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## Document Status

<table>
<thead>
<tr>
<th>Revision</th>
<th>Purpose</th>
<th>Author By</th>
<th>Reviewed By</th>
<th>Approved By</th>
<th>Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
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<td>MG</td>
<td>MG</td>
<td>11/05/2015</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

## 1.0 INTRODUCTION
- 1.1 Background  PAGE 4
- 1.2 Community Engagement  PAGE 5
- 1.3 Scope  PAGE 6

## 2.0 SITE CONSIDERATIONS
- 2.1 Context and Current Uses  PAGE 7
- 2.2 Existing Infrastructure  PAGE 8
- 2.3 Existing Trees & Shade  PAGE 9
- 2.4 Topography & Drainage  PAGE 10
- 2.5 Traffic & Circulation  PAGE 11

## 3.0 THE THEME
- 3.1 Design Intent  PAGE 12

## 4.0 THE EXPERIENCE
- 4.1 Age Groups  PAGE 14
- 4.1.1 Visitor Numbers  PAGE 28
- 4.1.2 Access & Abilities  PAGE 29
- 4.1.3 Playground Aesthetic  PAGE 32
- 4.1.5 Artistic Input  PAGE 33

## 5.0 STAGED APPROACH
- 5.1 Stage One  PAGE 25
- 5.2 Stage Two  PAGE 26

## 6.0 PROPOSED LANDSCAPE FEATURES
- 6.1 Parkland Furniture  PAGE 27
- 6.1.1 Seating & Benches  PAGE 28
- 6.1.2 Bollards  PAGE 29
- 6.1.3 Bicycle Parking  PAGE 30
- 6.1.4 Drink Fountain  PAGE 31
- 6.1.5 Fencing  PAGE 31
- 6.1.6 Signage  PAGE 31
- 6.1.7 Rubbish Bin  PAGE 31

## 7.0 SUGGESTED MATERIAL COLOUR PALETTE
- 7.1 Surface Treatments  PAGE 38

## 8.0 SUGGESTED PLANT SCHEDULE

## 9.0 MANAGEMENT & MAINTENANCE

APPENDIX 1 - LANDSCAPE CONCEPT PLAN CP-01-03 REV A
APPENDIX 2 - TWO (2) INITIAL CONCEPT PLANS CP-01-05
APPENDIX 3 - OPINION OF PROBABLE COST (APRIL 2015, JBA)
APPENDIX 4 - MAINTENANCE BUDGET ESTIMATE (APRIL 2015, JBA)
APPENDIX 5 - SUMMARY OF COMMUNITY CONSULTATIONS (AUG-SEPT 2010, CITY OF BUNBURY)
1.0 INTRODUCTION

This document has been prepared by Josh Byrne and Associates (JBA) for the City of Bunbury (CoB, ‘the City’) and provides a written explanation of the design intent and the key features of the Bunbury Water Playground (BWP). It is to be read in conjunction with all appendices with particular regard to Appendix 1 - Landscape Concept Plan CP-01 to CP-03 REV A and Appendix 2 - Two (2) Initial Landscape Concept Plans CP-01 to CP-05.

(Note that photographic images in this report have been included as indicative only of the style and feel of the project. Many items within the Bunbury Water Playground are custom designed and as such, imagery of these items are not available)
1.0 INTRODUCTION

1.1 Background
The Bunbury Water Playground project was initially identified on the Leschenault Inlet Master Plan (LIMP) which was developed by Place Laboratories in 2012-2013. ‘The ‘LIMP’ provides an overarching framework and strategic direction to the future development of public space around the inlet for the next 20 years’. The master plan and supporting technical reports contain research, site analysis and recommendations for infrastructure and community engagement.

1.2 Community Consultation
Since the endorsement of the LIMP, the Bunbury community has been pro-active and have pushed for the development of a water playground by creating a Facebook page specifically for the purpose of lobbying. In 2014, the City undertook a community consultation process to gauge support and ascertain preferred equipment and playground location.

The community consultation occurred between September and October in 2014. It involved:
• Online survey (with 322 completed surveys);
• Two presentations to Maidens’ Park Primary School and Bunbury Primary School;
• Four community meetings;
• Active Facebook page (84 comments).

The consultation revealed key equipment, facilities and safety features the community would like to see at the water playground. The most popular pieces of water playground equipment were bucket spillers, water cannons, slide-activity centres, ground sprays and character/play arches.

In addition, the recommendations highlighted a desire to cater for all ages, provide toilet and change room facilities, potential cafe or pop-up coffee van, park furniture and BBQs, nature play, trees, gardens and grassed areas.

Please refer to Section 1.2, Appendix 5: Water Playground Consultation Report for further information.
1.0 INTRODUCTION

1.3 Scope

In early 2015, Josh Byrne & Associates (JBA) were engaged to develop a Bunbury Water Playground Concept Plan and estimated construction costs. This work involved:

- Comprehensive site analysis and desktop research which included the consideration of the community consultation report
- Facilitating an information gathering design workshop with the City (held on 10th March 2015)
- Development of two concept plans (dwg no. CP-01-03 & CP-01,04-05 in Appendix 2)
- Further refinement of CoB’s preferred concept with the incorporation of feedback from the City and Council members. It was decided that Concept One (CP-02-03) was to progress, with the following suggestions raised in regards to materials and key elements:
  1. safety hazard of splinters with the use of timber
  2. incorporation of a ‘large floating tap’ feature
  3. incorporation of the stream feature from Concept Two, into Concept One
  4. potential to reference the old lighthouse
- Further development of Concept One (Appendix 1) to incorporate the changes mentioned above and final issue along with this Landscape Concept Report, a Opinion of Probable Cost (Appendix 3) and a Maintenance Budget Estimate (Appendix 4).

