



Westleigh Park Master Plan

June 2023

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Council recognises the Traditional Owners of the lands of Hornsby Shire, the Darug and GuriNgai peoples, and pays respect to their Ancestors and Elders past and present and to their Heritage. We acknowledge and uphold their intrinsic connections and continuing relationships to Country.

1.0 Introduction

In 2016 in response to progressively increasing demands upon existing open space, Hornsby Shire Council Council purchased 36 hectares of land from Sydney Water for the primary purpose of developing additional sports facilities for the district. The demand for sports facilities in the district has been identified through various studies including NSROC Regional Sportsground Strategy Review (2016) and Hornsby Sportsground Strategy (2018).

The proposed new sports facilities seek to assist Council in meeting the evolving needs of the community. The previously cleared and disturbed area of the site is currently zoned R2 Low Density Residential and is proposed to accommodate the new playing fields, amenities and supporting facilities.

Westleigh Park will play a key role in recreational provision for the district including a diverse range of provisions for formal sports, passive recreation (e.g. picnics, walking, playground), mountain biking and ancillary facilities (including internal roads, carparks, amenities buildings, shared paths and water management).

Fundamentally Council has sought to develop an environmentally and culturally sustainable framework for the development of the recreational site that:

- **Protects biodiversity at every stage** - Several vegetation communities are found on the site, some of which are threatened ecological communities. Biodiversity protection principles have been applied throughout the planning process which look to avoid, minimise and mitigate environmental impacts. Residual impacts will be offset and rehabilitated in accordance with relevant policies and guidelines.
- **Minimises adverse impacts to local creeks by applying Water Sensitive Urban Design (WSUD)** Avoid and minimise adverse impact of stormwater on downstream waterways. Apply water sensitive urban design (WSUD) to manage water quality and flows, including stormwater harvesting, conservation and water quality treatment.
- **Supports environmental sustainability** - Environmentally sustainable design features will reduce operational carbon emissions, such as passive solar design, renewable energy and energy efficient hot water and lighting
- **Designs for bushfires** - Planning for Bushfire Protection to embed resilience of the site.
- **Provides active transport** - Pedestrian and cycle paths have been proposed to provide a loop access around the perimeter of the site, entering from Warrigal Drive and the new entry from the south. Paths will also connect to a broader local network of cycle paths and the adjoining mountain bike trails to the east. Bus access with bus bays are also proposed along the

perimeter park road to encourage public transport / group access to the park.

- **Connects with Country** - Being guided by the local Aboriginal groups on protection and promotion of the indigenous heritage and culture within the park.

Council undertook community engagement on the draft Master Plan in June 2021 to understand the community's views on the draft proposals, including the sports fields, traffic and parking, community facilities, adjoining mountain bike trails, bushland biodiversity, potential link between Hornsby Park and Westleigh Park, and indigenous history.

Feedback generally conveyed that the draft Master Plan had a good balance of 'active' and 'passive' recreation activities, and a sustainable approach to restoring and protecting the natural environment while addressing recreational needs. Typical concerns raised during the consultation included the management of potential biodiversity impacts of mountain bike use and sport field development, and potential for impacts on traffic and local road systems. The engagement reports have been used to inform the Master Plan to strengthen positive features while seeking to address community concerns.

The development of the Master Plan has involved a multidisciplinary team including specialist inputs in the following areas:

Environmental Partnerships (NSW) Pty Ltd
Master Planning and Landscape Design

Taylor Thompson Whitting (TTW)
Master planning, Civil, Traffic and Transportation Engineering

Civille
Water Management

Bitzios
Traffic Planning

Coffey Partners, Senversa
Contamination Remediation and Environmental Management

Eco Logical Australia
Environmental Assessment

Trailsapes, Dirt Art & Griffith University
Mountain Bike Trail Assessment and Concept Planning

Wannangini Pty Ltd
Aboriginal Cultural Heritage

SJB Planning
Statutory Planning

This report provides a summary of the site conditions and describes in summary form the Master Plan for Westleigh Park.

2.0 Project Objectives

The Master Plan seeks to provide a conceptual framework for ongoing planning on the site. Specifically it seeks to achieve the following:

- To assist in catering for the ongoing demand for sports facilities (including female sports) in the district and in response to NSROC Regional Sportsground Strategy Review (2016) and Hornsby Sportsground Strategy (2018);
- To provide a safe, clean and high quality environment for the community to enjoy a range of activities through the remediation of past contamination on the site;
- To embed environmental sustainability throughout the project including :
 - i. Avoid, minimise and mitigate environmental impacts.
 - ii. Improve and manage the natural environment in particular threatened ecological communities and species.
 - iii. Provide water management that minimises adverse flow or water quality impacts to the local creek system and to Council's existing stormwater system.
 - iv. Employ Water Sensitive Urban Design (WSUD).
 - v. Reduce operational carbon emissions, through passive solar design, renewable energy and energy efficient features in all facilities.
 - vi. Integrate planning for bushfire protection.
 - vii. Support active and public transport to and within the site.
- To Connect with Country and Design with Country in consultation with local Aboriginal peoples.



Westleigh Park Artist's impression

3.0 Site Description

Westleigh Park (refer Figure 3.1) is located at 62 Quarter Sessions Road, Westleigh on Lot 101 DP 1217395. The land is owned by Hornsby Shire Council and is currently zoned (R2) Low Density Residential and Environmental Management (E3) in the Hornsby Local Environmental Plan (LEP) 2013, with adjoining lands zoned as (R2) Low Density Residential or (RE1) Public Recreation. The Dog Pound Creek land, located to the north of the Westleigh Park site, is owned by Hornsby Council and is mostly bushland zoned (RE1) Public Recreation. The Dog Pound Creek BioBanking area cannot be used or impacted upon.

The study area is approximately 46 hectares (with about 36 Ha. in Westleigh Park and around 10 Ha. in the adjoining Dog Pound Creek bushland). In Westleigh Park around 10 hectares is currently cleared land with the remainder being bushland (referred to as 'Westleigh Park Bushland').

The Westleigh Park land was formerly owned by Sydney Water and adjoins the Sydney Water Thornleigh Reservoir to the south and is bordered by bushland to the north. Quarter Sessions Road runs along the western frontage of the park with some adjoining residential properties backing on to the site from Koorringal Avenue to the east.

Areas of bushland within the site are mapped as 'endangered' and 'critically endangered' as well as threatened species being present. These areas need to be retained and impacts are to be avoided, minimised or mitigated through the project.

3.1 Aboriginal Heritage

As identified in the Due Diligence Assessment Report for the Westleigh Park complex, prepared in 2019 by GuriNgai Tribal Link Aboriginal Corporation, "the study area for Westleigh Park, has been for generations and still is, home to the GuriNgai & Darug Mobs (Wannangini)." In addition, the area was seasonally occupied in various locations by the Darginyung peoples. The connections to this area for each of these groups includes pre and post European colonisation.

An Aboriginal Cultural Heritage Assessment (ACHAR) was undertaken for the site in 2020 which identified the following Statement of Aboriginal Cultural Significance:

"The land containing the project area embodies the collective and contemporary Aboriginal social values of loss, remembrance and resilience. From a traditional viewpoint, the land represents an important meeting place along a well-travelled path and therefore embodies the shared values of family, community and social cohesion. Looking forward, this land still retains the potential to educate and celebrate a unique connection to Country by promoting a shared understanding of the area's cultural values."

In addition the ACHAR refers to the existing dead Scarred Tree on site which is recommended to be relocated to a safe location for conservation and interpretation on the site (an indicative location is shown on the maps in this Master Plan), as well as other aspects of cultural heritage importance in the local area which are to be conserved and protected.

