

Lake Pertobe Masterplan 2018



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ACKNOWLEDGMENTS

Council acknowledges the Gunditj-mara and the Kirrae Whurrong people as the original custodians of the lands of this area.

Council also acknowledges the descendants of the ancestors of Aboriginal nations within the lands forming the Great South Coast and particularly the elders of the indigenous communities within both Warrnambool and this region.

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1 Executive Summary

Lake Pertobe (name derived from ‘pirtup’, the word meaning small sandpiper in local Gunditjmara language) is a 58 hectare park nestled between the City’s CBD and beachfront. It was developed from ephemeral wetlands in the 1970s. The recreational lakes and adventure playground of Lake Pertobe have developed a reputation due to the diverse and unique play opportunities and expansive social areas on offer and over the last four decades, Lake Pertobe has become Warrnambool’s most recognised visitor attraction, having been named among Trip Advisor’s Top 10 Travellers’ Choice Parks (South Pacific region) in 2016.

An unsurpassed recreational asset, Lake Pertobe is a key element of Warrnambool’s offering for local residents and contributes to Warrnambool’s reputation as Victoria’s most liveable regional city (IPSOS, Life in Victoria 2017 and Deloitte Regional Cities Liveability Index 2017).

Implementation of this masterplan will enhance the

experience of this renowned playspace and park for locals and tourists alike. By improving connections between Lake Pertobe, the CBD and foreshore area, improving access within the reserve, adding to the play opportunities for all ages and abilities, encouraging more people to explore whole reserve and enjoy the lakeside environment will strengthen the city’s reputation as a family-friendly destination for both domestic and international visitors.

The park attracts groups, families with children, those looking for outdoor spaces to meet friends and also lovers of the environment (particularly bird watchers). Lake Pertobe offers extensive walking opportunities around the lakes and is located strategically between neighbouring residential areas of South Warrnambool and Merrivale, the City’s central business district and Warrnambool’s main beach and foreshore promenade.

In early 2016 Council’s Project Working Group prepared a Background Report (Appendix 1) which summarised key issues for Lake Pertobe and the ideas and opportunities identified during extensive stage one community engagement. In June 2016, the consultant team were appointed to analyse these findings, provide expert advice on a range of matters and develop the Masterplan Report. The process is outlined in Chapter 3.

The challenges and opportunities for Lake Pertobe (see Appendix 3 & 4), identified in consultation with Council officers, stakeholders and the community, have provided a strong foundation for masterplan’s development. The vision for the reserve and this masterplan will guide future improvements, maintenance and management of the Reserve for the next 10-15 years.

The Masterplan considers the goals and priorities of Warrnambool 2040 Community Plan (draft), the Warrnambool City Council Plan, Warrnambool Open Space Strategy, Warrnambool Open Space Infrastructure Guidelines, Warrnambool – A Healthy City, Sustainable

Transport Strategy, Warrnambool Asset Management Strategy and the Railway Station Precinct Plan, within its recommendations.

Lake Pertobe Reserve is identified as a regional reserve in the Warrnambool Open Space Strategy 2014. It offers extensive and diverse passive and active recreation opportunities to both those living in the Warrnambool and across the South West region (approx. 50,000 residents) in addition to the thousands of domestic and international visitors to Warrnambool each year.

While the reserve is large (58 hectares including three lakes and the extensive wetland areas), the developed recreation area and accompanying facilities along the Pertobe Road frontage, is relatively small (4 hectares). An immediate challenge is to ensure that this intensively used strip along Pertobe Road is not over-used to the detriment of the user experience or to an extent which requires unsustainable and unaffordable maintenance to retain Lake Pertobe Reserve at the current high standards.

The Reserve's ability to meet peak demand is most challenged in the summer months, when visitation and activity levels increase sharply. In January, when there are thousands of holiday makers within the precinct, beach-goers and many events held in the foreshore area (and most often the events spaces in Lake Pertobe), car access and parking and reserve infrastructure such as shelters, barbecues, toilets and play spaces are regularly stretched beyond the area's capacity.

This Masterplan's recommendations provide for upgrade and renewal of existing facilities and improved connectivity and development of attractions away from the existing play areas of this iconic reserve to meet the growing needs of

the local community, to encourage users to explore and use more of the reserve to spread visitation across the site and to retain Lake Pertobe as an exceptional asset which continues to exceed the expectation of visitors of all ages.

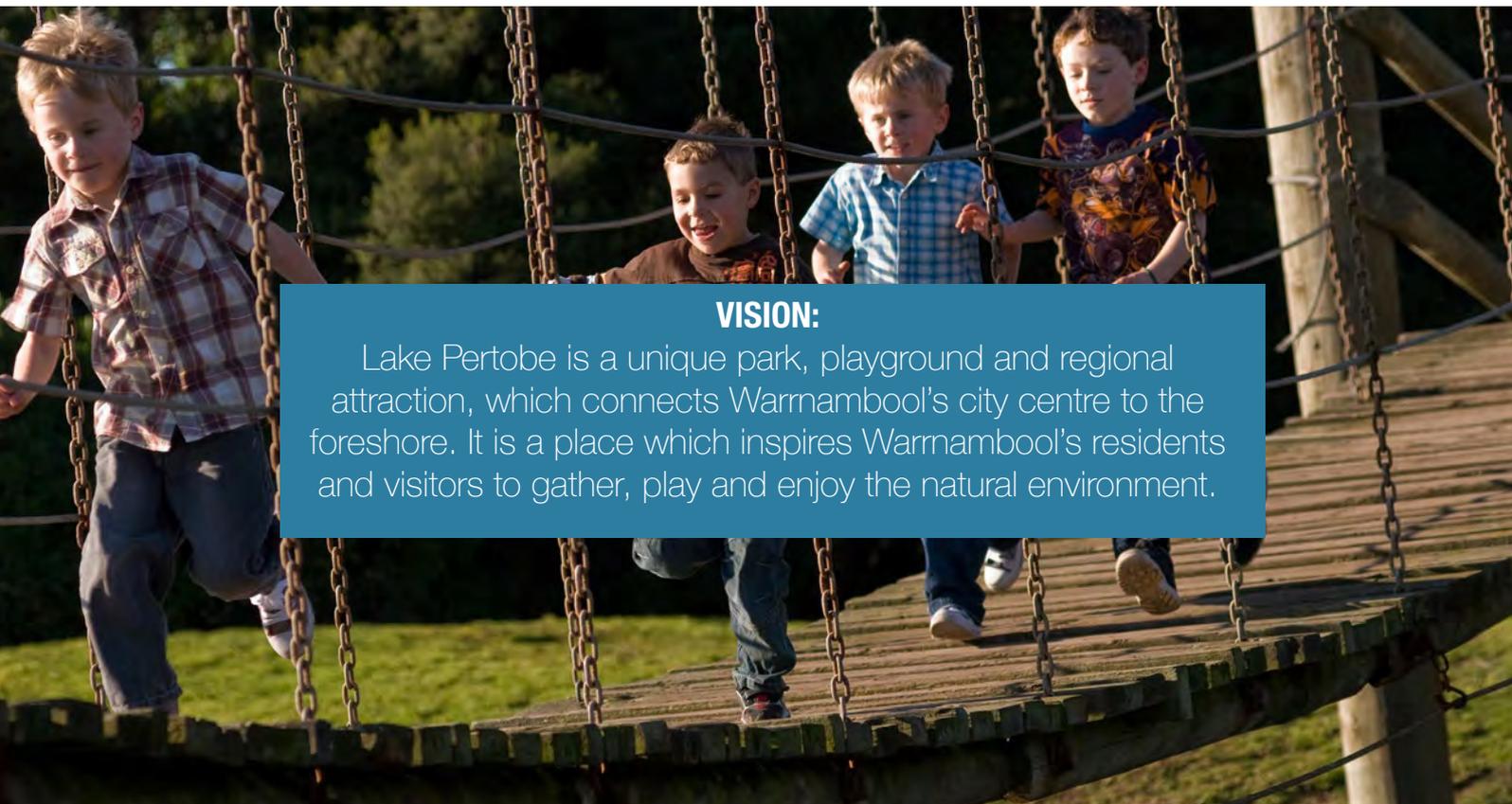
The Masterplan's extensive development and management recommendations (as summarised in Section 1.2 and detailed in Chapter 6):

- identify improvements to ensure Lake Pertobe's reputation as one of the best playgrounds in regional Australia is maintained;
- recommend investment to protect the reserve from overuse and congestion (including improving infrastructure, experiences and creating easy connections from neighbouring areas and the CBD for pedestrians and cyclists), and
- improve maintenance activities to enhance and protect the environmental values of this much loved place in the decades to come.

1.1 Vision

Following extensive input of stakeholders and the community in Stage One, a vision for Lake Pertobe was developed as the guiding statement for this plan. This vision was endorsed after considering feedback from the community in Stage 2 (refer Appendix 10 - Community Engagement Summary)

The Vision has influenced the recommendations and priorities in this Masterplan and should be considered when making decisions about improvement and renewal of Lake Pertobe in the future.



VISION:

Lake Pertobe is a unique park, playground and regional attraction, which connects Warrnambool's city centre to the foreshore. It is a place which inspires Warrnambool's residents and visitors to gather, play and enjoy the natural environment.

1.2 Masterplan Recommendations

Below is the summary of masterplan recommendations for each of the ten themes, which are expanded on in Section 6.

6.1. Infrastructure	Priority	
6.1.1.	Construct a new toilet/change facility with showers and change rooms at McGenan's Carpark to service all users of the foreshore area.	Immediate
6.1.2.	Provide access to the water for reserve users and hire operators along the lakes' edge in appropriate locations which are connected to the path network.	Medium
6.1.3.	Identify appropriate locations and form for the provision of shade infrastructure in the reserve, particularly servicing the play areas.	High
6.1.4.	Prepare an infrastructure style guide to create a consistent and appropriate character. The guide should include: seats, waste receptacles (rubbish/recycle), drinking fountains/water bottle refilling stations, bike racks, lighting and picnic tables.	High
6.1.5.	Install combined drinking fountains and water bottle filling stations at key destinations within the reserve.	Medium
6.1.6.	Review the provision of litter bins across the reserve, and install new/replacement waste and recycling infrastructure.	Medium
6.1.7.	Install bike racks at key destinations within the reserve, particularly adjacent to car parks and entry points.	Medium
6.1.8.	Install additional seating and picnic tables which meet the needs of all users (including some seats with arm rests, back rests and wheelchair accessible tables).	High
6.1.9.	Investigate feasible options for replacement of the swing bridge feature in Play Area 3.	Immediate
6.1.10.	Creative and innovative design will be included in all new projects (eg wayfinding & signage, shelters, functional art, picnic decks, play features, etc).	Immediate
6.1.11.	Develop an App to increase engagement and enjoyment of visitors to Lake Pertobe by providing information and interpretation of Lake Pertobe's environment and recreational opportunities.	High
6.1.12.	Construct a Changing Places facility with accessible shower on reserve adjacent to existing public toilets.	High
6.2. Connectivity and Wayfinding		
6.2.1.	Develop and implement a wayfinding strategy for areas within and adjacent to Lake Pertobe.	High
6.2.2.	Install wayfinding maps of the reserve in selected high traffic locations to facilitate easy navigation of the reserve and raise awareness of the variety of experiences and activities on offer.	Immediate
6.2.3.	Name all walking paths/loops, play areas and barbecue shelters to improve navigation and wayfinding.	High
6.2.4.	Design and develop a pedestrian and cyclist-friendly entrance from Harris Street Reserve by formalising pathways, installing appropriate fencing and wayfinding.	Medium
6.2.5.	Design and develop a pedestrian and cyclist-friendly entrance to the foreshore precinct at the corner of Banyan Street/Pertobe Road and Merri Street (and integrate into the wayfinding strategy for Lake Pertobe and surrounds).	Medium
6.2.6.	Improve pedestrian and cycle connections between Lake Pertobe and all adjacent public areas by improving and connecting paths, and the addition of wayfinding information.	Medium
6.2.7.	Construct new shared path across the southern side of Lake Pertobe Reserve to link all pedestrian crossing points on Pertobe Road as well as create raised crossing points.	High

6.2.8.	Complete the existing pedestrian loops and sub-loops in the reserve by constructing new paths and filling gaps in the existing network to create multiple options for a continuous path of travel around Kids Lake and Main Lake.	Medium
6.2.9.	Construct a new (shared) path to create pedestrian and cycle-friendly connections across the southern boundary of the reserve linking with path on the northern side of Pertobe road in 6.2.7.	High
6.2.10.	Construct a path between Mill Lake and Main Lake and on the north side of the Main Lake to connect to the northern path.	Medium
6.2.11.	Provide and clearly designate emergency access at all entrances to the reserve.	Medium
6.2.12.	Investigate options to improve pedestrian access across the railway line to link Lake Pertobe to Warrnambool's CBD.	Medium
6.3. Accessibility		
6.3.1.	Include information about accessible destination points and infrastructure (paths, play, social, toilets etc) in the wayfinding information.	High
6.4. Play Infrastructure		
6.4.1.	Design and construct an exciting, unique, inclusive, challenging and innovative playspace in Play Area 2 for 0 to 12 years.	Immediate
6.4.2.	Design and develop a diverse range of exciting, unique, challenging and innovative play for all ages by designating specific user groups for each play area: Play Area 1 – Youth/Adventure – Ages 12 years plus Play Area 3 – Slides etc – All ages / Mixed Area	High
6.4.3.	Provide unique, additional natural and sensory play experiences within existing play areas.	Medium
6.4.4.	Provide additional challenging adventure play opportunities in Play Area 1.	High
6.4.5.	Remove the paddling pools and creek feature in Play Areas 1 and 3 and replace with other water-based play elements in Play Areas 2 and 3.	Medium
6.4.6.	Include additional inclusive play elements and improve accessibility in all Play Areas by removing barriers such as raised timber edges and sand soft fall and replacing with accessible pathways and surfaces, as appropriate.	High
6.4.7.	Construct a new play area or feature in the central section of the reserve to create a new destination which encourages users to explore areas beyond the Pertobe Road frontage.	Medium
6.5. Arts and Culture		
6.5.1.	Include and share stories about Lake Pertobe's heritage, indigenous culture, storm-water/drainage functions and environmental values through improvements, wayfinding, precinct names and other on-site information.	High
6.5.2.	As 'Pertobe' is derived from the word 'pirtupp' meaning small sandpiper in aboriginal language, include the bird as a theme where appropriate, to acknowledge local aboriginal culture and identity within the reserve.	Immediate
6.6. Recreation and Social Use		
6.6.1.	Construct a half-court basketball and/or other active recreation infrastructure (eg netball/soccer/table tennis facilities) to encourage young people and adults to participate in casual sport.	Medium
6.6.2.	Construct several elevated viewing mounds on the edge of the Main Lake and/or Mill Lake.	Low
6.6.3.	Change to the local laws applying to Lake Pertobe Reserve to allow dogs-on-lead to use the perimeter pathways. This change should be evaluated after 12 months.	Medium
6.6.4.	Install clear signage at entry points and along pathways, and communicate via other channels available, to indicate where dogs are permitted and not permitted at Lake Pertobe.	High

