



Open Space and Recreation Analysis

Response to Campbelltown Council: Request for Additional Information
4 October 2019

Client: Michael Brown Planning Strategies Pty Ltd, with RobertsDay (now HATCH RobertsDay)

Date: Addendum: 11 November 2022 / Original report: 24 July 2020

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Date	Addendum: 11 November 2022 Original report: 24 July 2020
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Version	FINAL
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Contents

ADDENDUM TO REPORT	5
EXECUTIVE SUMMARY	11
1 INTRODUCTION	13
2 SITE MASTERPLAN (PREFERRED)	17
3 DEMOGRAPHIC CHARACTER	20
3.1 Current population	20
3.2 Future projections	21
3.3 Site masterplan population projections	23
3.4 Implications for open and recreation spaces on the site	24
3.5 Site masterplan demographics	24
4 SPORT AND RECREATION	25
4.1 Council plans and strategies	25
4.2 Open space and recreation trends	27
4.3 Implications for sport and recreation in the site	28
4.4 Site masterplan sport and recreation	29
5 ACTIVE RECREATION PARTICIPATION	30
5.1 Active recreation	30
5.2 Implications for active recreation participation on the site	31
5.3 Site masterplan active recreation	31
6 OPEN SPACE OPPORTUNITIES	32
6.1 Open spaces	32
6.2 Active corridors	35
6.3 Implications for open space opportunities on the site	39
6.4 Site masterplan open space	39
7 RESPONSE TO COUNCIL	42

FIGURES

Figure 1	The site	13
Figure 2	PP 2019 masterplan for the site	15
Figure 3	Preferred site masterplan, revised PP	17
Figure 4	Revised PP open space configuration	19
Figure 5	Proportion of household type change, 2020-2036	22
Figure 6	Local open and recreation spaces	32
Figure 7	District and regional open and recreation spaces	33
Figure 8	Airds Road shared pedestrian and cycle path	36
Figure 9	Current Bow Bowling Creek	37
Figure 10	Public and private open spaces across the site	41
Figure 11	Indicative concept plan for the Public Promenade	41

TABLES

Table 1	Population growth and change, 2020-2036	21
Table 2	Change in age groups, 2020-2036	22
Table 3	Change in proportional representation of dwellings in Leumeah	23
Table 4	Comparable dwelling composition and household size	23
Table 5	Projected active recreation demand in Campbelltown LGA.	30
Table 6	Categories of relevant open spaces	35
Table 7	Open space provision calculations for the site	40
Table 8	Summary of response to Council's <i>Request for Additional Information</i>	43

APPENDICES

A	Demographics	48
B	Document review	51
C	Context analysis	66

Addendum to report

Addendum purpose and overview

The following Open Space and Recreation Analysis was submitted on 24 July 2020. In February 2021 Campbelltown City Council (Council) requested additions and revisions to:

- » Clarify the correlation between open space provided on the site and the demand generated for other open space facilities future residents would need access to (e.g. sports fields for active recreation)
- » Address the impact that the future site residents could have on existing open and recreation spaces in nearby centres of Minto, Leumeah and Campbelltown, including if upgrades to these spaces is required
- » Assess if the open space provided on the site will meet the needs of the future residents

Since that time a number of meetings have been held with Campbelltown City's Council Design Panel. Those meetings have involved interrogation of the proposed scheme and some suggestions for change. Based on discussion with the Design Panel, HATCH RobertsDay have amended the scheme for Holylea Road. Options have been presented to the Panel and discussed. This report addendum reflects those discussions and speaks to finalised scheme developed through that process.

This addendum is informed by the document and data sources contained in the Open Space and Recreation Analysis and also considers:

- » The revised design prepared by HATCH Roberts Day October 2022
- » The latest site information (e.g. projected dwellings and potential people number, total open space provided), provided by HATCH RobertsDay
- » The revised open space provision rate per future population, overall and for public and private open spaces
- » Consideration of the potential impact of future residents on existing district and regional active and open spaces and capacity of the development to support the active and recreation spaces network in Campbelltown LGA

This addendum includes the following sections:

- » Revised site information
- » Population projections and open space provision
- » Open space needs and demands generated by potential site population
- » Supporting information and calculations.

Revised site information

The previous concept plan (2020) has been extended to consider 5-7 Plough Inn Road, north west of the original site. Based on revised concept plan and site information provided by HATCH RobertsDay (October 2022), this is projected to result in:

Mixed residential and commercial development:

- » Approximately 1,245 apartment dwellings, with a combination of one, two and three bedrooms (an increase in 265 apartments from the previous concept plan). It is assumed that density will continue to range from medium to high (with 80% of buildings nine storeys or less).
- » Approximately 7,205 square metres of non-residential which will include a health and wellness destination

Private open space for residents:

- » Approximately 9,750sqm of communal open space (25% of total site area), as either:
 - > 6,575 square metres of ground floor communal open space for residents
 - > 2,775 square metres of communal green roof spaces for the residents
 - > 400 square metres of communal space along the creek in the form of a community garden and gathering place.

Public spaces and active connections:

- » Approximately 11,354 square metres (30% of total site area) of public open space, provided as:
 - > A Gateway green space of 1,372 square metres
 - > a 4,185 square metre public promenade which ranges from 8.5 metres wide along residential frontage and 10 metres wide along non-residential frontage
 - > An active plaza of 2,687 square metres with a width of 30 metres
 - > Two additional public open spaces both of 15 metres wide (one 1,705 square metres and the other 1,405 square metres) creating cross site links and spaces through the site.

Population projections and characteristics

This addendum applies the previous average household estimate of **1.9 persons/dwelling in the site**. For supporting justification used to inform this average (see **Section 3.3**).

Based on a revised yield of **1,245 apartments**, this would generate potential population of **2,366 people** (an increase of 666 people from the previous concept plan). Based on previous findings, this addendum continues to support open and recreation spaces on the site which meet the needs of:

- » Families with children (Leumeah is predicted to have a similar proportional representation of couples with children to Minto (approximately 38%), who will require accessible and highly visible play spaces for young children and will add to the demand for sporting spaces in organised sporting activities (ABS *Participation in Sport and Physical Recreation, Australia 2013-14* data found that young people aged 15-17 years of age participate most in sport and recreation)
- » High density residents (Leumeah has minimal existing high density dwelling), so open and recreation spaces will need to offer communal 'backyard' spaces for families in high density
- » An increasing proportion of people living alone, generating a provide spaces for social connection and interaction such as larger gathering spaces and active corridors
- » A culturally diverse resident population with diverse and/or non-traditional recreation needs, which could be supported by adaptable open and public spaces that enable a range of diverse activities
- » An increasing proportion of older people (70-84 years) as well as significant representation of young people (18 to 34 years), who have different recreation and socialisation needs, including the highest rates of participation in sporting

- » Future workers in proposed retail and non-retail spaces, who will require nearby public open space to relax, exercise, socialise, etc, either during or outside of their working hours.