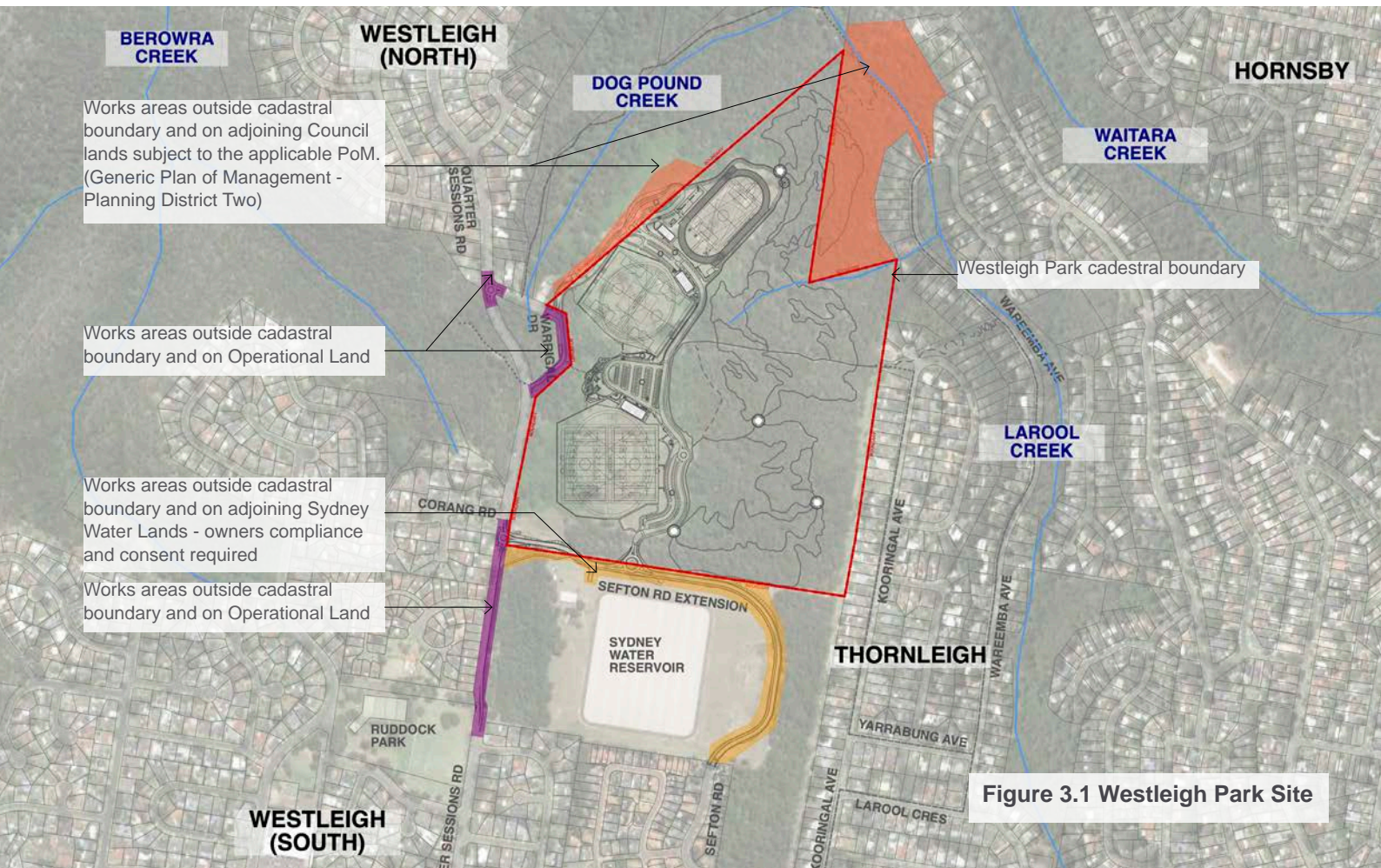


Figure 3.1 Westleigh Park Site



Image Source: visitnewcastle.com.au



Centennial Park - multi purpose parklands.
Image Source: Greater Sydney Parklands



Centennial Park - multi purpose parklands.
Image Source: Sydney.com



Centennial Park - multi purpose parklands.
Image Source: Centennial Parklands Sports Centre



Centennial Park - multi purpose parklands.
Image Source: centennialparklands.com.au

3.2 Current Site Conditions and Use

The cleared area on the site is predominately tufted grasses and un-maintained exotic grass with significant weed encroachment. Several worn tracks traverse the cleared area. The Westleigh Park Bushland contains areas of mapped Threatened Ecological Communities and includes an extensive network of unsanctioned mountain bike trails.

The site is currently informally used for casual recreation such as dog walking and access for established but un-sanctioned mountain bike trails through the bushland areas. A former Rural Fire Services (RFS) building is located along the north edge of the cleared lands.

The adjacent Dog Pound Creek site is mostly bushland with some fire trails and areas of weed growth. The majority of Dog Pound Creek site is managed under a BioBanking agreement and cannot be impacted by the proposals or any other uses.

Westleigh Park, including the bushland area, contain areas of contamination (asbestos, PFAS and others) on the surface and within the site fill. Much of this material is considered solid waste including landfill materials from construction and demolition sites.

PFAS (Perfluoroalkyl and Polyfluoroalkyl Substances) are manufactured chemicals formerly used in products such as fire fighting foams which do not degrade over time and may be harmful to humans and fauna. A detailed PFAS contamination assessment has been undertaken and the NSW Government has undertaken to provide remediation of all PFAS affected areas. At time of writing monitoring is ongoing. The initial recommendation was at least 6 months between sampling events. As no seasonal change was noted in the sampling results, Senversa recommended 12 months between sampling events to provide an opportunity to analyse results over a longer period in order to identify any trends/changes. The Environmental Protection Authority (EPA) has had oversight of this matter.

Topography

The site lies at approximately 171-186m Australian Height Datum (AHD) on an approximately north trending ridgeline. Land slopes away from the centre of the site to the east and west, while the northern areas slope to the northwest, north and northeast towards gullies. Falls across the existing landform range between 1:20–1:30 which is significantly steeper than a playing field platform (generally 1:100).

Drainage

Surface runoff generally falls to the east and west, away from the ridgeline and into the surrounding bushland areas through natural drainage lines and as infiltration. In major storm events, runoff travels via overland flow paths to nearby watercourses. (*Civil Stormwater Report by TTW*)

Geology

Most of the site is assumed to be underlain by Ashfield Shale along the top of the central ridgeline, with the northwest and northeast areas underlain by Hawkesbury Sandstone.

A borrow pit (small quarry) in the north of the site was used as a source of rock during construction of the Thornleigh Reservoir south of the site. Approximately 23,700 m³ was obtained from this excavation. Based on an approximate area of 11,690 m² the indicative depth of the borrow pit has been estimated to be 2m. (*Sydney Water*)

This suggested that the depth of fill/soil overlying bedrock may vary from up to approximately 3m below ground level near the southern site boundary, to less than 1m below ground level towards the northern site boundary.

Landfill

Between 40–50% of the cleared portion of the site has a landfill depth of one metre or lower with up to 2–4m depth in zones along the south western and eastern boundaries (refer Figure 3.2).

Vegetation

Several vegetation communities exist on the site, including Sydney Turpentine Ironbark Forest (STIF), listed as Critically Endangered under the Commonwealth Environment Protection (EPBC) Act and Biodiversity Conservation Act 2016 - BC Act (NSW) and Duffys Forest, listed as an Endangered Ecological Community under the BC Act. Vegetation community mapping is reflected in Figure 3.3.

Over 240 plant species, including eleven species of Orchids, have also been recorded on-site. In addition surveys indicate that *Darwinia biflora* (Threatened Flora - under the EPBC Act (Commonwealth)) and *Tetratheca glandulosa* (BC Act) were observed on-site.

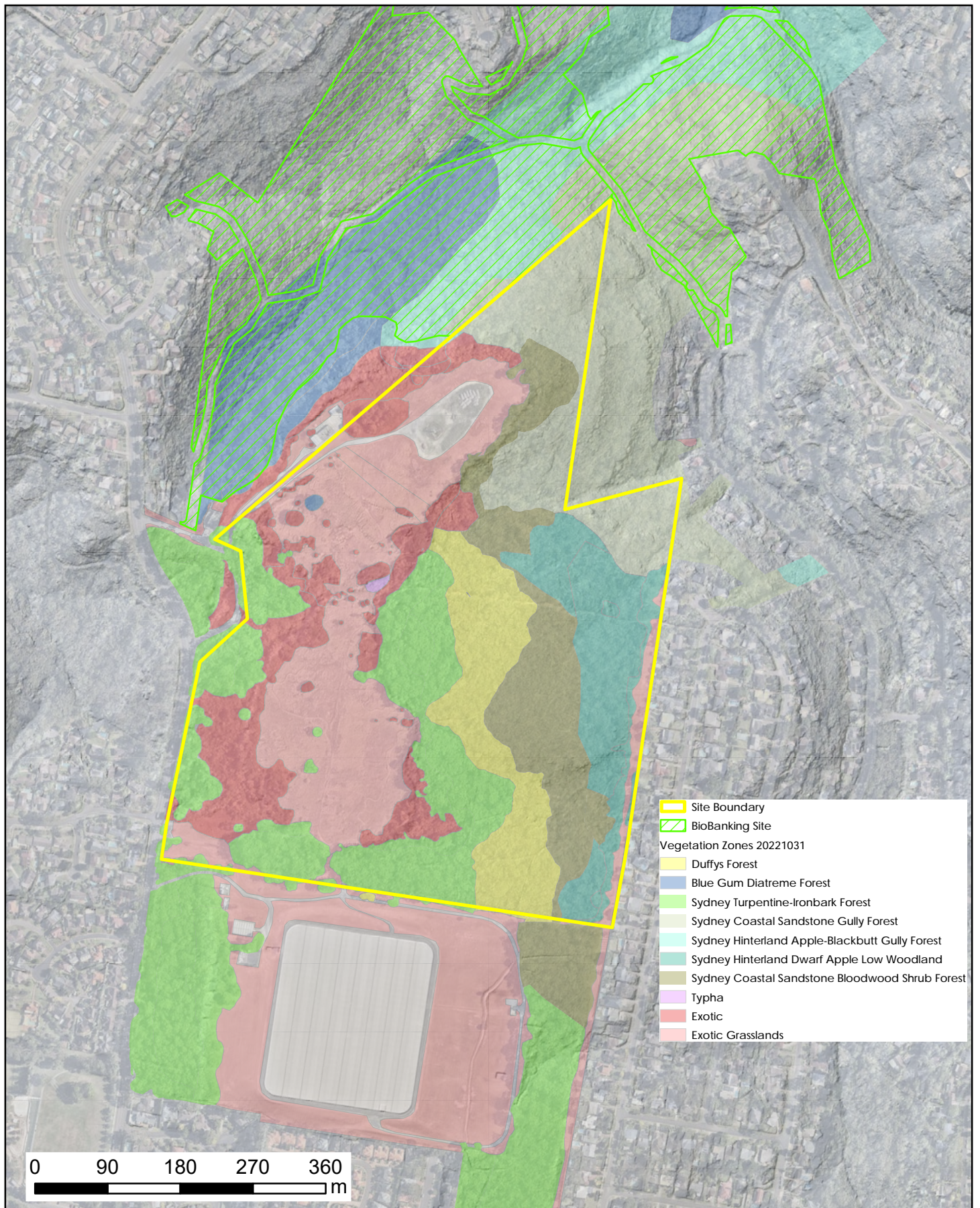
There are unsanctioned mountain bike trails that pass through the above areas as indicated on Figure 3.4.

