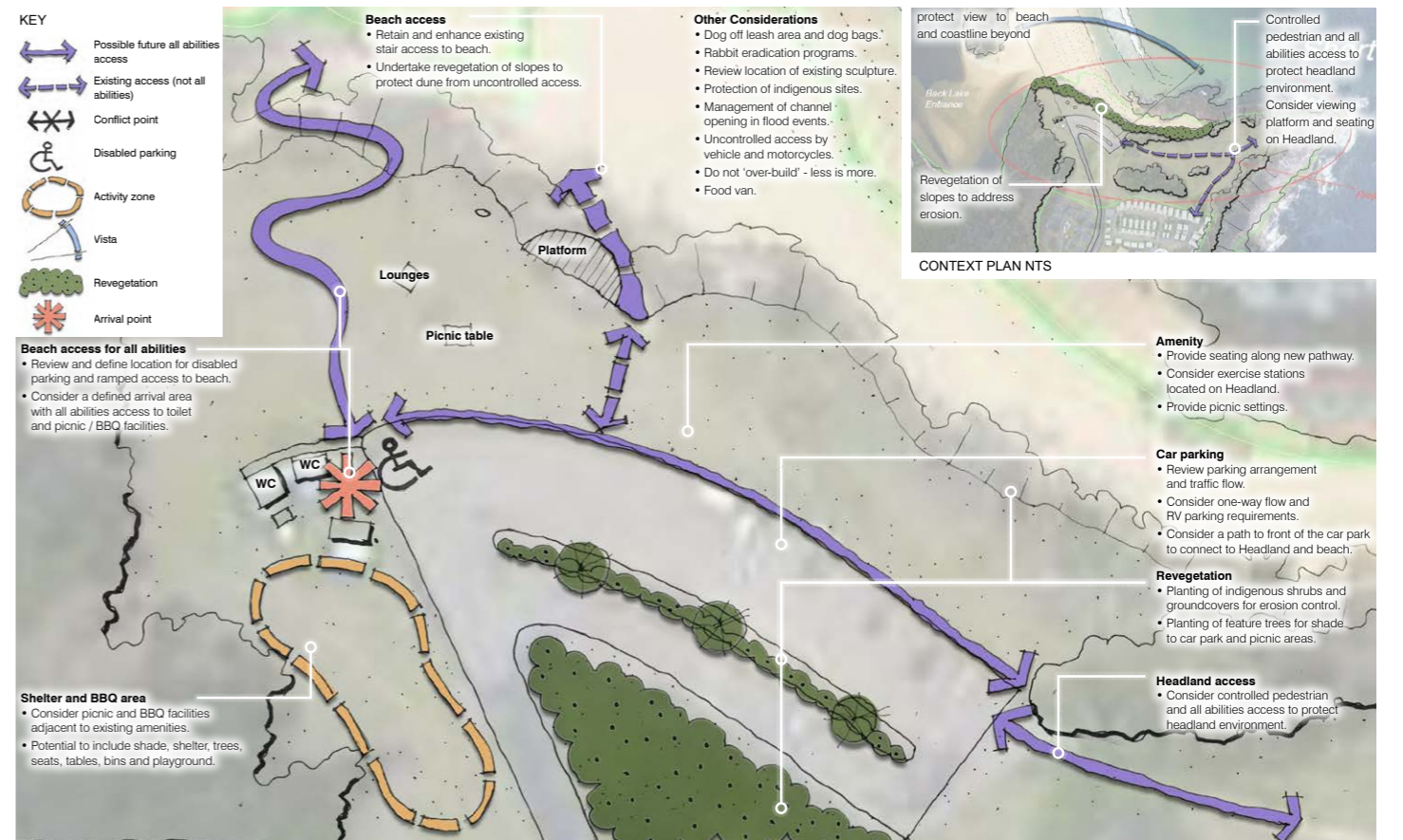


Figure 6: Short Point Merimbula – Analysis, Opportunities and Constraints Plan

NOT TO SCALE

## 6.9 PAMBULA BEACH RESERVE EXISTING CONDITIONS PHOTOS AND ANALYSIS PLANS



Existing features including timber lookout, coastal vegetation and the SLSC building to be enhanced.

Opportunities to improve drainage, amenities and play spaces were identified.

Opportunities to address undefined car parking, vegetation maintenance and dilapidated buildings.

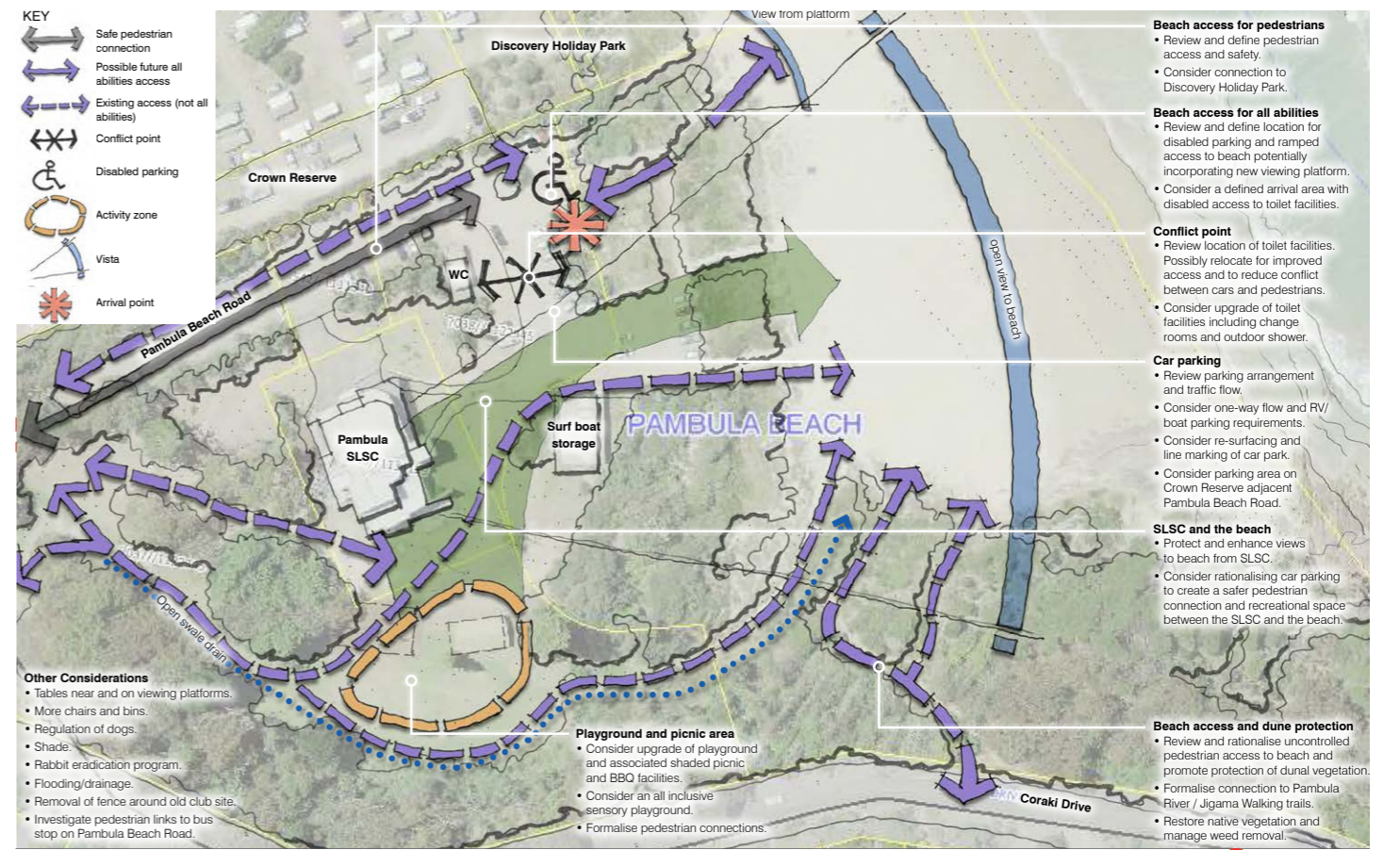


Figure 7: Pambula Beach Reserve – Analysis, Opportunities and Constraints Plan

NOT TO SCALE

# 07 SITE CONSULTATION RESULTS AND SUMMARY PLANS

The following summaries of feedback for each site has been collated from the community feedback survey, listening posts and site investigations. The below summaries inform the design responses and recommendations contained in the DRAFT Accessibility Plans which follow in the next Section of this Report.

## 7.1 BRUCE STEER POOL – BERMAGUI

### ACCESSIBILITY

- ▶ Review and define location for ramped and hand-railed all abilities access to the water. Consider a mat for wheelchairs.
- ▶ Review and define location for disabled parking.
- ▶ Provide a defined arrival area with all abilities access to toilet facilities and seating areas.

### TRAFFIC AND CAR PARKING

- ▶ Review car parking arrangements, traffic flow and consider best location for coach / RV turnaround and drop off area.
- ▶ Aim to reduce conflict between cars, boat launching and pedestrians at the boat ramp and car parking area.
- ▶ Consider more shade trees in car park area.

### AMENITIES AND FACILITIES

- ▶ Review existing signage and consider additional interpretive signage. Consider 'positive' signage to control anti-social behaviours.
- ▶ Upgrade toilets and shower facilities, including review of location with the potential to identify new facilities at the beach level. Provide a new amenities block that includes the following facilities:
  - ▶ accessible for all
  - ▶ toilets for male, female and disabled
  - ▶ indoor showers for both male and female
  - ▶ outdoor shower
  - ▶ baby change
  - ▶ potential for unisex facilities.
- ▶ Monitor and maintain the shark / sting-ray net including repairs and ensure coverage during high water levels.
- ▶ Provide additional accessible furniture for user amenity including picnic settings, seats and bicycle parking. Locate seating to ensure shade coverage as well as seating that captures winter sunshine on the eastern side of the site.
- ▶ Upgrade shelter area with accessible pathways and seating.
- ▶ Maintain views to beacon for water vessels.

- ▶ Upgrade and manage fish cleaning area and waste disposal facilities. Review ongoing maintenance of these facilities.
- ▶ Provide new BVSC beach safety signage.

### LANDSCAPE AND ENVIRONMENT

- ▶ Enhance and protect the natural qualities of the space to keep it 'as natural as possible'.
- ▶ Undertake weed removal, bank stabilisation and revegetation of the existing embankment between the upper and lower levels.

