



rockingham beach foreshore master plan

august 2015





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part one

1.0 introduction

The complete Rockingham Beach Foreshore Master Plan includes:

- **Part One:** The Master Plan;
- **Part Two:** Detailed Information;
- **Appendix A:** Site Analysis and Background Information;
- **Appendix B:** Transport Assessment Report; and,
- **Appendix C:** Coastal Hazard Risk Management and Adaptation Plan.

executive summary

Following the recommendations of the City of Rockingham's Economic Development Strategy, the Rockingham Foreshore Master Plan provides a coherent vision for 4kms of waterfront reserve and its immediate surrounds. The reserve comprises approximately 32 hectares of coastal land starting at Hymus Street to the west and finishing at Governor Road to the north-east.

The Master Plan includes three (3) areas:

- Area One – Bell and Churchill Parks including the Boardwalk, Rockingham Beach Road and Railway Terrace;
- Area Two – Palm Beach and Esplanade including Palm Beach Jetty and Val Street Jetty; and,
- Area Three – Wanliss Street to Governor Road Reserve including Naval Memorial Park.

The Master Planning approach has been informed by upfront and ongoing community and stakeholder inputs and shaped by the design team through an iterative process. The resulting plan:

- Supports the goals of the Activity Centre Plan for the Rockingham Strategic Metropolitan Centre;
- Embraces the unique setting of a north facing beach in protected waters to enhance and improve the foreshore reserve and surrounding public domain;
- Retains and builds upon the casual recreational atmosphere that the area is historically renowned for;
- Recognises the Nyungar significance and European history of the site;
- Prioritises the needs of people over vehicles;

- Protects and enhances sensitive coastal dune landscapes;
- Improves connections between the surrounding urban fabric, the built public domain and the beachfront;
- Provides the basis for improved overall amenity including shade, play, seating, showers, barbecue and bicycle facilities;
- Provides a strategy for consistent and improved signage and way finding;
- Identifies key destinations within the overall precinct for detailed design studies;
- Examines existing and proposed traffic flows, car parking, and future transport scenarios for the precinct with the goal of reprioritising the area to better cater for pedestrians;
- Provides site specific coastal risk hazard assessment and recommendations including defence, adaptation and management strategies;
- Proposes some key 'attractors' with iconic potential; and,
- Provides an implementation and staging strategy.

The successful implementation of the vision established within the Master Plan, will see the Rockingham Beach Foreshore elevated to its rightful place as an attraction of local, state and national significance. This in turn will be a key driver for investment and economic development within the wider waterfront precinct in Rockingham.



image 1.1: Rockingham Beach

1.1 project origin

People and Place should be connected. It is that spirit of connection that fundamentally informs the Master Plan for the Rockingham Beach foreshore presented in these pages.

The purpose of the Master Plan is to enhance the amenity, function and appearance of the foreshore precinct for recreational users and adjacent commercial areas. The City's adopted *Economic Development Strategy 2014 - 2017* (EDS) recognises the potential of the Foreshore Precinct and seeks to build on its attributes to aid in attracting investment and increasing visitation.

'Key Recommendation 2' of the EDS states that a Foreshore Master Plan should be developed for Rockingham Beach to deliver on the following objectives:

1. A contemporary design using world best practice civic and public place design principles and materials that are complementary to the planning objectives of the Foreshore Precinct of the Waterfront Village area;
2. A design that is sympathetic to, and makes maximum use of the uniqueness of the north facing sheltered beach and the significant shaded areas within the two parks;
3. A design that is complementary to the functionality and feasibility of existing and future apartment/hotel/food and beverage/retail development;
4. A design that will be conducive to community events and gatherings;
5. A design that incorporates latest technology public toilet systems both portable and fixed;
6. A design that facilitates better linkages between Churchill Park and the Palm Beach Jetty;
7. The feasibility of the establishment of an "ocean pool" in the study area and recommendations on form, scale and location;
8. Streetscapes that facilitate pedestrian activation and alfresco dining, maximising community interaction and enjoyment;
9. Streetscapes that facilitate effective linkages between shopfronts and adjacent reserves to complement existing and future retail / food and beverage / tourism activities;
10. A reduction in vehicular traffic and the impact of vehicles and parking on the amenity of the area generally and options for appropriately relocated parking in the near vicinity; and,
11. Development of a title /name for the general area under design consideration that will be used for marketing and promotional purposes in the future.

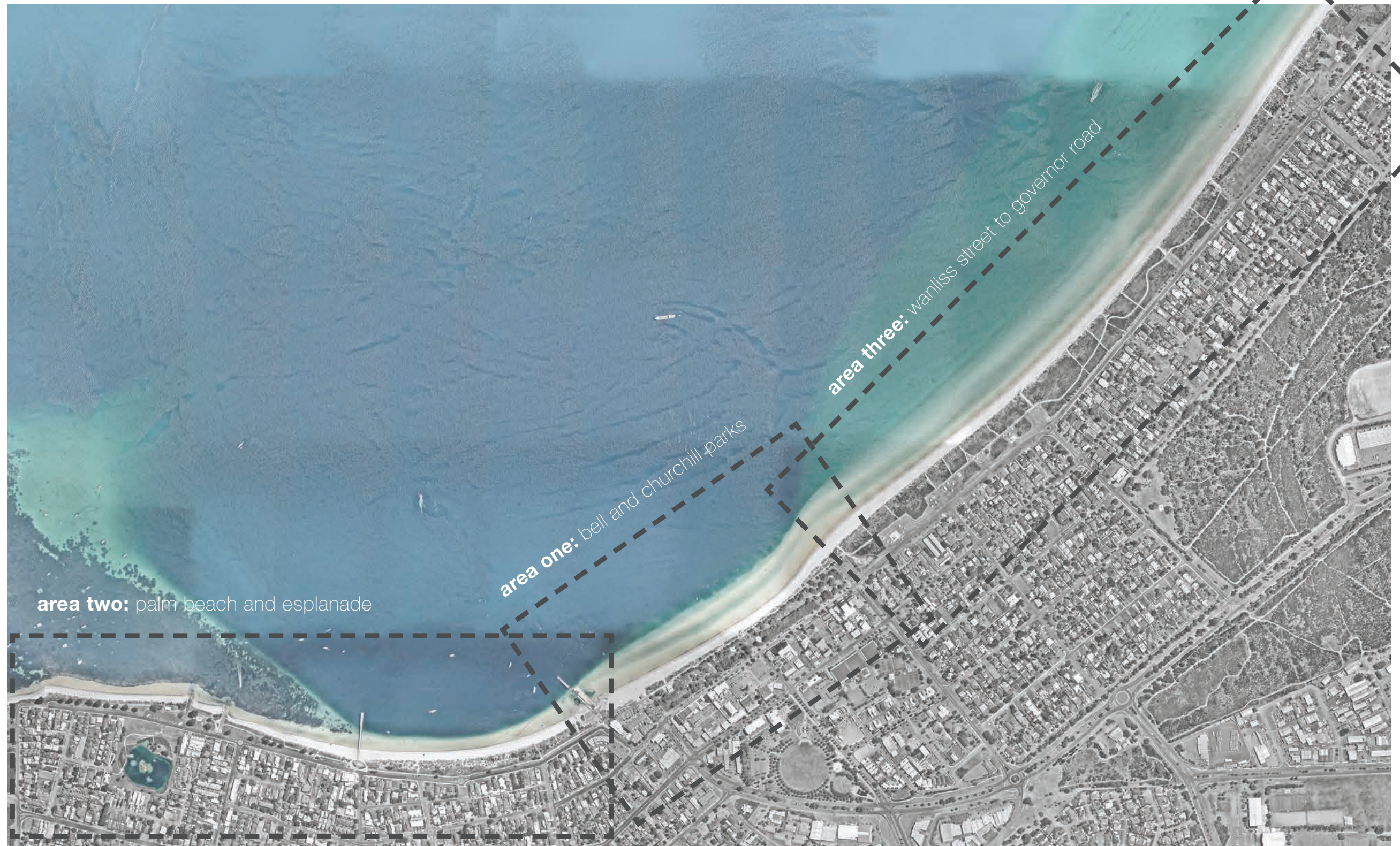


figure 1.1: site context plan

1.2 the site

The site covers over 4km of foreshore reserve and consists of three nominated areas:

Area One: “Bell and Churchill Parks”:

Val Street jetty to Wanliss Street, including Railway Terrace, Kent Street and Rockingham Beach Road.

This area comprises principally of Bell and Churchill Parks, ‘The Boardwalk’, and the streetscapes and retail frontages for Railway Terrace and Rockingham Beach Road. It is characterised by the five hectare park which enjoys a direct connection to the beach. The park contains numerous mature and native trees and is popular with a large range of user groups all year round. It is especially popular during summer and is rightly recognised as Rockingham’s principal and most successful public space.

Area Two: “Palm Beach”:

Val Street jetty along Esplanade to Hymus Street incorporating Palm Beach Jetty.

The Palm Beach precinct includes Esplanade which is a pleasant scenic coastal drive with largely unimpeded views of Cockburn Sound and Garden Island. The beach is popular with locals and visitors alike. The Jetty has become locally iconic and is a major attractor. The foreshore reserve itself is narrow, understated, and is largely comprised of low vegetated dunes, turf verges and a shared path. Residential properties enjoy close proximity and views of the beach and water. Shade is sparse except in the western end near the boat ramps.

Area Three: Wanliss Street to Governor Road:

Wanliss Street to Governor Road Reserve bordered by Rockingham Beach Road and the foreshore.

The sequence of three primary foreshore reserve spaces to the east of Wanliss Street include:

- a) a large turfed area set back from the primary dune interspersed with carparks;
- b) a large dunal landscape; and,
- c) the Naval Memorial Park and Governor Road Reserve to the north/east.

Of the three study areas, it is the least developed and retains more of a ‘casual’ character.



key

- 1 rotary park
- 2 palm beach jetty
- 3 val street jetty
- 4 churchill park
- 5 bell park
- 6 naval memorial park

figure 1.2: the rockingham beach foreshore masterplan - scale 1:5000 at a3





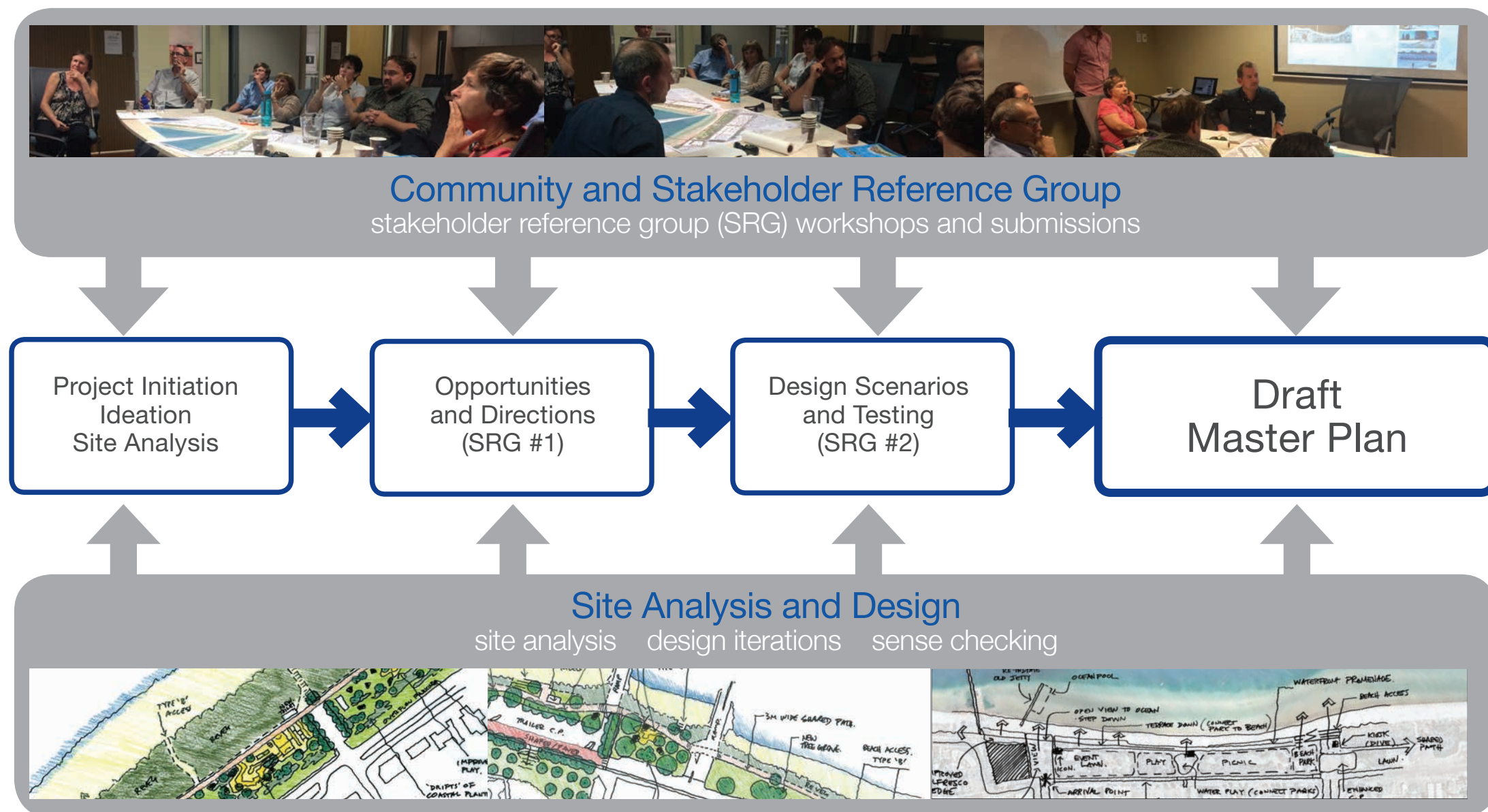


figure 1.3: engaged design process

1.3 community and stakeholder engagement

1.3.1 – Initial Consultation

The City conducted initial community engagement in December 2014 via a specialist consultant, Consult WG, to assist in gauging attitudes and ideas from the community and stakeholders. A selection of engagement elements included a Community Survey, letters to landowners and business owners, media releases, Facebook posts, a Councillor Workshop and two Community Information Sessions.

