

MENANGLE PARK

Open Space and Landscape Strategy Report

Prepared for DAHUA Group

14th November 2018

Project Number: 2517002



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Report title	Open Space and Landscape Strategy Report
Document number	2517002
Prepared for	DAHUA Group
Authors	Baz Richards
Revision number	11
Revision issue date	14th November 2018
Approved	Nick Ison
Reason for revision	Final Issue

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1 INTRODUCTION

1.1 Introduction

Place Design Group has been asked by APP on behalf of Dahua Group to review and evolve the Strategic Master Plan for Menangle Park in relation to overall landscape strategies. There is an existing Master Plan in place for the site which requires revisiting based on the following:

- The current proposal is 10 years old, prepared within a different physical and planning context and responding to the trends of that period;
- Today's Master Plan must respond to the existing and projected growth within Sydney's South West;
- Planning proposals must respond to the recent NSW District and Strategic planning documents including the Greater Sydney Region Plan and Western City District Plan.
- The Western Sydney Airport will impact the nature of development within the South West and the revised Menangle Park Master Plan should accommodate this change; and
- Over the past decade there have been significant changes to demographics, affordability, housing need and lifestyles. Menangle Park provides the opportunity to meet needs and fill a market gap.

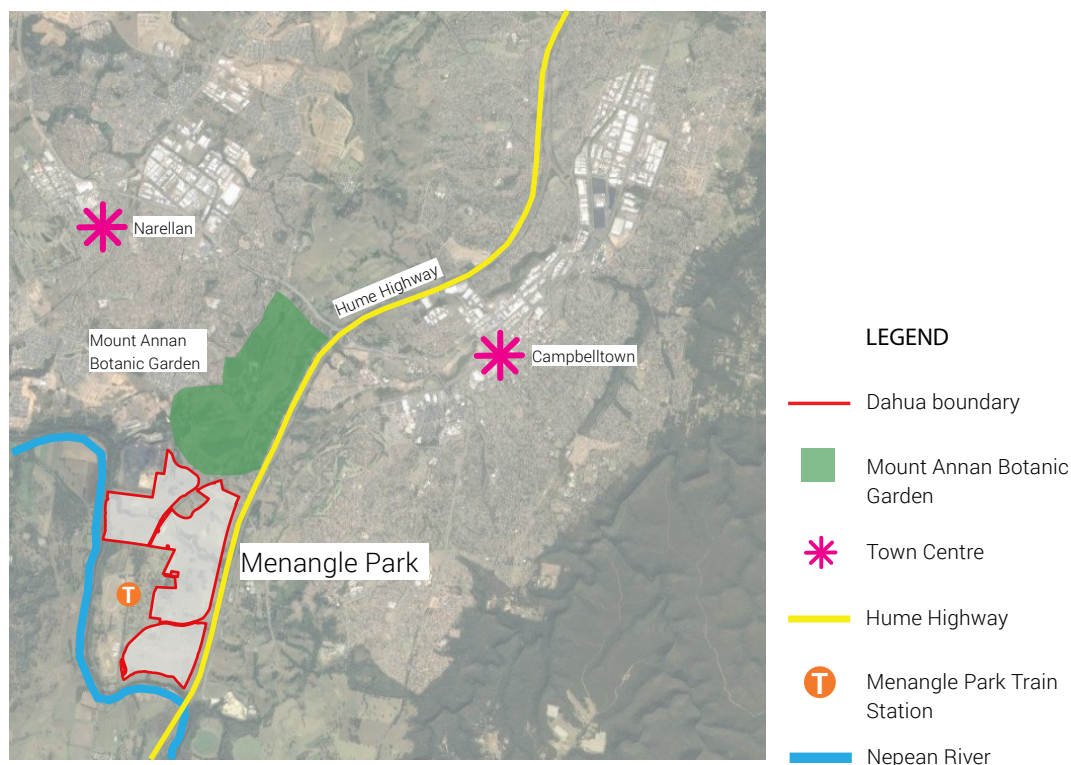
This document outlines the vision and overall landscape design principles of the site and is based on the site's planning history and site specific analysis. It should be read in conjunction with the urban design report prepared by Roberts Day which proposes 8 character areas throughout Menangle Park and provides further definition and detail of the streetscapes and open spaces proposed in each of the character areas.

1.2 Background and Local Context

Menangle Park is a rural-residential suburb located in Sydney's south west within the Greater Macarthur Priority Growth Area. It is approximately 5.5km to the south-west of the Campbelltown, 23km from the Liverpool Strategic Centre and 65km from the Sydney CBD.

The Menangle Park Urban Release Area (URA) covers a total area of approximately 958 hectares and is bounded by the Nepean River to the south and west, the Hume Highway (M31) to the east and the Australian Botanic Gardens to the north. The Main Southern Railway Line dissects the area in a north / south direction.

Dahua own and control a significant portion of the Menangle Park URA consisting of approximately 500 hectares of gross site area. Dahua's land includes the central and eastern parts of the area to the east of Cummins Road. Their holdings are positioned to the north and south of Menangle Road and include land in the north-west corner of the URA which has been earmarked as future employment lands.



Menangle Park - Local Context Plan

1.3 Working with Key Land Owners

There are a number of key land owners within and adjoining the Menangle Park site. These include landowners the Glenlee Heritage Residence, Club Menangle and Mt Annan Botanic Garden. To ensure the long term success of the development, the open space strategy will look to:

- Work with adjacent landowners around the Glenlee Heritage Residence to provide appropriate heritage considerations.
- Work closely with the Club Menangle Group to enhance precinct wide opportunities.
- Work closely with the Mount Annan Botanic Gardens team to:
 - Deliver genuine biodiversity through investment in vegetation corridors
 - Establish opportunities for linkages to new functions within the southern portion of the botanic gardens site
 - Establish joint social and community based programs including events and plant procurement programs for selected species.

1.4 Site Constraints

The following key site constraints of the site have been identified:

- The site adjoins the Hume Highway to the east, the rail line to the west and the Nepean River to the south. This limits the number of entry points which can be advantageous in orchestrating a sense of arrival and address to the site.
- The proposed Spring Farm Parkway and Menangle Road are major barriers to pedestrian connectivity across the site. They effectively split the site into three villages.
- The Nepean River provides flood constraints on the site that defines the parkland extent.
- There are large areas of ecologically endangered communities on site. While many are located in the riparian corridors, a proportion will need to be removed and offset.

1.5 Key Considerations

The following key considerations of the site have been identified in developing the Menangle Park Planning Proposal:

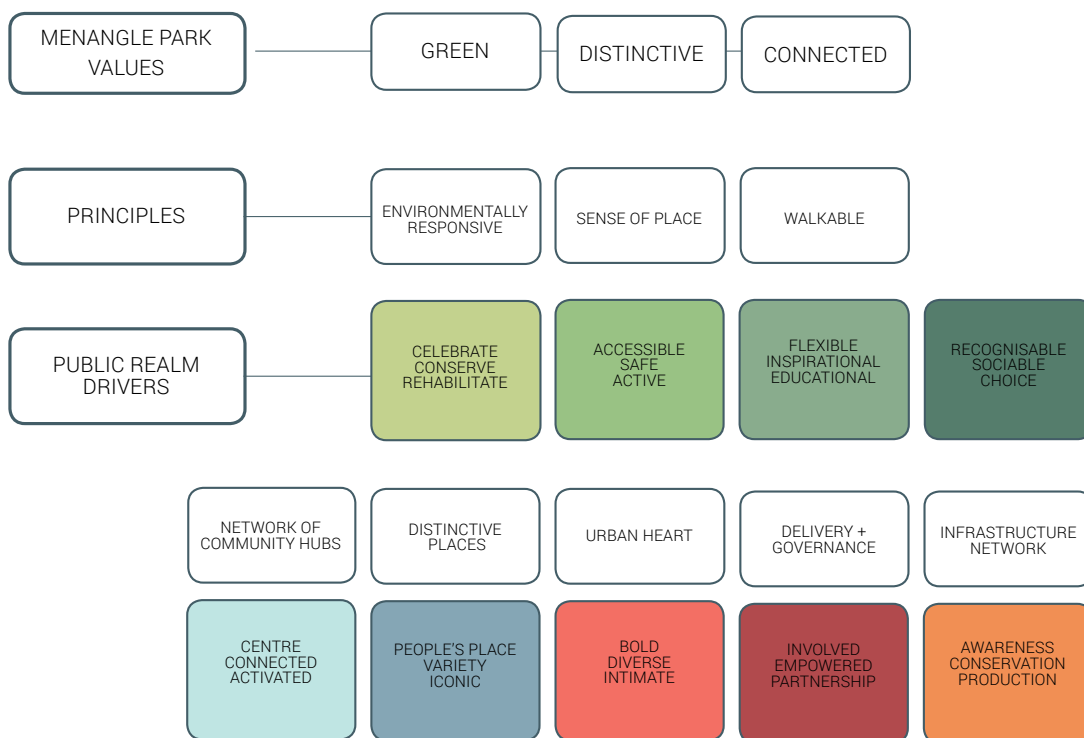
- The site's geographical relationship with Nepean River, Mt Annan Botanic Garden and Club Menangle narrates the importance of connecting the site into Sydney's Green Grid Vision.
- Existing and proposed cycleway links Camden LGA, Campbelltown LGA and Mt Annan Botanic Garden inform regional cycleway strategy at Menangle Park. The site will also benefit from the forward planning of the Macarthur South Trails Strategy.
- At district level, pedestrian and cycleway connections are to be tied into an optimal internal framework.
- The location of the site, rainfall data, and extreme temperatures impacts on the need to include low water demand planting where possible. This is important to ensure the longevity of the landscape and minimise maintenance requirements.
- Regional view profile and distinct high vantage points.

1.6 Vision

Landcom and Campbelltown City Council's vision for Menangle Park forms the basics of the ongoing master planning:

"As an impressive southern gateway to the Sydney Metropolitan Region, Menangle Park will become a unique urban community characterised by sustainable design, accessibility and a vibrant town centre. As part of the broader Macarthur community, Menangle Park's urban form will capitalise on the existing economic resources, existing natural and cultural heritage qualities and the adjacent Nepean River".

Dahua's objectives are to deliver a benchmark masterplanned community in Menangle Park which addresses the site's constraints, capitalises on the site's natural and built environment and heritage and provides a saleable product to market.



1.7 Design Principles

To guide the design review and landscape masterplan, we have developed a series of key guiding principles to underpin the design development framework. These are:

- Deliver a benchmark landscape and public domain outcome within a progressive master-planned community.
- Establish a holistic and fully integrated approach to the landscape masterplan that relates closely to the urban design principles and layout.
- Create 8 distinctive landscape character areas across the development in conjunction with the urban design and built form strategy for the site.
- Provide a memorable experience for residents and visitors, building on a strong identity for the site and the creation of a significant sense of place.
- Respond to past and existing land use, existing topography and landscape character including the river, adjacent botanic gardens and agricultural land.
- Optimise access and connectivity to all public open spaces, with a focus on walkability and cycle network.
- Develop maintenance and management strategies in consultation with Council to ensure high quality public domain outcomes.
- Increase biodiversity and leverage close relationships between Council and the Mount Annan Botanic Garden.
- Maximise opportunities for pedestrian / cyclists interaction and environmental learning which will enhance sense of identity and integrity of community.

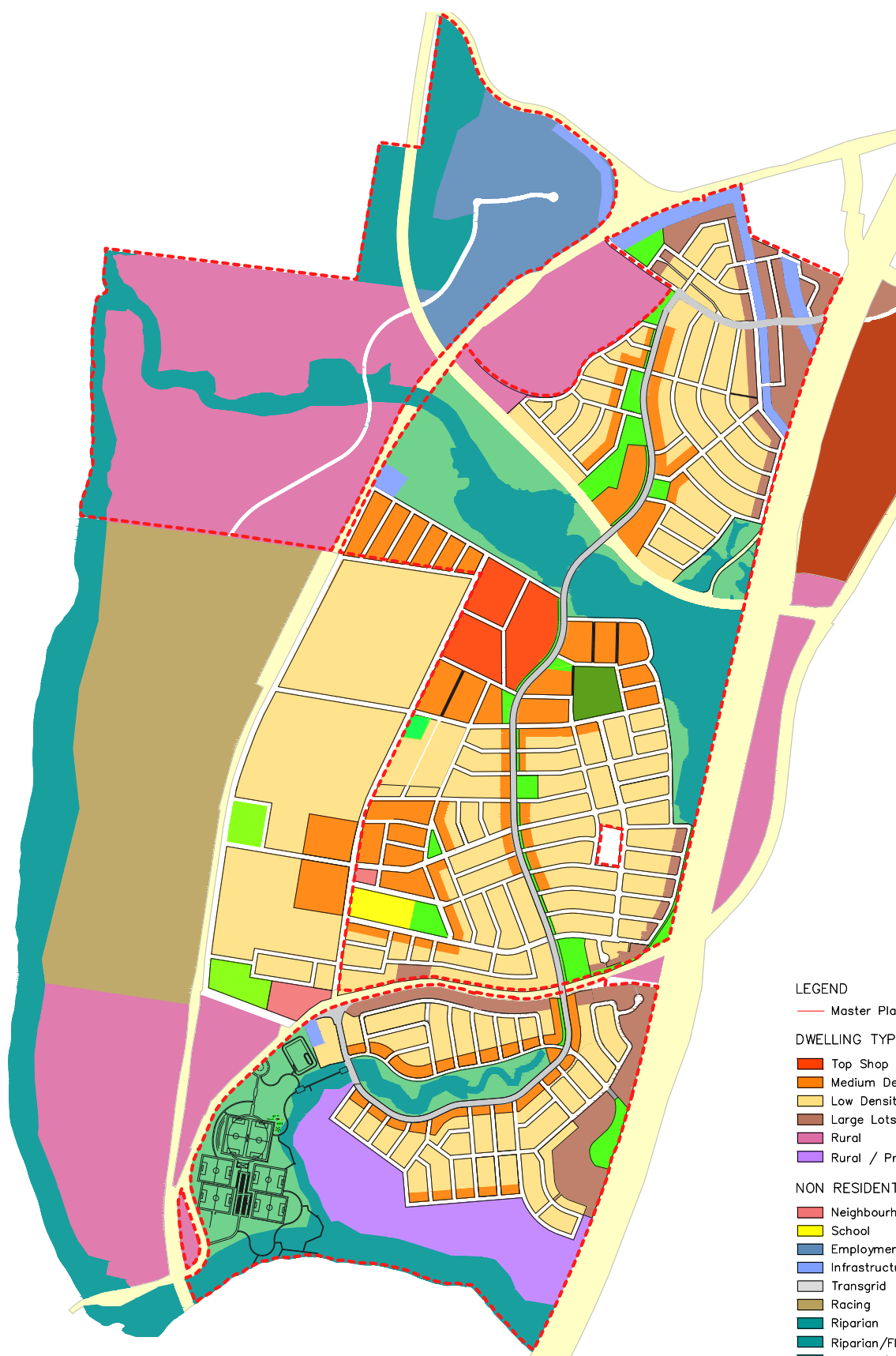
2 URBAN STRUCTURE PLAN COMPARISON

Urban Structure Plan Comparison

The development of the 2018 Menangle Park Urban Structure Plan has led to a wealth of new initiatives and improvements over the original Structure Plan. Progression toward a more comprehensive and integrated Structure Plan for Menangle Park includes a greater understanding of the needs of key stakeholders such as Club Menangle, Mount Annan Botanic Gardens and Campbelltown Council.

A sequence of internal and external design workshops held by the urban design, engineering and landscape architecture team in conjunction with leading technical advice has resulted in a number of broad key improvements including:

- An increased emphasis on the development of an integrated hierarchy of open space across the site.
- A strong emphasis on landscape design in the creation of the updated urban design framework. Open space has dictated the built form.
- The 2018 Structure Plan plans creates approximately **141.36ha** of open space within the site of Menangle Park. This figure includes; riparian land, informal open space (parks and playspaces), playing fields and areas of ecological value. Detention basins located within open spaces amount to **6.55ha** providing a net total amount of open space as **134.81ha**.
- An increased commitment to providing high quality open spaces that meet the requirements of Council and the community.
- A focus on providing a variety of open spaces that respond directly to the surrounding landscape character with differing functions, contrasting design and within walking or cycling distance from anywhere on site.
- Subdivision layouts that consider vista and views of the distant hills and landmarks from the approaches to the site and internally along view key corridors.
- An earthworks strategy that responds to the site characteristics inclusive of views, riparian areas and topography whilst ensuring treatment for developable land and functional open space areas.