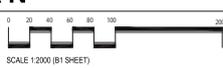
6.6.5.	Investigate the formation of a Friends of Lake Pertobe group to increase community involvement in the implementation of the Masterplan.	High
6.7. Environment and Landscaping		
6.7.1.	New plantings will be indigenous wherever possible, with exotic trees used to provide natural shade as required.	Immediate
6.7.2.	Plant new groups of advanced deciduous trees for shade at the edges of grassed, open space areas/events areas.	High
6.7.3.	Review existing plantings and identify trees/shrubs for removal and/or replacement.	High
6.7.4.	Limit vehicles parking under the Norfolk Island Pine trees on Pertobe Road Monitor the health and condition of the Norfolk Island Pine trees regularly as part of the Council's existing tree audit/program.	Medium
6.7.5.	Improve the reserve's habitat values through weed control and works to improve water quality.	High
6.7.6.	Remove noxious and environmental weeds in the reserve.	High
6.8. Events and Infrastructure		
6.8.1.	Review access to the electricity supply for events and install access points in appropriate locations.	High
6.8.2.	Develop an events and activities policy to guide and manage appropriate and sustainable use of Lake Pertobe.	Immediate
6.8.3.	Develop an online interactive process for the approval, booking, management and promotion of events at Lake Pertobe.	High
6.8.4.	Develop a Policy around fees and charges for Council Open Space	High
6.8.5.	Develop a policy for Itinerant Trading on Council managed Land	High
6.9. Parking and Transport		
6.9.1.	Prioritise, design and cost all parking recommendations as detailed on the parking layout plan for Lake Pertobe.	High
6.9.2.	Extend and formalise the car park area next to the mini golf.	High
6.9.3.	Extend the car park area near the sewer pump station to include extra vehicle spaces.	Medium
6.9.4.	Improve the vehicle parking area on the northwest side of Pertobe Road by sealing and line marking vehicle parking to maximise the spaces available near Events Area 1.	High
6.9.5.	Develop overflow parking for the foreshore area along Price Street.	High
6.9.6.	Restrict inappropriate vehicle access to the Jetty Flat area.	High
6.9.7.	Install a barrier to the east of Play Area 2 to stop vehicles parking under the Norfolk Island Pine trees on the road reserve.	Medium
6.9.8.	Communicate changes to parking and pedestrian connections at Lake Pertobe to increase awareness of park and walk options in the area.	Medium
6.10. Drainage and Water		
6.10.1.	Develop and implement a drainage maintenance program to ensure the lake's important drainage function is sustained.	High
6.10.2.	Investigate with Wannon Water the feasibility of alternate water sources from the main lake system for reuse at surrounding public areas.	High



LEGEND

-  Proposed car parking spaces
-  Pertobe Road Precinct envelope (see enlarged plan)
-  Proposed granitic sand path
-  Proposed concrete shared path
-  Existing concrete path to be widened into a shared path
-  Proposed location for wayfinding signage
-  Proposed location for wayfinding map
-  Proposed bicycle hoops

**MASTERPLAN CONTEXT AND KEY PLAN
LAKE PERTOBE
WARRNAMBOOL CITY COUNCIL**



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Print Issue: 25.09.2017 - Emailed to L. Mcleod	MICHAEL SMITH AND ASSOCIATES Landscape Architecture and Urban Design
Title: Masterplan Context and Key Plan Lake Pertobe	Office: 1st floor, 407 Whitehorse Road, Balwyn VIC 3103 Postal: 5 Jonis Street, Camberwell VIC 3124 Tel: 9830 0414 Fax: 9830 2555 Email: msa@msalandscape.com.au
Client: Warrnambool City Council	Drawn: G.L. Date: 21.09.2017 Project No.: 16-033 Cad File: Drawing No.: Sheet 1 of 1



LEGEND

- Revised layout or new car parking spaces
- Existing pathway
- Proposed granitic sand path minimum width 2.3 metres
- Proposed concrete path minimum width 2.5 metres
- Existing concrete path to be widened into a shared path of minimum width of 2.5 metres
- Proposed raised shared path intersection treatment
- Proposed timber post and rail fence to prevent parking on nature strip
- Suggested location for wayfinding signage
- Suggested location for wayfinding map
- Trees/shrubs proposed to be removed
- Proposed group of deciduous trees for shade
- Proposed general location for new indigenous and/or native planting
- Proposed location for adventure/water play elements
- Suggested location for a drinking fountain and water/bottle filling station
- Existing shelter or toilet
- Suggested location for litter and recycling bins
- Suggested location for a seat
- Suggested location for a picnic table
- Suggested location for bicycle parking

PERTOBE ROAD PRECINCT - MASTERPLAN RECOMMENDATIONS LAKE PERTOBE, WARRNAMBOOL WARRNAMBOOL CITY COUNCIL

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Print Issue:
Drawn: G.L.
Date: 21.09.2017
Project No.: 162033
Call File:
Client: Warrnambool City Council

Title: Pertobe Road Precinct
Lake Pertobe, Warrnambool
Drawing No.: Sheet 1 of 1



SITE-SPECIFIC RECOMMENDATIONS

Infrastructure

- 1 Construct a new toilet/change facility with showers and change rooms at McGennan's Carpark to service all users of the foreshore area.
- 2 Provide access to the water for reserve users and hire operators along the lakes' edge in appropriate locations which are connected to the path network.
- 3 Identify appropriate locations and form for the provision of shade infrastructure in the reserve, particularly servicing the play areas.
- 4 Install combined drinking fountains and water bottle filling stations at key destinations within the reserve.
- 5 Review the provision of litter bins across the reserve, and install new/replacement waste and recycling infrastructure.
- 6 Install bike racks at key destinations within the reserve, particularly adjacent to car parks and entry points.
- 7 Install additional seating and picnic tables which meet the needs of all users (including some seats with arm rests, back rests and wheelchair accessible tables).
- 8 Investigate feasible options for replacement of the swing bridge in Play Area 3.

Connectivity and Wayfinding

- 9 Install wayfinding maps of the reserve in selected high traffic locations to facilitate easy navigation of the reserve and raise awareness of the variety of experiences and activities on offer.
- 10 Design and develop a pedestrian and cyclist entrance from Harris Street Reserve by formalising pathways, installing appropriate fencing and wayfinding.
- 11 Design and develop a pedestrian and cyclist-friendly entrance to the foreshore precinct at the corner of Banyan Street/ Pertobe Road and Merri Street (and integrate into the wayfinding strategy for Lake Pertobe and surrounds).
- 12 Improve pedestrian and cycle connections between Lake Pertobe and all adjacent public areas by improving and connecting paths, and the addition of wayfinding information.
- 13 Construct new paths to link Lake Pertobe Reserve with all pedestrian crossing points on Pertobe Road.
- 14 Complete the existing pedestrian loops and sub-loops in the reserve by constructing new paths and filling gaps in the existing network to create multiple options for a continuous path of travel around and between the lakes.
- 15 Construct a new (shared) path between Price Street and Pertobe Road to create pedestrian and cycle-friendly connections across the southern boundary of the reserve.
- 16 Construct a path between Mill and Main Lake and on the north side of the Main Lake to connect to Play Area 1.
- 17 Provide and clearly designate emergency access at all entrances to the reserve.
- 18 Investigate options to improve pedestrian access across the railway line to link Lake Pertobe to Warrnambool's CBD.

Play Infrastructure

- 19 Design and develop a diverse range of exciting, unique, challenging and innovative play for everyone by designating specific target/user groups for each play area:
Play Area 1 - Youth/Adventure- 12 years plus
Play Area 2 - Young children - Preschool to 12 years
Play Area 3 - Slides etc - All ages/Mixed Area
- 20 Provide unique, additional natural and sensory play experiences within existing play areas.
- 21 Provide additional challenging adventure play opportunities in Play Area 1.
- 22 Provide a fenced/enclosed play space within Play Area 2.
- 23 Remove the paddling pools and creek feature in Play Areas 1 and 3 and replace with other water-based play elements in Play Areas 2 and 3.
- 24 Include additional inclusive play elements and improve accessibility in all Play Areas by removing barriers such as raised timber edges and sand doft fall and replacing with accessible pathways and surfaces, as appropriate.
- 25 Investigate a new play area or feature in the central section of the reserve to create a new destination which encourages users to explore areas beyond the Pertobe Road frontage.

Recreation/Social Use

- 26 Construct a half-court basketball and/or other active recreation infrastructure (eg netball/soccer/table tennis facilities) to encourage young people and adults to participate in casual sport.
- 27 Construct several elevated viewing mounds on the edge of the Main Lake and/or Mill Lake.
- 28 Install clear signage at entry points and along pathways, and communicate via other channels available, to indicate where dogs are permitted and not permitted at Lake Pertobe.

Environment and Landscaping

- 29 New plantings will be indigenous wherever possible, with exotic trees used to provide natural shade as required.
- 30 Plant advanced deciduous trees for shade at the edges of grassed, open space areas/events areas as appropriate.
- 31 Review existing plantings and identify trees/shrubs for removal and/or replacement.
- 32 Limit vehicles parking under the Norfolk Island Pine trees on Pertobe Road by creating formalised/designated car park bays with a buffer zone from the edges of trees. Monitor the health and condition of the Norfolk Island Pine trees regularly as part of the Council's existing tree audit/program.

Events Infrastructure

- 33 Review access to the electricity supply for events and install access points in appropriate locations.

Parking and Transport

- 34 Prioritise, design and cost all parking recommendations as detailed on the parking layout plan for Lake Pertobe.
- 35 Extend and formalise the car park area next to the mini golf.
- 36 Extend the car park area near the sewer pump station to include extra vehicle spaces.
- 37 Improve the vehicle parking area on the northwest side of Pertobe Road by sealing and line marking vehicle parking to maximise the spaces available near Events Area 1.
- 38 Develop overflow parking for the foreshore area along Price Street.
- 39 Restrict inappropriate vehicle access to Jetty Flat area.
- 40 Install a barrier to the east of Play Area 2 to stop vehicles parking under the Norfolk Island Pine trees on the road reserve.

Drainage and Water

- 41 Develop and implement a drainage maintenance program to ensure the lake's important drainage function is sustained.
- 42 Investigate the feasibility of harvesting stormwater from the main lake system for reuse at surrounding public areas.

GENERAL AND MANAGEMENT RECOMMENDATIONS

Infrastructure

- A Prepare an infrastructure style guide to create a consistent and appropriate character. The guide should include: seats, waste receptacles (rubbish/recycle), drinking fountains/water bottle refilling stations, bike racks, lighting and picnic tables.
- B Creative and innovative design will be included in all new projects (eg wayfinding & signage, shelters, functional art, picnic decks, play features, etc).

Connectivity and Wayfinding

- D Develop and implement a wayfinding strategy for areas within and adjacent to Lake Pertobe.
- E Name all walking paths/loops, play areas and barbecue shelters to improve navigation and wayfinding.

Accessibility

- F Include information about accessible destination points and infrastructure (paths, play, social, toilets etc) in the wayfinding information.

Arts and Culture

- G Include and share stories about Lake Pertobe's heritage, indigenous culture, stormwater/drainage functions and environmental values through improvements, wayfinding, precinct names and other on-site interventions.
- H Integrate art, culture and storytelling into all infrastructure and other improvements within the reserve.
- I As 'Pertobe' is derived from the word 'pirtupp' meaning small sandpiper in aboriginal language, include the bird as a theme where appropriate, to acknowledge local aboriginal culture and identity within the reserve.

Recreation/Social Use

- J Change to the local laws applying to Lake Pertobe Reserve to allow dogs-on-lead to use the perimeter pathways. This change should be evaluated after 12 months.
- K Investigate the formation of a Friends of Lake Pertobe group to increase community involvement in the implementation of the Masterplan.

Environment and Landscaping

- L Improve the reserve's habitat values through weed control and works to improve water quality.
- M Remove noxious and environmental weeds in the reserve.

Events Infrastructure

- N Develop an events and activities policy to guide and manage appropriate and sustainable use of Lake Pertobe.
- O Implement a process for the approval, booking, management and promotion of events at Lake Pertobe.
- P Consider a fee structure for hosting of 'commercial/for profit' markets and events at Lake Pertobe.

Parking and Transport

- Q Communicate changes to parking and pedestrian connections at Lake Pertobe to increase awareness of park and walk options in the area.

