

MEADOWBANK & MEMORIAL PARKS

MASTERPLAN REPORT

JULY 2019



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INTRODUCTION

Project Background

In December 2018, Aspect Studios was engaged by the City of Ryde to develop a Masterplan for Meadowbank Park and Memorial Park. With the rapid growth of local residential and working population within the City of Ryde local government area, there is an increasing demand for more outdoor recreational opportunities. As the largest parkland in the city, the parks have a bigger role to play in serving the evolving community needs.

The Masterplan was developed in response to the City's vision for open spaces [1] and the community demands expressed in the 2018 community consultation [2]. The Masterplan aims to assist the City and local community to set up a clear direction that will guide the incremental improvements and development over many years.

The project area includes Meadowbank Park and Memorial Park, bounded to the south by Parramatta River and surrounded to the east, north and west by a combination of low density and medium density residential developments. The parks have multiple access points off Constitution Road, Adelaide Street, Andrew Street, Ross Smith Avenue, James Street, Lancaster Avenue, Crowley Crescent and a regional pedestrian and cycle connection from the Ryde RiverWalk.

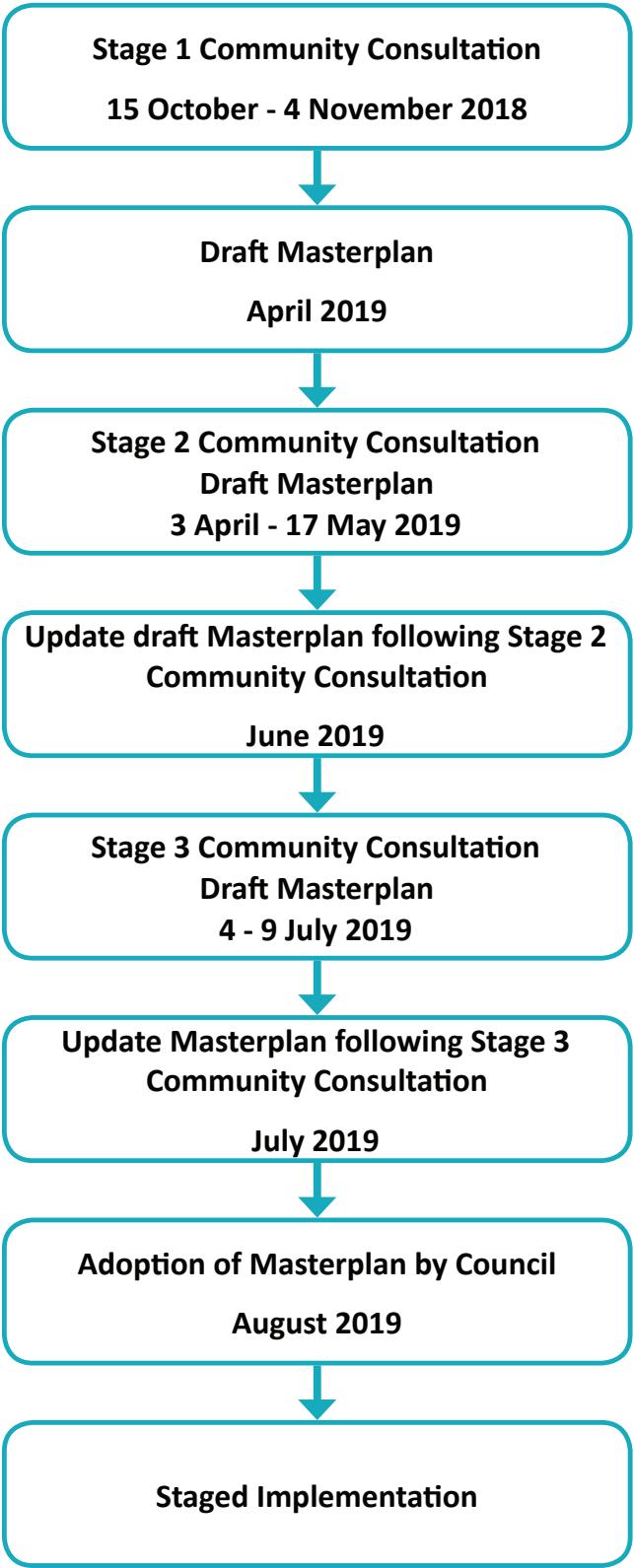
Masterplanning Process

The Masterplan was prepared in close collaboration with the City of Ryde Council, with input from stakeholders and community members. The timeline of preparing this Masterplan is illustrated in Figure 1.

Two Masterplan scenarios were prepared initially for Meadowbank Park, with main differences in the provision of netball courts and indoor sports centre. Although the Masterplan report is based on a single scenario, the alternative scenario is also included in Appendix 1 for information. Due to the evolving community needs, changing urban environment and social context, the alternative scenario will be assessed for implementation if necessary.

While the Masterplan provides an indicative scope of development, it is recognised that implementation programs will need to be reviewed regularly, ensuring the plan will always be a valid guiding document for the park development.

Figure. 1 Masterplanning Timeline



[1] City of Ryde had developed a series of strategic documents for different types of open spaces. The key strategic planning documents include:

City of Ryde Integrated Open Space Plan 2012

City of Ryde Sport & Recreation Strategy 2016-2026

Ryde Local Environment Plan 2014

Parramatta River Estuary Coastal Zone Management Plan 2013

City of Ryde Children’s Play Implementation Plan 2013 & updated 2019

Ryde Biodiversity Plan 2016

Ryde RiverWalk Masterplan 2007

City of Ryde Bicycle Strategy 2014

City of Ryde Sport & Recreation Study 2016-2026

City of Ryde Synthetic Surface Action Plan 2016-2026

State Environmental Planning Policy 19 (Bushland in Urban Areas)

River to River Corridors Project

Our Living River

State Environmental Planning Policy (Infrastructure) 2007

[2] City of Ryde Meadowbank and Memorial Park Masterplan and Meadowbank Park Plan of Management Community Stakeholder Engagement Report, November 2018

[3] Meadowbank and Memorial Park Masterplan Stage 2 Report, April 2019

[4] Meadowbank and Memorial Park Masterplan Stage 3 Report, July 2019

2

VISION AND OBJECTIVES

2.1 VISION

Meadowbank and Memorial Parks will be a multifunctional sports hub with high quality facilities and amenities that will meet the current and future sporting needs of the Ryde residential community.

The parks will serve as a community hub that advocates for wellbeing for all. A diverse range of activities and leisure opportunities and improvements in safety, wayfinding and access, will attract a broad spectrum of the Ryde Community to use the Park for both active and passive recreation.

At a broader scale, the Parks will make substantial contributions in improving ecological functions; increased tree canopy cover; increased diversity in flora; and improved water quality and stormwater discharge.

2.2 OBJECTIVES

Development of a large scale park presents many challenges. Changes in user needs over time, coupled with changes to management, and design consultancy teams pose risks that the park identity and the coherency of a strong landscape approach can be compromised over time.

The primary functions of the Masterplan include translating visions and big ideas into tangible strategies to guide detailed design now, and into the future; providing strategies to cater for the immediate community needs; and allowing for the park to adapt to future changes without compromising its integrity.

The key objectives of the Masterplan include:

- Reinforce the park's identity as a multi-purpose regional sports hub.
- Increase recreational opportunities for all the community members.
- Design a flexible open space framework that meets the current needs and is adaptable for future changes.
- Improve connectivity of the park to a broader area.
- Ensure a sustainable and climate resilient park.
- Provide a tool to formulate, budge and prioritise new projects.



2.3 LANDSCAPE FRAMEWORK

The spatial arrangement of the park is defined by the palm-like geometry consisting of vast central green space with four thinner, 'finger-like' open spaces extending from the palm. While these 'fingers' of open space feel relatively remote from the main sports action in the 'palm', they are easy to access from the surrounding neighbourhoods.

The proposed open space framework takes advantage of this spatial feature, locating the more frequent daily uses (the activity anchors) in these fingers, while increase the capacity for sport and community gathering in the palm. These small park spaces will be equipped with a range of facilities promoting active outdoor living and recreation for all age and ability groups.

The open space framework establishes the park ecosystem, circulation network, function and character zones. A robust framework not only prevents sporadic development, but also allows for adaptive uses to meet evolving needs of the community whilst maintaining a coherent park structure.

The main features of the open space framework for Meadowbank Park and Memorial Park are illustrated in Figure 3.