- LEGEND**
- Master Plan Boundary
- DWELLING TYPOLOGIES**
- Top Shop Apartments
 - Medium Density Lots
 - Low Density Lots
 - Large Lots
 - Rural
 - Rural / Private Open Space
- NON RESIDENTIAL USES**
- Neighbourhood Centre
 - School
 - Employment
 - Infrastructure
 - Transgrid
 - Racing
 - Riparian
 - Riparian/Flood (30m)
 - Riparian/Flood (15m)
 - Riparian/Flood (45m)
 - Ecology
 - Field/Open Space
 - Park/Open Space
 - * Future Open Space (>0.5ha)
 - * Indicative Open Space/Civic Area
 - * Additional two playing fields (Approx 2.5ha—Detailed locations TBC)

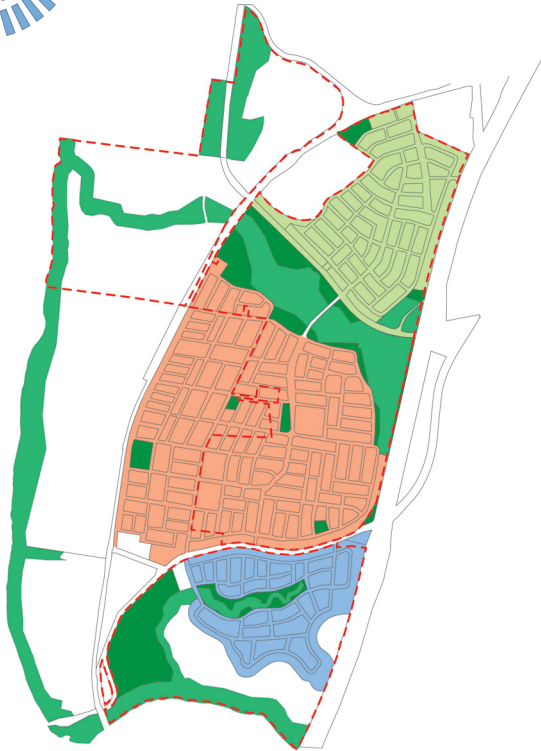
Structure Plan 2018

Source: Roberts Day

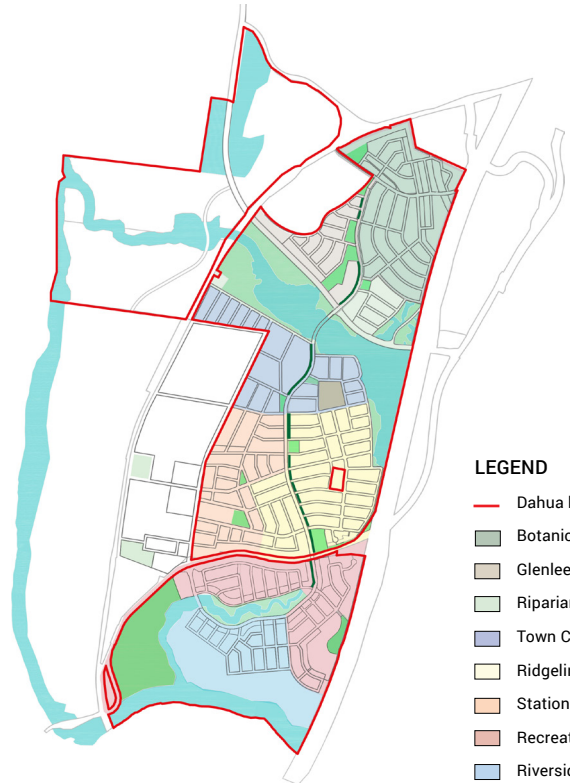


Character Areas

8 new character areas respond to existing and future place characteristics.



Character areas - 2016 Streetscape Master Plan



Character areas - 2018 Master Plan

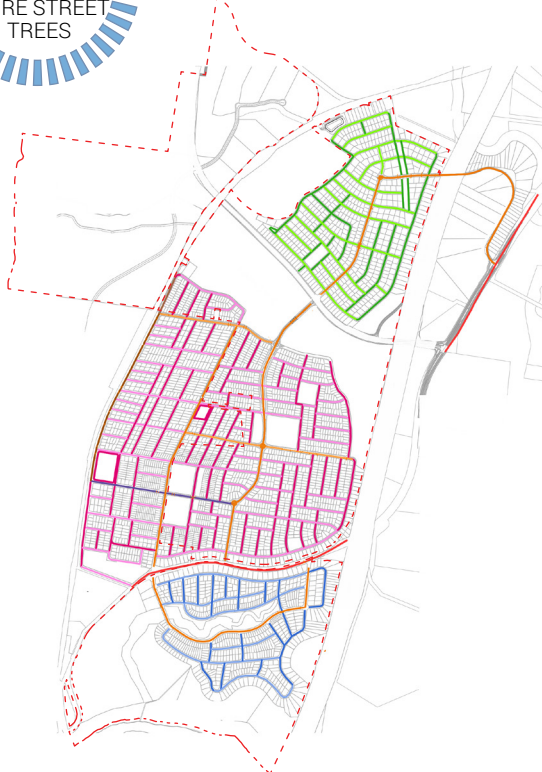
LEGEND

- Dahua boundary
- Botanic Gardens
- Glenlee Homestead
- Riparian interface
- Town Centre
- Ridgeline
- Station & Horse Racing
- Recreation
- Riverside



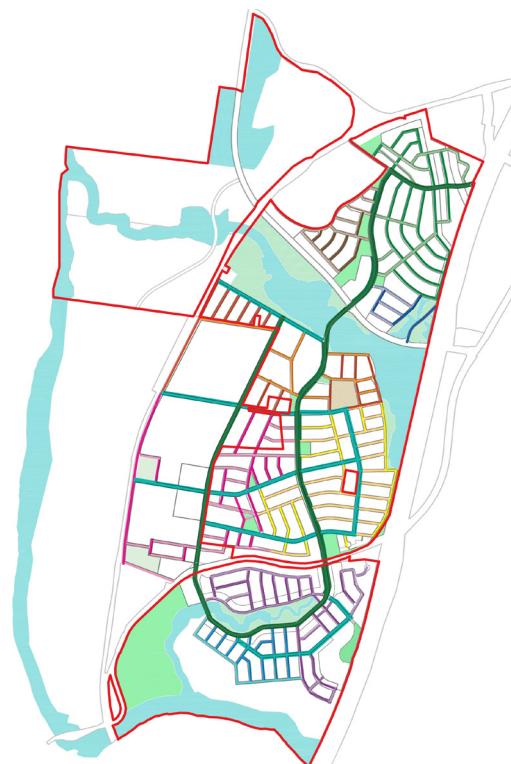
Street Trees

Street Tree Masterplan responds to 8 character areas.



Street Trees - 2016 Streetscape Master Plan

Source data: Menangle Park - Streetscape Master Plan 2016



Street Trees - 2018 Master Plan

- Collector Road
- Sub-collector Road
- Botanic Gardens - N/S
- Botanic Gardens - E/W
- Glenlee Homestead - N/S
- Glenlee Homestead - E/W
- Riparian - N/S
- Riparian - E/W
- Town Centre - N/S
- Town Centre - E/W
- Ridgeline - N/S
- Ridgeline - E/W
- Station/Horse Racing - N/S
- Station/Horse Racing - E/W
- Recreation - N/S
- Recreation - E/W
- Riverside - N/S
- Riverside - E/W





Active Transport

Improved precinct connectivity through extensive pedestrian and cycle networks that provide access to all surrounding landmarks.



Cycleways - 2016 Streetscape Master Plan

Source data: Menangle Park - Streetscape Master Plan 2016

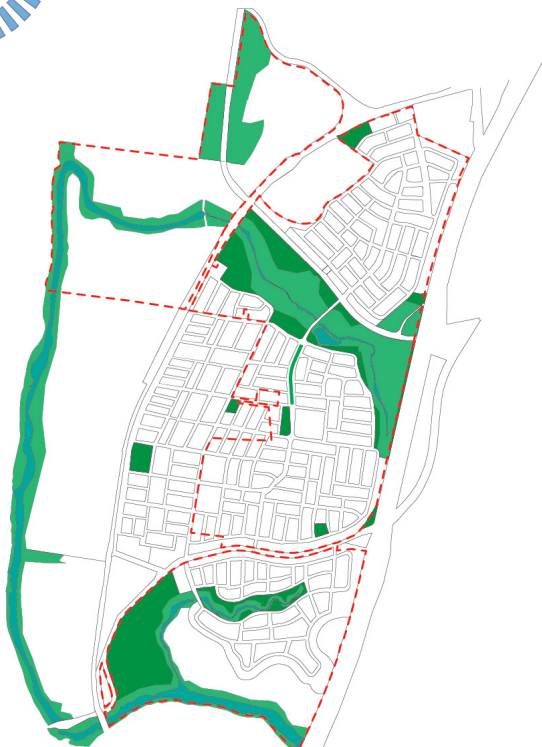
Active Transport Network- 2018 Master Plan

Source data from RobertsDay 2018



Open Space

A more diverse and evenly distributed open space network reflecting emerging trends in sport and recreation.



Open Space - 2016 Structure Plan

Source data: Menangle Park - Streetscape Master Plan

Open Space - 2018 Master Plan

Source data: RobertsDay 2018

3 LANDSCAPE FRAMEWORK

Landscape Strategies

In response to the overall vision, landscape principles and current urban design, the landscape framework will act as the unifying element across the development. It is important to ensure that a strongly integrated landscape framework capitalises on the site's natural attributes to establish the development as an inviting and memorable place for residents but also for people visiting the area.

It is essential to consider how the landscape and public domain can influence the user experience. Whether it is driving along the main streets, utilising the networks of linear open space and cycle paths, or exploring the town centre, there needs to be an array of memorable experiences. Menangle park needs to continue to attract visitors and potential residents now and into the future as the development evolves. The landscape framework has been categorised in the following sections:

- Landscape Character and Initiatives (section 4)
- Streetscape (section 5)
- Open Space (section 6)

Relevant Studies:

The landscape strategies respond to a number of studies including current urban design, and the regional and strategic planning context of Menangle Park to develop a holistic approach to the Strategic Masterplan.

Extensive studies have been completed. The following studies will assist in comprising the landscape framework including:

- Final Local Environment Study, July 2010
- Menangle Park Flora, Fauna and Aquatic Assessment 2009
- Greater Macarthur Land Release Investigation 2015
- Menangle Park Water Sensitive Urban Design Strategy Report 2015
- Aboriginal Heritage Impact Report 2013
- Local Flooding and Stormwater Quantity Management (Detention) 2010
- Bushfire Risk Management Study for the Menangle Park Site 2010
- Menangle Park Section 94 Contributions Plan 2017
- Development Control Plan 2016
- Menangle Park Master Plan Review 2016 - Clouston Associates
- Menangle Park Structure Plan Review Ecological Constraints Assessment, 2016 - Cumberland Ecology
- Menangle Park Streetscape Masterplan 2016 - JMD Design
- The State of Play - Strategic Planning and Management of Playspaces in the City of Campbelltown (2016-2036), Nov 2016

4 LANDSCAPE CHARACTER

Character Precincts and Initiatives

The revised Masterplan approach will be fully integrated and will relate closely to the principles outlined in the report prepared by RobertsDay.

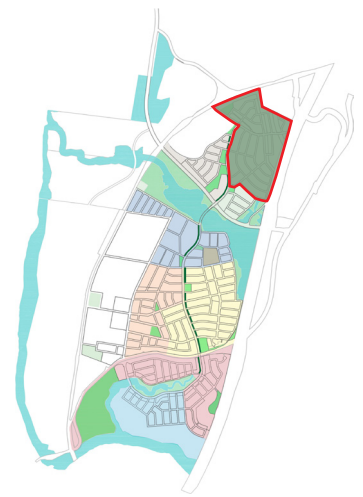
The 2016 Structure Masterplan identified three character areas defined as; The Northern Precinct, Central Precinct and Southern Precinct. The 2018 Structure Masterplan identifies eight new Character Areas across Menangle Park, based on existing and future place characteristics. These character areas will define features such as housing typologies, street sections, land uses and landscaping. The eight new character areas are:

1. Botanic Gardens
2. Glenlee Homestead
3. Riparian interface
4. Town Centre
5. Ridgeline
6. Station and Horse Racing
7. Recreation
8. Riverside

Place Identity

The revised Masterplan looks to strengthen the sense of place by expanding upon the rich social and cultural histories of the area. 'Place identity' will be reinforced by implementing a series of landscape guidelines specific to each of these character zones which will ensure that they are designed and constructed to the highest standard in the future.





4.1 Botanic Gardens Precinct

The Mount Annan Botanic Gardens are located to the north of Menangle Park. The 416 hectare site is home to over 2000 species of Australian Native plants, significant artworks, community based programs, national seed bank and a sequence of both indoor and outdoor function rooms.

The 'Botanic Gardens' precinct within Menangle Park is located between the Glenlee precinct and the northern boundary of the site. Steep topography will essentially dictate the size of lots, and the elevated position of the precinct will ensure that view retention becomes an important part of the landscape design within the character zone. It is intended that the precinct will comprise predominantly of detached or manor homes with deep setbacks and open yards.

Distinct areas within the precinct such as the easement corridors, basin park and linear park will be paired with the gardens in Mount Annan including the Big Idea Garden, Conifer arboretum, Wattle garden, Woodland Garden, Woodland Picnic Area and the Mallee Eucalypt Arboretum.



Key Character Initiatives

There are a number of opportunities to enhance pedestrian and vegetation corridors that will visually and ecologically connect the Mount Annan Botanic Gardens to the Main North South spine within Menangle Park. These include:

- Distinctive vegetation patterns with specimen trees at junctions and key corners will replicate the character of the gardens in an urban setting.
- Biodiversity in streetscapes including planted verges with native plant mixes for visual effect.
- A palette of predominantly flowering understorey and trees, replicating the seasonal character of the 'Connections Garden'
- Distinctive native street tree palette with wider verges allowing for trees with a dense broad canopy.
- Open space characters that derive from the Mount Annan garden precincts.

Street Trees (refer Street Tree Plan)

Botanic Gardens - N/S

Acacia parramattensis
Casuarina glauca
Angophora bakeri
Brachychiton populneus
Corymbia eximia
Syzygium luehmianii

Botanic Gardens - E/W

Angophora floribunda
Eucalyptus crebra
Melia azederach var. australis
Brachychiton discolour
Brachychiton acerifolius



4.2 Glenlee Precinct

The Glenlee Estate is located to the north west of the Menangle Park development and represents a rural cultural landscape of significance. It includes elements of Aboriginal heritage significance, association with early influential European settlers and an exceptional composition of the architecture and landscape.

The landscape incorporating the Homestead is of strong aesthetic value as a reminder of past land use and there lies an opportunity to represent this in the new development via interpretation of the former pastoral and agricultural uses of the estate. There are also significant opportunities to interpret the lifestyle and culture of the Dharawal people, through sculptural interpretation, signage and painting, plus the possible display of associated artefacts.

The urban form of the precinct will be prescribed, with a preference for heritage influences in the architecture, and supplemented by formal streetscapes, heritage tree guards and groups of heritage plantings at high points throughout the precinct. The northern open space spine acts as a primary connector to the Mount Annan Botanic Gardens to the north and incorporates stands of significant existing vegetation.

Key Character Initiatives

There are a number of opportunities to enhance the precinct to connect people with the rich cultural history of the area including:

- Recreate cultural plantings throughout open spaces in the precinct including Monterey Pine, *Pinus radiata* and *Robinia* hedge rows.
- Use formal streets by using heritage trees where possible.
- Provide architectural similarities between precinct shelter structures and the Glenlee House including corrugated iron, timber cladding and brickwork.
- Recreation of landmark Bunya Pines within open spaces and at key locations across the Glenlee precinct within Menangle Park.
- Public Art relating to historical significance (aboriginal and European aspects).



Street Trees (refer Street Tree Plan)

Glenlee Homestead - N/S

Harpulia pendula
Hymenosporum flavum
Pyrus 'Bradford'
Fraxinus griffithii
Gordonia axillaris

Glenlee Homestead- E/W

Acer buergerianum
Fraxinus oxycarpa
Liquidambar styraciflua 'Parasol'
Gordonia axillaris
Lagerstroemia indica



4.3 Riparian Interface Precinct

The riparian area sits to the south of the Spring Farm Parkway and directly north of the town centre precinct, and is characterised by the vegetation communities and native habitats found naturally along Howes Creek.

The riparian corridor connects the community with healthy, natural recreation. The built form strikes a careful balance between public amenity and environmental outcomes; celebrating, conserving and rehabilitating the site's natural assets.

A diverse mix of passive and active recreation spaces include district level play areas, walking and cycling trails and places to observe nature. Bridges, walkways and lookouts connect the amenity areas whilst controlling access to water bodies, ensuring preservation of the natural environment.

Streets are characterised by their native trees (Eucalypts and Melaleucas) and will run perpendicular to the riparian corridor, maximising permeability towards the highest amenity areas

A commitment to best practice riparian corridor management will see the implementation of a vegetated buffer to protect, restore and maintain ecological functions.



Key Character Initiatives

There are a number of opportunities to enhance streetscapes and open spaces to define the character and connect the community to the natural environment including:

- Revegetate a minimum 10m beyond the riparian corridor providing layers of vegetation including groundcovers, understorey and canopy
- A palette of 'raw' materials such as timber, stone and steel reinforce simplicity and enhance the natural characteristic whilst referencing rural farming.
- Provide active interfaces with riparian zones including bridges, walkways and footpath networks, ensuring the natural assets are fully leveraged.
- Integrate large areas of stormwater management (WSUD) with swathes of grasses and sedges to enhance the natural character.