MASTERPLAN RECOMMENDATIONS LAKE PERTOBE WARRNAMBOOL CITY COUNCIL

Amendments:

Print Issue:
25.09.2017 - Emailed to R. Lineham

Title: Draft Masterplan Recommendations
Lake Pertobe
Client: Warrnambool City Council

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Date: 30.08.2016
Project No.: 16-033
Cad File:
Drawing No.: Sheet 1 of 1



2 Introduction

LOCATION:

Lake Pertobe reserve (the reserve) is more than 50 hectares and is largely Crown Land vested under the control of Warrnambool City Council as the Committee of Management. An area of 10 hectares in the northeast section is Council Freehold Land. The reserve is in a Public Park and Recreation Zone in the Warrnambool Planning Scheme.

While Lake Pertobe reserve sits immediately to the south of the Warrnambool CBD, it is not well connected to the City Centre as a result of the Melbourne to Warrnambool Railway line dissecting the two. The Harris Street Recreation Reserve adjoins the site to the northwest, the residential neighbourhood of South Warrnambool to the west and south west, and Cannon Hill to the north east. The Lady Bay beach and foreshore is opposite the reserve's main frontage on Pertobe Road to the south and east. The map overleaf illustrates the reserve's location in the wider context.

Merri Street and the southern edge of the Warrnambool CBD is visually well-connected to Lake Pertobe and the foreshore area. Cannon Hill is open space on a hilltop with

expansive views to Lake Pertobe and the foreshore. Whilst the views are vast, physical connections for both people and vehicles between these areas are extremely limited due to the railway line along the north boundary of the reserve, and the significantly difference in topography - with the CBD sitting on a hilltop overlooking the ocean and Lake Pertobe reserve at sea level.

Strategically, the reserve is well-located near other foreshore attractions such as Flagstaff Hill Maritime Village including the visitor centre, main swimming beach, the breakwater, the South Warrnambool Wetlands, and scenic locations such as Thunder and Pickering Points. There are several of Warrnambool's largest accommodation properties within walking distance of Lake Pertobe, including 3 camping grounds along Pertobe Road.

SITUATION ANALYSIS:

The Project Working Group's Background Report identified that current infrastructure at Lake Pertobe is consistent with the Warrnambool Open Space Infrastructure Guidelines, with exception of all-abilities access which is mostly poor, and a lack of any informational or wayfinding signage. While the lake and its environs are flat, there are issues of accessibility within and to/from the site due to a lack of paths and the steep difference in topography between the reserve and land to the north. As previously noted, the railway line limits access to and from the reserve

from Merri Street to a single location at the end of Gilles Street and via the road bridge on Pertobe Road.

The play opportunities are extensive and while renewal has taken place, the layout is original from the reserves development in the 1970s. The three main play areas are all along the frontage along Pertobe Road and near the reserve's picnic tables, shelters, barbecues and toilet facilities. The activities and facilities in this area along the Pertobe Road frontage, along with boat hire (small motor boats, canoes, and paddle boats), are the major drivers of visits by locals and visitors alike.

Currently the three stormwater outflows from Warrnambool's CBD are crude. Strategies to improve the visual and physical presentation and hydrological capacity of the stormwater outflows form part of the Masterplan's recommendations.

2.1 Scope

The Lake Pertobe Masterplan aims to address the development, management, operation and programming of the reserve for at least the next 15 years. The area covered by the Masterplan includes the area bounded by the Warrnambool Railway Precinct, Cannon Hill Lookout, Flagstaff Hill Maritime Village, Warrnambool Foreshore, the Woollen Mill Development and Harris Street Reserve.

Council's Project Working Group conducted a detailed consultation and engagement process that informed the preparation of the background report that summarised the issues and opportunities for both the Warrnambool Botanic Gardens and Lake Pertobe to date which formed the basis of Part A of the project.

Part B of the Project, which was undertaken by the Consultant

team in conjunction with the Project Working Group and other Council officers, included:

- Analysis of the issues and opportunities raised in the Background Report.
- Identification and documentation of additional issues and opportunities.
- Assessment of opportunities.
- Consideration of community input and feedback.
- Preparation of the Draft Masterplan and Report.

The Part B tasks are detailed in the Appendices.

2.2 Project Aims

Warrnambool City Council set the following aims for the Masterplan study for Lake Pertobe.

- Develop a Masterplan for Lake Pertobe that take into account Warrnambool's changing demographics and future needs, furthering its goals and objectives as 'Warrnambool – a Healthy City'.
- Provide clear direction for Council and stakeholders by determining priorities, service levels and resourcing around the future development, management, operation and programming/activation of Lake Pertobe over at least the next 15 years.
- Prepare a functional and realistic Masterplan for Lake Pertobe.

The following are the objectives of the Masterplan for Lake Pertobe:

- Ensure the reserve continues to meet and exceed standards and expectations as a regionally significant reserve and open space by addressing issues such as connectivity, universal access, drainage, events and vehicle parking.
- Prepare the Vision for Lake Pertobe.



3 Process

The diagram details the actions undertaken to inform the development of the Masterplan.

January/ February 2016	Stakeholder Interviews Community Engagement: Issues and Ideas
February	Policy Review/ Strategic Context
March	Background Paper Prepared
April	Consultant Brief Prepared
June	Consultant Appointed
July	Consultant team site visit, stakeholder interviews, site assessments completed
August	Review of opportunities and development of the Draft Vision
September	Project update issued and community feedback on the draft vision
December 2016 - January 2017	Develop Draft Plan and Summary of Recommendations
March/April	“Check in” with the community on the Draft Masterplan direction at on site events and online
August	Workshop to seek direction from Council on key issues
September	Draft Masterplan and Report
January 2019	“Check in” with the community on the Final Report
2019	Masterplan presented to Council for adoption



Community Engagement : Issues And Ideas – January & February 2016

An extensive community engagement program was undertaken to explore what visitors, residents and stakeholders love about Lake Pertobe, and the changes and improvements they would support in the future.

In summary there were:

- 245 surveys completed
- 11 Submissions
- Hundreds of conversations at Summer Night Markets
- Two focus groups with young people at Warrnambool College
- Interviews with stakeholders

The message was clear – people of all ages love and value Lake Pertobe.

The top five things people told us they loved about Lake Pertobe were:

- The variety of play equipment and barbecue facilities
- Its spaciousness and size
- Open, grassed areas
- The wildlife and environment
- Walking tracks and accessibility

The top five things people told us they would like changed or improved were:

- Add and update play areas (including shade and water elements)
- Update and link paths and trails
- More native plants and wildlife
- Signage and wayfinding
- Better access for all

The submissions received included:

- Fencing to prevent inappropriate vehicle access (and prevent hoon activity)
- Improved parking and better connection to neighbouring areas
- Addressing gaps in pathway connections to improve connectivity in and around the site
- Fencing of some play areas
- More creative and challenging play activities for all ages
- Include permanent events infrastructure
- Add a petanque piste (playing area)
- Allow dogs on lead on perimeter paths around Lake Pertobe
- Improved bird watching facilities

Young aboriginal people and members of the Local Aboriginal Network (LAN) provided specific suggestions about how Aboriginal stories, language, and culture could be shared on the site in the future. These conversations also revealed that 'Pertobe' means "sandpiper" in local Guditjmarra language.

In summary, there is overwhelming community support for investment in and management of the Lake Pertobe to ensure it remains one of the best, freely accessible, reserves/parks and playgrounds in Australia, and becomes a more walkable, connected and environmentally sustainable feature which is well connected to both central Warrnambool to the foreshore.

Following the community engagement outlined above, Council's Project Working Group (PWG) prepared the Background Report Part A (see Appendix 1) that provides information about the reserve, current use and management, and highlights a range of existing issues (infrastructure, connectivity and wayfinding, universal access, heritage and art, recreation and social use, environment, events and traffic and parking) to assist in the preparation of the Masterplan for Lake Pertobe. This feedback and the Background Report were provided to the Consultant on appointment to inform the development of the Draft Masterplan.

Since the appointment of the Consultant in June 2016 the following activities have informed the preparation of the Draft Masterplan.



July 2016	<p>Initial meeting and site analysis</p> <p>Following the initial meeting and site reconnaissance of the consultant team with the PWG, other Council officers and Council Parks and Gardens staff, a new document was created outlining additional issues and opportunities identified.</p> <p>Together with the previous issues and opportunities identified during Part A, these were combined in tabulated form as an Assessment of Merit (see Appendix 5) and were disseminated to members of the PWG and the consultant team for comment.</p>
August 2016	<p>Assessment of opportunities</p> <p>The consultant team assessed each opportunity and provided a recommendation to the level of priority assigned to each. Ten (10) categories were used to theme the opportunities. These have continued through the project and have been used in this report (refer to Chapter 6).</p>
	<p>Water modelling and stormwater harvesting opportunities</p> <p>STORM Consulting prepared a Water Balance Model for Lake Pertobe which informed the options for stormwater harvesting and storage options.</p>
	<p>Project Working Group meeting and Council staff workshop</p> <p>An informal workshop was held to develop the Draft Vision to support the Masterplan for Lake Pertobe. The different options for stormwater harvesting and storage were presented to the Project Working Group for their feedback.</p>
	<p>Councillor Briefing</p> <p>The Draft Vision and Issues and Opportunities were presented to Councillors for their feedback.</p>
September 2016	<p>Project Update to the community and feedback on the Draft Vision: Community Engagement # 2</p> <p>A project update was published and a community survey was undertaken to gauge reactions to the Draft Vision and the issues and key directions identified. Highlights of the feedback received regarding each theme are provided in Chapter 6.</p>
December 2016 – January 2017	<p>Preparation of the Draft Masterplan</p> <p>The consultant team prepared the Draft Masterplan for presentation during the next phase of community consultation for early 2017.</p>
March – April 2017	<p>Community Engagement # 3</p> <p>Council officers presented the Draft masterplan at a community event in Lake Pertobe on 2nd April 2017 for community feedback. Community input was also sought via a survey online and in hard copy. This was distributed to those who had previously engaged in the project consultation.</p>
August 2017	<p>Councillor Briefing</p> <p>The Draft Masterplan key recommendations were presented to Councillors on 28th August 2017 for their feedback.</p>
September 2017	<p>Draft Masterplan</p> <p>The consultant team created a Draft Masterplan for refinement and sign off by the PWG</p>



4 History

Prior to European settlement, Lake Pertobe would have been an ephemeral wetland draining the undulating land to the north now the CBD and north Warrnambool area. The Peek Woorong people occupied the area around Warrnambool for at least 30,000 years prior to Warrnambool's founding in 1847 and would have made use of the seafood, eels and birdlife that were present in the Warrnambool bay area as food sources. 1

Lake Pertobe, in its current form, was established through a staged development process. In the 1960's, seawater was pumped into the lake and the lake was used for water skiing. The lake dried out in 1968 and became unusable. In 1975, a plan was presented to Council to develop the lake as a "Wildlife and Tourism Area". The 1975 plan's recommendations included dredging the lake, building a weir and creating a series of islands, bridges and canals. The plan was adopted by Council and implemented from 1974-1980, which contributed to Warrnambool winning as Premier Town Contest in 1979 2. Substantial investment in revegetation, playspace equipment and civic amenities followed.

In 1996, Council completed a Playground Development Strategy which highlighted the need for plans to upgrade the playground equipment within Lake Pertobe to meet Australian Standards. In response to the Strategy, a

concept plan for the eastern section of Lake Pertobe was prepared in 1998. The concept plan incorporated a range of improvements including new play apparatus and amenities. The plan's recommendations have been largely implemented. The eastern section is the section in this report later referred to as the Lake Pertobe corridor.

The lake now functions as the nucleus for active competitive recreation to the southeast and south by way of: an athletics track, cricket ground, BMX track, Pigeon Racing Club, lawn tennis and hard surface tennis courts with lighting and a lawn bowling club.

In 2014 Lake Pertobe made the Top 10 South Pacific Parks in the Trip Advisor Travellers Choice Awards. The reserve consistently receives 'excellent' reviews on the Trip Advisor website. Lake Pertobe has received high reviews from a variety of Melbourne-based websites and blogs.



Lake Pertobe Development Plan 1975



5 Strategic Context: Policies and Strategies

Following is a summary of strategies and plans that have influenced the Masterplan, or for which the Masterplan delivers outcomes.

5.1 Warrnambool 2040 Community Plan (draft)

When endorsed in mid-2018, Warrnambool 2040 (W2040) will be a long term community plan for the future of Warrnambool. It aims to capture the community's shared values, goals and priorities for the next twenty-plus years.

During the first phase of community engagement, Warrnambool's residents identified Lake Pertobe one of the things they love about Warrnambool. More native revegetation and the protection of the natural environment were identified as improvements needed in the future.

The draft plan identifies the importance of access to the natural environment, connectivity and quality public spaces for Warrnambool's residents as key priorities.

W2040 GOALS AND PRIORITIES RELEVANT TO LAKE PERTOBE:

In November 2017, the following draft goals and specific priorities were published which the masterplan directly addresses and supports:

GOAL: Warrnambool is a welcoming, liveable and thriving place

PRIORITY 4: Warrnambool will have connected open spaces

Warrnambool will provide abundant public open space for its diverse population. Through good design, our public open spaces will be accessible, safe and well-connected, and provide a variety of activities and uses to suit all abilities and age groups. Our public open spaces will be designed to support and enhance the natural environment and biodiversity

PRIORITY 5: Warrnambool will have quality public spaces and facilities

Warrnambool will offer public spaces and facilities that are well designed, activated, sustainable, adaptable, multi-use and safe. Public spaces will be designed to facilitate social connections by encouraging diverse activities for residents and visitors in an open and welcoming environment. Warrnambool will be an attractive and pleasant place to be, including public art and other visual points of interest.

Goal: Warrnambool will be a city for all people

PRIORITY 1: A welcoming and inclusive city

Warrnambool will be an inclusive and welcoming community that embraces all residents and visitors, and encourages those with diverse backgrounds, ages and abilities to participate in the community. Warrnambool will reflect and celebrate its diverse cultures, beliefs and heritage.