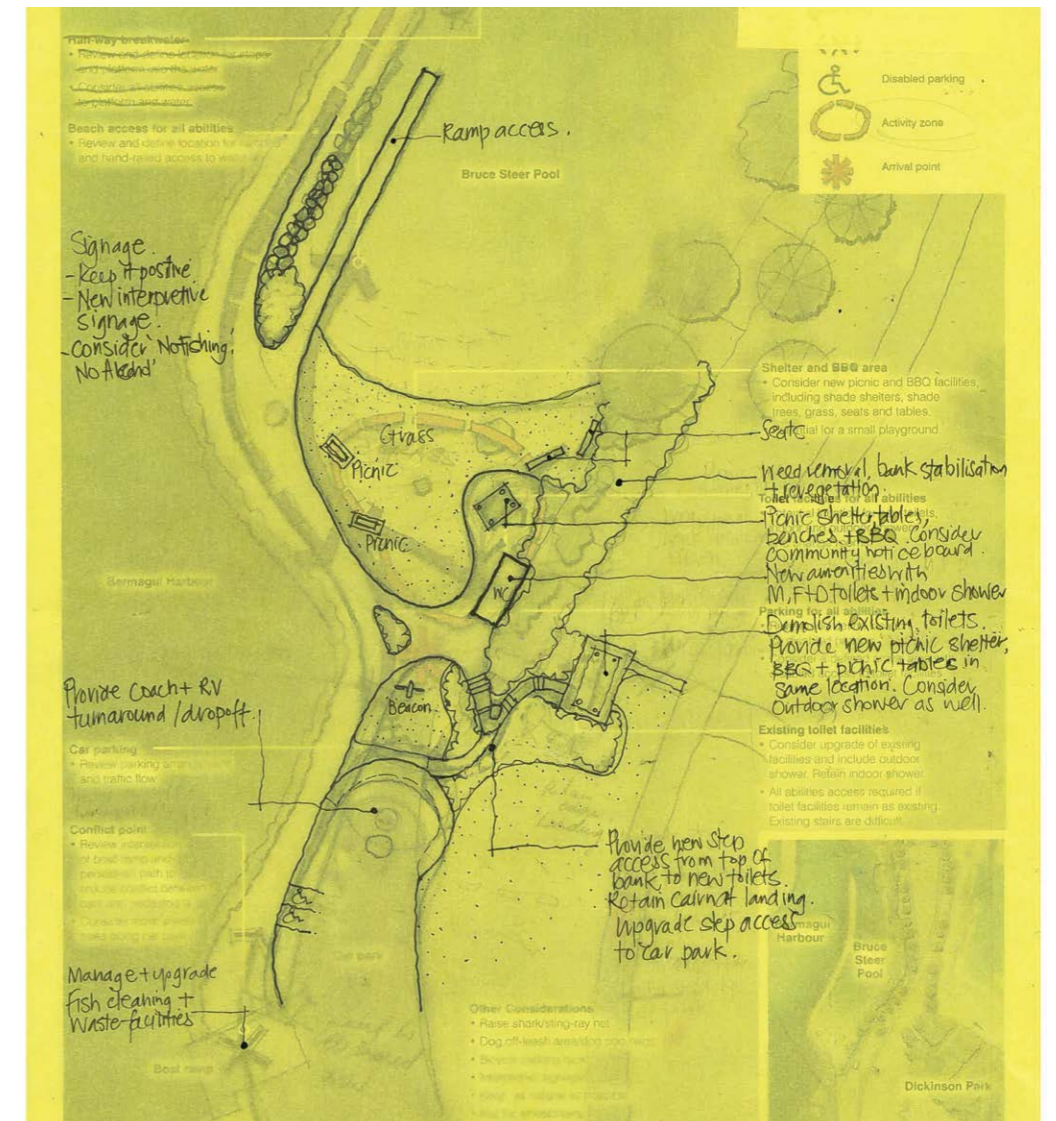


Figure 8: Bruce Steer Pool Bermagui - Consultation Results and Summary Plan

## 7.2 SHORT POINT – MERIMBULA

### ACCESSIBILITY

- ▶ Provide ramp/walkway to provide access where achievable with existing levels to features and facilities including existing sun lounges, viewing platform and proposed shelter area.
- ▶ Improve pathway connections from car parking area to existing and proposed features (e.g. seating and viewing areas, headland walk, amenities, existing beach access steps).
- ▶ Consider potential for boardwalk pathway over drainage line at the western end of the car park for improved access to headland.

### TRAFFIC AND CAR PARKING

- ▶ Review and define location for disabled parking with connecting pathways.
- ▶ Consider additional shade trees to the car park while not obstructing views.
- ▶ Review car parking arrangement and traffic flow with a view to maintaining views from car park and providing defined parking areas. Consider one way circulation, speed humps and coach / RV turnaround and drop-off area. Retain access to grassed overflow parking area to the south of the main car park.
- ▶ Consider bollards and/or barrier kerbs along car park frontage to mitigate risk of vehicles over topping embankment.
- ▶ Retain beach access for grader along western side of the site for maintenance/opening of Back Lake channel when required.

### AMENITIES AND FACILITIES

- ▶ Investigate potential for a new picnic shelter, BBQ facilities and picnic tables with appropriate path access. Locate on north western part of the site where existing flat area can provide usable space which will not impede north westerly views from car park/grass areas.
- ▶ Retain existing viewing platform and sun lounges and provide connecting pathway access to these features.
- ▶ Review longevity and maintenance obligations of the timber adjacent outdoor shower location at the viewing platform. Desire to retain outdoor shower in this location given proximity to beach access steps. Ensure accessible pathways to shower facilities.
- ▶ Suggestions were made to review the location of the existing sculpture. The sculpture is required to be retained in its existing location due to cultural heritage obligations. Opportunity to incorporate sculpture location into proposed pathway alignment.
- ▶ Provide terraced seating areas along the grassed embankment that provide for a variety of view lines including at the eastern area of the site for wave/surfer watching.
- ▶ Consider provision of a new multi-purpose building that can incorporate Lifeguard Station, food and drink kiosk, new toilet and shower amenities, and storage.

- ▶ Provide a pathway to the headland, generally along the alignment of the former road and provide seats at regular intervals.
- ▶ Suggestions were made for exercise stations along the headland. In light of the existing exercise stations at Merimbula Lake, the existing off leash area and Council's capacity to implement and maintain infrastructure, this suggestion needs careful consideration to minimise conflicts between users and on going management.
- ▶ Opportunity to enhance the area at the end of the headland including a lookout, public binoculars and seating.
- ▶ Retain existing dog off-leash area on the headland in line with BVSC Companion Animals Policy. Suggestions were made in relation to improved maintenance of dog waste dispensers and bin collections.
- ▶ Provide new BVSC beach safety signage, as well as interpretive signage which acknowledges the site's cultural heritage.

### LANDSCAPE AND ENVIRONMENT

- ▶ Undertake weed management and native revegetation of slopes to protect dune from uncontrolled access. This may be staged works including revegetation to the top of the batter adjacent open space grassed area, followed by the remainder of the headland embankments.
- ▶ Enhance and protect the natural qualities of the space. Do not 'over-build', less is more.
- ▶ Introduce rabbit eradication programs.
- ▶ Protection and acknowledgment of indigenous sites and heritage.



Figure 9: Short Point Merimbula - Consultation Results and Summary Plan

## 7.3 PAMBULA BEACH RESERVE – PAMBULA BEACH

### ACCESSIBILITY

- ▶ Improve pedestrian and disabled access and safety into and throughout the site.
- ▶ Improve pedestrian links to bus stop on Pambula Beach Road and residential area.
- ▶ Improve visual and physical connection through the site towards the start of the Jigama Walking Track.
- ▶ Consider a pedestrian connection to Discovery Holiday Park with a disabled access point.
- ▶ Review and define location for disabled parking with connecting pathways to facilities and features.
- ▶ Provide Access Path to beach as part of NSW Government funding initiative.
- ▶ Upgrade toilets and shower facilities generally in the same location as existing toilet block. Provide a new amenities block that includes the following facilities:
  - ▶ Accessible for all.
  - ▶ Toilets for male, female and disabled.
  - ▶ Indoor showers for both male and female.
  - ▶ Outdoor shower (potential to retain existing outdoor shower).
  - ▶ Baby change.
  - ▶ Potential for unisex facilities.

### TRAFFIC AND CAR PARKING

- ▶ Review parking arrangement and traffic flow including the following opportunities:
  - ▶ Investigate provision of roundabout at Corokai Drive entrance for improved intersection safety.
  - ▶ Provide parallel parking for buses/boats/RV's within the site where possible.
  - ▶ Consider additional car parking area to the west of the Surf Life Saving Club while retaining existing high value trees.
  - ▶ Consider re-surfacing and line marking of car park.
  - ▶ Consider future expansion of parking area on the northern boundary within the Crown Lease Area currently occupied by Discovery Holiday Park.
- ▶ Retain maintenance access to pump station.
- ▶ Retain surf boat and life guard access from SLSC to beach.

### AMENITIES AND FACILITIES

- ▶ Provide grab rails to outdoor shower and upgrade shower facilities when required.

- ▶ Provide an open grass area south of the SLSC for kickabout / performances / overflow parking.
- ▶ Protect and enhance views to beach from SLSC.
- ▶ Suggestion was made for a viewing tower at the beach for surf patrol. Recent installation of the viewing platform provides for viewing area. Further consideration by BVSC for a beach tower is required.
- ▶ Provide new BVSC beach safety signage.
- ▶ Provide way-finding and directional signage at the entrance to the precinct.
- ▶ Remove storage shed and provide new storage adjacent to the SLSC building.
- ▶ Consider seats / tables near and on viewing platforms.
- ▶ Relocate playground for improved access and visibility. Include all abilities play equipment, bike/scooter track and associated shaded picnic and BBQ facilities. Consider providing low impact exercise equipment for the elderly.
- ▶ Undertake community consultation to review the name of the Reserve.

### LANDSCAPE AND ENVIRONMENT

- ▶ Improve safety of existing drain outfall at the site entry and improve stormwater management through the site.
- ▶ Remove existing cypress trees 'maze' for improved visibility and safety throughout the site.
- ▶ Continue to promote weed management, revegetation and maintenance of dunes and embankment adjacent Corokai Drive.
- ▶ Undertake rabbit eradication programs.



Figure 10: Pambula Surf Lifesaving Club Precinct Pambula Beach - Consultation Results and Summary Plan

## 7.4 CONSULTATION RESULTS ON THE DRAFT ACCESSIBILITY PLANS

The following summaries of feedback for each site has been collated from the community feedback survey and written submissions received during the public exhibition phase of the DRAFT Accessibility Plans.

The below summaries address only those comments which were relevant to the brief for this project and related to amendments to be included in the plans that were agreed with Council. The comments inform the amendments to the design responses and recommendations contained in the FINAL Accessibility Plans which follow in the next Section of this Report. Responses to feedback are shown in italics.

## FEEDBACK ON BRUCE STEER POOL – BERMAGUI

- ▶ Reduce the amount of roadworks and changes to the parking area.
  - *The plans have been revised to reduce the amount of roadworks. Note that the current layout of the existing asphalt area does not allow for disabled parking that meets Australian Standards. The plans have been amended to reflect accessible disabled parking bays with sufficient room for service vehicles and cars/trailers to turn around at the end of the car park.*
- ▶ Feedback regarding the need for the all abilities access ramp from the upper level and associated cost.
  - *Following comments received and further detailed analysis it has been determined that it would be unfeasible to achieve the 1:14 grades with landings and that there will be more benefit in providing other elements in the plan.*
- ▶ Review provision of parking for coaches.
  - *A more detailed review of the existing topography has determined that the cost vs benefit for this item will be minimal. Recommendations for considering bus drop off bay at the southern end of the Bruce Steer pool entry road are outlined in the plan. The existing topography is too steep to achieve parking bays for coaches and cars on the western side of the upper road without significant earthworks.*
- ▶ Leave the hill as natural as possible.
  - *The removal of the all abilities access ramp and review of stair and pathway access enable minimal works to the steep embankment. Revegetation of the lower part of the embankment will enhance the natural qualities of the area.*
- ▶ Review provision of pathways leading from the Bruce Steer pool area.
  - *Connecting pathways are indicated on both the eastern and western side of the car park. The eastern side pathway will provide direct access from the car parking bays. The proposed pathway on the western side is deemed appropriate to connect the boat ramp area to Bruce Steer pool. Further investigation and design will be required to determine safe connections at the southern end of the Bruce Steer pool car park entry.*
- ▶ Suggestion for use of 316 Grade Stainless Steel.
  - *To be included in detailed design.*
- ▶ Please provide staging for works.
  - *Proposed stages are included in the plan and cost estimates.*



## FEEDBACK ON SHORT POINT – MERIMBULA

- ▶ Retain grassed area as much as possible and reduce concrete walkways.
  - *The concrete walkways have been reviewed and reduced in scale to maximise grassed area while providing ramped access to the existing viewing platform and proposed shelter area.*
- ▶ Provision of shade trees.
  - *Shade is provided by additional small shelters. Community sentiment to retain views has taken precedence over inclusion of shade trees.*
  - *Trees have been removed from the centre median to retain views from car parking bays on the upper car parking area.*
- ▶ Larger coach parking area.
  - *The topography of the site presents significant challenges for additional coach parking and maneuvering without considerable earthworks and expense.*
- ▶ Area to blend in with natural environment.
  - *Pathways have been reduced to retain open grass areas. Revegetation on cliff will enhance natural environment.*
- ▶ Seating and tables have been overlooked.
  - *Seating and tables are provided throughout the site, including seating walls along the length of the car parking area that are accessible from the proposed pathway. Seating is provided along the pathway to the headland, including a picnic setting and seating and a viewing platform at the end of the headland path.*
- ▶ Provide additional shelters for shade
  - *There is opportunity for smaller shelters to be installed over picnic settings as part of future works.*