Open space needs and demands generated by potential site population

Clarify the correlation between open space provided on the site and the demand generated for other open space facilities future residents would need access to (e.g. sports fields for active recreation)

The current concept plan and indicative yields are accommodating passive open space and recreation needs on site for both the future resident population, as well as contributing to local open spaces for Leumeah and the active connections for broader Campbelltown LGA. Overall:

- » Approximately 11,354 square metres of public open space (equating to 30% of total site area) for future residents, and the local and Campbelltown LGA community provided as:
 - > A Gateway plaza area with screening trees to provide a forecourt to the non-residential buildings and a buffer from the roadway
 - > Public plaza accessible from Hollylea Road and linking to the public promenade and Bow Bowling Creek, and will be the future location of a large play space as well as spaces to spend time in an activated urban setting
 - > Public promenade (8.5 to 10 metres wide) providing active walking and cycle connections along Bow Bowling Creek and a mixture of large and smaller 'break out spaces' which can accommodate fitness circuit stations, spaces to stop and spend time and smaller play spaces
 - > Two public open spaces that cross the site and provide additional connectivity between Hollylea Road and Bow Bowling Creek.
- » Approximately 9,750sqm of communal open space (equating to 25% of the total site area), which is accessible to future residents as:
 - > Green roof spaces on top of buildings that can be used for smaller gatherings and spending time
 - > Open spaces between buildings, for low impact passive and run about spaces for residents, as well as space for larger gatherings
 - > Publicly accessible open space along the creek (community gardens, gathering places, etc)

Overall, the population and open space yields indicate:

- » 3.5 sqm/person (equating to 0.4ha/1,000 people) of private open space for future residents
- » 4.8 sqm/person (0.5ha/1,000 people) of public open space
- » 8.3 sqm/person (equating to 0.9ha/1,000 people) of combined private and public open space
- » A contribution of 11,354 square metres (11.3ha) of local public open space provided as a public plaza, public open space and an active green link along the creek corridor.

Plans for the site do not indicate sport and recreation spaces as the location, access and scale of the site is unlikely to meet Council requirements for the provision of sporting spaces and supporting facilities (based on previous report findings). However, it is recognised that the site will generate demand for active recreation uses, in particular for children who have the highest participation rates in organised sport.

Address the impact that the future site residents could have on existing open and recreation spaces in nearby centres of Minto, Leumeah and Campbelltown, including if upgrades to these spaces is required

Assess if the open space provided on the site will meet the needs of the future residents

Active open and recreation spaces in Leumeah, Minto, and Campbelltown were identified in the previous report. Details of the capacity and quality of these spaces is not publicly available. However:

- » It is understood that active spaces used by sporting organisations during weeknights and on weekends can be limited in their capacity for 'turn up and play' informal active recreation

- » Council does not have a benchmark for court provision but does have a limited current and projected supply of hard courts (based on multi-purpose indoor court supply at Minto Indoor Sports Centre).

It is recommended that consideration be given to some off-site enhancement of active recreation space which could be in the form of contribution towards the provision of a half court in a nearby location such as Hollylea Reserve or other appropriate enhancement to that space that could help to address active recreation needs. It is noted that Campbelltown City Council does not have a standard for the provision of outdoor courts although a shortage of courts in the LGA is identified in the 2017 Campbelltown Sport & Recreation Strategy (2016 – 2036). As a reference, the City of Parramatta's recent Community Infrastructure Strategy – Outdoor Recreation Network (2020) adopts a standard for outdoor courts of 1 court per 10, 000 people. The estimated population of the Hollylea Road proposal would, using the Parramatta standard, generate demand for approximately one quarter of one court.

There is the opportunity for additional recreation spaces to be provided on site in addition to the public promenade/active corridor. A quality outdoor fitness area could be incorporated along the Creek promenade providing both free equipment supporting the health and wellbeing of the community but also helping to activate the space. In addition play spaces are suggested for both the northern linear green space (mixed use area) and a smaller one in one of the cross-site public open spaces.

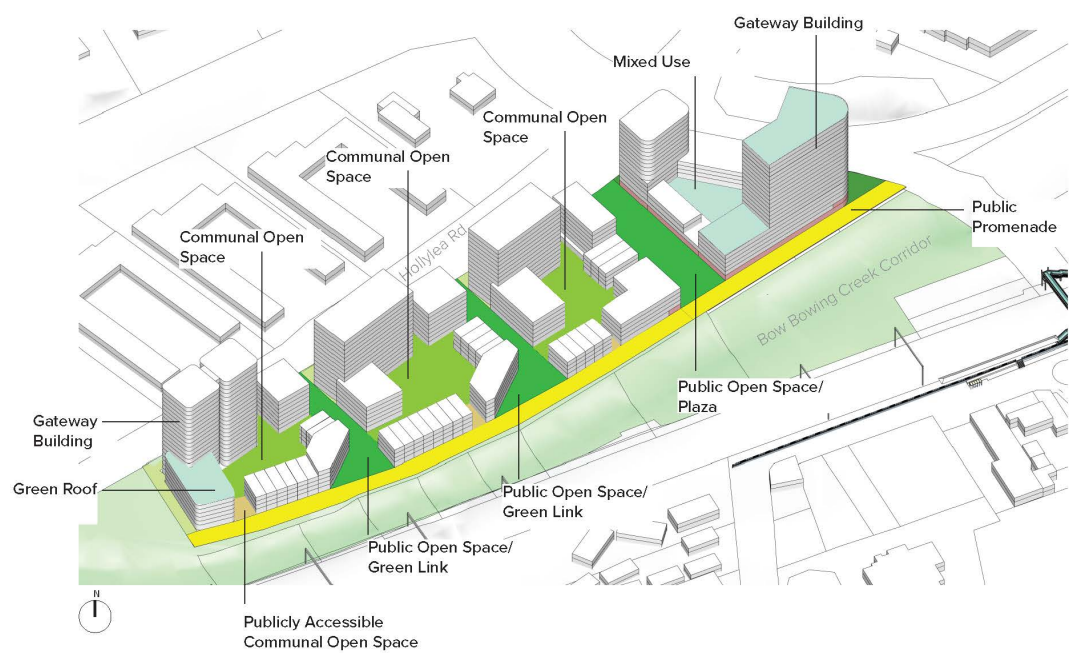
Character of promenade

At 30% of the total site area, the quantity of open space is considered sufficient and in excess of recognised standards. As well as quantity, the quality of provision has been a key focus of the Design Panel discussion and subsequent work by HATCH RobertsDay. This discussion and further work has focussed on the quality of spaces and the provision of a range of experiences for residents of the site and the wider community. Some of the key elements of this work that has been incorporated into the revised design has included:

- Human scale along corridor to create the vibrancy, surveillance and social connection that help to activate public spaces for multiple users
- Active frontage and the completion of an active green link along the creek corridor
- The inclusion of quieter, more contemplative spaces to provide some respite for residents and others who want to utilise the space for its calming and restorative benefits.

The addendum is based on the following concept design

FINAL CONCEPT DESIGN



Open space provision calculations for the site (2022)

The site		
Number of dwellings	1,245 dwellings	
Potential population	2,366 people	
Total land area (2A Hollylea Rd + 5-7 Plough Inn Rd)	37,397sqm	
Public open spaces	Area (sqm)	Proportion of site (%)
Gateway space	1,372	3.5%
Public plaza	2,687	7.5%
Public promenade	4,185	11.0%
Public open space (mid)	1,705	4.5%
Public open space (lower)	1,405	3.5%
<i>Subtotal: Public open spaces</i>	<i>11,354</i>	<i>30%</i>
Communal open spaces (for residents of the site)		
Green roof	2,775	7.4%
Ground floor communal open space	6,575	17.6%
Publicly accessible space along creek	400	1.1%
<i>Subtotal: Private open spaces</i>	<i>9,750</i>	<i>26%</i>
TOTAL	21,104	56% (48% at ground level - not including green roof)

Source: HATCH RobertsDay October 2022

Executive summary

This Open Space and Recreation Analysis has been prepared in response to Campbelltown City Council's *Request for Additional Information 4 October 2019* for the *Planning Proposal, Urban Design Report – Leumeah 2019* to rezone Hollylea Road, Leumeah.