PRIORITY 2: An active and connected community

Warrnambool will be a community which has safe, welcoming and accessible places designed to facilitate diverse social, cultural and physical opportunities. It will provide environments which support and encourage active living and meaningful social connection.

PRIORITY 3: A healthy place

Warrnambool will make health a priority with accessible and affordable physical and mental health services, recreational facilities and opportunities, including for those who are vulnerable and disadvantaged.

PRIORITY 4: Value our Aboriginal identity

Warrnambool will proudly embrace and respect Aboriginal culture, knowledge and heritage.

GOAL: Warrnambool will be the most sustainable regional city in Australia.

PRIORITY 2: Enjoy, love and respect its natural environment

Warrnambool will restore, maintain and enhance its natural environment, biodiversity corridors, waterways and coast for the benefit of all its inhabitants. It will strive to improve our natural assets and invest in them for our future generations, drawing on traditional owner knowledge.

PRIORITY 3: Green Warrnambool

Warrnambool will develop greening initiatives such as the urban forest and nature strips, connecting green wedges, green roofs, vertical gardens and community gardens. Warrnambool will increase its green infrastructure and associated canopy cover for a cooler, water sensitive and biodiverse City

PRIORITY 8: Warrnambool will conserve water and improve the health of its waterways through water sensitive urban design

5.2 Warrnambool City Council Plan (2017 – 2021)

The Council Plan includes the following objectives and strategies which are directly supported by the masterplan.

Objective 1: Sustain and enhance the natural environment

1.1 Protect and enhance our waterways, coast and land

Objective 2: Foster a healthy city that is socially and culturally rich

2.1 Promote healthy lifestyles
2.2 Seek equity, access, safety and inclusion for everyone

- 2.3 Increase community health and social connections
- 2.4 Encourage and support participation in sport, recreation and physical activity
- 2.7 Actively acknowledge local Aboriginal culture
- 2.8 Increase participation opportunities for disadvantaged members of the community

Objective 3: Maintain and improve the physical fabric of the city

- 3.1 Build better connections for cyclists and pedestrians
- 3.3 Build infrastructure that best meets current and future community needs
- 3.4 Enhance movement in and around the city
- 3.5 Maintain and enhance existing Council infrastructure

5.3 Warrnambool - A Healthy City (2017 – 2021)

Lake Pertobe is supports active living and social connection in Warrnambool. Improvements to arguably Warrnambool’s most important reserve will deliver strongly on many priorities of the City’s health and wellbeing plan.

5.4 Warrnambool Open Space Strategy (2014)

Assessed a regional open space in the strategy, Lake Pertobe Reserve is arguably the “jewel in the crown” of Warrnambool’s Open Space network.

The open space vision for Warrnambool is: Warrnambool

will have a high quality, diverse, accessible open space network that reflects community needs and enhances social connection, environmental protection and economic benefit.”

In order to achieve this vision, principles have been developed to guide the day to day planning and management of open space in Warrnambool.

It is envisioned that Warrnambool’s open space network will be:

- Accessible** - a variety of open spaces that are accessible to all residents, regardless of age, ability and culture. Residents should have at least one open space within walking distance of their home.
- Adaptable** – be flexible, multi-use and provide opportunities for passive and active recreation that is responsive to community needs.
- Connected** - open space corridors and shared trails that improve the connectivity of the network and provide links for walking, cycling and biodiversity movement.
- Diverse** – provide a variety of experiences and cater for a range of recreational needs.
- Efficient** - consider adaptability and maintenance in the development and management of open space.
- Equitable** - access to open space will be distributed as fairly as possible across the municipality.
- Protective of the environment** - preserve and enhance areas with environmental values and provide appropriate public access to waterways and coastal environments.

A key issue identified in the open space strategy which will be addressed in this masterplan is the poor connectivity between Warrnambool’s Central Business District and the



Lake Pertobe/foreshore precinct for cycling and walking. Topographical differences between the two precincts is a contributing factor; the elevation difference delivers expansive views, however it limits access points on the north side to only two locations – from Pertobe Road and Gilles Street.

In terms of the other open space principles, Lake Pertobe needs to be improved in the following ways:

- **Accessibility** – be more accessible to all ages, abilities and cultural backgrounds.
- **Protection of the environment** – there is a need to better preserve and enhance areas of environmental value and provide access where appropriate to the lake.
- **Diversity** – improve the reserve’s offer and variety of experiences and to better meet the recreational needs of all ages, but especially young people and adults.

5.5 Warrnambool Open Space Infrastructure Guidelines

The existing infrastructure at Lake Pertobe is generally consistent with the Warrnambool Open Space Infrastructure Guidelines as indicated for a regional recreation reserve. The following items are not currently lacking within the reserve and would be supported by these guidelines:

- A basketball hoop/hitting wall
- Improved disability/wheelchair access
- Additional all-abilities play equipment/experiences
- Improved and additional shared pedestrian/ bike pathways
- Additional bicycle racks
- Wayfinding and informational signage

5.6 Warrnambool Public Toilet Plan (2014)

Specific recommendations relevant to Lake Pertobe are the following:

- Upgrade of the interior of the public toilets building to the southwest of Play Area 2 to meet CPTED and DDA requirements.
- Installation of external lighting at the public toilets building to the southwest of Play Area 2 and south of Play Area 3.
- Decommissioning of the public toilets building on the southeast side of Pertobe Road (adjacent to the Beach Kiosk) and construction of a replacement public toilet and change facility within the Foreshore Precinct.

5.7 Warrnambool Sustainable Transport Strategy (2010-2020)

Specific recommendations relevant to Lake Pertobe are the following:



- Improvement to the foreshore path network through better pedestrian and cyclist linkages from Warrnambool’s Central Activities District through the Railway Precinct and Lake Pertobe.
- Support of Warrnambool’s tourism industry through better connectivity in between key destinations such as Lake Pertobe, Warrnambool Harbour, the beach areas and beyond.

5.8 Lake Pertobe Concept Plan (1998)

The majority of the recommendations within the concept plan were implemented apart from the construction of formal shared paths throughout the Lake Pertobe.

5.9 Lake Pertobe Development Plan (1975)

The majority of the recommendations within the development plan were implemented apart from the construction of a road or path under the railway line at Gilles Street to connect Lake Pertobe with the Central Activities District.

6 Masterplan Recommendations

The following discussion or narrative underpins the Draft Masterplan's Recommendations. They were derived from the analysis, the assessment of merit of ideas raised during the consultation and engagement process and adoption of Council Planning Policies and Strategies, including the objectives of the Masterplan.

6.1 Infrastructure

Current Situation

Overall infrastructure is adequate in terms of barbecue shelters, seating and the variety of play elements. Existing playspace elements are not due for renewal for at least another six years. Shade is provided primarily as barbecue shelters. There is limited shade provided by small to medium canopy trees nearby to the playspaces and the barbecue shelters. The granite stone top picnic tables have timber seat planks and many seat planks have deteriorated.

Community Feedback

The need for any new infrastructure is to be sympathetic to the setting and the environment was documented during the community engagement process. Additional seating and picnic facilities were strongly supported.

Recommendations

6.1.1 Construct a new toilet/change facility with showers and change rooms at McGennan's Carpark to service all users of the foreshore area

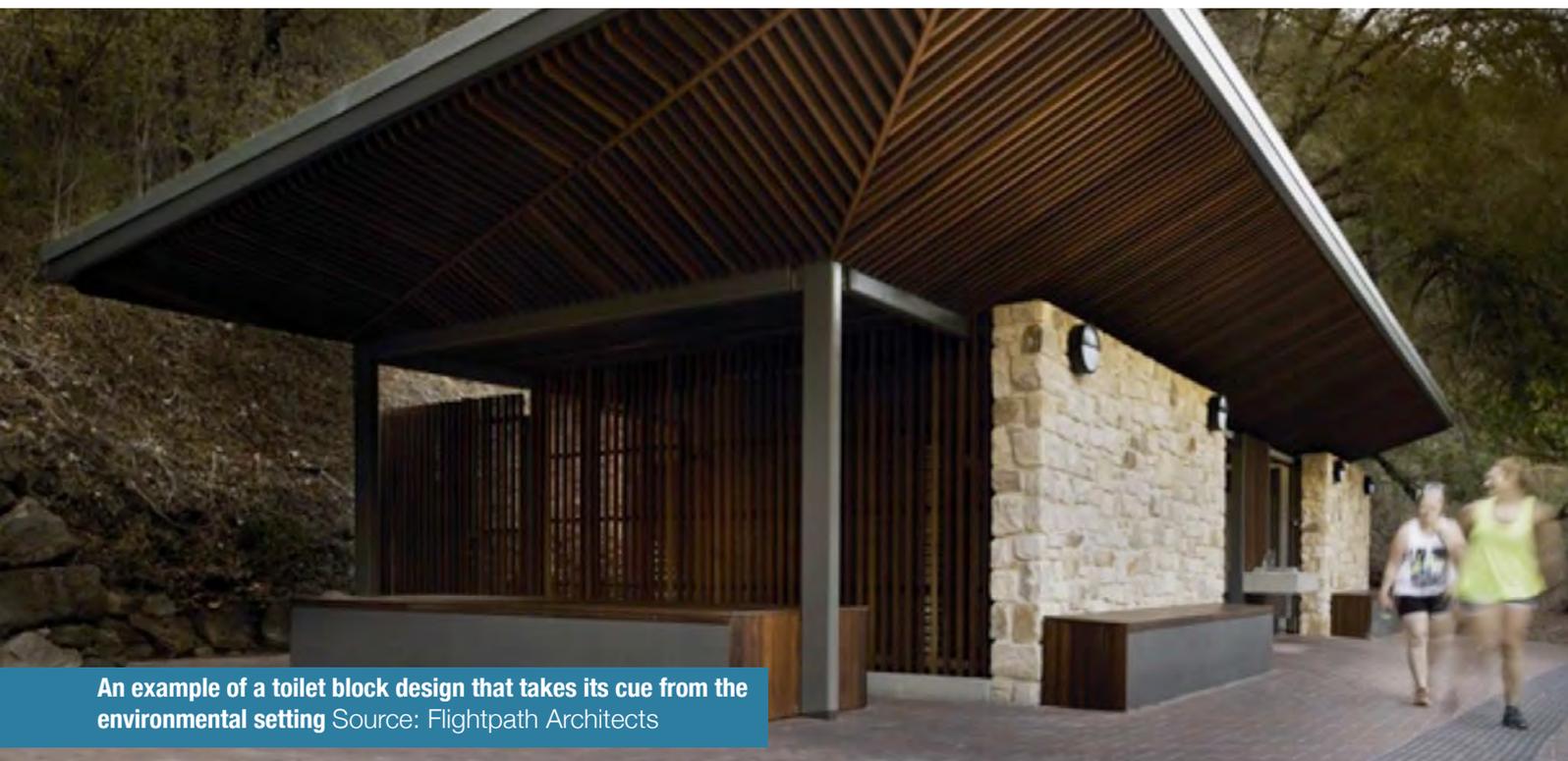
IMMEDIATE PRIORITY

This project has already been approved. The toilet facility should be carefully designed to be integrated into the foreshore precinct, consultation is to be undertaken for final location.

6.1.2. Provide access to the water for reserve users and hire operators along the lakes' edge in appropriate locations which are connected to the path network.

MEDIUM PRIORITY

Areas or portions of the lake edge should be accessible to people with prams, walking frames and wheelchairs. A floating jetty will allow all abilities access to the lake environment.



An example of a toilet block design that takes its cue from the environmental setting Source: Flightpath Architects

6.1.3 Identify appropriate locations and form for the provision of shade infrastructure in the reserve, particularly servicing the play areas.

HIGH PRIORITY

Consideration should be given to the provision of shade in the form of small clusters of deciduous trees and/or structures other than shade sails. These are best provided at key picnic locations and the toddler playspace. Providing shade to groups of seats and picnic tables will make the stay at Lake Pertobe more enjoyable, particularly for less mobile people, elderly people and families of young children.

6.1.4 Prepare an infrastructure style guide to create a consistent and appropriate character. The guide should include: seats, waste receptacles (rubbish/recycle), drinking fountains/ water bottle refilling stations, bike racks, lighting and picnic tables.

HIGH PRIORITY

Currently there is no consistent style for the existing infrastructure elements. Site furniture should be consistent and take reference to the lake and coastal environment.

6.1.5 Install combined drinking fountains and water bottle filling stations at key destinations within the reserve.

MEDIUM PRIORITY

Additional drinking fountains to key destinations such as the flying fox area will make visitation more enjoyable. Taps for filling water bottles will be more hygienic than bubblers and less wasteful of water.

6.1.6 Review the provision of litter bins across the reserve, and install new/replacement waste and recycling infrastructure.

MEDIUM PRIORITY

Attend to maintenance issues associated with having

too many litter bins along Pertobe Road. Currently there are small bins to the kerbline and larger bins are used at peak times. Install some permanent larger litter bins as permanent installations.

There is a soldiered line or row of small capacity litter bins. Larger bins at key hot spots should be provided.

6.1.7 Install bike racks at key destinations within the reserve, particularly adjacent to car parks and entry points.

MEDIUM PRIORITY

Providing bicycle hoops adjacent to picnic areas and playspaces will encourage people to cycle to Lake Pertobe, rather than travelling by car. In the longer term the promotion of cycling within Warrnambool's CBD may help reduce car parking pressure and congestion at Pertobe Road and the foreshore area during the summer months.

6.1.8 Install additional seating and picnic tables which meet the needs of all users (including some seats with arm rests, back rests and wheelchair accessible tables).

HIGH PRIORITY

Provision of a range of seats and picnic tables will make the stay at Lake Pertobe more enjoyable particularly for less mobile people and elderly people. Provision of seats with back rests will be good as the seats to existing picnic tables do not have back rests. Flat zones for pram and wheelchair parking should be considered. While traditional outdoor seats and tables can be utilised, creative options should also be considered.