Fauna

Habitat assessments undertaken in 2016 by Council have been supplemented by work undertaken by Eco Logical Australia from 2021 to 2023. The vegetation survey indicated the site exhibits high diversity in birds species, with 50 species observed including the threatened Square-tailed Kite and summer migrants the Sacred Kingfisher, Eastern Koel, Channel-billed Cuckoo and Dollarbird. Both Barking and Powerful Owls were heard, but no roosting or nesting observed on the site.

There were a few reptile species, and indications of mammals (scats and tracks, burrows and feeding scars) present. Red Crown Toadlets were also observed in a couple of locations.

A full species list of flora and fauna observed on the site will be included in subsequent development application documentation.

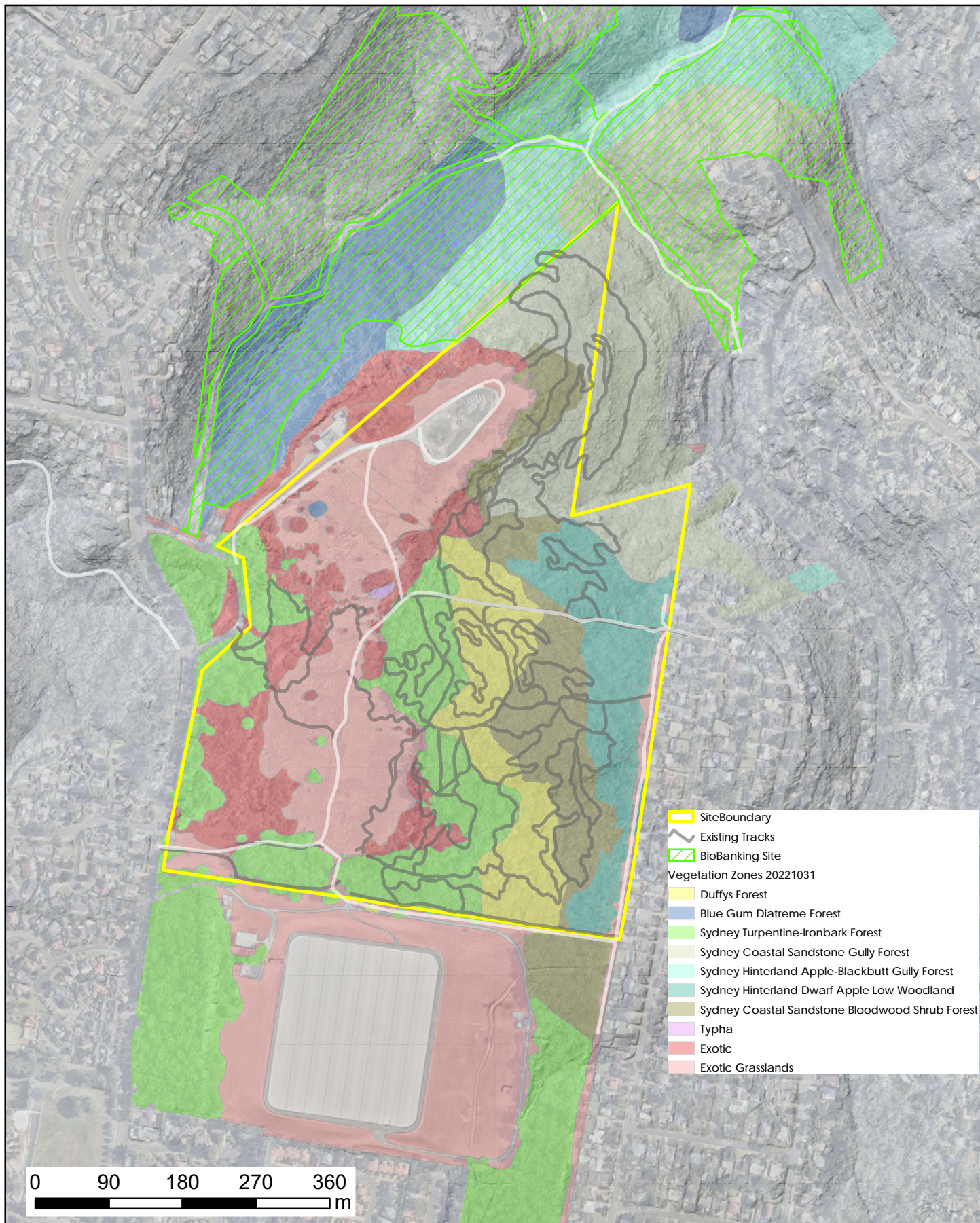


- Site Boundary
- BioBanking Site
- Vegetation Zones 20221031
- Duffys Forest
- Blue Gum Diatreme Forest
- Sydney Turpentine-Ironbark Forest
- Sydney Coastal Sandstone Gully Forest
- Sydney Hinterland Apple-Blackbutt Gully Forest
- Sydney Hinterland Dwarf Apple Low Woodland
- Sydney Coastal Sandstone Bloodwood Shrub Forest
- Typha
- Exotic
- Exotic Grasslands

0 90 180 270 360
m

	<h2 style="margin: 0;">20230220_Westleigh Vegetation Communities</h2>	<p>Map Scale: 1:6,000 at A4 Portrait</p>		
<p>Hornsby Shire Council 296 Peats Ferry Road HORNSBY NSW 2077 Telephone: 02 9847 6666 Email: hsc@Hornsby.nsw.gov.au</p>	<p>Important Notice! Dimensions, location of features and boundaries are indicative only, their actual position has not been surveyed. Aerial photography may not align with cadastral boundaries. Hornsby Shire Council accepts no responsibility for any incident arising from any inaccuracy.</p> <p><small>Copyright © Hornsby Shire Council 2019; © The State of New South Wales; Aerial imagery: © NSW Department of Finance, Services and Innovation 2016</small></p>	<p>Projection:</p>	<p>GDA94 / MGA zone 56</p>	
		<p>Date:</p>	<p>20/02/2023</p>	

Figure 3.3 - Westleigh Vegetation Communities (Source: Eco Logical Australia 2023)



- Site Boundary
- Existing Tracks
- BioBanking Site
- Vegetation Zones 20221031
- Duffys Forest
- Blue Gum Diatreme Forest
- Sydney Turpentine-Ironbark Forest
- Sydney Coastal Sandstone Gully Forest
- Sydney Hinterland Apple-Blackbutt Gully Forest
- Sydney Hinterland Dwarf Apple Low Woodland
- Sydney Coastal Sandstone Bloodwood Shrub Forest
- Typha
- Exotic
- Exotic Grasslands

0 90 180 270 360
m



	<h2 style="margin: 0;">Westleigh Existing Unsanctioned Tracks</h2>	<p>Map Scale: 1:6,000 at A4 Portrait</p>		
<p>Hornsby Shire Council 296 Peats Ferry Road HORNSBY NSW 2077 Telephone: 02 9847 6666 Email: hsc@Hornsby.nsw.gov.au</p>	<p>Important Notice! Dimensions, location of features and boundaries are indicative only, their actual position has not been surveyed. Aerial photography may not align with cadastral boundaries. Hornsby Shire Council accepts no responsibility for any incident arising from any inaccuracy.</p> <p><small>Copyright © Hornsby Shire Council 2019; © The State of New South Wales; Aerial imagery: © NSW Department of Finance, Services and Innovation 2016</small></p>	<p>Projection:</p>	<p>GDA94 / MGA zone 56</p>	
		<p>Date:</p>	<p>20/02/2023</p>	

Figure 3.4 - Westleigh Park Unsanctioned mountain bike trail network (Source: Hornsby Shire Council 2018)



4.0 Master Plan

The Master Plan illustrates the development of the park's recreational and supporting facilities to address district recreational needs. The plan integrates the sensitive planning of uses and facilities to conserve important bushland and habitat, and to facilitate remediation of the site in an appropriate manner.

Key aspects of the Master Plan are outlined in the following summary and illustrated on the Master Plan diagrams provided in Figures 4.1 to 4.8 .

4.1 Recreation

Provisions for recreation within the site are illustrated on Figures 4.1 to 4.3

4.1.1 Active recreation

The Master Plan proposes three sports facility platforms that have been sited to integrate within the constraints of existing bushland vegetation and provision of road access.

