



WANGARA RESERVE MASTERPLAN

Prepared for Bayside City Council
JUNE 2024

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Wangara Reserve Masterplan
FINAL Design Report
Prepared for Bayside City Council
June 2024

We acknowledge First Nations peoples and their continuing connection to land, waters and culture, because we strongly believe in reconciliation and collaborative engagement for a better future.

We pay our respects to Elders past, present and emerging, whose knowledge, traditions and stories guide custodianship on what will always be their ancestral lands.

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INTRODUCTION

01

MASTERPLAN OVERVIEW

Bayside City Council has identified an opportunity to provide a new large public open space at 20 Wangara Road, Sandringham. This 6.6 hectare site will complement and expand the existing network of green space in the surrounding area.

GroupGSA was engaged by Bayside City Council (BCC) in November 2023 to develop a masterplan for the site, to help guide its transformation. While the site currently has no formal name, for the purposes of this masterplan it will be referred to as “Wangara Reserve”.

The design team has explored a variety of options for the function and arrangement of the open space, considering the community’s needs and preferences for the future use of the site, in context of existing site conditions and previous land uses, relevant Council policy and strategy documents, and the objectives described in Council’s project brief.

This report covers a brief history of the site, analysis of existing conditions, and of the upcoming rehabilitation works (by others) to manage remnant soil contamination to meet the requirements for use as a public reserve. It also includes a summary of ideas that were gathered through community consultation activities, and how these have influenced the design.

Key ideas for the site that were raised through both internal and external consultation, have been tested for compatibility of use and available space on the site. Through this testing of ideas, and in collaboration with BCC’s Project Working Group, we have developed this Masterplan for the reserve.

Vision for the site

The November 2022 Council Resolution advised that this site should be transformed into parkland with high ecological value that supports the health and growth of indigenous plant communities and native fauna, while also functioning as passive open space for the enjoyment of local residents and visitors to the municipality.

While this vision was largely supported by community members who participated in consultation regarding the future of the site, there were also a high number of suggestions that the site should provide active recreation facilities and/or functions. Proposals included mountain biking, BMX pump track, skate park, pickleball courts, running track and fitness equipment.

Some of these ideas are incompatible with the on site conditions as a rehabilitated former landfill (which limits the amount of digging and earthworks that can occur), as well as the need to consider the sensitive interfaces with the residential area to the west and the cemetery to the east. In addition, certain types of activity that create significant noise (e.g. skate park) or environmental damage and erosion (e.g. mountain biking) are incompatible with the existing fauna habitat on the site and with Council’s strategy to include this site as a key ecological link with surrounding green spaces.

On that basis, this Masterplan represents the reserve as primarily a passive open space, with garden beds, trees, walking trails, places to sit, an open grassed area for informal play and gatherings, a fenced off-leash dog area and a small car park, but with allowance for low impact active recreation activities such as running, group fitness and kick-about.

Active spaces are separated from sensitive ecological areas (such as Bronzewing Pigeon



Aerial photo of Wangara Reserve site, looking south east

habitat) with vegetated buffers, and the site offers a broad range of passive recreation activities for the enjoyment of nature as well as opportunities for education about local flora and fauna.

The concepts in this masterplan are indicative only and will require detailed design investigations and feasibility studies to determine the ultimate configuration of the reserve.

PROJECT SCOPE

This masterplan sets out the vision for the development of the new Wangara Reserve as a large green open space for the community to enjoy.

This report provides an overview of the masterplan process and the factors that have influenced the design, including on-site conditions, Council policies and strategies, operational requirements, feedback from community and stakeholders about their desired future for the reserve.

The masterplan concept design drawings (plans, sections and imagery) provide the basis for further investigation and design work that will underpin the delivery of upgrades to the reserve. **All of the ideas presented in the masterplan are conceptual only and will be subject to further detailed design and feasibility investigations.**

Due to the high cost of delivering a large open space, implementation may need to be staged – this is to be determined by Council and will be dependent on future budgets and priorities.

Masterplan Process

Creating a masterplan is an iterative process that relies on feedback and input from community and stakeholders, and direction from Council on how this feedback should be reflected in the design.

GroupGSA has worked collaboratively with Bayside’s project team to collect and evaluate feedback from community engagement activities, key stakeholder groups, and Councillors. In addition we have tested ideas for the site with Council’s Project Working Group which includes representatives from a range of work areas such as Open Space & Recreation, Property, Capital Works,

Engineering, Traffic & Parking, Maintenance, and Engagement & Communication.

All of this collective knowledge, along with our own site investigations and background research has to determined the priority functions and features that were included in the Draft Masterplan. Following public consultation on the Draft Masterplan, these ideas have been further refined based on community, stakeholder and Councillor feedback, for inclusion in the Final Masterplan.

The masterplan design balances the desires of community and stakeholders against the constraints imposed by existing site conditions, operations and maintenance requirements and environmental considerations.



EXISTING CONDITIONS

- Steep slopes around the perimeter of the site will be retained and stabilised where necessary. This creates some challenges for providing access to the upper level.
- Due to the topography and the soil contamination, it may not be possible to provide power or water supply to parts of the site. This limits opportunities for installing irrigation, lighting, drinking fountains, etc.
- Remnant buildings and structures from the golf driving range are no longer in use and not currently fit for public use. Due to the (likely) high cost of refurbishment to meet building standards and EPA requirements, this masterplan proposes that they be demolished, with the long slab under the old stalls retained and re-purposed as an arbour. **Further detailed building condition assessments will need to be undertaken to determine the feasibility of retaining and or re-purposing some or all of the existing structures, which could result in changes to the rehabilitation plan. EPA approvals and the masterplan design for this area of the site.**

OPERATIONS AND MAINTENANCE

- The masterplan does not propose any changes to the existing commercial lease area (currently operated by Sandy Mini-Golf) and adjacent carpark at the north of the site. However, these are included within the study area to ensure that the whole site is considered holistically, as a set of interconnected zones and functions.
- Some additional parking will be required for park users and possibly also as overflow for the Bayside Community Sports Centre. The north-east corner of the site has been identified as the preferred location for the car park, with driveway

access from Wangara Road. **Further feasibility studies are required to determine the size, layout and entry point for this parking area.**

- Any proposed uses that could result in noise or privacy concerns must be located away from the residential area to the west and the cemetery to the east of the site.
- Bins will need to be located where easily accessible by waste contractor (i.e. near car park or site entry points)
- Maintenance access for mowing/pruning/litter collection will need to be retained at the south of the site, via the existing gate on Talinga Road.

ENVIRONMENTAL CONSIDERATIONS

- Closed landfills are not suitable sites for enclosed buildings or structures. The potential for landfill gas emissions from the below ground waste presents a safety risk.
- Existing contamination on the site requires soil capping before the masterplan can be implemented. Council has commissioned a Rehabilitation Plan for the site (separate to this masterplan).
- No deep-rooted trees, deep footings or enclosed buildings can be installed on top of the remediated soil cap across the top of the site, and trenching must not impact the cap. This may limit the potential provision of power and water across the top of the hill.
- The south-west corner of the site at on the lower level under the trees, is a known habitat area for the Common Bronzewing Pigeon. This area should not be disturbed by any significant works and habitat is to be increased if possible through additional planting.
- Existing large trees and other vegetation to be retained wherever possible.

COUNCIL RESOLUTION

Delivery of this masterplan is a 2023-24 Council Action Plan item, originating from the November 2022 Council Resolution, which states that Council:

1. *Confirms the future use of the site at Wangara Road as an Interactive Passive Open Space with an Environmental Focus for the purpose of developing a Rehabilitation Plan*
2. *Notes the process required to complete the development of the Wangara Road Masterplan, and that the Masterplan should include for consideration, but not limited to:*
 - *Best practice available for the management of the former landfill site*
 - *Mother stock area for the Bayside Community Nursery*
 - *Interactive garden beds*
 - *Protection and enhancement for native wildlife including Bronzewing habitat*
 - *A large Floral Clock consisting of predominantly indigenous plants.*

The Council Resolution items have been tested with the community and key stakeholders to understand their relevance and viability for this site.

The specific suggestions from the resolution were put to the community for consideration during Round 1 of community consultation, but generated little interest, with the most popular being “Native Wildlife Habitat”.

General feedback collected during Stage 1 of community consultation indicated that Council's desire for the future open space to have a passive and environmental focus, did not align with some community members' aspirations for the site to include active recreation infrastructure.

However, it was evident that a large proportion of the community supports a natural environmental focus for the reserve, and this was reiterated by the feedback received on the Draft Masterplan during Stage 2 consultation.

For this reason, the masterplan takes a balanced approach to delivering on the original Council resolution while also accommodating some of the community suggestions.

The table at top right summarises how the suggestions of the Resolution have been addressed in the masterplan.

Refer to page 9 for more information about the proposed landfill management solution.

Refer to Chapter 5: Consultation Summary for more information about the outcomes of community engagement and how the feedback received has influenced the masterplan design.

Council Resolution Items	Included in Masterplan
Passive Open Space with an Environmental Focus	Yes (with some low impact Active rec. opportunities)
Best Practice Landfill Management	Yes (addressed by the Rehabilitation Plan)
BCS Mother Stock Area	No (not viable in this location)
Interactive Garden Beds	Yes
Native Wildlife Habitat	Yes
Floral Clock	No (not appropriate for this site)



View of Wangara Reserve site from Talinga Road

COUNCIL PLANS & STRATEGIES

Key Council documents that have informed and guided this masterplan include:

Bayside City Council Plan 2021-25

Goal 1: Our Planet

- Strategic Objective 1.2: Protect and enhance our natural and coastal environments, biodiversity and unique ecosystems

Goal 3: Our Place

- Strategic Objective 3.1: Open space is increased, and foreshore is cared for, to support diverse use and connect to community

Goal 4: Our Promise

- Strategic Objective 4.3: Provide customer-focused and effective service delivery and value in all we do.

Bayside 2050 Community Vision

Theme 1: Living Environment/Natural Environment

- 1.3 Enhance and protect the full range of botanical flora and fauna biodiversity, which will be climate appropriate for 2050. Ensure our city remains a sustainable and biologically diverse environment, where residents and nature can co-exist.

Theme 2: Increase and Enhance Open Space

- 2.1 Ensure existing open space is maintained, protected and accessible to all.

Theme 4: Community Feel and Direction

- 4.1 Green open space: increasing open space by the acquisition of more land and better utilisation of existing spaces for pocket parks and community garden.

Urban Forest Strategy 2022

The goals outlined in the strategy are:

1. Increase tree canopy cover
2. Recognise the importance of the Urban Forest, through partnership and raising awareness of biodiversity gains.
3. Increase understorey planting, throughout Council streets, parks and reserves.

The tree canopy cover in Sandringham has approximately 17.01% tree canopy cover and 17.9% understorey cover. Bayside City Council aims to increase tree canopy cover to 30% in parks and reserves by 2040.

Other objectives in the Urban Forest Strategy include:

- Prioritising and strengthening the support of existing trees;
- Support and enhance our local biodiversity and protect locally endangered, native species via improving habitat connectivity and the protection and planting of EVCs;
- Adapt to climate change and maximise environmental outcomes including the retention of rainwater;
- Reducing heat exposure;
- Raise the level of community awareness and participation;
- Maximise community health and well-being

outcomes from increased tree and vegetation cover and spread the word on both big and little wins;

- Strengthen Council's ability to retain and monitor trees on both public and private land.

Bayside Park Improvement Habitat Linkage Plan

The Habitat Linkage Plan looks to identify opportunities of where to increase indigenous and native species, and diversify the species planted to strengthen wildlife corridors, which will in turn create additional habitat for native fauna.

Wangara Reserves provides an essential biodiversity linkage from Tulip Street to George Street Reseve, Pobblebonk Park and Merindah Park to Bay Road Heathland Sanctuary.

Bayside Biodiversity Action Plan 2018-2027

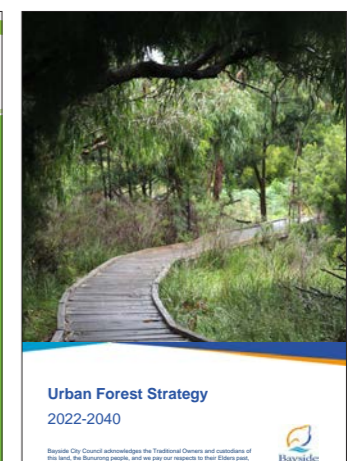
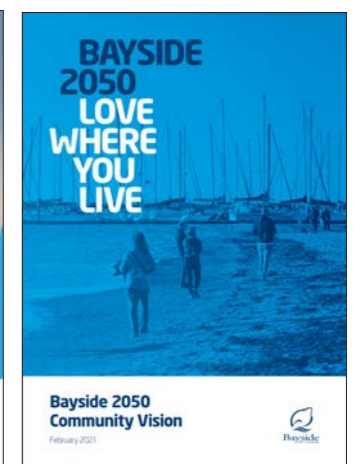
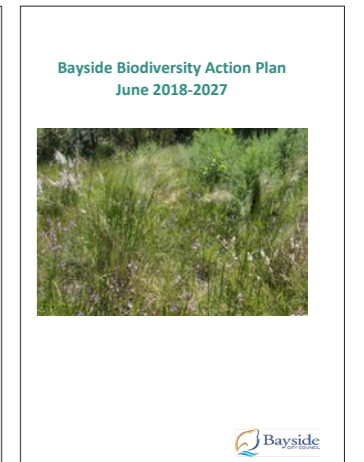
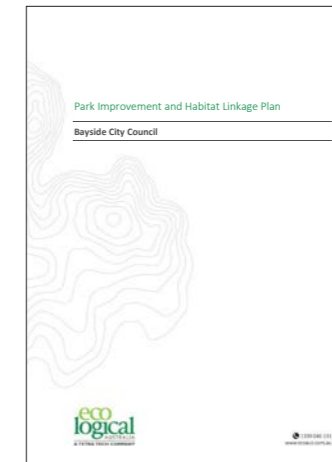
Bayside City Council's Biodiversity Plan aims to:

- Conserve and protect biodiversity;
- Integrating biodiversity and natural resource management;
- Managing threatening processes;
- Improving our knowledge; and
- Community involvement.

Urban Forest Precinct Plan - Sandringham 2023

The Urban Forest Precinct Plan outline key actions for each suburb in Bayside. The Sandringham precinct plan will respond to the individual needs, challenges and aspirations for the locality.

The interventions in this masterplan will aim to help achieve these goals.