6.1.9 Investigate feasible options for replacement of the swing bridge feature in Play Area 3.

IMMEDIATE PRIORITY

The suspension bridge functions as an access connecting paths, but doubles up as a 'play experience' enjoyed by children and adults. The bridge is one of Lake Pertobe's



Examples of seats and tables



Existing granite top picnic table with timber seating

more recognisable features that must be replaced.

6.1.10 Creative and innovative design will be included in all new projects (eg wayfinding & signage, shelters, functional art, picnic decks, play features, etc).

IMMEDIATE PRIORITY

Projects involving the design of infrastructure such as toilet blocks, shelters, signage and functional art should consider the lake and foreshore environment setting and do not include unnecessary/unrelated design elements for ornamentation's sake.

6.1.11 Develop an App to increase engagement and enjoyment of visitors to Lake Pertobe by providing information and interpretation of Lake Pertobe's environment and recreational opportunities.

HIGH PRIORITY

Develop a Lake Pertobe dedicated App that can efficiently disseminate important information to the users of Lake

Pertobe. The App is to be designed to showcase all that Lake Pertobe has to offer as many users are unaware of the potential that Lake Pertobe has to offer. Many members of the public entering Lake Pertobe have very little idea as to where paths go and what opportunities might be within a few minutes' walk of them.

The app is to give information about Lake Pertobes cultural history, encourage participation in more site activities including walks, flora and fauna discovery (including birdwatching), the various play opportunities, wayfinding and locations of site amenities.

6.1.12. Construct a Changing Places facility with accessible shower on the reserve adjacent to existing public toilet.

As a key regional destination it is important to have a high standard of accessibility and inclusive facilities at Lake Pertobe. Changing Places facilities are larger than standard accessible toilets, and have extra features and more space to meet the needs of people with a disability and their carers. A Changing Places facility will be constructed adjacent to the existing toilet block at Play Area 2.



6.2 Connectivity and Wayfinding

Current Situation

Lake Pertobe is a 'destination' place and the important link connection to other destinations including the Jetty Flat sports precinct, the foreshore, Flagstaff Hill, Cannon Hill, the Railway Station, Lady Bay, Deep Blue Resorts and accommodation providers. The overall layout of the reserve supports multiple pedestrian/cycle 'loop' trails however there is no continuous formalised perimeter trail around the whole reserve. There are multiple defined entry points. The reserve has good pedestrian and cycling links to the South Warrnambool residential area including the Woollen Mill development however, cycling within the reserve is not well supported due to gaps in the formal path network, existing accessibility issues and minimal existing bike racks. There are no formalised walking tracks in between the lakes. Instead there is an informal mown/slashed track that does not provide all-weather access. Currently there is no directional or information signage available at the reserve.

Community Feedback

The need for wayfinding signage showing walking tracks and destination points within and around Lake Pertobe was mentioned during the community engagement process. Construction of missing links to the footpath network particularly links to the Warrnambool-Port Fairy Rai Trail and to Jetty Flat sports precinct was also mentioned during the community consultation stage.

Recommendations

6.2.1 Develop and implement a wayfinding strategy for areas within and adjacent to Lake Pertobe.

HIGH PRIORITY

The strategy should identify the location and style for directional signage and maps in the reserve, including information about walking and cycling loops, providing travel times between key destinations in and beyond the reserve and highlight accessible features. The wayfinding strategy is to

incorporate information about the site’s history, environment, indigenous cultural heritage and leisure features.

6.2.2 Install wayfinding maps of the reserve in selected high traffic locations to facilitate easy navigation of the reserve and raise awareness of the variety of experiences and activities on offer.

IMMEDIATE PRIORITY

Lake Pertobe is Warrnambool’s premier open space and link between the CBD and foreshore as bookends to the reserve. It is of crucial importance that maps are prepared noting pathways, vehicle access, car parking areas and activity zones.



Example of a wayfinding map

6.2.3 Name all walking paths/loops, play areas and barbecue shelters to improve navigation and wayfinding.

HIGH PRIORITY

Through naming each precinct (ideally with Gunditjmara names and/or names pertaining to the geology, ecology/ environment), wayfinding will be easier for visitors to the reserve. Already the Sandpiper water bird (Pertobe means sandpiper in the Gunditjmara language) has been recommended as a possible design theme for the reserve and it is appropriate that other names of equal standing considered for sections of the reserve. Naming of sections of the reserve will assist Council and event organisers in better managing festivals and other events. Naming of precincts will assist in the deployment of work crews vehicles and access during emergency situations. The naming of precincts should be as per the already compartmentalised activity zones of playspaces and shelters.

6.2.4 Design and develop a pedestrian and cyclist-friendly entrance from Harris Street Reserve by formalising pathways, installing appropriate fencing and wayfinding.

MEDIUM PRIORITY

Harris Street Reserve with its soccer, cricket and dog training facilities is strategically located at the northwest corner of Lake Pertobe and is a link to the railway station, the CBD and residential areas to the west of Lake Pertobe. Therefore there is a strong requirement for the improved path network of Lake Pertobe to link into a formalised pathway system with wayfinding signage within Harris Street Reserve, thereby creating connectivity to the northwest.

6.2.5 Design and develop a pedestrian and cyclist-friendly entrance to the foreshore precinct at the corner of Banyan Street/Pertobe Road and Merri Street (and integrate into the wayfinding strategy for Lake Pertobe and surrounds).

MEDIUM PRIORITY

This is the main vehicular access to connect to the breakwater, the foreshore and Lake Pertobe for motorists, pedestrians and cyclists entering Lake Pertobe from the Warrnambool CBD and the northeast. The Maritime Museum and Visitor Information Centre is to the immediate east, making this intersection the gateway to the reserve, the breakwater, Thunder Point and the foreshore.

6.2.6 Improve pedestrian and cycle connections between Lake Pertobe and all adjacent public areas by improving and connecting paths, and the addition of wayfinding information.

MEDIUM PRIORITY

Currently the existing narrow ‘sand through scrub tracks’ are easily missed, plus a more legible asphalt pathway near the Warrnambool Surf Life Saving Club lead to the Lady Bay foreshore. Providing wayfinding signage and increasing the visual prominence of particularly the sand tracks leading from the existing picnic shelters is required.

6.2.7 Construct new shared path across the southern side of Lake Pertobe Reserve to link all pedestrian crossing points on Pertobe Road as well as create raised crossing points

HIGH PRIORITY

The southern side of the Lake Pertobe Reserve currently lacks any form of pedestrian paths, the reserve itself lacks any pathways to ensure that pedestrians can enjoy the reserve on a consistent surface. Pedestrians rather have to cross the road on the southern side of Pertobe Road to walk or cycle on a path, the Construction of a shared pathway on the southern side of the reserve will create a fantastic promenade which will link existing facilities including car parks, picnic shelters and some all abilities play equipment performing a vital walking infrastructure goal. Providing pedestrian raised pathways across vehicle accesses will also ensure that the pathway provides a pedestrian focused piece of infrastructure.

6.2.8 Complete the existing pedestrian loops and sub-loops in the reserve by constructing new paths and filling gaps in the existing network to create multiple options for a continuous path of travel around Kids Lake and Main Lake.

MEDIUM PRIORITY

There is a need for a legible and well-laid out path system both to the perimeter of Lake Pertobe and between the lake systems. Currently there is the North, East and Southern section of Lake Pertobe Reserve which lack pathways. The installation of a 2.5 metre wide concrete path will not only allow for paths to link up the large amounts of facilities including play areas, bbq areas, car parks but it will create a fantastic pedestrian loop with all abilities access. Pathways will need to have distance markers to assist people interested in circuit walking/running or cycling.

6.2.10 Construct a path between Mill Lake and Main Lake and on the north side of the Main Lake to connect to the Northern Path.

MEDIUM PRIORITY

There is an existing mown/slashed grass track subject to inundation between the two lake systems. Full construction of a concrete path in the sections subject to inundation will provide more acceptable pedestrian surfaces.

6.2.11 Provide and clearly designate emergency access at all entrances to the reserve.

MEDIUM PRIORITY

Lake Pertobe of 58 hectares in area, is large and in parts somewhat secluded. Naming of the precincts of the reserve will assist emergency vehicles in locating incidents and adding emergency markers at key landmarks and entrance points will assist in locating part of the reserve for emergency agencies.

6.2.12 Investigate options to improve pedestrian access across the railway line to link Lake Pertobe to Warrnambool's CBD.

MEDIUM PRIORITY

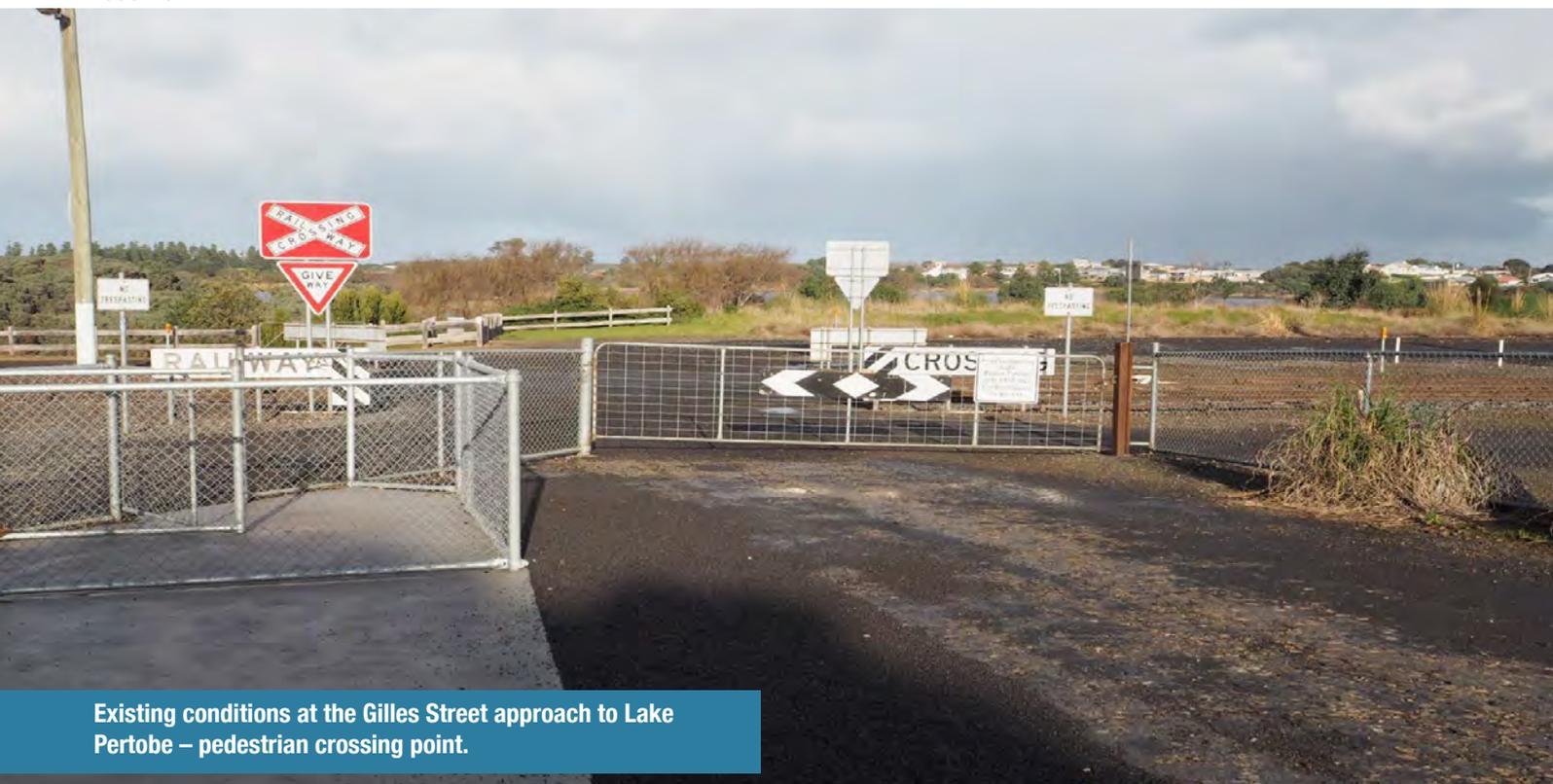
One way to reduce the pressure of visitation and access by car/car parking pressure is to encourage people to walk from the CBD area to Lake Pertobe. Upgrading the Gilles Street crossing may be difficult, given it would involve VicTrack. Improving the pedestrian connections from the north to the crossing should actually be a higher priority than the crossing itself. A potential overhead crossing of the railway line with switch back ramp approaches to meet departure gradients is one long term option.



6.2.9 Construct a new (shared) path to create pedestrian and cycle-friendly connections across the south west boundary of the reserve linking with path on the Northern side of Pertobe Road in 6.2.7.

HIGH PRIORITY

At peak times visitation pressure is high, the Masterplan has actively sought to encourage activity away from the busy frontage, and provide improved active transport linkages provision to the southern and western sections of the reserve.



Existing conditions at the Gilles Street approach to Lake Pertobe – pedestrian crossing point.

6.3 Access for All

Current Situation

Most of Lake Pertobe is relatively flat, making access to people with mobility issues or with prams relatively easy.

The following elements are the existing all abilities infrastructure:

- Multiple disabled car parking spaces with path connections to the barbecue shelters (east and west of Events area 1, west of Events Area 2, northeast of Events Area 3 and west of the barbecue shelter adjacent to the toilet block south of Pertobe Road)
- A small equal access playspace that links to an accessible picnic table and a disabled car parking bay
- The maze in Play Area 1 is suitable for wheelchair access
- Accessible bridges linked to an accessible picnic table
- A variety of seating options in the barbecue shelters
- Disabled toilets to the south of Play Area 3

There are no wayfinding signs or maps to show where these elements are in the reserve.