From south to north, the field platforms step down the site executing a level change of around 8m overall. Each of the platforms is served by off street parking areas which have direct accessible connections to field and associated amenities/ facilities. The field platforms are also connected by the shared pedestrian cycle path network and supplementary pedestrian path network.

Precinct 1 Athletics track and support facilities

The north platform, in the narrowest section of the cleared lands, can support a senior competition athletics track and internal field area (which could be used as a fifth football field if not being used for athletics).

The area can accommodate a line marked grass track or alternatively be developed as an all-weather athletics facility. The internal field areas are proposed to accommodate other field events e.g. shot put, long jump, high jump, discus etc.

Precinct 2 central multi-purpose sportsfield platform

The central multipurpose field platform sits above adjoining levels to the west and is flanked by retaining walls of varying heights along with discrete ball fencing to retain balls within the fields. To the east, the platform is recessed into the landform. This central facility could accommodate a synthetic surface or alternatively be developed as a natural sports turf surface.

The available space in this zone will limit field sizes to dimensions between minimum and maximum sizes for senior competition.

Precinct 3 southern multi-purpose natural turf sports-field platform – full senior size

The southern field platform provides the widest area working within the zone defined by adjoining bushland. The Master Plan illustrates a multipurpose playing field platform accommodating two (2) full competition size football fields, or two (2) full-size Rugby fields, or a full-size AFL field, with a full-size cricket field during summer.

The field platform sits above adjoining levels and is flanked by retaining walls of varying heights to the west, Black coloured perimeter fencing again prevents balls leaving the fields and entering the bushland area.

4.1.2 Multipurpose park amenities buildings

Each of the field platforms is served by an amenities building at the same level as the field. The amenities buildings are accessed off the main carparks or the internal road network and path network.

All the amenities buildings will be designed to reduce operational carbon emissions, conserve potable water and harvest rain water.

4.1.3 Informal Recreation

Grassed viewing areas

Along the edge of each sport field, shaded grassed sections provide warm up areas and spectator viewing.

Open grassed informal games and picnic parkland

An open grassed space with seating and shelter, located to the north of precinct 3, provides for both local use and complements the sports uses of the fields. This area also provides a buffer zone for the playground from the carpark.

Play Space

Between the southern and central field platforms is a passive recreational area that includes a play space area that is integrated into the level changes in this area, with the surrounding bushland as backdrop. The play space could provide a local play facility in accordance with Council's Play Plan 2019.