The Rockingham Beach Foreshore Master Plan “Design Parameters” were then derived from the consultation to inform the preparation of the Master Plan with considerations for the full Study Area.

This information effectively established the design brief and influenced the project objectives which are the subject of this Master Plan.

1.3.2 Continuing Engagement through the Design Process

The design process for the Master Plan was enhanced with an integrated community and Stakeholder Reference Group (SRG) which was briefed in detail on the project and invited into a participatory design process.

Engagement included:

- Two Community and stakeholder reference group workshops at the Gary Holland Community Centre (26th February and 26th March 2015) with representatives from:
 - Chamber of Commerce;
 - WA Police;
 - Recreational user representatives;
 - Historical Society;
 - Local residents;
 - Youth representative;
 - Reconciliation Action Committee; and,
 - Event Coordination.

Workshop One included a discussion around the existing conditions and ‘big picture’ opportunities for each of the precincts along the Foreshore. The key themes raised by the SRG included:

- Importance of recognising of the Aboriginal and European significance of the area;
- The need to lift the presentation of the foreshore, in particular the entrance at Railway Terrace;
- The desire to retain existing natural features such as dunes and trees;
- The need to retain amenities but noting that elements could be replaced; and,
- The creation of pedestrian friendly spaces was supported, as long as consideration for issues around parking was given.

Workshop Two included a discussion and presentation of more developed concept ideas. The concepts were broadly supported by the SRG, however numerous design improvements were proposed, from the very fine grain, (such as location of drink fountains etc.) to discussion around the importance of a holistic parking strategy.

1.3.3 Second Public Consultation

The draft Master Plan, prepared through input from the SRG, was then released for public comment through the month of June 2015 during which time almost 200 submissions were received.

Following consideration of the submissions, the final Master Plan was adopted by Council in July 2015 subject to various changes the majority of which responded to the key themes raised during the comment period.

1.3.4 Other Consultation Methods

The following additional consultation measures were conducted through the Initial and Second Consultation:

- Two Councillor Workshops (25th March and 2nd July 2015);
- Meeting with the Reconciliation Action Group (16th March 2015);
- A Community Information Session at the Gary Holland Community Centre to engage with interested members of the public following the release of the Draft Master Plan (14th May 2015);
- A Consultation/Working Session with the Dive Trail stakeholders following feedback from the Draft Master Plan (1st July 2015).

2.0 area one - bell and churchill parks

2.1 area one - bell and churchill parks

Opportunities and Directions:

The following key opportunities were identified during the design and review process:

1. Create a distinct “sense of arrival” in approach to Rockingham Beach Foreshore by improving the streetscape environment around Railway Terrace, establishing a beachfront plaza, and a new recreational jetty;
2. Create a flexible ‘people park’ by prioritising pedestrian access rather than prioritising vehicle traffic and parking in prime locations;
3. Develop a stronger connection to the beach from the park and explore opportunities to increase the vibrancy and activation of the foreshore;
4. Widen the Boardwalk area (Cafe strip between Railway Terrace and Val Street) and improve connections to Esplanade;
5. Develop a stronger alfresco strip via streetscape improvements to Rockingham Beach Road and improve the connection to the park;
6. Improve access to car parking via improved way finding and signage;
7. Revitalise and upgrade furnishings and facilities, and reduce clutter;
8. Upgrade existing playgrounds with new or relocated play elements and increased shade;
9. Improve the Pioneer Walk and promote a friendly welcoming environment for cycling across all areas;
10. Improve universal access to the beach and park across all elements;
11. Maintain and express the overall ‘feel’ of the park and retain existing trees;
12. Resolve dune management and erosion issues through design;

13. Improve facilities for beach goers and day-trippers and develop smaller commercial opportunities such as kiosks; and,
14. Review the locations of memorials and commemorative and interpretive elements.

Refer to Appendix A - Rockingham Beach Foreshore Master Plan Site Analysis and Background Information for the detailed site analysis which informed the design approach.

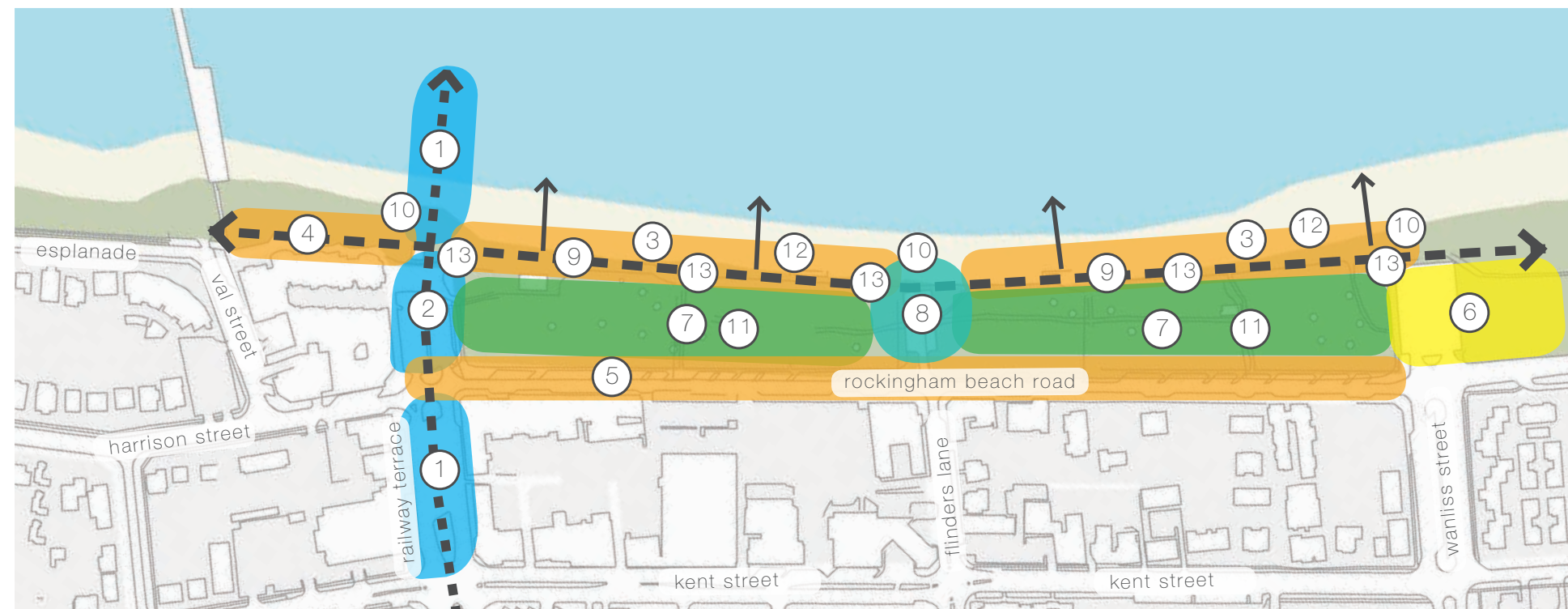


figure 2.1: diagram - area one - opportunities and directions diagram





figure 2.2: plan - area one plan - scale 1:1500 at a3



2.2 area one - plan

key

- | | |
|--|---|
| 1 railway terrace - urban entry | 16 disability and inclusive access matting |
| 2 rockingham beach plaza | 17 maintain existing boat exclusion zone |
| 3 universal access and service vehicle access bays | 18 re-configured flinders lane carpark |
| 4 churchill park - event lawn and cinema screen with raised platform | 19 enhanced streetscape and road |
| 5 rockingham beach jetty | (K) kiosks |
| 6 the boardwalk | (T) toilets |
| 7 pioneer promenade | (O) shaded overlooks |
| 8 new pavilion | (P) shaded playgrounds |
| 9 bell and churchill maritime playground including millenium sphere | (PN) picnic node |
| 10 rockingham beach road - vehicle and pedestrian shared space | (A) beach access type a - universal access and beach amenity node |
| 11 lawn and terraces and coastal protection | (E) exercise node |
| 12 universal access path | (M) maintenance vehicle beach access |
| 13 wanliss street carpark expansion | ☀ opportunity for Nyungar significant places and story interpretation |
| 14 indicative development | ⬜ potential location for temporary toilets for community events |
| 15 retail/activated pedestrian laneways | |

- existing eucalyptus trees to retain
- existing and proposed peppermint trees
- existing and proposed coral trees
- existing and proposed plane trees
- existing and proposed norfolk island pines
- existing and proposed palm trees
- existing and proposed low coastal trees

notes:

1. cycling facilities are to be provided within suitable nodes
2. universal access across all elements is required to be investigated and resolved through subsequent detailed design
3. CPTED principles are to be applied to all subsequent detailed design phases
4. all car parks will include ACROD bays to the relevant australian standards
5. refer to Part Two for detailed propositions



image 2.1 : Bell park peppermint grove

2.3 the spaces

The following spaces have been identified for detailed design. The features of each space are described in subsequent pages.

Key:

1. Railway Terrace
2. Rockingham Beach Plaza
3. Rockingham Beach Jetty
4. 'The Boardwalk'
5. Pioneer Promenade and Terraces;
6. Bell and Churchill Maritime Playground
7. Rockingham Beach Road 'Shared Street'
8. Churchill Events Lawn
9. Wanliss Street Carpark and Beach access

The following spaces will remain largely unaffected with the exemption of rationalisation of furniture items and playgrounds:

10. Churchill Tuart Lawn with picnic and play facilities
11. Bell Picnic Lawn
12. Bell Peppermint Avenue

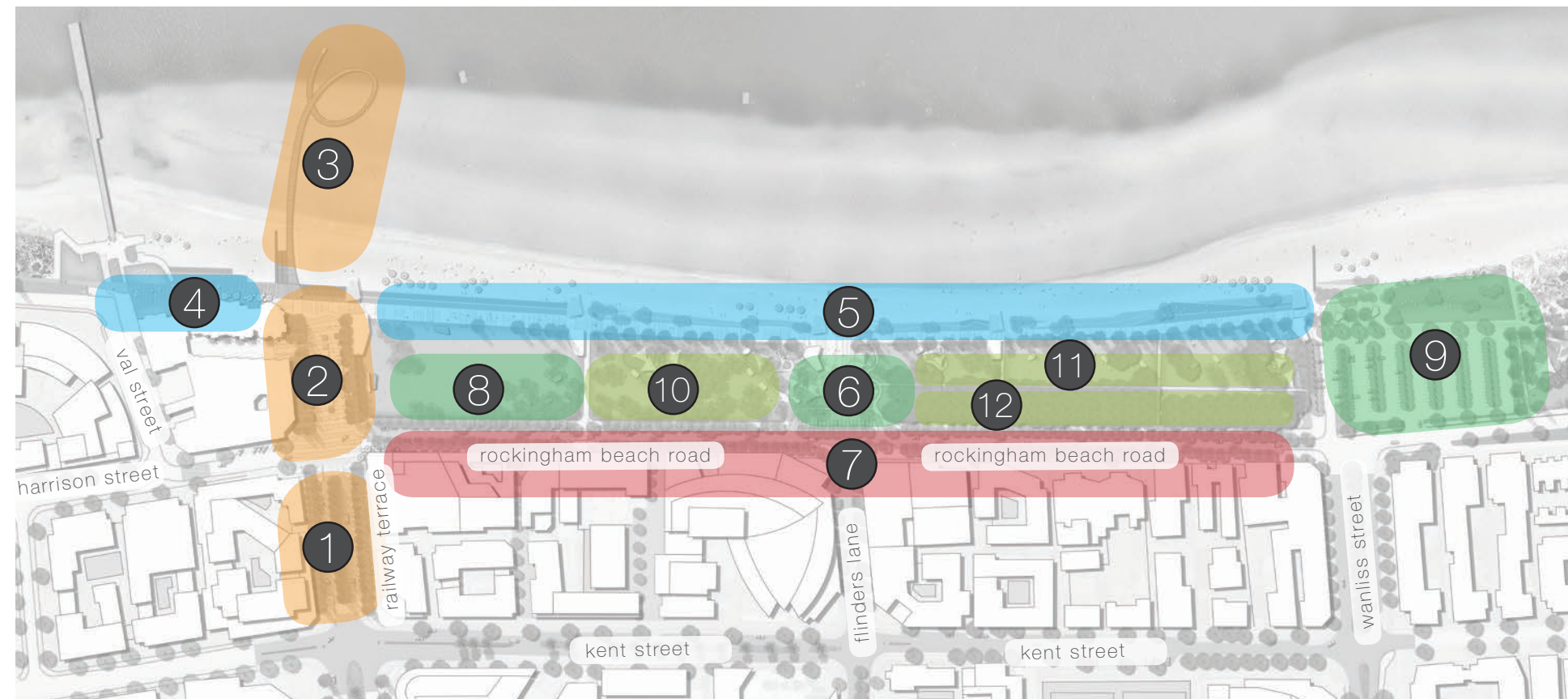


figure 2.3: spatial diagram

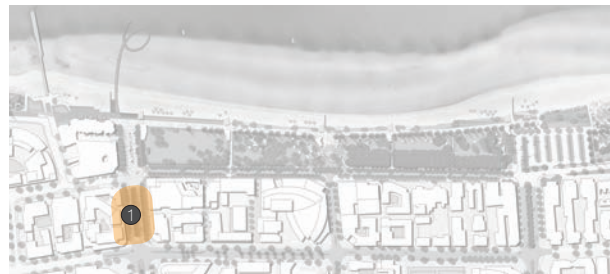


figure 2.4: perspective view - railway terrace

2.3.1. railway terrace

A significant upgrade to the streetscape of Railway Terrace that exemplifies its coastal context, relaxed atmosphere, and enhances the pedestrian experience whilst improving parking and retail opportunities along the street front.

This will provide greater definition of Railway Terrace as the 'gateway' to the Rockingham Beach Foreshore and establish the 'tone' of the area upon arrival.



example projects



image 2.2: Cottesloe, WA

Key design features:

- More efficient car parking layout including accessible parking;
- Car bays relocated to the sides in order to improve pedestrian safety;
- Increase in footpath width and improved paving surface and kerbs;
- Planting of tall coastal appropriate trees (such as Norfolk Island Pines) to frame the view to the water, define the streetscape, and establish a strong civic gateway experience;
- General improvement to street furniture;
- Interpretive layer of the Jarrahdale-Rockingham Railway in the paving design and street furniture elements; and,
- Bus stop and taxi rank relocated around the corner to Kent Street.



image 2.3: Santa Monica Boulevard, West Hollywood

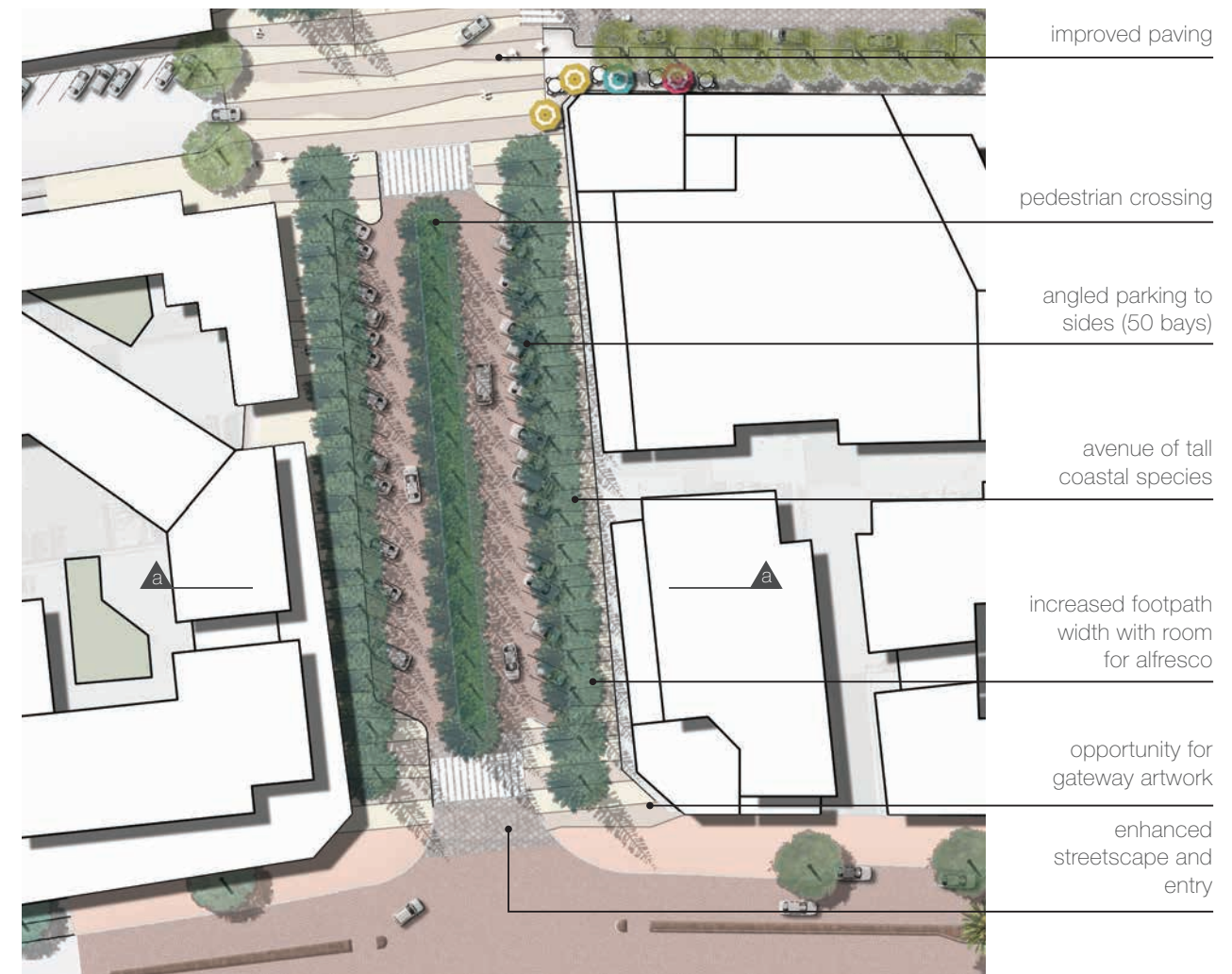


figure 2.5: detail plan - railway terrace

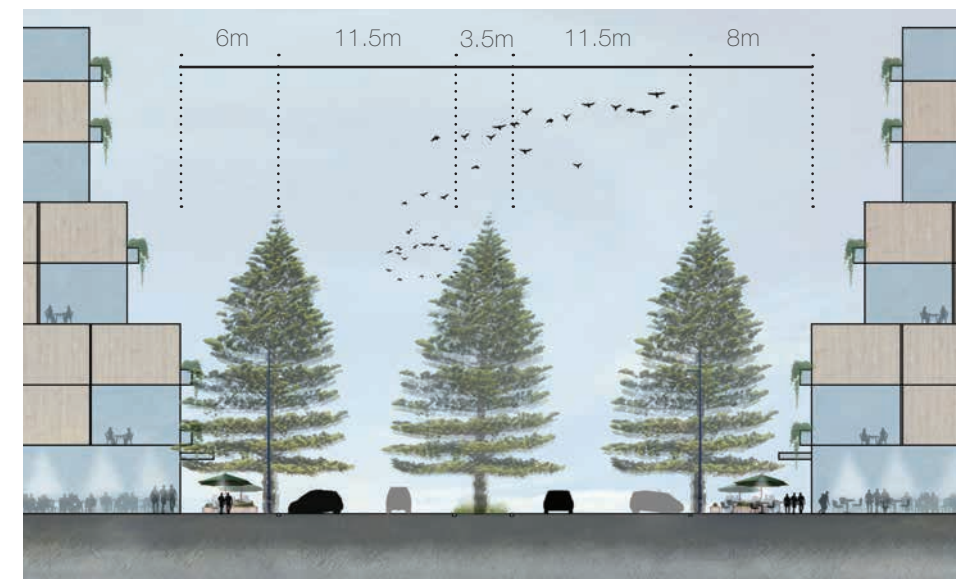


figure 2.6: indicative section aa - railway terrace - scale 1:500 at a3



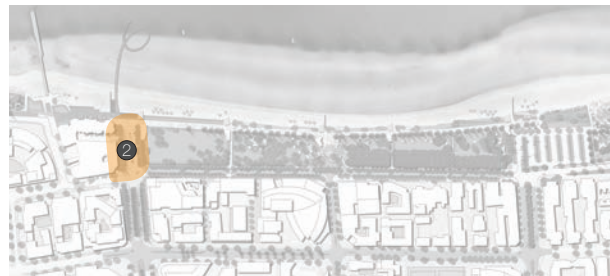
figure 2.7: perspective view - rockingham beach plaza and rockingham beach jetty

2.3.2. rockingham beach plaza

Railway Terrace extends into a new 'high performance' pedestrianised foreshore plaza space that effectively expands Bell and Churchill Parks westwards. The Plaza transitions to the beach via a series of new timber seating steps. It becomes an adaptable multi-purpose 'people space' which can be used for organised and programmed activities such as weekend markets, special events, music performances and so on. Rockingham Beach Plaza acts as a spatial 'fulcrum' that resolves the east-west connection between Churchill Park and 'The Boardwalk' and the north-south connection between Railway Terrace and the beach.

Key design features include:

- Vehicle parking for 'kiss'n'ride', disabled bays, and service access will be maintained as will vehicle access to existing buildings;



example projects



image 2.4: Bathers Beach, Fremantle

- High quality paving appropriate to a beach context;
- Large seating steps will provide direct access to the beach and a prominent public gathering point;
- Opportunity to recognise Nyungar culture at this point of arrival, to link this location to surrounding sites of significance and to integrate a Nyungar meeting place for events and celebrations;
- Interpretive layer of the Jarrahdale-Rockingham Railway in the paving design and street furniture elements;
- Continuation of the Railway Terrace trees framing and defining the space, with public seating under;
- Alfresco seating area adjacent to existing cafes and restaurants to be maintained and increased;
- Opportunity for unique urban lighting;
- A new iconic café and public toilet/amenities kiosk and shaded pavilion to the NE corner replacing the existing pavilion and nearby toilets;
- Integrated services such as power/gas/water outlets for temporary structures and events; and,
- Opportunity for a significant public artwork commission.