## FEEDBACK ON PAMBULA BEACH RESERVE – PAMBULA BEACH

- ▶ Include provision for relocation of fence along the Crown Lease Area.
  - *Included in cost estimate.*
- ▶ Main car parking needs to be angle parking
  - *90 degree parking is considered appropriate to allow vehicles to enter parking spaces without having to utilise roundabout to safety turn around and enter parking bays. 45 degree angle parking is provided in the proposed new car park area to the west of the SLSC.*
- ▶ Realign entry to SLSC for ease of vehicle access .
  - *Entry alignment has been modified to allow for ease of access / egress.*
- ▶ Lifeguard tower is superfluous and will become a target for vandals.
  - *This was proposed by the community during initial consultation. The lifeguard tower has been removed from the concept plans.*
- ▶ Consider the height of trees proposed to retain views from patrol tower.
  - *Proposed species are low growing and planting will be reviewed during further detailed design. Tree pruning will be undertaken in line with BVSC tree policies and procedures.*
- ▶ Reconsider vehicle beach access track along existing alignment between proposed play space and bbq area.
  - *The proposed vehicle beach access has been amended to be via existing SLSC driveway and roadway and will connect with the existing beach platform.*
- ▶ Question regarding the need for a pathway around the southern side of the SLSC.
  - *This path is considered appropriate.*
- ▶ Question the need for additional car park on the western side of SLSC.
  - *This was proposed as part of the initial consultation and provides disabled parking immediately adjacent the entry to the SLSC. One way with angle parking ensures no 'dead end' in parking arrangement and provides turning space for vehicles. Car parking arrangement meets Australian Standards.*
- ▶ Question regarding provision for drainage from the caravan park into the reserve.
  - *This will be addressed as part of future detailed design of the car park and pathways.*
- ▶ Consolidate pathways in the reserve.
  - *Pathways have been reviewed and consolidated.*
- ▶ Retain and upgrade Rotary Shelter.
  - *Shelter shown to be retained.*
- ▶ Question regarding the size of the play space in the reserve.
  - *The play space shown is considered appropriate for a local play space.*
- ▶ Question regarding disabled parking close to the beach.
  - *Disabled parking spaces are shown adjacent the new amenities building and connecting pathways.*

## 7.5 ADDITIONAL CONSULTATION ON THE SHORT POINT DRAFT ACCESSIBILITY PLANS

Following adoption of the Coastal Accessibility Master Plans, Council gave direction to review the Short Point Coastal Accessibility Master Plan, with particular attention to the placement of the viewing platform and proposed BBQ facilities for accessibility purposes.

Alternative proposals were put forward and these were presented to the community in a drop in session held on 18 May 2017.

Following the consultation, a report was included in the agenda for the 16 August 2017 Council meeting. The report gave a summary of:

- ▶ The objectives and intent of the Master Plan project
- ▶ Feedback from the initial project consultation process (2016)
- ▶ Comments and outcomes from the Short Point Coastal Master Plan drop in session (18 May 2017)
- ▶ A review and comparison of the adopted Master Plan and the alternative plan presented.

Council Resolved:

- ▶ That Council acknowledge the minutes from the drop in session but also acknowledge that it does not represent all voices heard that day due to the unexpected number of people who attended and the constraints of documenting everyone's opinion
- ▶ That Council adopt the following aspects of the Master Plan and proceed to detailed design drawings when funding becomes available:
  - Bus turning circle
  - Car park upgrades (including upgraded drainage and curbing and retaining walls and disabled parking and median strip)
  - Redesigned walkway/promenade to incorporate integrated steps, seating and viewing areas along the front of the lower level car park
- ▶ Investigate replacing the current viewing platform with a smaller and purpose built observation platform for the strict purpose of being an area used by the SLSC and also storage options
- ▶ The area where the current toilets are is identified for a future pavilion that is modest in size so as not to detract from the natural surrounds, adds a sculptural quality to the headland, and provides amenity for the area. This could include BBQ facilities, toilets, shelter, and storage for the SLSC. This should be a separate tender with an architect when funding becomes available;
- ▶ That before work proceeds on any aspect of the Master Plan, detailed design drawings are put on public exhibition for at least four weeks, with specific consultation and approval from Council's Accessibility Committee; and plans are presented at a Council meeting for final approval;

- ▶ That Council review the headland pathway (Stage one) following complaints regarding access.

A revised Short Point Master Plan was finalised in December 2017 and was put on public exhibition in March 2018. The main changes in the revised plan included:

- ▶ Grouping Elements – Promenade footpath & viewing areas, picnic area, amenities, furniture & seating.
- ▶ Viewing Areas & Decks – Provides viewing decking off the promenade path; retains but reduces the size of the existing viewing platform
- ▶ Paths – Removes accessible path links to the existing beach access steps, viewing platform.
- ▶ Park Furniture – Removes furniture and seating from the grass embankment area. Provides park furniture and seating on the promenade decking areas.

Below is a summary of the consultation feedback and recommended amendments to the Draft Revised Short Point Coastal Accessibility Master Plan which was exhibited in March 2018.

Not surprisingly there were some differing views expressed in the feedback received during the exhibition period. This reflects the different users of the area and also the differing objectives of the project.

There is no question each of the project objectives is important and has merit however when it comes to implementation sometimes individual objectives can conflict. For example, too greater expansion of coastal vegetation will affect recreational opportunities and potentially views. Removal of recreational features to improve visual amenity can reduce recreational opportunities and will also affect accessibility. Installation and development of structures on the site can affect visual amenity and can also affect cultural sites.

The Coastal Accessibility Plans look to achieve a balance between these objectives. The wording of the objectives reflects this by looking toward 'improvements' and 'enhancements' to deliver an overall improved outcome.

Within the feedback there are themes which can be clustered and generally these relate to key items and elements numbered in the Plan. A summary of the feedback by these themes and Plan elements and recommended amendments is provided in the table below.

Plan Item	Comments General Summary	Recommendation
General Theme of Comments	Natural areas and views are the best asset. Can do with some improvements but don't overdo it. Don't over develop.	Noted. Reduce scale where possible noting access and expected circulation areas and needs.
Accessible Path Link	Keep it simple. Concern on view impacts of balustrade if needed.	Reduce the need for balustrade where possible. Utilise steps or other elements or appropriate edge barriers where possible.
Upgrade Car Park	Maximise car parking.	Maximise parking. Accessible parking both ends of the lower carpark aligned to steps / links from upper parking.
Promenade and Accessible viewing areas.	Good for accessibility. Don't over develop. Concern on view impact of balustrade if needed. Think about area at eastern end.	Provide promenade / viewing area at each end. Delete middle area to reduce scale and development and have a modest sized viewing area at the eastern end of the promenade. (note feedback on existing 'sun lounge' seating below)
Beach Viewing / Seating	Keep existing sun lounge features. Provide seating along promenade and headland walk paths.	Provide seating along paths, provide some feature 'sunlounge' type seating. Utilise steps as terrace seating where suitable. Seats to be installed along and at the end of the headland path
Picnic Area	Provide enough picnic area, seating and tables.	Include second picnic area where there will be minimal impact on views. (lower level near and north of amenities building; steps to access)
Existing Viewing Area	Works and is OK as it is. Retain it.	Upgrade at reduced size including SLS rescue board & flags storage area under; as per recent consultation feedback.
Multi-Purpose Building	Don't overbuild. Is a 'multi-purpose' building needed? Kiosk will be under used.	Contemporise design to reduce visual effect on surrounds. Include public amenities & storage. Design to consider planned area for small kiosk for possible development if there is future demand. (Area to be set up to be used as a seasonal mobile food van space until kiosk is developed)

Plan Item	Comments General Summary	Recommendation
Coach Access	Is it needed? Keep it minimal	Strong links and value to the community through accessible tourism. Review for minimum workable requirements.
Other - Levels and excavation	Reduce excavation levels	Utilise existing site levels where possible. Will relate and need to be balanced against need for balustrade and impact on views.
Other - Suggested projects / works	Path along Short Point road, renew / upgrade Merimbula boardwalk, improvements Spencer park.	Note project links and consider for future works and funding opportunities and priorities.

Council resolved the following:

- ▶ Council acknowledge and thank the public for their submissions regarding the revised draft Short Point Accessibility Master Plan.
- ▶ That Council adopt the revised Short Point Coastal Accessibility Plan exhibited in March 2018 with recommended amendments included in the Short Point Revised Coastal Access Plan Consultation Feedback Summary Table included in this report.
- ▶ That the plan updated to reflect the changes and uploaded to Council's website.

# 08 COASTAL ACCESSIBILITY PLANS

## 8.1 BRUCE STEER POOL, BERMAGUI

The Bruce Steer Pool precinct will provide all abilities access from the lower car park to site features and the water's edge. Improvements will include enhanced open space and facilities, upgraded toilets and showers, and layout which enhances the intrinsic landscape values of the site.

A key element of the concept is a pedestrian path which links disabled parking, amenities, picnic facilities and access into the pool itself. The path will be generous in width and be wheelchair friendly. Improved parking arrangements and pedestrian connections to the surrounding open space areas have also been addressed. Access for boat launching at the boat ramp and boat trailer queuing area has been maintained.

### KEY RECOMMENDATIONS

#### 1 ALL ABILITIES ACCESS TO THE WATER – STAGE 1

Provide an all abilities concrete walkway into the water of Bruce Steer Pool which connects with surrounding pedestrian pavement areas. The walkway will be approximately 50m long and 2m wide with DDA compliant grade of 1:20 and landings at 15m intervals as required by Australian Standards.

#### 2 PAVED CONNECTIONS – STAGE 2

Provide wheelchair friendly paved connections between key features facilities within the precinct.

#### 3 SEATING AREA IN THE SUN

Provide new wheelchair accessible picnic settings and seating on the eastern side of the site to enable users the opportunity to sit in the sunshine.

#### 4 OPEN GRASS SPACE

Retain and enhance open grassed space between pathways and sand. Use adjacent paving to define grass edge to provide a continuous and easily maintained lawn area.

#### 5 PICNIC AND SEATING NODE IN THE SHADE

Provide a bespoke shade structure which references the existing Bermagui 'timber wharf' design language and include two picnic settings. Enhance opportunities to utilise shaded area by providing two long bench seats in the sand within proximity of the shelter area.

#### 6 SHARK/STINGRAY NET

Upgrade shark/stingray net at the northern end of the pool to ensure full net coverage during high tide.

#### 7 NEW AMENITIES FACILITY – STAGE 3

Provide new amenities building the bottom/lower level of the embankment for improved all abilities access. Provide disabled, male and female toilets within the facility. Consider unisex toilets and provision of baby change room. Provide indoor showers and outdoor shower. The new amenities building should also reference the existing Bermagui 'timber wharf' design language. Investigate service connections for water, sewer and power.

#### 8 OPEN GRASS ARRIVAL AREA

Improve arrival area adjacent Beacon with seating and interpretive signage. Retain navigational beacon. Consider providing a community noticeboard and bicycle rack.

#### 9 CAR PARKING + DISABLED SPACES

Reconfigure car parking arrangements to create regular and disabled parking area that includes two dedicated disabled car spaces that meet Australian Standards and are connected to facilities with pathways. Line-mark two disabled spaces. Allow for possible increase to four disabled spaces following further consultation. The parking area provides marked spaces facing the water. Provide a continuous path of travel from the car park to features and facilities of the site. Consider surface treatment to asphalt to define parking area.