This report responds to Council's request for the revised Planning Proposal to incorporate:

- » **Demographic character:** The potential future population of the site, including residents and workers, as well as surrounding Leumeah town centre.
- » **Sport and recreation:** Integration of leading industry benchmarks and standards aligned to sport and recreation trends, planning and provision.
- » **Active recreation participation:** Incorporation of active recreation participation data for Campbelltown City local government area (LGA) and potential connections between the site and existing surrounding active recreation infrastructure.
- » **Open space opportunities:** Potential for the site to contribute to open space and recreation in the Glenfield to Macarthur Urban Renewal Corridor, with direction from Council's open space, recreation and connections planning, as well as embellish and transform Bow Bowling Creek with planting and active corridors.
- » **Bow Bowling Creek:** Widen narrower sections of Bow Bowling Creek, creating a consistent width of approximately 55m.

Key elements of the revised Planning Proposal masterplan relevant to this report are:

- » Continuing to be mixed residential and commercial development
- » Continuing to offer private open spaces for residents
- » Offering more public spaces and public active connections
- » An alternative strategy to Council's request for a consistent 55m width to Bow Bowling Creek: The Widening of Bow Bowling Creek – The Public Promenade, which Council has expressed comfort with.

Summary of response to Campbelltown City Council

Section 7 of this report provides a detailed response to Campbelltown City Council's request. In summary, the revised *Planning Proposal, Urban Design Report – Leumeah July 2020* masterplan incorporates:

Demographic character:

- » The variety and sizes of private and public open spaces on site will be able to accommodate a diversity of local passive and unorganised active recreation activities for residents and the community, facilitating utilisation by diverse household types and age groups.
- » The diversity of sizes and scales in the communal open spaces provides a foundation for diverse recreation types and amenities (such as a playground), for different household types in the site.
- » The public plaza is 'designed for people' and will support social interaction among residents and the Leumeah community, fostering social connections among culturally diverse groups.
- » The public plaza and public open space will provide accessible (within 400m) high-quality open space for workers to spend time, which should be enhanced with supporting infrastructure for passive and unorganised recreation activities.

Sport and recreation:

- » Considering Council's recommendation for sporting grounds, the location, access and scale of the site is unlikely to meet requirements for the provision sport and recreation spaces and facilities.

- » Linear active travel and recreation space act as an unimpeded public extension of the public promenade, providing space for activities, passive surveillance and community connection (resident and surrounding community) without disturbing the active mobility.
- » The public open space offers opportunities for small gatherings, a play ground and outdoor fitness activities.
- » Open space for future residents is provided predominantly at ground level, but also supplemented on the roof top of some residential buildings on the site (the location and configuration of roof top open space is subject to later detailed design as it is part of the private block). The DCP being prepared by RoberstDay, in conjunction with the revised PP, outlines requirements for the balance between privacy and activation in open space on the site
- » Health and fitness facilities will be accessible from this area and connect with the public promenade, which will provide a public active corridor.
- » The size, function and design of break-out spaces will provide human-scale spaces for community interaction and small gatherings, with passive surveillance making spaces feel safe and activated.

Active recreation participation:

- » The location, access and scale of the site is unlikely to meet Council's requirements for the provision sport and recreation spaces and facilities.
- » The variety and sizes of private and public open spaces on site will be able to accommodate a diversity of local passive and unorganised active recreation activities for residents, facilitating utilisation by diverse household types and age groups.
- » The activation of Bow Bowling Creek as an active linear corridor will contribute a significant component of links to regional cycleway and pedestrian connections, and local, district and regional open and recreation spaces.

Open space opportunities:

- » Open spaces on the site have been designed and located so residents, workers and visitors experience the connection from urban to natural spaces and can move between them safely and freely.
- » The size and quantity of frontage spaces breaking off the public promenade increases connection to Bow Bowling Creek and encourages people to walk further, spend more time outside and facilitates community interactions.
- » Future residents will have access to diverse options for spending time, recreation and gatherings, both locally in the public plaza and open spaces on the site as well as by connections to surrounding open and recreation spaces established by the public promenade / Bow Bowling Creek.

Bow Bowling Creek:

- » Areas allocated as public open space within the site could be delivered in two ways, depending on Council's desire to take on and maintain as an asset:
 - > Zoned RE1 - All open space (as defined by the *Planning Proposal, Urban Design Report – Leumeah July 2020* masterplan)
 - > Zoned RE1 - Corridor Widening and Public Open Space.
- » An adequate supply of local public open space is provided on the site (20%).
- » Residents will be able to access public and private open space (approximately 13,300sqm), and the wider community will be able to access all public open spaces (5715sqm).
- » The widening of Bow Bowling Creek - public promenade will establish stronger active links to surrounding open and recreation spaces (local, district and regional) for residents of the site and the wider Campbelltown LGA community.

1 Introduction

This Open Space and Recreation Analysis (report) responds to Campbelltown City Council's (Council) *Request for Additional Information 4 October 2019* for the *Planning Proposal, Urban Design Report – Leumeah 2019* (the PP 2019) to rezone Hollylea Road, Leumeah (the site).

The PP has been prepared by RobertsDay, in collaboration with Michael Brown Planning Strategies Pty Ltd (Michael Brown Pty Ltd). Michael Brown Pty Ltd is managing the interests of the five existing private landowners on the site.

The site, shown in **Figure 1** below, is a land area of 28,520sqm. Council also owns a portion of land which adjoins the south western edge of the site. Council-owned land is not considered in this report.

Figure 1 The site



Source: Googlemaps, 2019

PP 2019

Council completed a preliminary assessment of the PP 2019 for the site, which has informed their *Request for Additional Information 4 October 2019*. Features of the PP 2019 relevant to this report are:

Mixed residential and commercial development

- » Approximately 980 apartment dwellings, with a combination of one, two and three bedrooms.
- » Density ranging from medium to high (80% of the buildings will be 10 storeys or less).
- » Up to 7,850 square meters (sqm) of commercial floor space, with a retail façade bordering the public plaza (see below) and including health food and speciality wellness shops.

Private open spaces for residents

- » Open and green spaces, approximately 3,760sqm combined, dispersed between the residential buildings, suitable for smaller gatherings, play, and outdoor health and fitness (e.g. tai chi, individual workouts)
- » A green roof, located on buildings along the north eastern edge of the site, approximately 4,090sqm, for group socialising or gathering, as well as relaxing or spending time in spending time in quiet.

Public spaces and active connections

- » A north facing, landscaped public plaza, up to 1,500sqm, interfacing with ground level retail
- » A public pedestrian and/or cycle connection from Hollylea Road to Bow Bowing Creek, feeding off the public plaza
- » A public promenade, up to 400m long (minimum 5m wide), extending between the site and Bow Bowing Creek.

The PP 2019 masterplan is provided in **Figure 2** on the following page.

Figure 2 PP 2019 masterplan for the site



Source: RobertsDay *Planning Proposal, Urban Design Report – Leumeah* 2019

Report purpose

Council requires that the next submission of the PP 2019 quantities the need for public open space likely to be generated by the future resident and worker capacity of the site.

This report responds to Council's recommendation for the revised PP to incorporate:

- » **Demographic character:** The potential future population of the site, including residents and workers, as well as surrounding Leumeah town centre.
- » **Sport and recreation:** Integration of leading industry benchmarks and standards aligned to sport and recreation trends, planning and provision.
- » **Active recreation participation:** Incorporation of active recreation participation data for Campbelltown City local government area (LGA) and potential connections between the site and existing surrounding active recreation infrastructure.
- » **Open space opportunities:** Potential for the site to contribute to open space and recreation in the Glenfield to Macarthur Urban Renewal Corridor, with direction from Council's open space, recreation and connections planning, as well as embellish and transform Bow Bowling Creek with planting and active corridors.
- » **Bow Bowling Creek:** Widen narrower sections of Bow Bowling Creek, creating a consistent width of approximately 55m

This report- responds to Council's request for an Open Space and Recreation Analysis, to inform a revised *Planning Proposal, Urban Design Report – Leumeah May 2020 (the revised PP)*.