image 2.5: Place de la Paix, Ville de Mulhouse, France



figure 2.8: detail plan - rockingham beach plaza

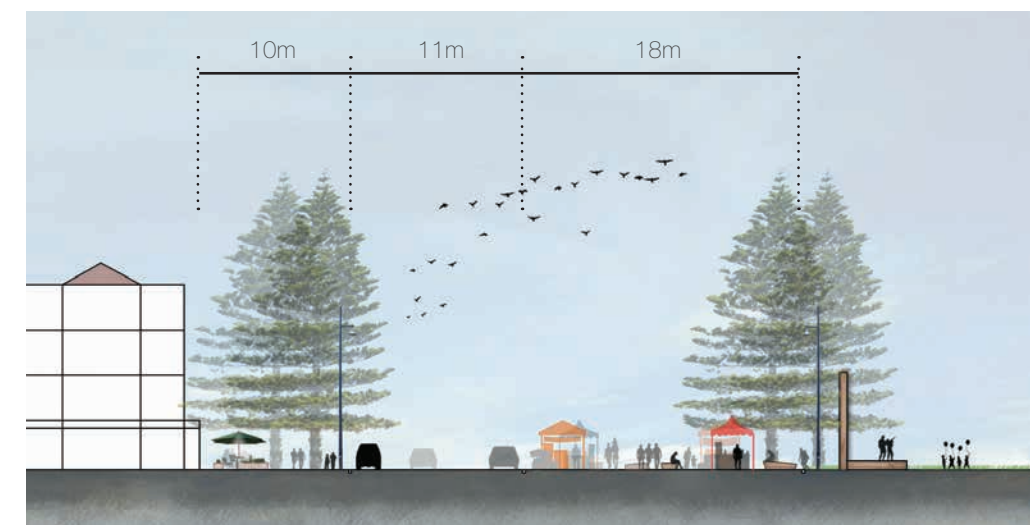
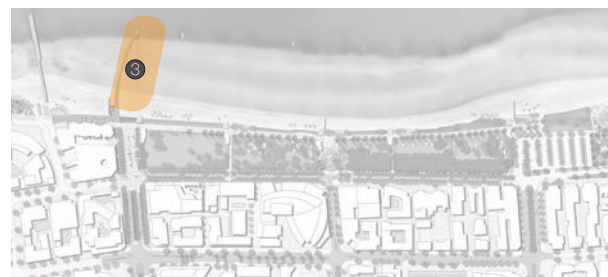


figure 2.9: indicative section bb - rockingham beach plaza - scale 1:500 at a3

2.3.3. rockingham beach jetty

The final part of the arrival sequence is a new recreational jetty that extends outwards from the Railway Terrace axis and is primarily a space for casual swimmers. The jetty is visible from Railway Terrace and is expressed by a sinuous embracing form which loops back on itself to establish a 'controlled swimming space'. The design should re-imagine the Old Rockingham Port Jetty, the extension of Railway Terrace as a promenading experience and inclusion of Nyungar stories that connect Cockburn Sound, Garden Island and the mainland.



Other design features can include:

- An iconic structure at the end of the jetty offering a destination / interpretation / focal point;
- A shaded space under the jetty at the boardwalk connection;
- Specialty lighting and balustrade design;
- Deep water access area and an enclosed swimming zone;
- Opportunity for stepped edge into the water;
- Potential to illuminate the jetty from underneath so that it appears as a crisp line of light at night;
- Possibility of including a shark proof net;
- Jetty to be fully accessible from the land and have accessible ramp and hoist into the water; and,
- Jetty to descend at a constant grade (approx 1:40) from the line of the beach to sit 200mm above high tide mark at lowest point (subject to detailed design).

example projects

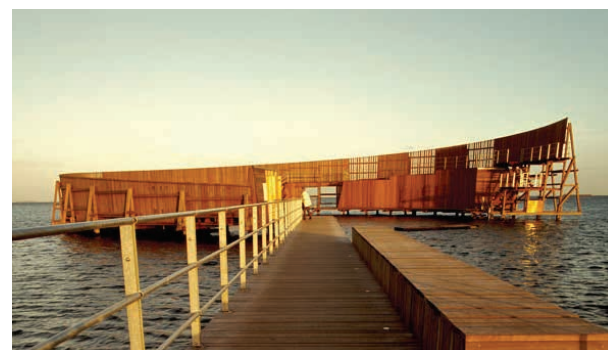


image 2.6: Kastrup Sea Bath, Denmark



image 2.7: Infinity Bridge, Denmark

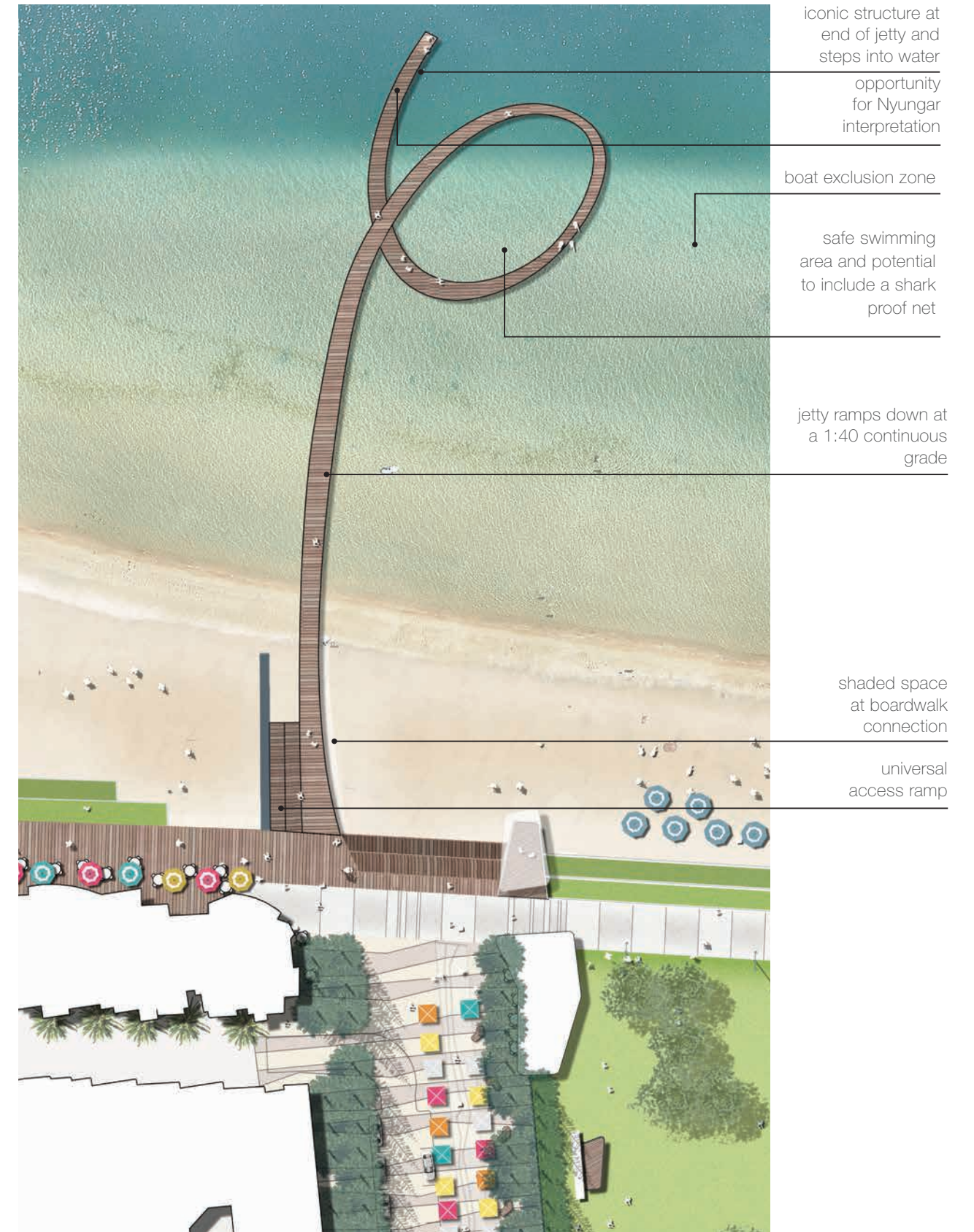


figure 2.10: detail plan - rockingham beach jetty

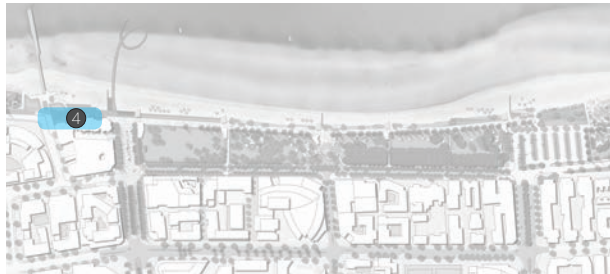


2.3.4. 'the boardwalk'

'The Boardwalk' will be widened substantially to at least 10m and be redesigned to accommodate a hardwood timber surface. It will provide improved public seating and lighting, an improved balustrade, grass terraces and a stronger direct connection to the Esplanade shared path to the west which will also accommodate nearby bicycle parking facilities. Existing restaurant/café businesses will be afforded additional alfresco space to increase patronage.

The widening of the boardwalk in conjunction with the new beach plaza space will create an improved and seamless connection with the Pioneer Promenade.

The basalt wall will be retained, however the memorial plaques will be relocated to a purpose built memorial wall nearby on Palm Beach.



example projects



image 2.8: Bathers Beach, Fremantle



image 2.9: Toronto Waterfront, Canada

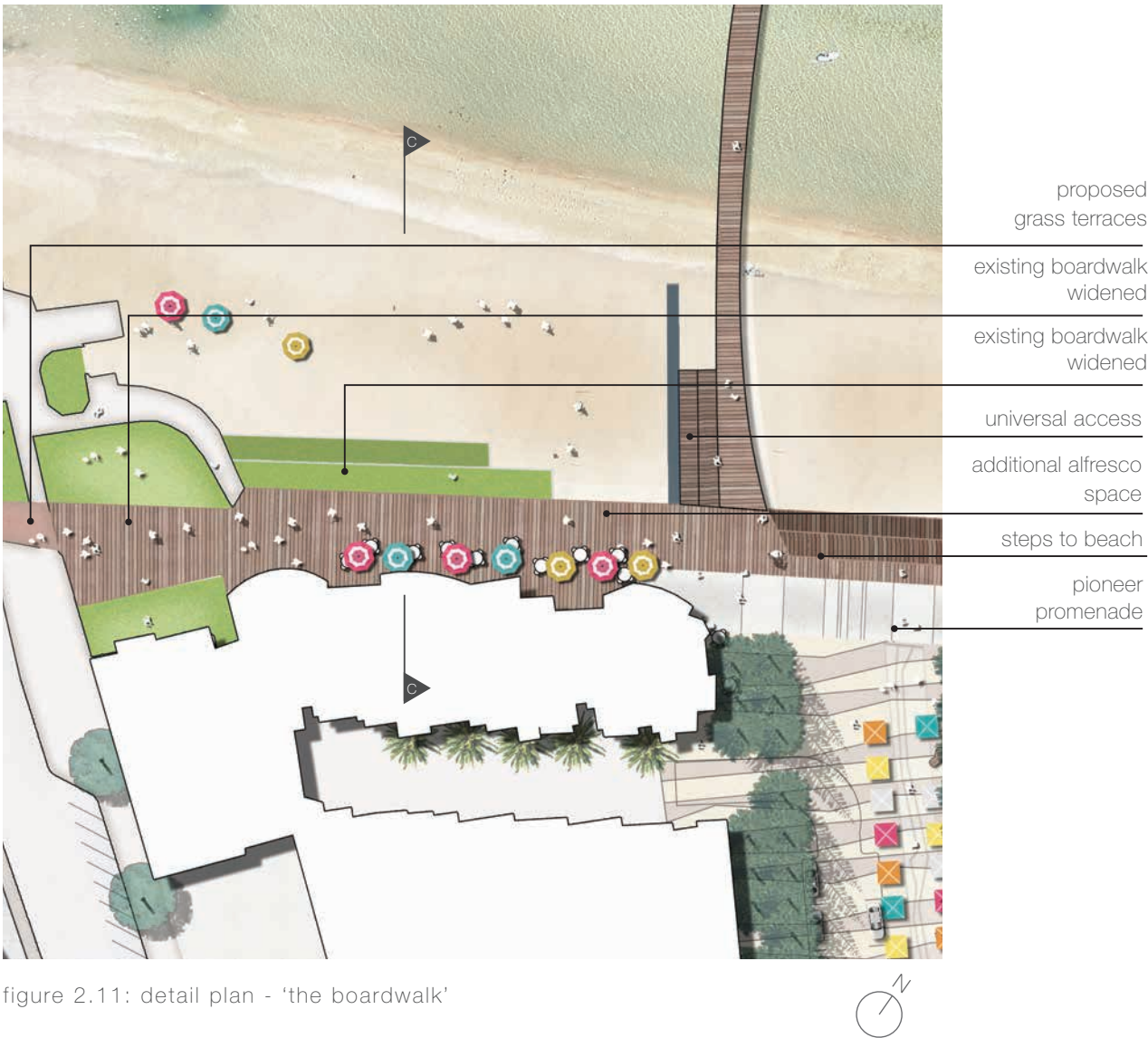


figure 2.11: detail plan - 'the boardwalk'