BACKGROUND RESEARCH

02

DEMOGRAPHICS

Bayside Council

Population: 102,177 (47.8% M, 52.2% F)

Median age: 45

People aged between 0-19 years old make up approximately 24% of the population and people aged between 40-59 years old make up approximately 30% of the population.

The most common ancestries in Bayside City Council were English, Australian, Irish, Scottish and Italian.

In Bayside City Council, 69.7% of people were born in Australia.

(2022 ABS Census Data)

Sandringham

Population: 10,977 (47.1% M, 52.9% F)

Median age: 47

People aged between 0-19 years old make up approximately 22% of the population and people aged between 40-59 years old make up 30% of the population.

The most common ancestries in Sandringham were English, Australian, Irish, Scottish and German.

In Sandringham, 70.2% of people were born in Australia.

(2022 ABS Census Data)

Sandringham Forecast for 2041

The population in Sandringham is expected to grow to 11,793 people, with the average age to be 43 years old.

(2021 profile.id)

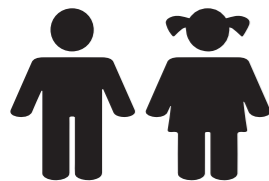
Dog Ownership in Bayside

The number of dogs registered in Bayside City Council was 12,477 in 2022/23.

Participants of a community survey have stated that off-lead offences are an issue in parks and on beaches where dogs are only allowed on-lead. (Domestic Animal Management Plan 2021).



Population:
101,306



0-19 year olds:
24%



40-59 year olds:
30%



Population:
10,926



0-19 year olds:
22%



40-59 year olds:
30%



OPEN SPACE DISTRIBUTION

Open Space Network

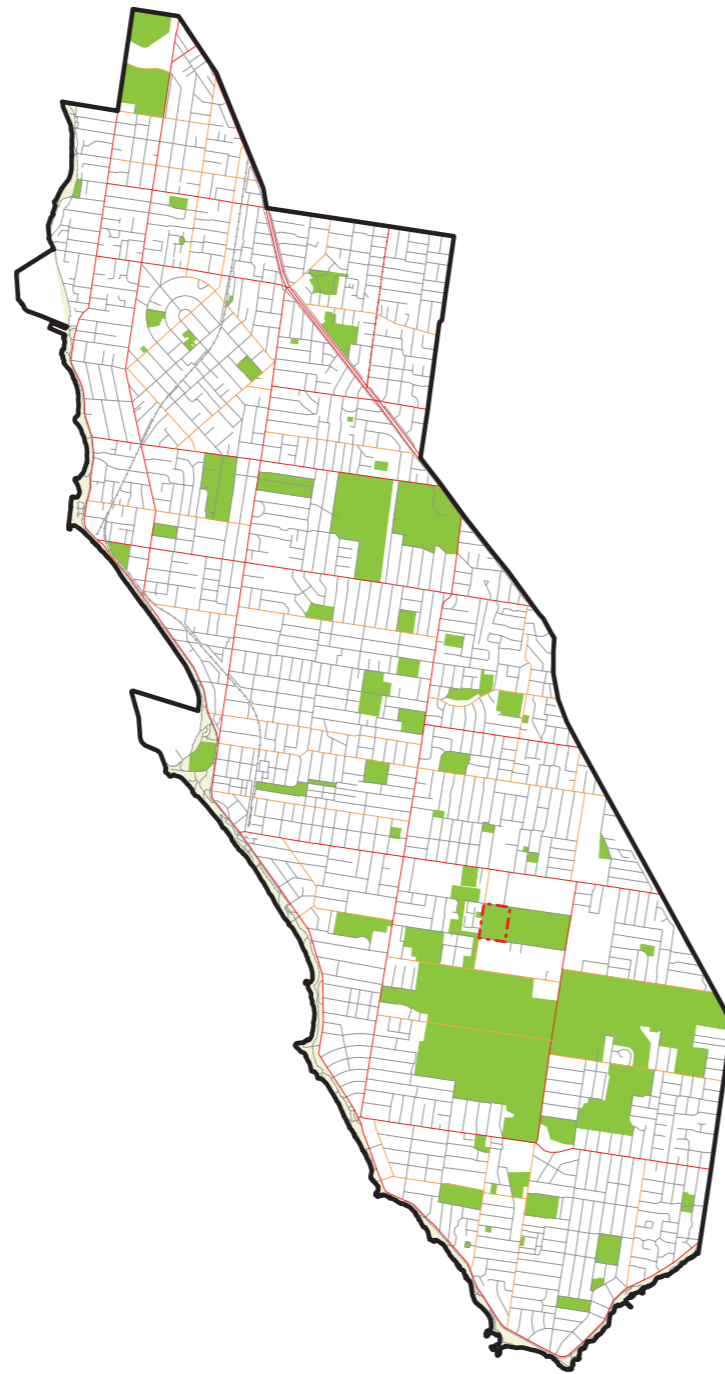
Within Bayside City Council, there is a variety of public open spaces for passive and active recreation, approximately covering 416 hectares, not including the additional 6.6ha that will be added to the open space network with the conversion of Wangara Reserve.

The Bayside Open Space Strategy has listed out the different categories of the open space based on its function, and how much space each category has: They include:

- Social Family Recreation Park: 44.81 hectares
- Sports grounds: 119.41 hectares
- Relaxation Park: 13.56 hectares
- Formal Garden: 7.64 hectares
- Conservation Reserve: 75.25 hectares
- Recreation Facility - excl public golf course: 9.92 hectares / inc. public golf courses: 118.98 hectares
- Beach: 26.91 hectares
- Cemetery: 1.6 hectares
- Allocated School Sports ground

Legend

- Open space
- Foreshore

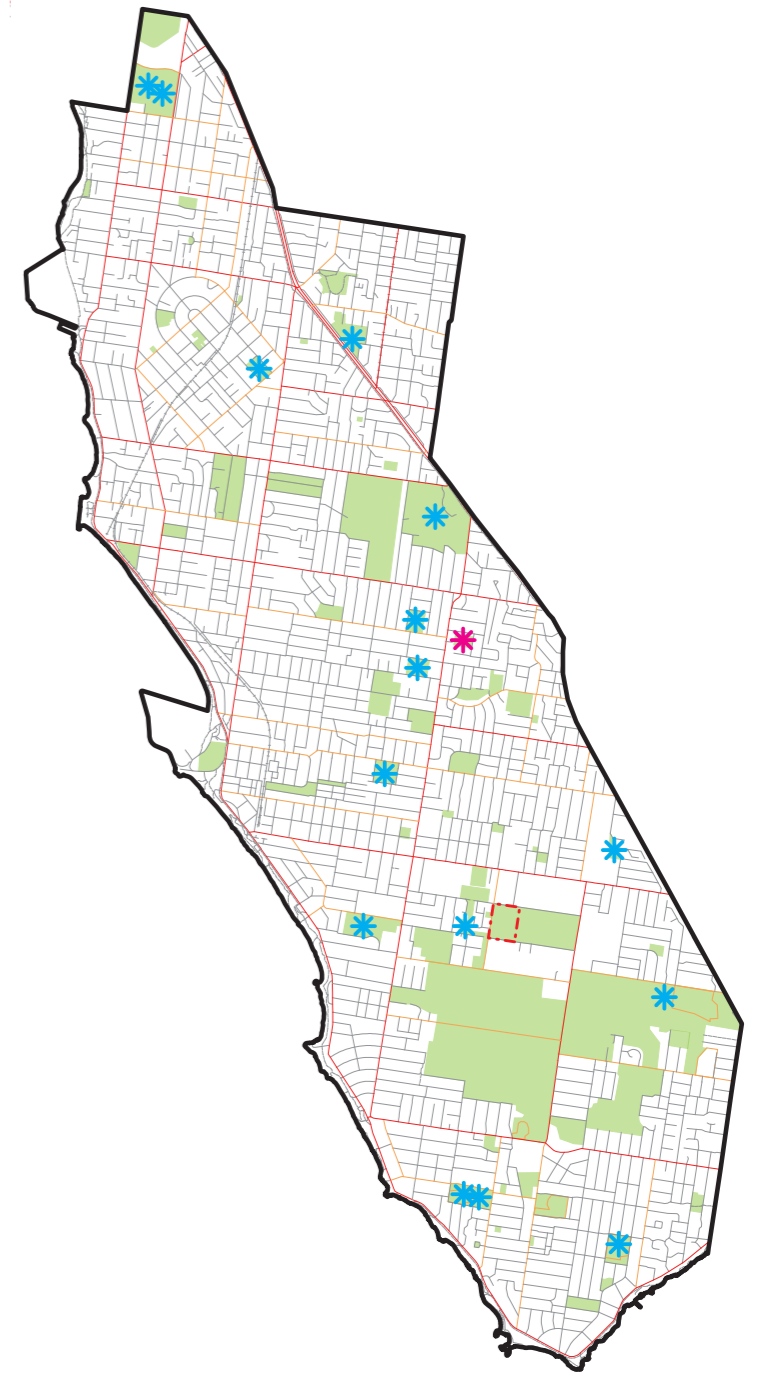


Parks where dogs are allowed off-leash

While dogs are allowed off-leash within some areas of existing parkland, there is only one dedicated, fenced off-leash dog park within the municipal boundary, at Wishhart Reserve.

Legend

- Fully enclosed, off-lead dog park
- Dogs off lead within park area



SITE HISTORY

Pre-Colonial history

Not much is known about the activities of indigenous people on this site prior to the arrival of European settlers, however it falls within the traditional lands of the Bunurong people. Two small areas, at the south-west and north-east corners of the site are subject to an Aboriginal Cultural Heritage Sensitivity Overlay. Further research is required to understand the background to this overlay and how this will influence any future works.

Post-Colonial history

As the city of Melbourne began to grow, the bushland area around Sandringham was cleared of trees to be used as agricultural land. From the 1870s to the 1950s, the western portion of the site appears to have been used as a farm or market garden. In 1933 a cemetery, now known as Cheltenham Memorial Park, was established adjacent to the site and continued to expand over the next 50 years.

Beginning in the 1950s, the site changed use and began operating as a sand quarry. Around 1968 the site was re-purposed again as a municipal landfill that accepted putrescible waste until the late 1970s. During this time the surrounding farmland transitioned into industrial uses.

Around the year 2000, vegetation around the perimeter increased and the former industrial/commercial facilities located to the west of the site changed to residential dwellings.

Last 40 years

Around the mid 1980s, the site was redeveloped into a golf practice facility. Over the years it evolved to include a driving range, and putting practice area, with associated café, car park and clubhouse. A mini-golf facility was later added at the northern edge of the site. The driving range ceased operating in 2019, while the mini-golf facility continues operating and has a lease for the next 10+ years.

New Plans for the Site

In 2019, Bayside City Council commissioned the design of a new regional Netball Centre and associated car park for the upper level of the site. During this process it was revealed that the remnant contamination from the former landfill on the site needed to be remediated before any other works could occur. For this reason a decision was made to locate the Netball Centre on a different site approximately 400m to the west, on Holloway Road.

In 2022, Council commissioned a Rehabilitation Plan for the site to remediate and contain the contaminated soil and make the site suitable for use as parkland. The Rehabilitation Plan proposes to even out the surface levels in the centre of the site and cap the existing soil with new clean soil.

Subsequently, GroupGSA was commissioned to develop this masterplan, which proposes the future function and layout of the site, to be implemented after the rehabilitation works are complete (time line to be confirmed).



1870s-1950s



1950s



Late 1960-1970s



Current

ECOLOGICAL ASSESSMENT

Ecological assessment Report

As part of the analysis and background research process, GroupGSA engaged Beacon Ecological to undertake a Biodiversity Assessment for the site, to inform the masterplan design.

The results of field study have been provided as a report which describes the the current ecological values of the reserve. It also provides a list of suggested plant groups for future re-vegetation of the site.

Beacon Ecological found no remnant native vegetation present on site, which was entirely cleared of trees in the late 1800s for use as farmland. The study area is now predominantly covered by a large open area of introduced grasses with trees and shrubs at the boundaries. The oldest trees on the site are 30-40 years old.

With regards to fauna recorded on site, there were twenty six found species, none of which are considered significant or at-risk.

Flora

Significant flora was not noted within the study area. The study conducted identifies forty seven (47) flora species which are naturally occurring in the study area, of which one (1) is native and forty six (46) are introduced.

The study area comprises of a mix of indigenous (non-local) and native species.

The ecological features include indigenous planted trees around the boundaries as well as semi-mature and more recent revegetation of indigenous species.



Map 1. Ecological features

Source: Beacon Ecological report, March 2024

- Semi mature vegetation
- Planted vegetation
- Study area

Fauna

Twenty six (26) fauna species were found in the study area. This consists of four (4) mammals, sixteen (16) birds and six (6) invertebrates. Of these, twenty three (23) are native and three (3) introduced.

Grassland habitat

Although introduced / modified grassland is prominent within the site, it supports a range of species and useful ecosystem functions such as grazing, foraging, hunting, shelter and breeding.

Arboureal habitat

Consisting of planted tree patches, this habitat creates niches that likely support a range of mammals, birds and reptiles for foraging and shelter.

It is noted that this habitat is missing several components including under storey by shrub layer or native ground-cover with the exception of the Southwest corner where Bronzewing habitat is occurring.

It is concluded that two thirds of the fauna species found on site are dependent on arboureal habitat.

Although significant or at-risk fauna was not noted within the study area, both Common Bronzewing and microbats are focal species of the local 'Friends of Native Wildlife' group (FoNW) and should be protected.

Recommendations

The study recommended that any proposed designs should minimise impacts to existing native vegetation.

It is also recommended that:

- Proposed works shall be concentrated within the central field (above the capped landfill);
- Planted locally and non-locally indigenous species shall be retained;
- Vegetation along western and southern boundaries is to be prioritised for retention - these areas contribute to bio-links between Bay Road Heathland Sanctuary, Pobblebonk Park, Merindah Park, George St reserve and Sandringham Golf links to the South;
- Further re-vegetation of native ground-covers and shrubs species is recommended as this may improve the fauna habitat, particularly bird species. Spiky shrubs would be useful for this;
- Revegetation shall consist of local indigenous species and part of the local EVC range (EVC 710 and EVC 892);
- Enhancement of the ecological values through the use of woody debris.

The above recommendations are in line with Council strategies, particularly the Park Improvement Habitat Linkage Plan (PIHLP).

BRONZEWING HABITAT

The Common Bronzewing pigeon, *Phaps chalcoptera*, has a small population within the City of Bayside, and is known to nest on the south-western slopes of the site, and at the lower level near the corner of George Street and Talinga Road.