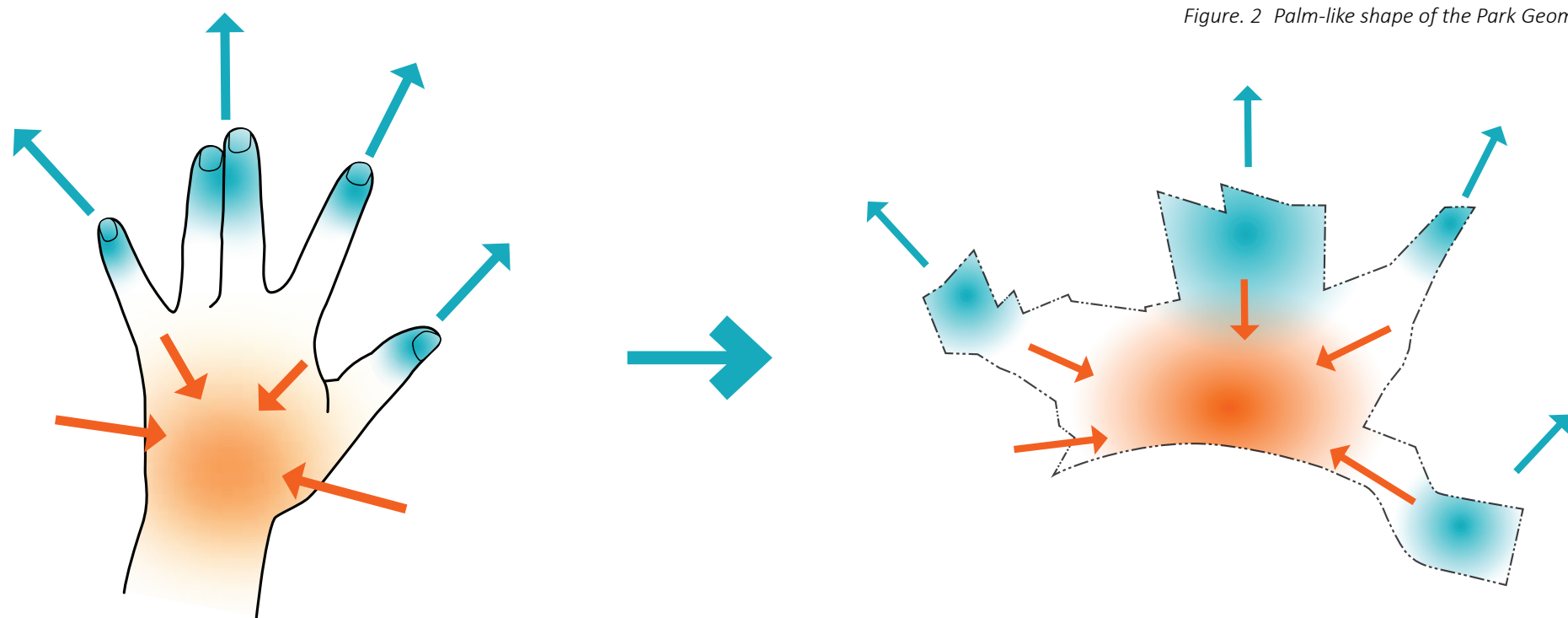
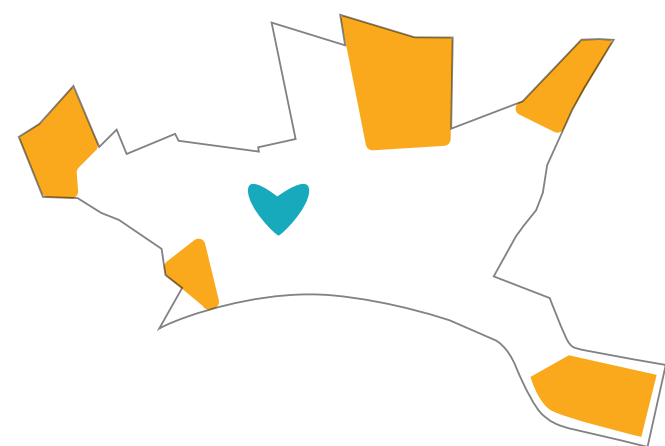
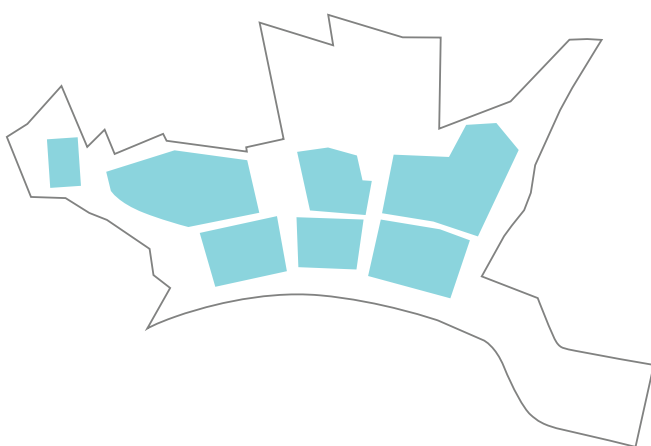


Figure. 2 Palm-like shape of the Park Geometry



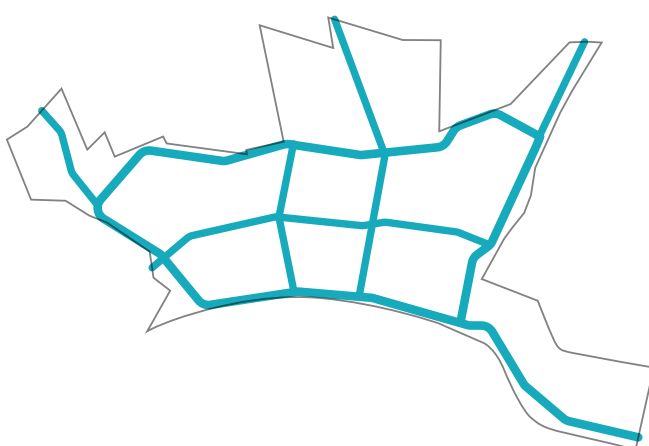
Activity Anchors

The anchors are spaces designed for frequent daily uses, such as play, exercise, games, gathering, respite and small scale community events.



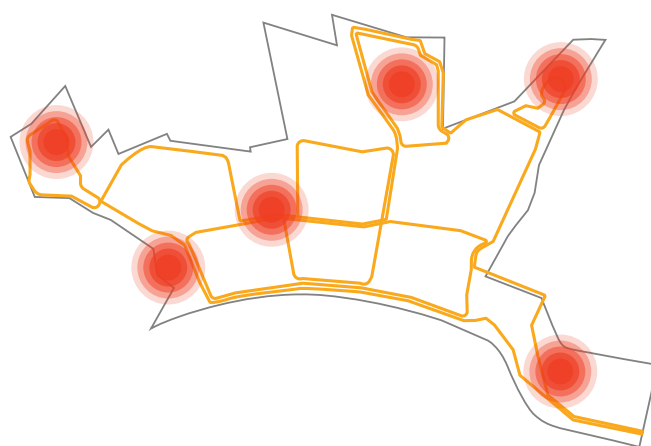
Sports Green

The vast central area is occupied by sport fields, providing flexible space for formal sports and community event.



Green-blue Grid

The grid/blue grid establishes the principal movement corridors for pedestrian, cyclists and wildlife. Composed of structured tree planting, creeks and bioswale system, the grid system also provides connected habitat for wildlife.



Pods and Circuits

The pods are secondary activity anchors along the main circulation corridors. These spaces provide seating and spectating opportunities for sport games, as well as activities for daily use, such as fitness, play, shaded seating and flexible paved area.

Figure. 3 Palm-like shape of the Park Geometry

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LANDSCAPE MASTERPLAN

Figure. 4 Meadowbank Park and Memorial Park Masterplan



KEY	
1	Multi-purpose sports fields (synthetic)
2	Multi-purpose sports fields
3	Multi-purpose sports courts area
4	Multi-purpose hard courts (including linemarking for tennis)
5	Fitness Equipment
6	Enclosed cricket nets
7	Meadowbank Skate Park
8	Regional playground
9	Upgraded neighbourhood park
10	Amenity buildings
11	Cafe / amenities
12	Dedicated off-leash dog exercise area, with sports field to be in use Sat & Sun morning
13	Car park
14	Community event lawn
15	Creek naturalisation
16	New path
17	Informal sports court
18	Modified cul-de-sac for drop-off
19	New pedestrian bridge
20	Upgraded stone walls and park furniture
21	Improved river interface and habitat
22	New park furniture along RiverWalk
23	Existing bushland to be retained and protected
24	Upgraded track and steps
25	Dog friendly swim site

SPORTS FACILITIES NUMBERS

TYPES	EXISTING	PROPOSED
Rectangular Fields Senior	8	11
Rectangular Fields Junior	2	6
Cricket Senior	3	5
Cricket Junior	1	0
Cricket Net	3	5
Netball	28	0
Tennis	8	8
Multi-purpose court	0	9
Basketball hoops	1	6

Key Masterplan Components

As the community is rapidly growing, one of the key challenges is to accommodate more functions within limited open space while maintaining a strong identity as a regional sports hub. The key gestures in the proposed Masterplan are summerised in the following categories.

Strengthen the Meadowbank Park's identity as a regional sports hub:

- Increasing the number of multi-functional sports field and courts (Table 1)
- Provide synthetic turf for weather use.
- Increase training facilities, such as cricket nets and warm up areas.
- Increase and upgrade sport related facilities, including sports amenity buildings, shaded seating for spectators
Provide informal courts for unstructured games.

Increase and diversify recreational opportunities:

- Build a regional playground next to the Meadowbank Skate Park to serve both local residents and regional visitors.
- Create a network of shared user paths connecting the main activity areas in the park.
- Provide opportunities for food outlets in the park. The location near regional playground is identifies for a cafe/kiosk.
- Upgrade neighbourhood parks adjacent to Ross Smith Avenue and Andrew Street to provide facilities for exercise and passive recreation.
- Create small activity nodes along path to provide more choice for exercise and recreation.
- Increase shade along paths, seating and play areas.
- Install more seats along RiverWalk, especially under existing trees.

Enhance and improve the natural systems in the park:

- The southern end of Archer Creek and eastern side of Charity Creek is identified as the priority zone for creek naturalisation.