Report structure

The following report is structured to respond directly to Council's *Request for Additional Information 4 October 2019*, in correlation with the revised PP. It includes the following sections:

- » **Section 2: Site masterplan**

An overview of the public and private open space elements of the preferred masterplan option, including incorporation and design responses to Bow Bowling Creek.

- » **Section 3: Demographic character**

High level analysis of current (2020) and projected resident population household and dwelling characteristics for Leumeah, compared to Minto, Campbelltown (suburb) and Campbelltown City LGA.

Utilisation of comparable current and projected household and dwelling data to inform an estimated resident population number and composition for the site.

- » **Section 4: Sport and recreation**

High level review of current Council, and other relevant, open space and recreation plans and strategies, and high level overview of open space and recreation trends.

- » **Section 5: Active recreation participation**

A snapshot of trends in active recreation participation and preferences at state level, and high level analysis of active recreation participation data for Campbelltown LGA.

- » **Section 6: Open space opportunities**

High level review of existing local, district and regional active recreation spaces in Leumeah and incorporation of shifting consideration of active corridors as contributors to open space networks.

- » **Section 7: Response summary**

A summary of the relevant masterplan elements and key findings of this report, which respond to Council's *Request for Additional Information 4 October 2019*.

2 Site masterplan (preferred)

The revised *Planning Proposal, Urban Design Report – Leumeah July 2020* has been prepared in response to Council's *Request for Additional Information 4 October 2019* and in collaboration with Council.

The preferred site masterplan in the revised PP is provided in **Figure 3** below.

Figure 3 Preferred site masterplan, revised PP



Source: RobertsDay *Draft Planning Proposal Urban Design Report* July 2020

Key elements of the revised PP masterplan relevant to this report are:

Continuing to be mixed residential and commercial development

- » Approximately 895 apartment dwellings, with a combination of one (30%), two (60%) and three bedrooms (10%).
- » Density ranging from medium to high (80% of the buildings will be 10 storeys or less).
- » Up to 6,205 square meters (sqm) of commercial floor space, with a retail façade continuing to border the public plaza and commercial options to include health food and speciality wellness shops.

Continuing to offer private open spaces for residents

- » The retention and reconfiguration of communal open and green spaces, approximately 3,525 sqm combined, dispersed between the residential buildings, suitable for smaller gatherings, play, and outdoor health and fitness (e.g. tai chi, individual workouts)
- » The retention and reconfiguration of a green roof, located on buildings along the north eastern edge of the site, approximately 4,108sqm, for group socialising or gathering, as well as relaxing or spending time in spending time in quiet.

Offering more public spaces and public active connections

- » There are two options for open space in the site, public open spaces that can be accessed by all members of the public (the public plaza, public open space and the public promenade) and private open spaces for sue by future residents on the site (the green Roof and communal open space)
- » The redevelopment of the public plaza with public open space, approximately 3,105sqm, entering in from Hollylea Road at the northern corner of the site, providing an open connection to the public promenade and larger space for passive and active recreation activities
- » The enhancement of the public promenade, approximately 2,608sqm, extending the length of the site along Bow Bowling Creek and into the public open space, providing an active corridor and contributing to the larger active corridor network as well as enabling community connection to Bow Bowling Creek.

The positioning of public and private open spaces across the site is shown in **Figure 4** below.



Request for consistent width of approximately 55m along Bow Bowling Creek

During the writing of this report, RobertsDay prepared an alternative strategy to Council's request for a consistent 55m width to Bow Bowling Creek: **The Widening of Bow Bowling Creek – The Public Promenade.**

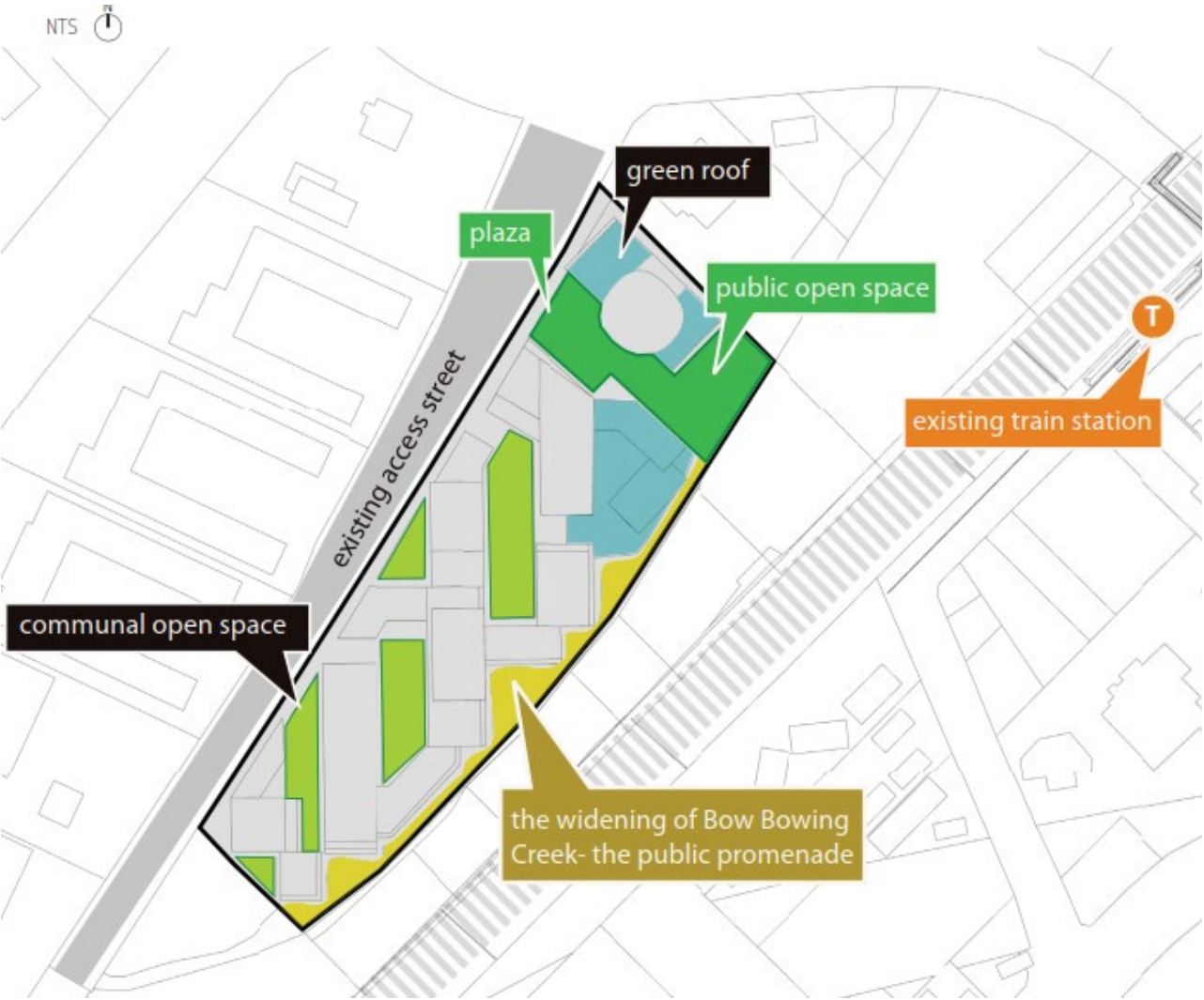
This alternative strategy creates a variation in width across the corridor length and integrates a publicly accessible open space as an extension of the Public Promenade. Overall, the alternative results in a greater amount of total public space, and public spaces of adequate size to accommodate activities in conjunction with active mobility.