The purpose of this work will ultimately assist in securing internal and external funding to progress with the detail design, procurement and installation. The staged approach included in this report and concept plan also provides a framework for the City to install components of the playground on an affordability basis without being detrimental to the overall design.
2.0 SITE CONSIDERATIONS

2.1 Context and Current Uses
The Bunbury Water Playground is to be located on the peninsula of Lot 681, known as Point Parker. The site is bound by:
- the Bunbury Storm Surge Barrier (serviced and operated by Department of Transport Fremantle) to the east with the Discovery Holiday Park, Bunbury Power Boat Club; low density residential properties and Sykes Foreshore Reserve beyond;
- the single carriageway of Koombana Drive to the north, with the old railway and Geographe Bay beyond;
- Blair Street directly to the west with Bunbury’s city centre including the Regional Entertainment Centre and the Grand Cinemas approximately 250m away, and;
- a sandy beach reaching the Leschenault Inlet to the south.

The existing site is reclaimed land consisting of built up rock, rubble and sand with very little vegetation. The site is mapped as ‘High Risk of actual acid sulphate soil (AASS) & potential acid sulphate soil (PASS) <3M from surface levels’ as set out in Planning Bulletin No.64 and will therefore require an AASS management plan prior to any excavation works being undertaken on this site.

The site’s future potential use has been in debate in recent years, certain parts have since been used extensively;
- Eager fisherman utilise the pedestrian path to the north to access the mouth of the inlet, and try their luck under the Koombana Drive bridge;
- Kayaks and stand up paddler boarders (SUPs) launch from the strip of beach;
- Following site upgrades to Point Parker in early 2015 with the installation of picnic facilities and a new path there has been an increase in passive recreational users frequenting the site.

The Bunbury Water Playground will become an iconic entry into Bunbury’s city centre, located in a high profile location with a large number of motorists passing by on Koombana Drive.
2.0 SITE CONSIDERATIONS

2.2 Existing Infrastructure
Several upgrades to the eastern area of lot 681 occurred in early 2015 including the installation of the following:

- 2m wide exposed aggregate path running north south along the eastern edge of the site;
- 3 No. steel shade structures - with yellow, red and black coloured powder-coated finish;
- 3 No. picnic table settings, with composite material seats and tops;
- 8 No. LED light poles;
- 3 No. bin enclosures;
- 1 No. electric double barbecue (Christie Parksafe);
- 1 No. water fountain;
- 1 No. sign - ‘Point Parker’ information;
- Irrigation system

There are also two car parking areas located 50m northwest of the site, of which CoB feel is adequate to service the proposed water playground at this stage. Should it prove inadequate at a later stage, there is substantial land available to expand car parking opportunities.

2.3 Existing Trees & Shade
Existing vegetation is sparse within the proposed site. There are eight (8) existing trees, including (1) Acacia sp. located on the tip of Point Parker and seven (7) Norfolk Pine (Araucaria heterophylla) trees recently planted along the eastern side of the path as part of 2015 upgrade works. The Norfolk Pines have been planted to tie in with the established trees on the east side of the inlet though future tree plantings (refer to appendix 1 for tree locations) should consider advanced native species that will tolerate high water and salt levels such as Eucalyptus. rudis, E. camaldulensis and Casuarina sp.

These trees should be planted as soon as practically possible to get a head start on establishment and advanced shade opportunities.
2.0 SITE CONSIDERATIONS

Shade is an essential consideration for the health and well being of the future water playground users. Careful selection and location of appropriate tree species will be required during the detailed design of the water play park to ensure: maximum shade benefit, ongoing health and form and non intrusive interruption to the mechanics of the water playground. The use of trees in close proximity to the water play pad area must be considered to minimise leaf litter build up over drains and associated clogging of the system. The extent of tree planting is identified in the concept drawings as appendix 1 to this report.

The CoB has indicated a preference to avoid the use of shade sails due to vandalism, ongoing maintenance including seasonal assembly and disassembly, and poor durability due to weather

2.4 Topography & Drainage

The proposed site is relatively flat with a steep rising embankment to the north associated with Koombana Drive. The land gently tapers down to a triangular peninsular approximately 2m above sea level, of which two sides are bound by the Leschenault inlet.

It is recommended that a geotechnical report be undertaken during the detailed design phase of the water playground due to the need for potential deep excavation of the site.

WAPC and DoW approvals requires a water management plan including a stormwater & drainage management plan be development prior to the commencement of development.

The outcomes of the above reports, plans and negotiations with relevant departments will likely influence the detailed design of the Bunbury Water Playground.
2.5 Traffic & Circulation
The proposed site of the Bunbury Water Playground is accessible by vehicle from Blair Street. Two existing car parks are situated off Blair Street, providing safe access to the playground. The small car park closest to site caters for 14 cars and a further 50 metres further east, the larger car park caters for 100. This should be sufficient for the anticipated number of playground users during weekend periods though additional parking during school holiday periods must be considered either through short term temporary parking on nominated turf areas, expansion of the existing 14 bay parking area or the use of the railway station parking at Koombana North if agreements are reached with LandCorp in time for opening of the BWP.