While not an at-risk species, ongoing suburban development in south-east Melbourne has reduced suitable habitat for this bird. Volunteers from the Bayside Friends of Native Wildlife group help protect this patch by planting, weeding and ongoing monitoring to provide food and a safe haven for the Bronzewing Pigeon and other local species.

Due to local community interest in this bird, protecting its habitat was specifically mentioned in the Council Resolution to open the reserve up to public use, and was again raised during community consultation.

Bronzewings frequently nest on the ground under bushes or on lower branches and prefer to be near a water body. They feed on the ground, eating grass seeds, fallen acacia seeds, grains and berries. A favourite berry is Ruby Saltbush, *Enchylaena tomentosa* which is indigenous to the area. Their ground dwelling nature makes them vulnerable from fox predation.

The masterplan proposes to retain the existing vegetation in this area and revegetate the slopes where possible to create additional habitat for these birds. There is also an opportunity to educate the local community and visitors to the reserve about this bird and other fauna on the site, using interpretive signage.



Legend

- Existing tree canopy cover
- Approximate area of Bronzewing habitat

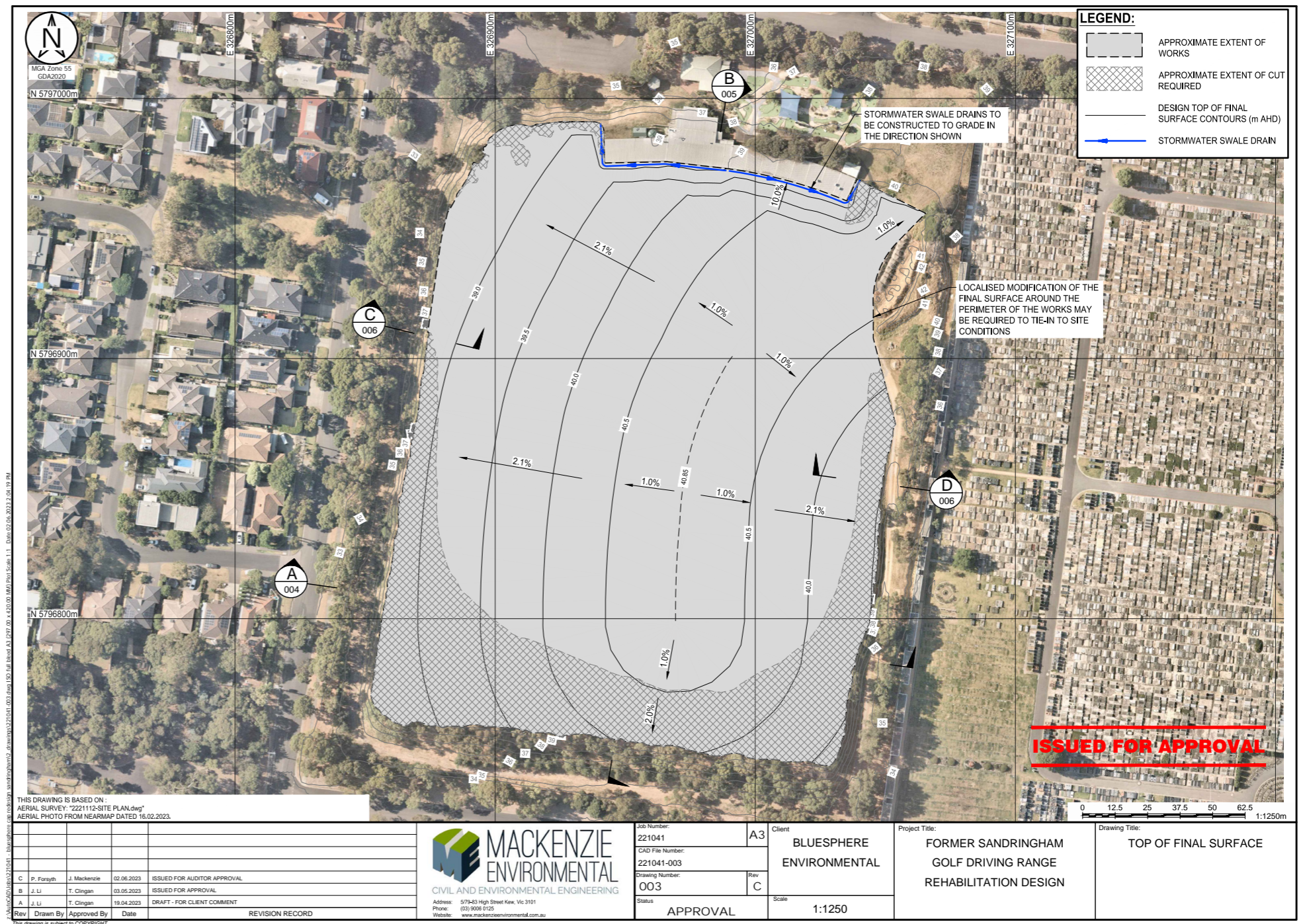


REHABILITATION WORKS

BCC has commissioned Bluesphere Environmental to develop a Rehabilitation Plan for the site, to manage contamination from the former landfill. This plan proposes to cap the contaminated area with new soil to prevent the escape of any pollutants that could be harmful to human health. The existing topography on the highest part of the site will be altered to create a surface that sheds water away from the centre.

There are boreholes located across the site which are used to monitor emissions from the contaminated areas for human health and safety. These will remain in place for at least two years post-completion of the rehabilitation works and possibly longer. The levels of emissions detected as well as the location of the boreholes will limit areas where construction of new infrastructure can occur and this could delay delivery of the masterplan or require further design changes.

Once the rehabilitation works are complete (subject to approval by the Environmental Protection Agency), implementation of the masterplan can begin. Even though the contamination will be safely contained, EPA regulations will limit the extent of construction works that can occur in the new park. This may prevent planting of large trees, construction of shade structures, and provision of power and water across the top of the hill.



Draft Rehabilitation Plan - subject to EPA approval



SITE ANALYSIS

03

LOCATION

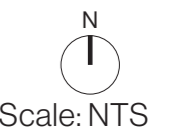
Wangara Reserve is situated in the Bayside City Council suburb of Sandringham, approximately 17km south-east of Melbourne CBD.

The City of Bayside is located alongside the eastern coastline of Port Phillip Bay. It includes the suburbs of Brighton, Brighton East, Hampton, Hampton East, Sandringham, Black Rock, Beaumaris, and parts of Highett and Cheltenham.

We acknowledge the Bunurong People of the Kulin Nation as the First Peoples and Traditional Custodians of the land on which Wangara Reserve sits, and will look to embed their lore, history and legacy in the outcomes of these works.



Metropolitan Melbourne Map



LOCAL CONTEXT

Wangara Reserve is approximately 6.6 hectares of green open space. To the north and south of the site are commercial and industrial precincts. The Cheltenham Memorial Park borders the east of the site, and there is a residential area to the west, with connections to a network of other local parks and reserves.

The site has steep embankments and is surrounded by trees on all sides. The elevation of the site ranges between 32m and 43m above sea level, with the highest points at the top of the southern embankment.

There is a public car park at the north west corner of the site, with capacity for 58 vehicles.

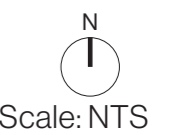
Sandy Mini-Golf currently leases an area of approximately 3500m² on the northern boundary of the site, comprising of the mini golf course, office buildings, a rotunda, 2 car spaces and an area of steep ground with large trees along the southern edge of the public car park.

The majority of the site (apart from the car park and mini-golf) is not currently accessible to the public - it is enclosed by a tall chain mesh fence and all entry gates are locked.

A golf driving range previously operated in the central and southern section of the site. It ceased operating in 2019, however the associated sheds and office buildings still remain on the site. They are within the fenced area and have not been in active use since the driving range closed.

Key

- | | | |
|--|------------------------------------|---------------------------------|
| 1 Sandy Mini Golf course | 8 Sandringham College 10-12 campus | 15 Tjilatjirrin Reserve |
| 2 Mini golf office building | 9 Merindah Park | 16 Commercial / industrial area |
| 3 Former Golf Driving Range infrastructure | 10 Pobblebonk Park | |
| 4 Public Car park | 11 St Johns Kindergarten | |
| 5 Cheltenham Memorial Park | 12 George Street Reserve | |
| 6 Retirement Living | 13 Dog Off Leash Area | |
| 7 Bayside Community Sports Centre | 14 Residential area | |
- Site Extents



SITE PHOTOS

Key Plan



1 North-east grassed area



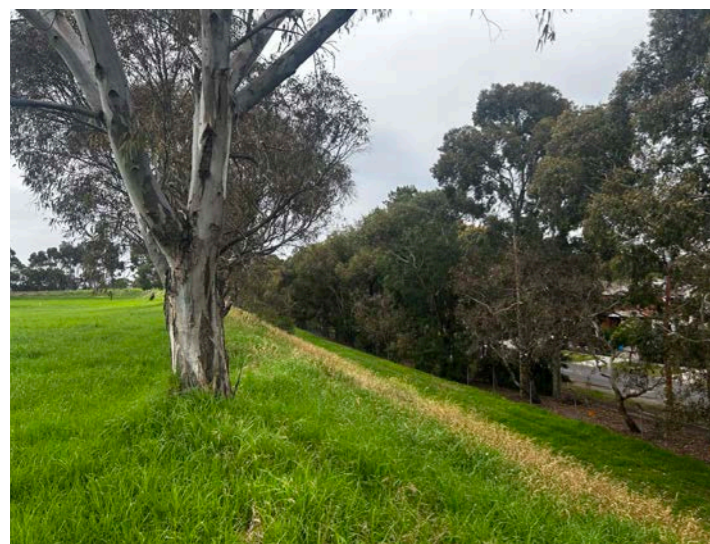
2 Existing infrastructure for previous driving range



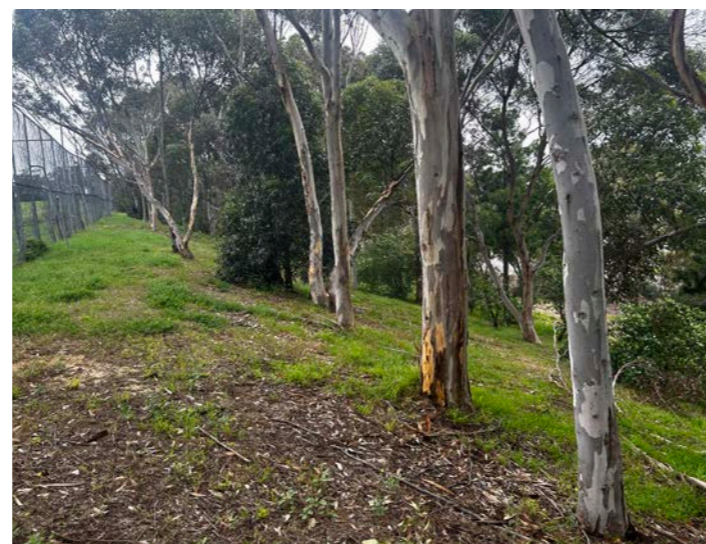
3 Timber retaining wall



4 Central grassed area



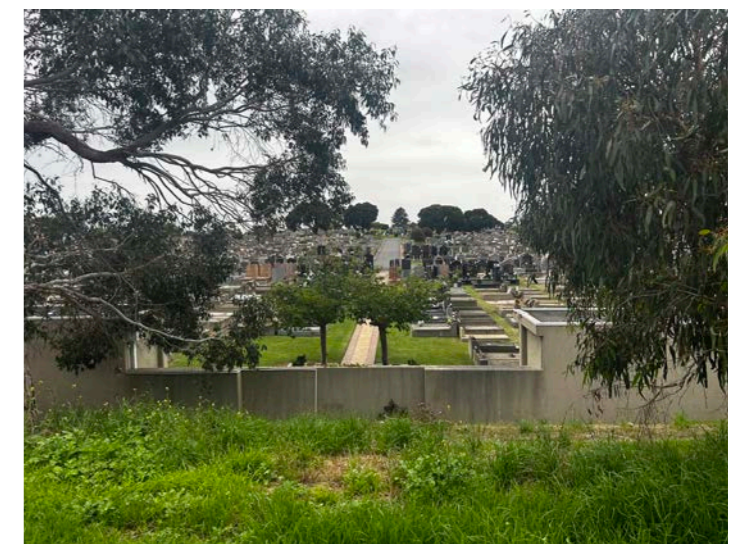
5 Western embankment



6 Southern embankment



7 Corner of George Street and Talinga Road (looking north east)



8 View of Cheltenham Memorial Park from top of hill

LAND USE & ACCESS

Access & Movement Corridors

The main roads around the perimeter of the site as Wangara Road, George Street and Talinga Road. In the adjacent parks and reserves, there are informal trails for walking and cycling.