#### 10 BOAT QUEUING AREA

Retain existing boat queuing areas in their current form. Provide low retaining wall and connecting pathway along toe of grassed batter. Retain sufficient asphalt area for boat launching requirements and the required turning radius of a service vehicle and similar sized vehicles.

#### 11 EMBANKMENT REVEGETATION

Introduce a weed removal and revegetation program to improve the visual amenity, stability and environmental values of the embankment. Ongoing maintenance should also form part of the program. Incorporate measures for the eradication and management of vermin and feral animals.

#### 12 STAIR AND BOARDWALK ACCESS

Improve the existing stair access between the upper and lower levels of the site. New stairs and boardwalk on steep slope will include handrails and landings as required. Retain the existing rock Cairn memorial.

#### 13 UPPER PICNIC AREA

Replace the old amenities block with a secondary picnic area that is accessible from the top of the embankment and provides a viewing area. Investigate opportunity to re-use existing concrete slab. Provide a bespoke shade structure which references the existing Bermagui 'timber wharf' design language, and includes two picnic settings.

#### 14 SIGNAGE

Provide new beach safety and social awareness signage in line with the Bega Valley Shire Council signage suite. Include new and additional interpretive signage where appropriate.

#### 15 BUS/COACH PARKING

Provide bus/coach parking bay to the south where flatter land is available and minimal earthworks will be required. Connect with proposed connecting pathway to enable users to access Bruce Steer pool along toe of batter adjacent boat queuing area.

#### 16 FISH CLEANING AND BOAT RAMP

Improve fish-cleaning and waste disposal facilities and on-going maintenance.

#### 17 ROCK GROUYNE ACCESS

Investigate opportunity to provide concrete pathway on rock groyne.

**Legend**





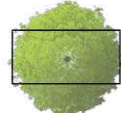






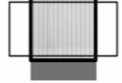
	Existing contour		Asphalt surface treatment		Grass		Long bench seating
	Evergreen trees		Asphalt		Low mass planting		Picnic setting
	Concrete paving		Timber ramp structure		Revegetation		Picnic shelter



Figure 11: Bruce Steer Pool DRAFT Coastal Accessibility Plan

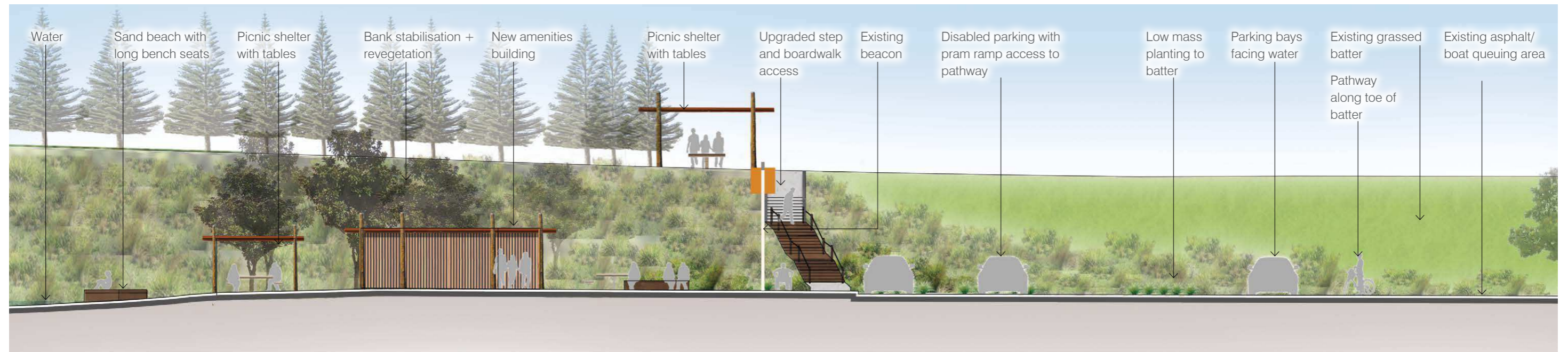
1:500 @ A3

## INDICATIVE CROSS-SECTIONS

**Section A – A'**  
Scale 1:200 @ A3



**Section B – B'**  
Scale 1:200 @ A3

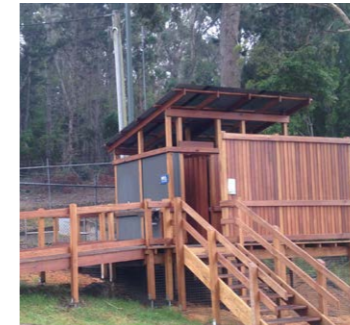


## ELEMENTS

## SAMPLE IMAGES

### COMMUNITY

- ▶ Accessible/long bench seats
- ▶ Shade shelter
- ▶ Barbecue
- ▶ Amenities with indoor showers
- ▶ Outdoor shower



### ALL ABILITIES

- ▶ Water access
- ▶ Handrails
- ▶ Elevated walkway
- ▶ Feature paved parking area
- ▶ Disabled parking bays
- ▶ Connecting pathways



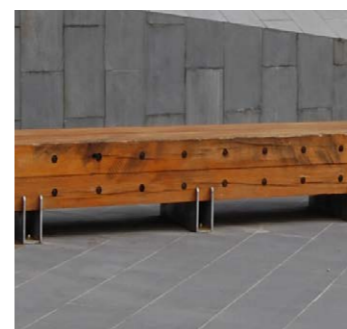
### LANDSCAPE + ENVIRONMENT

- ▶ Cliff revegetation
- ▶ Native planting
- ▶ Water sensitive urban design
- ▶ Bank stabilisation
- ▶ Erosion control



### CHARACTER

- ▶ Wharf style design
- ▶ Chunky timbers
- ▶ Norfolk Island Pines
- ▶ Banksia feature trees



## 8.2 SHORT POINT – MERIMBULA

The key objective for Short Point Merimbula is to promote and enhance its identity as a 'Coastal Icon' and recognise the significant cultural heritage of the site. The space will provide improved access to facilities and features, resting and viewing opportunities, picnicking, improved traffic and parking arrangements, as well as significant restoration and revegetation of the cliff and dune landscapes. The improvements will allow people to enjoy the area in a way that is inclusive and sustainable for the future.

### KEY RECOMMENDATIONS

#### 1 HEADLAND ACCESS – STAGE 1

Provide pathway heading east along the old road alignment to the end of the headland (install gravel path with potential for future concrete). Provide seats at regular intervals along the path for resting and viewing. Consider a simple viewing platform at the end of the headland with interpretive signage, binoculars/telescope and seating. Provide for all weather pedestrian passage areas over the drainage line at the eastern end of the car park for all weather pedestrian access. Retain existing dog off leash area. Allow for maintenance and special events access from the car park to the gravel path.

#### 2 COASTAL ESCARPMENT REVEGETATION – STAGE 2

Introduce a weed removal program, including woody weeds (e.g. Coral Trees), and native species revegetation program to improve the visual amenity, stability and environmental values of the dunes and coastal escarpment. Ongoing maintenance should also form part of the program. Incorporate measures for the eradication and management of vermin and feral animals. Plant appropriate native edging species to the top of batter as part of the first stage of revegetation. Consider views from the top of the escarpment when planting, for example plant taller shrub species lower on the escarpment while planting lower growing species towards the top.

#### 3 ACCESSIBLE EDGE TO CAR PARK – STAGE 3

Provide a new pedestrian pavement along the front of the lower level car parking bays that connects with adjacent promenade deck, proposed amenities and headland access pathway. The pavement will require reclaiming some of the existing car park area to achieve a level surface.

#### 4 UPGRADED CAR PARK

Improve the function of the existing car park through a one way loop while retaining nose-in 90 degree angle parking facing the beach. The proposed pedestrian path along the car park frontage will require modifications to the car park layout. Provide disabled car parking spaces at each end of the car park and centrally within the car park, ensuring direct access to amenities.

Modify central median to allow for turning radius of a passenger vehicle and undertake earthworks to the southern grass embankment. The central median will increase in width and shall be planted with low growing species to manage erosion and retain views from upper car parking area. A retaining wall shall be provided on the southern side of the car park to minimise earthworks. Include suitable drainage systems as part of future design including rain gardens for best practice storm water management.

#### 5 PROMENADE AND VIEWING DECKS

Improve accessibility from car park to viewing opportunities through the provision of a promenade and viewing decks. Access to the decks will be from the accessible concrete pathway along the lower car park frontage. The promenade decks will finish flush with the concrete pavement. Seating will be provided at locations along the decks to maximise the viewing opportunities. Platform seats 450mm high will provide the interface between the promenade and grass area at key locations to allow flexibility of seating for individuals and small or large groups and minimise need for any balustrade. Provide sun-lounge style seating features through staged replacement of existing sun-lounges.

Provide step access to the grass embankment generally in line with car park access ways and existing beach access.

#### 6 'SURFER AND WAVE WATCHING' AREA

Retain existing open grass area at the eastern end of the site for watching surfers and waves. Retain one existing informal beach access track from the grass area to the beach.

#### 7 PICNIC AREA

Improve picnic opportunities through provision of new shelter areas with wheelchair accessible picnic settings and barbecues. The locations will be at the western end of the lower car park and congruous with the amenities building. This location of the picnic area will also ensure that the shelters will not impede views from the upper levels of the site.

#### 8 EXISTING VIEWING PLATFORM

Upgrade current viewing platform with a smaller and purpose built observation platform for the strict purpose of being an area used by the Surf Life Saving Club, including rescue board and options for storage.

#### 9 SIGNAGE

Provide new beach safety and social awareness signage in line with the Bega Valley Shire Council signage suite. Include new and additional interpretive signage where appropriate that acknowledges the history and cultural heritage of the site.

#### 10 MAINTENANCE ACCESS

Provide 4m wide space for maintenance/grader access to the beach and headland. Include appropriate strength crossover from car park as required.

#### 11 AMENITIES AND STORAGE

Upgrade the existing amenities through provision of a low-key amenities and storage building, modest in size, potentially comprising storage, food/drink kiosk, male and female toilets and indoor showers, disabled toilets and showers, outdoor shower, and storage facilities. The architecture of the building should address views to the north, east and west, and sit unobtrusively within the landscape when viewed from the beach and entry road.

#### 12 COACH ACCESS

Review coach access requirements with a view to providing designated coach parking area and turning bay. This will also provide a direct drop off area adjacent the proposed amenities building and shelter area. Grader access to the beach will also be from this location.