Following a workshop between Council and RobertsDay where the alternative strategy was presented, Council confirmed they are 'comfortable with having a portions of creekside open space corridor in public ownership and a portion in private ownership (provided that unimpeded public access is allowed over the private portion).'

Source: Council email from dated 1 May 2020.

A key challenge for the provision of public open space along Bow Bowling Creek will be flooding events. Design intervention (e.g. stepped layers) and supporting infrastructure (e.g. high volume drainage) will be crucial in ensuring that public spaces remain accessible in flooding events, ensuring community access at all times.

Figure 4 Revised PP open space configuration



Source: RobertsDay 23 June 2020

3 Demographic character

The potential future population of the site, including residents and workers, as well as surrounding Leumeah town centre.

3.1 Current population

A demographic investigation of the current (2020) and projected (2036) populations of Leumeah, Minto, Campbelltown (suburb) and Campbelltown local government area (LGA) was undertaken using Forecast.id *Campbelltown City Council* (November 2017 data set).

Demographic data is provided in **Appendix A**.

Population size and diversity

Leumeah has a current population of 10,273 people (2020), accounting for close to 6% of the total Campbelltown LGA population (175,527 people in 2020).

Close to 3,000 people of the current Leumeah population were born overseas (2016). This represents almost 30% of the total Leumeah population (2016). The top four countries of birth, other than Australia, are:

1. United Kingdom (4.0%)
2. New Zealand (3.1%)
3. India (2.6%)
4. Philippines (2.6%).

Dwellings and households

There are 3,880 dwellings in Leumeah, accounting for close to 7% of all dwellings in Campbelltown LGA (2016). Separate or standalone dwellings are the dominant dwelling type (75%, 2016), with some town house or terrace style (20%, 2016). There is minimal to no high density in Leumeah (5%, 2016).

There are approximately 3,800 households in Leumeah (2020). Almost half are currently family households with children (couples and single parents, 46% in 2020), followed by couples without children (26% in 2020) and lone persons (22% in 2020).

Approximately 25% of people in Leumeah are within the parents and homebuilders and young workforce age ranges (35-49 years, and 25 to 34 years, 2020).

Workforce characteristics

In 2016, the dominant occupations in Leumeah, Minto and Campbelltown (suburb) were:

- » Clerical and administrative
- » Professionals
- » Technical and tradesman
- » Machinery operators and drivers.

The strongest industries of employment across all three areas were health care and assistance, retail trade and manufacturing.

3.2 Future projections

Population growth

Leumeah is projected to experience minimal growth in population number (roughly 1,000 people), representing approximately 1% of the total population growth of Campbelltown LGA (close to 115,000 people). However, proportionally Leumeah represents significant growth.

An increase of population of approximately 1,100 people represents more than 10% growth for Leumeah from 2020 (10.4%). Leumeah's growth is projected to be slightly lower than Minto (approximately 2,000 people by 2036) and significantly lower than Campbelltown suburb (close to 60% on 2020 population, approximately 18,500 people).

Projected population growth is shown in **Table 1** below.

Table 1 Population growth and change, 2020-2036

Suburbs	2020	2026	2036	Change 2020-2036	
				No.	%
Leumeah	10,273	10,684	11,309	+1,173	+10.4%
Minto	14,088	14,438	14,845	+1,989	+13.4%
Campbelltown suburb	16,516	22,723	31,427	+18,582	+59.1%
Campbelltown LGA	175,527	212,002	275,778	+114,370	+65.2%

Source: Forecast.id, Campbelltown City Council, November 2017

Dwelling and household projections

Leumeah has minimal existing high density dwellings (e.g. flats, units), only 173 dwellings of 3,880 in the suburb (4.5%). The average household size of Leumeah is 2.7 persons/household (2016). In high density dwellings the average household size is slightly lower than the average, 2.0 persons/households (2016).

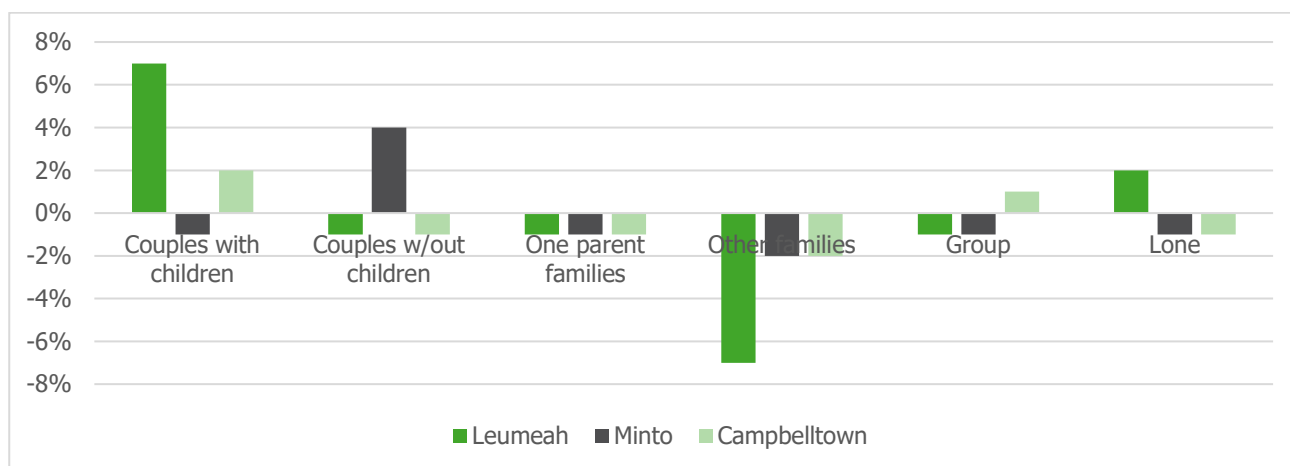
By 2036, close to 490 new dwellings are projected for Leumeah (4,368 dwellings by 2036), the average household size is projected to remain 2.7 persons/households. In 2036, couples with children and couples without children will increase most in actual number (675 and 265 households), followed by lone persons (125 households).

Families with children (couples and single parents) are predicted to represent approximately 25% of the total population, a proportional decrease. However, this is due to a decrease in the representation of single parent families. Couples with children and lone person households are estimated to increase proportionally (by approximately 7% and 2%).

Leumeah is also predicted to have similar proportional representations in both couple with children and lone person households to Minto (approximately 38% and 15%), and higher than Campbelltown suburb (approximately 28% and 14%) in 2036.

Change in household types (proportionally) is shown in **Figure 5** on the following page.

Figure 5 Proportion of household type change, 2020-2036



Source: Forecast.id, Campbelltown City Council, November 2017

Age groups

The greatest increase in age groups (actual and proportional) in Leumeah is projected for seniors (70-84), predicted to represent almost 20% of total population growth up to 2036. Combined, young people (between 18 to 34 years), may account for almost 30% (312 people) and parents and homebuilders (35-49 years) are expected to increase (+110) in number but represent a lower proportion of the population (-1%).

Compared to Leumeah, the majority of Minto's growth will be seniors (close to 28% of total population growth 2020-2036), and Campbelltown suburb's young workforce and parents and homebuilders will increase most (almost 34% of total population growth 2020-2036).

Change in age groups is shown in **Table 2** below.