A multi purpose pedestrian path links the eastern side of Bunbury’s city centre along the inlet foreshore north to the proposed site. The bridge over Koombana Drive provides pedestrian access to the holiday park on the eastern side of the inlet, and a path winding under the Koombana Drive bridge provides universal access to residents of the future development north of Koombana Drive.

There is a concrete path that connects the floodgates to Point Parker terminating at the shade structure. The playground design will link with this path to provide formal access from the existing car park.
2.0 SITE CONSIDERATIONS

2.6 Electrical & Lighting

The recent upgrade works to Point Parker demonstrate CoB’s adoption of sustainability initiatives with the installation of eight (8) LED lights at 15 metre intervals illuminating the new path. There is one double electric barbecue under the southern most structure at Point Parker. Advanced CCTV surveillance equipment installed at the Regional Entertainment Centre is capable of monitoring the proposed area with the inclusion of up to (2) additional cameras.

The concept design incorporates matching LED pathway lighting along the northwestern perimeter and along the main pathways within the Playground, with pole mounted CCTV cameras to allow for extra surveillance. Lighting is also included in the toilet block, feature up-lighting within the splash pad area and potential lighting incorporated into the manta ray shade structures has been considered.

A significant headworks and mains supply upgrade will be required to service the extensive infrastructure associated with the water playground, ablutions and lighting.

Additional demand items for the proposed water playground area include;

- 15 No. LED playground lighting;
- 10 No. Up-lighting within the play space;
- CCTV Cameras;
- toilet facilities and sewer pump station;
- water Playground pumping arrangements; and,
- future supply to cafe.

The existing supply cabinet and infrastructure would be relocated to a new site main switchboard located within the ablutions and pump room.

Further investigation into alternative power options and their feasibility should be undertaken during the detailed design phase of the project. Solar power should be considered for the roof of the ablutions block though the extent would be determined after total load calculations are undertaken by the project electrical engineers.
3.0 THE THEME

As agreed with the CoB, JBA developed (2) concept options for the Bunbury Water Playground. Both playground concepts have different themes whilst maintaining a single vision for the ‘greater surrounding landscape’ including ablutions/services block, car parking, vehicular and pedestrian access/circulation, beach frontage upgrades, soft landscape treatments and the connection to the existing amenities. These facilities have been carefully located in the most suitable location in relation to the playground and car park (refer to Appendix 1: CP-01).

The community consultation held in 2014 highlighted the community’s desire for a playground theme with the notional theme to reflect the character of the city. Inspiration for the themes didn’t fall short during the design process as Bunbury is rich in iconic features and local character. Some of these local attributes include:

- **Location** - on the Leschenault Inlet surrounded by water on 2 sides; en-route to Cape Naturaliste, or main thoroughfare to iconic south west of WA; natural West Australian coastline;
- **History** - old jetty with potential use of salvaged 150 year old timbers; local shipwrecks, lighthouses; old railway and exportation of sheep, grains and timber);
- **Ecology** - unique marine life, wetlands and flora;
- **Produce** - Local food production

From this we identified the two concepts themes as:

- Concept One - CP-01’s is ‘Under the Jetty’ (refer to Appendix 2: CP-02-3)
- Concept Two - CP-02’s is ‘Bunbury Horizons’ (refer to Appendix 2: CP-04-5)

As outlined in Section 1.1, one preferred theme was further refined, Concept One; ‘Under the Jetty’ (Appendix 1).
‘Under the Old Jetty’ is an imaginative water playground concept that builds on the historical and ecological values of Bunbury. It provides opportunities to all ages and abilities to use the space in a safe, fun, exciting environment. Unique features include a bold, sculptural replica of the ‘old Bunbury jetty’ constructed with its salvaged materials, custom manta-ray shade structures, toddler tidal pool, shipwreck water curtains and various bespoke marine inspired water play elements.
4.1 Design Intent
The design intent looks to:
1. Create a themed, engaging, and imaginative water playground that caters for a range of abilities;
2. Emphasise and compliment the natural surrounding environment;
3. Provide Bunbury with a special, unique asset reflective of the City’s historical and ecological values;
4. Incorporate natural play elements and materials whilst ensuring all required playground safety standards are met;
5. Include artistic elements throughout the space whether it be play or for functional purposes (i.e. artistic water element or signage);
6. Provide facilities such as all abilities toilet facility, with potential to build an adjacent cafe in the future;
7. Incorporate sustainability initiatives throughout the overall design;
8. Arrange and layout the proposed playground to provide shade, accentuate views, and provide wind protection;
9. Increase pedestrian accessibility and linkage opportunities throughout the site;
10. Create opportunities to avoid standard generic equipment and use unique bespoke alternatives;
11. Consider staging of the project to enable funding opportunities;
12. Consider the water playground as the primary design goal within stage 1; and,
13. Comply with a ‘zero water depth’ design, with no pooling of water.

4.0 THE EXPERIENCE
4.1.1 Age Groups
The playground through its range of equipment, play elements and artistic components would cater for all age groups and their carers.

4.1.2 Visitor Numbers
The CoB advised that anticipated number of users would be between 60-70. It is acknowledged that these numbers are arbitrary and numbers could well be exceeded. The water playground itself, could in theory cater for many more users which would again increase if stage 2 proceeded with the surrounding dry play elements.