There are many existing infrastructure elements that do not provide all-abilities access. Some of the bridges and fishing platforms do not support all abilities access. The informal tracks to the north, east and west of Main Lake are mown/slashed grass, which do not support all-abilities or all-weather access.

Community Feedback

The community overwhelmingly supports improvements to the existing path system and inclusion of new play oppor-



Example of wheelchair-friendly play equipment (Source: The Bay Push)

tunities that would improve accessibility for people with mobility issues.

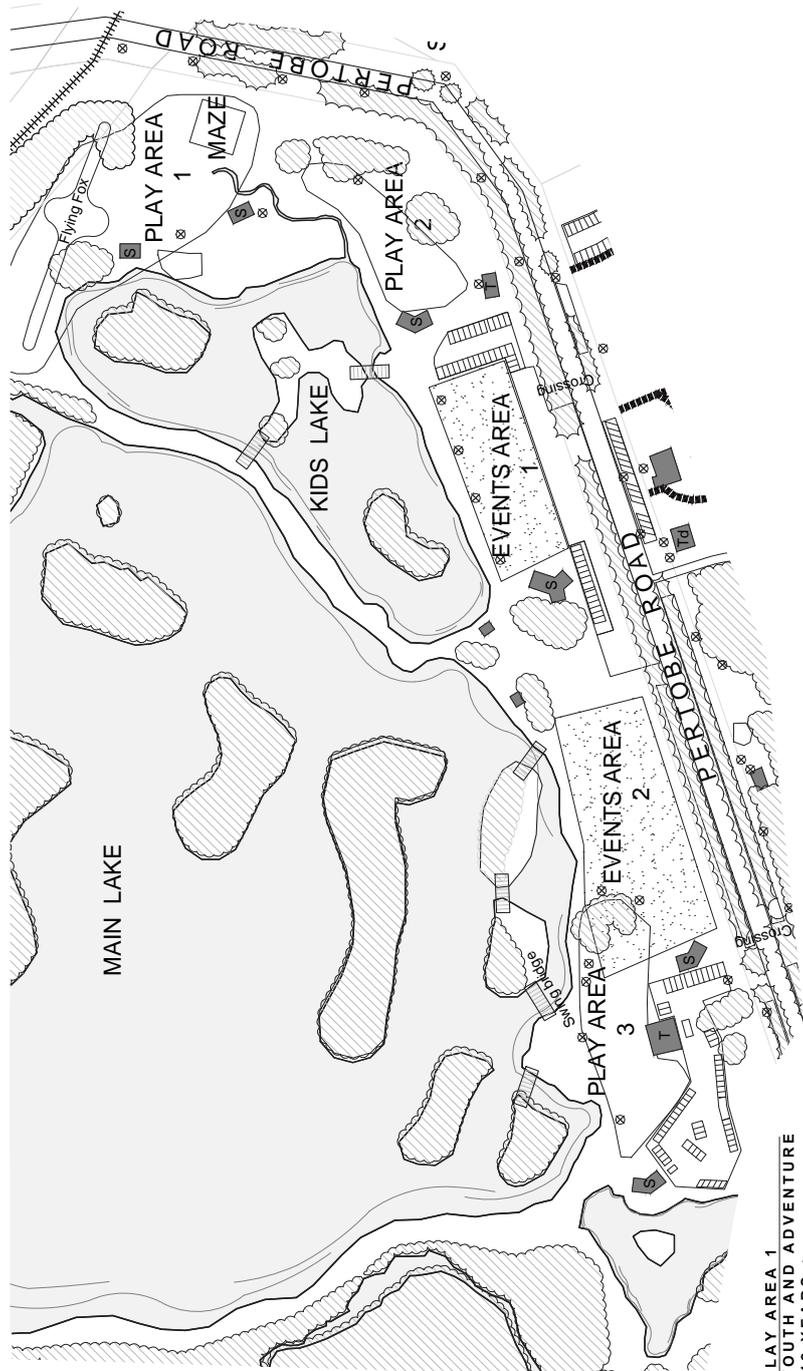
Recommendations

6.3.1 Include information about accessible destination points and infrastructure (paths, play, social, toilets etc) in the wayfinding information.

HIGH PRIORITY

The provision of information and wayfinding signage and markers will inform people of the reserve's attributes, diversity of use and environment. In the longer term, assist in spreading the intensity of use across the reserve.





**PLAY AREA 3
SLIDES, ETC.
MIXED/ALL AGES**



Slide hill



Miracle slide, tyre swing and spinner



Junior playspace



Mini trampolines



Rock pool

**PLAY AREA 2
YOUNG CHILDREN
PRESCHOOL TO 12 YEARS**



Toddler playspace



Equal access playspace

**PLAY AREA 1
YOUTH AND ADVENTURE
12 YEARS +**



Maze



Artificial creek and rock pool



Rock pool



Junior and senior flying fox

STRENGTHS

- Integration of adventure play areas with the 'natural' environment
- Unstructured links in between the playspaces
- Diverse play experiences on offer

CHALLENGES

- Lack of shade at all the playspaces
- The miracle slide, spinner and four tyre swing are play elements that cannot be replaced at end-of-life (2023). Some play elements such as the rock pools does not strictly meet safety standards
- Regular vandalism to play equipment

**EXISTING PLAY INFRASTRUCTURE
LAKE PERTOBE - WARRNAMBOOL
WARRNAMBOOL CITY COUNCIL**

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Project No.: 16-033

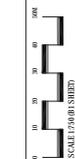
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Drawing No.: Sheet 1 of 1

Amendments:

Title: Existing Play Infrastructure
Lake Pertobe - Warrnambool

Client: Warrnambool City Council



6.4 Play Infrastructure

Current Situation

There is a diversity of play experiences on offer within Lake Pertobe. The play elements are linked informally which contributes to the 'adventure feel' of the playspaces. The three existing playspace precincts are:

- Play Area 1 – includes the maze, junior and senior flying fox, rock pool and artificial creek
- Play Area 2 – toddler playspace and equal access playspace
- Play Area 3 – slide hill, rock pool, junior playspace, mini trampolines, miracle slide, tyre swing and spinner

The existing all-abilities play elements within the reserve are the maze in Play Area 1 and an equal access playspace in Play Area 2 which is currently in poor condition and requiring replacement. While the maze is internally accessible by wheelchair, there is no footpath leading to it.

Community Feedback

The community supports improvements to the playspaces to make them safer for young children and to allow all-abilities access particularly for children with mobility issues. These include fencing around the toddler playspace, installing rubber mats under some play equipment and providing shade to playspaces. Requests have been made to either construct a dedicated water-based playspace or to incorporate water-based play into the existing playspace precincts. The incorporation of natural and sensory play experiences and adventure-type play infrastructure has

also been documented during the community engagement process.

Lake Pertobe is acknowledged as being one of the state's best playspaces. The several core sites of play apparatus are well-compartmentalised and defined by mounding, vegetation, including grassed areas and picnic shelters.

Recommendations

6.4.1 Design and construct an exciting, unique, inclusive, challenging and innovative playspace in Play Area 2 for 0-12 years

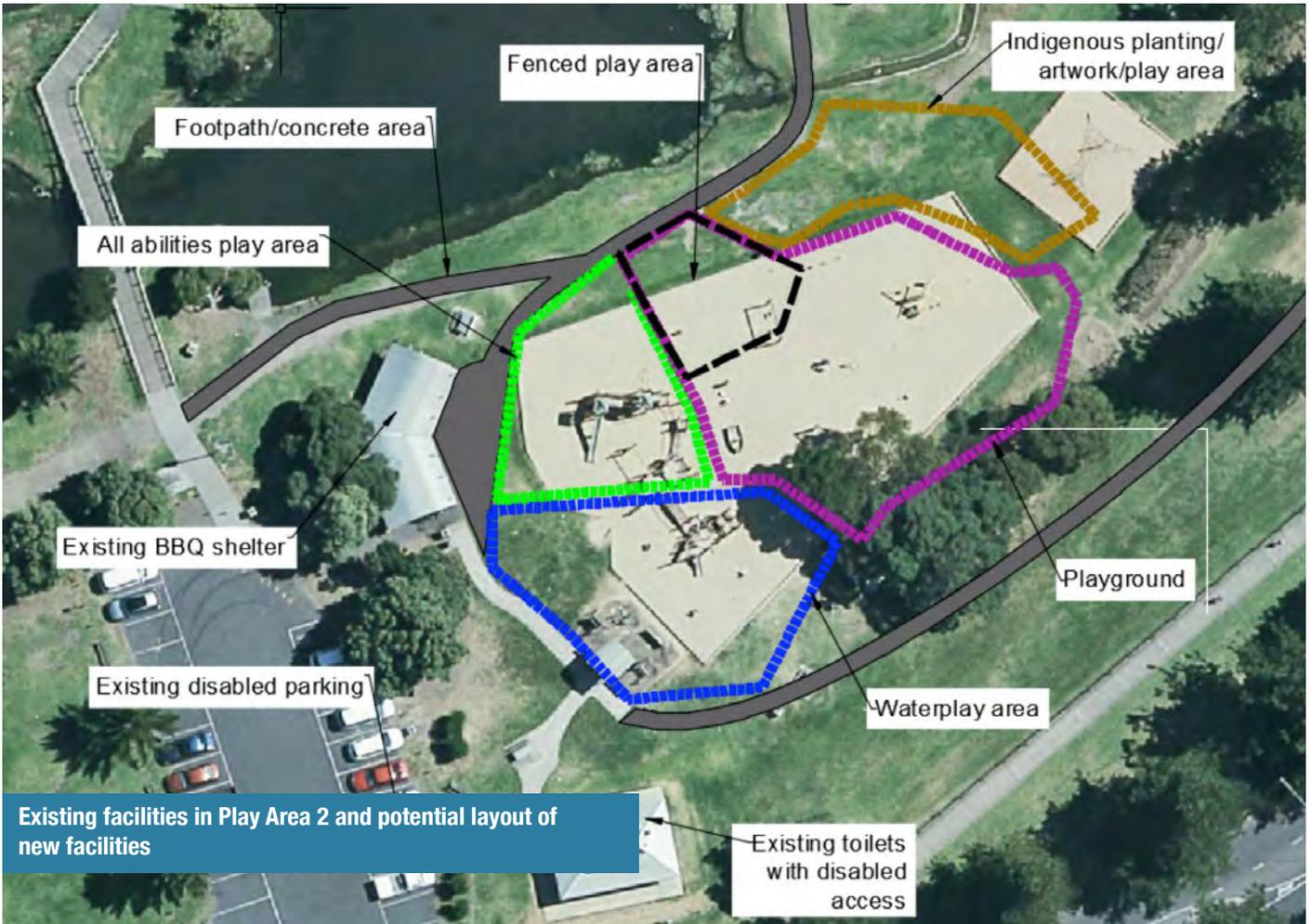
IMMEDIATE PRIORITY

The playspaces at Lake Pertobe are a very high value asset to the Warrnambool community and tourists abroad. Particular potential is present for Play Area 2 to be expanded to incorporate a high profile unique attraction. Play Area 2 has been identified as a key facility which can incorporate modern waterplay, new all abilities equipment and significant iconic playground equipment.

Installation of equipment at Play Area 2 will represent the highest value for money investment in Lake Pertobe as the site currently already has significant supporting facilities adjacent, including fully accessible disabled and ambulant toilets, fully accessible car parking and accessible bbq areas and shelters.

The playspace is one of the key projects for Lake Pertobe and Warrnambool in general, the creation of a significant facility in this location will help re-establish Lake Pertobe as one of the state's premier play facilities. The playspace is to feature:





Unique playground equipment Lake Pertobe was once a one of a kind in its provision of unique and exciting play equipment. There is a pressing need to once again become a leader in play equipment provision. The playspace is to feature unique or rare play equipment to provide an exciting wow factor one of and one a kind experience.

Water Play a modern water play system is required in this area to create a new a safe interaction point for water and children. The current wading pools and ponds in Lake Pertobe represent a potentially unsafe slippery environment; the creation of a modern waterplay facility will greatly improve the facility. This will also include truly accessible play equipment for all children to play together.



Princess Diana Memorial Playground in Kensington Gardens, London. Source: Playground Adventure UK

Fencing Lake Pertobe has several playgrounds in close proximity to the open water bodies of the lake, while it would be unfeasible to fence the whole lake an opportunity exists to create an area for very young children to play with more of a barrier between them and the water allowing for a greater degree of safety and piece of mind.

True All Abilities Equipment Play Area 2 has some limited all abilities equipment which requires replacement, an investment is required to provide modern equipment which will allow for play that is fun for those of less ability and those of more ability to interact together. This is the best form of inclusive play as it truly removes any distinction between peoples and allows everyone to play together. Below is an example of equipment which provides a truly inclusive opportunity.



Example of water play elements

6.4.2 Design and develop a diverse range of exciting, unique, challenging and innovative play for all ages by designating specific user groups for play area 1 and 3:

Play Area 1 – Youth/Adventure – Ages 12 years plus

Play Area 3 – Slides etc – All ages / Mixed Area

HIGH PRIORITY

The Play Areas 1 and 3 require significant investment in the potential to create adventure play for older children along with the ability to promote other portions of Lake Pertobes facilities.