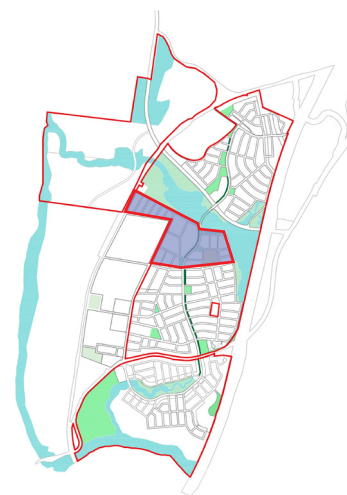
Street Trees (refer Street Tree Plan)

Riparian - N/S

Eucalyptus tereticornis
Melaleuca bracteata
Melaleuca decora
Melaleuca leucadendra
Melaleuca linariifolia
Melaleuca quinquenervia

Riparian- E/W

Eucalyptus microcorys
Eucalyptus robusta



4.4 Town Centre Precinct

As the destination node and northern gateway for the development, the town centre emerges as the centre of community life. The proximity of the town centre to the northern riparian corridor presents opportunities to combine the 'natural' with the 'man made', blurring the interface between these two distinctive character zones and creating something unique.

Centrally located, the town centre is destined to become the beating heart of cultural and civic life in Menangle Park. Open spaces are reflective of quality, resilient to change and support and enhance the town centre functions. Robust, flexible spaces foster 'community spirit' through engagement.

The character overlay will be integrated into a varied urban setting with plaza's, squares, shade elements, green walls, and urban WSUD measures. The proximity of the town centre to the Mount Annan Botanic Gardens further reinforces the opportunity to introduce botanic references into the landscape.

Key Character Initiatives

There are a number of opportunities to characterise public open spaces, plaza's and squares that bring the community together including :

- Strong Art and Sculpture based public realm that inspires and educates including:
 - Sandblasted artworks in concrete surfaces that relate to a variety of character zones and existing site uses across the site.
 - Gateway sculptural archways or post elements at the approach from the north.
 - Etched glass awnings to retail precincts, that match outlying shelter structures within the plaza spaces.
- Formal, ordered planting character to the understorey, reflecting key nodes and open spaces throughout the development.
- A bespoke urban furniture palette unique to Menangle Park including thematic tree grilles, benches and retail facilities.
- A progressive lighting design that will foster activation of the town centre at night-time.
- Smart technology integration such as WIFI furniture, bins and lighting with sensors.
- Formal Boulevards and axes of non-native tree planting cutting into native environments.



Street Trees (refer Street Tree Plan)

Town Centre - N/S

Acmena smithii
Elaeocarpus reticulatus
Tristaniopsis laurina 'Luscious'
Waterhousea floribunda 'green avenue'

Town Centre - E/W

Nyssa sylvatica
Populus simonii
Zelkova serrata
Lagerstroemia indica



4.5 Station and Horse Racing Precinct

Since 1914, Menangle Park has been strongly linked to horse racing. Moving forward, the development will look to strengthen and preserve the equine legacy and will be key in forging the new, exciting and modern identity of Menangle Park. It is intended that the precinct will be defined as a modern civic centre bursting with civic pride.

Key in defining the character of the precinct will be the location of new community facilities and services (the neighbourhood centre and school). The open spaces will reflect the built form.

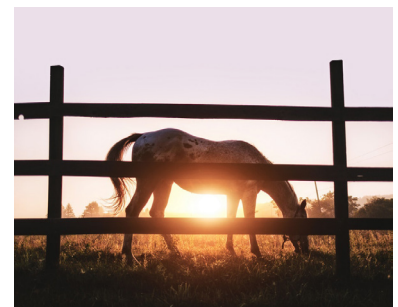
The character of these spaces will leverage off the proximity to Club Menangle and Menangle House and Gardens. Through developing design initiatives that speak to community values and bolster identity, an inherently emotive place identity will form.

Innovative and imaginative story-telling techniques will develop a strong human - centred design narrative, celebrating cultural histories and diversity. The value driven design for the Station and Horse Racing Precinct will deliver a shining example of the region's enterprising spirit.

Key Character Initiatives

There are a number of opportunities to enhance streetscapes and open spaces to define the Menangle Park place identity :

- Graphic histories inscribed in stone and metalwork reflecting the equine legacy and enterprising community spirit of the region.
- Equine style timber fencing throughout the precinct will reinforce the rural character.
- A bespoke urban furniture palette unique to Menangle Park including thematic tree grilles, benches and retail facilities.
- Improved connectivity to Club Menangle with integrated recreational opportunities.



Street Trees (refer Street Tree Plan)

Station/Horse Racing - N/S

Alectryon tomentosus
Corymbia maculata
Eucalyptus punctata
Eucalyptus sideroxylon

Station/Horse Racing - E/W

Lagerstroemia indica (white)
Lagerstroemia indica (pink/red)
Sapium sebiferum
Elaeocarpus eumundi



4.6 Ridgeline Precinct

Located with Menangle Road to the south and the Hume Highway to the east, the ridgeline precinct character draws on its prominent elevated position and provides open spaces that afford experiences of ascent and decline, maximising vantage points to the surrounding district views.

Streetscape and road layout is critical to retaining connectivity and maintaining views across the development. Major pedestrian and cycle paths flanked by elegant site branding and formal planting design will further enhance the legibility and sense of arrival to the destination precinct.

Key Character Initiatives

There are a number of opportunities to enhance streetscapes and open spaces to define the character of this precinct:

- Locate the significant hilltop park at the important highpoint to maintain important views to natural amenity.
- Provide high quality bespoke entry statements, public artworks and shade structures integrated with formal landscape design and planting that reflects aboriginal and cultural heritage.
- Provide varied play experiences with play equipment that offers elevated lookouts and vantage points that appreciate significant district views.
- Amended road verge (19.4m) along the ridge top road with larger tree planting that celebrates the ridge top location.
- Important Linear Park provides pedestrian and cycle network connections through the site.



Street Trees (refer Street Tree Plan)

Ridgeline - N/S

Elaeocarpus reticulatus
Tristanopsis laurina 'Luscious'
Cupaniopsis anacardioides

Ridgeline - E/W

Lagerstroemia indica
Sapium sebiferum
Pyrus calleryana 'Chanticleer'
Tristanopsis laurina 'Luscious'
Liquidambar styraciflua 'rotundiloba'
Pistachia sinensis



4.7 Recreation Precinct

The Recreation Precinct is located to the south of Menangle Road and to the east of the Hume Highway. The character of the precinct is heavily influenced by existing topography and natural features including the site's high point to the east, as well as the proximity to the Nepean River and southern riparian corridor.

Significant sporting infrastructure including outdoor playing fields and local sports courts are proposed. The provision of these high-end sporting facilities will kick start the creation of a talented and healthy new community and generate a variety of socio-economic benefits to the region. The facilities associated with the open spaces will assist in strengthening social networks, as well as placing Menangle Park on the sporting map.

Riverside and riparian spaces are considered a unique asset within this area and will be developed to offer a diverse range of informal recreation spaces that also seek to protect and preserve the natural environment. Streetscape layouts are well connected to the wider open space network which will maximise access to open space and assist in creating an active community identity.

Key Character Initiatives

There are a number of opportunities to enhance streetscapes and open spaces to define the character and connect to the natural environment:

- Hierarchy of open spaces that maximise access and interaction with the natural river and riparian corridor such as streetscapes running toward riparian corridors.
- Amenities to provide recreation infrastructure for varying age groups and abilities.
- Biodiversity in streetscapes including planted verges with native plant mixes for visual effect and developing new wildlife communities.
- Distinctive native street tree palette with wider verges allowing for trees with a dense broad canopy.



Street Trees (refer Street Tree Plan)

Recreation - N/S

Corymbia eximia
Alectryon tomentosus
Backhousia citriodora

Recreation - E/W

Brachychiton populneus
Pyrus calleryana 'Chanticleer'
Tristaniopsis laurina 'Luscious'
Pistacia sinensis



4.8 Riverside Precinct

The Riverside Precinct is located at the southern end of the site. The proximity to the Nepean River will drive the character of the area.

High end detached homes on larger lots with greater front setbacks (with natural landscape retained in private lots) enhance the rural character and is in keeping with the surrounding landscape characters found to the east and west of the precinct.

The precinct is in close proximity to the riparian corridor with connections to the major sports hub. Dwellings benefit from large areas of private open space/rural land adjacent to the river. Local flora and fauna found along the banks of the Nepean River will provide a character that is reflective of the natural environment.

Interaction with the river will be explored with a focus on recreation activities such as rowing, kayaking, swimming, cycling and walking.

Key Character Initiatives

There are a number of opportunities to enhance streetscapes to define the character and connect to the natural environment:

- A palette of 'raw' materials such as timber, stone and steel reinforce simplicity and enhance the natural characteristic whilst referencing rural farming.
- Provide active interfaces with riparian zones including bridges, walkways and footpath networks, ensuring the natural assets are fully leveraged.
- Integrate large areas of stormwater management (WSUD) with swathes of grasses and sedges to enhance the natural character.
- Rural style housing with smaller lots to the northern portion of the precinct.



Street Trees (refer Street Tree Plan)

Riverside - N/S

Melaleuca bracteata
Melaleuca decora
Melaleuca leucadendra
Melaleuca linariifolia

Riverside- E/W

Ginkgo biloba
Nyssa sylvatica
Zelkova serrata 'green vase'
Flindersia australis
Koelreuteria bipinnata

5 STREETScape STRATEGY

5.1 Streetscape Hierarchy

Streetscape is a major contributor to the quality of the overall neighbourhood. Principles in building streetscape character are to invest legibility to the urban landscape and respond to heritage and cultural significance, visual amenity and the 8 character areas. The Menangle Park Streetscape Strategy looks to:

- Enhance the reputation of the site, focusing closely on the southern and northern entry points into the site – the approach from Menangle Road to the south and the Spring Farm Parkway to the north. Gateway statements will take the form of iconic public art pieces, well considered site signage and branding and distinctive, dramatic landscape design.
- Provide strong repetitive elements of appropriate character and in scale with the residential development to create a unity for the suburb.
- Reinforce the character of heritage items and their curtilages.
- Be strongly influenced by the surrounding rural landscape, the Nepean River corridor, ridgelines, views.

The RobertsDay Urban Design Report establishes five street types: parkway collector, collector road, sub-collector road, ridge top road and local road. The streetscape characters should reinforce and enhance the road hierarchy and respond to these 8 character areas.



Streetscape Hierarchy Plan - 2018 Master Plan

Scale 1:20,000 @ A4

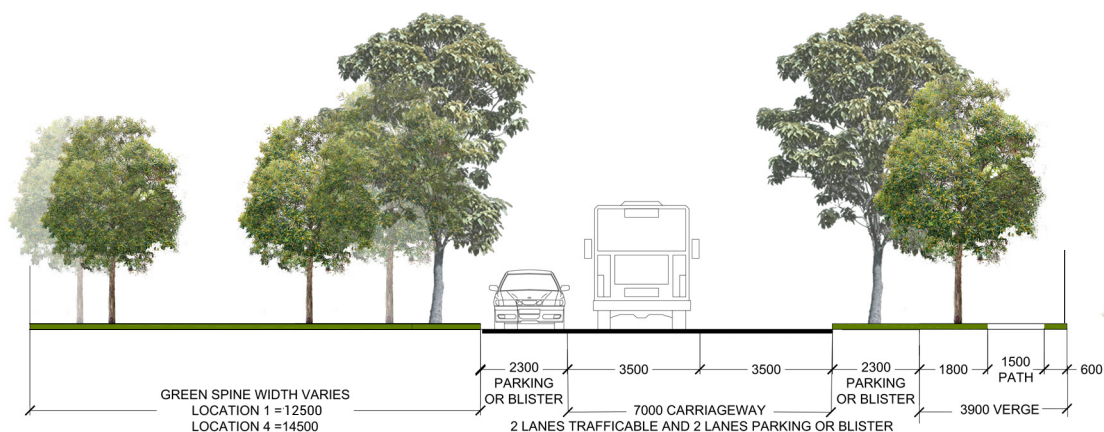


NOTES:

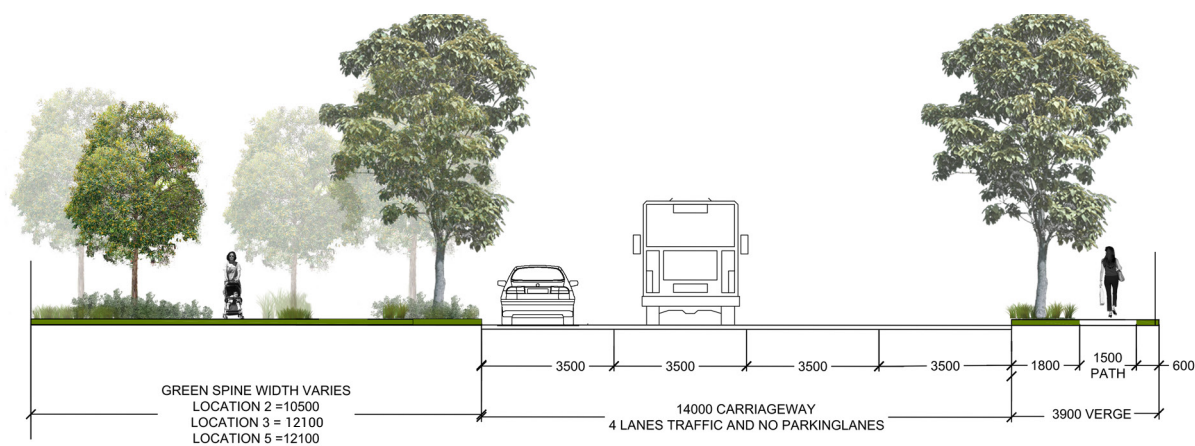
1. GREEN SPINE GRAPHIC INDICATIVE ONLY.

REFER PAGE 52-56 FOR GREEN SPINE KEY LOCATIONS AND LANDSCAPE INCLUSIONS.

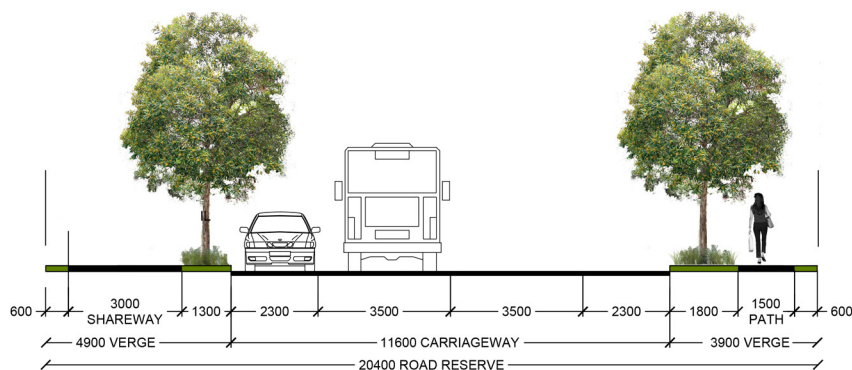
2. THE GREEN SPINE WIDTH IS DEPENDENT ON ROAD CORRIDOR AND ROAD CARRIAGEWAY WIDTH PROPOSED



Green Spine - North South Link (2 traffic lanes and 2 parking lanes with planting blisters)

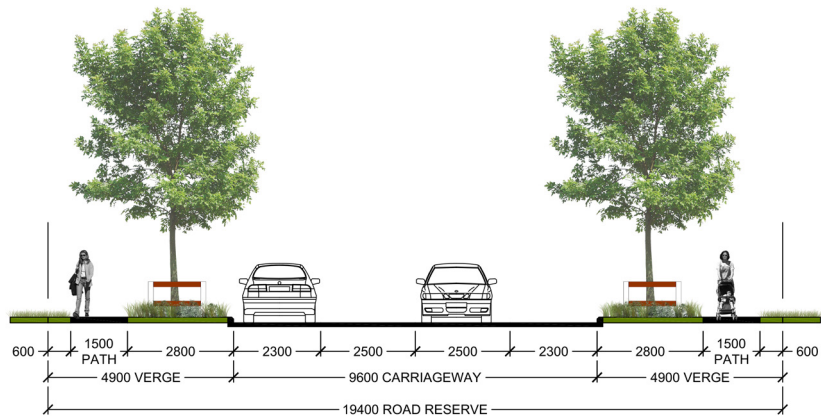


Green Spine - North South Link (4 traffic lanes)

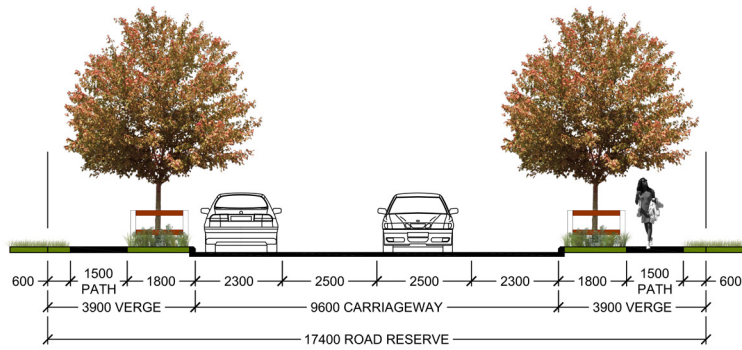


Collector road (20.4m)

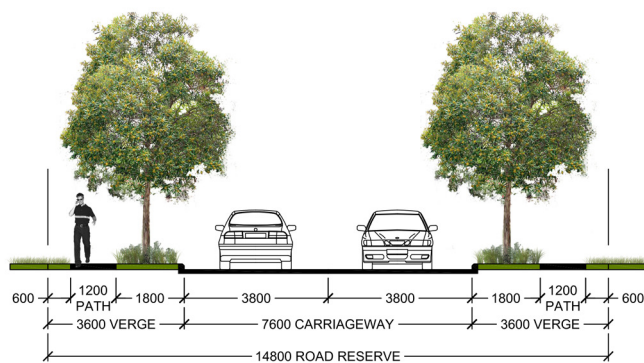
Street Sections 1:200 @A3



Ridge-top road (19.4m)



Sub collector road (17.4m)



Local/minor road (14.8m)

5.2 Fencing

Allotment boundary treatments define front gardens and contribute to neighbourhood character. The Menangle Park fencing strategy expands on the fencing character studies undertaken by JMD Design in 2016 and responds to the latest 2018 Structure Plan proposed by RobertsDay. The following design principles have been applied to the street fencing strategy:

- Utilise 'place identity' to inspire materiality. Menangle House, Menangle Park Paceway and Glenlee Homestead are significant buildings that inspire materiality. Key materials used in the construction of these buildings include brick, timber and steel. These materials can be applied in innovative ways to reinforce the character of the development and reflect urban, rural, contemporary or traditional character styles.
- Reinforce street hierarchy and legibility by using a consistent brick pier and timber fence along collector and sub collector roads. Variations in the timber fencing will respond to the 8 character areas. Local roads will use timber fences (no brick) with variations that respond to the 8 character areas.
- Patterning, texture and colour that reflects the character of historic homesteads and gardens, horses on rural lots and farm structures.