- Establish a green grid system.
- Significantly increase understorey planting to improve biodiversity of the park ecosystem.
- Improve arrival experience and encourage use of public transport.
- Create additional drop-off areas and redistribute car parking for easy access to main park destinations.
- Create shared user paths connecting to the pedestrian network within streetscape, providing easy access to public transport.
- Improve park wayfinding system.
- Provide more bike facilities at main park entries and park destinations.

Memorial Park is a relatively self-contained park with significant level change that offers filtered views towards the river. The key objective is to improve user experience without compromising its natural bushland setting. The main improvements include:

- Repair dry stone retaining walls and stairs, and introduce planting to along the walls.
- Provide park benches at the edge of lawn terrace, giving people different options for seating.
- Build new shade structures over the BBQ and picnic tables.
- Provide easy access to public transport.
- Upgrade park furniture, such as benches, picnic tables, bins and lighting.
- Improve park wayfinding system.

Figure. 5 Artistic Impression of Meadowbank Park



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LANDSCAPE STRATEGIES

4.1 PEDESTRIAN AND BIKE CIRCULATION

The key improvements of pedestrian and bike circulation are:

- The creation of a loop path to the outer edge of the sporting fields for pedestrians and shared users. The loop path connects RiverWalk, main entries, car park, and activity anchors.
- Improved east-west connections within the park. Presently, RiverWalk serves as the only major east-west connection in the park. Two new paths are proposed to provide additional east-west connections that improve access from the surrounding neighbourhood.
- An proposed upgrade to the Riverwalk pathway would widen it to 4m. The pathway would be shared by both pedestrians and cyclists however a separated user option will be investigated.
- Increased pedestrian access points to the park. New pedestrian entries will be added on Constitution Road, Ross Smith Avenue and Meadow Crescent. Landscaping and wayfinding will be upgraded at all pedestrian entries.
- The creation of a series of path circuits threading together the activity anchors. The circuits may be coded by colours, signs, or other playful methods, and at various lengths, cater for a variety of uses: jogging, walking, riding etc.

Figure. 6 Pedestrian and Bike Circulation Diagram



4.2 VEHICULAR ACCESS AND PARKING

Key strategies are proposed to improve the vehicular arrival experience.

- Improve internal car park circulation by connecting the car parks on Constitution Road and Adelaide Street.
- Redistribute parking to reduce congestion. Provide parking space, including accessible parking, at Andrew Street neighbourhood park and regional playground.
- Improve car park landscape by introduce new trees, rain gardens and lighting.
- Where new access routes are proposed a traffic report will be conducted to ensure safe entry/exit.
- A Modied Ross Smith Avenue cul de sac will include a drop-off.

CAR PARK NUMBERS

TYPES	EXISTING	PROPOSED	Accessible PARKING
Adelaide Street	211	158	YES
Constitution Road	158	186	YES
Ross Smith Avenue	46	51	YES
Andrew Street	0	15	YES
Meadow Crescent	60	60	NO
Memorial Park	18	17	NO
John Whitton Bridge west	25	25	NO
Total	500	495	

Figure. 7 Vehicular Access and Parking Diagram



- Visitor car park
- Car entry
- Service vehicular entry

4.3 OPEN SPACE TYPOLOGY

The open space typologies across the park are varied, and based on the functions and provision of facilities, including:

Regional and District Playground

The regional and district playground provide diverse play and recreational opportunities for a wide range of users, from toddlers, teens, parents to elderly. The space will serve visitors from a broader area as well as local residents.

The facility provision may include:

- Children's playground with water play
- Skate park
- Shaded BBQ and picnic facilitates
- Seating areas
- Water station
- Cafe or kiosk
- Public toilet
- Loop path
- Bike racks

Neighbourhood parks

Neighbourhood parks are designed to serve the daily recreational needs mainly for the local communities. They are easy to access by foot and car, and provide facilities for both active and passive recreation at a smaller scale.

The typical facility provision include:

- Playground equipment
- Seating area
- Shaded BBQ and picnic facilities
- Drinking fountain
- Bike racks

Sportsground

The vast central open space is occupied by multifunctional sportfields, which host regular structured and unstructured sport games at a regular basis. The fields will also be used for community events by booking.

The typical facility provision include:

- Floodlit by booking

- Shaded seating area for spectators
- Outdoor power and water for events

Sport courts

These paved courts are designed for multiple sport games via line marking and shared sports facilities. The existing tennis courts will be upgraded to support other sports, while booking will still be required.

The typical facility provision include:

- Fixed sport facilities
- Floodlight by booking
- Shaded seating area for spectators
- Bike racks

Green Heart

With its proximity to the Adelaide Street car park and central amenity building, the green heart is expected to become an activity hubs for regular daily and event uses, such as sports spectating, outdoor games, dance, tai chi, community events, festival gathering, etc.

The typical facility provision include:

- Flexible paved area for events
- Shaded seating area for relaxation and sport spectating
- Shade structure
- Pedestrian lighting
- Drinking fountain
- Outdoor power and water for events
- Informal play and exercise opportunities
- Areas designed for informal outdoor games
- BBQ and picnic tables
- Bike racks
- Wayfinding signage

Activity nodes

Located throughout the network of main shared user

path, activity nodes provide a series of simple facilities for relaxation, exercise, play and sport spectating. Each activity node may provide a different range of facilities depending on its location, for example, the foreshore activity nodes will be mainly used for seating and relaxation, while for those near fields may provide facilities for exercise and spectating.

The typical facility provision may include:

- Flexible paved area for exercise
- Shaded seating area for relaxation and sport spectating
- Pedestrian lighting
- Informal play opportunities
- Drinking fountain
- Bike racks

Natural Area

The park presents two remnant bushland areas, which are identified in the City of Ryde Biodiversity Plan as high priority for conservation. Hence there is limited public access to these areas. Educational signs will be installed outside the bushland boundary to raise public awareness of the bushland ecosystem and conservation works.

Figure. 8 Open Space Typology Diagram



4.4 PLANTING

The planting strategy takes into consideration of the ecological benefit, human comfort and the landscape character.

The most dominant feature in the Masterplan is the green grid, consisting of a variety of large tree species, predominantly local native. Two tree palettes will be used for north-south and east-west boulevard respectively for diversity and legibility. Tree species selection will be in accordance with Council's preferred tree species lists and be guided by future flora and fauna reports.

An important strategy is to create planting character zones to reinforce place identity and increase the diversity of plant communities. The most identifiable zones include:

- **Existing Natural Area:** the main objective is to conserve the remnant bushland and ensure its long term health. Situated in highly urbanised environment, edge effect is one of the biggest threats to these natural areas. Only local native species presenting no harm to the existing bushland can be used in the surrounding area, and no high intensity human activity should be located nearby, as invasive species and plant seeds can be transported easily by wind, birds or insects into the bushland. Detailed management strategy will be carried out in separate flora studies.
- **Main park destinations** (regional playground, district playground and neighbourhood parks): these areas are frequently used and need to accommodate a large number of visitors at one time. The plants need to be robust, easy to maintain, as well as providing seasonal attractions.
- **Creek edges:** the main function of these planting areas are to increase ground infiltration and reduce direct stormwater runoff into the water courses. The plants selection will be mainly drought and inundation tolerant species.
- **Foreshore:** similar to the creek edge planting, these ground cover plants reduce direct stormwater runoff into the river. Existing planting area will be infilled with more native species to increase biodiversity and habitat for birds and insects. In addition, the introduction of mosquito repellent plants, particularly near seating

Figure. 9 Structural Tree Diagram



Figure. 10 Planting Character Zones Diagram

area will be implemented to assist in reducing the prevalence of mosquitoes.

- **Super-swale:** the super swale will provide a bioswale for stormwater quality improvements and stormwater infiltration. It is an integral component of the landscape setting with footpath or boardwalk waving through the planting areas. Educational signs and interactive landscape elements will be installed to describe the sustainable water management system in the park. The extent of super-swale will be determined at detail design stage.
- **Car parks:** car park planting makes significant contribution to the arrival experience and reduction of pollutants from the surface runoff. Bioswale will be installed in new and existing car parks wherever space permits.



4.5 LIGHTING

The park lighting consists of three main components: sports field lighting, safe routes for evening use and general pedestrian lighting for main activity areas and shared user paths.

All senior sports fields will be lit by timed sports field lighting. Each fields can be lit up independently depending on booking. The floodlights will be designed to minimise lighting impact on adjacent residential properties.

Another key strategy to ensure safety is to provide safe routes for evening uses. Currently the RiverWalk serves as the only safe route for people travelling east-west along the foreshore. The Masterplan proposes additional three north-south safe routes linking RiverWalk to main streets (Constitution Road, Ross Smith Avenue and Andrew Street) and car parks (Adelaide Street and Constitution Road car parks).

Key gathering and recreational areas will be lit by pedestrian light to improve safety and surveillance.

Detailed lighting design will be carried out by individual park projects. However, there are some general design principles should be taken into consideration, such as:

- maximise the use of each light pole to reduce the total number of light poles;
- consider the impact of growing tree canopies over time;
- minimise upward light pollution, using LED light for better lighting control and energy saving; and
- avoid over lighting of the park by choosing priority areas for lighting.

Figure. 11 Lighting Diagram





4.6 SUSTAINABILITY

Climate Change

Despite management and maintenance, climate remains the most important factor in shaping urban parks. The impact of climate change no longer lies in the predication, extreme weather events are on the rise, such as flooding and drought are more frequent and more severe. Climate change also leads to species dislocation and accelerating the rate of species extinction.