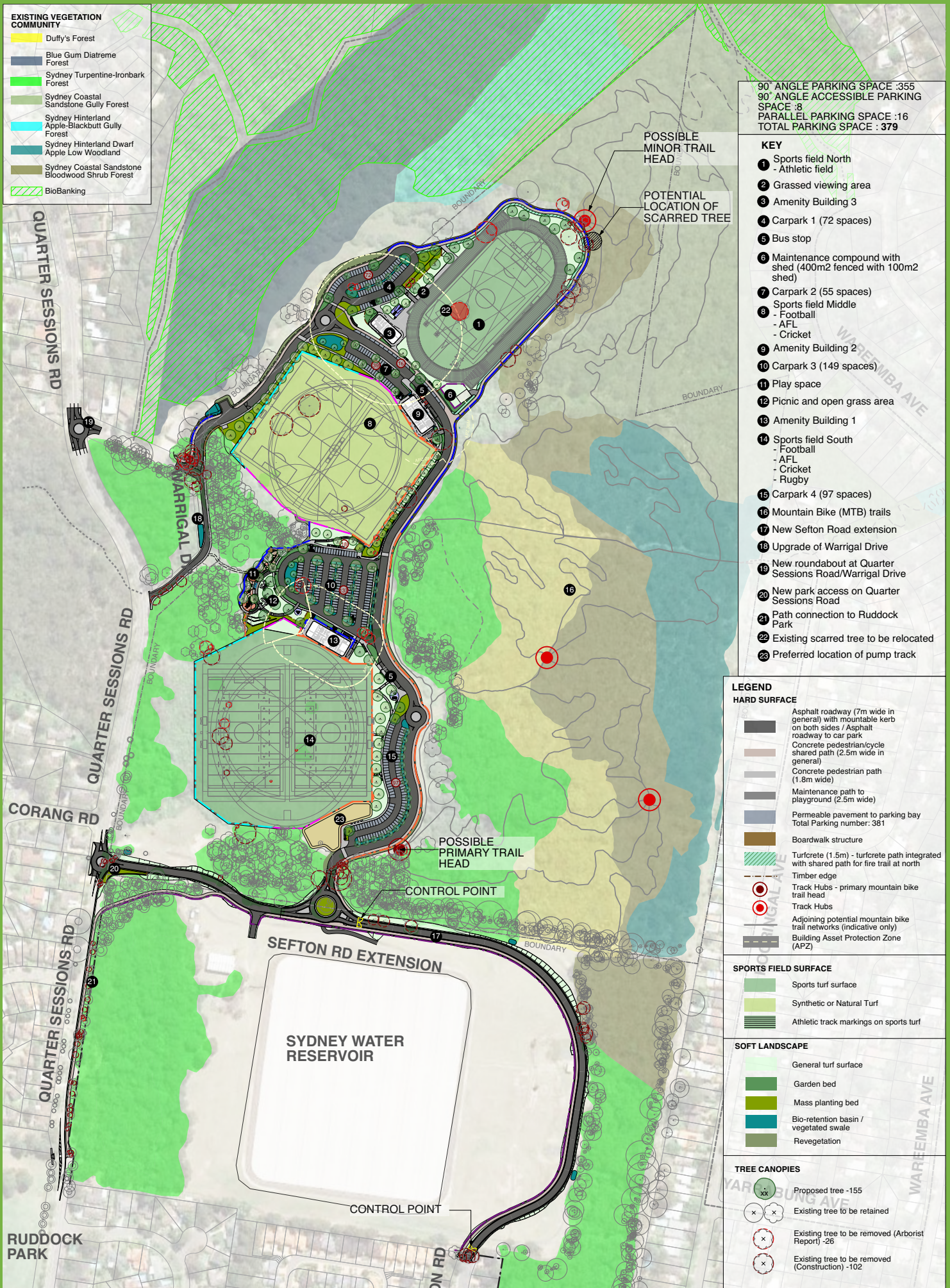


Figure 4.1- Westleigh Park concept masterplan

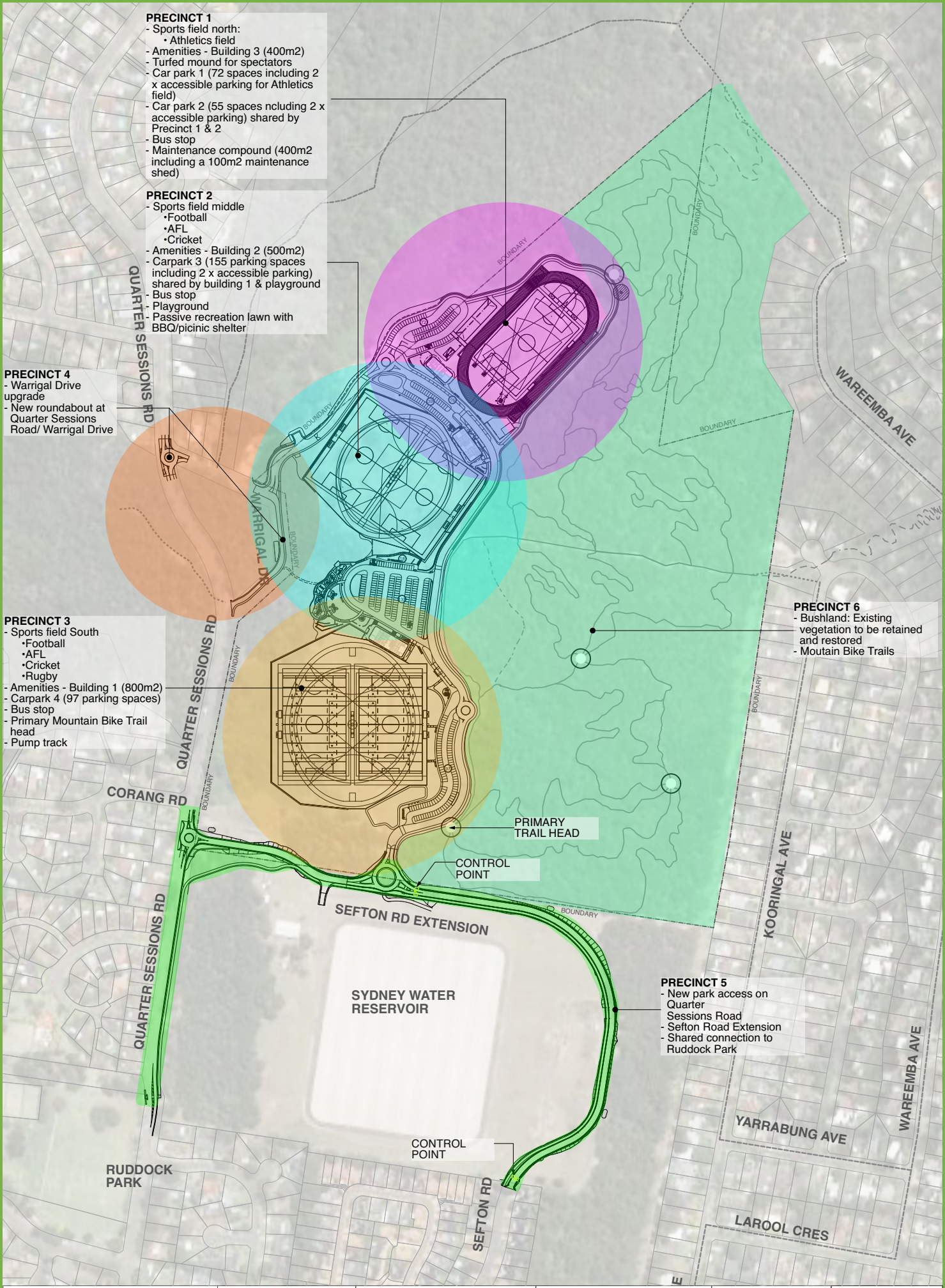
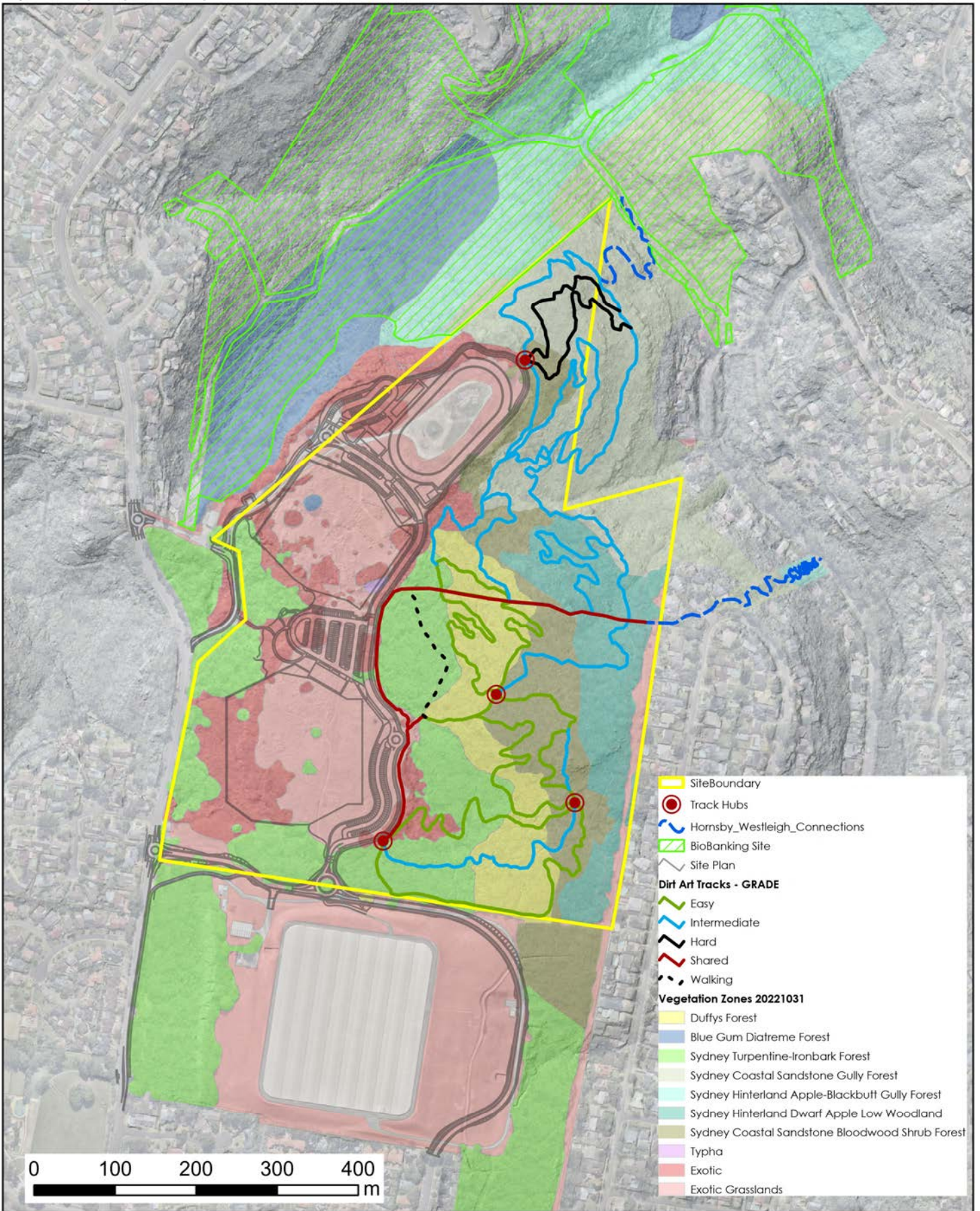


Figure 4.2 - Westleigh Park concept masterplan - activity precincts





 <p>Hornsby Shire Council</p>	<h2>20230524_Westleigh Track Network</h2>	<p>Map Scale: 1:6,000 at A4 Portrait</p>		
<p>296 Peats Ferry Road HORNSBY NSW 2077 Telephone: 02 9847 6666 Email: hsc@Hornsby.nsw.gov.au</p>	<p>Important Notice! Dimensions, location of features and boundaries are indicative only, their actual position has not been surveyed. Aerial photography may not align with cadastral boundaries. Hornsby Shire Council accepts no responsibility for any incident arising from any inaccuracy.</p> <p><small>Copyright © Hornsby Shire Council 2019; © The State of New South Wales; Aerial imagery: © NSW Department of Finance, Services and Innovation 2016</small></p>	<p>Projection:</p>	<p>GDA94 / MGA zone 56</p>	
		<p>Date:</p>	<p>20/02/2023</p>	

Figure 4.3 - Westleigh Park - proposed alternative trail network (Hornsby Shire Council 2023)

Mountain Bike Trails

Vegetation and biodiversity surveys of the bushland at Westleigh Park have identified several threatened ecological communities and threatened species. In many cases the existing unsanctioned mountain bike trails pass through these areas. Council has expressed a desire to provide for a wide range of recreational opportunities at Westleigh Park and recognises, while currently unsanctioned at this site, mountain biking remains popular with the community.

Council undertook community engagement in mid-June 2021 as part of the previous draft Master Plan exhibition to understand community perspectives on mountain biking at the site. Significant concern was raised by the community relating to the balance between recreational needs and environmental protection.

In response to the community's concerns, Council undertook a targeted engagement process in mid-2022. This included members of the mountain biking community, community environmental representatives and local residents. This co-design process aimed to provide opportunities for all groups with an interest in the issue to contribute. Due to divergence views a consensus on an acceptable trail network at the site was not able to be achieved. Rather, the co-design participants respectfully chose to present two options to Council for consideration.

Council gave consideration to both options and worked closely with both a trail designer and ecological consultant (Dirt Art and Eco Logical Australia, respectively) to inform the development of a trail concept plan (refer to figure 4.3). This concept plan evolved over several iterations and was informed by stakeholder feedback, best practice design principles and on-site investigations, including:

- Vegetation community validation
- Flora and fauna surveys
- Desire to maintain a focus on easy to immediate trails
- Avoidance and reduction of tracks in areas of high value biodiversity
- Creation of additional trails in less sensitive areas
- Recycling and upgrading existing tracks to avoid creating new impacts
- Establishment of a primary track head, including wayfinding and auxiliary facilities (e.g., wash bays)
- Creation of zones and hubs to improve rider experience and environmental sustainability
- Ground truthing to ensure constructability

The Master Plan also identifies potential connections between Westleigh Park and Hornsby Park. These links will offer another experience to visitors of either park, with them able to be enjoyed by those moving through the Shire on foot or bike.

Cycle Pump Track

A cycle pump track is proposed at the south-eastern corner of the southern sportsfield platform, approximately opposite the primary mountain bike track head, and adjoining the southern carpark.

The pump track is proposed to include a beginner track and an intermediate/advanced track to cater for users of different ages and abilities, and complement other facilities on the site.



Image Source: Trailscape



Image Source: Ku-ring-gai Council



Westleigh Park Artist's impression

4.2 Access

4.2.1 Pedestrian and cycle access

Shared pedestrian and cycle path

The pedestrian and cycle access network to and within the site is illustrated on Figure 4.4.

Pedestrian access into the park is focused on a 2.5–3m shared recreational and maintenance path network which enters the site from Warrigal Drive and the proposed new entry from the south. This will provide loop access around the perimeter of the facilities in addition to providing supplementary maintenance access. The shared path will be supplemented by pedestrian paths in the centre of the site which connect parking areas to facilities and provide access through the central parkland area between the southern and central fields. The shared path will connect to a broader local network of cycle paths via both on road and off-road links. The adjoining mountain bike trails and bush walking tracks being considered will also be connected to track and trail networks beyond the site.