5.3 Street Trees and Planting

Street trees improve the neighbourhood aesthetic, provide shade, cooling, and promote biodiversity. The tree planting strategy for Menangle Park will:

- Reinforce the character of heritage items and their curtilages.
- Reinforce each character areas and respond to elevation, prevailing wind direction and aspects. For example, the tree species within the local roads adjacent to the heritage areas have been proposed to reflect the a historical element reminiscent of historical gardens.
- Establish a logical street hierarchy. The street tree principle is that larger trees species spaced apart from each other along collector road will allow clear sight for drivers whereas smaller trees close to each other along local road would discourage driver to move fast.
- Frame important views and screen less desirable elements.
- Reinforce ridgelines and spur lines, reducing the apparent scale of the suburban development, and minimising the silhouetting of roof lines on the horizon which has the effect of emphasising the built form.
- Highlight gateways and nodes through distinctive tree planting and / or be spoke signage to provide legibility within the suburb
- Promote solar access through the use of deciduous trees
- Require minor amendments to the existing DCP that facilitate wider streetscape verges to allow for the planting of larger scale trees with greater instant impact.
- Bring unity to the site by installing identical tree guard throughout the site with variation in colour.
- Minimise impact of roof lines through tree planting, whether regular spacing or not.
- Optimise solar access through tree species selection.
- Ensure sufficient width through road corridors to accommodate for larger, high-prominence tree species without impact on services or lots
- Install blisters on the Green Spine (north-south link) to provide additional space for larger street trees contributing to an expanded urban canopy
- Use a combined native and introduced plant palette across the site, subject to council recommendations.
- Use distinctive tree planting and vegetation groups as destination and visual markers in the landscape on hill tops and other highly visible open spaces.
- Create a tree farm on site as a means to ensure mature tree stock availability.

Street Tree Selection

The following is a legend for the Street Tree Masterplan provided on the following page:



Collector Road

Angophora floribunda
Jacaranda mimosifolia



Sub-collector Road

Lophostemon confertus



Botanic Gardens - N/S

Acacia parramattensis
Casuarina glauca
Angophora bakeri
Brachychiton populneus
Corymbia eximia
Syzygium luehmannii



Botanic Gardens - E/W

Angophora floribunda
Eucalyptus crebra
Melia azederach var. *australis*
Brachychiton discolor
Brachychiton acerifolius



Glenlee Homestead - N/S

Harpulia pendula
Hymenosporum flavum
Pyrus 'Bradford'
Fraxinus griffithii
Gordonia axillaris



Glenlee Homestead- E/W

Acer buergerianum
Fraxinus oxycarpa
Liquidambar styraciflua 'Parasol'
Gordonia axillaris
Lagerstroemia indica



Riparian - N/S

Eucalyptus tereticornis
Melaleuca bracteata
Melaleuca decora
Melaleuca leucadendra
Melaleuca linariifolia
Melaleuca quinquenervia



Riparian- E/W

Eucalyptus microcorys
Eucalyptus robusta



Town Centre - N/S

Acmena smithii
Elaeocarpus reticulatus
Tristaniopsis laurina 'Luscious'
Waterhousea floribunda 'green avenue'



Town Centre - E/W

Nyssa sylvatica
Populus simonii
Zelkova serrata
Lagerstroemia indica



Ridgeline - N/S

Elaeocarpus reticulatus
Tristaniopsis laurina 'Luscious'
Cupaniopsis anacardioides



Ridgeline - E/W

Lagerstroemia indica
Sapium sebiferum
Pyrus calleryana 'Chanticleer'
Tristaniopsis laurina 'Luscious'



Station/Horse Racing - N/S

Alectryon tomentosus
Corymbia maculata
Eucalyptus punctata
Eucalyptus sideroxylon



Station/Horse Racing - E/W

Lagerstroemia indica (white)
Lagerstroemia indica (pink/red)
Sapium sebiferum
Elaeocarpus eumundi



Recreation - N/S

Corymbia eximia
Alectryon tomentosus
Backhousia citriodora



Recreation - E/W

Brachychiton populneus
Pyrus calleryana 'Chanticleer'
Tristaniopsis laurina 'Luscious'
Pistacia sinensis



Riverside - N/S

Melaleuca bracteata
Melaleuca decora
Melaleuca leucadendra
Melaleuca linariifolia



Riverside- E/W

Ginkgo biloba
Nyssa sylvatica
Zelkova serrata 'green vase'
Flindersia australis
Koelreuteria bipinnata



Street Trees - 2018 Master Plan

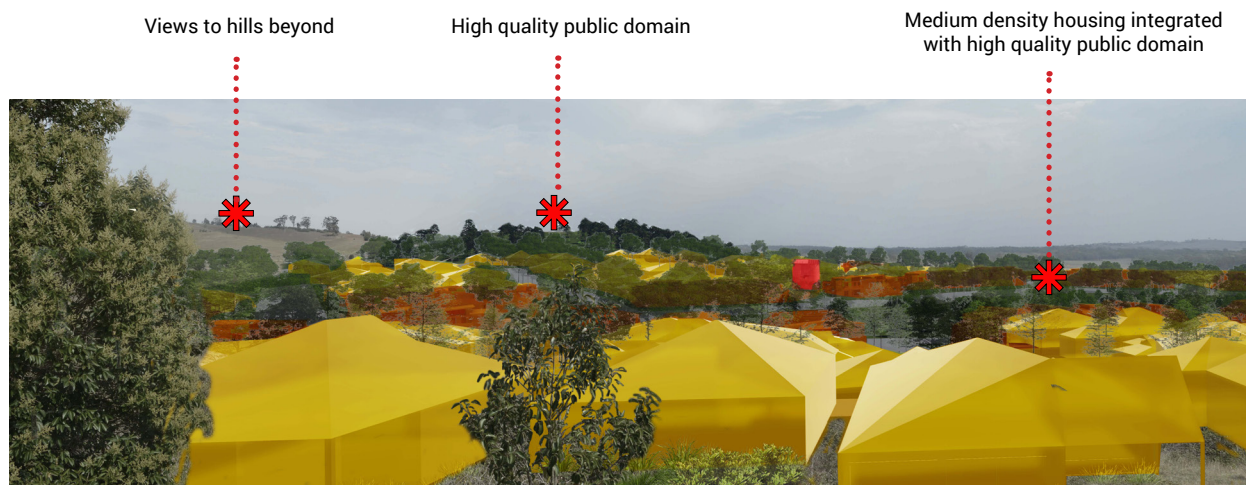
Scale 1:20,000 @ A4



5.4 Retaining and Celebrating Key Views

The Menangle Park development area offers an array of varied topographic experiences, from dramatic highpoints and lowpoints nestled along the riparian corridors. These areas have been identified as significant and unique to the area, offering district views to the south and west across the development area. There are several opportunities for capitalising on these natural assets within the landscape:

- Retaining existing view corridors by strategically changing street tree arrangements in selected locations.
- Appreciating the natural beauty of undulating terrain, natural landmarks such as the Nepean River, Mount Annan, Razorback Mountain and Blue Mountain by retaining important views and respecting existing landform.
- Retaining views and vistas to and from key high points and ridge lines, to and from riparian corridors, key areas of retained vegetation and iconic landscape markers in the landscape.
- Located significant open space at highpoints allowing important views to be appreciated.



Visualisation above shows the visual impact of the proposed development from Menangle Road looking east. It is intended that high quality public domain and streetscapes including street tree planting will minimise visibility of the development and maintain long range open views beyond.

5.5 Environmental Sustainability

The following strategies have been developed to ensure the long term environmental sustainability of the development:

- Ensure delivery of Water Sensitive Urban Design (WSUD) initiatives to manage water processes on site by working with Council. This will include combined landscape and engineering initiatives for an integrated approach.
- Capture and re-use of stormwater will be sustainably utilised for plant establishment and irrigation, reducing the need for imported water. Investigate self-watering street trees, using road run off where feasible.
- Facilitate the maximisation of ground water infiltration.
- Encourage public interaction with the native environment and introduce a learning forum about on site processes including WSUD treatment trains, local wildlife, microclimate, temperature and rain data.
- Develop environmentally sensitive design approach by offsetting development land, retaining, regeneration and revegetation of critical vegetation in addition to new vegetation corridors in line with Sydney's Green Grid Vision
- Ensure that the landscape design provide optimised mitigation to climate change and to the potentially harsh climate in the south west of Sydney.

5.6 Public Art and Wayfinding

The natural and cultural environment of Menangle Park provides the perfect setting for a new community within the suburb of Campbelltown. The proposed public open spaces of this emerging community can be significantly enriched by a public art strategy which reflects local heritage, cultural values and in large, the communities aspirations.

Public art can take a number of forms including: permanent, temporary, ephemeral, even performance art. It can reflect past and present cultural values as well as provide a medium to inform and educate the community about local achievements, local ecology and environmental issues. Diverse public art opportunities such as major gateway elements, sculpture, artwork trails, and interpretive signage elements have been identified for each open space in Section 6.

6 OPEN SPACE STRATEGY

The Open Space Strategy for Menangle Park will provide varied recreation opportunities that reflect emerging trends in sport and recreation. The open space network will provide opportunities for walking in pleasant surroundings, safe accessible cycling and facilities for fitness and play in public spaces with ease of access (especially in higher density living areas).

It is vitally important that the proposed public domain spaces fully embrace and respect the cultural heritage, agricultural history and rural character of the site. The aim is to introduce both modern and traditional landscape design movements with materials that will provide the residents and visitors with the right mix of public amenities in both passive and non-structured recreational activities. The open space network aims to bring the community together to participate in shared experiences.

6.1 Active Transport Network (Pedestrian and Cycle Path)

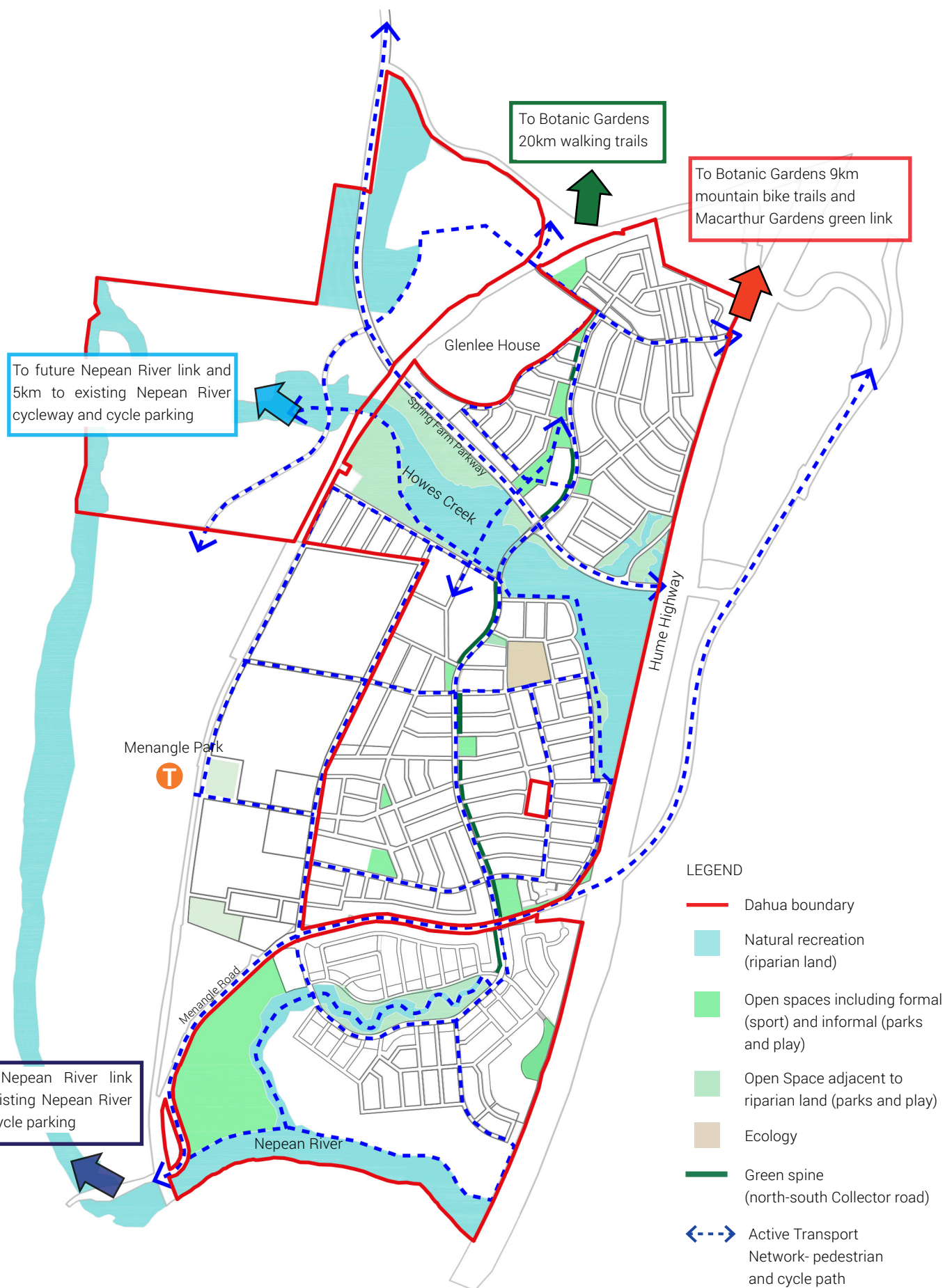
Precinct wide connectivity is crucial in delivering an attractive and successful public domain. Maximising pedestrian and cyclist interaction and environmental learning will enhance the sense of identity and integrity of the future community.

When compared to the 2016 Structure Plan, the 2018 Structure Plan creates a more comprehensive pedestrian and cycle network operating at multiple scales.

The key features of the 2018 Structure plan includes:

- The creation of an extensive, legible pedestrian and cycleway network (Active Transport Network) that connects all areas of the site and provides access to all surrounding landmarks. A site wide cycle and pedestrian loop to the periphery of the development site will connect people with natural and built amenities including the Nepean River, Mt. Annan Botanic Gardens, Club Menangle and surrounding natural creeks.
- The Active Transport Network will not compromise links to future site wide connections
- The Green Spine along the north-south collector road provides an additional 7-9.6m wide of opportunities directly linked to passive recreation nodes.
- A comprehensive wayfinding strategy unique to the Menangle Park development

It is important to note that site approvals, topographical challenges and site access will require further detailed investigations during design development to ensure the feasibility of the Active Transport Network.