Besides being the primary source of nature for urban residents, large parks can also play valuable roles in preserving biodiversity, mitigating heat island effects and urban hydrology. They are important stepping stones in urban green corridors and fulfil a variety of ecosystem services.

The Masterplan considers the park landscape system in a comprehensive and long-term manner, aiming to mitigate environmental damage as well as contribute to the urban ecosystems and regenerate natural habitat. These approaches are incorporated in various landscape strategies, such as stormwater management, sustainable construction, planting strategy, public transportation, creek naturalisation, park management and maintenance, etc.

Integrated Water Management

Integrated water management brings together all facets of the water cycle to maximise social, environmental and economic outcomes. Elements of water cycle include:

- waterways
- alternative and potable water supply
- stormwater management
- water treatment
- wastewater management

While the traditional stormwater systems are designed to move water rapidly off buildings and pavements, they also disrupt natural hydrology, contribute to water pollution, and potentially lead to more floods . Green infrastructure provides manifold of environmental benefits as well as reduce long term maintenance and reconstruction cost.

The Masterplan focuses on the following aspects to promote integrated water management:

- Increase stormwater tanks for irrigation.
- Install bioswales to increase natural ground infiltration as various scales.
- Identify priority areas for creek naturalisation.
- Increase permeable paving and reduce areas of hardstand where possible to encourage ground filtration.
- Explore opportunities for grey water recycling and green roofs for new amenity buildings.
- Install information signages to illustrate the principles and measures of integrated water management in the park.

Creek Naturalisation

Located in the Parramatta River Basin, Meadowbank Park is the point in which Charity Creek, Little Creek and Archer Creek flow into the Parramatta River. In 1940s, the creeks were channelised with concrete lining as they appear today. However, channelisation actually increases water velocity and the likelihood of flooding as well as increases to water pollution by unfiltered stormwater runoff. Naturalisation of concrete waterways will decrease peak flow velocities, reduce depth of flow and provide habitat for wildlife.

The ideal outcome for the park would be returning all three creeks back to more natural status, with permeable lining and vegetated slope embankment. However, the biggest challenge for Meadowbank Park is availability of open space adjacent to the creek, given the high demands on the open space to cater for sporting needs.

The Masterplan proposes the following strategies for creek naturalisation and improvement:

- Prioritise creek naturalisation on the eastern side of Charity Creek, as well as at the southern end of Archer Creek, where it flows into the river. Adjacent to this area are the existing mangrove and salt marsh, and more open space has been achieved in this area by re-configuring the sports fields. Indicative naturalised creek areas are shown in the Masterplan, however, further hydrology investigation is required.
- Create bioswales along creek edges where widening creek corridor is not possible. Bioswale provides stormwater infiltration similar to natural waterways.
- Some relatively large open spaces near the creeks are not currently used for sports, which may present opportunities for naturalisation in the long term (figure 12 illustrates some of the naturalisation opportunities under various spatial allowances). The Masterplan proposes mainly soft landscape in these areas, avoiding constructing main structures or hardscape so as to preserve these spaces for creek naturalisation in the future.

Sustainable Construction Materials

Sustainable construction materials are measured by their life cycle cost, the main criteria include:

- Locally sourced as far as possible to reduce transportation distance and green house gas emission.
- New or recycled materials fit for purpose.
- Robust and easy for maintenance.
- Available for long term replacement.
- Reduce heat island effect.

Technologies have been continuously integrated in construction materials to improve the longevity and safety. Although the Masterplan does not nominate exact construction materials, it encourages investigation of new tech materials for sustainable purpose.

Adoption of new materials presents many benefits, including:

- Faster construction times.
- Reduced labour costs.
- Less waste.
- Better health and safety for workers and users.
- Better productivity from existing resource.

Figure. 12 Examples of Naturalised Creek Edges



Naturalisation

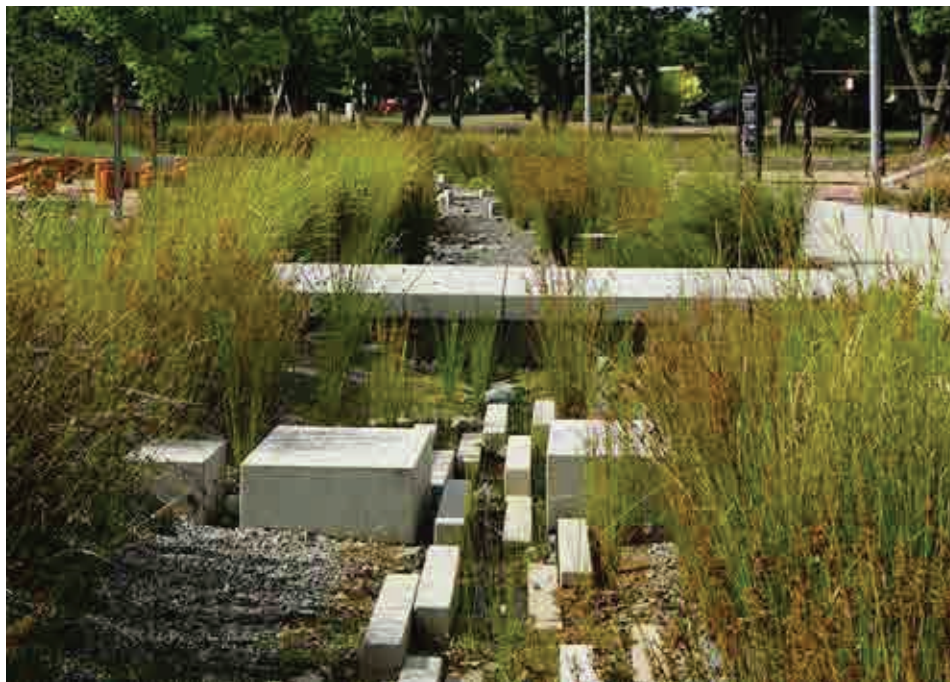
Reshape the entire channel to create bowl shape profile, with vegetated sloped embankment and natural permeable bottom.

Bioswale

Replace the top section of the concrete embankment with bioswale. Natural stones are used for constructing the bioswale to increase permeability and aesthetics.

Narrow Bioswale

Narrow bioswale strip can also be used for areas where space is restricted. The top section of the concrete channel will be replaced with bioswale planters integrated with overflow outlets. Natural stones and permeable paving materials on the outer edges will provide additional infiltration.



4.7 CLIMATE RESILIENCE

Meadowbank Park has been identified as being highly vulnerable to sea level change in climate change assessment and vulnerability mapping previously undertaken by the City of Ryde. The likely and major consequence of sea level change will be the loss of areas of primary recreation space and therefore proposals must include mitigation measures.

In the course of preparing the Masterplan, climate change resilience analysis was undertaken to ensure the sporting fields and key assets will accommodate projected 2050 sea level change. As verified by *NSW Government Coastal Planning Guidelines (2010)* a level rise benchmark figure of 40cm by 2050 has been adopted. Proposed upgrades include:

- Raised field and sports courts levels to meet a minimum RL 2.4m (Existing Parramatta River King tide water level has been increased 40cm to reach projected 2050 water level change figure).
- A proposed open Swale above the North West field.

As the scope of this Masterplan is 20 years, future considerations for beyond this are recommended to include:

- The existing Meadowbank Park seawall will be extended to account for water level rises.
- The 3 existing canals will be raised and adjusted as well.

Figure. 13 Climate Resilience Diagram



4.8 MAINTENANCE AND EMERGENCY ACCESS

Maintenance Paths and Emergency Access Points

The maintenance strategy for the parklands allows for gaps in tree lines, existing and proposed entry points, and clearly defined pathways allowing maintenance vehicles and emergency vehicles (e.g. ambulances) to easily access all areas of the park.

Figure. 14 Maintenance Diagram



4.9 STAGING

This masterplan for Meadowbank park and Memorial park will be delivered over 20 years. The proposed works will occur in a sequenced and logical order pending budget and funding availability.

Figure. 15 Staging Diagram



- | | | | | |
|---------|---------|---------|----------|----------|
| Phase 1 | Phase 4 | Phase 7 | Phase 10 | Phase 13 |
| Phase 2 | Phase 5 | Phase 8 | Phase 11 | Phase 14 |
| Phase 3 | Phase 6 | Phase 9 | Phase 12 | Phase 15 |

5

DETAIL PLANS

6.1 REGIONAL PLAYGROUND

Figure. 16 Detail Plan of Regional Playground



Design Intent

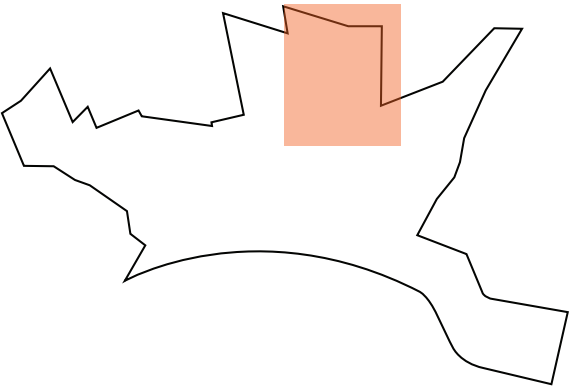
Creation of a regional scale play space that is an attractor for local and regional visitors.