Table 2 Change in age groups, 2020-2036

Service age groups	Years	2020			2020-2036 change			
		Leumeah			Minto		Campbelltown	
		No.	No.	%	No.	%	No.	%
Babies	0-4	792	+55	-0.2	-70	-0.9	+1,418	+1.2
Primary school	5-11	931	+75	-0.2	-34	-0.4	+1,512	+1.3
Secondary school	12-17	771	+53	-0.2	+156	+0.7	+931	0.0
Tertiary education	18-24	933	+146	+0.4	-28	-0.7	+1,565	-1.2
Young workforce	25-34	1,607	+166	+0.1	-62	-1.3	+3,102	+0.3
Parents and homebuilders	35-49	2,007	+110	-0.8	+22	-0.9	+3,083	+0.7
Older workers and pre-retirees	50-59	1,202	+124	0.0	+50	-0.2	+1,511	+0.5
Empty nesters and retirees	60-69	1,064	+21	-0.8	+58	-0.1	+809	-0.7
Seniors	70-84	871	+217	+1.1	+550	+3.5	+755	-2.2
Elderly aged	85+	95	+68	+0.5	+60	+0.4	+226	-0.2

Source: Forecast.id, Campbelltown City Council, November 2017

3.3 Site masterplan population projections

Estimated household size and resident population

This report assumes an average household size of 1.9 persons/dwelling in the site.

This has been developed applying the comparative household size for Campbelltown suburb and understanding that Leumeah is currently and projected to remain comprised of family households with children (approx. 50% in Leumeah, approx. 40% in Campbelltown suburb in 2036).

Applying an average household size of **1.9 persons/household** generates a potential population of **1,700 people in 895 dwellings**. The estimated 895 dwellings on the site would result in a significant increase in the number of dwellings projected for Leumeah, approximately doubling the estimated dwelling increase, and all in one dwelling type (apartments).

The delivery of high density dwellings on the site would create a higher representation of this dwelling type in Leumeah (approximately 21%). This could alter the dwelling composition for the suburb and potentially have implications for average household size. Dwelling scenarios without and with the site are summarised below in **Table 3**.

Table 3 Change in proportional representation of dwellings in Leumeah

Dwelling types	Without the site			The site	
	Current % 2016	Current no. 2016	Projected no. 2036	Projected no. Up to 2036	Projected % Up to 2036
Low	75%	2,865	3,290	3,290	62%
Medium	20%	772	874	874	17%
High	5%	172	218	1,113	21%
Total dwellings		3,880	4,368	5,277	

Source: Forecastid. Campbelltown, November 2017 and RobertsDay, June 2020

Projections based on the site dwelling yield creates a similar dwelling number and composition in future Leumeah to current Campbelltown suburb (2016). The average household size is 2.4 people/household, which incorporates 1.8 persons/high density dwelling (2016). This is shown in **Table 4** below.

Table 4 Comparable dwelling composition and household size

Dwelling types	Campbelltown suburb			The site
	Current no. 2016	Current % 2016	Average HH size	Projected %. Up to 2036
Low	2,817	52%	2.9	62%
Medium	1,494	28%	1.9	17%
High	1,002	19%	1.8	21%

Source: ABS Campbelltown SSC community profile, 2016

Potential workforce

MacroPlan's *Leumeah Economic Land Use Assessment Addendum Report July 2020* indicates that the site will comprise a combination of retail and non-retail economic activities. Projected activities include:

- » A supermarket and retail specialities
- » Non-retail shopfronts, with possible uses such as real estate agents, travel agents and banks

- » Health and wellbeing services, such as a medical centre and/or allied health and gym
- » Commercial office spaces.

These work spaces reflect the current dominant employment industries of health care and assistance and retail trade in Leumeah, Minto and Campbelltown (suburb). They also reflect current dominant commercial occupations in these locations, being clerical and administrative and professional.

3.4 Implications for open and recreation spaces on the site

- » The future residents on the site will be living in high density, and access to private open space traditionally provided in low and medium housing will need to be adapted and complemented with close access to public open and recreation spaces
- » An increase in the size of Leumeah's current population could result in significant proportional changes, even if the actual population number may seem low. An increase in population in a shorter time period may be experienced more intensely on existing local open and recreation spaces, designed to accommodate a smaller population.
- » The dominant occupations reflect the dominant industries of employment, indicating that people may work close to home, and would therefore may also access spaces, services and facilities close to their residence (local).
- » Open and recreation spaces in the site should provide infrastructure which supports use by families with children and should foster interaction and connection between an increasing proportion of the population living alone.
- » The future resident population is likely to be culturally diverse, so the provision of types of open and recreation spaces and supporting infrastructure will need to consider the unique social and recreational needs of diverse, new and emerging cultures.
- » Proportional growth is expected in older persons (70-84 years) and young people aged between 18 to 34 years of age, who have very different recreation and socialisation needs.
- » Future potential workers in proposed retail and non-retail spaces will require nearby public open space to relax, exercise, social, etc., either during or outside of their working hours.

3.5 Site masterplan demographics

- » The **variety and sizes of private and public open spaces** on site will be able to **accommodate a diversity of local passive and unorganised active recreation activities for residents and the community**, facilitating utilisation by diverse household types and age groups.
- » The diversity of sizes and scales in the communal open spaces provides a foundation for **diverse recreation types and amenities** (such as a playground), **for different household types** in the site
- » The **public plaza is 'designed for people' and will support social interaction** among residents and the Leumeah community, fostering social connections among culturally diverse groups
- » The **public plaza and public open space will provide accessible (within 400m) high-quality open space for workers to spend time**, which should be enhanced with supporting infrastructure for passive and unorganised recreation activities.

4 Sport and recreation

Integration of leading industry benchmarks and standards aligned to sport and recreation trends, planning and provision.

4.1 Council plans and strategies

The following section has been informed by:

- » Council's *Campbelltown Sport and Recreation Strategy 2016 – 2036*, developed by Otium Planning Group (2017)
- » Council's *Campbelltown Open Space Strategic Plan* (2018)
- » Council's *Strategic Planning and Management of Playspaces in the City of Campbelltown 2016 – 2036*, developed by OneEighty Sport & Leisure Solutions (2016)
- » Council's *Campbelltown CSP 2017 – 2027* (2017)
- » Council's *Campbelltown LGA Bicycle Plan* developed by GTA Consultants (2010)
- » Council's *Campbelltown LGA Cycleway Plan* (Map) (2019)

In addition, the following documents were reviewed, due to their strong alignment and influence with Council's plans and strategies:

- » DPIE's *Glenfield to Macarthur Urban Renewal Corridor* (2015)
- » DPIE's *Greater Sydney Outdoors Study Findings* (2019)
- » NSW Government Architect's (GA) Office *Greener Places: Draft Open Space and Recreation Guide* (2018)
- » NSW GA's Office *Greener Places: Draft Urban Tree Canopy Guide* (2018)

Detailed document summaries are provided in **Appendix B**.



Reimagining Campbelltown CBD (2018)

Council's has highlighted the importance of Bow Bowling Creek, as an integral piece of future Campbelltown's 'blue and green grid':

The biggest opportunity is the opening up of the Bow Bowling canal and utilising the increased amenity to create a high quality city core focussed public realm.

By focussing on the enhancement and integration of natural spaces like Bow Bowling Canal, Council is striving to achieve:

- » Greater combinations of public spaces and open spaces and sustainable ecosystems
- » A larger regional concept of the public realm, embedded in high amenity, accessibility along open space corridors, connection into regional recreation opportunities and engagement with wellness
- » A definition of a hierarchy of open space depending on the role and function of the open space type.