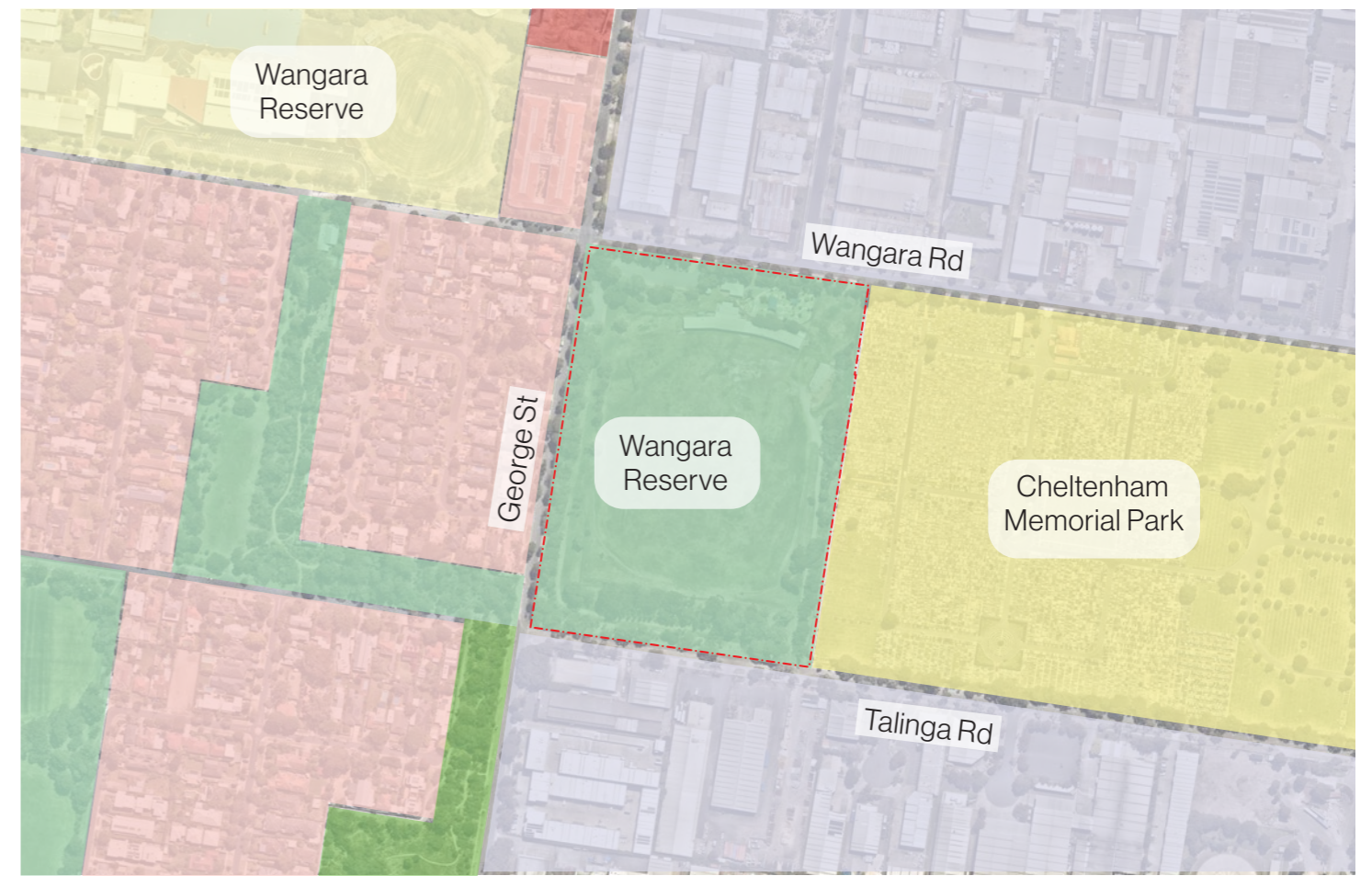


Legend

- Main Road
- Local Road
- Walking Trails

Land Use

Surrounding land use is industrial to the north and south of the site, with residential to the west and a large Memorial Park to the east.



Legend

- | | |
|---|---|
| Commercial 2 Zone | Neighbourhood Residential Zone |
| Public Use Zone (Education) | Public Park and Recreation Zone |
| Public Use Zone (Cemetary / Crematorium) | Public Conservation and Resource Zone |
| Mixed Use Zone | |

PLANNING OVERLAYS

Aboriginal Cultural Heritage Sensitivity Overlay

Areas of Aboriginal Cultural Heritage Sensitivity surround the site extent of the project and within the south-west corner of the site. A cultural heritage management plan may be necessary.

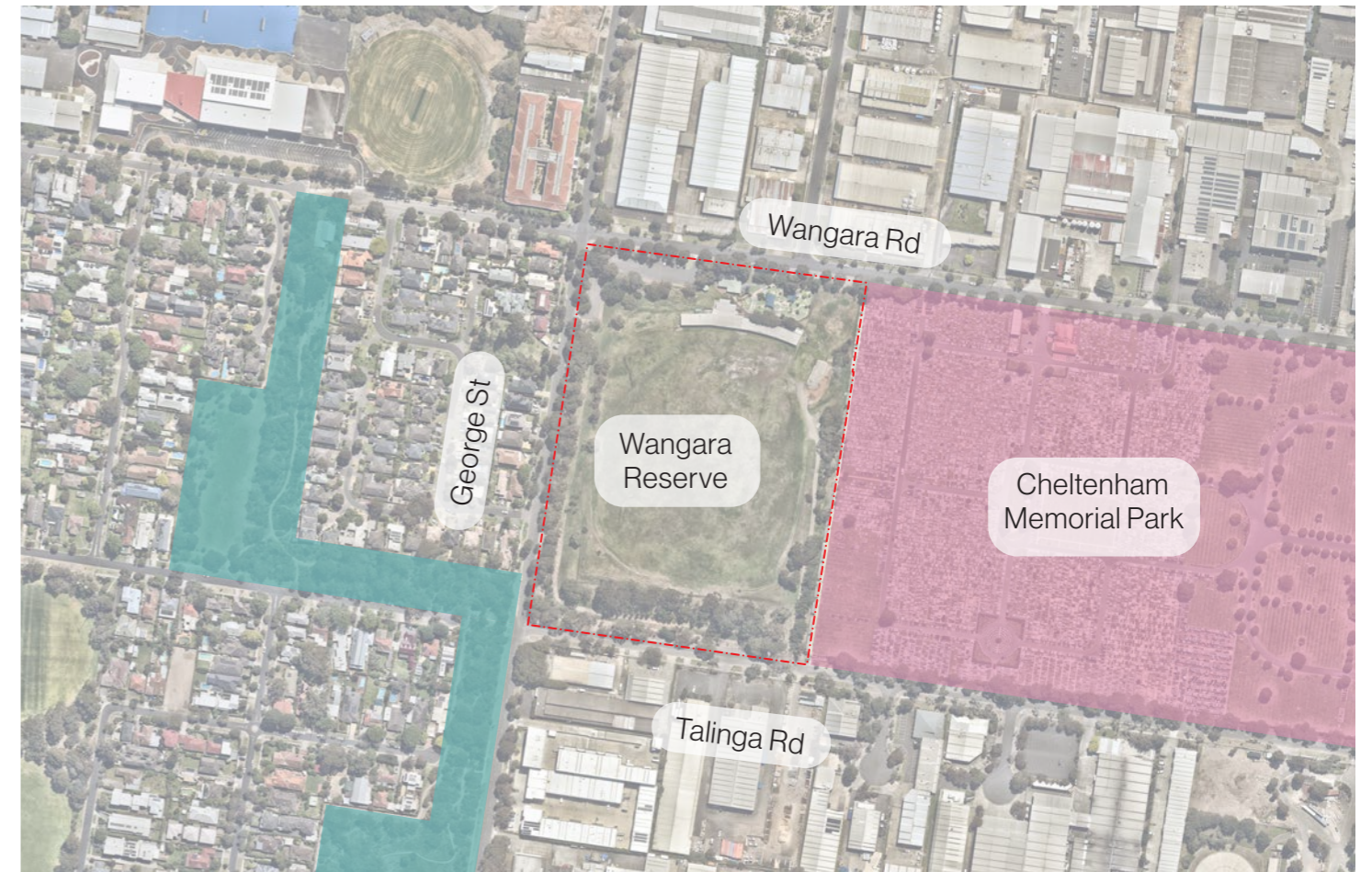


Legend

■ Aboriginal Cultural Heritage Sensitivity Overlay

Overlays

Adjacent to the site, the Cheltenham Memorial Park has a Heritage Overlay and the parks and reserve on the west of the site as a Vegetation Protection Overlay.



Legend

■ Vegetation Protection Overlay

■ Heritage Overlay

TOPOGRAPHY

The current topography of the site is quite irregular and presents steep slopes to all East, South and Western boundaries of the previous driving ranges plain.

This is a major constraint and consideration in terms of accessibility to the site, as well as safety.

The digram on the side illustrates the contours and gradings along the site edges, which will be reviewed and re-designed as part of the rehabilitation plan for the site.

NOTE: The topography on the upper levels of the site will be altered during the rehabilitation works, which propose to create a crest in the centre of the site that slopes gently toward the east, west and south so that water will shed effectively from the site. A new land survey must be undertaken after completion of these works to capture the new levels and gradients on the site.

Legend

—	Contour line / height		
■	RL 43m	■	RL 36m
■	RL 42m	■	RL 35m
■	RL 41m	■	RL 34m
■	RL 40m	■	RL 33m
■	RL 39m	■	RL 32m
■	RL 38m		
■	RL 37m		



CONTAMINATED SOIL

The Site is a former landfill which operated from 1968 to 1978. The Site has an area of 6.6ha, of which approximately 4.9ha (equivalent to 74% of the site) is affected by contamination from this prior use. The types of waste deposited during landfilling are likely to have consisted of putrescible and hard waste.

Due to the contamination on site, the BlueSphere Rehabilitation Plan (pending EPA approval) will determine the level of rehabilitation and remediation required before Council can implement the masterplan and open Wangara Reserve for community use. It will also provide a deeper understanding of what constraints are imposed on future development of the site.



Legend

 Inferred Waste Extent

CURRENT USES & FACILITIES

Public use of the space is currently limited to Sandy Mini-golf and the car park at the northern boundary of the site. The rest of the site is fenced and serviced by two locked gates. It is only accessible to Council staff (for maintenance purposes).

The buildings associated with the defunct golf driving range are no longer in use, and their future has not yet been determined. This masterplan is based on the assumption that the structures will be demolished, however there is some community interest in retaining / re-purposing these buildings.

Bluesphere Environmental has advised that due to the risk of gases from the contaminated soil accumulating in enclosed areas, *“these building should not be used in their current form”* and that *“any structures to be installed...should be vented to the environment. For example, shelters, gazebos or amenity blocks with partially open rooves/walls”*.

A detailed condition assessment and architectural design study will be required to determine whether any part of these structures could be retained to meet the above requirement, and what their use could be. Enclosed buildings will require significant monitoring, mitigation and alterations if they are to be retained (this does not affect the mini-golf office which is outside of the contaminated area).

Legend

- Car park
- Office Building (in use)
- Remnant structures (not in use)
- Mini-Golf course
- Fence
- Access Gate
- Gravel Track
- Pedestrian Footpath



N
Scale: NTS

SERVICES

Service Provider	Assets*
Bayside City Council	An underground drainage service extends from the centre of the western boundary and continues under the Site to the south-eastern corner. Drainage pits and services are present on the Wangara Road, George Street and Talinga Road.
Melbourne Water	A Melbourne Water drainage pipeline runs from the north-west of Site and connects to the Council-owned drainage pipe that runs through the south centre of Site (see above).
Multinet Gas	High pressure gas lines run along the outside perimeter of Site on the southern, western and northern boundaries. No gas services appear to enter the Site.
NBN Co	NBN plans identified services along the north of Wangara Road, west of George Street and south of Talinga Road. A cable junction enters the Site in the north of Site that likely connects to the northern-most building (Sandy Mini Golf).
South East Water Corporation	Plans indicate that water mains run along the outside perimeter of Site on the southern, western and northern boundaries. No water assets appear to enter the Site
Telstra	Telstra mains were identified along the north of Wangara Road, west of George Street and south of Talinga Road. A cable junction enters the north of Site that likely connects to the northern-most building (Sandy Mini Golf).
United Energy	A low voltage junction box is adjacent to the Site boundary on George Street, which runs west to the adjacent residences. High voltage underground cables that connect to light poles are present on the north side of Wangara Road adjacent to Site. There is a pole within the northern car park, likely low voltage street lighting.

*Source: Bluesphere Environmental Detailed Site Investigation Report

Legend

- Easement
- Drainage pipe
- ✕ Stormwater drain

Note that there is a drainage easement running diagonally across the southern part of the site. Due to the significant depth (8-10m) of soil cover over this drain pipe, we do not believe there will be any impact or issues with installing footpaths, trees, fencing etc over this area as part of the new reserve.



EXISTING VEGETATION

Ecological Vegetation Class (EVC) is a classification system for native vegetation types in Victoria. This information can help to inform what species are suitable for a site, based on the plant communities that occur naturally in that location (or would have been found there prior to development).

Prior to European colonisation, this site and the broader local area was covered with vegetation from two EVCs: Heathy Woodland/Sand Heathland Mosaic (892) and Grassy Woodland/Damp Sands Herb-rich Woodland Mosaic (719). Due to the impacts of urban development, very little remnant vegetation remains in the local area, and none on the subject site.

However, some of the plants currently existing on the site do match to the Heathy Woodland EVC, which is distinguished by Manna Gum or Narrow-leaf Peppermint with Heath Tea-tree in the understorey.

Large canopy trees, many taller than 10m have been planted around the perimeter of the site. These are predominately native trees including Casuarina, Melaleuca, Banksia, and several species of Eucalypt.

Understorey shrubs and grasses around the edges of the site include a wide variety of native and indigenous plant species.

The majority of the site, particularly on the upper level has been planted with introduced grass species.



Legend

- Existing tree canopy cover
- EVC Heathy Woodlands

OPPORTUNITIES

- ① Create a network of garden beds with native and indigenous plant species, with interpretive signage and walking paths that encourage people to admire and learn about local flora.
- ② Protect and enhance the Bronzewing pigeon habitat area
- ③ Potential bio-diversity corridors to connect Wangara Reserve to the neighbouring open green spaces such as Pobblebonk Park, George Street Reserve, Merindah Park, and through to Bay Road Heathland Sanctuary.
- ④ Recreational opportunities - including passive leisure activities (walking, picnicking etc.) and informal active leisure such as running, biking, kick-about.
- ⑤ Increase canopy cover for heat mitigation and fauna habitat.
- ⑥ Potential for a dedicated area for a fully enclosed, off-leash dog park
- ⑦ Potential area for new car parking including overflow car park for Bayside Community Sports Centre
- ⑧ Potential future connection to the adjacent Memorial Park. Note there is a significant level change at this location that would require major works and tree removals to create a pedestrian link, therefore this long-term opportunity is not included in the masterplan design.
- ⑨ Create an improved pedestrian entry to the site via the central easement through the lease area.



Legend:

- Site extent
- Inferred waste extent
- Steep slope
- Existing building
- Commercial lease area (currently Sandy Mini-golf)
- ↔ Potential biodiversity corridors
- Approx. extent of Bronzewing pigeon habitat

CONSTRAINTS

- A** Extent of contamination on site - consider the rehabilitation plan and its constraints, including planting and infrastructure
- B** Aboriginal Cultural Heritage Sensitivity Overlay on the south-west corner of the site and north-east corner
- C** Sensitive interface: Memorial Park adjacent to the site on the east
- D** Sensitive interface: Residential area adjacent to the site on the west
- E** Bronzewing pigeon habitat to be retained (and enhanced per Council Resolution)
- F** Commercial lease area to remain
- G** Existing steep batters around the perimeter are to be retained and stabilised where necessary
- H** Topography and dense bushland limits possible access points for vehicles and pedestrians.
- I** All existing large trees to be retained (unless deemed to be of low or no arbouricultural value)
- J** Existing golf driving range buildings are no longer in use and should be assessed to determine their potential for future use / whether they can safely be retained.
- K** Boreholes will be retained for at least 24 months after rehab works are complete and will require access for ongoing monitoring and management (multiple locations - refer to legend)
- L** Public carpark to be retained
- M** Limited scope for tree planting on top of rehabilitated (capped) soil area



Legend:

- Site extent
- Inferred waste extent
- Steep slope
- Existing building
- Commercial lease area (currently Sandy Mini-golf)
- Aboriginal Cultural Heritage Overlay
- Approx. extent of Bronzewing pigeon habitat
- ◆ Borehole for monitoring contamination



CONSULTATION SUMMARY

04

COMMUNITY CONSULTATION PROCESS

Consultation Approach

The consultation process sought to understand the community's needs and wants for the future of Wangara Reserve and the gauge the level of support for design proposals for the site.