Cycleways - 2018 Master Plan

Source data: RobertsDay

Scale 1:20,000 @ A4



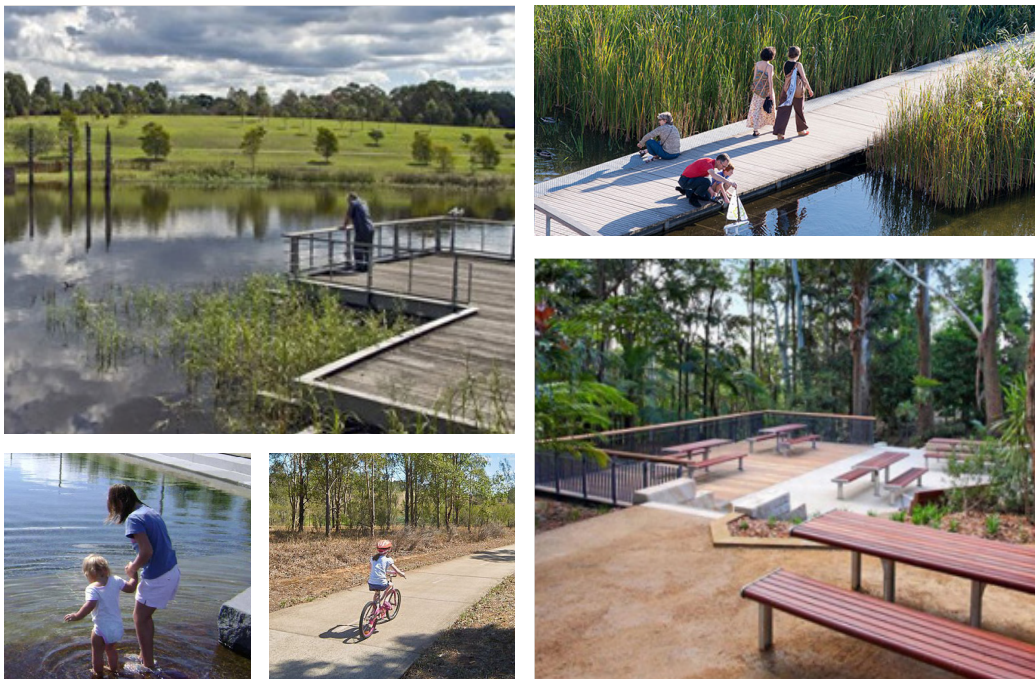
6.2 Open Space Provision

Recreation Provision

The Menangle Park Social Impact Advice Report (Elton Consulting) provides guidance for the provision of varied recreation which includes natural, informal and formal recreation opportunities. The open space provision uses benchmarks that consider the projected future population for Menangle Park to be around 16,300 people.

Natural Recreation (Riparian Areas/Environmental Protection Areas)

The presence of the Nepean River system and its tributaries presents unique opportunities for the Menangle Park community. **85.11ha** of land within the Menangle Park development area is considered riparian open space. The riparian corridor areas as indicated on the plan (page 51), presents unique recreational opportunities for the community such as picnicking, birdwatching and bushwalking in a natural environment.



6.3 Integration of WSUD (detention basins) in to open spaces

There are a number of on site detention basins located throughout the open space network. These areas help store and control stormwater run-off and reduce peak flows to the natural waterway system. These detention basin areas are an opportunity for additional recreation and ecological value. The proposal is for these basins to be designed holistically within the open space and be fully integrated into the parkland settings. The design approach will:

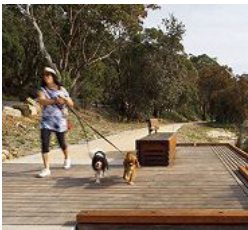
- Introduce planting design that reflects the riparian nature of the development and delivers native animal habitat for additional wildlife biodiversity
- Introduce footbridges with lookouts, informal paths with seating areas and playful elements such as stepping stones and logs around basin edges and water bodies for additional passive recreation value
- Provide active recreation along footpaths adjacent to detention basins with integrated facilities such as seating areas and fitness equipment.



6.4 Informal Recreation (Parks and Playspaces)

Informal recreation is defined as places that encourage people to exercise, meet with others, relax or play. It includes unstructured activities such as walking, running, ball games and dog walking. The Menangle Park Open Space Strategy provides the following informal recreational infrastructure:

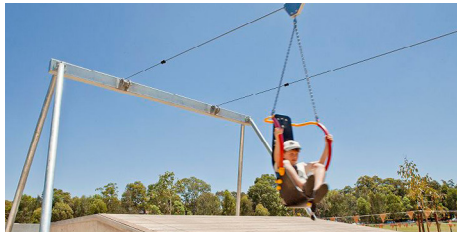
- **85.11 ha riparian open space** with opportunities for natural recreation
- **24.55 ha open space** delivering a range of local parks including 8 play spaces for a variety of ages and abilities and 2 district play level spaces with facilities for older children (skate or BMX). Locations and sizes of spaces are based on a walkable distance to most residences
- **2.46ha ecological protection zone** (Elderslie Banksia vegetation) with opportunities for bush regeneration, education and passive recreation adjacent to the core vegetation community
- **23.1km Active Transport** including shared cycling and walking connections.



6.5 Play Provision

8 new play spaces are proposed for the Menangle Park development. It is a key objective that designated play spaces deliver high quality diverse play experiences for children and their families. Wide ranging play outcomes including cognitive, social and physical play experiences are intended for all ages and abilities. The approach to play at Menangle Park will be to offer play experiences that target all age groups from toddlers to juniors, to teenagers and adults, whilst taking advantage of the natural play opportunities provided by the natural settings.

Accessible and Inclusive spaces provide opportunity to bring the entire community together by welcoming everyone with exciting, challenging and fun environments for all. To help build an inclusive and sustainable community at Menangle Park, consideration should be given to accessibility and inclusion at all play spaces, taking guidance from the latest research and thinking including the NSW Government's best practice toolkit 'Everyone Can Play' draft document.



6.6 Playspace Hierarchy

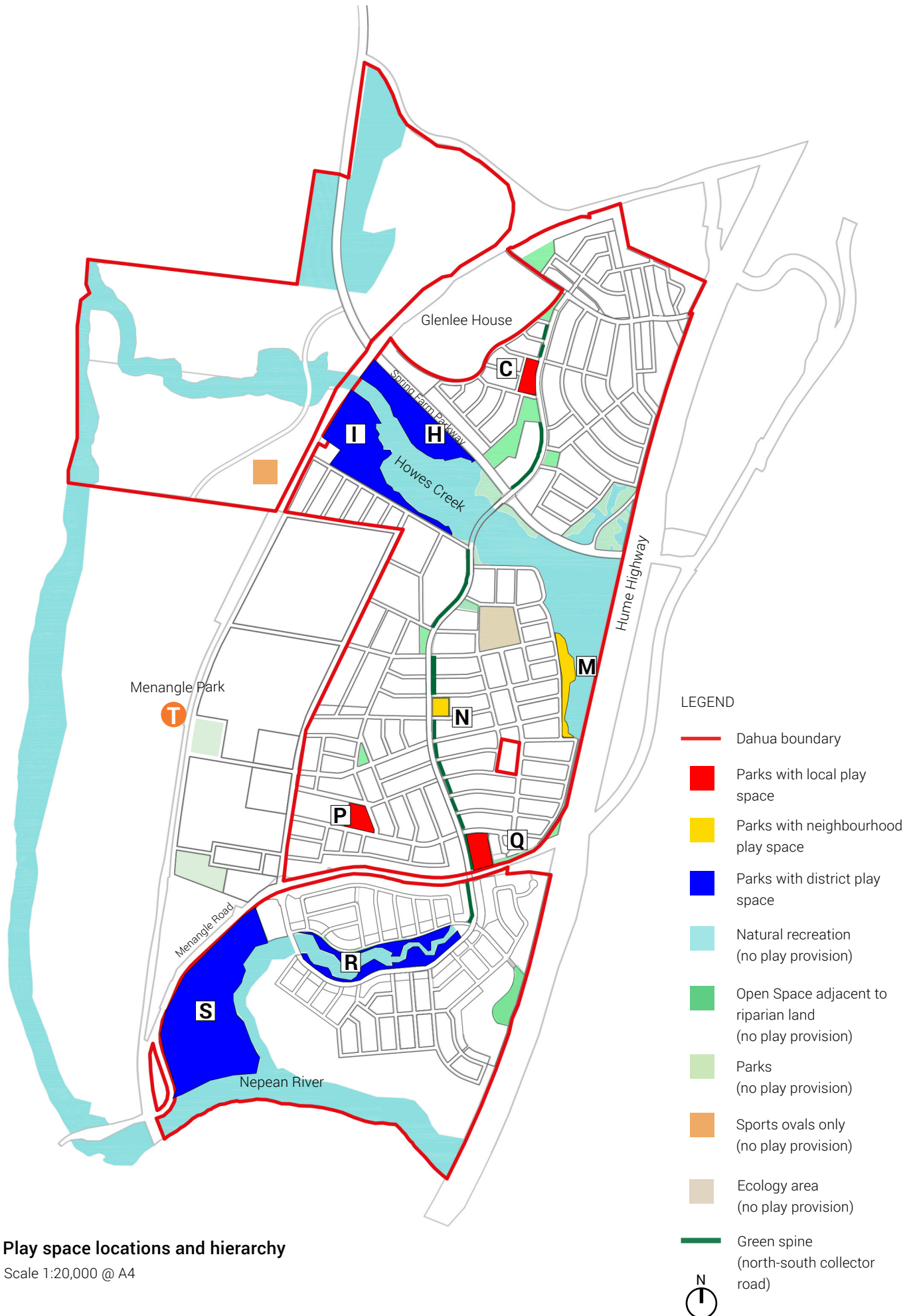
Play spaces throughout the development are to be classified generally in alignment with nationally recognised approaches and categorised in the following ways as per Campbelltown City Council's strategic guiding document 'The State of Play 2016-2036' :

Local: Offering passive and low key recreation opportunities such as seating and landscaping, these play spaces are small in nature and target toddlers and or juniors (0-3 and 3-6 year olds). Play equipment may include swings, slides and landscaping.

Neighbourhood: Targeting a broader demographic catchment, the neighbourhood playspaces include equipment for toddlers to seniors and may include assets such as seating, shade bins and picnic tables.

District: Attracting a wider catchment and located on larger parcels of land also used for other activities such as sport, these playgrounds offer a wide variety of play 'choice' from toddler, to senior to youth and additional accessible play facilities as well as seating, shelter, water fountains etc.





6.7 Green Spine

The 'Green Spine' is a linear open space that runs along the extent of the north - south Parkway Collector road, delivering **1.25ha** of diverse, high quality open space to the Menangle Park development. The Green Spine varies in width along its length, providing an additional 7.6 m wide open space in the most northern parts of the development to approximately 9.6m wide open space to the central and southern areas of the development.

The Green Spine functions not only as high-quality open space experience but also as an active transport link that connects pedestrians and cyclists to the extensive site-wide open space network. A key deliverable of the green spine will be walkability and improved access to all surrounding landmarks, particularly to those living in the higher density areas. Approximately 80% of the of space network is directly connected to the Green Spine.

As the Green Spine transcends the character precincts of the development, there will be subtle changes in hard materials, trees and planting and landscape elements such as signage, furniture, public art that are reflective of the precinct character areas.

The Green Spine will provide a varied fine grain fabric to support the social life of the development. It is intended that the green spine will respond to the urban design and built form influences such as proposed housing typologies and adjacent open spaces. The diversity of the fine grain spaces found along the Green Spine will help to satisfy the human need for novelty and will lead to numerous health benefits for the entire community of Menangle Park. By encouraging social interactions; places for walking, talking and lingering among people of all ages and abilities, the benefits of the social engagement and passive surveillance opportunities will assist in building a well-connected, safe and sustainable community at Menangle Park.

With the increased opportunity for larger trees and extensive shrub and grasses planting opportunities, the Green Spine will assist with urban cooling, deliver healthier natural environments and natural habitats for wildlife. Additional benefits include opportunities for water sensitive urban design initiatives that will reduce peak surface run off and pollution to the surrounding local waterways.

There are a number of principles proposed for the entire length of the Green Spine including the introduction of a QR code reading system that will provide wayfinding and information on events and site histories, as well as smart-city thinking (potential to incorporate street furniture integrated with wi-fi, and sensory processors that can provide data to assist with improving the everyday management of the development).



6.8 Formal Recreation (Sport)

Formal recreation facilities are places that encourage people to exercise in a more structured way. It includes sports facilities such as pools, sports courts and sports fields. The forecast population for Menangle Park is considered sufficient to warrant the provision of its own sporting facilities. The open space strategy provides **19.76ha** formal recreation including:

- **17.26ha** in southern precinct including 4 sports fields grouped together with other activities including cycle, walking tracks, courts, play equipment and fitness equipment and an area for up to 6 sports courts.
- Regional level Criterium Bike Track (for road cycling and running track) as part of the multi-sports hub.
- **2.5ha** sports playing fields in the rural lands to the west of Howes Creek.



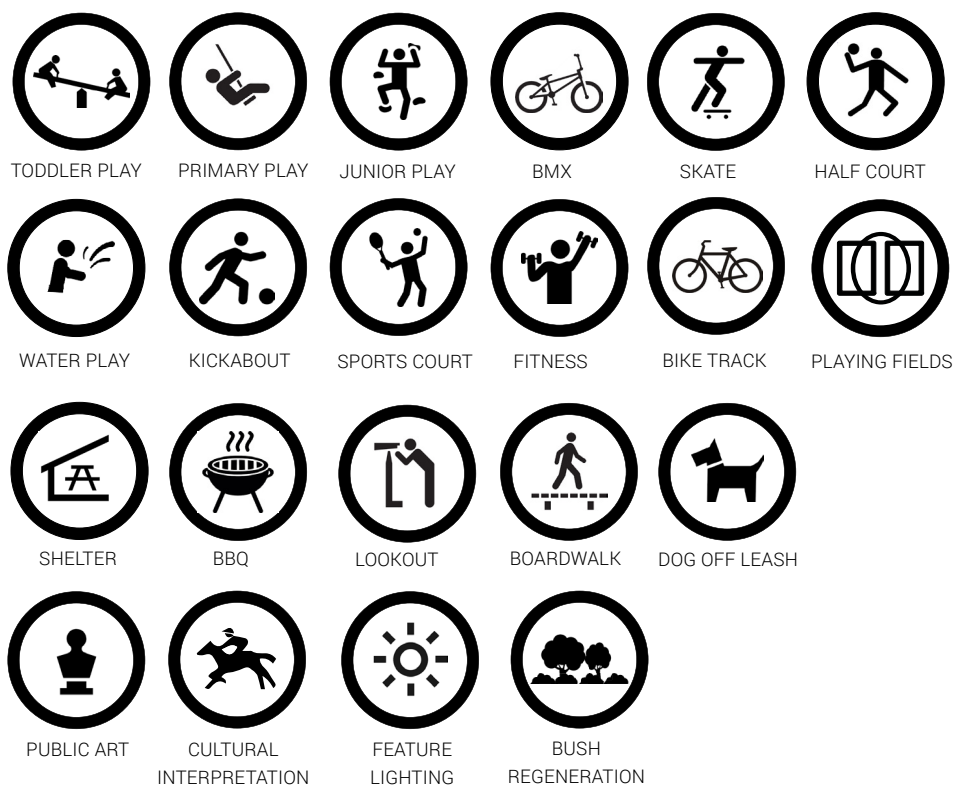
6.9 Recreation Drivers

A number of key drivers determine the location, function and facilities proposed for each open space including:

- Diversity of proposed residential lots. For residents who live in smaller lots, the need for access to public open space will be greater.
- Catchment density (the number of people living within 400m radius/5 minute walk).
- Co-location and proximity to other open spaces/recreation facilities.
- Ecological constraints (the presence of protected vegetation communities (Cumberland Ecological Constraints Report).
- Stormwater treatment and the requirement for bio-retention basins (SMEC Stormwater Management Report).

The Open Space Plan on page 50 provides an overview of locations for natural, informal and formal recreation. The table on page 51 identifies key constraints and considerations informing the recreational functions of each open space.

The following icons provide graphic representation of recreational functions and facilities listed in the table. Icons are assigned to each open space to assist with ease of referencing.