4.1.3 Access and Abilities
The Bunbury Water Playground is designed for universal inclusiveness with a number of the play elements altered to accommodate this requirement.

Three universally accessible entrance points to the north, west and northwest, would provide direct connection to the 2.5m wide accessible pathway network allowing all users access to the playgrounds facilities. Two (2) disabled parking bays would be allocated in the closest existing car park to provide ease of access to the Playground. The Department of Health (DoH) requested the provision of a fence around the playground ‘to prevent access by dogs and undesirables at night’. This would be partially achieved with the integration of garden beds planted out with native ground covers and climbers to achieve a more natural barrier as well as with the use of low height fencing and gates as required.
4.1.4 Playground Aesthetic
The Bunbury Water Playground would display a range of artistic elements, materials and finishes to resemble a natural West Australian coastal feel. The intention will be to use Jarrah timbers salvaged from both the old Bunbury jetty and nearby land clearing for use as features in some of the built structures and perimeter fences. Salvaged Jarrah logs would also be used throughout the landscape for feature elements like log seats and various play structures. All timbers would receive specialist accessible below ground treatment and would require servicing every 5 years.

Consistent throughout the design is the intention to move away from the familiar ‘off-the-shelf’ play equipment with the proposed space having a special range of highly durable, robust, bespoke items designed specifically for this project to tie in with the ‘under the jetty’ theme. All items should be specified with maximum protection coatings and wearable items must be delivered with spares sufficient for a minimum of 10 years service.

4.1.5 Artistic Input
A large component of the play equipment would be bespoke and built by experienced West Australian fabricators and artists with the intention to:
• provide a unique sense of arrival into Bunbury along Koombana Drive as you enter Bunbury’s city centre;
• enhance the sense of place and provide an interpretation and expression of the Bunbury Water Playground and the greater Bunbury area;
• improve the visual amenity, and expand on the current high level of artworks within Bunbury’s city centre;
• improve interpretation of Bunbury’s cultural, environmental and built heritage.
4.0 THE EXPERIENCE

4.2 Broader Landscape
Outside the immediate playground boundary, the design incorporates the following landscape elements:

- Improvements to circulation routes (bicycle and footpaths);
- New composite timber boardwalk and decking over Point Parker;
- New composite timber play ‘jetty’;
- Expansion of sandy beach (pending approvals) with upgrades to the interface and improved access for beach goers;
- New directional and interpretive signage, and relocation of the Point Parker sign to the actual Point;
- Provision of seating benches/picnic tables;
- Large ‘lighthouse’ slide (dependent on budget and DPAW approval);
- Installation of a ‘large floating tap’ feature located in the inlet (dependent on budget and multiple agency approvals); and,
- Recreational grass areas.
4.3 Playground Zones
A large variety of play equipment will be provided which will cater for both wet and dry types of robust play through to more subtle, self creation, quiet play opportunities.

There are six playground areas;
1. Grass Areas
2. Expanded Beach Area
3. Splash-pad
4. Sand Play Area
5. ‘The Creek’ and Informal Nature Play Area
6. Adventure Play Area

Refer to Section 5.0 for the staging of the project.
4.3.1 Grass Areas
The community consultation findings revealed a desire for a large amount of dedicated grass area for passive recreational purposes including picnic and eating areas, gathering, drying off, ball games, yoga or exercise classes and a place to relax and observe.

Three large treed grassed areas are proposed to the north, east and south of the dedicated play zones. These are relatively close to enable good supervision of the play zones whilst providing enough comfortable naturally shaded space for a high number of users.

The sand and adventure play areas identified as stage 2 works would be turfed until stage 2 works proceeded (refer to section 5.0 for staging details).
4.3.2 Expanded Beach Area
The existing small beach is popular amongst kayaks and SUPs to launch their equipment. Formal access from the car park will be provided along a 2.5m wide concrete path conveniently past the toilet and shower amenities. A three tiered masonry block wall will differentiate the beach from the turf areas above and provide ample seating with a pleasant view across the inlet and floating tap feature.

Dependant on favorable DPAW and other agency negotiations and approvals, a cove like expansion to the beach is proposed and will be used as a form of ‘marine themed’ nature play. It will involve the excavation of existing fill, which can be utilised in other built up areas of the playground if suitable. As mentioned earlier in this report, acid sulphate soils will need to be considered with an effective management plan in place prior to any excavations.

Again, dependent on favorable DPAW and other agency negotiations and approvals, additional washed beach sand will provide an ideal soft fall for children that want to jump from a mini ‘jetty’ or exit from the slide over the pathway. Extending east from the jetty, a continuation of the dolerite rock wall will also provide informal exploration and rock-hopping play opportunity. It should be noted that the installation technique would need to be carefully considered to minimise vibration.

A recycled timber and composite plank boardwalk will link Parker Point to the corner of the beach extension, with permeable framing below to allow it to be traversable.
4.0 THE EXPERIENCE

4.3.3 Splash-pad
Although the Bunbury Water Playground provides a variety of play elements, the core of the project is the waterplay splash-pad.