Consultation on the masterplan was in two stages:

Stage 1 - Gathering ideas to inform the masterplan.

Stage 2 - Seeking feedback on the Draft Masterplan design.

Stage 1 consultation occurred over 3 months, from December 2023 - February 2024. Ideas gathered from the community informed the design of the draft masterplan.

Stage 1 community engagement sessions were held both online and in person, always following protocol guidelines. Notification of the community engagement activities included: direct email, social media posts and word of mouth.

The consultation structure included:

- Introduction to the project;
- Informing conversation / Information panels;
- Understanding the engagement / connection of the group with the site;
- Questions and discussion / community opinion.

In Stage 2 of consultation, the Draft masterplan was showcased online in May of 2024 to seek community feedback on the proposed design.

Consultation Process



Sandy Twilight Market consultation stall

Project Promotion

A range of tools were used by Council to promote the project and encourage participation in consultation activities:

Communication Channel / Tool	Description
1 Have your Say Project Page	Online page dedicated to the project, including project brief, site constraints information and feedback opportunities.
2 Social Media Posts	Council channels - Facebook and Instagram. Both organic and sponsored posts geo-targeting Bayside suburbs.
3 Signage and QR code Display at Major Activities	Signs displayed project & consultation information and QR code link to Have Your Say page. Two A1 Signs at events location.
4 Bayside Magazine	Incorporated short articles with project information and access links to the relevant 'Have Your Say Page' for further engagement.

STAGE 1 CONSULTATION ACTIVITIES

In-Person Consultation Sessions

Bayside City Council held two organised drop-in sessions in Sandringham to gather community ideas for Wangara Reserve:

Sandy Fest

Community Consultation Event 1

WHEN: December 2nd, 01:00pm - 4:00pm

WHERE: Sandringham Village

WHO: 30 x community contributions

WHAT: At the very start of the project, council arranged a stall at the Sandy Fest, in Sandringham, in order to promote the project and generate community interest.

Sandy Twilight market

Community Consultation Event 2

WHEN: February 3rd, 03:00pm - 06:00pm

WHERE: Sandringham Foreshore

WHO: 45 x community contributions

WHAT: The second community session was run with a marquee drop-in session at the Sandringham Twilight market open to anyone who was interested in the project. Representatives from Bayside City Council and GroupGSA were available at the Sandy Twilight Market to clarify queries and note down any ideas and comments from the community.

Online engagement opportunities

“Have your say” Online survey

WHEN: December 2023 - 28th February 2024

WHERE: <https://yoursay.bayside.vic.gov.au/future-use-wangara-road-site>

WHO: 243 x community contributions + support likes & comments

WHAT: An online ‘Have Your Say’ Page was hosted by Council on their website, explaining the project and allowing community members to express their ideas.

For both the in-person and online engagement activities, Council provided the following guidelines to manage community expectations about what could be included on this site:



Likely to be implemented

- Infrastructure including Paths, Benches and Tables;
- Shallow growing vegetation (Subject to assessment).



Features unlikely to be implemented

- Deep rooted plants and trees;
- Infrastructure requiring foundations or piling;
- Additional enclosed buildings

The Stage 1 consultation also sought community feedback on the following ideas that were proposed in Council’s resolution for this project:

- Floral Clock
- Wildlife Habitat enhancement
- Interactive Garden Beds
- Bayside Community Nursery mother stock area



Image 1. Sandy Twilight Market consultation panel

STAGE 1 CONSULTATION OUTCOMES

Engagement Record

All the feedback collected by Bayside City Council and GroupGSA has been documented during our program/consultation activities.

Data from feedback received through the 'Have your say Page' online and the Sandy Fest and Twilight Market was analysed and The summary captures the full range of ideas, concerns and views expressed during our consultation activities and material provided.

Unless otherwise noted, the views expressed in this document represent those of the participants and not necessarily those of our consultants or council.

Feedback Summary

This section includes the key points and findings from the community consultation activities carried out between December 2023 and the 3rd February 2024.

This will form the basis of the Concept Design and subsequently will inform an action plan on implementing a long term Masterplan to Wangara Road Reserve through a design strategy and supporting framework guided by project objectives.

Please refer to Appendix 1 for more detailed outcome for the online 'Have Your Say' page as well as the ideas provided during the drop-in session at the Sandy Fest and Twilight Market.

These notes are to be taken into consideration when moving forward into the design.

From the Feedback received, we have gathered the

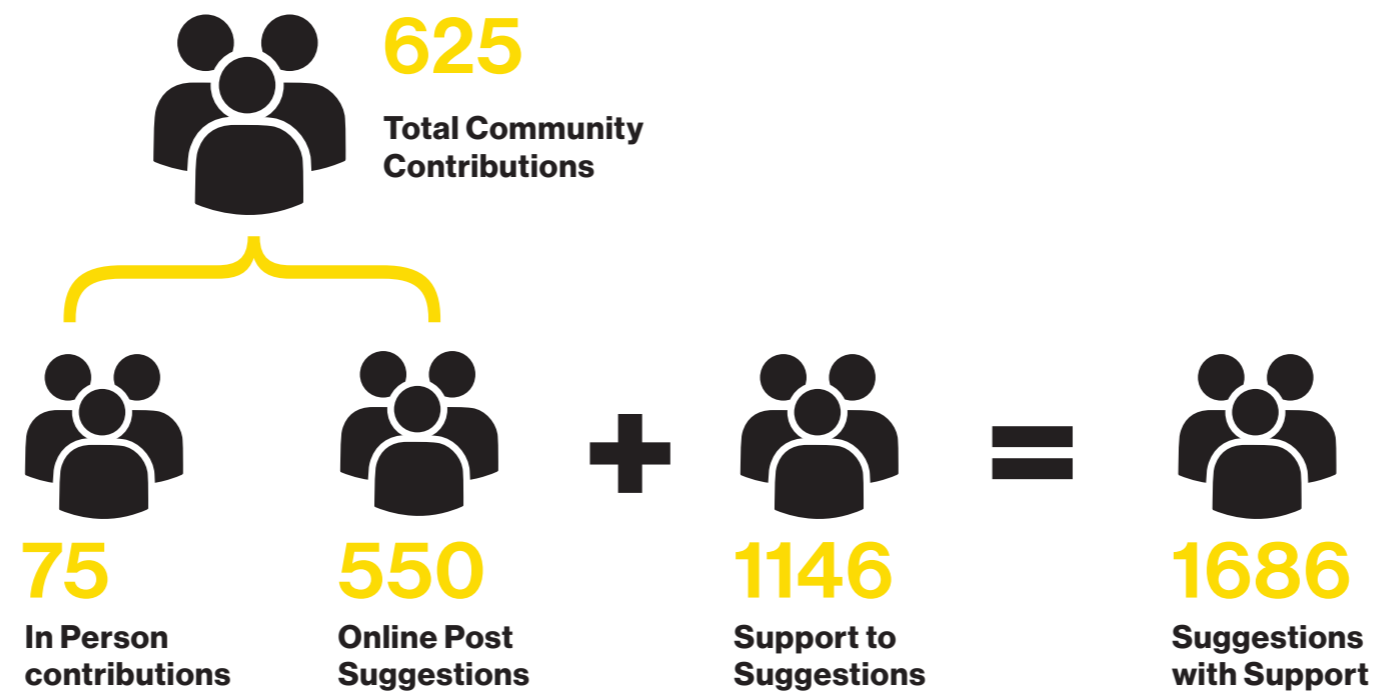
below numbers:

- 625 Total contributions;
- 75 in person contributions.
- 550 Online post suggestions;
- 1146 Support to suggestions;
- 1686 Suggestions with support;

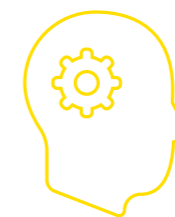
During the individual consultation meetings with the community, they expressed a number of suggestions and improvements to the site.

A total of 625 contributions were received, with the following results. Please note additional comments received along with the survey results have been reviewed and simplified into key ideas/concerns in this report. For further detail, refer to Appendix 1.

The following pages show a summary of the online feedback and ideas on the panels provided during the drop-in consultation sessions. These pages show a summary of all information gathered, while the Appendix previously mentioned provide more detailed feedback.



"It would be amazing to have even a 400m bike track in Bayside!"



"This is an excellent opportunity to provide passive open space with not too much infrastructure!"

"Let's give it the help it needs to turn from a toxic site to a green open space for the community to enjoy!"



"It would be great if there were two fenced dog areas. One for small dogs only and one for all dogs!"



STAGE 1 CONSULTATION FEEDBACK SUMMARY

Consultation Findings

Feedback collected from Stage 1 consultation was reviewed and organized into Themes and Key suggestions.

The three most popular themes that emerged from community feedback were:

- Recreation
- Environment
- Supporting Infrastructure

Among all the contributions received, a total of 34 unique suggestions were put forward by participants. Other community members then were able to comment on these suggestions to indicate their support.

The five most popular suggestions were:

- Mountain Bike Track
- Native Vegetation/ Rehabilitation
- Pickleball courts
- Dog off-leash area (fenced)
- Running / Walking track

The most popular themes and suggestions have been assessed to understand what is suitable for the reserve and how to incorporate these into the masterplan design.

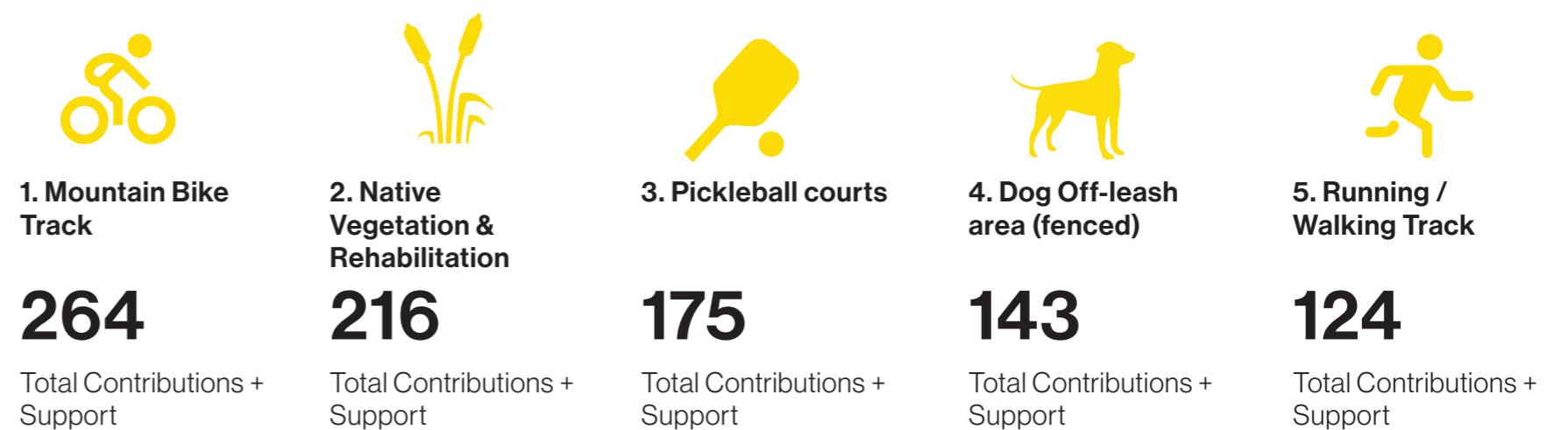
It is noted that throughout the first half of the online consultation process (December - 3rd February) the top five suggestions included mountain bike, native vegetation, dog off-leash, running / walking tracks and additional car-parking.

In the final three days of the consultation period, there was a large number of submissions for pickleball which appear to have been generated en mass, at the urging of one community interest group. This elevated Pickleball to 3rd most popular suggestion amongst the Top 5.

Top Three Consultation Themes



Top Five Community Suggestions



STAGE 1 FEEDBACK ASSESSMENT

The table below shows the ten most popular suggestions that arose from Stage 1 Community Engagement. Each suggestion has been evaluated against the physical, environmental and operational constraints of the site, as well as their alignment with the Council resolution and other Council Strategies relevant to this site. A summary is provided of the key reasons why each suggestion was or wasn't deemed suitable for this site.

SUGGESTION	INCLUDED (YES / NO)	REASONING
MOUNTAIN BIKE TRACK	NO	<ul style="list-style-type: none"> Active recreation / organized sport does not align with Council's resolution for this site to function as a Passive Open Space with environmental focus. The steep slopes around the perimeter are not appropriate for mountain biking which would cause significant disturbance to existing areas of native trees and shrubs, which provide animal habitat and ecological links to surrounding bio-diversity corridors. There is an existing BMX facility in close proximity at Tulip Street.
NATIVE VEGETATION / REHABILITATION	YES	<ul style="list-style-type: none"> Aligns with Council's resolution for this site to function as a Passive Open Space with environmental focus. Will help to protect existing habitat and increase bio-diversity and environmental values in line with Bayside's Park Improvement Habitat Linkage Plan, Biodiversity Action Plan 2018-2027, and Urban Forest Strategy 2022.
PICKLEBALL COURTS	NO	<ul style="list-style-type: none"> Active recreation / organized sport does not align with Council's resolution for this site to function as a Passive Open Space with environmental focus Installation of Pickleball courts would create a large area of impermeable surface, and require significant changes to levels and drainage on the site, which is incompatible with the Rehabilitation Plan.
DOG OFF-LEASH (ENCLOSED)	YES	<ul style="list-style-type: none"> There is only one fenced dog park in the municipality at Wishart Reserve (2.5km away). Council receives frequent community requests for additional enclosed off-leash spaces. There is sufficient room on this site to create a fenced, off-leash dog area, without impacting on the environmental values of the site.
RUNNING / WALKING TRACK	YES	<ul style="list-style-type: none"> Aligns with Council's Passive Recreation purpose for this site. A network of paths is proposed that will provide a variety of opportunities for walking / running including a continuous circuit trail that links the lower perimeter path to the top area of the site.
SPORTS OVAL(S)	NO	<ul style="list-style-type: none"> Active recreation / organized sport does not align with Council's resolution for this site to function as a Passive Open Space with environmental focus. There are four sport ovals within 800m of this site.
CAR PARK (ADDITIONAL)	YES	<ul style="list-style-type: none"> A parking area (approx. 50 spaces) will be provided for visitors to the site from outside of the walkable catchment and to provide access for people with young children or limited mobility.
PICNIC / BBQ AREAS / BENCHES	YES	<ul style="list-style-type: none"> Places to sit, gather and picnic, as well as BBQ facilities will be provided, to improve the user experience, without impacting on the environmental values of the site.
GOLF DRIVING RANGE	NO	<ul style="list-style-type: none"> Active recreation / organized sport does not align with Council's resolution for this site to function as a Passive Open Space with environmental focus.
PLAYGROUNDS / GYM FITNESS CIRCUIT	YES	<ul style="list-style-type: none"> Fitness equipment will be provided in small clusters adjacent to the central lawn that can form part of a circuit trail. Open lawn areas provide opportunities for informal play, along with ping-pong tables and playable mounds in the active zone under the arbour.