Recreation Functions and Facilities Icons



Open Space Number	Area (ha)	Character Precinct	Population catchment (people living within 400m radius) **	No of dwellings in catchment	Open Space Type (as per urban design classification)	Ecological Constraint	WSUD Constraint	Flood (1:100 event)	Stage	Design comments	Function/facilities														Speed (per m2)				
											Toddler Play	Junior Play	Senior Play	Teen (BMX)	Teen (Skate)	Water Play	Kickabout	Sports Court	Fitness Stations	Bike track	Shelter	BBQ	Lookout	Boardwalk	Dog off-leash (fenced)	Interpretation	Feature Lighting	Cycle Network	
GS	1.25	Botanic Garden, Glenlie, Town Centre, Station and Horse Racing, Ridgeline, Recreation	TBC	TBC	Green spine	N/A	N/A	N/A	TBC	Linear open space varies in width from 6m - 9.6m additional open space along the Parkway Collector Road																			High
A	0.81	Botanic Gardens	741	242	Local park with drainage	N/A	Bio retention basin 0.27 ha Bio filter size 1150m2	N/A	8B	Prominly to Glenlie Homestead and Mount Annan Botanic Garden. Large area required for bio retention. Adjacent to easement. Key character embellishment.																			Low
B	0.36	Glenlie Homestead	1468	499	Local park	NA	NA	N/A	8A	Open area maintains view corridors to Glenlie Homestead																			Low
C	0.73	Glenlie Homestead	2126	723	Local park with drainage	Approx 60% Shale Plains Woodland (CEEC)	Responds to existing natural drainage line	N/A	7B	Central open space located in northern precinct.																			Med
D	2.06	Glenlie Homestead			Local park with drainage	Approx 25% Shale Plains Woodland (CEEC)	Bio retention basin 0.35ha Bio filter size 0.1 ha	Approx 50% flood affected in southern area	7A	Large space with existing large dam. Southern area 1:100 flood affected																			Med
E	0.34	Riparian Interface	1377	468	Local park	NA	NA	N/A	7A	Adjacent to main collector road at entry to northern precincts. High density living. Eastern side is not functional.																			High
F	2.37	Riparian Interface	2091	711	District park	Approx 25% shale plains woodland. (CEEC) Approx 5% swamp oak floodplain forest (EEC)	Bio retention basin 0.35ha Bio filter size 540m2	Approx 80% flood affected eastern area	TBC	Adjacent to Hume Highway and Spring Farm Parkway. Existing dam																			Low
G	1.35	Riparian Interface	2338	795	District park	NA	NA	N/A	TBC	Gateway, entry statement to northern precinct																			Med
H	5.2	Riparian Interface	1552	528	District park	NA	Bio retention basin 1.1ha	Approx 50% flood affected to southern area	TBC	North of Howes Creek riparian land. Part of Distict Park (more passive)		*																	Med
I	7.16	Riparian Interface	2190	745	District park	NA	Bio retention basin 2.2ha.	Approx 70% flood affected to northern area	TBC	Distict Park - activates town centre. Adjacent to 60m riparian setback. Adjacent to freshwater wetlands and River Flat floodplain forest.																			High
J	0.15	Riparian Interface	TBC	TBC	District park	NA	Bio retention basin 0.24ha	N/A	TBC	Entry statement to central area from north																			Med
K1	0.25	Town Centre	TBC	TBC	Local park	NA	NA	NA	6A	Urban plaza space and link to conservation woodland area. Possible water play (pop up jets) near town centre																			Med
K2	2.46	Town Centre	3618	1231	Ecology	Approx 60% Elderlie Banksia (EEC)	NA	NA	6A	Approx 40% (1ha) available for open space outside of ecology area. Location for boardwalks and education. Areas of faush regeneration.																			Med
L	0.32	Town Centre	TBC	TBC	Local park	NA	NA	NA	5B	Urban plaza space with high level detailing. Located along main collector road																			High
M	1.37	Riparian Interface	1780	605	District park	NA	Bio retention basin 0.39ha Bio filter size 2000m2	NA		Adjacent to 60m riparian setback.		*																	High
N	0.52	Ridgeline	3175	1080	Local park	NA	NA	NA	3A	Centrally located along main collector road. Highly visual urban location surrounded by high density along main collector road.																			High
O	0.25	Station and Horse Racing	1919	650	Local park	Approx 50% Acacia Regrowth	NA	NA	3A	High density living area. Close proximity to school and open space P facilities																			Low
P	1	Station and Horse Racing	2319	789	Local park	NA	NA	NA	4A	Adjacent to school.																			High
Q	1.52	Ridgeline	2154	733	Local park	NA	NA	NA	1 and 2	Key arrival space from Menangle Road. Key public art and recreation opportunity																			High
R	7.1	Recreation	2649	901	District park	NA	Bio retention basin 0.35ha	NA	TBC	Adjacent to 60m riparian setback. Nature play theme																			High
S	17.8	Recreation	1269	432	Sports hub	NA	Bio retention basin 0.55ha	100% 1:100 year Flood affected	TBC	Major sports hub (formal recreation) with sports courts and criterium bike track																			High
T	1.3	Recreation	935	318	Local park	NA	NA	NA	4C	Hilltop park viewed from road. Key public art opportunity																			Med
PLAYING FIELDS		Town Centre	TBC	TBC	Playing fields	NA	NA	NA	TBC	2.5ha formal sport (playing fields) provided in the northern precinct																			Med

* Proposed location for key district play feature (tree-top canopy) and playground (flying fox)

** Assuming 2.94 ppl/dwelling (ABS 2016 for Campbelltown LGA)

Open Space Recreational Infrastructure Table

GREEN SPINE



Location

Location 1

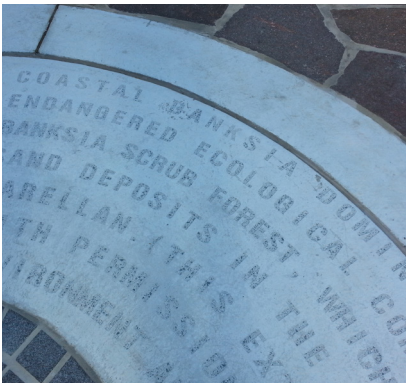
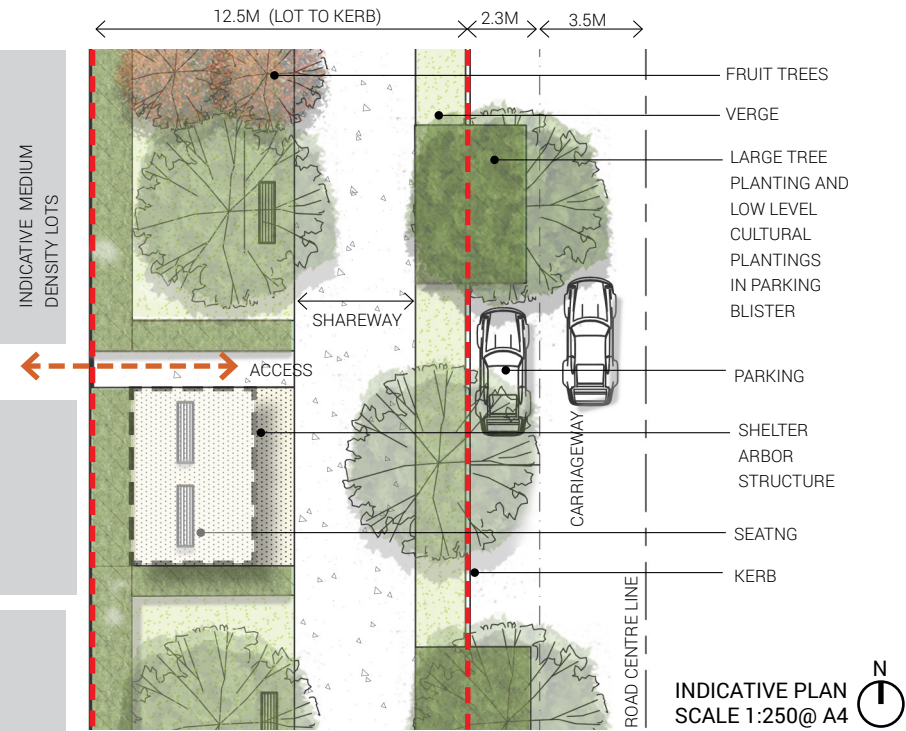
Landscape Inclusions

The Green Spine may consist of:

- Shareway as a part of site wide and regional cycle link
- Interpretive signage/public art and sandblasted paving details referencing Indigenous histories or European settlement or provide environmental education
- Feature lighting integrated with furniture to reinforce contemporary design quality
- Shelter arbor structure using timber and recycled brick materials
- Tree planting including formal grid style plantings that reference the site's European heritage
- Tree and shrub planting is to comply with Crime Prevention principles
- Low maintenance, robust plant species
- Street parking blisters along the carriageway provide a WSUD opportunity and additional tree and shrub planting opportunities

Location 1 –Botanic Gardens and Glenlee/ Low Density

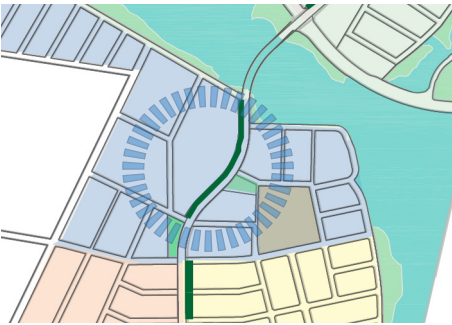
Located in the Glenlee and Botanic Gardens Precinct, this section of the Green Spine will provide an additional 7.6m wide open space (than the standard 20.4m wide collector road). Characterised by its function as the key link to the heritage precinct of the Glenlee Homestead to the west and Mount Annan Botanic Garden to the north, the paving materials and street furniture are kept simple here, with a low key feel. Plantings are reflective of the cultural plantings of the heritage precinct and Botanic Garden with low level flowering shrubs providing a backdrop to seating that is positioned to maximise site wide views.



Green Spine

Area	Precinct	Road Corridor Width	Additional width	Parking Blister
1.25 ha	Botanic Gardens/ Glenlee	28m	7.6m	Yes

GREEN SPINE



Location

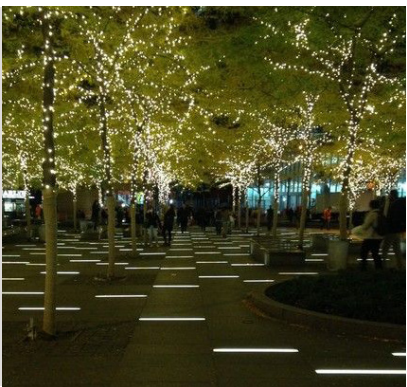
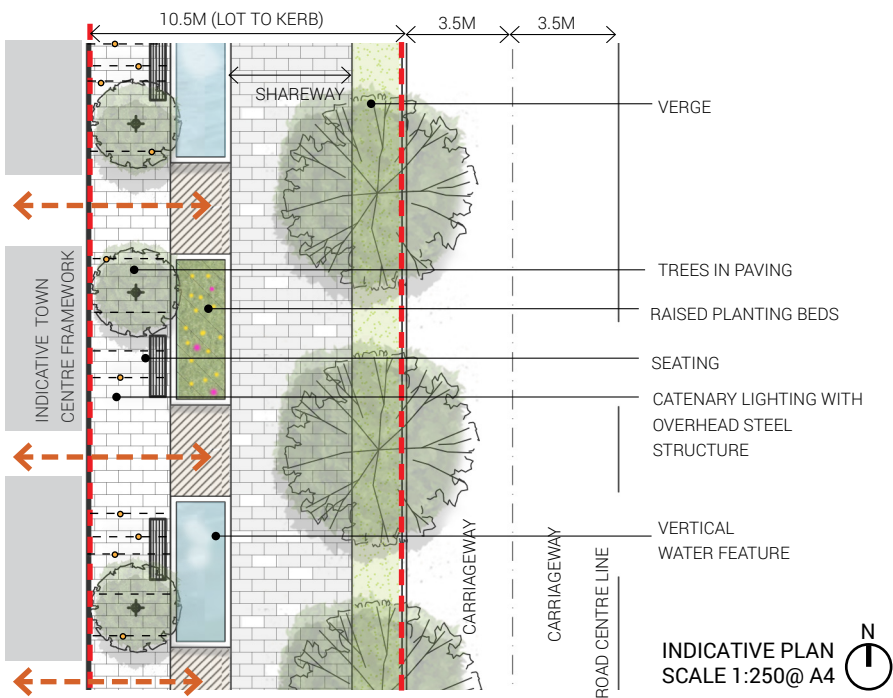
Location 2

Landscape Inclusions

- The Green Spine may consist of:
- Shareway as a part of site wide and regional cycle link
 - Detailed paving elements including steel tree rings that reference Menangle Park’s rural character
 - Feature lighting such as catenary lighting on wires integrated with an overhead steel structure to provide an intimate outdoor setting.
 - Public art and sculpture elements to reinforce identity of the town centre
 - Vertical water feature elements integrated with planting areas provide a buffer to the collector road and informal water play opportunities
 - Tree planting including semi-open canopy trees and structures to provide filtered shade and amenity
 - Trees and planting is to comply with Crime Prevention principles
 - Low maintenance, robust plant species

Location 2 – Town Centre

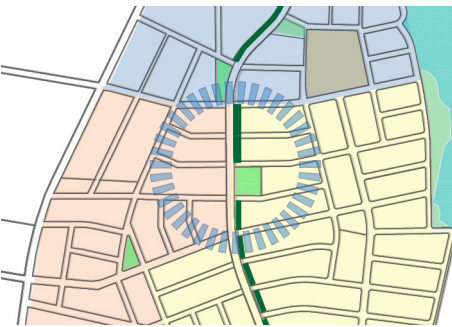
At the town centre interface, the Green Spine is influenced by its relationship with the intended built form that will form part of a ‘main street’ with front setbacks sufficient for outdoor dining, street trees, awnings and furniture. The Green Spine is also influenced by the higher density residential/commercial mix its with active ground floor frontages, as well as its proximity to the riparian park to the north and conservation area to the east. The additional 8m wide open space provides high quality urban environment that is characterised by detailed contemporary paving and bespoke seating and lighting. Timber platform seating areas reference the boardwalk detailing of the nearby conservation woodland area.



Green Spine

Area	Precinct	Road Corridor Width	Additional width	Parking Blister
1.25 ha	Botanic Gardens	28.4	8m	Yes

GREEN SPINE



Location

Location 3

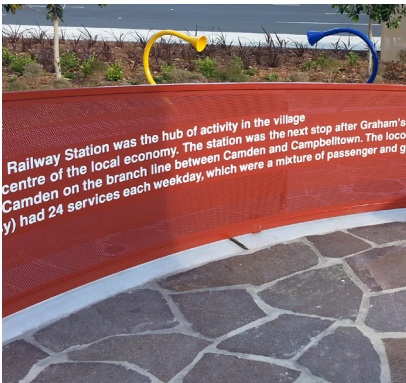
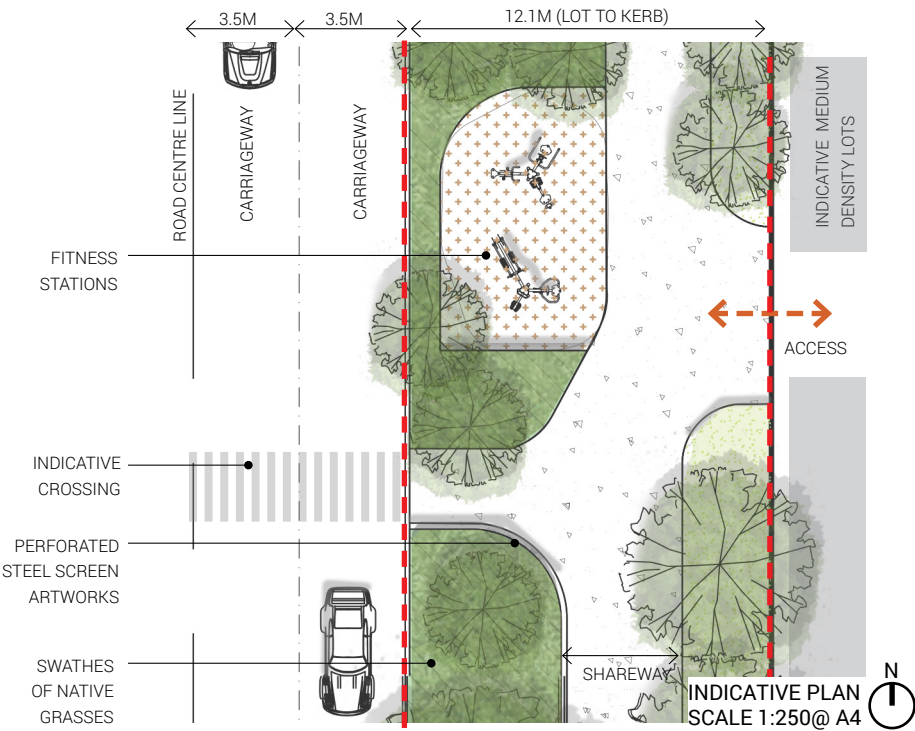
Landscape Inclusions

The Green Spine may consist of:

- Shareway as a part of site wide and regional cycle link
- Paving detailing to reinforce the rural character of the development
- Feature lighting integrated with furniture
- Public art and sculpture elements such as perforated steel screens with text and imagery provide a buffer to the road
- Fitness stations located along footpath network
- Tree planting including semi-open canopy trees and structures to provide filtered shade and amenity
- Trees and planting is to comply with Crime Prevention principles
- Low maintenance, robust plant species

Location 3 – Station and Horse Racing/Medium Density

At this location, the Green Spine provides a wider 9.6 metres of linear open space that offers flexible places for gathering and spaces for social interactions, characterised by narrative based design elements and detailing. Located in the Station and Horse Racing precinct, footpath forms are representative of the curvature of the raceway tracks and detailing will include bespoke furniture such as tree grills and benches, artwork/sculpture and a palette of native grasses planting. An opportunity for fitness stations or younger children’s play exists in this wider section of the Green Spine to offer more active recreation opportunities for medium density living.