Access points to adjoining mountain bike (MTB) trail network

The proposed MTB trail network would be accessed through Westleigh Park where riders can use parking and other facilities, or cycle to the site and access the MTB trail entry points via shared paths or the internal road network. The primary access point (trail head) is proposed at the south-eastern edge of the park reached via the shared path or perimeter road. Other access/exit points are also been considered from the shared path to the north of the site. Access and exit is also being considered to Wareemba Avenue and the Dog Pound Creek fire/maintenance trail.

4.2.2 Vehicular access and parking

The vehicular access and parking within and to the site is illustrated on Figures 4.5.

New roundabout at Warrigal Road north

This intersection is proposed to be converted into a roundabout to improve traffic flow and to better manage traffic volumes. The central island will be mountable to allow for bus movements. Consideration was also given to the requirement for firetrucks to access the Westleigh Rural Fire Brigade facility.

Associated kerb adjustments, median islands, line marking and signage would also form part of the works.

The intersection of Warrigal Drive south is proposed to be converted into a one-way exit with left turn movements permitted out onto Quarter Sessions Road. Signage and line-marking is proposed to provide clear priority to Quarter Sessions Road traffic movements.

New road access from Quarter Sessions Road

A new vehicular access point is proposed from Quarter Sessions Road located between the southern boundary of the site, and the Sydney Water facilities. This access point was chosen to avoid sight-line issues of the option near Corang Road, and to minimise impact to the existing significant vegetation community (STIF). This access will be shared with Sydney Water to access their operational site to the south, rather than creating a duplicate access point off Quarter Sessions Road.

Future road access to Sefton Road subject to ongoing discussions with Sydney Water

The proposed new Sefton Road access connection would require road works to continue from Sefton Road through the Sydney Water site and into the Park. This link seeks to enable more effective spreading of traffic loads on (for example) weekend game days. Traffic modelling has confirmed that this link could operate for specific controlled use when only one sporting platform is operational and is not required to provide day to day through access.

The extension of Sefton Road coupled with the new road access from Quarter Sessions Road would also provide an alternate access for the Westleigh community in the event of an emergency (such as bushfire).

To avoid potential impacts on the existing Sydney Water reservoir's infrastructure and address the safety and security matters to the existing assets, the new extension is proposed to be generally on or slightly above existing grade, minimising fill embankments but avoiding any disturbance of Sydney Water dam walling. The corridor would be provided with security fencing to limit public access to the Sydney Water site.

The proposal is subject to ongoing discussions with Sydney Water.

Parking areas

It is proposed to provide off street parking to service the sports facilities within the Westleigh Park site. The Master Plan aims to provide 379 car parking spaces. These are distributed between the main field platforms and have been predominantly provided as off-road parking areas with some additional parallel spaces between the central fields and northern athletics field. Each parking area includes a number of accessible parking spaces.

Traffic assessment

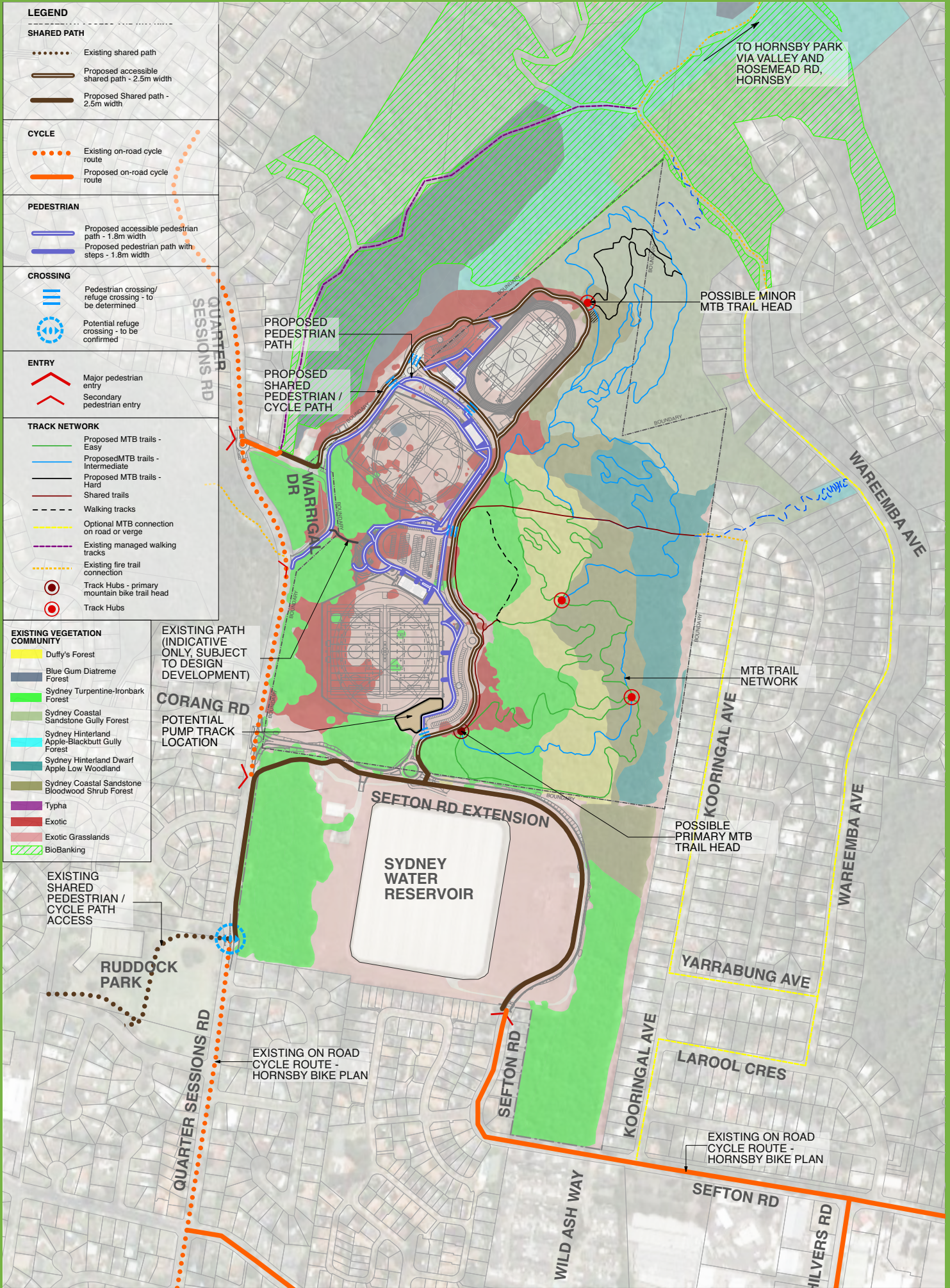












Figure 4.4 - Pedestrian & Cycle Access and Network (Source: TTW+EP)

90° ANGLE PARKING SPACE :355
 90° ANGLE ACCESSIBLE PARKING SPACE :8
 PARALLEL PARKING SPACE :16
 TOTAL PARKING SPACE : 379

LEGEND

TRAFFIC & PARKING

-  Existing external road
-  Proposed internal road with mountable kerb - 7m width in general and 8m width to wherever mountable kerb not applied
-  Proposed maintenance access/ emergency access to field
-  Proposed intersection upgrade
-  Proposed new entry into park site
-  Proposed parking area - off street 90°
-  Proposed parking area - road verge parallel
-  Accessible Parking (2 x parkings & 1 x shared area)
-  Loading zone
-  Potential pump track