Creation of a play space that complements the facilities and types of active uses delivered by the adjacent skate and youth park.

Ensure that the play space is accessible for all users and carers, with provision for accessible path networks, legible connections to car parks and key pedestrian paths, and seating, shade and shelter is provided.

KEY

1	Skate Park
2	Shaded seating and picnic area
3	Turf mound for play and seating
4	Play mound with tunnels, slides and climbing play
5	Water play
6	Amenity building with sports facility, canteen and toilets.
7	Cafe, toilets and outdoor seating area
8	Modified cul-de-sac for service vehicles, additional accessible parking and drop-off point
9	Path
10	Pedestrian entry with park signage and bike rack
11	New fence along Constitution Road integral to existing heritage gate
12	Existing pedestrian bridge
13	New footpath along Constitution Road car park
14	Existing car park
15	Existing Sydney Water facility
16	Upgraded multi-purpose courts
17	Multi court area: basketball & netball courts, ping pong tables, handball and hit-up wall.





1



2



3



4



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7



7

1. Create play opportunities through topographic variation
2. Integrate tree shade and natural materials in play space
3. Informal seating area on turf mounds
4. Play path for toddlers

5. Water play channel through turf mounds. Splashing area flanked by seating area and greeneries
6. Splash play zone with adjacent seating and mass planting
7. Cafe building (includes cafe/kiosk, public toilet, water pump room)

Figure. 17 Regional Playground Section



- 1. Turf mound shaded by tree canopies
- 2. Family seating area among tree groves
- 3. Play elements
- 4. Play mound
- 5. Water play with seating, planting and shade trees
- 6. Cafe/kiosk and outdoor seating area

Figure. 18 Artistic Impression of Regional Playground



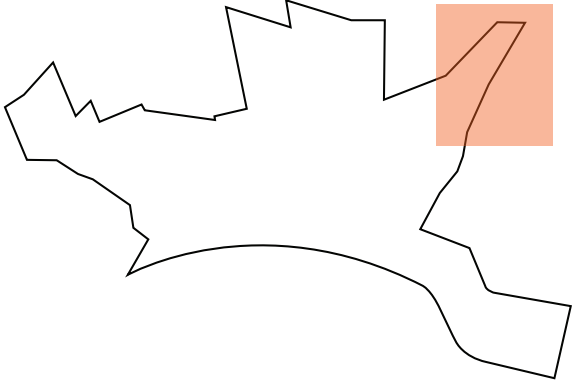
6.2 ROSS SMITH AVE NEIGHBOURHOOD PARK

Figure. 19 Detail Plan of Ross Smith Avenue Neighbourhood Park



Design Intent

- Provide additional park and playground facilities to compliment existing and expand the diversity of uses.
- Provide legible path network to improve connections to the street and other facilities within Meadowbank Park.
- Include additional soft landscaping and trees to enhance the natural setting.



KEY

1	Existing car park
2	Upgraded playground with additional play equipment
3	Picnic tables and outdoor games area
4	Park benches, mass planting and shade trees along path
5	Kick-about lawn
6	Primary shared pedestrian cycle path with large canopy trees
7	Mass planting along creek to increase infiltration of stormwater runoff
8	Multi-purpose sports fields
9	Field access driveway



1



2



3

1. A play space integrated into its natural setting
2. Small gathering space
3. Tables and benches shaded by trees
4. Informational natural play elements
5. Paved loop path for walking, fun riding and scootering
6. Low intensity exercise equipment suitable for all-age groups



4



5



6

6.3 ANDREW STREET NEIGHBOURHOOD PARK

Figure. 20 Detail Plan of Andrew Street Neighbourhood Park

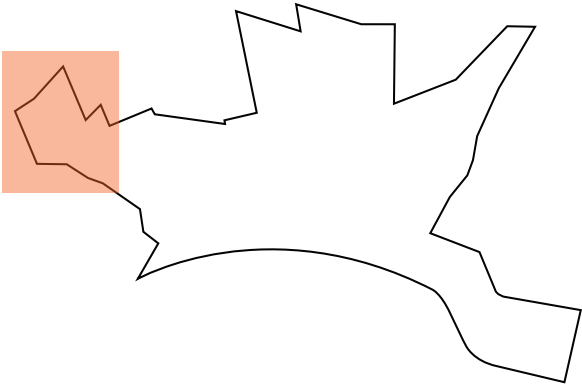


Design Intent

Build a strong identity of the neighbourhood park as a centre stage for junior sports. The two junior fields are integral to the park's function and layout. Many seating options are provided around the fields for spectating.

Provide opportunities for the whole community to enjoy exercise and play. Intergenerational play elements, playground, painted outdoor games and informal sports courts form a sticky edge for people to linger.

Create a family destination by locating a range of family friendly facilities around the junior fields, such as BBQ, picnic, playground, informal sport courts, etc. Every family member can be engaged in recreational activities as well as watching sports games.



KEY

1	Supergraphic on existing concrete culvert
2	Informal sports court
3	Upgraded playground
4	Amenity building
5	Seating and gathering area with shade structure, picnic tables, BBQ, gardens and tree groves
6	Existing trees with new understory planting
7	New parking area with accessible parking bays
8	Proposed carpark access. A traffic report will be conducted to ensure safe entry/exit.
9	Junior sport fields
10	Main shared user path
11	Multifunctional sports fields and off-leash dog exercise area (mini fields in use Saturday morning and Sunday morning only)



1. Junior sporting fields as the central feature of the small park
2. Family gathering space adjacent to the sporting fields
3. Small playground for younger children
4. Painted half courts provide additional sports opportunities
5. Painted play area on existing concrete surface



Figure. 21 Andrew Street Neighbourhood Park Section



1. New car park with accessible parking, entry from Andrew St
2. New footpath and mass planting
3. BBQ, picnic tables, flexible paved area under tree canopies for family gathering and sport spectating
4. Shade structure
5. Amenity building
6. Supergraphic painted on existing concrete culvert for small scale, informal outdoor games
7. Upgrade playground

Figure. 22 Artistic Impression of Andrew Street Neighbourhood Park



6.4 ARCHER CREEK ACTIVITY NODE

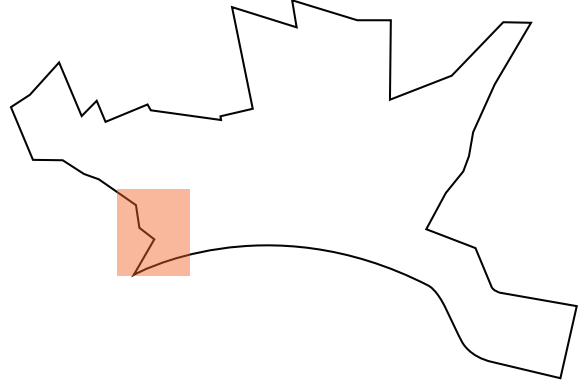
Figure. 23 Detail Plan of Archer Creek Activity Node



Design Intent

Create a catalyst project to strengthen the ecosystem in the park. This area is identified as the priority zone for creek naturalisation, extending the riverfront landscape into the park. Natural construction materials and riparian vegetation will be used to create habit for wildlife and passive recreational opportunities for park visitors.

Establish a gateway moment. This area is also the eastern gateway to the park as well as confluence of the green grid and RiverWalk. Planting design and landscape setting will be deliberate to enrich the arrival experience.



KEY

1	4m wide RiverWalk shared user path
2	Existing shared user path
3	New path
4	Naturalised creek edge with riparian vegetation and information signage
5	New pedestrian bridge
6	Activity node with seating and flexible gathering space
7	Multi-functional sports fields and flexible space for community events
8	Informal sport court
9	Existing mangrove and improved saltmarsh planting
10	Fitness equipment