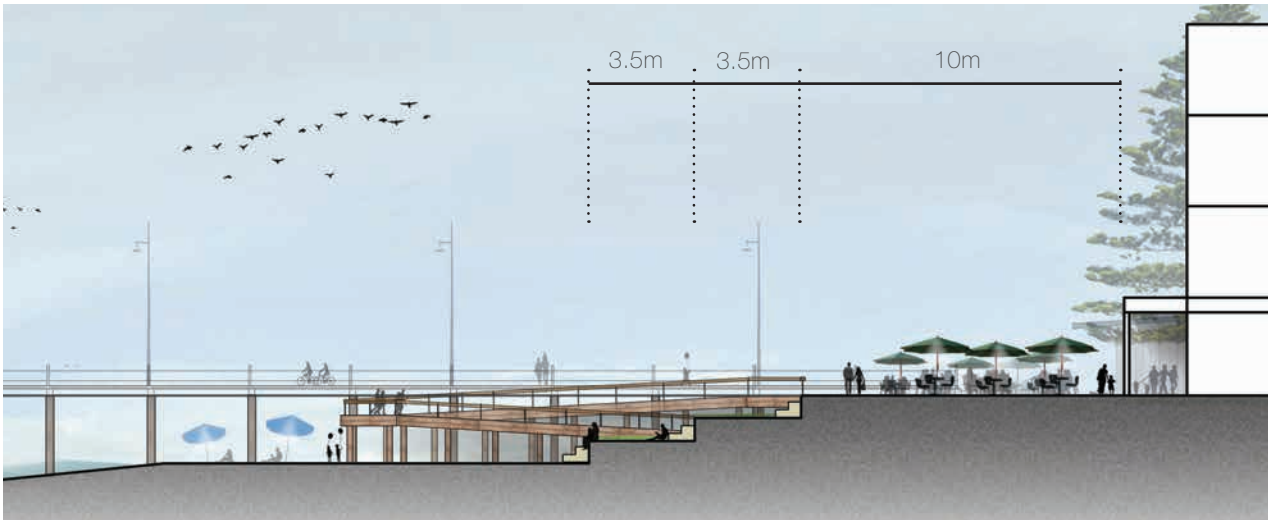


figure 2.12: indicative section cc - 'the boardwalk' - scale 1:250 a3



figure 2.13: perspective view - pioneer promenade and terraces

2.3.5. pioneer promenade and terraces

The existing Pioneer Walk will be upgraded to a 'promenade' in order to improve access to the park and beach, better connect with the boardwalk, and become the principal means of pedestrian movement throughout the site. The beach side of the promenade will become a series of turfed and planted terraces, which incorporate the necessary coastal defences against sea level rise and beach erosion. New access points will be designed into this treatment.

Improvements will include:

- New path surface (exposed aggregate insitu concrete) capable of supporting service vehicles;
- Wider path capable of supporting large movements of pedestrians and cyclists;

- Terraced lawns and planting to connect the park with the beach designed to incorporate coastal defences;
- Access to beach via generous stair connections and ramps;
- Five shaded beach overlook areas adjoining access points;
- Five small kiosk / pavilion structures co-located with the access and overlook points variously accommodating toilets (x3) and seasonal hire businesses (bike hire, ice cream etc);
- Existing pioneer walk interpretive plaques to be incorporated or re-created;
- Improved locations and upgraded respite and vista seating, lighting, bins and beach amenities; and,
- Existing nearby memorials and commemorations to be retained and adjusted to suit.

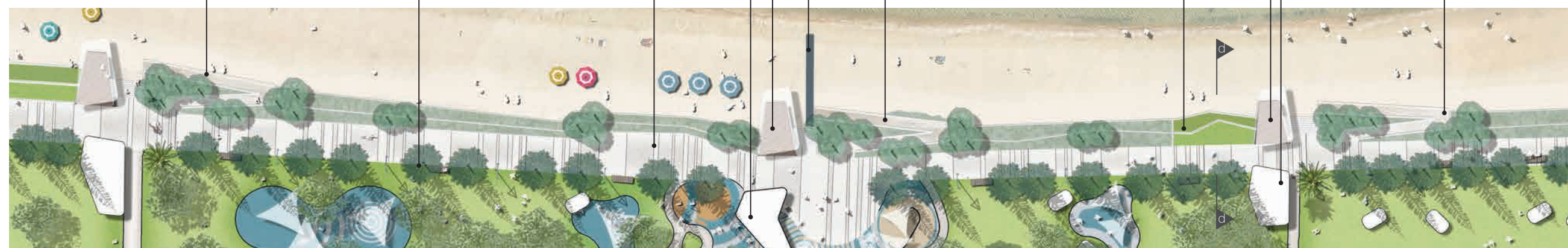
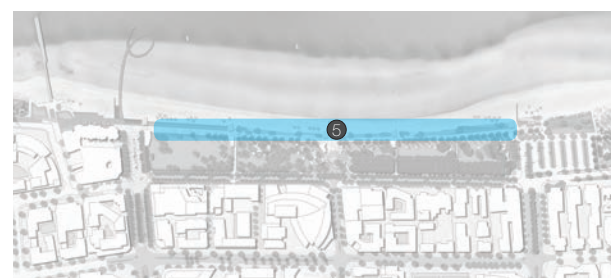


figure 2.15: detail plan - pioneer promenade and terraces (portion)

example projects



image 2.10: Brooklyn Waterfront, USA



image 2.11: Jack Evans Boat Harbour, NSW

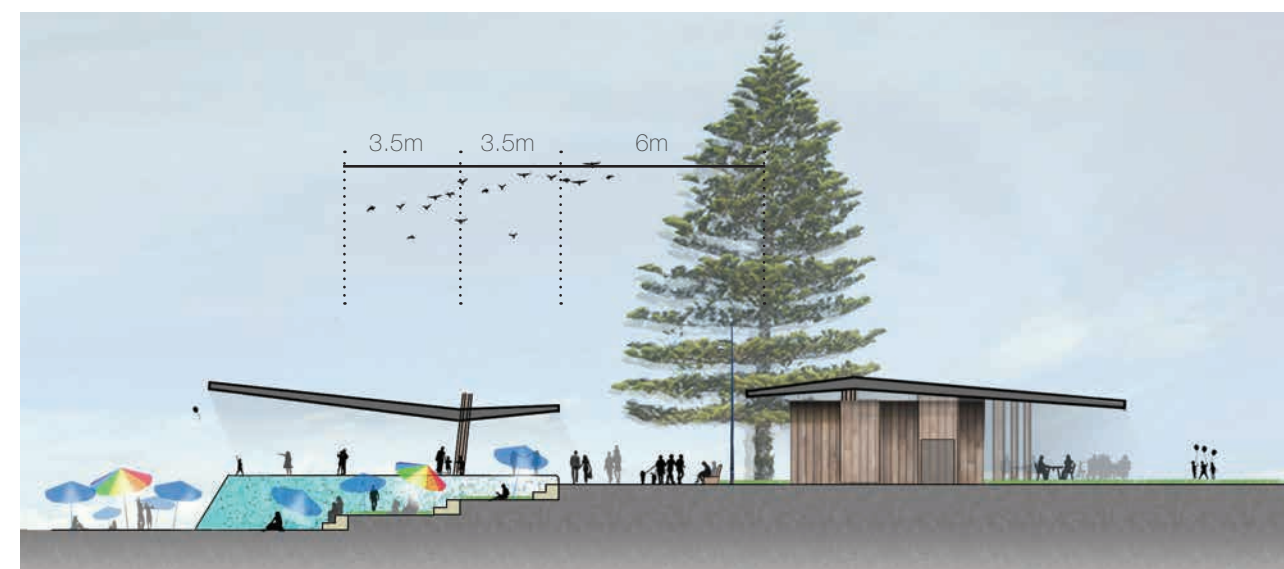


figure 2.14: indicative section dd - 'the pioneer promenade and terraces' - scale 1:250 at a3





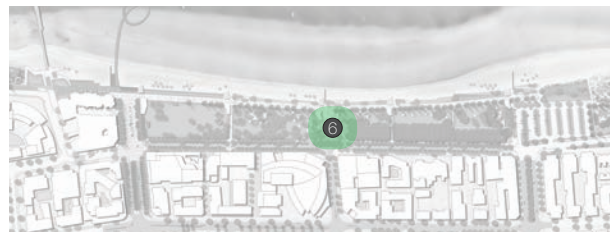
figure 2.16: perspective view - bell and churchill maritime playground

2.3.6. bell and churchill maritime playground

The site presently occupied by the Flinders Lane carpark will become a regionally significant playground unique to Rockingham creating a major attractor for families. In addition to its role as a playground, it will also serve the purpose of providing a stronger spatial connection between Bell and Churchill Parks; effectively creating one unified parkland.

Key features of the playground include:

- Custom designed elements and spaces by a specialist playground designer;
- Facilities for a range of ages and abilities;
- Water play elements and 'maritime' themed elements;



- The nearby millennium ball;
- Significant shade from new custom design shade structures and existing trees;
- Provision for carers and families to supervise (shaded seating, facilities etc);
- Existing toilets (possible adjustment to location);
- A 'play kiosk' to add a further layer of supervised play activation when in operation;
- Universal beach access via ramp;
- Opportunity to integrate site interpretation and artworks into the playground design;
- Retention of significant existing trees;
- Interpretation of Nyungar stories in water play elements;
- Interpretation of community memories of 'the trampolines';
- The removal of the 'choke point' along Pioneer Walk (ie increase space for an east-west connection); and,
- Re-configured Flinders Lane carpark to facilitate access to the dive trail.



figure 2.17: detail plan - bell and churchill maritime playground

example projects



image 2.12: Wisconsin Waterfront, USA



image 2.13: Playground, Wiesbaden, Germany



image 2.14: Bordeaux Waterfront, France



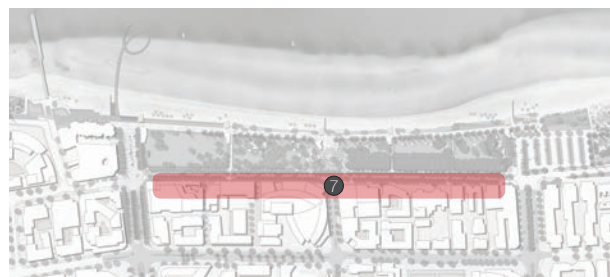
image 2.15: Parc Diagonal Mar, Barcelona, Spain



figure 2.18: perspective view - railway terrace and rockingham beach road intersection

2.3.7. rockingham beach road 'shared street'

A 'shared street space' or *woonerf* (Dutch for "living street") between Railway Terrace and Wanliss Street. It is a street where cars, pedestrians and bicycles can coexist with reduced road space infrastructure separating them – such as non or flush kerbs, less traffic signage, fewer road markings etc. Higher end material finishes typically associated with the lower speeds of pedestrian movement such as paved road surfaces replace asphalt. The street can be closed for events.



Key features and benefits include:

- Increased footpath width of the southern side by 2.5m creating more room for alfresco seating;
- Street tree plantings, some bollards, textured paving and urban furnishings are used to broadly define the edge of the road space;
- Parallel parking to either side of the road. Parallel parking is safer and creates 'friction' between vehicles in the street thus further enforcing lower speeds and attentiveness of drivers;
- Increased footpath width to the park side of the road; and,
- Improved access for mobility.