The splash-pad depicts an ‘under the jetty’ theme and would contain a variety of bespoke water play elements reflective of the community’s desires. These elements however would be customised marine inspired features that include:

- various surface jets (arches, cones, misters, vertical, bubblers) in the form of sea squirts, giant barnacles, sea urchins and starfish
- feature frog sculpture and tidal pool with tadpole activators
- water bucket tippers in the form of a fishing rod and a helm wheel
- ‘isolated danger below’ buoy water dump
- timed water curtains and water walls
- wave barrel (water pressurised against an inverted low height wall, forming a ‘barrel’)
- Giant ‘naval worm’ misting poles
- Ship wreck water curtains
- Bubbling boulders

Inspired by the sea snail, a series of meandering trails throughout the splash-pad provides a distinct deviation from the wet elements should park users wish to stay dry. These snail trails intertwine with the northern exit from the splash-pad, a path that passes underneath arched structures with perching animal sculptures. A bird sculpture on one of these frames will emit a randomly timed drop of water to the path below, creating a cheeky sense of confusion as one walks by!
4.0 THE EXPERIENCE

Along the perimeter of the splash-pad are a number of other ‘dry’ marine inspired musical play elements including an 8 note marimba in the form of a fish skeleton, coral drums and octopus tentacles drums that double up as seating.

Creating a bold entry statement to the splash-pad will stand a large feature replica section of the ‘old Bunbury jetty’, constructed of original salvaged timbers. At the top sits a crane hut resting on railway lines, accessed by an enclosed stairwell and a tubular spiral slide providing a slippery exit access to the bottom. Beneath the slide will be rubber soft fall that extends round to the birds nest and standard swing, providing universal access to this equipment.
4.3.4 Sand Play Area

South-east of the splash-pad is the mixed age sand play area. A raised composite ‘jetty’ deck and recycled timber post arrangement allows access beneath for integrated play opportunities. A wheelchair accessible ‘fish cleaning’ sand play table is located on top on the deck with a ‘fish’ (sand) bucket pulley system to get sand up. A low flow timed tap with a scheme water supply will wash sand through a chute in the middle of the table, dispersing sand down to the tables below.

Also below, a gunite constructed feature will have a series of bowls built in, allowing children to prepare ‘mud pies’.

Catering for the older and/or athletic children, a maritime inspired ‘cardinal buoy’ tower will offer a chance to climb up it and jump off or slide down the fireman’s pole. From original salvaged and reused mooring bollards fixed to the jetty, a rope and post climbing structure extends out towards the buoy tower.

Exit from the sand play area will be via timber stepping stumps, a choice of ladders or the set natural stone steppers. For the more advantageous climber, laterite rock pitching will divide the splash-pad and sand play area to avoid sand being brought onto the splash pad.
4.0 THE EXPERIENCE

4.3.5 The ‘Creek’ and Informal Nature Play Area
Nestled amongst the future tree canopies to the northwest of the playground, the relaxing sound of water cascading down the rocky stream will intrigue passers by whilst children are able clamber over the fallen tree trunks in the nature play area. Intrigue will turn to excitement as toddlers, children and adults begin exploring the border of the nature/ adventure play area, discovering a meandering stream that will offer countless hours of nature inspired entertainment.

The creek was an adaptation from the initial second concept plan, with water being circulated to a gentle cascade at the highest point of the stream. Accessed by a series of stone boulder steppers, it provides children with opportunities to participate in a range of informal nature play activities such as racing bark boats and exploring the habitats of local fauna. The creek and informal play area will also cater for users year round. Water supply to the creek would be determined during detailed design and would require negotiation with various departments.

4.3.6 Adventure Play Area
Consisting of a mixture of bespoke and typical climbing and balance apparatuses, the adventure play area will cater for older children as it provides an array of challenges designed to test a variety of skill levels. These elements will be custom made from steel, salvaged timbers and logs, and stone boulders with various rope networks linking structures. Ladders, fireman’s poles and slides will form alternative entry and exit points, with a main feature being a climbing tower representing a large cardinal buoy. Long term non toxic timber treatments would be adopted to minimise ongoing maintenance.
5.0 STAGED APPROACH

This project has been designed based on a two staged approach to allow for flexible funding arrangements or complete deferment of stage 2 altogether if budgets are not available.

5.1 Stage One
Stage one will aim to address the main infrastructure and earthworks and will therefore include the following works;
• toilet facilities / services block and sewer pump station
• water pumping arrangements, storage tanks and plumbing
• electrical upgrades, LED lighting and CCTV
• splash pad
• manta ray shade structures
• service road to toilet block
• expanded beach area and retaining (pending approvals)
• concrete pedestrian path networks
• recycled timber and composite boardwalk
• recycled timber and composite deck at Point Parker
• signage including relocation of Point Parker sign
• tree planting
• irrigation works
• turf
• picnic tables
• ‘floating tap’ feature sculpture (pending funding and approval)
• jetty replica feature
• fencing

Stage one works will also incorporate all the water play elements situated within the splash pad as well as a number of other elements. Play elements included in stage one also include the following;
• lighthouse slide (pending approvals)
• play jetty
• spiral slide (from jetty replica)
• swings (birds nest and standard)
• musical items (coral and octopus drums, fish skeleton marimba)
• 
Dependant on funding and time frames between stages, in the meantime the areas excluded from stage one will be grass.

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BUNBURY WATER PLAYGROUND landscape concept report

PAGE 25
5.0 STAGED APPROACH

5.2 Stage Two
Should funding become available, the progression of Stage Two will see the installation of Playground Zones 4 to 6 (see Section 4.3) being the Sand Play Area, the ‘Creek’, Informal Nature Play Area and the Adventure Play Area.