1



2



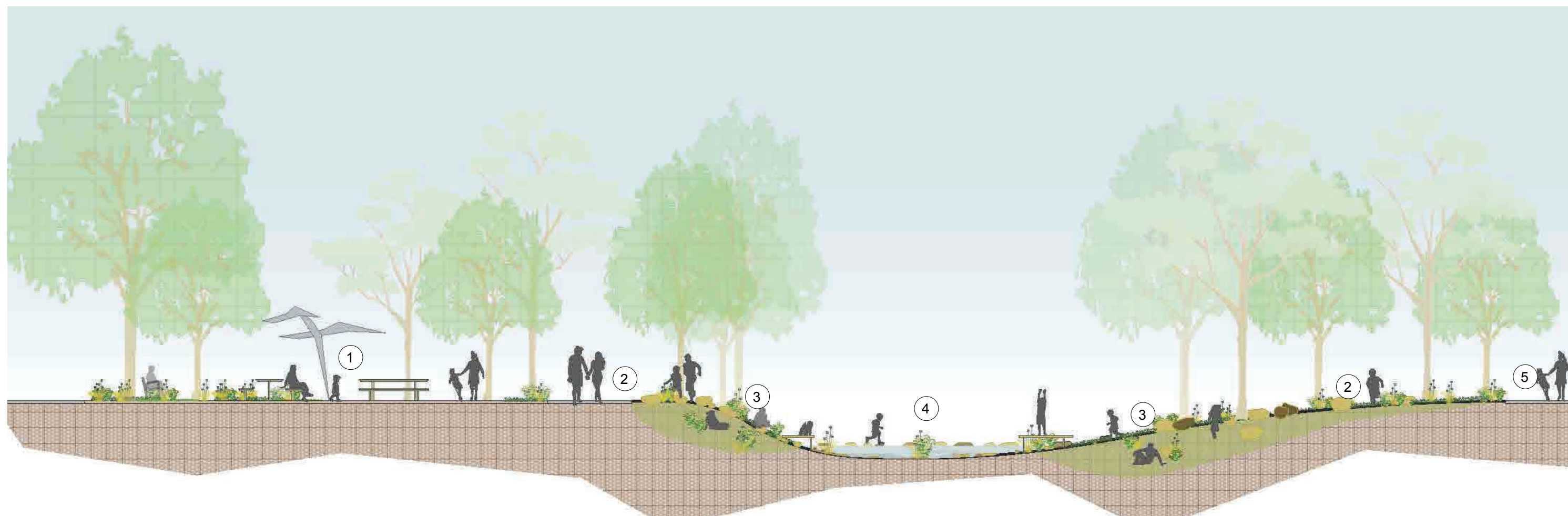
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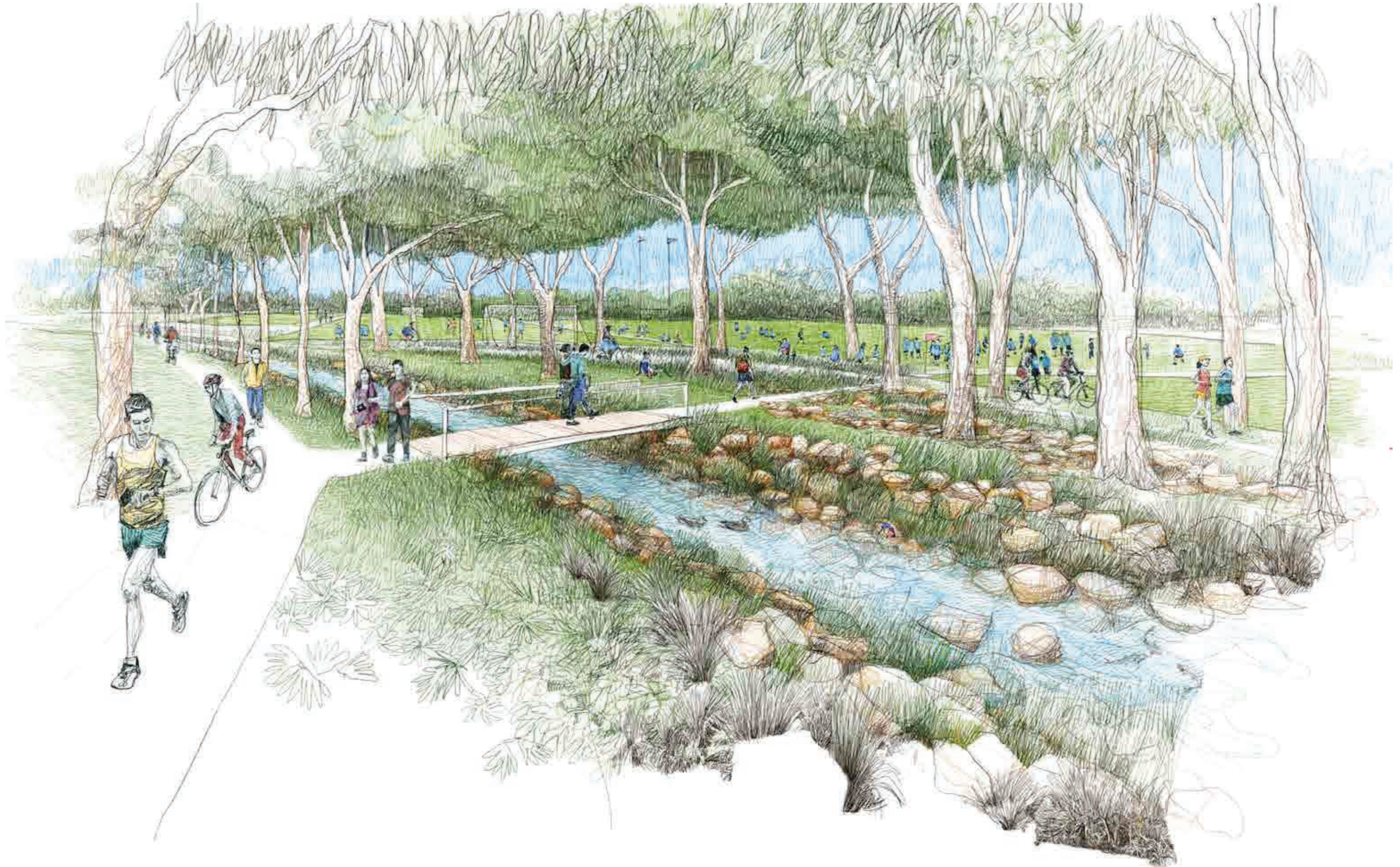
1. Naturalised water edge with riparian vegetation
2. Shaded path bordered by native gardens
3. Water edge stabilised by natural stone terrace
4. Pedestrian bridge

Figure. 24 Archer Creek Section



1. Flexible activity space with shaded seating and sensory gardens
2. New path
3. Naturalised creek edge with riparian vegetation, information signage and passive recreational opportunity
4. Naturalised creek
5. Multi-functional sports fields

Figure. 25 Artistic Impression of Naturalised Archer Creek



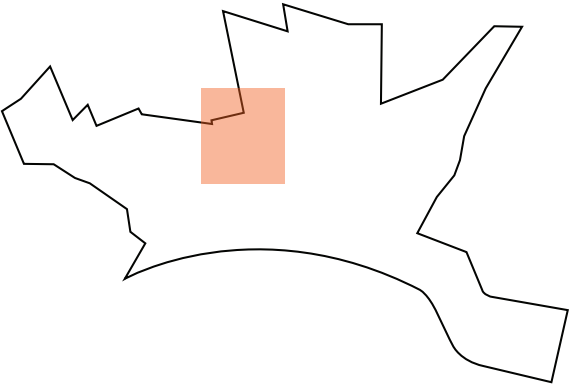
6.5 GREEN HEART

Figure. 26 Detail Plan of Green Heart



Design Intent

With its central location and convenient access by foot and car, the greet heart is expected to become a community activity hub for both daily activities and events.



KEY

1	Pedestrian and vehicular entry
2	Re-configured car park with median rain gardens and trees
3	Existing car park
4	Vehicle link between existing parking areas
5	Amenity building
6	Paved gathering space for seating, sport spectating, family friendly outdoor exercise, games and community events
7	Main path
8	Sports field and warm up area
9	Upgraded sports fields with synthetic turf



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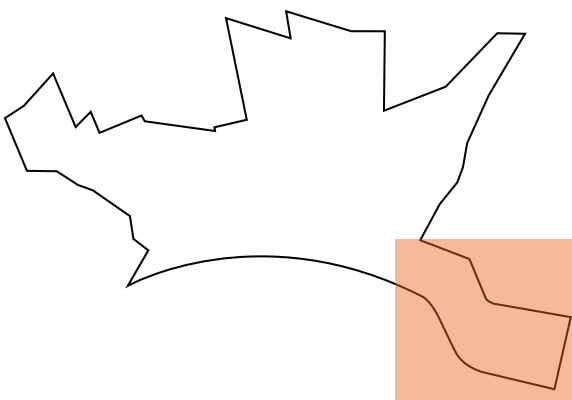


5

1. Provide seating edges for sport spectating
2. Outdoor game suitable for all-age groups
3. Flexible paved area for weekend market and community events
4. Flexible space for community events, such as annual sports awards
5. Seating area for community social gathering

6.6 MEMORIAL PARK & FORESHORE

Figure. 27 Detail Plan of Memorial Park



Design Intent

Memorial Park is a relatively self-contained park with significant level change that offers filtered views towards the river. The key objective is to improve user experience without compromising its natural bushland setting.

KEY	
1	Upgraded pedestrian entry with new park signage
2	Upgraded existing car park
3	New footpath
4	New pedestrian bridge connection to Meadowbank Park
5	Existing playground
6	New shade structure over BBQ and picnic tables
7	Upgraded dry stone wall and stairs
8	Upgraded terraced lawn to address the memorial
9	Upgraded track and steps
10	Upgraded path and park furniture along paths
11	Existing memorial stone
12	Existing car park
13	Informal access path from foreshore
14	New ground cover plants and park furniture along RiverWalk
15	Dog friendly swim site
16	New sandstone seating blocks near under tree canopies
17	Existing bush to be retained and protected
18	Informal sport courts and outdoor games painted on existing concrete surface
19	Existing toilet block- once building has reached useful life it is to be decomissioned.



1. Provide park furniture under existing tree shade
2. Use natural landscape materials to create riparian habitat at the existing beach
3. New shade structures over BBQ and picnic facilities
4. Dry stone wall with edge planting



6

PARK USER EXPERIENCE

Park User Experience

This section illustrates some hypothetical scenarios of park visitors' journeys in the park, including individuals, families and people of various age groups.

These journeys were mapped at early stage of preparing the Masterplan, in order to understand the needs of different user groups, and facilities needed to enrich the user experience.

For instance, initially it was uncertain if a cafe/kiosk would be suitable for the site. Through this study, it became evident that a place within the park for people to take a rest, and enjoy food and drink would not only appeal to parents/ carers, but may also benefit many other park users on daily basis.