COUNCIL RESOLUTION IDEAS FEEDBACK

The ideas proposed in the Council resolution were also tested with the community through the Stage 1 consultation material. A low number of participants commented on or “liked” the ideas from the Council resolution.

The summary on the right shows number of supportive votes for each idea, and the text below explains how the masterplan responds.

Community Feedback on Council Ideas



Native Wildlife habitat

19

Total Supportive engagement



Bayside Community Nursery stock area

8

Total Supportive engagement



Interactive Garden Beds

1

Total Supportive engagement



Floral Clock

1

Total Supportive engagement

Native Wildlife Habitat

This idea from the Council resolution received the strongest community support.

We understand that the site includes existing areas of habitat for Bronzewing pigeons, as well as other birds, reptiles and small mammals.

The masterplan includes strategies to protect this habitat. It will also investigate potential expansion or improvement to this habitat, and ideas for educating the public about the flora and fauna on the site.

BCN Mother stock area

During the Site Analysis phase of the masterplan, Bayside Community Nursery was consulted about their requirements for expansion of cultivation space.

They advised that inclusion of a mother stock area for their use at Wangara Reserve would not be viable due to security, access and resourcing requirements. Therefore, despite receiving seven votes of support from the community, this proposal will not be included in the masterplan.

Interactive Garden Beds

The term ‘interactive garden beds’ is not clearly defined in the resolution, but we understand it as the intention to include planted areas that provide an immersive experience of native flora, to encourage knowledge and appreciation of indigenous plants, and promote their use in private residential gardens.

Although the idea received only one vote of support, it is strongly aligned with the 3rd most popular community suggestion for Native vegetation/ rehabilitation on this site. It is also strongly aligned with relevant Council strategies and related strategies such as the Biodiversity Action Plan 2018-2027 and with the overall Council vision for function as a Passive Open Space with environmental focus. On that basis, this idea has been further explored and incorporated into the design.

Floral Clock

The resolution suggests the inclusion of a ‘floral clock’ on the site. We understand this as an intention to promote and celebrate indigenous plants and create an eye-catching feature or gateway element in the park (potentially this could include an art commission). It does not necessarily infer a traditional-style floral clock / timepiece with working mechanism, which would be more suited to a town square or traditional English-style park.

There was only one supportive vote for this idea. While a floral clock will not be included in the masterplan, instead there are other expressions of native and indigenous planting as well as opportunities for the inclusion of a public art installation that acts as a drawcard and point of interest for the reserve.

STAGE 2 CONSULTATION OUTCOMES

The Draft Masterplan was exhibited on Council's Have Your Say page between 1st and 26th May, 2024, to seek community and stakeholder feedback.

Feedback was gathered during this consultation period from the following channels:

- 139 online survey contributions
- 6 written statements through the online portal
- 4 direct submissions/emails to council officers
- 3 direct submissions/emails that were out of scope
- 4 phone calls to Council
- 2 meetings with Council

Consultation Findings

Following the Stage 2 engagement period and feedback collection, the information has been reviewed and incorporated into the final design where appropriate.

The most popular / supported themes that emerged from community feedback were:

- Toilet;
- Paths for walk / jogging / cycling;
- Tranquil quiet space;
- Benches throughout park;
- Secure off-leash area.

The draft Masterplan was generally well received with an average rating of 3.44 out of 5 stars, with 4 being the most frequent response.

Online survey respondents who participated in the first phase of community engagement (34%), felt that at least a little bit of their feedback had been incorporated into the draft Masterplan (80%).

Please refer to council's community engagement summary report for further detailed information.



1800 +
Community Visitors
to the project page



152
Total Community
Contributions



139
Online
contributions



6
Written statements
through online
portal



4
Direct
submissions/
emails to council



3
Direct
submissions/
emails out of
scope



4
Phone calls



2
Meetings

Top five Community Supported ideas



1. Toilet

62%



**2. Paths for walk /
jogging / cycling**

51%



**3. Tranquil quiet
space**

45%



**4. Benches
throughout park**

44%



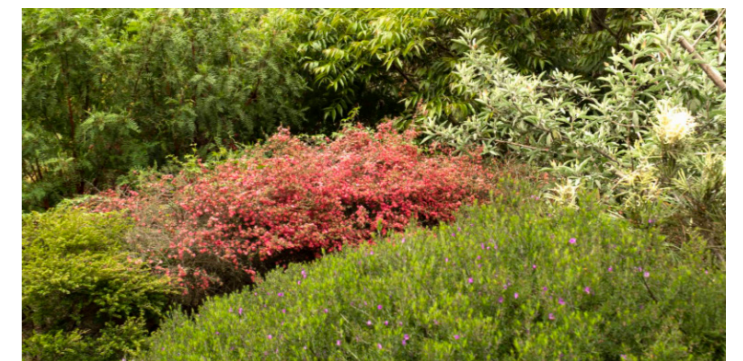
**5. Secure off-
leash area**

38%

STAGE 2 FEEDBACK ASSESSMENT

The table below shows the eight most popular suggestions that arose from Stage 2 Community Engagement. As for Stage 1, each suggestion has been evaluated against the physical, environmental and operational constraints of the site, as well as their alignment with the Council Resolution and other Council Strategies relevant to this site. A summary is provided of the key reasons why each suggestion was or wasn't deemed suitable for this site.

SUGGESTION	INCLUDED (YES / NO)	REASONING
TOILET	YES	<ul style="list-style-type: none"> As a large open space for public gathering and community events, the reserve shall offer opportunities for extended periods of usage and thus it is appropriate provide public toilet facilities. The toilet is proposed to be located under the arbour at the north of the site in an area where groups and are likely to gather.
PATHS FOR WALK / JOGGING / CYCLING	YES	<ul style="list-style-type: none"> A network of paths is proposed that will provide a variety of opportunities for walking / running / cycling including a continuous circuit trail that links the lower perimeter path to the top area of the site. No dedicated cycle path has been provided as this was deemed incompatible with the focus on passive recreation and environmental restoration.
TRANQUIL QUIET SPACE	YES	<ul style="list-style-type: none"> Tranquil and quiet spaces have been included in the design within the proposed arbour as well as wandering paths that offer an intimate experience.
BENCHES THROUGHOUT PARK	YES	<ul style="list-style-type: none"> Places to sit, gather and picnic, as well as BBQ facilities have been provided, to improve the user experience, without impacting on the environmental values of the site. Bench seats are strategically placed around the main and secondary paths, to provide opportunities for rest and contemplation.
SECURE OFF-LEASH AREA	YES	<ul style="list-style-type: none"> A fenced, off-leash dog area is included in the design, away from sensitive fauna habitat areas. The design includes planting buffers, sand pit and log play areas, trees and benches. A bin and a drinking fountain with dog bowl are included near the entry area.
VEGETATION	YES	<ul style="list-style-type: none"> Re-vegetation with indigenous plants is proposed including large shrubs to provide improved biodiversity and create buffer between sensitive uses. Infill tree planting is proposed in re-vegetation areas outside of the contaminated soil-cap (on the existing slopes and lower level areas).
CONSERVATION & PROTECTION OF BRONZEWING HABITAT	YES	<ul style="list-style-type: none"> Existing Bronzewing habitat area on the South-West of the site will be retained and re-vegetated with appropriate species. This area should include educational signage about the importance of habitat corridors for urban wildlife, Indigenous flora, fauna and habitat strategy and Bronzewing protection.
SPORT AND RECREATION	NO	<ul style="list-style-type: none"> Organized sport does not align with Council's resolution for this site to function as a Passive Open Space with environmental focus. Fitness equipment and running / walking trails are included to provide opportunities for low impact active recreation.





MASTERPLAN DESIGN

05

MASTERPLAN

This masterplan has been developed in collaboration with Council's Project Working Group, in line with relevant Council strategies, and in response to community and stakeholder feedback. It provides a large multi-functional passive open space that caters for a broad range of users including individuals, families, recreational walkers and runners, dog owners, school groups and those just wishing to enjoy the natural environment.

Spatial arrangement

The design makes use of the large available area by breaking it into five different activity zones:

- 1. Northern Terraces and Arbour**
A shady space with places to gather including a BBQ area, community garden, planter beds and a playful zone for younger people. This area also includes quiet places to sit and toilet facilities.
- 2. Entry plaza**
An open circulation space with feature paving, adjacent to the new carpark, and a cluster of interactive garden beds around a central gathering space. This area could include a gateway marker such as a public artwork, sculpture, signage or large feature tree.
- 3. The Green**
Open lawn areas for informal play, lounging, kick-about, picnicking etc. Fitness pods are stationed around the perimeter of the large lawn, and grassed mounds for lounging and informal play are a feature of the small lawn.
- 4. 4-Paws Zone**
A fenced area where dogs can frolick safely off leash and their owners can gather without disturbing other park users.

- 5. Wandering Trails**
A series of paths that meander through mass-planted garden beds, featuring local indigenous plants, with seats provided for quiet reflection and enjoyment of nature.

Movement and Access

The reserve will be accessible by car, with parking available in the existing car park at the corner of George street, as well as an additional car park with accessible bays at the north-east corner (number of car parks TBC).

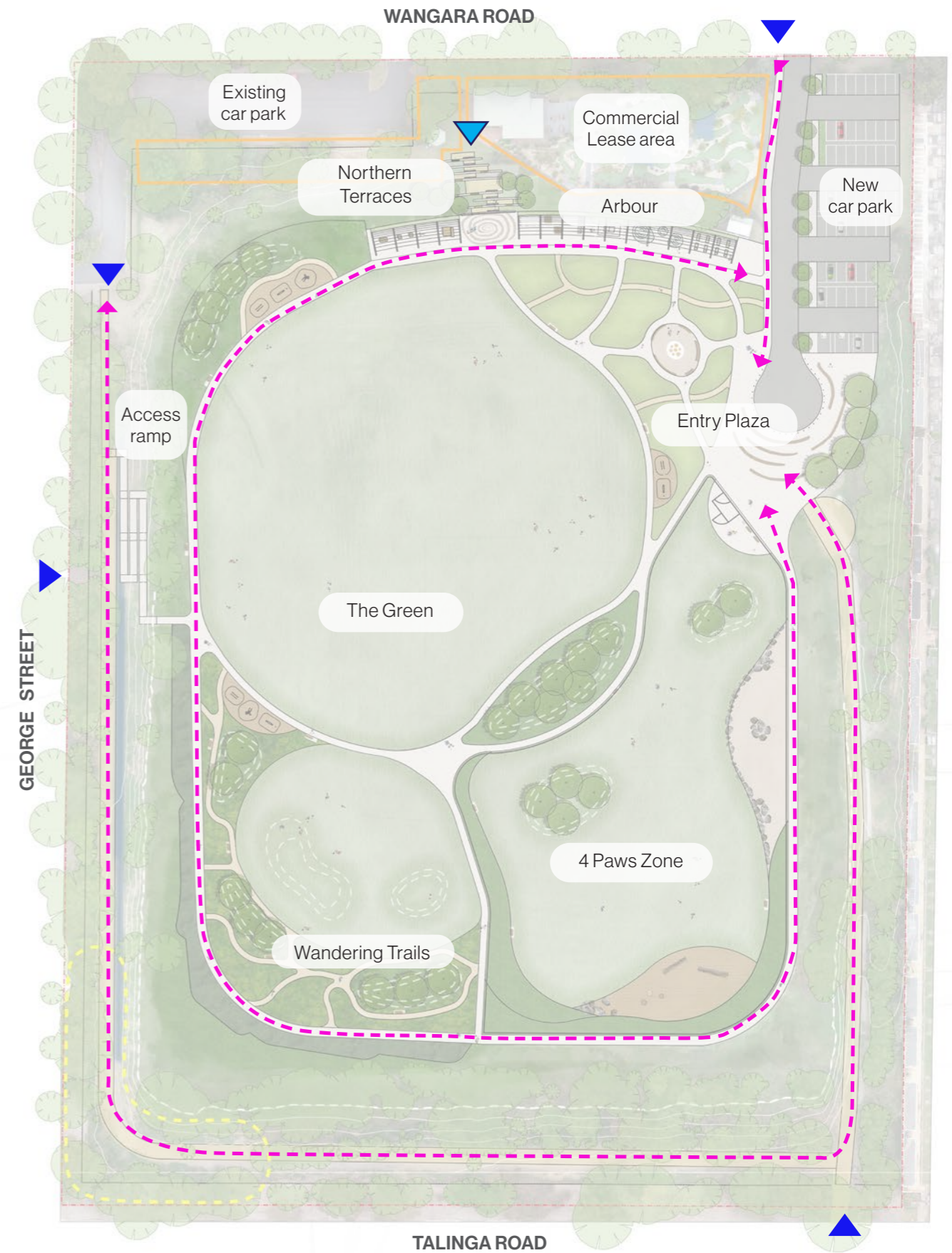
A proposed ramp at the western embankment will provide access from George street to the top of the hill for people of all abilities.

A new stairway will provide another pedestrian access point directly from Wangara road, along with an accessible footpath along the driveway of the new car park.




The existing perimeter path (currently a vehicle maintenance track) will be opened up to pedestrian use, connecting to the ramp on the west side and with an access point at the south-east of the site from Talinga Road, where the path slopes gently up to connect to the entry plaza.