Stage Two can be broken down into various components, where the removal of turf and the installation of elements or features one by one can be achieved when financially viable.

These components will also include:
• Garden beds
• Irrigation
• Picnic tables
• Additional rubbish bins

There is potential to construct a cafe / deck to the side and above the proposed pump house block at a later date. Access to the cafe will be via the adjacent space west of the facility.
6.0 PROPOSED LANDSCAPE FEATURES

The Bunbury Water Playground would include the following landscape features:

6.1 FURNITURE
   6.1.1 Seating & Benches
   6.1.2 Bollards
   6.1.3 Bicycle Parking
   6.1.4 Drink Fountain
   6.1.5 Fencing
   6.1.6 Rubbish Bins
   6.1.7 Signage

6.2 PLAY EQUIPMENT
   6.2.1 Water Play
   6.2.2 Climbing & Balancing Play
   6.2.3 Motion Play
   6.2.4 Sand Play
   6.2.5 Sensory and Musical Play

6.3 STRUCTURES
   6.3.1 Toilet Facility & Pump House
   6.3.2 Shade Structures

6.4 SURFACE TREATMENTS
   6.4.1 Soft Fall Surfaces
   6.4.2 Picnic & Seating Surfaces
   6.4.3 Paths & Roads

6.5 STONE & WALL TREATMENTS

A photo of salvaged timbers from the old Bunbury Jetty that could potentially be used in the construction of this project
6.1 PARKLAND FURNITURE

6.1.1 Seating and Benches
Typically local timber sawn or carved into bespoke informal seating logs, some with back rests. Low height gunite seating walls will cater for all ages and abilities with sections to have back support and be accessible by wheelchairs. Benches and picnic settings will match the existing composite picnic tables.

Existing table setting style at Point Parker

Examples of informal seating

6.1.2 Bollards
Custom made jarrah & stainless steel removable bollards to restrict vehicular access onto the water playground. Bollards would be on stirrup arrangements.

Examples of timber bollards
6. Existing drink fountain near Point Parker

6.1.3 Bicycle Rack
A unique custom bike rack design to complement the marine theme playground, potentially resembling a fish skeleton located at the main entrance.

6.1.4 Drink Fountain
There will be an additional artistic drink fountain / sand rinse located near the outdoor showers on the southern side of the toilet block.
6.1 PARKLAND FURNITURE

6.1.5 Fencing
Basic 1200mm high perimeter fencing with native creepers will help define the boundary in natural manner. Sections of fencing in conspicuous areas would be up-specified to feature fencing. Final fencing arrangements will be determined during detailed design, based on final approvals.

Example of perimeter fencing

6.1.6 Signage
Signage will have a consistent look and feel to the existing signage. The Point Parker sign will be relocated to the end of the Point, accompanied by interpretative navigational information signage of Bunbury’s key landmarks across the inlet. Entry signage will be located at the two main entries to the north and west, indicating key playground areas and subtle playground rules. There will also be basic directional signs located at key intersections within the playground.

Existing signage at Point Parker

6.1.7 Rubbish Bins
Rubbish bins and enclosures will match the existing City of Bunbury examples on site.

Existing rubbish bin enclosure
6.2 PLAY EQUIPMENT

6.2.1 Water Play
We all remember when we were children how fun it was to play with water, whether it was jumping in puddles, racing boats down streams or hosing off in the backyard during summer. Children will be given a very special opportunity to combine all these activities plus many more within the Bunbury Water Playground.

The water play elements incorporated within the playground are listed below:

• **Splash pad** - The splash pad will be the heart of the playground and the primary area for water play activities. Features within the splash pad will include a series of water spouts, jets, sprays, water curtains, tidal ebb and flow feature, water walls, bucket tippers and misters. The majority of these elements will be custom features in the form of marine inspired flora and fauna local to the Bunbury area. Exposed aggregate surfacing with a different coloured ‘snail trail’ dry path network that will provide access for people who may want to differentiate between the wet and dry areas. The space will be universally accessible and be bounded by gunite seating / steps, paving and grass areas. The splash pad is designed to have no standing water and water will be circulated from a pump house in the toilet block building.

• **Water tap** - a low flow potable press button water supply is located in the sand play area on the sand play table and within the set of sculpted mixing bowls. This will be scheme water, that can be mixed around with the sand.

• **Creek Bed** - As part of stage two, a creek bed with a gentle cascade will be a main feature to the northwest of the adventure/nature play area, meandering west. The creek will have large rock boulder edging and local southwestern riverstone pebbles in the base, and will provide an important water play alternative to the splash pad for exploring, designing and racing ‘boats’, and can be used year round. The water supply arrangements for this feature will be negotiated with the city and various departments during detailed design phase.
6.2 PLAY EQUIPMENT

6.2.2 Climbing & Balancing Play
The Bunbury Water Playground includes a wide range of climbing and balancing elements to challenge children of different ages and capabilities, and inspire their own free form climbing experience.

The climbing/balancing play elements incorporated within the playground are listed below though the majority would be included in stage two works:

- Natural trunk balancing apparatuses
- Timber balance beams
- Stepping stumps
- Suspended vertical nets and horizontal net bridges
- Burmese net bridge
- Inclined net climbers
- Buoy climbing structure
- Ladders
- Fireman’s poles
- Timber pole hide
- Windsurfer rocker
- Rope walks
6.2 PLAY EQUIPMENT

6.2.3 Motion Play
Motion play refers to activities such as rocking, sliding, swinging and spinning. Motion play provides an extra level of challenge and learning opportunities for risk assessment, personal and physical development, sharing and assisting others.