example projects



image 2.16: Bayview Terrace, Claremont, WA



image 2.17: Fort Street, New Zealand

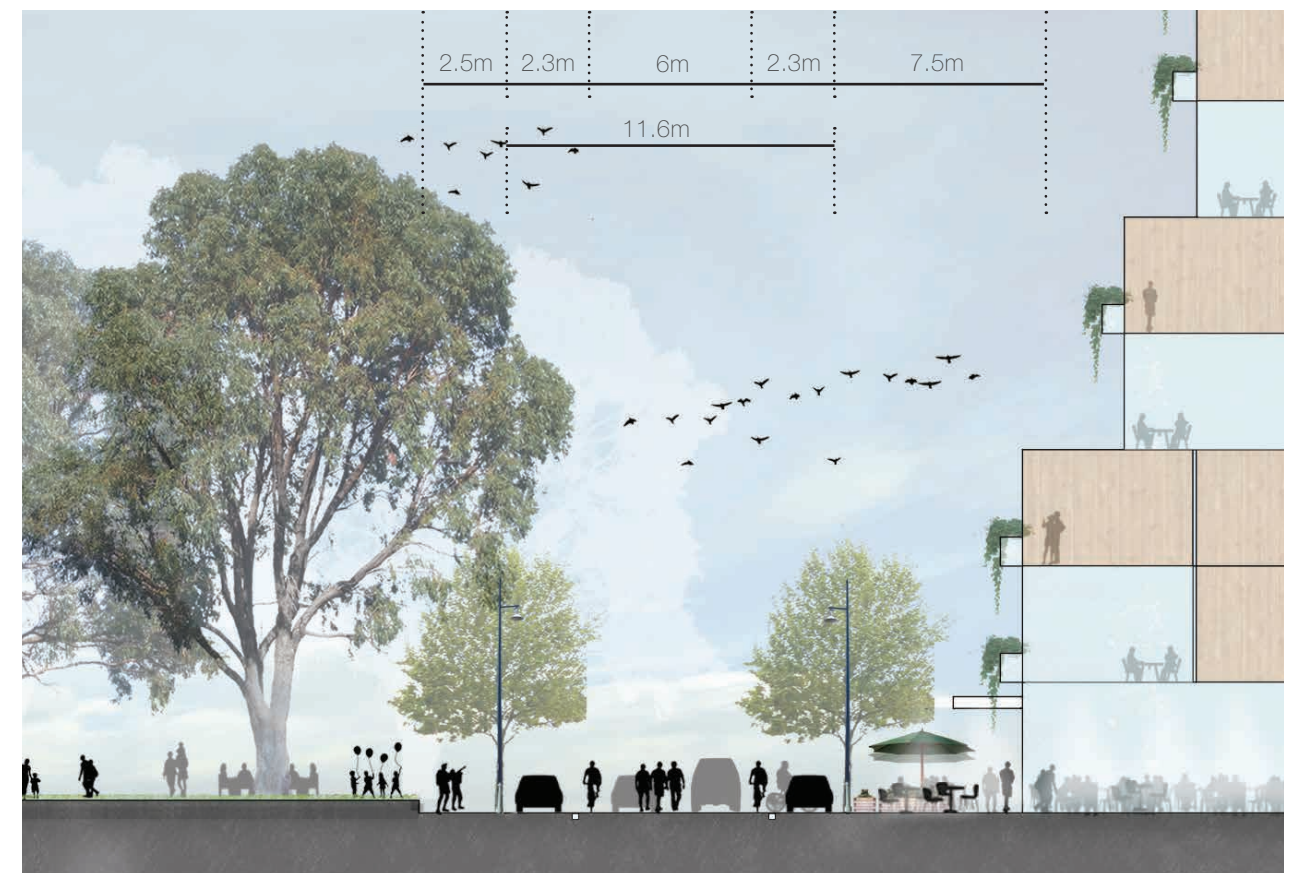


figure 2.19 and 2.20: typical plan and section rockingham beach road 'shared street' - scale 1:250 at a3

2.3.8. churchill events lawn

The westernmost end of Churchill Park will be rationalised into a prominent event space (to which it already caters). This space can be combined with the Rockingham Beach Plaza to form a larger area for festival style events.

Key moves to further improve the space include:

- Adjustments to grades where possible to improve connection to Rockingham Beach Road;



- Eventual removal of existing toilet facilities to reclaim space and open up views (new facilities to be located nearby at the Beach Plaza Kiosk);
- Rationalisation of furniture items such as bins and seats;
- Two multipurpose stage structures (one west facing, the other north facing). These structures can be used as large urban furniture when not in performance mode;
- Western stage structure to incorporate removable/ temporary screen;
- Lawn terraces to the Foreshore effectively expand the event space, improve relationship to the water and serve as robust coastal revetment structures; and,
- Retain and protect tuart trees.



figure 2.21: detail plan - churchill events lawn

existing character



image 2.18: Churchill Park (existing use of space to be retained)

example projects



image 2.19: Miami Beach, USA



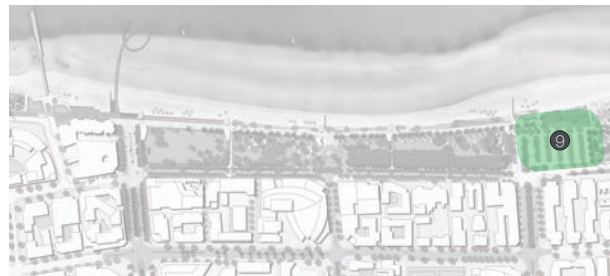
image 2.20: Miami Beach, USA



image 2.21: Northbridge Piazza, WA

2.3.9. wanliss street carpark and beach access

The north-east end of Bell Park will cater to beach goers by providing nearby parking and direct beach access and facilities.



example projects



image 2.22: Point Walter Reserve, WA



image 2.23: Elwood Foreshore, VIC

Improvements include:

- Increasing the carpark by 80 bays and increasing tree planting within the parking area for shade;
- Creation of a sloped lawn connecting park to beach directly;
- Significant shade structures, seating areas, beach kiosk, beach showers, and public toilet structure;
- Nyungar artwork opportunity to link existing public art to the Foreshore;
- Pioneer Promenade connects directly the shared path continuing north to Governor Road; and,
- Improved universal access to carpark and beach.

Note: A physical barrier between turfed areas and conservation areas is required to manage grass encroachment.

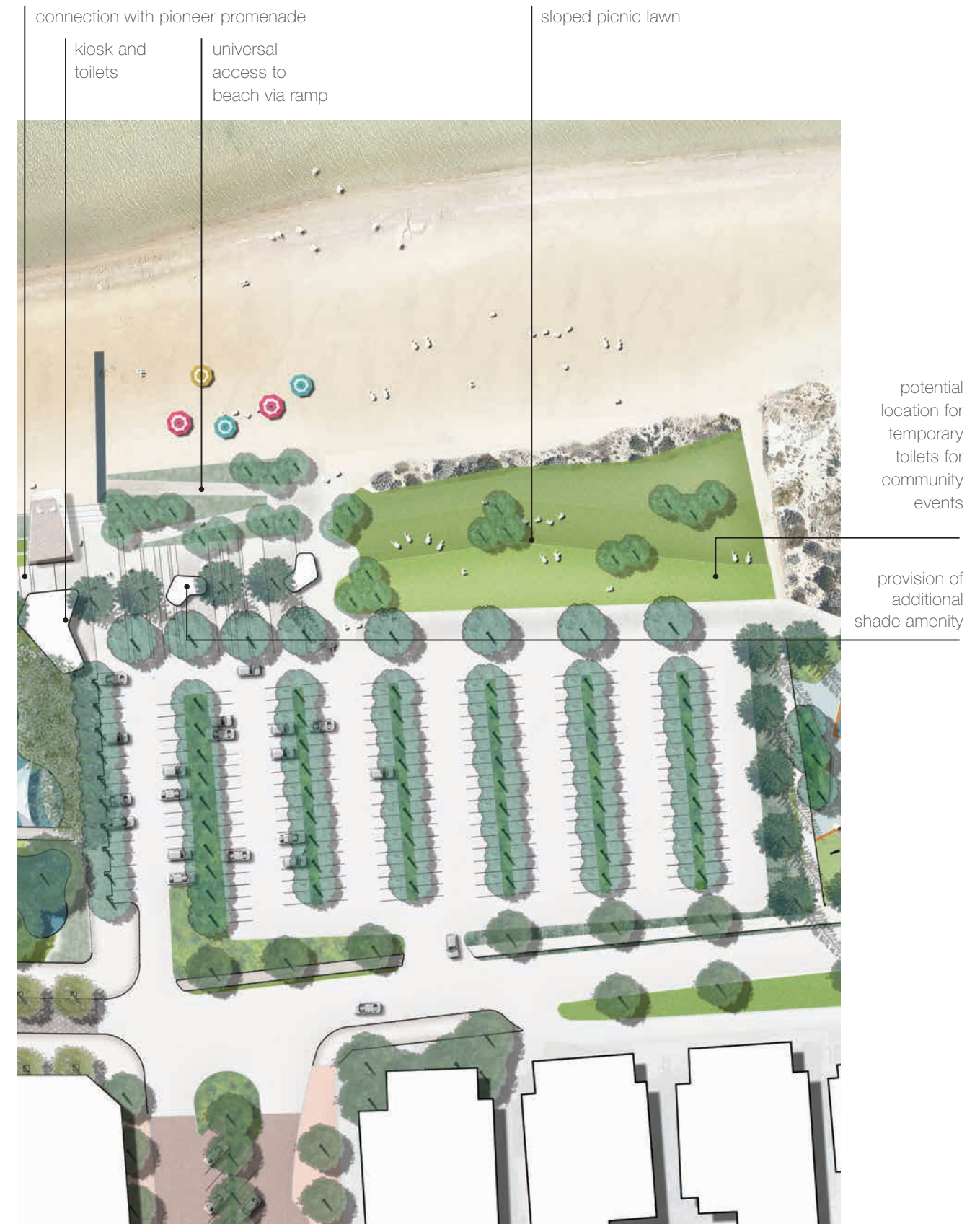


figure 2.22: detail plan - wanliss street carpark and beach access





3.0 area two - palm beach and esplanade

3.1 area two - palm beach and esplanade

Opportunities and Directions:

The following key opportunities were identified during the design and review process:

1. Improve and widen the shared path to safely and comfortably accommodate different users;
2. The shared path terminates before Hymus Street and directs users onto the road. There is an opportunity to extend and connect the path to adjacent areas;
3. Improve access to the dog beach west of Hymus Street;
4. Improve connectivity across Esplanade, between the Boat Ramp and Rotary Park, to ensure easy and safe pedestrian accessibility;
5. The Palm Beach Jetty precinct is well used and can be further provided for through additional shade and amenity; and,
6. Improve the Catalpa Memorial surrounds with shade trees and beach amenity.
7. Improve beach access and provide basic facilities for beach-goers such as showers, bubblers, bins and seating;
8. Improve shade generally across the area especially at the eastern end of Palm Beach which is particularly exposed;
9. Improve the provision of universal access points to the beach;
10. Further enhance and supplement dune vegetation in the area through weed management and review of pedestrian access; and,
11. Develop a stronger connection to the Rockingham 'sense of place' through an appropriate theme and consistent style for dune fencing and urban furnishings.

Refer to Appendix A - Rockingham Beach Foreshore Master Plan Site Analysis and Background Information for the detailed site analysis which informed the design approach.

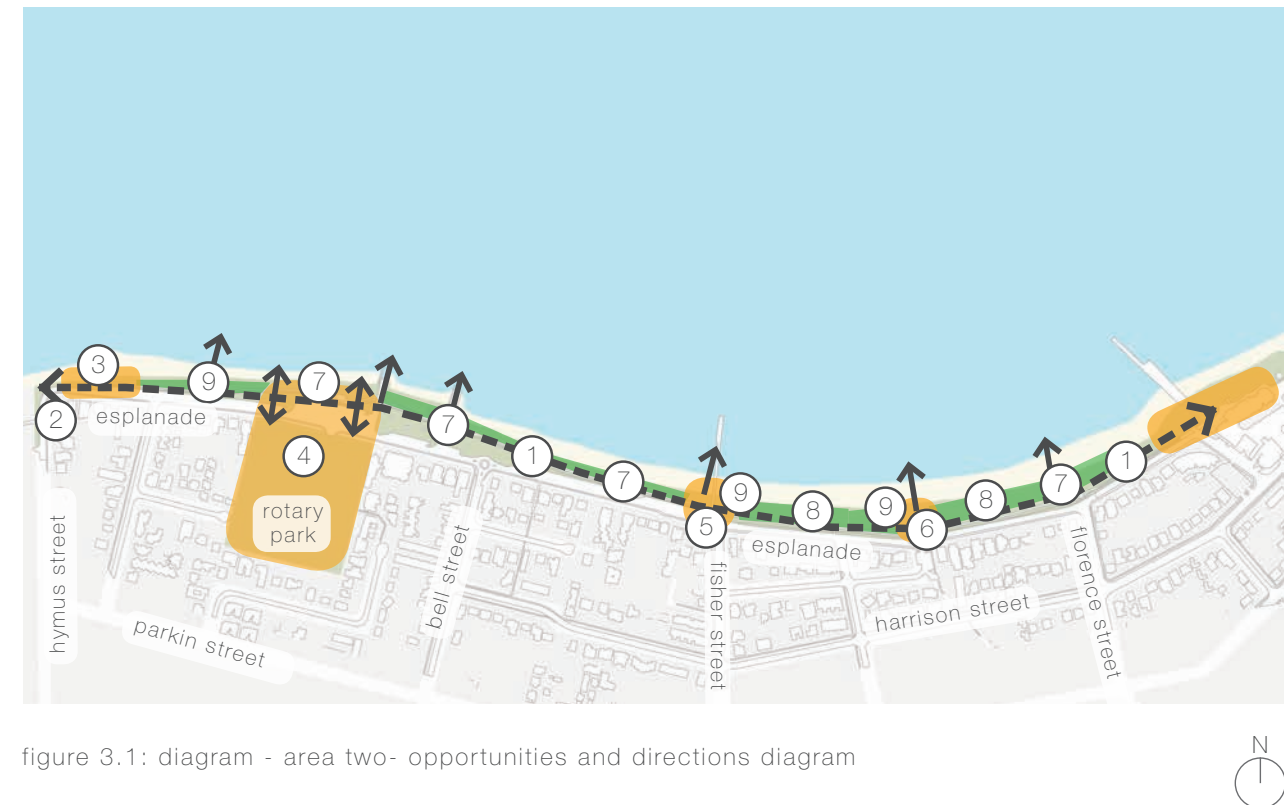


figure 3.1: diagram - area two- opportunities and directions diagram



figure 3.2: plan - area two - scale 1:2500 at a3



3.2 area two - plan

- | | |
|--|--|
| 1 upgraded shared recreation path (3m wide) | 14 enhanced catalpa memorial precinct |
| 2 improved hymus street sea wall protection | 15 new memorial wall for the relocated basalt wall plaques |
| 3 hymus street park | 16 disability and inclusive access matting |
| 4 new sea wall with stepped recreation edge | 17 existing pedestrian ramp |
| 5 dune revegetation | A beach access type a - universal access, lawn area and beach amenity node |
| 6 existing boat ramp and car park | B beach access type b - service access and beach amenity node |
| 7 improved amenity at rotary park including potential to reference Nyungar culture | C beach access type c - fenced beach access |
| 8 road pavement change between the boat ramps and rotary park | P playgrounds |
| 9 bell street roundabout upgrade | PN picnic nodes |
| 10 overflow parking in rotary park | E exercise nodes |
| 11 shade tree planting at street intersections | T toilets |
| 12 existing palm beach jetty plaza | F fence type a - post and wire dune fencing |
| 13 road pavement change between the palm beach jetty plaza and cafe | |