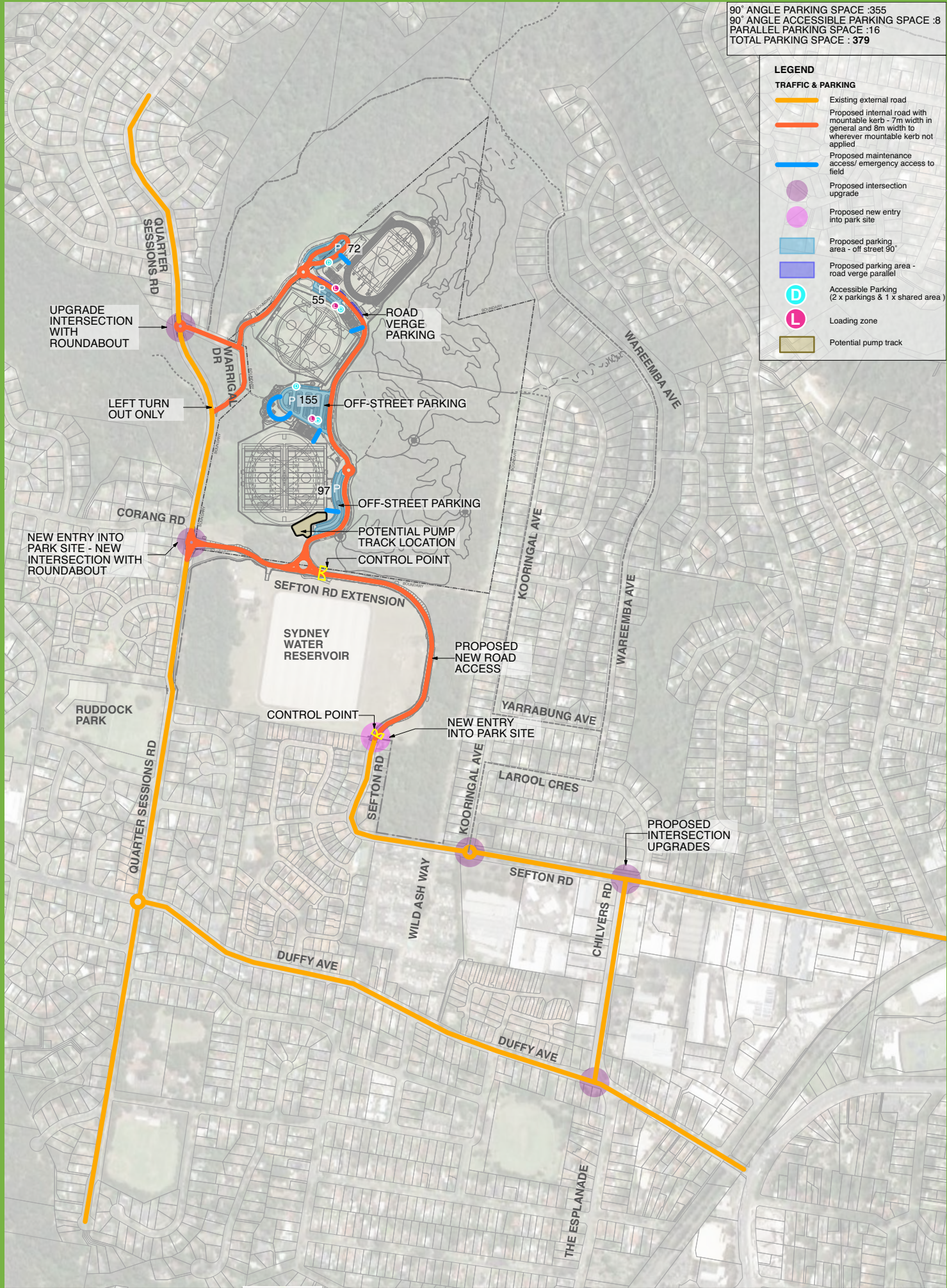


Figure 4.5 - Vehicular Access and Parking

Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	-6.000	-5.000	Dark Red
2	-5.000	-4.000	Red
3	-4.000	-3.000	Light Red
4	-3.000	-2.000	Orange-Red
5	-2.000	-1.000	Orange
6	-1.000	0.000	Light Orange
7	0.000	1.000	Yellow
8	1.000	2.000	Light Green
9	2.000	3.000	Green
10	3.000	4.000	Dark Green
11	4.000	5.000	Very Dark Green
12	5.000	6.000	Black
13	6.000	7.000	Black
14	7.000	8.000	Black

The TTW civil concepts illustrate the proposed final levels concept and related earthworks strategy. This earthworks strategy is only related to fields and associated infrastructure. The coloured diagram this page represents a “heat map of cut and fill across the site.



Figure 4.6 - Cut & Fill (Source: TTW)

To address community concerns raised during the initial concept Master Plan exhibition and to consider the influences of the NorthConnex project on the traffic volumes and patterns to the study area, Council engaged Bitzios Consulting. In 2022 Bitzios carried out traffic modeling to inform road and intersection upgrade requirements, assess the impact of the proposed Sefton Road extension and review active and public transport facilities and potential improvements.

This assessment concluded that the proposed Sefton Road extension would be required at some stage to address the potential impacts on the adjoining neighbourhood traffic flows.

In addition, Bitzios suggested a through access between Quarter Sessions Rd and Sefton Road would provide a supporting emergency egress route for the community.

4.3 Approach to landfill management

Cleared & Weedy Areas

A cap and contain approach is proposed to isolate the mixture of contamination in the existing fill material on site. This includes excavation of landfill and relocation for capping elsewhere on site.

A Remedial Action Plan has been developed to guide and monitor the site remediation.

Environmentally sensitive bushland areas

In the environmentally sensitive bushland areas adjoining the cleared zone of the site a combination of strategies is to be employed including:

- i. localised removal of dumped waste and asbestos;
- ii. localised isolation of asbestos exposure in accessible areas, accompanied with administrative controls
- iii. implementing a long term Environmental Management

Plan (EMP), to reduce potential impacts of contamination remediation on the environmentally sensitive areas. This may include fencing to preclude entry to areas of possible contamination and signage to identify permissible activities.

Earthworks

Although the site appears quite level to undulating, most of the land currently falls at a gradient of between 1:20–1:30. The Master Plan proposes the sports field platforms grading at the required sports profiles of 1:100.

The field platforms will be cut into existing fill and natural ground in places, (in particular to south east) (refer Figure 4.6), but due to the required level sports profiles, the edges of the platforms to the west and north will generally have a deeper profile of fill material and will need to be retained (see Figure 4.7 below)

Around 40% of the cleared portion of the existing site is covered in landfill to a depth of less than a metre. It is proposed to excavate down to natural ground to reach virgin excavated natural material (VENM) and relocate the excavated material to “containment cells” within the major fill zones required to establish the field levels.

Site won material will be used where possible as capping material to these containment cells and as fill material to the major fill zones on the site.

Some additional capping material may be needed if site won material doesn't meet required materials specifications for capping use.

The final levels have been calibrated to account for a generally balanced cut and fill exercise, focusing the requirement for imported material on landscape and related construction materials (e.g. road pavement materials) to build up surface profiles.

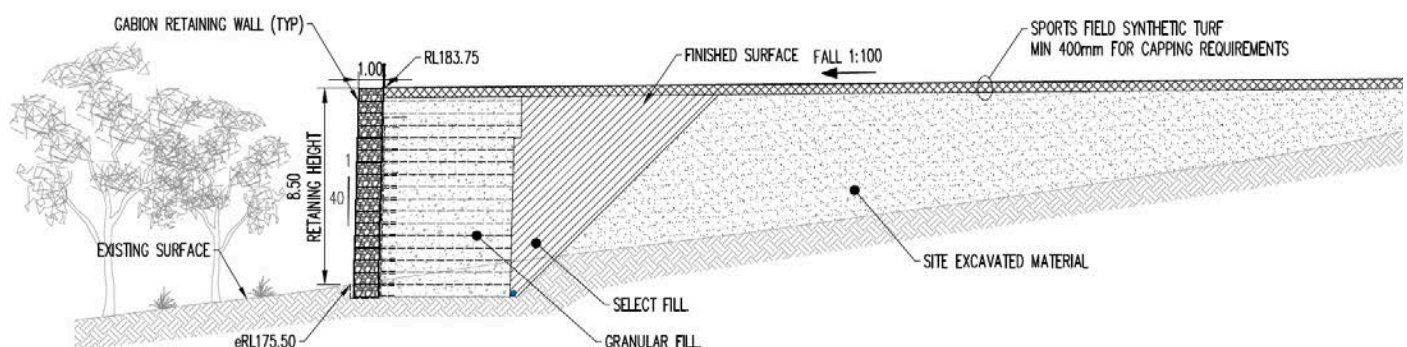


Figure 4.7 Section through Western edge of Southern field platform (Source: TTW)



Angophora costata - Significant tree in Westleigh Park
Image Source: Eco Logical Australia

4.4 Environmental Sustainability

Biodiversity protection

Conservation of the bushland and biodiversity values of the site have been a major factor in the development of the Master Plan.

The proposed development has predominantly been confined to existing cleared areas and has been subject to ongoing refinement through detailed ground survey and ecological assessment.

Biodiversity and arboricultural investigations have informed the Master Plan. The master planning process was guided by the biodiversity conservation principles of 'avoid, minimise and mitigate' to produce a sustainable footprint and reduce likely ecological impacts of the proposal.

Any localised residual impacts will be offset in accordance with relevant offset policies and schemes. Restoration of current 'weedy' areas, along with the rehabilitation of poor quality bushland and protection of good quality bushland will be integral to ongoing, future site management.

Stormwater management & WSUD

A further key consideration for development of a recreational parkland on the site is avoiding and minimising adverse impacts on the local creek system. This includes alteration of existing flow regimes, in addition to the quality of water entering these waterways from the site.

Existing catchments and the drainage lines to which they drain have been analysed, and the drainage proposal seeks to maintain sustainable flows and volumes to each of the existing catchment.

An integrated water management approach will guide the design process. This will involve treatment of runoff from roads and carparks in a combination of on-site bioremediation beds and wetlands, as well as capture, storage and reuse of stormwater to minimise erosive impacts downstream and to provide an alternative (to potable) water supply for irrigation and other uses.

Sustainable design

Environmentally sustainable design elements will reduce operational carbon emissions, provide resilience to the effects of climate change, reduce potable water use and improve waste management.

The key sustainable design elements in the proposed development include bicycle racks to encourage active transport, electric vehicle charging, rooftop solar system, solar hot water, LED lighting and motion sensors, minimising light pollution, high water efficiency rating for fixtures, waste management plan, rainwater tanks and passive solar design of the amenities architecture.