Some of these play items will be universally inclusive and extend the range of movement opportunities for children with disabilities.

The motion play elements incorporated within the playground are listed below:

- Various standard straight slides (small, medium and large)
- Tubular spiral slide
- Sea shell spinner
- Bird’s nest swing
- Standard swing
- Windsurfer rocker
6.2 PLAY EQUIPMENT

6.2.4 Sand Play
The Bunbury Water Playground includes two major sand play areas, the existing beach and 'cove' beach expansion for more informal natural play / exploration and the main sand play area that will cater for more construction activities, including sand play table, mud pie mixing bowls, and sand buckets. Sand play for children with disabilities has also been considered with wheelchair accessible sand play tables at various heights.

Sand is also a very effective surface treatment and cost effective alternative to rubber soft fall.

The sand play elements incorporated within the playground are listed below with many of these items included in stage two works:

- Natural beach sand for ‘beach combing’ exploration
- Mud pie mixing bowls
- Wheelchair accessible ‘Fish cleaning’ sand play table
- Sand chute
- Buckets and chains
- Mixed height sand play tables
- Attached sand play tools
6.2.5 Sensory & Musical Play
In addition to the sensory experiences (touch, smell, hearing, sight, vestibular (balance) and proprioception (coordination/awareness)) offered by some play activities in the playground sensory play will also include various surface textures, materials, sensory garden plantings and musical play items. Musical play elements are also incorporated within the playground.

The sensory and musical play elements incorporated within the play space are listed below:

- Textured footpaths with various surface finishes
- Sensory plantings
- Natural logs and rocks
- Sand texture
- ‘Sea coral’ drum musical instruments
- ‘Fish skeleton’ marimba musical instruments
- ‘Octopus tentacle’ drum musical instrument
6.3 Structures

6.3.1 Toilet Facility & Pump House

The toilet facility is located in the western corner of the playground close to the main entry. It is bordered by the maintenance access road to the north to enable ease of serviceability.

The facility will incorporate universally accessible toilet cubicles, universally accessible family change / toilet cubicles, shower facilities and a specialty change facility for high care visitors and their carers where it will include an electronic changing table and shower facility. Outdoor showers, foot wash and a drink fountain will be located just south of the toilet, along the main pathway for use after sand or water play.

Located in a highly visible location and in close proximity to the existing car parking, it’s position will also provide wind protection from the strong and prominent southwesterly.

To provide cost efficiencies in the project, the maintenance shed, bin storage and pump house will be contained in the same facility with doors accessible from the service road. The pump house will contain the secure electrical switchboard, all the necessary pumping hardware, filtration equipment and chemical store for the water playground.

Plumbed to the toilet facility and back wash will be a new sewer pump station that will deliver waste water to a Water Corporation sewer pump station 400M away.

6.3.2 Cafe

There appears to be a strong case for the inclusion of a cafe or small restaurant facility in close proximity to the water play park. This facility should be designed to accommodate a lease-able cafe and deck structure to the side and or above the pump house.

Design, construction and lease of the cafe facility would be negotiated between a long term tenant and the City and would likely be added to the Bunbury Water Playground as part of stage 2 so as the value of this lease is realised and maximum revenue is achieved.

It is envisaged that the lease of this proposed cafe would go a long way to covering a significant component of the annual maintenance costs of the Bunbury Water Playground though formal investigations as to its viability should be undertaken by a professional leasing firm.

A cafe facility directly adjacent to the splash pad area would also provide passive surveillance with the added benefit of reduced vandalism and therefore cost savings to the city.
6.3 Structures

6.3.3 Shade Structures

There will be two different types of marine inspired shade structures installed in different stages. Stage one within the splash pad will be ‘mantarays’ and stage two outside the splash pad will be ‘fish skeletons’.

The mantarays resembling the large shadows cast onto the seabed floor, the wings and body will provide the majority of the shade and the tail will curve down to become the structural post. These structures would be constructed from powder coated galvanised steel framing and perforated steel sheeting. The perforated steel sun shading with artistic marine inspired motifs will be emphasised at night by up-lighting from below, and during the day will cast unique patterns to the ground.

Stage two ‘fish skeletons’ inspired structures will be constructed with a framework of timber, various slats perpendicular to a main support beam will imitate the bone structure of a fish.
6.4 SURFACE TREATMENTS

There are a range of naturally sourced surface treatments which will be utilised within the playground including timber/mulch, stone, sand and lawn. Other treatments include rubber soft fall, asphalt or concrete surfaces to provide universal accessibility throughout the space.

6.4.1 Soft Fall Surfaces
A. Play mulch
B. White play sand
C. Rubber soft fall

6.4.2 Picnic & Seating Surfaces
D. Grass
E. Exposed aggregate concrete (to match existing Point Parker path)

6.4.3 Paths & Roads
F. Asphalt with flush kerbs
G. Concrete, broom finish
H. Mulch (bush track)
I. Composite decking
6.5 WALL & STONE TREATMENTS

Locally sourced limestone and laterite along with gunite will be used throughout the playground as climbable elements or as seating or retaining elements. Large Kimberley sandstone boulders will also be used in key locations for steppers and informal seating.