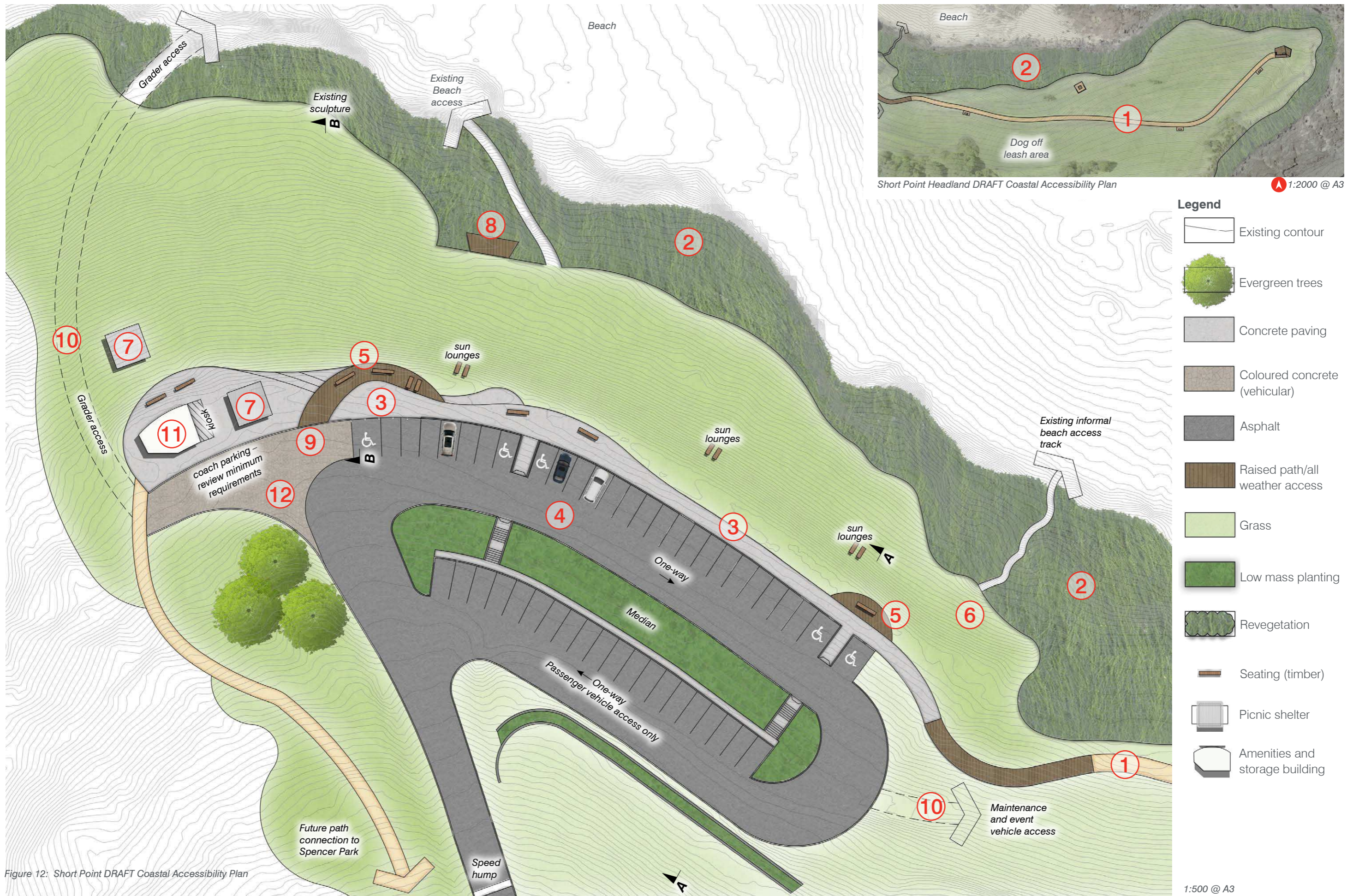
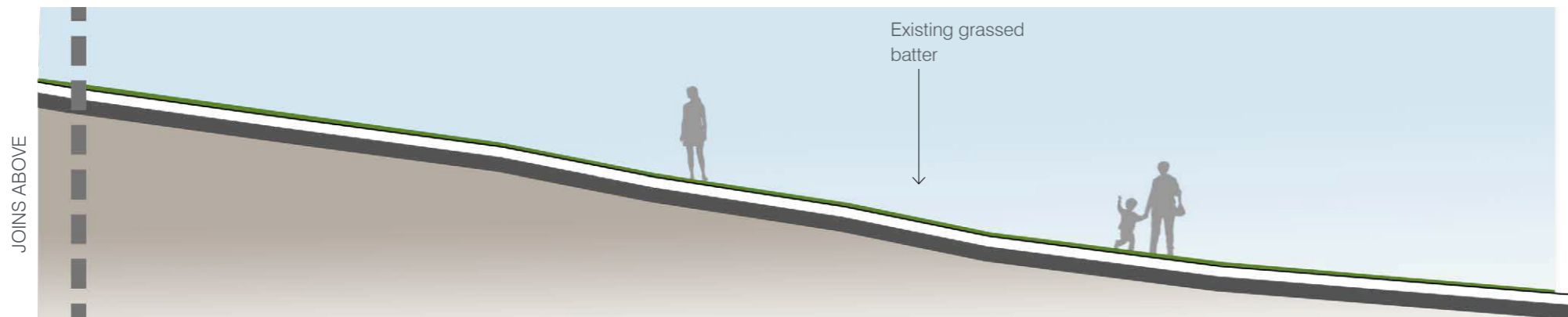
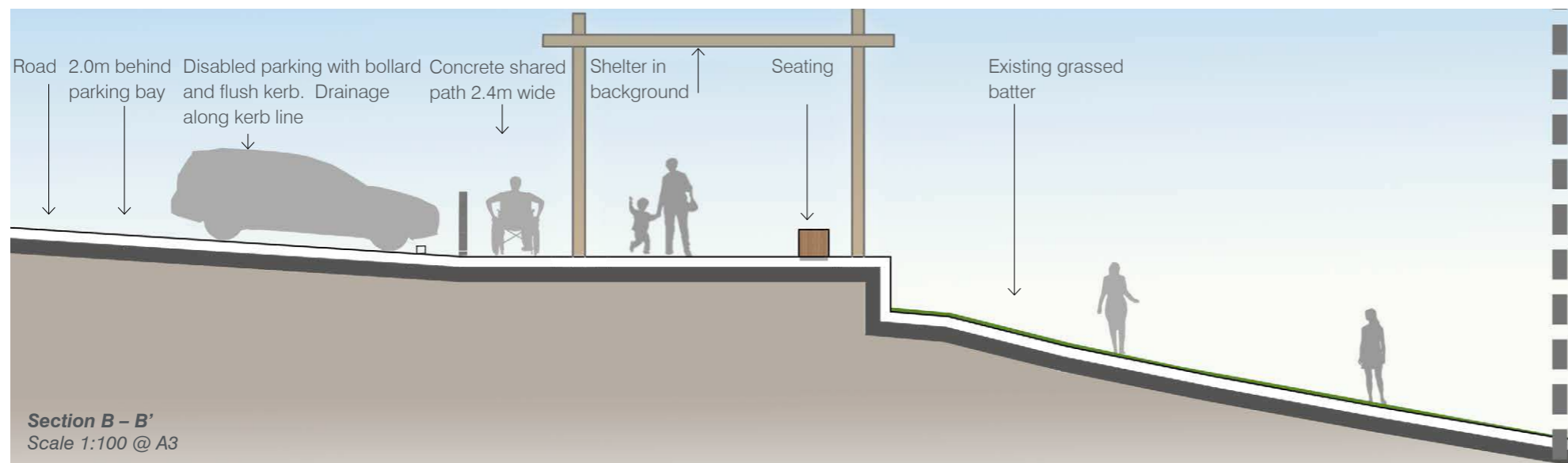
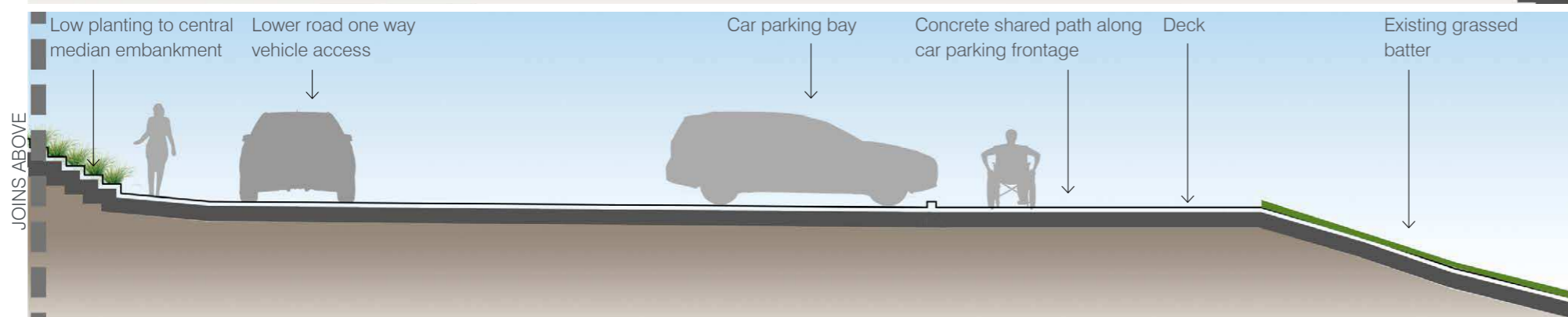
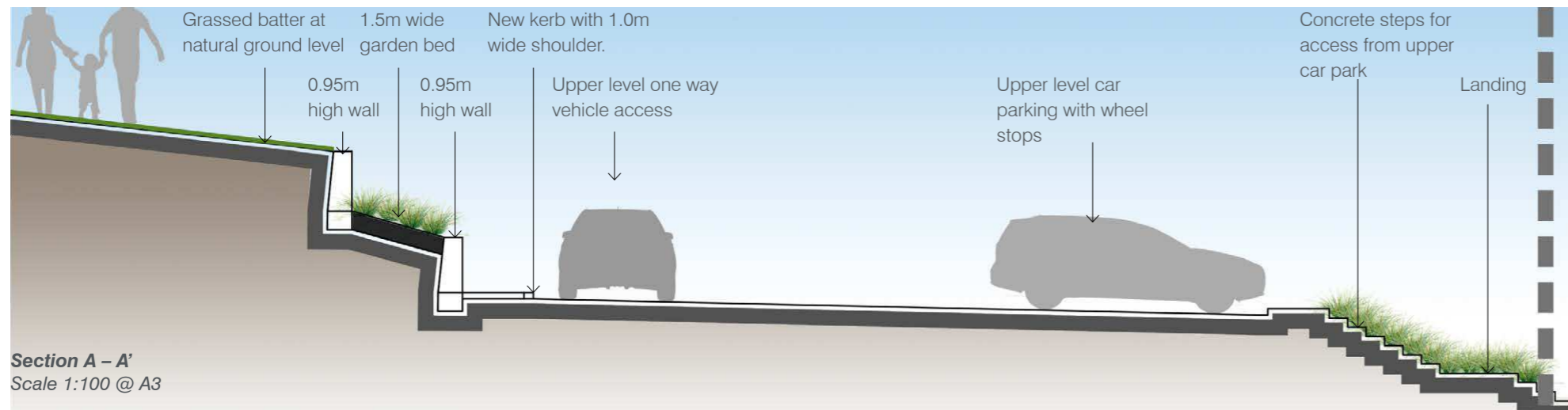


Figure 12: Short Point DRAFT Coastal Accessibility Plan

**INDICATIVE CROSS-SECTIONS**



## ELEMENTS

## SAMPLE IMAGES

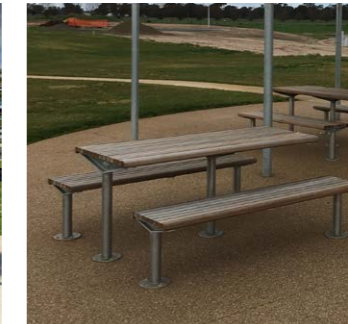
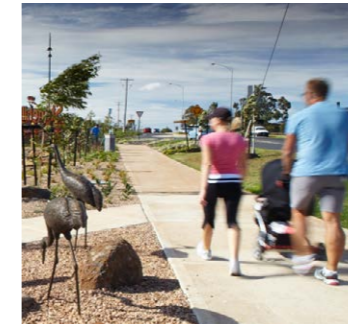
### COMMUNITY

- ▶ Seating / sun lounge
- ▶ Shade shelter
- ▶ Lifeguard Station
- ▶ Kiosk
- ▶ Outdoor showers



### ALL ABILITIES

- ▶ Boardwalks
- ▶ Gravel walkway
- ▶ Connecting pathways
- ▶ Wheelchair accessible picnic settings
- ▶ Disabled parking bays



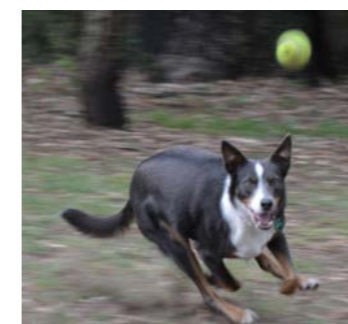
### LANDSCAPE + ENVIRONMENT

- ▶ Low mass planting
- ▶ Cliff/Escarpment revegetation
- ▶ Bank stabilisation
- ▶ Banksia shade trees
- ▶ Water sensitive urban design



### FUN + DISCOVERY

- ▶ Aboriginal/Cultural heritage
- ▶ Public telescope
- ▶ Dog off leash areas
- ▶ Seats for resting



### 8.3 PAMBULA BEACH RESERVE – PAMBULA BEACH

Pambula Beach Reserve has been identified as a key location to implement strategies to improve access to the beach for people with disabilities. The surrounding area of the reserve is also the subject of the accessibility plans. The reserve will be improved through pedestrian pathways that link disabled parking, toilets and shower amenities, picnic facilities and pathway access to the beach. Other improvements to the reserve include improved car parking arrangements, turning bay for recreational vehicles, an all abilities children's play space and adjacent picnic facilities.