The study also leads to the strategy of creating nodes and circuits within the path network. As the largest sports hub in the region, advocating sports for all ages and abilities is a value held strongly throughout this Masterplan. Circuit paths of various lengths will be coded to encourage jogging, walking and fun riding. The activity nodes are carefully located to generate purposes and interests along the circuit paths.

Figure. 28 Circuit Path



Figure. 29 User Experience - Elderly



User Profile

Who	Senior/retiree
When	Early morning
How to arrive	Walk





User Profile

Who	Mum and toddlers
When	Morning
How to arrive	Walk and prams

Figure. 30 User Experience - Family



Figure. 31 User Experience - Family



User Profile

Who	Dad and children
When	Afternoon
How to arrive	Bicycles





User Profile

Who	Parents, teenagers and children
When	Weekend/School holidays
How to arrive	Bicycles

Figure. 32 User Experience - Family



Figure. 33 User Experience - Young Adult



User Profile

Who	Young female workers
When	Early morning
How to arrive	Walk



Figure. 34 User Experience - Young Adult



User Profile

Who	Young adults
When	After work
How to arrive	Public transport/ Bicycles





User Profile

Who	Teenager/School students
When	Weekend/School holidays
How to arrive	Public transport/Bicycles

Figure. 35 User Experience - Teens



APPENDIX 1

ALTERNATIVE MASTERPLAN SCENARIO

Figure. 36 Alternative Masterplan scenario

Alternative Masterplan Scenario

Two Masterplan scenarios were prepared for this report. The recommended Masterplan without netball facilities has been outline earlier in this report.

This alternative Masterplan with netball facilities has been included for reference only. Due to evolving community needs, changing environment and political context the alternative Masterplan is not being recommended.

The key points of differentiation between this alternative Masterplan scenario and the recommended Masterplan scenario include:

- Relocate the netball courts within the park, and increase the court number from 28 to 32.
- Build indoor multi-functional sports centre, which also consolidates park administration uses. The centre is subject to other funding and planning.

KEY	
1	Relocated netball courts with special landscape treatment to emphasis the significance of LH Waud field in the community history
2	Re-configured existing car park with vehicular link to northern car park
3	Multi-functional tennis courts
4	Indoor sports centre
5	Skate park
6	Regional playground
7	Upgraded neighbourhood park with off leash area
8	Upgraded neighbourhood park
9	Event lawn and multi-functional sport fields
10	Local park and naturalised creek channel
11	Memorial Park with upgraded amenities
12	Rain gardens along creek edges
13	Modified cul-de-sac for service vehicular entry
14	New footpath along Constitution Rd car park
15	Informal sport courts painted on existing concrete slab
16	Potential pedestrian bridge
17	Existing bushland
18	Restore habitat at existing beach
19	Upgraded amenities for passive recreation along RiverWalk



APPENDIX 2

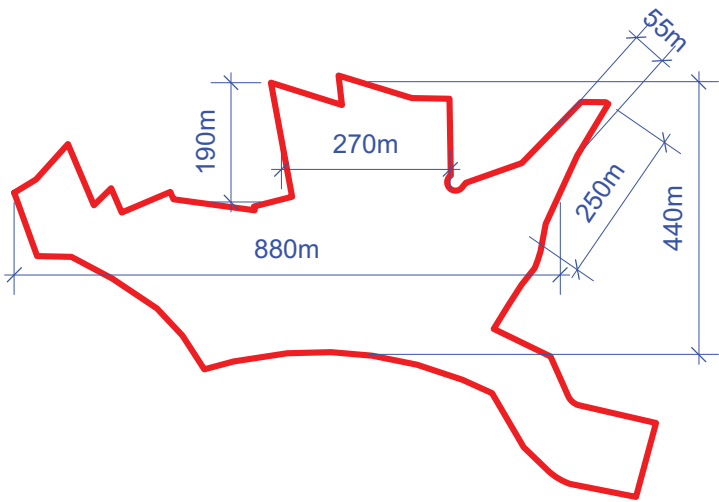
SITE ANALYSIS

10.1 SIZE COMPARISON

Figure. 37 Site Analysis - Scale Comparison



Centennial Park



Bicentennial Park



Sydney Park



Blaxland Riverside Park



Jubilee Park



Prince Alfred Park

10.2 OPEN SPACE CONTEXT

Meadowbank Park and Memorial Park are located on the southern portion of the City of Ryde local government area, fronting the Parramatta River on its southern edge.

The Parks mainly consist of open parkland, with mangrove vegetation adjacent the river frontage and two areas of existing bushland conservation areas on site.

The Parks are two of several parks linked by the Ryde RiverWalk.

Meadowbank Park is one of the largest dedicated sports park in the region.

Figure. 38 Site Analysis - Open Space Context



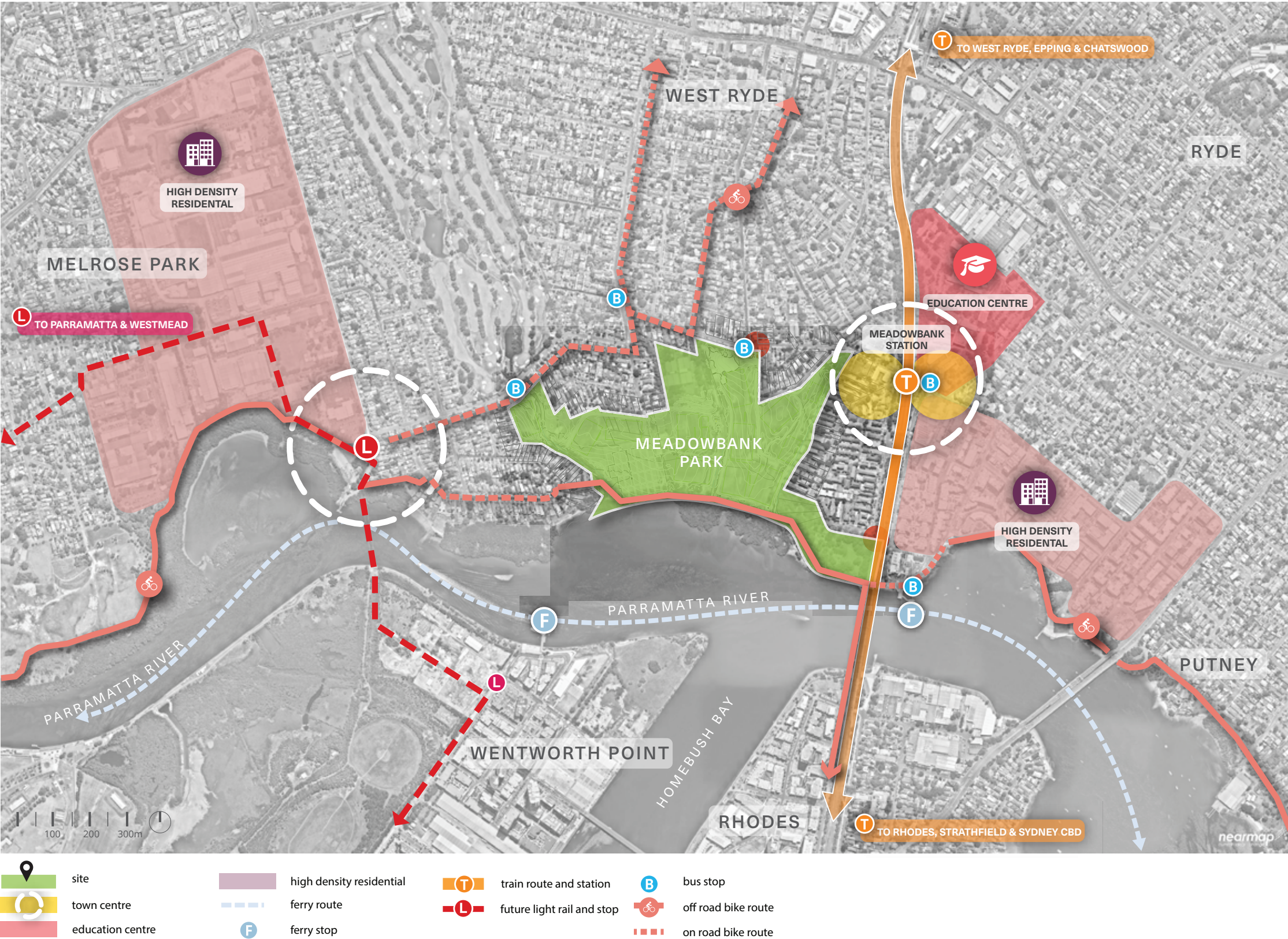
10.3 URBAN CONTEXT

Identified as a great place to live within the Sydney strategic growth corridor, the City of Ryde has seen an unprecedented population escalation, with higher numbers of families, growing ageing population and young workforce, and high proportion of residents from Cultural and Linguistically Diverse (CALD) backgrounds.

The parks are located within proximity to Meadowbank train station, Meadowbank Bank Ferry Wharf, bus stops, and potential future light rail stop.

The parks are also connected to a wider area by Ryde RiverWalk, a regional foreshore bike path, which allow the park to be accessed by bike from greater distance.

Figure. 39 Site Analysis - Urban Context



10.4 FLORA AND FAUNA

The site consist mainly of open grass turf used for sport fields, and a large area of hard paved surface in the south west corner used for netball courts.

There are significant stands of mangroves along the southern edge interfacing the Parramatta River, and an area of native bushland to the northern corner of Meadowbank Park, and a large stand in Memorial Park. Canopy trees line pathways to the perimeter of fields, but as inconsistent and provide little in the way of shade.