A. Laterite stone pitching
B. Kimberley sandstone boulders
C. Gunite
D. Limestone pitching
E. Dolerite / feature boulders
F. Mixed river stone creek bed
6.6 IRRIGATION

The existing irrigation system was installed as part of the early 2015 site upgrades and consists of gear drive sprinkler emitters to irrigate the proposed grass strip and bubbler emitters around the trees. It covers the strip of land between the path and the water to the east.

The site is subject to strong southwesterly winds that will cause a considerable amount of wind drift if the future design is not considered carefully. Correct orientation and consistent use of sprinkler emitters will assist in water efficiency.

If new tree plantings are installed as 'advance works', the existing irrigation system would need to be temporarily extended to accommodate irrigation to these trees.

The expansion of the irrigation system as part of phase 1 works will include new irrigation to all turf areas as set out in stage one as well as upgrading the irrigation controller to a rain man unit to ensure maximum water efficiency management of this scheme water irrigation system.

Further investigation into bore license allocation should also be considered in advance of any works proceeding to ascertain any possibility of reallocation to this site.
7.0 SUGGESTED MATERIAL COLOUR PALETTE

There will be three main colour palettes used throughout the playground:

• standard City of Bunbury logo colours which may be used within signage.
• bright playground colours will be used in typical play features (i.e. slides, swings) as well as rubber soft fall areas. These will create a sense of vibrancy.
• natural bushland colour tones for the nature / adventure play areas that induce a natural feel.
## 8.0 RECOMMENDED TREE SPECIES

<table>
<thead>
<tr>
<th>Species</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agonis flexuosa</td>
<td>WA Peppermint Tree</td>
</tr>
<tr>
<td>Allocasuarina fraseriana</td>
<td>Western She-oak</td>
</tr>
<tr>
<td>Casuarina equisetifolia</td>
<td>Beach She-oak</td>
</tr>
<tr>
<td>Casuarina obesa</td>
<td>Swamp Sheoak</td>
</tr>
<tr>
<td>Corymbia ficifolia</td>
<td>Red Flowering Gum</td>
</tr>
<tr>
<td>Eucalyptus lehmannii</td>
<td>Bushy Yate</td>
</tr>
<tr>
<td>Eucalyptus rudis</td>
<td>Flooded Gum</td>
</tr>
<tr>
<td>Eucalyptus camaldulensis</td>
<td>River Redgum</td>
</tr>
<tr>
<td>Ficus macrophylla</td>
<td>Moreton Bay Fig</td>
</tr>
<tr>
<td>Melaleuca halmaturorum</td>
<td>Swamp Paperbark</td>
</tr>
<tr>
<td>Melaleuca huegelii</td>
<td>Chenille Honey-myrtle</td>
</tr>
<tr>
<td>Melaleuca quinquemervia</td>
<td>Broadleaf Paperbark</td>
</tr>
</tbody>
</table>
9.0 MAINTENANCE AND MANAGEMENT

As with any playground, a reasonably high level of maintenance will be required to ensure safety and aesthetics are maintained at all times. An indicative 10 year maintenance budget estimate has been developed as part of this concept design (refer to Appendix 6).

Regular Maintenance Requirements
In general, regular maintenance to the playground will include the following:
• Daily site inspection to ensure the integrity and safety of all items within the space such as walkways and handrails.
• All sand areas will require a regular rake over to remove debris and unwanted material.
• Hard surface areas should be regularly blown off to remove sand and leaves.
• Check all play items for damage and functionality and rectify as required.
• Removal of litter and general path sweeping

Timber work
All timber work must be inspected annually with all in-ground timber to be treated with boron rods to protect against rot and white ant. This treatment requires rod replacement every 5 years.

Splash Pad
• Daily routine inspections to ensure the correct running of the pumps, filters, disinfectant and chemical feeders, flow indicators, gauges and all related parts of the water treatment system.
• Checking and topping up of chemicals.
• Daily wash down and rinsing of splash pad to remove material build up.
• Ensure water is freely draining and no blockages are occurring at floor inlets or water nozzles. Water shouldn’t be pooling anywhere.
• Ensure the water is properly disinfected at all times, to prevent transmission of infectious diseases. Regular, routine, water testing is required to ensure it meets aquatic facility standards. Ensure the safe storage, handling and use of chemicals. Ensure results are recorded and kept by CoB.
• Check all water sprays and nozzles are operational and replace as required. Ensure the operating pressure is controlled to avoid excessive pressures injuring users.
• Ensure the splash pad has a consistent slip resistant surface which is smooth and free of any features or undulations that may cause a trip hazard or other injury.
• Regularly check all structural components of the splash pad are intact.
9.0 MANAGEMENT AND MAINTENANCE

General play items
A full safety audit should be carried out on an annual basis to ensure compliance with new and existing play space safety standards. Ideally, CoB staff should be trained in the assessment of playspaces.

General play items may require rectification or replacement from time to time due to wear and tear as would be expected in any play space situation.

Care of Plants
- General plant inspection and weed control (i.e. tree ties, health)
- Inspection and replacement of failed plants
- Pruning
- Fertilising
- Hand watering if required
- Top up mulch

Irrigation
Inspection of all irrigation components and make repairs as required.

A comprehensive maintenance manual will need to be developed for the Bunbury Water Playground. It is anticipated that 1.5 full time staff members will be required to manage and maintain the facility if both stages 1 and 2 are implemented.