Adaptable and multiuse

Recreation trends in Greater Sydney are moving towards more passive and self-directed recreational activities e.g. running, walking, using playspaces, social BBQs etc (DPIE *Greater Sydney Outdoors Study*).

A greater diversity of people is also using open space, which requires open space design consider the different abilities and needs of the people using public spaces. Public and open space are increasingly expected to accommodate a variety of uses, creating concentrations of activity and vibrancy, as well as cost efficiency for their management. (GA Office *Draft Open Space and Recreation Guide*).

Provision rates

Council has adopted an active/sport and recreational spaces provision rate of 1.37ha of active spaces per 1,000 residents (Council's Campbelltown Sport and Recreation). It also has a set of guiding recommendations which consider qualitative as well as quantitative considerations for sporting grounds (see **following section**).

Leumeah is recognised as a Regional Sport Precinct (see section 2.2.3 for more information), aligning with DPIE's vision for a regionally 'sporting, recreation and entertainment precinct' surrounding Campbelltown Stadium (DPIE's Glenfield to Macarthur Urban Renewal Corridor). However, with the exception of the Wests Tennis courts, these recreation spaces are premier and elite athlete level and are not accessible for informal or free public access and use.

While regional active and sporting infrastructure is provided, no local and/or district level active and sporting recreation spaces are provided in Leumeah. Currently, Minto has the only four Council owned indoor sports courts in the LGA (Council's Campbelltown Sport and Recreation) and the distribution of playing fields across the Campbelltown LGA is unequal, indicated by Council's estimation of adequate supply (9ha) in playing fields across the entire LGA. (Council's Campbelltown Sport and Recreation).

District and regional active recreation spaces (e.g. incorporating fields and ovals for sporting codes) require suitable land size and locations to facilitate access, supporting infrastructure (e.g. club rooms and storage) and break out spaces (i.e. warm up areas) to accommodate a cluster of courts and users. Clustering sporting ovals, fields and/or courts with options for passive recreation activities supports the generation of activated and highly utilised open spaces and facilities.

Leumeah also has the second lowest rate of play space provision per population in the Campbelltown LGA, within only three play spaces (1 play space per 3,154 people), including two of which being planned for removal and replacement.

Council recommends 2 neighbourhood and 1 district play spaces, as well as 1 fitness zone next to each play space in Leumeah to meet current undersupply (Council's *State of Play*).

Sporting grounds recommendations

Council's *Campbelltown Sport and Recreation Strategy (2016 – 2036)* includes a series of recommendation for developer contributions and/or delivery of open and sporting spaces. These include a combination of qualitative and quantitative considerations, addressing size, location, visibility, access and surrounding uses.

In summary, open and recreation spaces should be:

- » Accessible by road, bikeway and public transport
- » Contribute to an overall supply rate of around 1.37 ha/1,000 residents (of land that meets provision standards)
- » Square or circular shape, as opposed to a narrow linear shape, to maximise useability, and no boundary should be less than 150m
- » Direct street frontage (to a minimum 50% of the sport park's boundary to promote casual visual surveillance and public access)
- » Road frontage to a major collector or higher order road

- » Playing fields and surfaces should not be subject to regular inundation and generally would be expected to achieve immunity of 20% AEP (annual exceedance probability) or greater
- » On land free of contamination or hazards such as High Voltage Transmission Lines, land fill, or contaminated waste
- » Not situated adjacent to noxious industries or other uses that would be incompatible with high levels of public use
- » On land is situated and/ or developed, to minimise residential conflict from noise or light issues.

4.2 Open space and recreation trends

Open space

DPIE's *Greater Sydney Outdoor Study* June 2019 investigated how people of Sydney use and value open spaces for recreation, and the current and future demand for types of activities to identify gaps.

Common open space aspirations included:

- » More high quality, open spaces supported by good facilities.
- » More opportunities for swimming and water-based activities in the local area.
- » Larger open spaces, to provide greater opportunity for diverse, outdoor recreation activities.
- » Open spaces that assist in building a greater sense of community.
- » Improvements to walking and cycling networks, to help get to outdoor recreation areas without a car.
- » Improvements to existing parks, to ensure they're being well utilised.
- » Protection of existing open spaces and recreational areas for future communities.
- » Open spaces that feel safe and provide for multiple uses.

The most popular activities currently undertaken in open spaces for were passive and included:

- » Walking, hiking, jogging, running (85%)
- » Relaxing in open spaces (77%)
- » Gathering in Open spaces for BBQs and picnics (64%)
- » Visiting playspaces (49%)
- » Walking the dog (34%)

More than half (58%) of participants from Western Sydney areas felt that they had good access to outdoor recreation in the areas they lived. However, over two thirds (66%) would like to see more outdoor recreation in the areas where they live.

When asked what they would like to see more of, Western Sydney participants nominated:

- » More open spaces in the local area, to help increase participation in outdoor recreation
- » Open spaces that assist in building a greater sense of community
- » Higher quality parks, with good facilities
- » Improvements to walking and cycling networks, to enable getting around without a car
- » Protecting existing open spaces and other recreational areas for future communities
- » More opportunities for swimming and water-based activities in the local area
- » Open spaces that feel safe and provide for multiple uses.

Recreation

The Australian Bureau of Statistics (ABS) identifies two classifications of sporting and recreation activities: organised and unorganised. For the purpose this report:

Organised activities: arranged through sporting, non-sporting and recreation clubs and organisations. These activities can take place in outdoor and indoor recreation and sporting facilities, including indoor courts, gymnasiums, outdoor courts and playing fields, as well as park spaces.

Unorganised activities: individualised or group activities not affiliated with clubs or organisations, and not aligned to sporting seasons. These activities can take place along linear corridors, and a variety of open and outdoor spaces, as well as indoor spaces, which accommodate broader public use.

According the ABS *Participation in Sport and Physical Recreation, Australia 2013-14* data, approximately 60% (based on 11.1 million people) reported that they had participated in sport and physical recreation (organised and unorganised) at least once in the 12 months, indicating a slight decrease from 65% over 2011-2012 (based on 11.7 million people). However, less than half had participated in organised sport and recreation (an estimated 5.2 million). This reflects the established trend which indicates that participation in organised sports and recreation is generally stagnating.

Key trends in physical recreation participation and facility use summarised in the Australian Sports Commission's report *The Future of Australian Sport* (Hajkowicz et al 2013) include:

- » A movement from organised, team sports to a focus on individual, unorganised fitness
- » Substantial growth in indoor sport and recreation, and greater demand for indoor facilities
- » Flexibility in the times that people enjoy their recreation, as demands on time increase and work practices change, such as being able to access paces facilities at any time, any day.

ABS *Participation in Sport and Physical Recreation, Australia 2011-12* data found that a wide range of spaces and facilities are used to participate in sport and recreation (based on 11.7 million people). In line with key trends, the spaces and facilities used most often were parks or reserves (40%) followed closely by indoor sports and fitness centres (37%). In addition,

- » Public playing fields and ovals (approx. 30%)
- » Outdoor sports facilities (approx. 25%)
- » Off-road cycleways and bike paths (approx. 25%)
- » School and education facilities (approx. 10%).

4.3 Implications for sport and recreation in the site

- » Open and public spaces should be designed to be multi-use and inclusive and should respond to increasing preferences for passive and self-directed recreation.
- » Council standards for open space and recreation are generally consistent with Government Architect benchmarks.
- » Council has a set of sporting grounds recommendations which incorporate qualitative and quantitative considerations, addressing size, location, visibility, access and surrounding uses.
- » Active recreation supplies are currently adequate across the LGA, but no local and district active recreation spaces are currently available for broader community use in Leumeah and significant undersupply is projected across the Campbelltown LGA by 2036.
- » District and regional active recreation spaces require suitable land size and locations to facilitate access, supporting infrastructure and break out spaces.
- » There is high play space demand in Leumeah and recommendations for play spaces types, with associated fitness stations.