Bushfire management

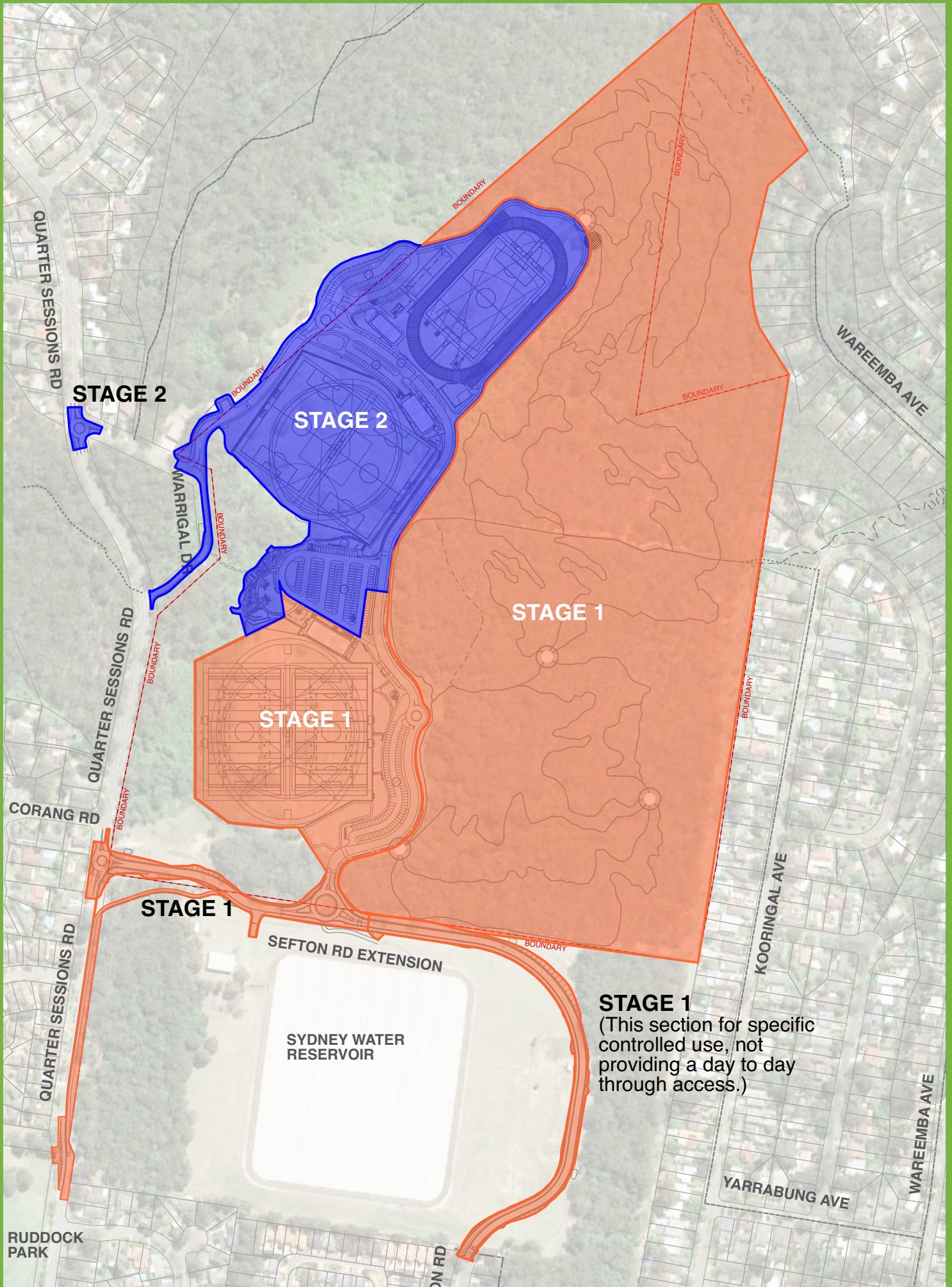
A Bushfire Opportunities and Constraints Assessment has been prepared to inform the design for bushfire protection and management. Key requirements include:

- Asset protection zone (APZ) provision — achieve a minimum BAL-40 exposure to all amenities buildings. Location of the amenities buildings are considered carefully to avoid any conflicts between APZ and adjoining vegetation communities;
- Construction — achieve the standard National Construction Code (NCC) fire safety requirements;
- Access — provide multiple access points with perimeter access and suitable dimensioned roads for fire rescue services
- Emergency management- provide a suitable bushfire emergency management and evacuation plan;
- Landscape — Vegetation management and design as per Planning for Bush Protection (PBP) guidelines. Utilise fire retardant planting species to reduce fire risks;
- Utilities- design to compliant with PBP guidelines.

Active transport

Pedestrian and cycle access is proposed within the park and connecting to the surrounding walking and cycling network. This seeks to support people of all ages and abilities to get to and around the park facilities. A shared path along the eastern edge of Quarter Sessions Road links the park from the southern entry to Ruddock Park, with the provision of a new refuge crossing point.

The existing bus stops located at Quarter Sessions Road and Corang Road near the southern entry of the park also support sustainable transport to the site



		<p>CLIENT</p>	<p>TITLE STAGING PLAN</p>	<p>Westleigh Park Sports Complex Development Application</p>	<p>SCALE 0 10 20 30 40 50 M</p>	<p>DATE</p>
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Figure 4.8 - Staging Plan

4.5 Staged Implementation of Master Plan

Delivery of the Master Plan will be staged as funding becomes available.

It is noted that around 40–50% of the cleared portion of the site is proposed to be excavated to natural ground with the landfill material redistributed beneath filled areas.

The final boundary of the stage one area would be based on the detailed volumes of contaminated material yielded from stage 1 earthworks to be contained and capped, but would generally reflect Figure 4.8.

Stage 1 works would mainly include the southern multi-purpose natural turf sportsfield platform and its amenities, the carpark to the east, the new entry from Quarter Sessions Road along the southern boundary of the site, and the southern portion of internal park road linking to the amenities and the MTB trails. The existing unsanctioned mountain trails will be either upgraded and improved or closed and rehabilitated. Some new trails and a primary trail head will be constructed to facilitate connections and circulation around the network.

The associated utilities would also be required to support the stage 1 works, including electrical substation kiosk, and water and sewer connections. Stage 1 works would include the proposed Sefton Road extension linking the park to Sefton Road for specific controlled use, but not providing a day to day through access.

Stage 2 works will be the remaining construction, including the northern and middle platform, the playground and BBQ/picnic area and associated carparks, amenities and utilities, along with the internal road networks and the upgrade of Warrigal Drive, and the Quarter Sessions Road / Warrigal Drive intersection.

4.6 Connecting with Country

Having committed to embedding the principles of Connecting and Design With Country, Council has been working with Aboriginal Consultants and stakeholders to review conservation priorities and develop a Connecting with Country Framework to guide ongoing design refinement and development.

A preliminary Aboriginal Cultural Heritage Assessment Report (ACHAR) has been received with a particular focus on several items of conservation importance including a Scarred Tree on the site. Based on consultation and discussion with the Registered Aboriginal Parties (RAP) the existing Scarred Tree (a dead Scribbly Gum) is proposed to be relocated and interpreted at the northern end of the northern field platform, connected with the valley landscape and bushland and providing a gathering and contemplation space.

Ongoing consultation and collaboration with the RAP will inform a Connecting with Country framework, which will in turn guide ongoing design development of Westleigh Park.

Progression of the framework will embody the NSW Government Architect's Designing with Country Guidelines - Statements of Commitment and can be expected to cover such opportunities as enhancing awareness and understanding, celebrating local language and stories, and encouraging living culture and relevance to contemporary First Nations communities.

Conclusion

The Westleigh Park Master Plan aims to provide a socially, environmentally and culturally sustainable plan for the site to encourage and support healthy community.

The plan seeks to address the increasing demands upon existing sports facilities within Hornsby Shire and will play a key role in recreational provision for the district area including provisions for formal sports, passive recreation, unstructured recreation and ancillary facilities.

The Master Plan reflects a holistic approach to making a safe, sustainable and resilient place addressing the challenges of site remediation, biodiversity protection, water management, sustainable energy and resource use, bushfire protection and active transport.

To Connect with Country, ongoing consultation and collaboration with Aboriginal stakeholders will inform Cultural Themes and roles into ongoing design to conserve and celebrate our indigenous legacy in a responsible, appropriate and respectful way.



Westleigh Park Concept Sketch – Southern multi-purpose platform looking north (indicative only)

NEED HELP?



This document contains important information. If you do not understand it, please call the Translating and Interpreting Service on 131 450. Ask them to phone 9847 6666 on your behalf to contact Hornsby Shire Council. Council's business hours are Monday to Friday, 8.30am-5pm.

Chinese Simplified

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German

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Hindi

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इस दस्तावेज़ में महत्वपूर्ण जानकारी दी गई है। यदि आप इसे समझ न पाएँ, तो कृपया 131 450 पर अनुवाद और दुभाषिया सेवा को कॉल करें। उनसे हॉर्न्सबी शायर काउंसिल से संपर्क करने के लिए आपकी ओर से 9847 6666 पर फोन करने का निवेदन करें। काउंसिल के कार्यकाल का समय सोमवार से शुक्रवार, सुबह 8.30 बजे-शाम 5 बजे तक है।

Korean

도움이 필요하십니까?

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Tagalog


Kailangan ng tulong?

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Farsi

نیاز به کمک دارید؟

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