The existing areas of mangrove and natural areas are to be protected, and enhanced where possible through improvements in stormwater management and creek naturalisation. New trees are proposed to complement existing stands to create continuous canopy cover and habitat corridors along key routes and in areas of congregation, as well as car park and hard stand areas to reduce the heat island effect.

Figure. 40 Site Analysis - Flora and Fauna

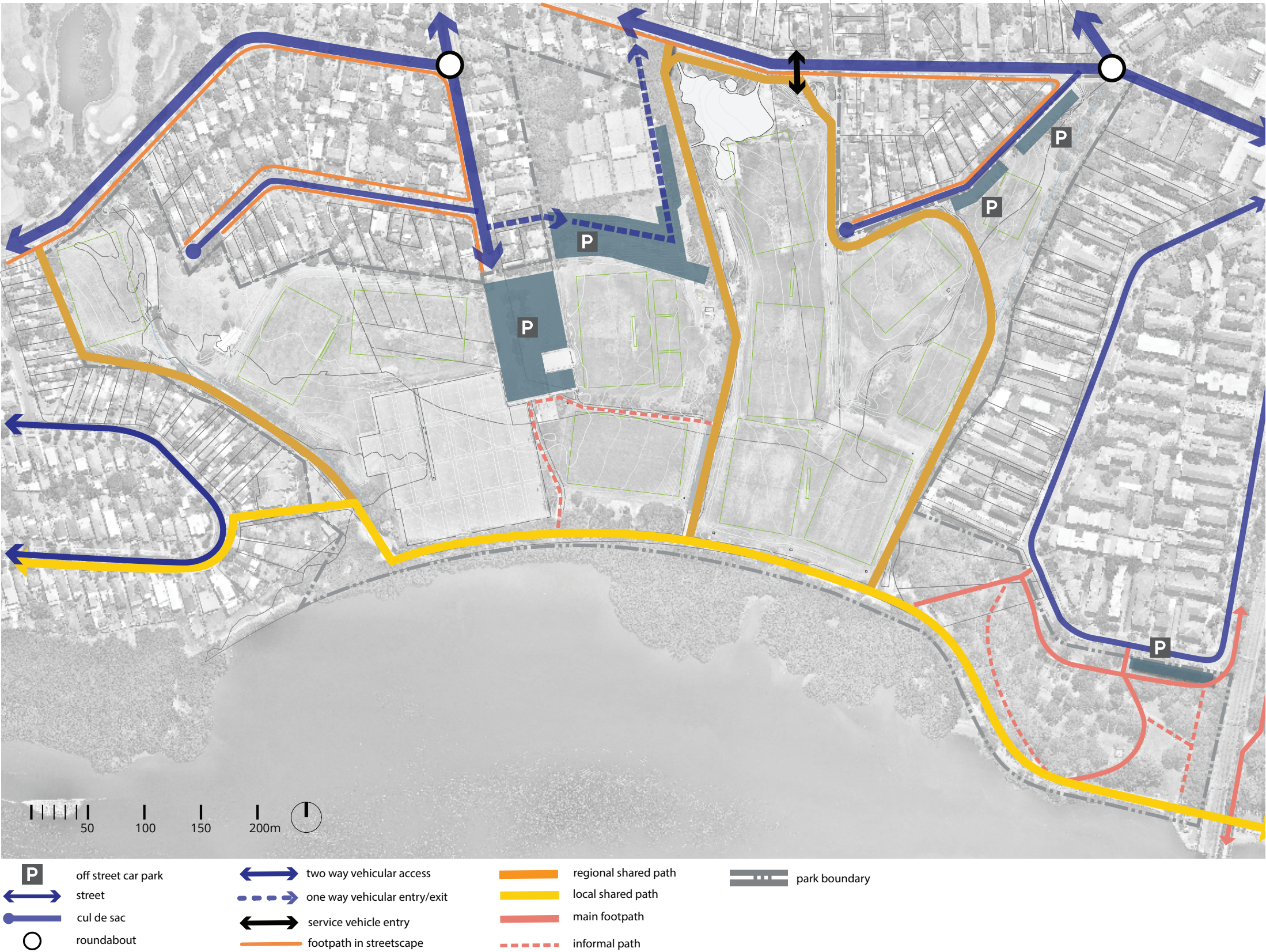


10.5 CIRCULATION

There are limited circulation paths within the parks and limited opportunities for crossings across the stormwater channels which form divisions within the park structure. Single point entries to separate car parks impacts on local traffic and a lack of paths connecting to the outer extents of the park areas limits the spread of use across the full park area.

A new path hierarchy that responds to public transport locations, key arrival points, and regional cycle and pedestrian routes should be implemented across the parks. Opportunities for additional crossings over the stormwater channels should be investigated to better connect the park in an east west manner.

Figure. 41 Site Analysis - Circulation



10.6 PARK PROGRAMS

The primary use of Meadowbank Park is for sports, with several areas dedicated for play and fitness. There is limited flexible congregation space and seating with shelter for passive park use.

Memorial Park is primarily a passive park space with areas of seating and open picnic areas. There is also a generous play space. New facilities in Memorial Park should not compete with the passive character of the park.

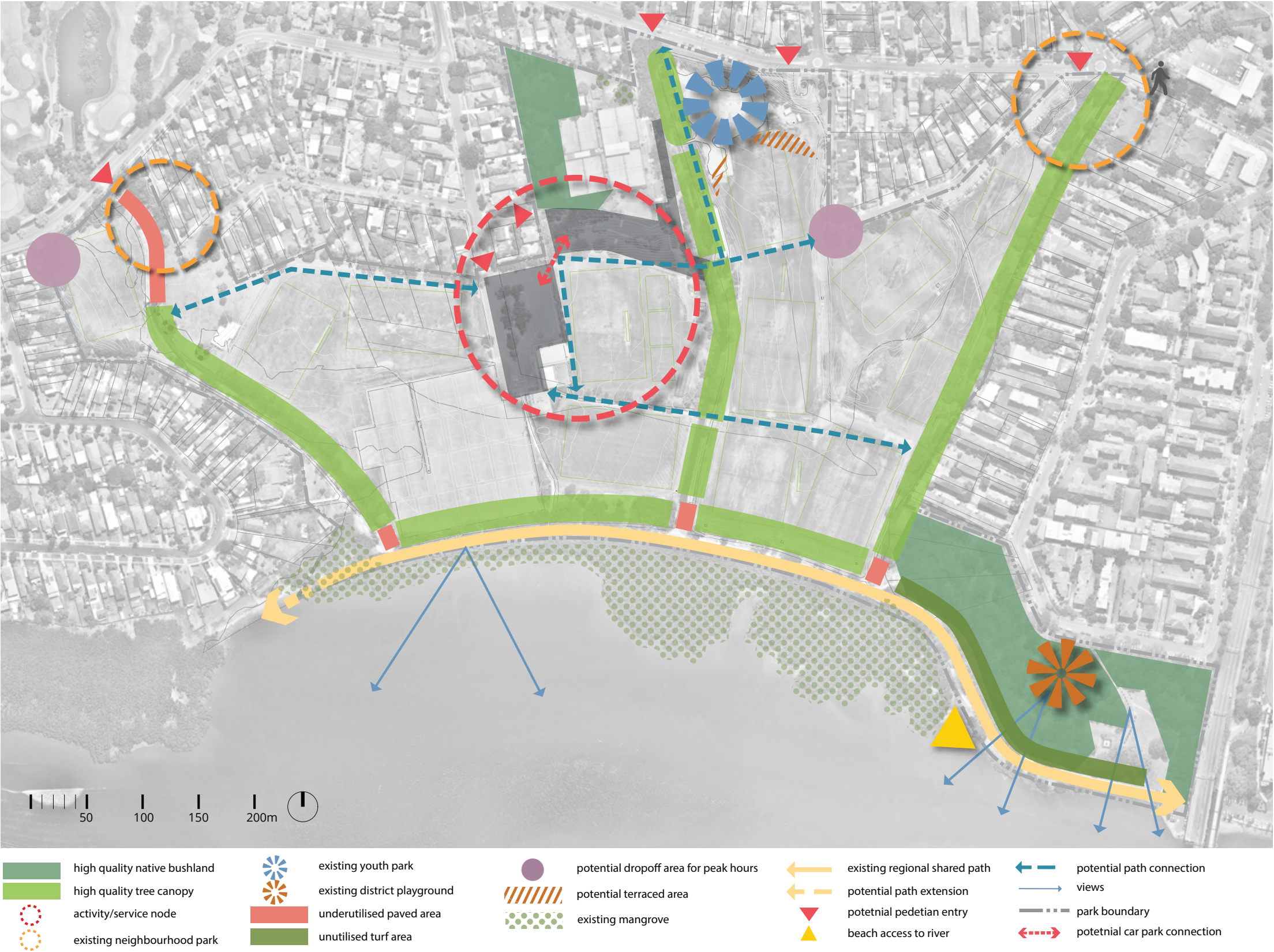
Figure. 42 Site Analysis - Park Program



10.7 OPPORTUNITIES

A summary of the opportunities on site are illustrated to the right.

Figure. 43 Site Analysis - Opportunities



10.8 CONSTRAINTS

A summary of the constraints to the Masterplan are summarised on the diagram to the right.

Figure. 44 Site Analysis - Constraints