Green Spine

Area	Precinct	Road Corridor Width	Additional Width	Parking Blister
1.25 ha	Station and Horse Racing	30m	9.6 m	No

GREEN SPINE



Location

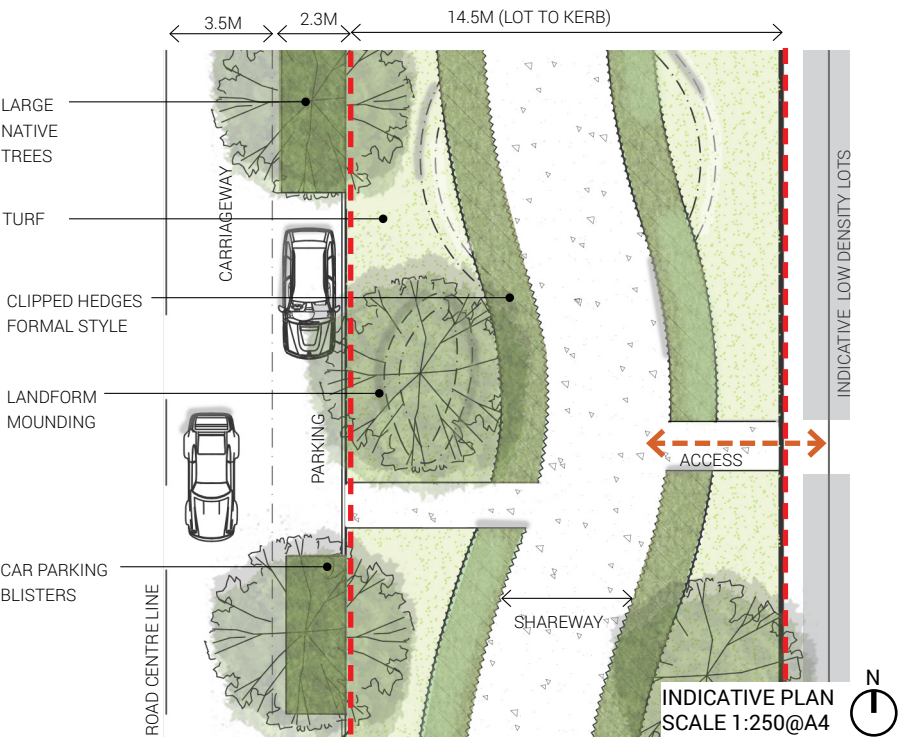
Location 4

Landscape Inclusions

- The Green Spine may consist of:
- Shareway as a part of site wide and regional cycle link
 - Interpretive signage/public art trail referencing Indigenous histories or European settlement or provide environmental education
 - Fitness stations located along footpath network
 - Feature lighting to provide a evening activation
 - Occasional car parking blisters along the carriageway provide additional tree and shrub planting with integrated WSUD opportunities
 - Trees and planting including large scale native trees with clipped hedges that are reflective of ridgetop signature planting design
 - Trees and planting is to comply with Crime Prevention principles
 - Low maintenance, robust plant species

Location 4 – Ridgeline/Medium-Low Density

Located at a key gateway to the development when arriving from Menangle Road, the Green Spine i has a low key, open feel to retains views across the southern precincts. Precinct character is reinforced by planting design associated with signature ridgetop character (large Angophora trees under planted with formal hedges as a buffer to the road). There is a possibility for fitness stations as part of the site wide active transport link that promotes social interactions and supports healthy active living.



Green Spine Overview

Area	Precinct	Road Corridor Width	Additional Width	Parking Blister
1.25 ha	Ridgeline	30m	9.6 m	Yes

GREEN SPINE



Location

Location 5

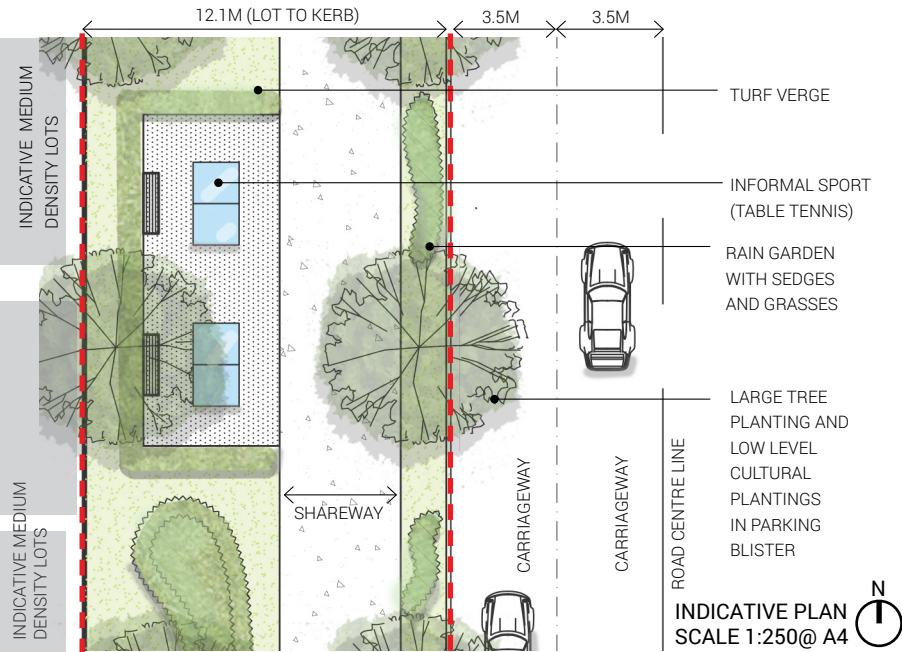
Landscape Inclusions

The Green Spine may consist of:

- Shareway as a part of site wide and regional cycle link
- Fitness stations located along footpath network
- Informal sport and seating areas such as table tennis
- Feature lighting supporting evening activation
- Tree planting including semi-open canopy trees and structures to provide filtered shade and amenity
- WSUD initiatives including rain gardens sedges and grasses
- Tree and planting is to comply with Crime Prevention principles
- Low maintenance, robust plant species

Location 5 – Recreation Precinct/Medium Density

South of Menangle Road, the Green Spine is located in the Recreation character precinct. This location is a key link to the southern riparian park and the formal recreation provision for the development. Taking advantage of the additional 9.6m wide of open space, the Green Spine provides opportunities for fitness equipment and informal sports such as table tennis and seating areas. Native planting species selection and water feature elements reinforce the local character and identity of the precinct that draws on the proximity to the southern riparian park and the Nepean River. WSUD initiatives including rain gardens provide an opportunity for environmental strategies to be implemented alongside recreation infrastructure.



Green Spine

Area	Precinct	Road Corridor Width	Additional Width	Parking Blister
1.25 ha	Recreation	30m	9.6m	Yes

BOTANIC GARDENS PRECINCT








Location

■ Open Space A

Landscape Inclusions

The park may consist of:

-  – Shareway as a part of site wide and regional cycle link
-  – Boardwalk or elevated walkway co-located adjacent to bio-retention basin (approx 0.27ha)
-  – Interpretive signage/public art trail referencing Indigenous histories or European settlement or provide environmental education
-  – Fenced dog off-leash area (approx 0.3ha)
-  – Tree planting including semi-open canopy trees and structures to provide filtered shade and amenity
- Tree and planting is to comply with Crime Prevention principles
- Low maintenance, robust plant species

Open Space A

The 0.81ha open space to the north of the Botanic Gardens precinct is located in an area of low density housing (large rural lots). The space provides passive recreation opportunities with dog off-leash area and open lawn spaces integrated with stormwater management (bio-retention basin).

Interpretive signage elements or a public art trail could be developed here to reference the rich cultural histories of the area. Planting design provides a visual and ecological reference to the Mount Annan Botanic Garden nearby.



Park Overview

Area	Precinct	Poulation Catchment (400m radius)	Classification	WSUD area
0.81 ha	Botanic Gardens	741	Local park with drainage	0.27ha

GLENLEE PRECINCT



Location

■ Open Space B

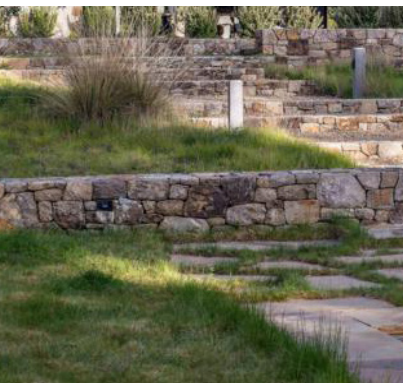
Landscape Inclusions

- The park may consist of:
- Shareway as a part of site wide and regional cycle link
 - Feature lighting to reinforce heritage character of the area
 - A mix of evergreen and deciduous trees for visual interest along the main collector road
 - Tree and understorey planting is to comply with Crime Prevention principles
 - Low maintenance, robust plant species

Open Space B

Located along the main collector road to the north of the Glenlee Homestead precinct, this 0.36 ha open space provides open grassy spaces with planted seating spaces intended for reflection and contemplation whilst ensuring key view lines to the Glenlee Homestead are maintained.

The space provides subtle landscape interventions with traditional sandstone walling. The small seating areas will be co-located with formal or orchard style planting that uses a mix of evergreen and deciduous trees, shrubs, flowering perennials and grasses to reinforce the heritage character and style of the northern precinct.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
0.36 ha	Glenlee Homestead	1468	Local park	NA

GLENLEE PRECINCT










Location

■ Open Space C

Landscape Inclusions

The park may consist of:

-  – Shareway as a part of site wide and regional cycle link
-  – Toddler play equipment including sliding and swinging and imaginative nature play elements
-  – Junior play equipment and landscaping that offers a variety of cognitive, social and physical play opportunities
-  – Small kickabout space (approx 0.1ha)
-  – Interpretive signage with reference to the Glenlee Homestead precinct
-  – Shelter with picnic settings
-  – Medium sized canopy trees with dappled shade
- Tree and understorey planting is to comply with Crime Prevention principles
- Low maintenance, robust plant species

Open Space C

This park is located along the main collector road in the Glenlee precinct. The park provides recreation facilities that support higher density living. The park provides a local play space (approx. 0.2ha) catering for ages up to 6 years old with play equipment, playground planting and landscaping and a small kickabout area (0.1ha). BBQ and shade structures with picnic settings support social activities.

New tree and understorey planting will be responsive to the existing shale plains woodland found naturally in this location. Limited access to the existing woodland may be possible with elevated boardwalks.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
0.73 ha	Glenlee Homestead	2126	Local park with drainage	Responds to existing drainage line

GLENLEE PRECINCT



Location

■ Open Space D

Landscape Inclusions

- The park may consist of:
- Shareway integrated with site wide and regional cycle link
 - Kick about space (approximately 0.5ha)
 - Interpretive elements relating to Glenlee and Botanic Gardens to increase identity and sense of place
 - Fitness stations located along footpath network
 - BBQ facilities and park furniture
 - Tree and understorey planting to comply with Crime Prevention principles
 - Planting of native species with some exotics in a formal style
 - Low maintenance, robust plant species
 - Fenced dog off-leash area

Open Space D

Located along the main collector road within Glenlee Homestead precinct, this large 2.06ha park provides informal passive recreation activities and facilities including kickabout space (approx 0.5ha), fenced dog off-leash area, BBQ's and shelters integrated along the footpath network. Integrated stormwater management areas (approx. 0.35ha) and areas of shale plains woodland vegetation (approx. 0.5ha) provide opportunities for environmental awareness and education through interpretive signage elements.

New planting areas are linked to Mount Annan Botanic Gardens to the north and presented in a formal grid/orchard style arrangement.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
2.06 ha	Glenlee Homestead	2126	Local park with drainage	0.35 ha

RIPARIAN INTERFACE









Location

■ Open Space E

Landscape Inclusions

The park may consist of:

-  – Shareway as part of site wide and regional cycle link
-  – Senior play (ages 6-12) including play equipment structures that can be used as a 'lookout' or meeting place
-  – Teenage Play including informal sports courts for ball games
-  – Small kickabout space (approx. 0.1ha)
-  – Shelter with picnic settings
-  – BBQ facilities and park furniture
-  – Planting of native species endemic to the area to enrich local flora
 - Tree and understorey planting is to comply with Crime Prevention principles
 - Planting of native species and endemic species to enrich local flora
 - Low maintenance, robust plant species

Open Space E

This 0.34ha open space is centrally located along the main collector road in the riparian interface precinct. The space provides play equipment for older children (ages 6-12) and a kickabout space. The recreation facilities are located in an area of good natural surveillance. BBQ's and shade structures with picnic settings will provide a place for young people and adults to be with friends.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
0.34 ha	Riparian Interface	1377	Local Park	NA

RIPARIAN INTERFACE



Location

■ Open Space F

Landscape Inclusions



- The space may consist of:
- Tree and understory planting responsive to the Vegetation Management Plan
 - WSUD elements including swale and rain garden in line with site wide landscape strategy
 - Tree and understory planting is to comply with Crime Prevention principles
 - Low maintenance, robust plant species and finishes
 - Vegetation Management Plan works

Open Space F

This open space is located adjacent to the Spring Farm Parkway access ramp and adjacent to the Hume Highway. Due to its location and topographical limitations, areas of shale plains woodland vegetation and swamp oak floodplain forest, this area will provide only passive recreation amenity including walking and dog off-leash areas.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
2.37	Riparian Interface	2091	District park	0.35

RIPARIAN INTERFACE








Location

■ Open Space G

Landscape Inclusions

The park may consist of:

-  — Shareway as a part of site wide and regional cycle link
-  — Major artwork gateway structure
-  — Boardwalk connection to Town Centre Park
-  — Interpretive signage/public art for aboriginal/environmental awareness/education
-  — Revegetation to the edge of riparian corridor
- WSUD elements including swale, rain garden, detention basin/retention basin in line with site wide landscape strategy and species selection
- Planting of native species and endemic species to enrich local flora
- Tree and understorey planting is to comply with Crime Prevention principles
- Low maintenance, robust plant species

Open Space G

Located to the south of Spring Farm Parkway, this highly visual space functions as an entry portal to the northern precincts. A major artwork structure (in keeping with site wide character) with structured planting and feature lighting elements provide a sense of arrival from the south.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
1.35	Riparian Interface	2338	District Park	NA

RIPARIAN INTERFACE



Location

■ Open Space H

Landscape Inclusions

- The park may consist of:
- Shareway as part of site wide and regional cycle link
 - District play facility that caters for all ages and abilities including non-structured play, risk and challenge, natural and imaginative play areas
 - Shelters with picnic settings
 - BBQ facilities and park furniture
 - Pedestrian bridge linking the north and south sides of the riparian corridor
 - Interpretive signage/ public art elements along a footpath or trail
 - Large kickabout space (approx. 1ha)
 - Offset/revegetation to compensate for loss of riparian vegetation elsewhere due to development
 - WSUD elements including swale, rain garden, detention basin/retention basin

Open Space H

This large 5.2ha open space located along the Howes Creek riparian corridor provides district level play facilities catering for all ages supported by seating areas, shade structures, BBQ's and picnic settings. This park could offer a regional play facility offering adventure play or non-structured play such as a treetop walkway or nature themed adventure play area.

It is intended the park be linked to **Park I** by a pedestrian bridge or shareway over the riparian corridor.

The park is characterised by landscape interventions reflective of the natural riparian environment.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
5.2	Riparian Interface	1552	District Park	1ha

RIPARIAN INTERFACE



Location

■ Open Space I

Landscape Inclusions

The park may consist of:

- Shareway as part of site wide and regional cycle link
- Play equipment for all ages from toddlers up to age 12 and abilities including challenging play equipment, natural play areas and non-structured play areas
- Skate facility with challenging ramps and rails co-located with half courts for active ball games
- BMX or bike track or trail for older children
- Shade structures
- BBQ facilities located with park furniture
- Interpretive signage referencing aboriginal or environmental awareness
- Fitness stations as part of a fitness loop or trail
- Water play area including water pumps, channels
- Pedestrian bridge linking the north and south sides of the riparian corridor
- Large kickabout space (approx. 1ha) adjacent to riparian setback

Open Space I

This large 7.16ha district park is located to the south of Howes Creek adjacent to the town centre interface. This important recreation space will provide activation to the town centre and a link to the riparian area increasing opportunities for natural recreation for all residents of the Menangle Park community.

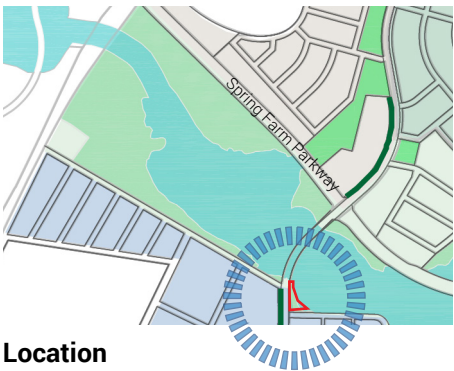
The park provides district level play for all ages including teens, skate and all abilities play. Nature areas, fitness stations, large kickabout spaces and informal sports courts provide additional active and passive recreation opportunities for adults. The subtle design of this park will ensure an immersive experience in nature.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
7.16	Riparian Interface	2190	District Park	2.2ha

TOWN CENTRE PRECINCT



Location

■ Open Space J

Landscape Inclusions

- The park may consist of:
- Shareway as a part of site wide and regional cycle link
 - Major artwork gateway structure
 - Boardwalk connection to Town Centre Park
 - Interpretive signage/ public art for aboriginal/ environmental awareness/ education
 - Revegetation to the edge of riparian corridor
 - WSUD elements including swale, rain garden, detention basin/retention basin in line with site wide landscape strategy and species selection
 - Planting of native species and endemic species to enrich local flora
 - Tree and understorey planting is to comply with Crime Prevention principles
 - Low maintenance, robust plant species and finishes

Open Space J

This open space is located at the north of the town centre precinct to the east of the main collector road. This highly visual space functions as an entry portal to the southern precincts when arriving from the north. A major artwork structure (in keeping with site wide branding) with structured planting and feature lighting elements provide a sense of arrival.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
0.15	Riparian Interface	2338	District Park	0.24 ha (into riparian land)

TOWN CENTRE PRECINCT



Location

■ Open Space L

Landscape Inclusions

This space may consist of:

- Interpretive signage, wayfinding elements and public artworks that provide information and environmental awareness
- Feature lighting reflecting the modern urban character of the town centre
- Custom shelter structures providing shades social gathering and seating areas
- Water feature offering informal water play opportunities in summer
- Urban forest tree planting using large native tree species in contemporary urban paving detail
- Tree and understorey planting is to comply with Crime Prevention principles
- A mix plant species that provide screening from the road
- Low maintenance, robust plant species

Open Space K1

This 0.25ha open space urban plaza space is located in the town centre precinct and provides an opportunity for a large contemporary plaza space/urban park with urban forest tree planting initiatives including extensive canopy cover, custom shelter structures and shaded seating and gathering areas.