Log and rope climbing structure

6.4.3 Provide unique, additional natural and sensory play experiences within existing play areas.

MEDIUM PRIORITY

Much of the play apparatus is of proprietary and standard construction. The natural or sensory play experiences are limited to the creek channel and water play mound to the northern end of the reserve. There is scope to include elements of vegetation (fragrance, touch), sculptural

animals, rocks and water play. There are some good water play spray/splash pads available operated by push button. Below are suggested plants with interesting flowers, fragrance and foliage texture that can be used as part of the natural and sensory play experiences:

Acaena novae-zelandiae	groundcover
Ajuga australis	groundcover
Anigozanthos flavidus	tufting plant
Atriplex semibaccata	shrub
Banksia ericifolia	large shrub
Banksia marginata	large shrub
Banksia spinulosa	shrub
Brachyscome multifida	groundcover
Carex appressa	tufting plant
Carex fascicularis	tufting plant
Cassinia aculeata	shrub
Chrysocephalum apiculatum	groundcover
Chrysocephalum ramossissimum	groundcover
Chrysocephalum semipapposum	groundcover
Correa alba	shrub
Correa reflexa	shrub
Corymbia citriodora 'Dwarf Pink'	small tree
Dianella longifolia	tufting plant
Dianella revoluta	tufting plant
Dodonaea viscosa subsp. spatulata	shrub
Eucalyptus leucoxylon 'Euky Dwarf'	small tree
Eucalyptus mannifera 'Little Spotty'	small tree
Ficinia nodosa	tufting plant
Helichrysum obcordatum	shrub
Pimelea ferruginea	shrub
Poa labillardieri	tufting plant
Rhagodia spinescens	shrub
Rytidosperma geniculatum	groundcover
Wahlenbergia communis	groundcover
Wahlenbergia stricta	groundcover
Xerochrysum viscosum	groundcover



Boulders as play features



6.4.4 Provide additional challenging adventure play opportunities in Play Area 1.

HIGH PRIORITY

Adventure play components using large dimension logs, ropes and mobile sections will appeal to older children.



Parkour play elements (Source: Maroondah City Council)

6.4.5 Remove the paddling pools and creek feature in Play Areas 1 and 3 and replace with other water-based play elements in Play Area 2

MEDIUM PRIORITY

The paddling pools have limited attraction and the rock work and crevices are potentially dangerous in terms of hidden broken glass, entrapment and other injuries.

6.4.6 Include additional inclusive play elements and improve accessibility in all Play Areas by removing barriers such as raised timber edges and sand soft fall and replacing with accessible pathways and surfaces as appropriate.

HIGH PRIORITY

An accessible playspace does not only constitute accessible play equipment, provision of accessible pathway connections and surfaces within and around the playspaces is also essential.

6.4.7 Construct a new play area or feature in the central section of the reserve to create a new destination which encourages users to explore areas beyond the Pertobe Road frontage.

MEDIUM PRIORITY

The creation of a new play area(s) away from the intensively used Pertobe Road corridor would assist in providing people with options in other sections of the reserve. Establishing an iconic climbing structure on one of the islands of the Main Lake or in between the Kids Lake and the Main Lake would assist in drawing people from the intensively used corridor to other parts of the reserve thereby dispersing activity and reducing pressure on the activity corridor parallel to Pertobe Road. The lake environment awaits discovery and interpretation through cultural heritage and environmental themes.

6.5 Arts and Culture

Current Situation

Lake Pertobe's status as a regional recreation reserve makes the precinct an ideal site for public art installations. Currently existing artwork is limited to murals on the maze in Play Area 1 and the sewer pump station. There is limited recognition of the Aboriginal and European heritage of the reserve.

Community Feedback

Demand exists for the installation of artworks in the form of sculptures and artistic feature elements along the reserve's path system.

Theming

Currently a visit to the lakes and the main Pertobe Road corridor leaves the visitor or local with little awareness of the environmental and cultural significance of the former wetland status of the lake. The integration of wayfinding theme and mural examples such as the Ngatanwarr Welcome Mural on the corner of Kepler and Merri Street all assist in making the journey and visit to Lake Pertobe more informative and memorable. The relationship of the maritime precinct and village offers opportunities for incorporation into storytelling.

6.5.1 Include and share stories about Lake Pertobe's heritage, indigenous culture, stormwater/drainage functions and environmental values through improvements, wayfinding, precinct names and other on-site information.

HIGH PRIORITY

This builds on the idea of creating interest and a sense of place for the reserve. During the community consultation and engagement process Part A, it was evident many

people are unaware of the environmental values of the reserve. There are opportunities to incorporate references to Gunditjmarra culture and the environment/ecology.

6.5.2 As 'Pertobe' is derived from the word 'pirtupp' meaning small sandpiper in aboriginal language, include the bird as a theme where appropriate, to acknowledge local aboriginal culture and identity within the reserve.

IMMEDIATE PRIORITY

Lake Pertobe is recognised in a local publication brochure 'Birds of Lake Pertobe' as one of six Warrnambool Region Birding sites and two other sites of close proximity – Thunder Point and the Merri River estuary and associated wetlands. It is appropriate that a bird common to the area can become the branding image for the reserve.



Example of integration of aboriginal culture within a pathway in Swan Reserve



Example of a bird used as a theme for feature paving and seating at Lake Colac



6.6 Recreation and Social Use

Current Situation

Currently there is good existing infrastructure to support leisure use of the reserve such as barbecue units and their integration with playspaces, open spaces and the lake environment. The cricket pitches, barbecue areas, playspaces, picnic areas and open spaces are available for use free of charge for individuals, groups and events. A number of commercial operators conduct hire businesses on the eastern edge of Kids Lake and Main Lake such as canoe, paddle boat and small motorboat hire and mini golf. Dogs are not allowed within the Lake Pertobe and the Warrnambool-Port Fairy Rail Trail to the west however, walking dogs on lead is allowed at the foreshore precinct areas including the Foreshore Promenade. Consumption of alcohol is prohibited in the reserve between 2pm to 4pm and 10pm to 11am daily.

Lake Pertobe is recognised as an important bird habitat. While bird hides have been constructed in the past, they have been a target of vandalism.

Community Feedback

The community is firmly against the charging of fees to use the reserve for both general usage and holding events and is of the opinion that there are enough businesses present in the reserve, i.e. the mini golf and the boat rides. There were comments about implementing safety procedures, including having security patrols after hours to address the lack of passive surveillance in the reserve particularly to the central and northwest areas. Requests have been made to construct additional infrastructure to encourage youth and adults to participate in casual sports and recreation activities such as basketball, soccer, petanque and netball. Opinion was divided on whether dogs should be allowed or not within the Lake Pertobe Reserve.

Recommendations



6.6.1 Construct a half-court basketball and/or other active recreation infrastructure (eg netball/soccer/table tennis facilities) to encourage young people and adults to participate in casual sport.

MEDIUM PRIORITY

The provision of a basketball half court, casual soccer goals and netball rings to the core sections of the Pertobe Road corridor adds a leisure dimension, particularly for older teenagers.

6.6.2 Construct several elevated viewing mounds on the edge of the Main Lake and/or Mill Lake.

LOW PRIORITY

Viewing mounds and platforms will create another dimension of interest and one or two at least should be strategically located away from the current high usage zones to assist in dissipating intensity of use. One of the mounds could be integrated with nature-based play experiences.



An example of a viewing mound in Lake Colac



6.6.3 Make a revision to the local laws applying to Lake Pertobe Reserve to allow dogs-on-lead to use the perimeter pathways.

MEDIUM PRIORITY

Dog ownership is an important part of many people’s lives through companionship, socialisation and exercise, all of which contribute to community wellbeing. Dogs however, pose a threat particularly to bird and native marsupial populations. The balance of allowing dog on lead to certain areas of the reserve is a fair and reasonable consideration by Council in maintaining a balance of community wellbeing and consideration of the environment.

6.6.4 Install clear signage at entry points and along pathways, and communicated via other channels available, to indicate where dogs are permitted and not permitted at Lake Pertobe.

HIGH PRIORITY

Clear signage will increase awareness of where dogs are permitted and not permitted within the reserve.

6.6.5 Investigate the formation of a Friends of Lake Pertobe group to increase community involvement in the implementation of the Masterplan.

HIGH PRIORITY

Harnessing local knowledge, skills and enthusiasm will greatly contribute to the presentation and ongoing maintenance of Lake Pertobe.

Proposed perimeter pathways for dog walking





6.7 Environment and Landscaping

Current Situation

The saline wetlands of Lake Pertobe provide an important habitat to wildlife including threatened species and migrating water birds. A number of indigenous plants exist in the reserve including at least one with threatened species status.

Environmental sustainability measures such as the installation of solar panels on the depot roof and the presence of reasonable recycling points across the reserve have been implemented, but could be improved.

Community Feedback

Suggestions have been put forward by the community to improve the water quality in the lakes, clean the northern perimeter of rubbish, replace some of the aging native plant species and plant additional trees to provide shade.

Recommendations

6.7.1 New plantings will be indigenous wherever possible, with exotic trees used to provide natural shade as required.

IMMEDIATE PRIORITY

The Norfolk Island Pine trees, while not indigenous, form a strong character of a maritime setting and Warrnambool's main street, Raglan Parade is one of country's most iconic avenues of Norfolk Island Pines. Pertobe Road with 158 Norfolk Island Pine trees assists in supporting the charac-

ter/theme, as does the lower end of Liebigh Street and its interface to Merri Street.

Recommended New Plantings

Indigenous

Acacia melanoxylon
Allocasuarina verticillata
Astroloma humifusum
Banksia integrifolia
Banksia marginata
Baumea juncea
Chenopodium candolleianum (syn. Rhagodia candolleana)
Ficinia nodosa
Juncus kraussii
Kennedia prostrata
Leptospermum continentale
Leptospermum lanigerum
Leptospermum laevigatum
Leucopogon parviflorus
Melaleuca ericifolia
Melaleuca lanceolata
Myoporum insulare
Olearia axillaris
Poa poiformis
Sarcocornia quinqueflora

Native

Acaena novae-zealandiae
Banksia praemorsa 'High Noon'
Carpobrotus rossii
Correa alba
Disphyma crassifolium
Melaleuca armillaris
Melaleuca mesophila
Myoporum parvifolium

6.7.2 Plant new groups of advanced deciduous trees for shade at the edges of grassed, open space areas/events areas.

HIGH PRIORITY

From the selection of deciduous trees listed, several groups of deciduous trees are to be planted to the perimeter of most of the events areas. Shade trees need to be tolerant of the maritime conditions experienced at the reserve.

Recommended Deciduous Trees for Shade

Acer x freemanii 'Autumn Blaze'
 Acer negundo 'Sensation'
 Acer rubrum
 Fraxinus excelsior 'Aurea'
 Fraxinus pennsylvanica 'Cimmaron TM'
 Fraxinus pennsylvanica 'Urbanite TM'
 Melia azedarach 'Elite'
 Pyrus calleryana

6.7.3 Review existing plantings and identify trees/shrubs for removal and/or replacement.

HIGH PRIORITY

A comprehensive and detailed plan is required to identify both exotic and native trees and shrubs that are either weed species or invasive. The plan should locate all trees including indigenous species that pose issues of personal safety (CPTED principles) to users of all parts of the reserve. Clearance of some vegetation from the north of Main Lake will allow tantalising view to the water from the Gilles Street approach.

6.7.4 Limit vehicles parking under the Norfolk Island Pine trees on Pertobe Road Monitor the health and condition of the Norfolk Island Pine trees regularly as part of the Council's existing tree audit/program.

MEDIUM PRIORITY

There are approximately 15 Norfolk Island Pines in the mid-length of Pertobe Road that have seriously deteriorated and are under stress. This is likely due to soil conditions, prevailing salt-laden winds and high intensity of vehicle parking to the particular zone, which compacts root systems' access to aeration and water. There is a total of 158 Norfolk Island Pines forming the avenue on Pertobe Road. There is parking available under approximately 130 trees consistently ranging from single bays to four car park bays between trees that are at 14 metre centres. There is currently a capacity of between 350 to 400 vehicles parking under the Norfolk Island Pines along Pertobe Road. Due consideration has been given and inspection of other Norfolk Island Pines for instance in Liebig Street. It is evident at the southern end of Liebig Street that car parking underneath the existing mature Norfolk Island Pines has not adversely affected the health and condition of the trees. Car parking is contained by existing tree islands of wood mulch between two to four metres from the trunk of each tree. This demonstrates a potential treatment for the Norfolk Island Pines parking area.

6.7.5 Improve the reserve's habitat values through weed control and works to improve water quality.

HIGH PRIORITY

Lake Pertobe's three lakes are fed from stormwater from Warrnambool Central Business District with three outfalls entering from the north edge of the reserve. Preliminary investigation has explored the potential/feasibility to improve the physical inflow and filtration of stormwater entering Mill Lake. Improved weed control, i.e. Pampas grass and other weeds is required to assist in providing improved habitat zones. The need is highlighted because of the extremely high visitation/activity pressures and the fact that Lake Pertobe is recognised as a bird habitat area linked to the Merri River system and Thunder Point.

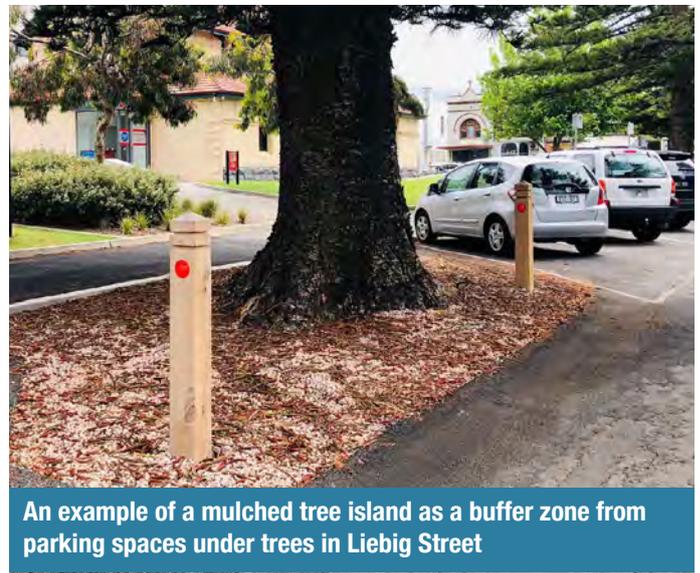
6.7.6 Remove pampas grass and other noxious weeds in the reserve.