#### KEY RECOMMENDATIONS

##### 1 PRECINCT ENTRY

Consider improving the vehicle and pedestrian safety at the entrance to the reserve from Pambula Beach Road through the provision of a roundabout and raised pedestrian crossing on entry road (subject to traffic committee approval). Define pedestrian access paths and road crossing points. Retain existing trees as a unique arrival feature.

##### 2 IMPROVE DRAINAGE

Improve the visual appearance and public safety of the storm water outlet and drain adjacent the reserve entry. Consider piping the drain adjacent to the proposed car park area and/or installing rock lining to the existing channel to help slow the water flow. Define a planted swale along the base of the embankment to direct flows away from the grass area and towards the outlet to the beach.

##### 3 UPGRADED CAR PARK WITH TURNAROUND AREA

Improve the existing car park arrangement to marked 90 degree angle parking bays and turn around area. The turn around area will allow for the required turning radius of service and passenger vehicles. Provide disabled car spaces at the eastern end of the parking area with direct access to connecting pathways. Provide parallel parking for long vehicles along the northern boundary. Provide maintenance access to pump station via gravel apron/grass with structural cells.

##### 4 NEW AMENITIES FACILITY

Replace the existing amenities building with a new facility that is wheelchair accessible and comprises male, female and disabled toilets and indoor showers. Consider inclusion of baby change facilities and potential unisex facilities. The architecture of the new facilities building should reference the materials, form and colours of the SLSC building.

##### 5 OUTDOOR SHOWER

Retain the existing outdoor showers in their current location and upgrade with seating and handrail.

##### 6 OPEN GRASSED AREA

Remove existing playground and Cypress tree 'maze' to create an open grassed 'kick-about' area for informal recreation and event performances. Retain existing shelter and barbecue. Consider utilising grassed area for overflow parking if required.

##### 7 SURF BOAT ACCESS AND PATROL

Utilise existing driveway access from the SLSC and car park to provide beach access for surf boats from the SLSC to the existing beach platform.

##### 8 ALL ABILITIES PLAY SPACE AND TRIKE CIRCUIT

Replace the existing playground with a local play space designed for children of all abilities. Include play elements which respond to the nautical/coastal theme of the area such as small play unit, sand play and basket/hammock swing. Incorporate a bicycle/trike circuit within the play space. Consider provision of outdoor gym/exercise equipment for older community members.

##### 9 ALL ABILITIES ACCESS AND PICNIC AREA

Provide a 2m wide all abilities access path, including a DDA compliant walkway, from the upgraded amenities building to the beach access path. Provide a wheelchair accessible picnic area comprising shade structure, barbecue, picnic settings and bicycle rack. Ensure pathway connections to the Beach Access Path for wheelchair access to the beach.

##### 10 PEDESTRIAN LINK

Provide a 2m wide concrete path from the new car park area and open grassed area linking to the SLSC, beach and amenities.

##### 11 DUNE AND EMBANKMENT REVEGETATION

Introduce a weed removal and revegetation program to improve the visual amenity, stability and environmental values of the dunes, as well as the embankment below Corokai Drive. Ongoing maintenance should also form part of the program. Incorporate measures for the eradication and management of vermin and feral animals.

##### 12 SIGNAGE

Provide new beach safety and social awareness signage in line with the Bega Valley Shire Council signage suite. Include new and additional entry, way-finding and interpretive signage where appropriate.

##### 13 ARRIVAL/MEETING AREA

Provide an open grassed area for meeting, waiting and resting adjacent to the upgraded amenities building, beach access paths and vehicle turnaround space. Enhance the existing landscape with additional native planting for shade and amenity (e.g. Banksia species).

##### 14 NEW CAR PARK

Provide additional parking area on the eastern side of the Surf Life Saving Club (SLSC). Ensure retention of any high value trees in this area. The new car park will include disabled parking spaces and provide direct pathway access to the SLSC. The parking area will also include angle parking, line marking, central median and turning area suitable for access by a service vehicle. Incorporate additional tree and garden bed planting of native species where possible.

##### 15 COACH PARKING

As part of potential intersection improvements at Pambula Beach Road/Corokai Drive, provide coach parking bay and disabled access pathway connections, including a bridge over the drainage swale.

##### 16 CROWN LEASE AREA

At expiry of lease, consider utilising the Crown Lease Area along the northern boundary of the site (currently leased to Discovery Holiday Parks) to provide additional parking area and improve accessibility for long vehicles. Reinstate any fencing required.



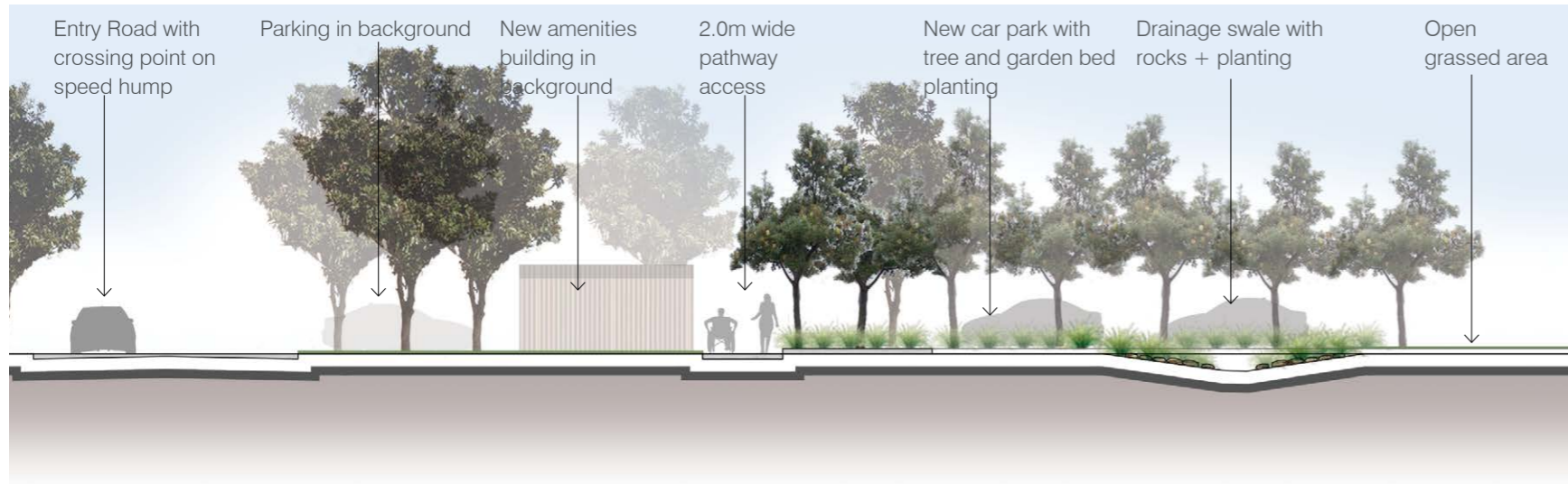
- Legend
- Existing contour
  - Evergreen trees
  - Concrete paving
  - Coloured concrete (vehicular)
  - Asphalt paving
  - Gravel paving / sand
  - Timber decking
  - Play sand (softfall)
  - Grass
  - Swale planting
  - Low mass planting
  - Revegetation
  - Seating bench
  - Picnic setting
  - Barbecue
  - Picnic shelter

Figure 13: Pambula Beach Reserve DRAFT Coastal Accessibility Plan

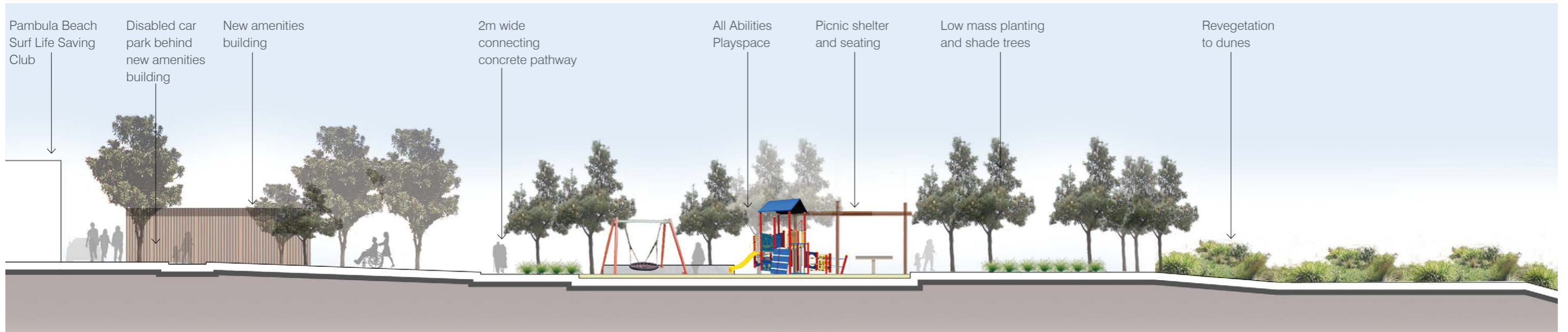
1:800 @ A3

## INDICATIVE CROSS-SECTIONS

**Section A – A'**  
Scale 1:200 @ A3



**Section B – B'**  
Scale 1:200 @ A3



## ELEMENTS

## SAMPLE IMAGES

### COMMUNITY

- ▶ Shade shelter
- ▶ Picnic settings
- ▶ All abilities play space
- ▶ Bicycle rack
- ▶ Exercise stations



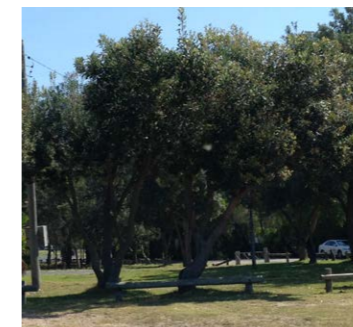
### ALL ABILITIES

- ▶ Beach matting/pathway
- ▶ Showers/Handrails
- ▶ Connecting pathways
- ▶ Bridges
- ▶ Disabled parking bays



### LANDSCAPE + ENVIRONMENT

- ▶ Interpretation
- ▶ Mass planting
- ▶ Structural soil products
- ▶ Banksia shade trees
- ▶ Water sensitive urban design



### INCLUSIVE PLAY

- ▶ Coastal theming play unit
- ▶ Sand and water play
- ▶ All abilities access
- ▶ Range of ages



# 09 OPINIONS OF PROBABLE COST

The Opinion of Probable Cost are high level estimates based on a Master Plan level of detail and provided to give direction to works that can be delivered in stages potentially over a number of years.

Preparation of further detailed design plans and estimates will be required to confirm extent and scope of staged implementation.