notes:

1. cycling facilities are to be provided within suitable nodes
2. universal access across all elements is required to be investigated and resolved through subsequent detailed design
3. CPTED principles are to be applied to all subsequent detailed design phases
4. all car parks will include ACROD bays to the relevant Australian standards
5. refer to Part Two for detailed propositions

3.3 the spaces

Several destination spaces have been identified (some existing and other spaces proposed) for further detailed design studies. Generally these spaces are providing enhanced amenity and facilities for specific functions and are described as follows:

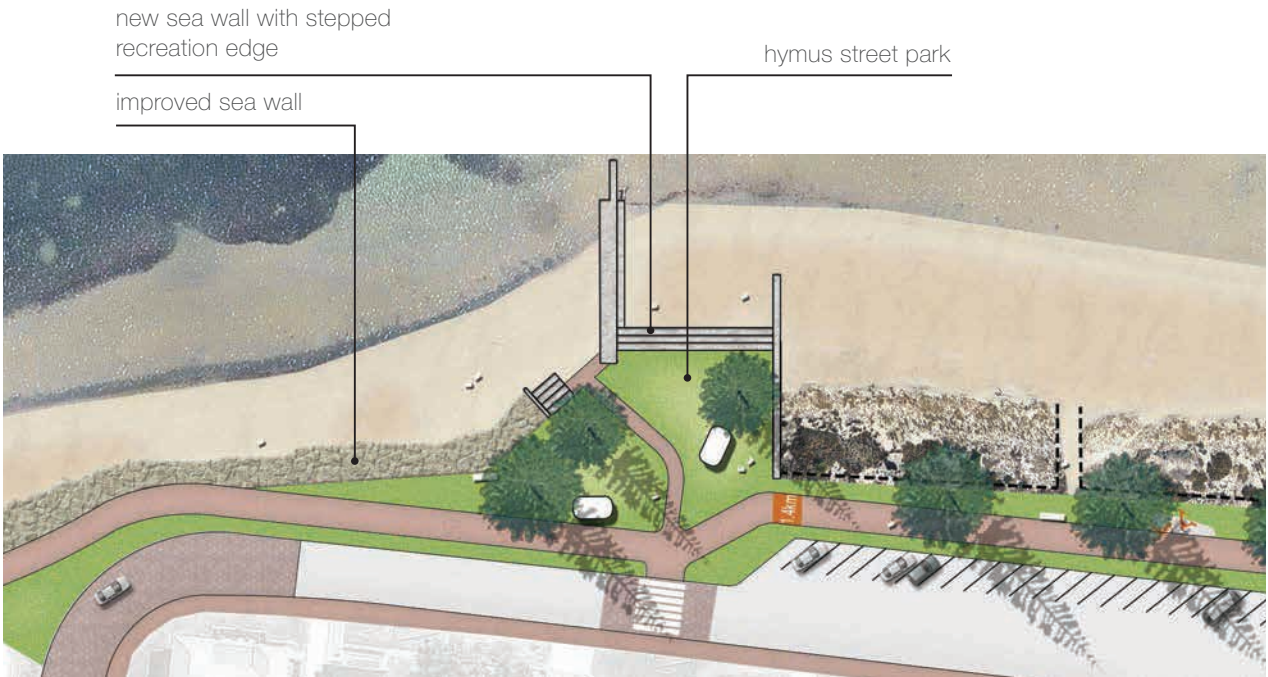
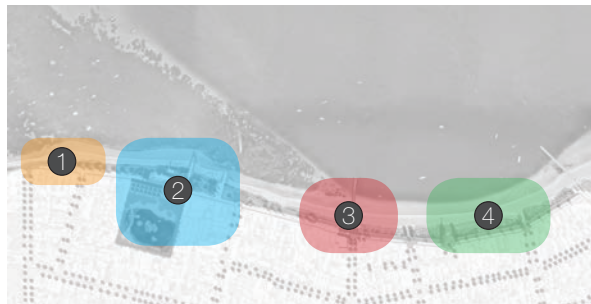


figure 3.3: detail plan 1 - area two - hymus street park

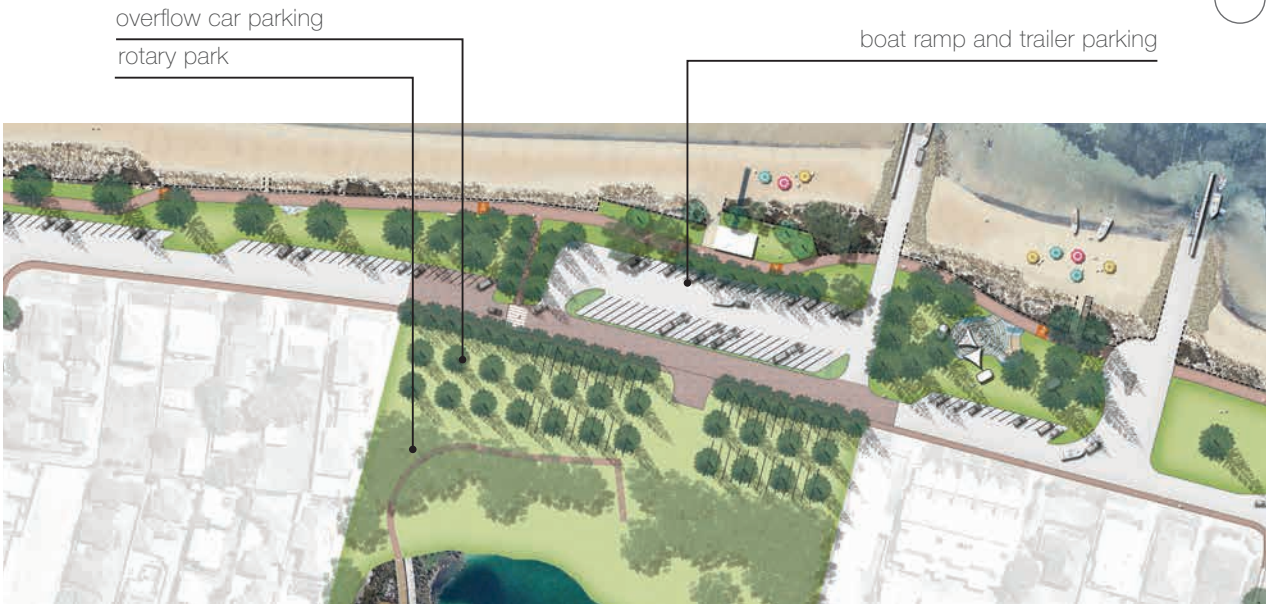


figure 3.4: detail plan 2 - area two - rotary park and boat ramp precinct

1. hymus street park

In addition to the provision and improvements of seating, beach access, and dune protection, it is proposed that a small park be created at Hymus Street to provide universal access to the dog beach to the west. This park can also include simple amenities catering to dog owners and other park users. The Esplanade cycle path will continue and connect to future development rather than terminate at this location.

2. rotary park and boat ramp precinct

The design proposes to better cater to overflow car parking into Rotary Park by establishing a nominal parking grid using trees which will also provide significant shade and effectively give the park a much stronger visual presence to Esplanade.

Additional tree planting to the grassed areas in the boat ramp area and car park will further improve shade and provide a stronger visual link to the Rotary Park opposite. A more prominent beach park connection is proposed. Additional picnic and barbecue nodes will add to and replace existing facilities. The playground will be upgraded and better integrated into the site.



figure 3.5: detail plan 3 - area two - palm beach jetty precinct



figure 3.6: detail plan 4 - area two - catalpa memorial precinct

3. palm beach jetty precinct

Additional tree planting and seating in the plaza area will provide more shade. New shade structures flanking the space and the jetty are proposed to provide shade at beach level. Additional amenity items such as bike parking and beach showers will also be provided for.

4. catalpa memorial precinct

The memorial will be protected and retained as the central feature; however the grassed space around it will be expanded and improved creating a new beach access and small park space. It will be flanked either side by new shade trees and accompanying furniture such as seating and beach showers. A new beach entry point to the north-east of the site will contain a memorial wall for personalised plaques which will be relocated from the basalt wall below 'The Boardwalk'.

4.0 area three - wanliss street to governor road

4.1 area three - wanliss street to governor road

Opportunities and Directions:

The following key opportunities were identified during the design and review process:

1. Widen and improve the shared path to accommodate different users. The path itself has numerous 'blind corners' and the surface is inadequate for comfortable cycling;
2. Upgrade existing playgrounds to include additional play elements, shade and other family amenities nearby;
3. Extend the shared path and connect the spaces at the western end of the Naval Memorial Park in the vicinity of the submarine conning tower;
4. Enhance the Naval Memorial Park and improve its presence on the street; and,
5. Further develop the access to the dog beach at Governor Road Reserve and provide facilities for dog owners.
6. Improve beach access through the dunes along the site and provide basic facilities for beach-goers such as showers, bubblers, bins and seating;
7. Provide universal beach access points along the area;
8. Improve shade amenity across the area. There is a lack of street trees and lack of shade generally except in the vicinity of the Naval Memorial Park;
9. Retain, supplement and generally improve large expanses of significant dune vegetation; and,
10. Improve the dune fencing and urban furnishings with a consistent style that reflects the Rockingham 'sense of place'.

Refer to Appendix A - Rockingham Beach Foreshore Master Plan Site Analysis and Background Information for the detailed site analysis which informed the design approach.