HIGH PRIORITY

Pampas grass, a native to New Zealand can seriously and quickly invade maritime wetland systems. It is prevalent to several locations to the edges of the lake. Other serious weeds within the reserve include weeping willows, Coprosma repens, mirror bush, Cortaderia sellowiana (NZ flax), Oxalis, Kikuyu grass, angled onion and Delairea odorata (Cape Ivy). Replacement planting of indigenous vegetation would be required.



Existing vegetation at the Gilles Street approach



An example of a mulched tree island as a buffer zone from parking spaces under trees in Liebig Street

6.8 Events Infrastructure

Current Situation

The Lake Pertobe/Foreshore Precinct is a popular venue for events and the number and size of events is increasing, most of which coincide with peak summer use. At present no charges are made for events conducted at the reserve. Everyday individual and group use of facilities by locals and visitors will remain casual and non-charged. The extensive off-road areas make the reserve a good venue for hosting running/cycling events including Surf to Surf Fun, Australian Schools Triathlon and Tour de Depot. The larger events including Wunta, Friday Night Market and Twilight Movies are held in Events Area 1 and 2 and smaller events including the World Wetland Day and Scripture Union event in Events Area 3. Council has an informal practice of alternating holding events in the three Events Areas to prevent the grass of either areas being too compacted.

Power is inadequately provided for events. Three phase power is set up for individual events, which is a recurring cost even for Council-run events such as the Twilight Movies. For events such the Friday Night Markets that provide their own power, a key issue is the number of power cables on the ground including through pedestrian thoroughfare areas. There is no access to hot water for events held at the reserve.

There are no dedicated loading points and boom gates are frequently blocked by parked cars/events vehicles during periods of high parking demand.

Community Feedback

The community supports the construction or installation of additional infrastructure such as a stage, barbecue units and litter bins to better support more events.

Recommendations

6.8.1 Review access to the electricity supply for events and install access points in appropriate locations.

HIGH PRIORITY

Onsite power points will increase safety given the significant number of events conducted on the reserve. Having a permanent power supply can also assist in a potential stormwater harvesting scheme.

6.8.2 Develop an events and activities policy to guide and manage appropriate and sustainable use of Lake Pertobe.

IMMEDIATE PRIORITY

a. Prepare an events policy to guide appropriate use for groups/individuals who require access to power and water within the reserve or for people who want to book and have exclusive use of the shelters. The range of revenue-generating activities for Council needs to

be broadened. The events policy should also consider management and access arrangements for events with a consistent policy across Council facilities.

b. Prepare a policy framework identifying suitable activities and those that are not compatible. The policy should consider a review on the banning of dogs within the reserve and consider allowing dogs on lead within the perimeter of the reserve which will likely increase use and visitation by local residents. Signage should be installed at the entrance advising of dog on lead area.

6.8.3 Develop an online interactive process for the approval, booking, management and promotion of events at Lake Pertobe.

HIGH PRIORITY

The introduction of interactive online booking system and charge for use of facilities by commercial operators seeking a return for services used will assist in the management of events and traffic during peak-use months and general maintenance of infrastructure and the landscaped areas.

6.8.4 Develop a Policy around fees and charges for Council Open Space

HIGH PRIORITY

The introduction of a policy for fees and charges for opens spaces will ensure that charging of commercial use of public assets is fair and equitable and that community uses are encouraged and effectively managed.

6.8.5 Develop a policy for Itinerant Trading on Council managed Land.

HIGH PRIORITY

The introduction of an Itinerant Trading Policy will assist to support and enhance the vibrant and unique experiences available to the community and visitors to Lake Pertobe. The policy should allow Council to better manage requests to operate mobile and temporary businesses on all Council managed land.





6.9 Parking and Transport

Current Situation

During the cooler months, onsite parking is generally adequate and people with mobility issues can easily be accommodated within a number of disabled car parking spaces. There is plenty of informal parking for overflow, including the Cannon Hill car park area, which is also well used for overflow parking during events. The existing formal car park areas within the core demand area (between the Mini Golf and Play Area 2) are limited. During the summer months, there is an extreme concentration of activities within the foreshore precinct, which causes congestion on Pertobe Road and pressure on parking spaces and general vehicle access. Informal parking of cars on either side of the road reserve to Pertobe Road is uncontrolled during the peak-use months. As a result of the practice of informal parking, (a) cars park even on the wide nature strip adjacent to the maze which necessitates drivers on departure, reversing cars onto a bend of Pertobe Road (b) the grassed areas to some sites immediately under Norfolk Island Pine trees are compacted and a number of Norfolk Island Pines in Pertobe Road are in poor health probably due to soil conditions, salt-laden winds and exacerbated by soil-compaction of root systems.

There is a total of 158 Norfolk Island Pines forming the avenue on Pertobe Road. There is parking available under approximately 130 trees consistently ranging from single bays to four car park bays between trees that are at 14 metre centres.

Being flat, and virtually at the level of the Merri River, the reserve has several large areas of poor drainage, some of

which attracts unauthorised vehicle access and abuse to less frequented/defined use areas such as around Jetty Flat oval and the BMX track.

Community Feedback

The community strongly supports additional car parking and strategies that would assist with better traffic flow during the peak-use months including better traffic management and alternative parking agreements.

Recommendations

6.9.1 Prioritise, design and cost all parking recommendations as detailed on the parking layout plan for Lake Pertobe.

HIGH PRIORITY

Given that there are several recommendations for the construction of additional car parking areas as well as formalising existing car parking spaces, prioritising each car parking-related project for Lake Pertobe would assist Council in allocating and sourcing funds. Ready identification of parking areas within the precinct and identification of each precinct (parking area on maps and on site) will assist Council and event organisers in better management of events.

6.9.2 Extend and formalise the car park area next to the mini golf.

HIGH PRIORITY

This area was identified in Council's Background Report Part A (see Appendix 1) to assist in the provision of

additional car parks in the vicinity of 50 cars, combined with a sealed access route to the Pigeon Club area. The provision of a shared pathway system through this area of the reserve would assist with access to the reserve for people arriving by car. Establishment of car parking in this area will assist in dispersing traffic across the Pertobe Road precinct during the peak-use months.

6.9.3 Extend the car park area near the sewer pump station to include extra vehicle spaces.

MEDIUM PRIORITY

The grassed area between the sewer pump station and the car park area to the north is not particularly heavily used. As identified in Council's Background Report (see Appendix 1), there is space to formalise additional car parking spaces to the south of the existing car park area, avoiding underground services.

6.9.4 Improve the vehicle parking area on the northwest side of Pertobe Road by sealing and line marking vehicle parking to maximise the spaces available near Events Area 1.

HIGH PRIORITY

There is space to line mark and seal additional car park areas to provide additional car park spaces around the existing formalised car park area to the southeast of Events Area 1. As this is primarily the area used by buses, shuttles and trailers for drop-offs and pick-ups, formalising the extra car parking spaces here should be a high priority.

6.9.5 Develop overflow parking for the foreshore area along Price Street.

HIGH PRIORITY

There is space on either side of Price Street to provide and sign available overflow car parking spaces to either side of the street. Currently both sides are grassed. The south side would require considerable re-grading and drainage works to alter the open grassed channel. Establishment of car parking in this area will assist in dispersing traffic across the Pertobe Road precinct during the peak-use months.

6.9.6 Restrict inappropriate vehicle access to the Jetty Flat area.

HIGH PRIORITY

Restricting access to unauthorised vehicles in the Jetty Flat area will minimise damage over time. Supplementary soil placement and/or grading in parallel with improving the drainage will assist in providing drier pedestrian areas and improve the somewhat neglected appearance of this isolated area. With increasing usage of the Jetty Flat precinct, the issue of hoon behaviour will reduce through increased passive surveillance.

6.9.7 Install a barrier to the east of Play Area 2 to stop vehicles parking under the Norfolk Island Pine trees on the road reserve.

MEDIUM PRIORITY

Formalise parking to protect Norfolk pipes and develop garden spaces under trees. Currently the road reserve northwest of Pertobe Road near Play Area 2 is used for informal parking during peak-use months. Parking under the Norfolk Island Pines is not only detrimental to the trees' health, it poses problems in terms of vehicles causing a traffic bottleneck in that section of Pertobe Road and possibly posing danger to pedestrians walking on the asphalt footpath. By moving the fence farther east, the potential space for parking will be restricted, making illegal parking there impossible.

6.9.8 Communicate changes to parking and pedestrian connections at Lake Pertobe to increase awareness of park and walk options in the area.

MEDIUM PRIORITY

Lake Pertobe is directly adjacent to the foreshore precinct and from a parking perspective are best contemplated as an integrated area. While the Lake Pertobe review identified a number of parking proposal and footpath connections, there may be other requirements associated with the foreshore area.

It is recommended that a parking strategy is prepared that considers the whole Lake Pertobe and foreshore precinct holistically, with consideration for:

- The various user groups across the precinct,
- The peak activity times for each use / user group,
- The likely peak parking demands,
- The suitability of the existing parking supply both from a numerical perspective, but also in relation to the proximity to key land uses,
- Consideration for the potential 'sharing' of parking resources from complementary land uses,
- Review of the opportunities for expansion to existing parking facilities,
- Review of new parking opportunities,
- Identification of key walking linkages between the parking resources and the key land uses,
- Management of parking to cater for various user group (i.e. parking restrictions),
- Enforcement of parking to provide safe and efficient parking for the precinct, and
- Wayfinding signage to the key parking area.

Given the seasonal nature of activity associated with the foreshore area (camping and beach activity), it is important that the strategy considers 'absolute peak' activity in the December / January period and 'typical peak' activity in February / March.

The strategy will need to identify how parking is to be managed into the future to allow for efficient usage of Council resources.

Refer to Appendix 8 for more information.



6.10 Drainage and Water

Current Situation

Lake Pertobe plays a critical role in the filtration of stormwater from Warrnambool's CBD before stormwater enters the Merri River. There are two bores within the reserve and one at Jetty Flat, which are used for watering the en-tout-cas tennis courts to the west and to top up water levels in the Kids Lake to support the boat hire amenities and in the children's water play pools in Play Area 3. The bore water is too saline for some uses. Mains water is used for the irrigation of the landscaped and grassed areas of Lake Pertobe, the Harris St Reserve (partial), the cricket oval and the grass tennis courts. The drain outfalls, which are located in the northern perimeter, become litter traps during major storm events. There are some maintenance issues associated with the Fairy Street and Japan Street drain outfalls associated with overgrown Kikuyu and infrequent cleaning of the drains. A sediment bed was installed to dry out sediments from the Japan Street drain prior to removal offsite, but it remains unused.

Community Feedback

Community supports the cleaning of the drain outfalls to the north and the improvement of water quality particularly in the Main Lake.



Lake Pertobe overview of water sources (Source: Council's Background Report in Appendix 1)

Recommendations

6.10.1 Develop and implement a drainage maintenance program to ensure the lake's important drainage function is sustained.

HIGH PRIORITY

Program regular maintenance of the drainage system, particularly at the Fairy, Gilles and Japan Street outflows.

6.10.2 Investigate with Wannon Water the feasibility of alternate water sources from the main lake system for reuse at surrounding public areas.

HIGH PRIORITY

A water balance model (see Appendix 9) was created as part of the Masterplan study to determine the reliability of a possible alternate water source being stormwater harvesting based on the available runoff from the Fairy Street and Gilles Street outlet catchments.

There is several potential ways which Council could work with Wannon Water to secure alternate water sources and while stormwater harvesting is not the only source which is available, Two scenarios for this type of harvesting were modelled as examples; one with an annual water demand of 17ML (existing use) and one with the annual water demand of 32.5ML which is based on the existing use and proposed irrigation use.

Typically, the exact components of a stormwater harvesting system are determined during a feasibility study/design based on water quality sampling and other factors such as space and surface levels. For the purposes of this Masterplan, two general arrangements are proposed which cover the typical arrangements of a stormwater harvesting system. These options are discussed below:

pumped from the pond through a tertiary treatment system. The treated water would continue to be pumped to local storage tanks prior to use for irrigation.



System schematic option 2 (STORM Consulting 2016)

The arrangement of Option 2 is similar to Option 1, however the water is stored in an underground storage tank before being pumped through a tertiary treatment system (same as Option 1). The benefit of Option 2 is that the Lake does not need to be disrupted and altered to achieve an open storage.



System schematic option 1 (STORM Consulting 2016)

For this option, stormwater is directed from the outlet(s) to a sedimentation basin north of Mill Lake. Water then flows from the sedimentation basin to a constructed pond, which is segregated from the rest of the lake. Water is then

7 References

1 Visit Warrnambool (2017) Visitor Information – About Warrnambool.

Sourced from the Visit Warrnambool website. <http://visitwarrnambool.com.au/visitor-information/about-warrnambool/#.WH1MIFN97s1>

2 Monument Australia (2017) Lake Pertobe Project.

Sourced from the Monument Australia website. <http://monumentaustalia.org.au/themes/culture/social/display/95854-lake-pertobe-project>

3 G Higgins (1912) Outer Ports of Victoria, The Varsity Engineer: vol. 5, June 1912, Committee of the Melbourne University Engineering Society, Melbourne.

8 Appendices

- 8.1 Appendix 1** – Background Report 2016
- 8.2 Appendix 2** – Implementation Plan and Opinion of Probable Costs
- 8.3 Appendix 3** – Summary of Part A Background Report SWOT Analysis
- 8.4 Appendix 4** – Summary of additional issues and opportunities
- 8.5 Appendix 5** – Assessment of Merit of consultation outcome
- 8.6 Appendix 6** – Lake Pertobe Riparian vegetation survey - Australian Plants Society
- 8.7 Appendix 7** – Remnant Species of Lake Pertobe – Kevin Sparrow
- 8.8 Appendix 8** – Traffic Issues and Opportunities – Traffix Group
- 8.9 Appendix 9** – Stormwater Harvesting Options Report - STORM Consulting
- 8.10 Appendix 10** – Community Engagement Summary