## 9.1 BRUCE STEER POOL – BERMAGUI

Item	Description	Unit	Qty	Rate	Amount	Summary Amount
<b>STAGE 1 WORKS</b>						
<b>1 General Conditions</b>						\$ 10,000.00
a	Works to include securing the site at all times, setting out of works, liaison with Superintendent	item	1	\$ 10,000.00	\$ 10,000.00	
<b>2 Earthworks and Drainage</b>						\$ 10,000.00
a	Allow for bulk earthworks and drainage	item	1	\$ 10,000.00	\$ 10,000.00	
<b>3 Paving</b>						\$ 86,400.00
a	Concrete paving from existing asphalt area to beach	sq.m	530	\$ 80.00	\$ 42,400.00	
b	Concrete ramp to water and handrail	sq.m	110	\$ 400.00	\$ 44,000.00	
<b>4 Amenities building</b>						\$ 100,000.00
a	Toilet building including all plumbing, electrical, etc	no.	1	\$ 100,000.00	\$ 100,000.00	
<b>Stage 1 Subtotal</b>					<b>\$ 206,400.00</b>	<b>\$ 206,400.00</b>
<b>Stage 1 Design and Construction Contingency 20%</b>					<b>\$ 41,280.00</b>	<b>\$ 41,280.00</b>
<b>Stage 1 Grand Total</b>					<b>\$ 247,680.00</b>	<b>\$ 247,680.00</b>
<b>STAGE 2 WORKS</b>						
<b>1 General Conditions</b>						\$ 5,000.00
a	Works to include securing the site at all times, setting out of works, liaison with Superintendent	item	1	\$ 5,000.00	\$ 5,000.00	
<b>2 Demolition</b>						\$ 10,000.00
a	Demolition of part of existing car park, as required	allow	1	\$ 10,000.00	\$ 10,000.00	
<b>3 Earthworks and Drainage</b>						\$ 15,000.00
a	Allow for bulk earthworks and drainage	item	1	\$ 15,000.00	\$ 15,000.00	
<b>4 Paving</b>						\$ 31,120.00
a	Concrete paving to upper level	sq.m	60	\$ 80.00	\$ 4,800.00	
b	Concrete steps, including kerb and handrail to Australian Standards	sq.m	20	\$ 200.00	\$ 3,920.00	
c	Concrete paving to lower level (pathways connecting car park)	sq.m	280	\$ 80.00	\$ 22,400.00	
<b>5 Car park</b>						\$ 88,800.00
a	Supply & install kerb edge and pram ramp to carpark	lin.m	15	\$ 60.00	\$ 900.00	
b	Pavement linemarking	allow	1	\$ 500.00	\$ 500.00	
c	Retaining wall on eastern side of car park (500mm high)	lin.m	100	\$ 250.00	\$ 25,000.00	
d	Surface treatment to asphalt to define parking area	sq.m	520	\$ 120.00	\$ 62,400.00	
<b>6 Structures</b>						\$ 75,000.00
a	Shade shelters	allow	2	\$ 30,000.00	\$ 60,000.00	
b	Boardwalk steps with handrails on steep slope	allow	1	\$ 15,000.00	\$ 15,000.00	
<b>7 Low mass planting</b>						\$ 1,234.25
a	Application of appropriate herbicide to remove weeds and pasture grass	sq.m	11	\$ 0.25	\$ 2.75	
b	Cultivation of site topsoil with soil amelioration additives	sq.m	11	\$ 4.00	\$ 44.00	
c	Imported approved mulch	cu.m	3	\$ 62.50	\$ 187.50	
d	150mm pot sizes at 4m/2	No.	100	\$ 10.00	\$ 1,000.00	
<b>8 Grassing</b>						\$ 2,885.00
a	Top dress grass areas	sq.m	580	\$ 3.25	\$ 1,885.00	
b	Rolled turf to all new grass areas	sq.m	100	\$ 10.00	\$ 1,000.00	
<b>Stage 2 Subtotal</b>					<b>\$ 229,039.25</b>	<b>\$ 229,039.25</b>
<b>Stage 2 Design and Construction Contingency 20%</b>					<b>\$ 45,807.85</b>	<b>\$ 45,807.85</b>
<b>Stage 2 Grand Total</b>					<b>\$ 274,847.10</b>	<b>\$ 274,847.10</b>

<b>FUTURE WORKS</b>						
<b>1 General Conditions</b>						\$ 6,000.00
a	Works to include securing the site at all times, setting out of works, liaison with Superintendent	item	1	\$ 6,000.00	\$ 6,000.00	
<b>2 Lighting and Electrical</b>						\$ 12,500.00
a	New lighting	allow	1	\$ 12,500.00	\$ 12,500.00	
<b>3 Signage</b>						\$ 5,000.00
a	Social awareness signage	allow	1	\$ 2,500.00	\$ 2,500.00	
b	Interpretive signage	allow	1	\$ 2,500.00	\$ 2,500.00	
<b>4 Furniture and Fixtures</b>						\$ 47,000.00
a	Long bench seats	No.	5	\$ 2,500.00	\$ 12,500.00	
b	Picnic settings	No.	5	\$ 4,500.00	\$ 22,500.00	
d	Outdoor shower including plumbing	allow	1	\$ 8,000.00	\$ 8,000.00	
e	Community noticeboard	allow	1	\$ 2,500.00	\$ 2,500.00	
f	Bike rack	allow	1	\$ 1,500.00	\$ 1,500.00	
<b>5 Tree Planting</b>						\$ 1,000.00
a	SemiAdv Trees (2.0 - 3.0m high, 40-50lt, 30mm min. cal.)	No.	4	\$ 250.00	\$ 1,000.00	
<b>6 Revegetation</b>						\$ 18,813.75
a	Application of appropriate herbicide to remove weeds and pasture grass	sq.m	865	\$ 0.25	\$ 216.25	
b	Cultivate on site topsoil 150mm depth with soil amelioration additives	sq.m	865	\$ 4.00	\$ 3,460.00	
c	Jute matting	sq.m	865	\$ 5.50	\$ 4,757.50	
d	Tubestock at 4m/2	No.	3460	\$ 3.00	\$ 10,380.00	
<b>8 Plant Establishment Period</b>						\$ 3,250.00
a	Replacement of unhealthy/dead plant materials, removal of debris and litter and replacement of any failed plants	weeks	13	\$ 250.00	\$ 3,250.00	
<b>Stage 3 Subtotal</b>					<b>\$ 93,563.75</b>	<b>\$ 93,563.75</b>
<b>Stage 3 Design and Construction Contingency 20%</b>					<b>\$ 18,712.75</b>	<b>\$ 18,712.75</b>
<b>Stage 3 Grand Total</b>					<b>\$ 112,276.50</b>	<b>\$ 112,276.50</b>
<b>Grand Total</b>					<b>\$ 634,803.60</b>	<b>\$ 634,803.60</b>

### Exclusions

- These estimates are based on Coastal Accessibility Plans only.
- Excludes GST.
- Excludes extended maintenance.
- Excludes replacement and maintenance of shark / stingray net

### Priorities

- Access ramp to water
- Amenities building



The Opinion of Probable Cost are high level estimates based on a Master Plan level of detail and provided to give direction to works that can be delivered in stages potentially over a number of years. Preparation of further detailed design plans and estimates will be required to confirm extent and scope of staged implementation.

## 9.2 SHORT POINT – MERIMBULA

Item	Description	Unit	Qty	Rate	Amount	Summary
						<b>Amount</b>
<b>1</b>	<b>General Conditions</b>					\$ 4,500.00
a	Works to include securing the site at all times, setting out of works, liaison with Superintendent	item	1	\$ 4,500.00	\$ 4,500.00	
<b>2</b>	<b>Demolition</b>					\$ 10,000.00
a	Demolition of existing car park, as required	allow	1	\$ 10,000.00	\$ 10,000.00	
<b>3</b>	<b>Earthworks and Drainage</b>					\$ 20,000.00
a	Allow for bulk earthworks and drainage	item	1	\$ 20,000.00	\$ 20,000.00	
<b>4</b>	<b>Lighting and Electrical</b>					\$ 20,000.00
a	New lighting	allow	1	\$ 12,500.00	\$ 12,500.00	
b	Power and electrical connections for BBQ	allow	1	\$ 7,500.00	\$ 7,500.00	
<b>5</b>	<b>Paving</b>					\$ 76,350.00
a	Decomposed granite paving	sq.m	140	\$ 15.00	\$ 2,100.00	
b	Decomposed granite paving to headland walk including seating areas	sq.m	630	\$ 15.00	\$ 9,450.00	
c	Concrete paving	sq.m	685	\$ 80.00	\$ 54,800.00	
d	Concrete steps, including kerb and handrail to Australian Standards	sq.m	50	\$ 200.00	\$ 10,000.00	
<b>6</b>	<b>Car park</b>					\$ 282,876.00
a	Asphalt seal including prime	sq.m	2640	\$ 60.00	\$ 158,400.00	
b	Heavy duty coloured concrete paving (coach access)	sq.m	562	\$ 120.00	\$ 67,440.00	
c	Basecourse Class 2 20mm FCR	cu.m	528	\$ 17.00	\$ 8,976.00	
d	Kerb edge to carpark and medians	lin.m	526	\$ 60.00	\$ 31,560.00	
e	Pavement linemarking	allow	1	\$ 500.00	\$ 500.00	
f	Retaining walls (structural) to the south of the car park	lin.m	32	\$ 500.00	\$ 16,000.00	
<b>7</b>	<b>Buildings</b>					\$ 200,000.00
a	Amenities and storage building including all plumbing, electrical, etc	no.	1	\$ 200,000.00	\$ 200,000.00	
<b>8</b>	<b>Viewing Platform</b>					\$ 90,000.00
a	Supply and install new viewing platform with storage and new shower facilities	no.	1	\$ 90,000.00	\$ 90,000.00	
<b>9</b>	<b>Structures</b>					\$ 63,300.00
a	Shade shelters large	allow	2	\$ 20,000.00	\$ 40,000.00	
b	Seating walls (400 high) along main promenade path	lin.m	35	\$ 300.00	\$ 10,500.00	
c	Concrete 450 x 400mm terrace seating	lin.m	32	\$ 400.00	\$ 12,800.00	
<b>10</b>	<b>Boardwalks and Decking</b>					\$ 54,000.00
a	2m wide recycled plastic boardwalk (headland walk)	lin.m	26	\$ 500.00	\$ 13,000.00	
b	Recycled plastic decking to building surrounds	sq.m	84	\$ 250.00	\$ 21,000.00	
c	Whale watching deck with access ramp and shelter	allow	1	\$ 20,000.00	\$ 20,000.00	
<b>11</b>	<b>Signage</b>					\$ 5,000.00
a	Social awareness signage	allow	1	\$ 2,500.00	\$ 2,500.00	
b	Interpretive signage	allow	1	\$ 2,500.00	\$ 2,500.00	
<b>12</b>	<b>Furniture and Fixtures</b>					\$ 55,300.00
a	Seats along headland walk	No.	7	\$ 1,800.00	\$ 12,600.00	
b	Picnic settings	No.	4	\$ 4,500.00	\$ 18,000.00	
c	Barbecue	No.	1	\$ 8,000.00	\$ 8,000.00	
d	Outdoor shower including plumbing	allow	1	\$ 10,000.00	\$ 10,000.00	
e	Public telescope/binoculars	allow	1	\$ 6,000.00	\$ 6,000.00	
f	Dog waste dispenser	allow	1	\$ 700.00	\$ 700.00	

<b>13</b>	<b>Low mass planting on batters</b>					\$ 10,662.50
a	Application of appropriate herbicide to remove weeds and pasture grass	sq.m	510	\$ 0.25	\$ 127.50	
b	Cultivation of site topsoil with soil amelioration additives	sq.m	510	\$ 4.00	\$ 2,040.00	
c	Imported approved mulch	cu.m	38	\$ 62.50	\$ 2,375.00	
d	Tube stock pot sizes at 4/m2	No.	2040	\$ 3.00	\$ 6,120.00	
<b>14</b>	<b>Revegetation</b>					\$ 126,150.00
a	Application of appropriate herbicide to remove weeds and pasture grass.	sq.m	5800	\$ 0.25	\$ 1,450.00	
b	Cultivate of 150mm depth site topsoil with soil amelioration additives	sq.m	5800	\$ 4.00	\$ 23,200.00	
c	Jute matting	sq.m	5800	\$ 5.50	\$ 31,900.00	
d	Tube stock pot sizes at 4/m2	No.	23200	\$ 3.00	\$ 69,600.00	
<b>15</b>	<b>Grassing</b>					\$ 6,500.00
a	Top dress all areas as indicated on drawings	sq.m	2000	\$ 3.25	\$ 6,500.00	
<b>16</b>	<b>Rocks in planted batters</b>					\$ 2,500.00
a	Feature rocks	No.	25	\$ 100.00	\$ 2,500.00	
<b>17</b>	<b>Plant Establishment Period</b>					\$ 4,550.00
a	Replacement of unhealthy/dead plant materials, removal of debris and litter and replacement of any failed plants	weeks	13	\$ 350.00	\$ 4,550.00	
<b>Total</b>						<b>\$ 1,031,688.50</b>
<b>Design and Construction Contingency 20%</b>						<b>\$ 206,337.70</b>
<b>Grand Total</b>						<b>\$ 1,238,026.20</b>

### Exclusions

- 1 These estimates are based on Coastal Accessibility Plans only.
- 2 Excludes GST.
- 3 Excludes extended maintenance.
- 4 Excludes gravel loop road for coaches.