On the top of the hill (main area of the reserve), a network of paths is provided that offers multiple circulation options, including a 2.5m wide circuit path around the top of the hill, and a series of smaller paths connecting and through each of the zones.

Via this network of paths, stairs and ramp, it is possible to create multiple continuous walking or running circuits that connect across both the upper and lower levels of the reserve.



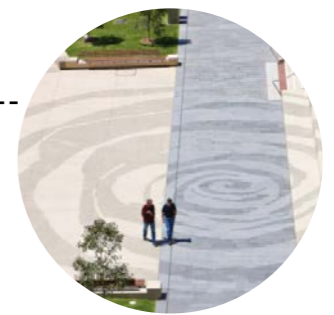
Legend:

-  DDA accessible entry points
-  Stair case entry point and access
-  Primary circulation

Wangara Reserve Masterplan

NEW & EXISTING FEATURES

- ① Entry plaza with feature paving
- ② Raised interactive garden beds
- ③ Multi-functional arbour
- ④ Drop off / Pick up area and vehicle turning zone
- ⑤ Re-vegetation planting to site edges
- ⑥ Ephemeral Swale
- ⑦ Drinking fountain and bins
- ⑧ Existing path (to be upgraded for use as an informal walking path)
- ⑨ Existing carpark
- ⑩ Existing Commercial lease area
- ⑪ New car park (size to be confirmed)



LEGEND:

- | | |
|------------------|--|
| Commercial lease | Sand pit & boulders |
| Proposed trees | Mulch & logs |
| Existing trees | Primary paths |
| Grass | Secondary paths |
| Planting | Fitness pods |
| Planted mounds | Approximate area of Bronzewing habitat |



INDICATIVE SCALE BAR

NORTHERN TERRACES & ARBOUR

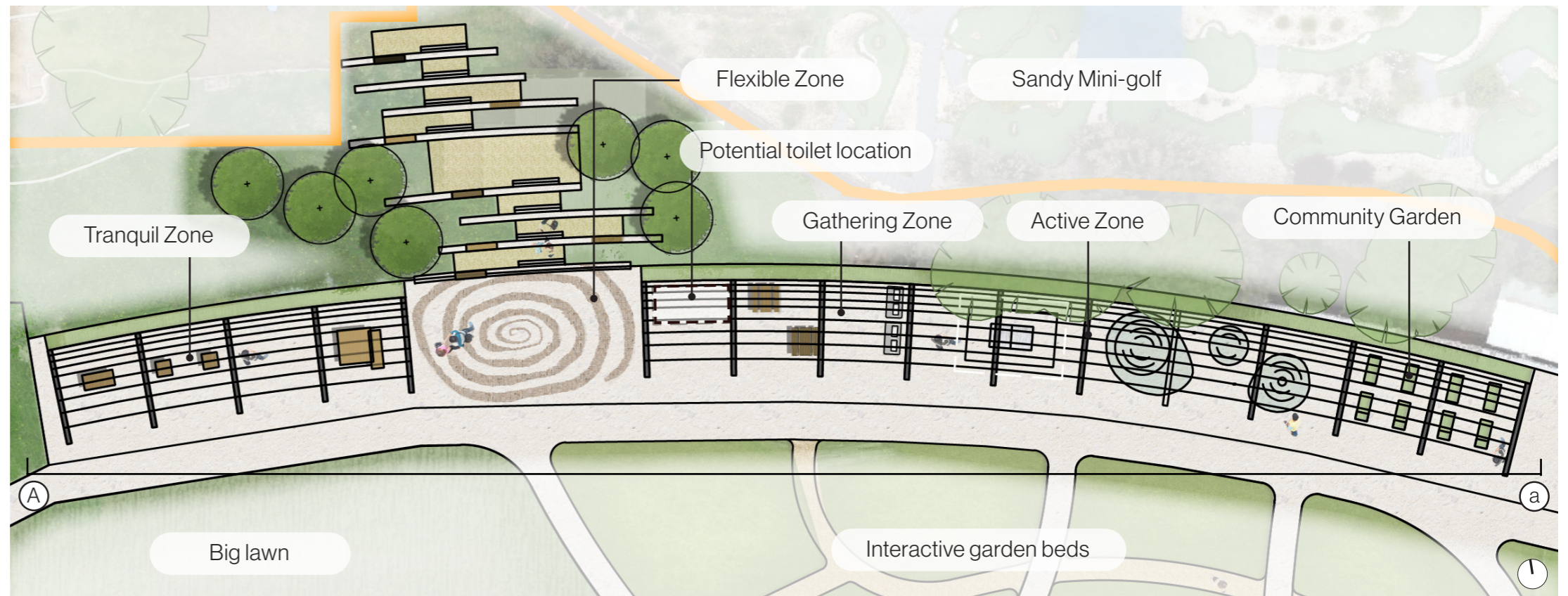
Key Plan



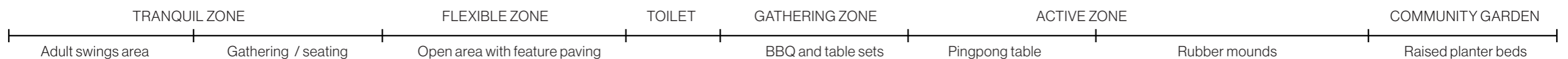
The masterplan design examines the potential to create new connections, vistas and functionality at the north of the site if the building and stalls that were part of the golf driving range operation were to be demolished. We proposed to retain and re-purpose the existing concrete slab under the stalls as the base for a large multi-functional arbour that provides shade, shelter and a variety of activities, and doubles as a striking structural element that forms a welcoming gateway to the reserve.

A path from the Wangara Road car park leads to a new stairway, which passes through landscaped terraces that provide additional seating and gathering space, while also stabilising the slope. The arbour at the top of the stairway features climbing plants to soften and green the structure and includes a tranquil zone for quiet reflection, a BBQ area, active zone with ping pong table and informal play space, and a community garden.

A public toilet will be included near the main stairway (exact location to be determined) utilising the existing sewer connection from the old building.



Northern Arbour plan view



Northern Arbour South Elevation Aa'

ARBOUR ZONES & ELEMENTS

Tranquil zone

At the western end of the arbour is a shady space with furniture for lounging and quiet reflection, with views over the big lawn.

This area will have a semi-transparent roof and be enclosed along the north edge with shade tolerant climbing plants.

It provides a variety of seating opportunities for individuals, couples and small groups, including long benches and adult swing seats that are suspended from the structure and have a gentle swaying motion.



Climbers through Arbour structure

Gathering zone

This area with two barbecues and two large picnic table settings offers space for family and friends to gather. It is a space for social opportunities that invites all age groups to socialise. There is additional bench seating running along the back wall of the arbour.

This area also includes a drinking fountain and is under a roof to provide shelter in sunny and in wet weather.

Toilet

A public toilet will be provided adjacent to the Flexible Zone at the top of the stairs. The exact size and location of the toilet is to be determined.



Drinking Fountain



Large suspended seats rock gently for quiet relaxation



Picnic tables for group or family gathering



BBQ facilities

ARBOUR ZONES & ELEMENTS

Active zone

This area offers some playful elements for younger park users and those who enjoy low impact active recreation. It includes a ping pong table (BYO bat and balls) and a series of low mounds with rubber surface.

The mounds provide a sense of fun and a space that can be used for unstructured play and also for lounging / lookout over the adjacent garden bed areas.



Pinpong table

Community garden

A group of raised, irrigated planter boxes provide an opportunity for community gardening, whether this be growing veggies or ornamental plants.

In line with Council's Community Garden policy, this area could either be a Shared Garden, in which gardeners work in the whole garden, doing whatever is needed at the time and taking a share of what they grow, or a Facilitated garden, managed on behalf of Council.

There may also be potential for nearby schools to be involved in plant propagation / experimentation using these plots.



Community gardening



Rubber mounds



Community garden boxes

ENTRY PLAZA

Key Plan



The entry plaza connects the new car park to the parkland, leading through raised interactive garden beds in raised planters, to a circular gathering space with potential for an iconic public artwork as a centrepiece.

The raised planters at 500mm height are designed for engagement (touching / smelling etc.) featuring local indigenous plants with interpretive signage and QR codes for further information.

This area will serve as a welcoming gateway space with potential indigenous art and feature paving that can be designed to represent the local history of the site.

The large open paved area provides space for circulation and also connects the car park to the 4Paws Zone (fenced dog off leash area).



Entry plaza plan view



Big lawn and primary path Raised garden beds Open circle and gateway space with public art opportunities Raised garden beds and discovery paths

Entry plaza section Bb'

ENTRY PLAZA ELEMENTS

Interactive Garden Beds

This area offers a display of local indigenous plant species for exploration and education. The raised garden beds will allow for a more intimate and discovery experience. The planters are raised at a height to encourage touching, smelling and engaging with plants.

Next to the garden beds there will be interactive QR codes that with links to online pages that provide further fun / interesting facts and information about planting, ecology, biodiversity and growing conditions, to encourage local people to plant these species in their home gardens.



Raised edges to interactive garden beds

The Circle

Among the raised garden beds, a circular gathering space with seating provides a sense of a formal entry to the site from the car park area. This is an ideal location for a public art work such as a sculpture, mural (feature paving) and/or temporary installations.

These have potential to create landmark features that serve as meeting and orienting points within the reserve.

The elements may be designed and developed by engagement with local and/or indigenous artists to tell the stories of place and make a reference to local connection to country.



Public art example



Paths through garden beds look and feel



Interactive garden beds



Entry plaza paving pattern



Open Circular gathering space

THE GREEN

Key Plan



Big lawn

The big lawn includes a large open and flexible space which is suitable for kick-about, picnic and gatherings. This area is outlined by a loop track where visitors can walk, run and cycle.

Around the big lawn, there are a number of fitness pods and grass mounds that offer a topography change and shade to the loop. A large mound at the south-east edge with trees and understorey planting creates a buffer between the big lawn and the dog area.

Small lawn

The smaller lawn area, offers an alternate space for smaller groups or individuals, away from informal sports that may happen on the Big Lawn. Two grassed mounds invite people to enjoy a prospect experience. These mounds can be used for group gatherings, lounging in the sun, and informal play.



Big lawn and primary path Tree mound with planting Primary path Dog off-leash

Big lawn adjacent mound section Cc'



Big lawn plan view

THE GREEN ELEMENTS

Tree mounds and paths

The inclusion of grassed mounds in this area invite users to gather in this space whilst providing viewing opportunities to the surrounding areas. The mounds can also be used for informal topography play. Additional mounds with understorey planting and trees provide shade to adjacent areas.

The proposed path system will allow for a hierarchy of activities and materials. The primary paths will be made of concrete and are suitable to a number of activities such as walking, running. Smaller pathways in granitic sand encourage slower walking for enjoyment of the natural environment.

The main circuit path around the top of the hill is a generous 2.5 metres wide to allow ease of passing for people with prams or kids on bikes. While this path is wide enough to be used for casual cycling, its main function is for walking and running.



Primary and secondary paths



Walk / running / cycling primary paths



Small lawn mounds

Fitness pods

Along the path around the big lawn area there are three dedicated zones with fitness pods that offer different levels of exercise for all age groups.

The incorporation of these pods will serve as destination points for users within the reserve and can be enjoyed as part of a running/fitness circuit.

These could be surfaced with rubber or softfall mulch (TBC) - mulch is preferred due to the natural setting.



Static fitness equipment



Fitness pod



Timber equipment

4 PAWS ZONE

Key Plan



Fenced dog park

The dog off-leash area is approx. 9500m², and offers a variety of experiences. The area is fully fenced and has one entry point adjacent to the carpark. This entry features double gates for safety, to prevent dogs running out where vehicles are moving.

Within the fenced area, there is a large open grass area, a sand-pit zone with boulders and a mulched area with balancing logs to provide variety of

experiences and spaces for dogs with different energy levels. It will also include some bench seats for dog owners to sit and watch their dogs play.

The proposed mounds in this area will allow for tree planting and provide some shade and topography as an additional play opportunity for the dogs.

The south and west sides of the dog off-leash area include a wide native planting buffer to create a more enclosed feeling and provide separation from the perimeter path and biodiversity areas.

Balance and play elements

The inclusion of boulders on sand and tree logs on mulch facilitate play and lacing opportunities for dogs under dog-owner supervision. These elements bring a sense of a natural landscape whilst serving an active function. Where possible, materials will be sourced from any trees and rocks removed from the site as part of earthworks associated with the Rehabilitation Plan.



Boulder edge around sand pit



Dog off-leash area look and feel



Tree logs on mulch



Dog off-leash plan view

WESTERN ACCESS RAMP

Key Plan



Following the ecology consultant recommendations, the western edge will incorporate additional indigenous planting to strengthen and prevent erosion along the sloped edges and enhance the existing habitats zones.

This edge will also incorporate an accessible ramp that allows visitors to walk from the existing carpark to the top of the reserve.

At the bottom of the Western edge, there will be a proposed planted swale that will serve a stormwater function to this boundary.