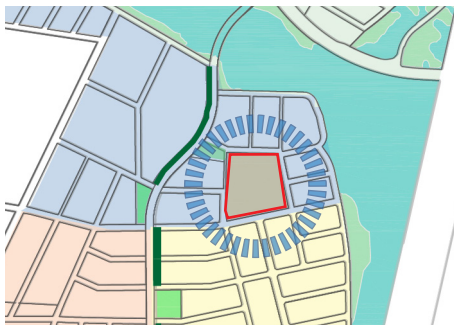
The space provides a direct link between big box retail of the town centre to the conservation area to the east. Character of the plaza will be inspired by the natural environment of the locally endangered woodland. Native tree, shrub and grasses planting will assist with meeting site wide ecological objectives.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
0.25 ha	Town Centre	TBC	Local Park	N/A

TOWN CENTRE PRECINCT






Location

■ Open Space K

Landscape Inclusions

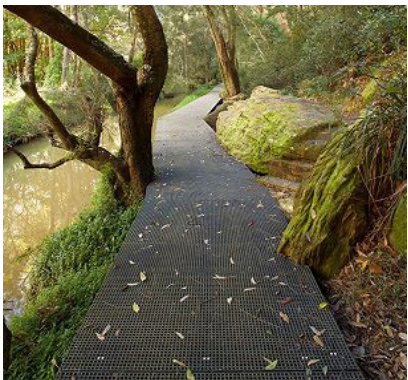
The park may consist of:

-  – Minimum 2ha revegetation / bush regeneration
-  – Footpath and boardwalks around the outside of conservation zone will provide a quiet location for reflection
-  – Interpretive signage for environmental awareness / education along the recreation path to be placed sensitively

Open Space K2

The park is characterised by the significant community of endangered Elderslie Banksia Scrub Forest which is to be protected, retained and celebrated. Minimal Intervention is a key driver of the design.

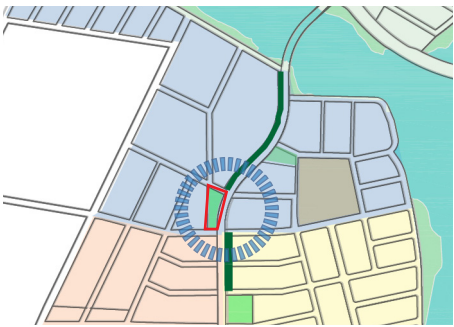
The Elderslie Banksia Scrub Forest has the character of a low woodland or scrub-forest and is dominated by *Banksia integrifolia*. A shrubby understory of scattered herbs, sedges and ferns will also be retained within the park environment. Footpaths will be limited to the periphery of the park, with boardwalks taking visitors closer to the vegetation where possible. Education through interpretive signage will highlight the importance of the conservation zone.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
2.46	Town Centre	3618	Ecology	NA

TOWN CENTRE PRECINCT



Location

■ Open Space L

Landscape Inclusions

- This space may consist of:
- Shareway as part of site wide and regional cycle link
 - Interpretive signage reflecting cultural histories of the site
 - Feature lighting reflecting the modern urban character of the town centre
 - Interpretive signage reflecting cultural histories of the site
 - Public square with water feature offering informal water play opportunities in summer
 - A mix of evergreen and deciduous trees for visual interest and optimised solar access
 - Public square with water feature offering informal water play opportunities in summer
 - Tree and understorey planting is to comply with Crime Prevention principles
 - A mix plant species that provide screening from the road
 - Low maintenance, robust plant species

Open Space L

This urban plaza space is located to the south of the town centre along the main collector road/active transport network. This multi-functional civic space provides a framework on which a range of community activities can occur. Robust urban paving, furniture, artworks integrated with contemporary planting design will further define the Menangle Park development as a modern and exciting place to live.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
0.32	Town Centre	TBC	Local Park	N/A

RIPARIAN INTERFACE












Location

■ Open Space M

Landscape Inclusions

The park may consist of:

-  — Shareway as part of site wide and regional cycle link
-  — Challenging play equipment, natural play areas and non-structured play areas for all ages and abilities
-  — Kickabout space (approx. 0.3ha)
-  — Boardwalks to riparian interface areas
-  — Dog off leash area (approx. 0.3ha)
-  — Shade structures with picnic settings
-  — BBQ facilities with park furniture
-  — Fitness stations as part of a fitness trail
-  — Semi-open canopy trees and structures to provide filtered shade and amenity
- Tree and understorey planting is to comply with Crime Prevention principles
- Low maintenance, robust plant species

Open Space M

This 1.37 ha riparian park provides neighbourhood to district level play facilities with larger play equipment including flying foxes and unstructured nature play areas. The park provides public facilities including fitness stations, BBQ's and shelters with picnic settings located along the footpath network

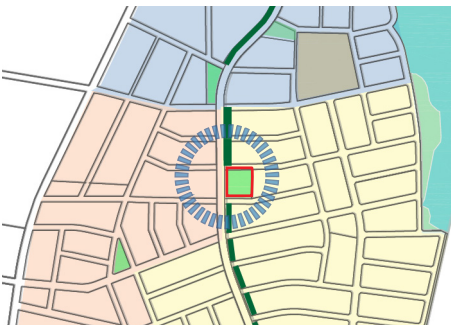
Furniture and planting design responds to other riparian spaces and areas of integrated stormwater management (bio-retention basins) further enhance the sense of natural recreation.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
1.37	Riparian Interface	1780	District Park	0.39 ha

RIDGE LINE PRECINCT



Location

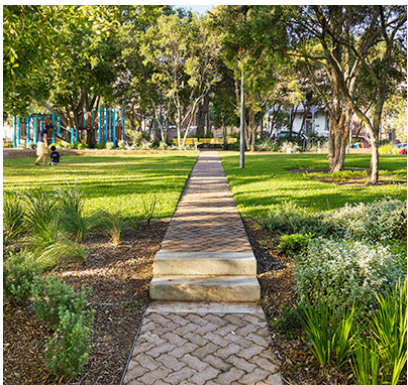
■ Open Space N

Landscape Inclusions

- The park may consist of:
- Shareway as a part of site wide and regional cycle link
 - Challenging play equipment, natural play areas and non-structured play areas that provide a range of cognitive, social and physical play opportunities
 - Feature lighting reflecting the modern urban character of the town centre
 - Interpretive signage/ public art for aboriginal/ environmental awareness/ education
 - Tree planting including semi-open canopy trees and structures to provide filtered shade and amenity
 - Tree and understorey planting is to comply with Crime Prevention principles
 - Low maintenance, robust plant species and finishes

Open Space N

Located along the main collector road, this 0.5ha park provides a variety of recreation facilities for the high density living area. Play provision will include play equipment for ages up to 12 with adult socialising spaces. This park supports social activities with robust planting and fencing provides safety from the main collector road.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
0.52	Ridgeline	3175	Local Park	NA

STATION AND HORSE RACING PRECINCT



Location

■ Open Space O

Landscape Inclusions

The park may consist of:

-  — Small kickabout space (approx. 0.2ha)
-  — Shade structures with picnic settings
-  — Interpretive signage/public art trail referencing the rich cultural histories of the area including horse racing
-  — Semi-open canopy trees and structured planting to provide filtered shade and visual amenity
- Tree and understorey planting is to comply with Crime Prevention principles
- Low maintenance, robust plant species and finishes

Open Space O

Located in the high density living area of the station and horse racing precinct, this 0.25ha open space serves as a passive recreation area with open lawns and planting areas, shelters and picnic settings and a small kickabout space. This park is located approximately 200m from Park P and Park L which both provide high levels of recreation and play facilities.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
0.25	Station and Horse Racing	1910	Local Park	NA

STATION AND HORSE RACING PRECINCT



Location

■ Open Space P

Landscape Inclusions

- The park may consist of:
- Shareway as a part of site wide and regional cycle link
 - Junior play equipment and landscaping that offers a variety of cognitive, social and physical play opportunities
 - Kickabout area (approx. 0.6ha)
 - Shade structures with picnic settings
 - BBQ facilities located with park furniture
 - 2-3 Sports courts (tennis or basketball)
 - Interpretive signage or small artwork elements reflective of cultural histories
 - Large semi-open canopy trees and structured planting to provide filtered shade and visual amenity to the ridge line
 - Tree and understorey planting is to comply with Crime Prevention principles
 - Low maintenance, robust plant species

Open Space P

Located adjacent to the new school, this 1.0ha park will provide an extension of the school facilities. Large grassed open space areas, informal sports courts and fitness stations promote healthy active living for children and adults in denser living areas. A kickabout area flanked by large semi open canopy trees and robust planting should be responsive to view corridors.

Subtle landscape detailing such as fencing and paving reference the equine legacy of the site. Play space facilities will be appropriate for primary school aged children.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
1.0	Station and Horse Racing	2318	Local Park	NA

RIDGELINE PRECINCT



Location

■ Open Space Q

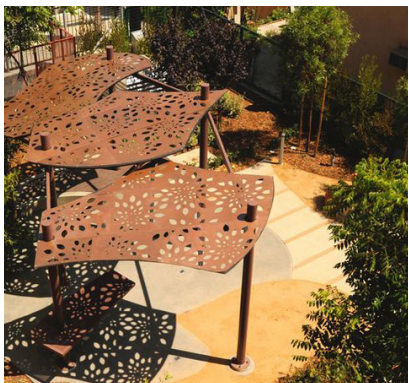
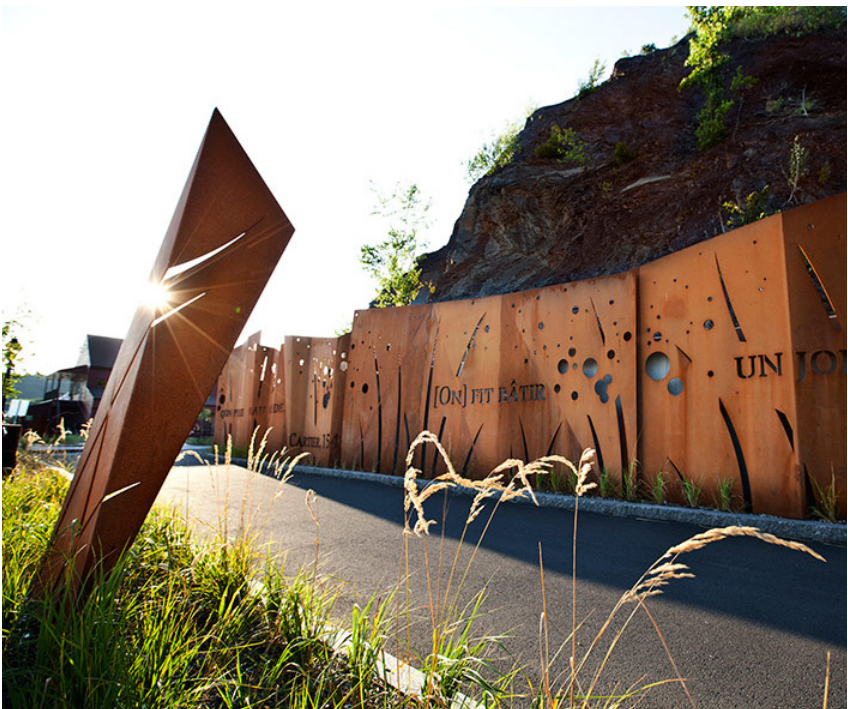
Landscape Inclusions

The park may consist of:

- Shareway as a part of site wide and regional cycle link
- Toddler play equipment including sliding and swinging with imaginative nature play elements and themes
- Junior play equipment and landscaping that offers a variety of cognitive, social and physical play opportunities
- Kick about space (approx. 0.2ha)
- Key public art statements integrated with landscape feature walls and shelter structures
- Semi-open canopy trees to provide filtered shade and amenity
- Tree and understorey planting is to comply with Crime Prevention principles
- Low maintenance, robust plant species

Open Space Q

The hilltop park is located at the gateway to the southern precinct with a prominent elevated position. The park functions as a local park providing recreational amenities including a children’s playground, open lawn/kickabout space, feature pergola, seating and picnic areas. The park celebrates its ridge top location with terraced landform and feature walling with integrated signage. Viewing platforms/lookouts maximise vantage points to the surrounding district views.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
1.52	Ridgeline	2514	Local Park	NA

RECREATION PRECINCT



Location

■ Open Space R

Landscape Inclusions

- The park may consist of:
- Shareway as a part of site wide and regional cycle link
 - Senior play including BMX or informal/adventure bike track
 - Fitness stations as part of a fitness trail
 - Kick about space (approx.1.5ha)
 - Dog off leash areas
 - Shade structures with picnic settings
 - BBQ facilities with park furniture
 - Interpretive signage/ public art for aboriginal/ environmental awareness/ education
 - Exciting riparian crossings and connections linking the north and south sides of the riparian corridor
 - Semi-open canopy trees and structures to provide filtered shade and amenity
 - Tree and understorey planting is to comply with Crime Prevention principles
 - Low maintenance, robust plant species

Open Space R

This riparian park is nestled along the riparian corridor, surrounded by medium density living. This park is non-sport/ more passive in nature and provides natural recreation opportunities. Play areas are co-located with BBQs, picnic shelters and furniture. Accessible paths and shareways connect to the adjacent sports park. Integrated into the central corridor are areas for indigenous heritage and vegetation conservation.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
7.1	Recreation	2649	District Park	0.35

RECREATION PRECINCT



Location

■ Open Space S

Landscape Inclusions

It is anticipated that the park will consist of:

- Shareway as a part of site wide and regional cycle link
- Play equipment for all ages including challenging play equipment, natural play areas and non-structured play areas
- 4 or 6 sports fields including soccer, cricket, basketball and tennis courts with adjacent terraced lawn area functioning as grandstand
- Shade structures with picnic settings
- BBQ facilities with park furniture
- Interpretive signage for aboriginal/environmental awareness/education along the recreation path to be placed sensitively and minimise disturbance to this area
- Tree and understorey planting is to comply with Crime Prevention principles
- Low maintenance, robust plant species

Open Space S

The major sports hub is located along Menangle Road in the southern area of the development. The large park provides diverse formal sporting facilities including soccer fields, cricket fields, basketball courts, tennis courts and associated amenities. A district level criterium bike track provides excellent road cycling and running facilities.

Community sporting activities are supported with play equipment for all ages, shade structures, BBQ, picnic facilities and any required community/clubhouse buildings.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
17.8	Recreation	1269	Sports hub	0.55ha

RECREATION PRECINCT



Location

■ Open Space T

Landscape Inclusions

The park may consist of:

- Public art including option for interpretation of former agricultural use of site
- Lookouts/ Viewing decks to maximise view sheds to surrounding districts
- Feature lighting including uplighting to iconic artwork/ sculpture

Open Space T

This park is located in a prominent elevated position adjacent to the Hume Highway. The park responds to the unique topographical and natural features of the site with passive open spaces and viewing platforms that maximise vantage points and district views. This park could provide a location for an iconic public art structure representative of the former agricultural land use.



Park Overview

Area	Precinct	Catchment (400m radius)	Classification	WSUD area
1.3	Recreation	935	Local Park	NA

7 CONCLUSION

The 2018 Structure Plan plans creates approximately **141.36ha** of open space within the site of Menangle Park. This figure includes; riparian land, informal open space (parks and playspaces), playing fields and areas of ecological value. Detention basins located within open spaces amount to **6.55ha**, providing a net total amount of open space as **134.81ha**.

The open space strategies look to ensure all social infrastructure recommendations are met by providing a variety of active and passive recreation, visual and ecological open space areas. In addition to meeting these recommendations, the open space strategy will:

- Provide eight different character areas that influence the open spaces.
- Provide local parks located near the town centre and neighbourhood centre, providing amenity for people living in more urban house types.
- Preserve and enhance areas of significant ecological value.
- Deliver walkability by ensuring lots are within 400m radius of open space.
- Provide a clear hierarchy of open space.
- Ensure progressive and unique responses to designated play areas incorporating adventure play and utilising topography.
- Provide unique sculptural elements.
- Focus on providing facilities for all abilities in addition to providing a wide range of stand and 'adventure' equipment across the site.
- Ensure delivery of high standard, contemporary sports/fitness facilities through best practice in design across the site, especially within the designated southern precinct.
- New parks are proposed in response to the key site features and topography of the site including significant hilltops, areas where significant vegetation are to be retained and adjoining the central and southern riparian corridors.

The streetscape strategies proposed will reinforce the road hierarchy and will be reflective of the eight different character areas of the development. The streetscape character will be defined by the tree species which reflect the natural character and landform of the site, while accommodating the functional needs of pedestrian, cycle and vehicle movement along each of the roads.

Both the positioning and size of the public open space network across the development has now been realised and has been one of the key factors in establishing the current urban design structure plan.

The aim is simply that the structure of the open spaces will lead to a benchmark landscape and public domain outcome for the Menangle Park community. One that meets both the current and future needs of the community, designed for longevity, cognisant of ongoing Council maintenance requirements and will assist in producing a walkable neighbourhood that reduces our reliance on vehicles to access our local services.



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