### Priorities

- 1 Revegetation works
- 2 Pathways and accessibility to Headland
- 3 Seating

The Opinion of Probable Cost are high level estimates based on a Master Plan level of detail and provided to give direction to works that can be delivered in stages potentially over a number of years. Preparation of further detailed design plans and estimates will be required to confirm extent and scope of staged implementation.

### 9.3 PAMBULA BEACH RESERVE – PAMBULA BEACH

Item	Description	Unit	Qty	Rate	Amount	Summary
<b>STAGE 1 WORKS</b>						
<b>1 General Conditions</b>						\$ 5,000.00
a	Works to include securing the site at all times, setting out of works, liaison with Superintendent	item	1	\$ 5,000.00	\$ 5,000.00	
<b>2 Earthworks and Drainage</b>						\$ 10,000.00
a	Allow for bulk earthworks	item	1	\$ 10,000.00	\$ 10,000.00	
<b>3 Buildings</b>						\$ 10,000.00
a	Toilet building including all plumbing, electrical, etc	no.	1	\$ 10,000.00	\$ 10,000.00	
<b>4 Beach access path</b>						\$ 50,000.00
a	2m wide recycled plastic beach access path	lin.m	100	\$ 500.00	\$ 50,000.00	
<b>Stage 1 Subtotal</b>					<b>\$ 75,000.00</b>	<b>\$ 75,000.00</b>
<b>Stage 1 Design and Construction Contingency 20%</b>					\$ 15,000.00	\$ 15,000.00
<b>Stage 1 Grand Total</b>					<b>\$ 90,000.00</b>	<b>\$ 90,000.00</b>
<b>FUTURE WORKS</b>						
<b>1 General Conditions</b>						\$ 4,500.00
a	Works to include securing the site at all times, setting out of works, liaison with Superintendent	item	1	\$ 4,500.00	\$ 4,500.00	
<b>2 Demolition</b>						\$ 10,000.00
a	Demolition of existing car park, as required	allow	1	\$ 10,000.00	\$ 10,000.00	
<b>3 Earthworks and Drainage</b>						\$ 15,000.00
a	Allow for bulk earthworks	item	1	\$ 15,000.00	\$ 15,000.00	
<b>4 Lighting and Electrical</b>						\$ 17,500.00
a	New lighting	allow	1	\$ 12,500.00	\$ 12,500.00	
b	Power and electrical connections for BBQ	allow	1	\$ 5,000.00	\$ 5,000.00	
<b>5 Paving</b>						\$ 125,680.00
a	Decomposed granite paving	sq.m	160	\$ 30.00	\$ 4,800.00	
b	Concrete paving	sq.m	1155	\$ 80.00	\$ 92,400.00	
c	Structural cell pavement	sq.m	231	\$ 80.00	\$ 18,480.00	
d	Crossing at entry road	allow	1	\$ 10,000.00	\$ 10,000.00	
<b>6 Car park</b>						\$ 188,003.00
a	Asphalt seal including prime.	sq.m	2295	\$ 60.00	\$ 137,700.00	
b	Basecourse Class 2 20mm FCR	cu.m	459	\$ 17.00	\$ 7,803.00	
c	Kerb edge to carpark and medians	lin.m	700	\$ 60.00	\$ 42,000.00	
d	Pavement linemarking	allow	1	\$ 500.00	\$ 500.00	
<b>7 Buildings</b>						\$ 15,000.00
a	New storage facility	allow	1	\$ 15,000.00	\$ 15,000.00	
<b>8 Structures</b>						\$ 20,000.00
a	Shade shelters	allow	1	\$ 20,000.00	\$ 20,000.00	
<b>9 Boardwalks</b>						\$ 2,850.00
a	2m wide recycled plastic boardwalk over swale	lin.m	6	\$ 500.00	\$ 2,850.00	
<b>10 Walls</b>						\$ 2,850.00
a	Concrete seat walls to playspace	lin.m	6	\$ 500.00	\$ 2,850.00	
<b>11 All Abilities Playspace</b>						\$ 66,800.00
a	Themed tower and slide	no.	1	\$ 30,000.00	\$ 30,000.00	
b	Hammock swings	no.	2	\$ 5,000.00	\$ 10,000.00	
c	Sand digger	no.	1	\$ 3,800.00	\$ 3,800.00	
d	Freight and installation	allow	1	\$ 20,000.00	\$ 20,000.00	
e	Drainage	allow	1	\$ 3,000.00	\$ 3,000.00	

<b>12 Playspace surfacing</b>						\$ 35,200.00
a	Washed sand soffitfall	sq.m	305	\$ 80.00	\$ 24,400.00	
b	Rubber soffitfall to trike circuit	sq.m	60	\$ 180.00	\$ 10,800.00	
<b>13 Signage</b>						\$ 10,000.00
a	Social awareness signage	allow	1	\$ 2,500.00	\$ 2,500.00	
b	Interpretive signage	allow	1	\$ 2,500.00	\$ 2,500.00	
c	Entry and wayfinding signage	allow	1	\$ 5,000.00	\$ 5,000.00	
<b>14 Furniture and Fixtures</b>						\$ 65,500.00
a	Picnic settings	No.	6	\$ 4,500.00	\$ 27,000.00	
b	Platform seats	No.	2	\$ 2,000.00	\$ 4,000.00	
c	Barbecue	No.	1	\$ 10,000.00	\$ 10,000.00	
d	Outdoor shower including plumbing	allow	1	\$ 8,000.00	\$ 8,000.00	
e	Bike rack	allow	1	\$ 1,500.00	\$ 1,500.00	
f	Reinstate fencing to Crown Land Lease Area	allow	1	\$ 20,000.00	\$ 20,000.00	
<b>15 Fitness station circuit</b>						\$ 15,000.00
a	Fitness stations	allow	1	\$ 15,000.00	\$ 15,000.00	
<b>16 Tree Planting</b>						\$ 6,000.00
a	SemiAdv Trees (1.0-1.2m high.)	No.	50	\$ 120.00	\$ 6,000.00	
<b>17 Low mass planting</b>						\$ 15,114.63
a	Application of appropriate herbicide to remove weeds and pasture grass	sq.m	280	\$ 0.25	\$ 141.50	
b	Cultivation of site topsoil with soil amelioration additives	sq.m	280	\$ 4.00	\$ 1,120.00	
c	Imported approved mulch	cu.m	42	\$ 62.50	\$ 2,653.13	
d	150mm pot sizes at 4/m2	No.	1120	\$ 10.00	\$ 11,200.00	
<b>18 Revegetation</b>						\$ 28,275.00
a	Application of appropriate herbicide to remove weeds and pasture grass	sq.m	1300	\$ 0.25	\$ 325.00	
b	Cultivate on site topsoil 150mm depth with soil amelioration additives	sq.m	1300	\$ 4.00	\$ 5,200.00	
c	Jute matting	sq.m	1300	\$ 5.50	\$ 7,150.00	
d	Topsoil at 4/m2	No.	5200	\$ 3.00	\$ 15,600.00	
<b>19 Grassing</b>						\$ 7,285.00
a	Top dress all areas as indicated on drawings.	sq.m	1780	\$ 3.25	\$ 5,785.00	
b	Turf to play space grass mounds	sq.m	100	\$ 15.00	\$ 1,500.00	
<b>20 Swale Works</b>						\$ 11,500.00
a	Rock line and widen swale	cu.m	40	\$ 250.00	\$ 10,000.00	
b	New outlet structure	allow	1	\$ 1,500.00	\$ 1,500.00	
<b>21 Plant Establishment Period</b>						\$ 3,900.00
a	Replacement of unhealthy/dead plant materials, removal of debris and litter and replacement of any failed plants	weeks	13	\$ 300.00	\$ 3,900.00	
<b>Future works Subtotal</b>					<b>\$ 665,957.63</b>	<b>\$ 665,957.63</b>
<b>Future works Design and Construction Contingency 20%</b>					\$ 133,191.53	\$ 133,191.53
<b>Future works Grand Total</b>					<b>\$ 799,149.15</b>	<b>\$ 799,149.15</b>
<b>Grand Total</b>					<b>\$ 889,149.15</b>	<b>\$ 889,149.15</b>

#### Exclusions

- 1 These estimates are based on Coastal Accessibility Plans only.
- 2 Excludes GST.
- 3 Excludes extended maintenance.
- 4 Excludes entry roundabout and gravel loop road for coaches.

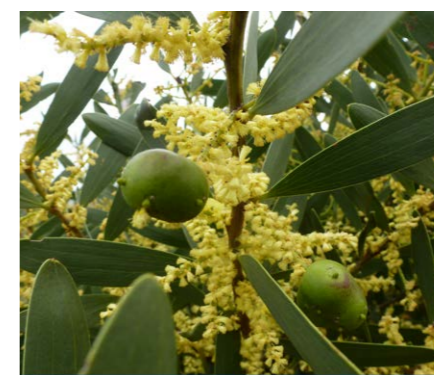
#### Priorities

- 1 Amenities upgrade
- 2 Beach access path

# 10 RECOMMENDED SPECIES LIST

## REVEGETATION RECOMMENDED SPECIES LIST

Botanical Name	Common Name	Location
<i>Acacia longifolia subsp. sophorae</i>	Coast Wattle	Dunes, Headlands
<i>Allocasuarina verticillata</i>	Drooping Sheoak	Headland
<i>Alyxia buxifolia</i>	Sea Box	Headland
<i>Banksia integrifolia subsp. integrifolia</i>	Coast Banksia	Dunes, Headlands, car park
<i>Ficinia nodosa</i>	Knobby club-rush	Dunes, Toe of headland
<i>Glycine tabacina</i>	Variable Glycine	
<i>Leucopogon parviflorus</i>	Coast Beard-heath	Dunes
<i>Lomandra longifolia</i>	Spiny-head Mat-rush	Ornamental mass planting
<i>Melaleuca armillaris subsp. armillaris</i>	Bracelet Honey-myrtle	Headland
<i>Myoporum boninense</i>	Boobialla	Headland
<i>Poa poiformis</i>	Coast Tussock-grass	Headland and estuaries
<i>Themeda triandra</i>	Kangaroo Grass	Headland
<i>Westringia fruticosa</i>	Coastal Rosemary	Headland



Plant Images

# 11 WHERE TO FROM HERE?

## 11.1 NEXT STEPS

The completion of the FINAL Coastal Accessibility Plans following the community engagement surrounding the project is a significant outcome for Bega Valley Shire and the community.

The next phases of work for Bruce Steer Pool, Short Point Merimbula and Pambula Beach Reserve will involve any necessary further detailed design work, tendering and physical implementation in approved stages. .



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