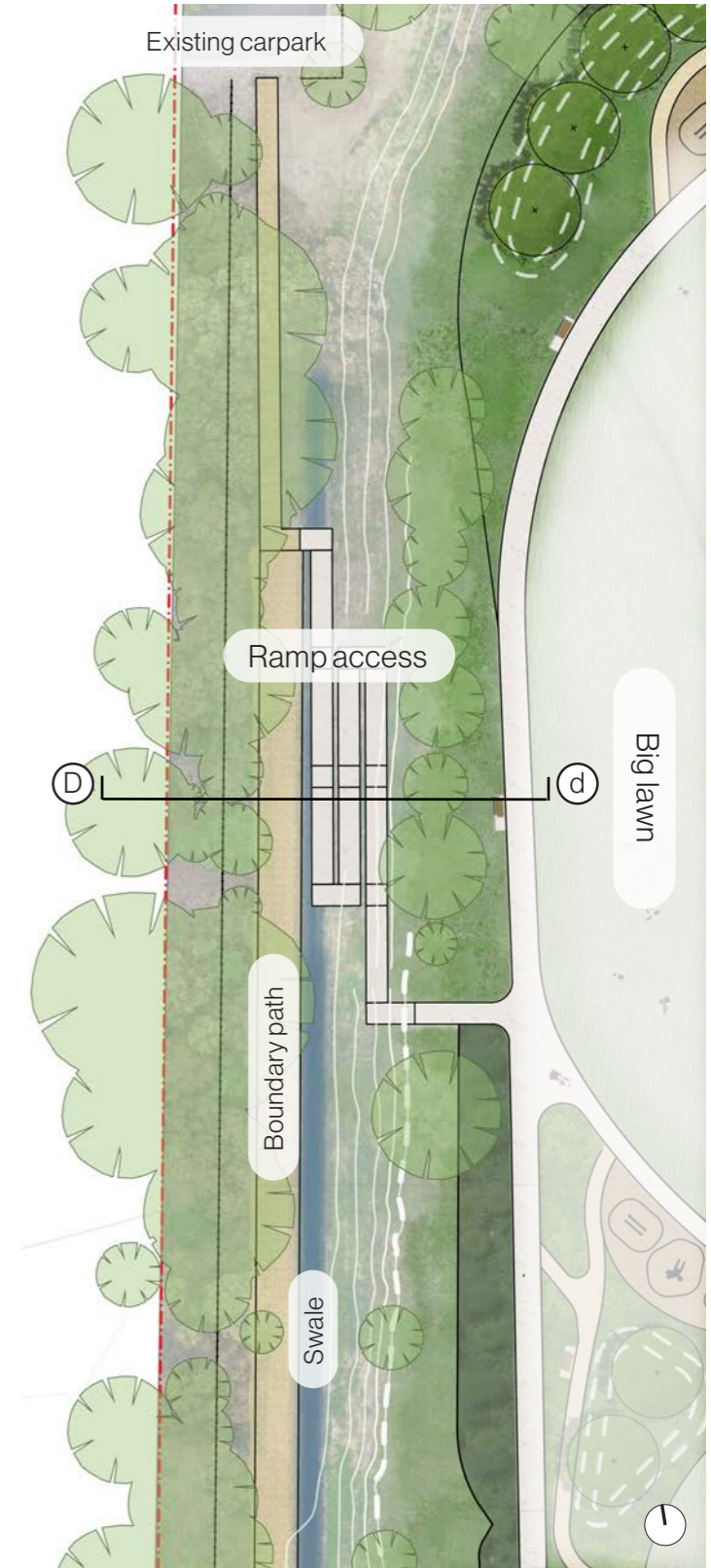
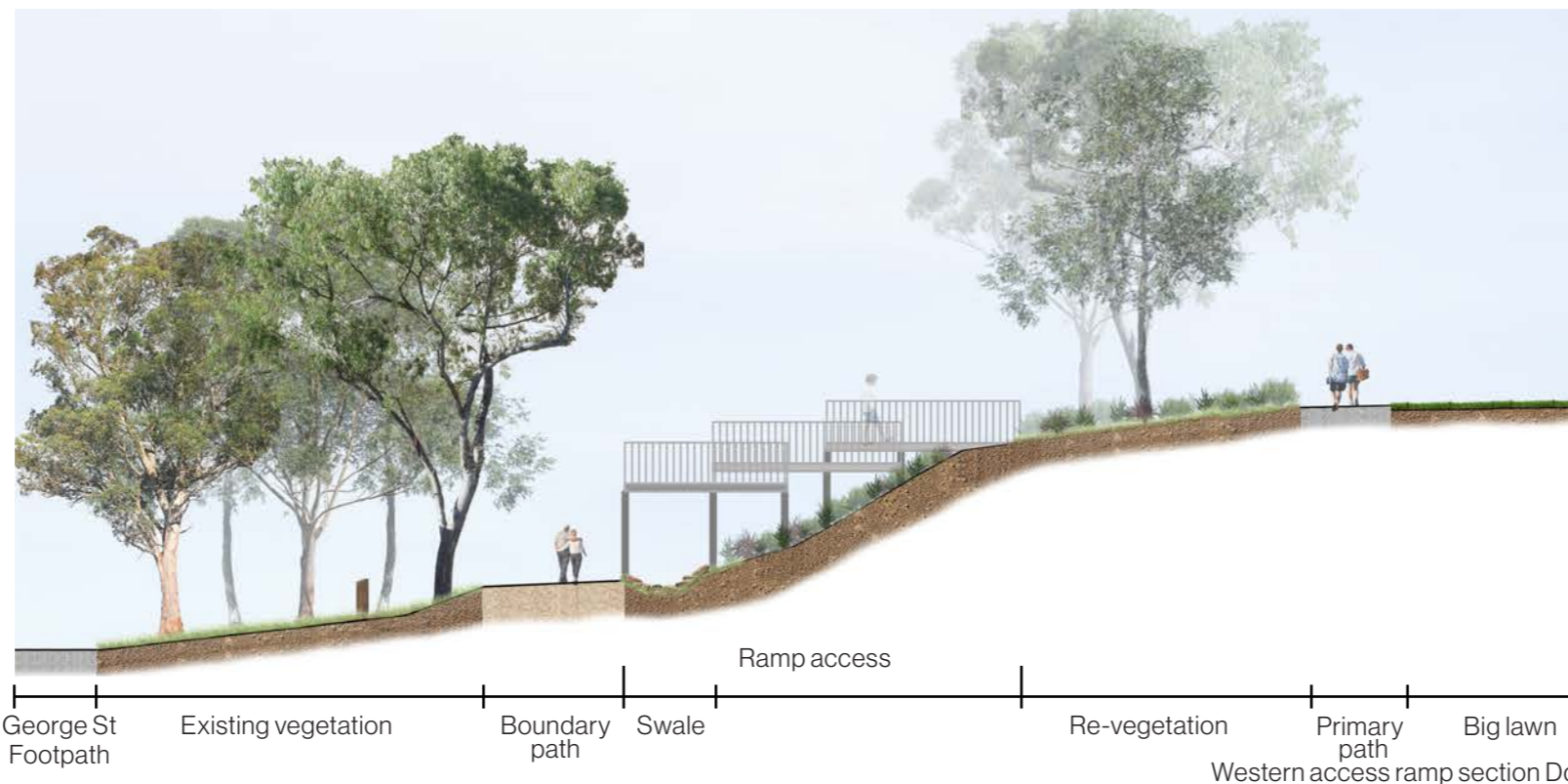
An additional mid-block opening in the fence along George Street will provide another pedestrian entry to the site.



Access ramp through existing slope

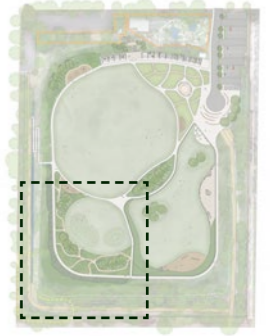


Access ramp look and feel



WANDERING TRAILS

Key Plan



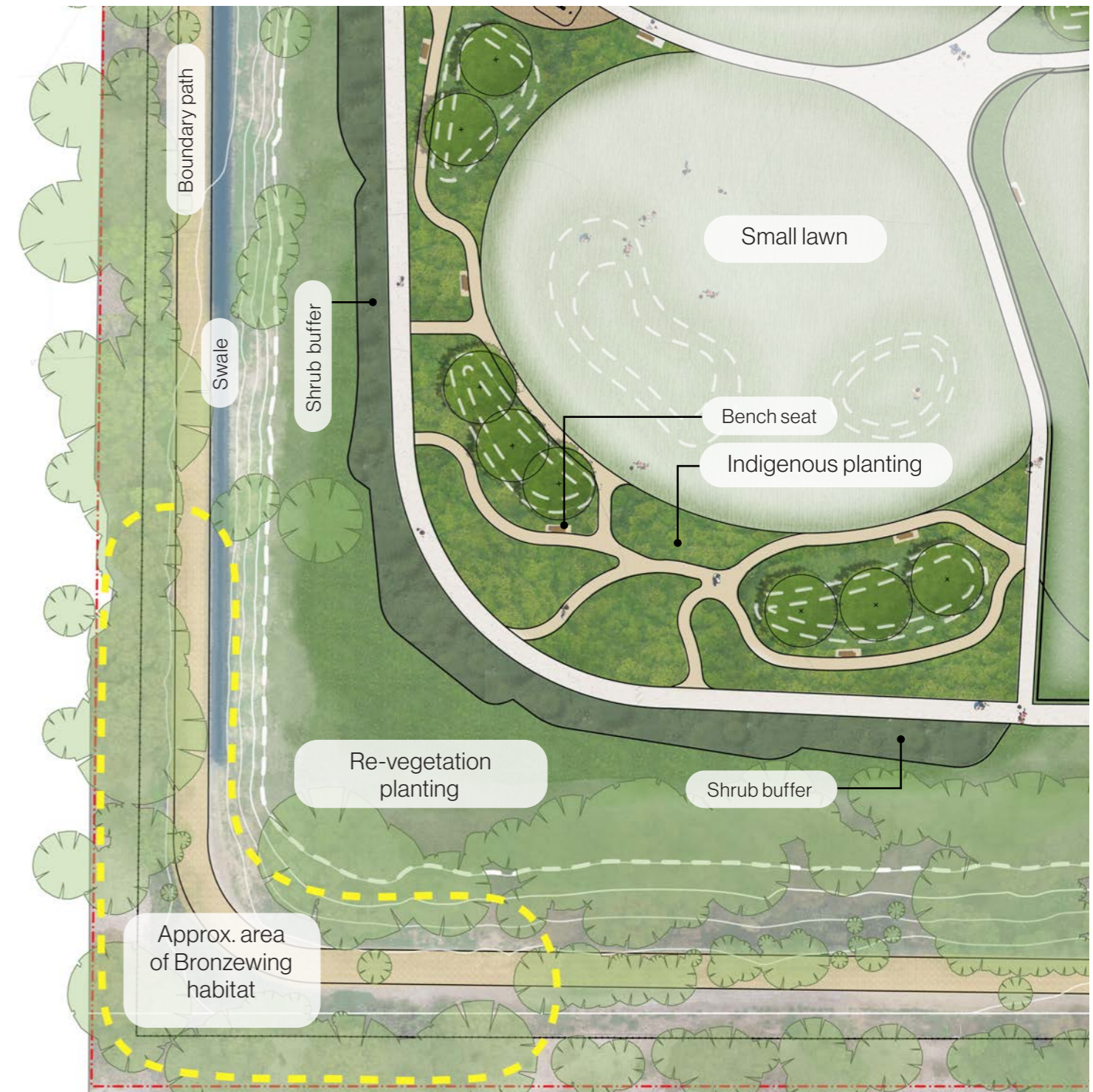
The South-Western corner of the reserve will include a biodiversity zone with re-vegetation of indigenous ground-covers and shrub species to the lower tier and sloped edge of the site. The inclusion of these elements will help improve the existing fauna habitat, particularly for birds species such as the Common Bronzewing.

On the upper tier of the site, mass-planted garden beds featuring local indigenous plants will provide opportunities for exploration and connections with nature in this area. A network of “wandering trails” provides options for recreational walking, enjoyment of nature and quiet reflection, with seats provided among the planting.

The re-vegetation will consist of local indigenous species which are part of the local EVC. For enhancement of the ecological values of this area, the integration / re-utilization of woody debris is also proposed.

This area is to include educational signage about the importance of habitat corridors for urban wildlife, Indigenous flora, fauna and habitat strategy and Bronzewing protection.

The above interventions will strengthen the fauna and flora habitats through this corner and facilitate bio-links to the nearby parks and reserves.



Indigenous planting look and feel



Walking paths through indigenous beds



Educational signage

INDIGENOUS PLANTING SELECTION

A preliminary selection of indigenous plants is provided to enrich the West, Southern and Eastern boundary areas of the reserve and enrich the existing Bronzewing habitat.





Introducing a variety of indigenous plants will:





- Assist in the prevention of soil degradation;
- Reduce the need for tree trimming and clearing;
- Encourage native birds, animals and plants to return to the area;
- Help maintain a natural balance in the local ecosystems;
- Reduce possible pest outbreaks;
- Retain the integrity of the local plant species and the landscape.



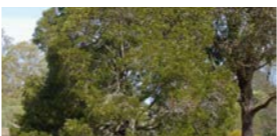
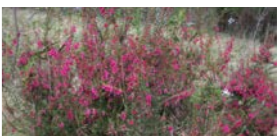



All proposed species have been advised by a qualified ecologist and selected from the relevant EVC benchmark from the Gippsland Plain bioregion, (many of these species are already present on site). This is not an exhaustive list and many other species may be included in the planting design for these areas.

For further information on recommended species, please refer to the Biodiversity Assessment report by Beacon Ecological.

Note: Any suggested tree species in re-vegetation areas are to be planted outside of the contaminated soil-cap, to avoid tree roots infiltrating the contaminated soil area below the cap surface. Location of trees to be planted in revegetation zones will be subject to detailed assessment of once the rehabilitation works are complete.

WANDERING TRAILS			
BOTANICAL NAME	COMMON NAME & TYPE	SIZE (HXW)	IMAGE
<i>Epacris impressa</i>	Common Heath Shrub	1-1.5m x 1-3m	
<i>Cassinia aculeata</i>	Common Cassinia Shrub	1-2.6m x 2m	
<i>Indigofera australis</i>	Austral Indigo Shrub	2m x 2m	
<i>Leptospermum continentale</i>	Prickly Tea-tree Shrub	2m x 2m	

SHRUB BUFFER			
BOTANICAL NAME	COMMON NAME & TYPE	SIZE (HXW)	IMAGE
<i>Acacia paradoxa</i>	Hedge Wattle Shrub	4m x 4m	
<i>Banksia marginata</i>	Silver Banksia Tall Shrub	3m - 6m x 4m	
<i>Leptospermum continentale</i>	Prickly Tea-tree Shrub	2m x 2m	
<i>Solanum laciniatum</i>	Large Kangaroo Apple Shrub	4m x 5m	

RE-VEGETATION AREAS							
BOTANICAL NAME	COMMON NAME & TYPE	SIZE (HXW)	IMAGE	BOTANICAL NAME	COMMON NAME & TYPE	SIZE (HXW)	IMAGE
<i>Acacia mearnsii</i>	Black Wattle Tree	8-25m x 6-10m		<i>Acacia paradoxa</i>	Hedge Wattle Shrub	4m x 4m	
<i>Acacia melanoxylon</i>	Blackwood Tree	30m x 4-10m		<i>Epacris impressa</i>	Common Heath Shrub	1-1.5m x 1-3m	
<i>Allocasuarina verticillata</i>	Drooping Sheoak Canopy Tree	10m x 6m		<i>Leptospermum continentale</i>	Prickly Tea-tree Shrub	2m x 2m	
<i>Eucalyptus radiata</i>	Narrow-leaf Peppermint Canopy Tree	10-40m x 6-20m		<i>Leptospermum myrsinoides</i>	Heath Tea-tree Shrub	1-1.5m x 1-2m	