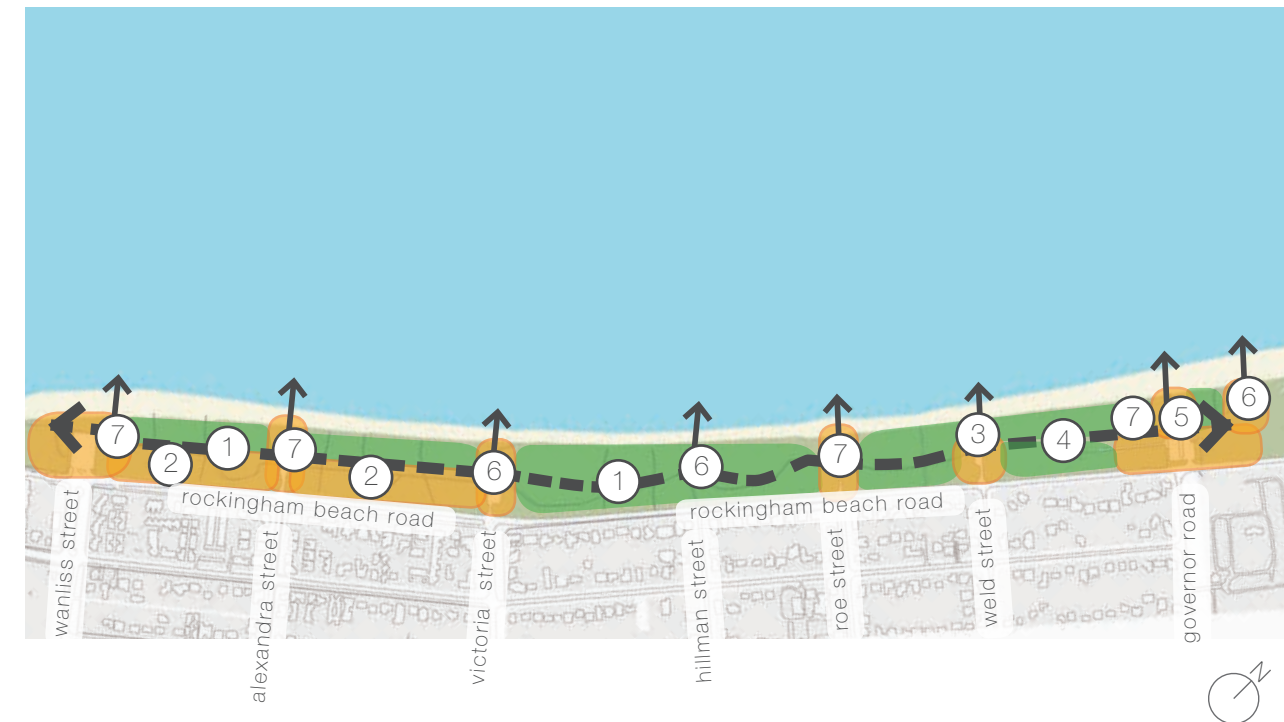


figure 4.1: diagram - area three- opportunities and directions diagram



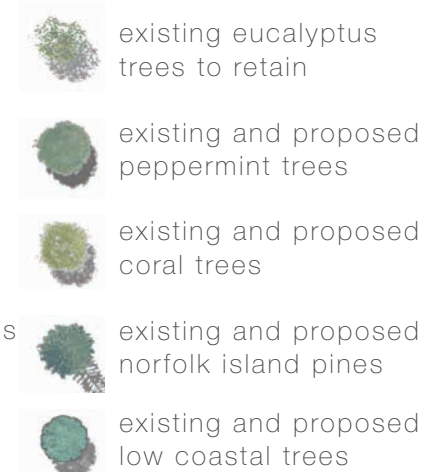
figure 4.2: plan - area three - scale 1:4000 at a3



4.2 area three - plan

key

- | | |
|--|--|
| 1 wanliss street carpark expansion | (A) beach access type a - universal access, lawn area and beach amenity node |
| 2 new active node with ball sport/youth facilities | (B) beach access type b - service access and beach amenity node |
| 3 retain, protect and enhance dune vegetation | (C) beach access type c - fenced beach access |
| 4 upgraded and realigned shared recreation path with coastal views | (P) playgrounds |
| 5 lookout including shelter and seating opportunity | (PN) picnic nodes |
| 6 coastal park with low level vegetation and low coastal trees | (T) toilets |
| 7 enhanced naval memorial park | (F) fence type a - post and wire dune fencing |
| 8 existing open lawn area | (E) exercise node |
| 9 dog beach park | (M) maintenance vehicle beach access |
| 10 car park extension | ☀ opportunity for Nyungar significant places and story interpretation |
| 11 indicative development - City of Rockingham Northern Waterfront Sector Development Planning Policy 2013 - no. 3.2.6 | |



notes:

1. cycling facilities are to be provided within suitable nodes
2. universal access across all elements is required to be investigated and resolved through subsequent detailed design
3. CPTED principles are to be applied to all subsequent detailed design phases
4. all car parks will include ACROD bays to the relevant Australian standards
5. refer to Part Two for detailed propositions

4.3 the spaces

Several destination spaces have been identified (some existing and other proposed) for further detailed design studies. Generally these spaces are providing enhanced amenity and facilities for specific functions and are described as follows:



figure 4.3: detail plan 1 - area three - coastal park

1. coastal park

The existing large tracts of turf to the west will be upgraded and designed to become a new park; effectively the third park in sequence of Bell and Churchill parks. This park will be designed with the needs of locals and day-trippers in mind. New picnic nodes, seating areas, barbecue nodes, beach showers and several new shade structures will be thoughtfully located to provide a range of occupation options.

Generally the quantity and overall quality of these items will be increased from existing. New tree plantings will provide further shade and improved dune protection measures will be implemented. Beach access paths will be improved. A small active ball sports node will be accommodated near the expanded Wanliss Street carpark.



figure 4.4: detail plan 2 - area three - naval memorial park



2. naval memorial park

The Naval Memorial Park will be consolidated and include strengthened tree planting, improved amenity and facilities for visitors and improved interpretation and signage elements. The shared path will be extended along the northern side.

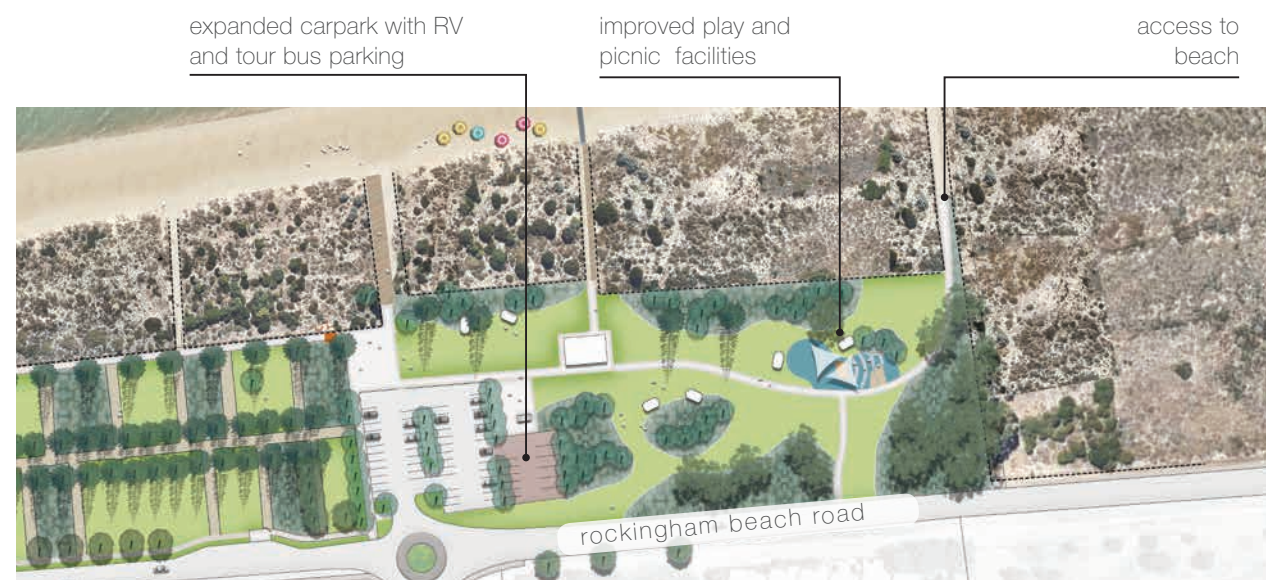


figure 4.5: detail plan 3 - area three - dog beach park



3. dog beach park

The small eastern most park will be upgraded to better cater for dog owners including watering and washing facilities and beach showers. Additional tree planting, improved shade structures and picnic/barbecue facilities will be provided. Existing toilet facilities will be retained and upgraded with the option for a seasonal kiosk. The carpark will be expanded with the possibility of RV and tour bus parking being accommodated.

5.1 implementation strategy

The Rockingham Beach Foreshore Master Plan has been developed to guide change within the Foreshore Precinct in both the short and long term, and to ensure future development responds to the principles and desired outcomes that the community values. This includes recreational facilities, landscaping, car parking and development opportunities, whilst also giving consideration to the significant cultural, heritage and environmental opportunities presented by this site.

The Master Plan is made up of numerous smaller projects that can be implemented in the short, medium and long-term, and these projects will be staged appropriately over time as funding becomes available.

A broad estimate of associated construction costs for all three (3) nominated areas has been derived.

A staging plan will be further defined and projects will be re-costed in detail when funding sources are confirmed and detail design is commenced.

area	order of magnitude capital works
railway terrace	\$3,500,000
rockingham beach plaza	\$2,500,000
'the boardwalk'	\$2,000,000
rockingham beach jetty	\$6,000,000
bell and churchill maritime playground	\$3,000,000
bell and churchill park	\$6,500,000
rockingham beach road	\$6,000,000
palm beach and esplanade - area two	\$5,500,000
wanliss street to governor road - area three	\$6,000,000

table 5.1: table of approximate costs

* The above approximations do not include design fees, project management, escalation, contingencies, intersection upgrades, major service upgrades, contributions or re-alignments.

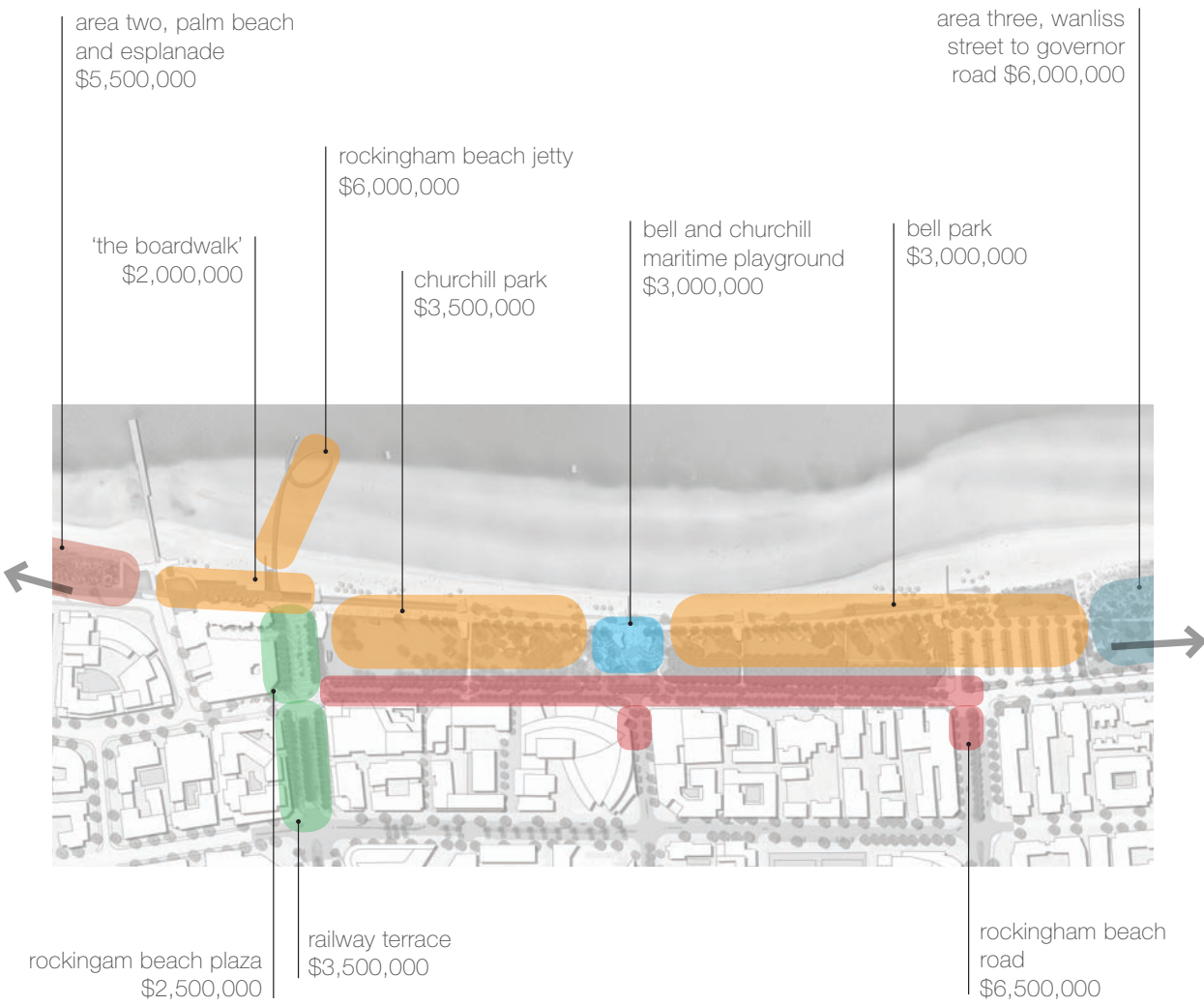


figure 5.1: indicative implementation plan

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