OPEN SPACE AND RECREATION ANALYSIS

- » In Western Sydney, access to quality outdoor spaces that support a variety for passive recreation activities is highly valued
- » Participation in unorganised sporting and recreation activities continues to steadily increase.
- » Open spaces, such as parks and/or reserves are the spaces and facilities used most often for sport and recreation.

4.4 Site masterplan sport and recreation

- » Considering Council's recommendation for sporting grounds, the **location, access and scale of the site is unlikely to meet requirements for the provision sport and recreation spaces and facilities.**
- » **Linear active travel and recreation space act as an unimpeded public extension of the public promenade**, providing space for activities, passive surveillance and community connection (resident and surrounding community) without disturbing the active mobility
- » The public open space offers opportunities for **small gatherings, a play ground and outdoor fitness activities**
- » Open space for future residents is provided predominantly at ground level, but also **supplemented on the roof top of some residential buildings** on the site (the location and configuration of roof top open space is subject to later detailed design as it is part of the private block). The Development Control Plan (DCP) being prepared by RoberstDay, in conjunction with the revised PP, outlines requirements for the balance between privacy and activation in open space on the site
- » **Health and fitness facilities will be accessible** from this area and connect with the public promenade, which will provide a public active corridor
- » The **size, function and design of break-out spaces will provide human-scale spaces** for community interaction and small gatherings, with passive surveillance making spaces feel safe and activated.

5 Active recreation participation

Incorporation of active recreation participation data for Campbelltown City local government area (LGA) and potential connections between the site and existing surrounding active recreation infrastructure.

5.1 Active recreation

Council's *Campbelltown Sport and Recreation Strategy (2016 – 2036)* broadly recognises that areas of anticipated growth in the Campbelltown LGA currently have no sport and recreation facilities (East Leppington, Macarthur, Mt Gilead and Menangle Park. Leumeah does not have any identified local or district sports facilities (according to Council mapping, see **Section 6.1**).

The strategy's demand analysis (based on a projected population of 342,458 residents of Campbelltown in 2036) predicts that all formal active recreation spaces and facilities will be undersupplied by 2036. This is provided in **Table 5** below.

Table 5 Projected active recreation demand in Campbelltown LGA.

Active recreation facilities	Participants	Size (Ha)	Facilities
Field Sports	36,705	243.29	121 playing fields
Indoor Court Sports	14,306	3.00	22 courts
Outdoor Court Sports	16,345	14.25	81 courts
Outdoor Green Sports	1,788	0.40	2 greens
Indoor Sports and Recreation	53,927	4.94	89 activity spaces
Pool Sports and Recreation	21,957	6.00	3 centres
Totals	145,029	271.89	

Source: Council's Campbelltown Sport and Recreation Strategy (2016 – 2036)

Adult recreation

ABS *Participation in Sport and Physical Recreation, Australia 2013-14* data found that seven of the top 10 sport and recreation activities nominated by adults were unorganised.

The top five were also predominately individualised forms of recreation, including walking and cycling which can be accommodated along active or mobility corridors. The remaining sports, soccer/football, athletics and tennis, could include a combination of organised and unorganised activities, in a combination of individual and group sizes:

1. Walking – 43%
2. Fitness/Gym – 33%
3. Swimming – 16%
4. Athletics, track and field – 16%
5. Cycling – 10%
6. Football/ball soccer – 7%
7. Bushwalking – 7%
8. Golf – 6%
9. Tennis – 5%
10. Yoga – 5%.

Children recreation

ABS *Participation in Sport and Physical Recreation, Australia 2013-14* data found that young people aged 15-17 years of age participate most in sport and recreation (74% of 11.1 million people).

The NSW Office of Sport's *Participation in sport and active recreation AusPlay April 2017* results for children's (aged 5-13 years) participation in organised sports and physical activities show that the most popular

activities take place in both outdoor and indoor spaces, but require specific supporting infrastructure (e.g. swimming pool, court or field outlines):

- | | |
|--------------------------------|------------------------------------|
| 1. Swimming – 30% | 6. Netball – 5% |
| 2. Football – 22% | 7. Tennis – 4% |
| 3. Dancing (recreational) – 9% | 8. Athletics. Track and field – 4% |
| 4. Gymnastics – 8% | 9. Basketball – 4% |
| 5. Cricket – 6% | 10. Rugby league – 4%. |

5.2 Implications for active recreation participation on the site

- » Council has estimated an undersupply in all active recreation facilities across the LGA by 2036
- » In Australia, most of the sports and recreation activities undertaken by adults are unorganised, and the top five activities are predominately individualised and linear (e.g. walking, fitness, swimming, cycling)
- » The highest NSW participation rates for recreation among children (aged 5-13 years) indicate that most organised sports and recreation activities can take place indoor or outdoor, but require supporting infrastructure (e.g. swimming pool, court or field outlines).

5.3 Site masterplan active recreation

- » The **location, access and scale of the site is unlikely to meet Council's requirements** for the provision sport and recreation spaces and facilities
- » The variety and sizes of private and public open spaces on site will be able to accommodate a **diversity of local passive and unorganised active recreation activities for residents**, facilitating utilisation by diverse household types and age groups.
- » The **activation of Bow Bowling Creek as an active linear corridor** will contribute a significant component of links to regional cycleway and pedestrian connections, and local, district and regional open and recreation spaces
- » Open spaces on the site have been designed and located so residents, workers and visitors experience the **connection from urban to natural spaces and can move between them safely and freely**
- » The size and quantity of frontage spaces breaking off the public promenade increases connection to Bow Bowling Creek and encourages people to **walk further, spend more time outside and facilitates community interactions**
- » Future residents will have **access to diverse options for spending time, recreation and gatherings, both locally in the public plaza and open spaces on the site as well as by connections** to surrounding open and recreation spaces established by the public promenade / Bow Bowling Creek.

6 Open space opportunities

Potential for the site to contribute to open space and recreation in the Glenfield to Macarthur Urban Renewal Corridor, with direction from Council's open space, recreation and connections planning, as well as embellish and transform Bow Bowling Creek with planting and active corridors.

Widen narrower sections of Bow Bowling Creek, creating a consistent width of approximately 55m: addressed in the alternative strategy for Bow Bowling Creek prepared by RobertsDay (approved by Council in email on 1 May 2019).

6.1 Open spaces

Existing spaces

Local spaces

The following local open spaces and sport and recreation spaces and facilities currently surround the site:

- » Directly opposite on Hollylea Road: Campbelltown City Bowl indoor bowling alley and Funland Oz children's party, play, education and function centre (both privately operated)
- » Directly adjacent, to the north: Leumeah Skate Park (public)
- » North, within 5 minutes drive: Campbelltown Indoor Soccer (privately operated).

The only space for free public use is Leumeah Skate Park. This park has some amenities, including accessible toilets, covered BBQ and lighting.

Local open and recreation spaces surrounding the site are shown in **Figure 6** below.

Figure 6 Local open and recreation spaces



Leumeah Skate Park



Campbelltown Indoor Soccer



Campbelltown City Bowl



Funland Oz

Source: Author's own, Wednesday 8 January 2020

District and regional spaces

Leumeah is positioned within the Department of Planning, Industry and Environment's (DPIE) *Glenfield to Macarthur Urban Renewal Corridor* (2016).

In summary, Leumeah is identified as the regional sports precinct for the corridor. The Leumeah Regional Sports Precinct currently contains the following cluster of elite or premier sporting facilities:

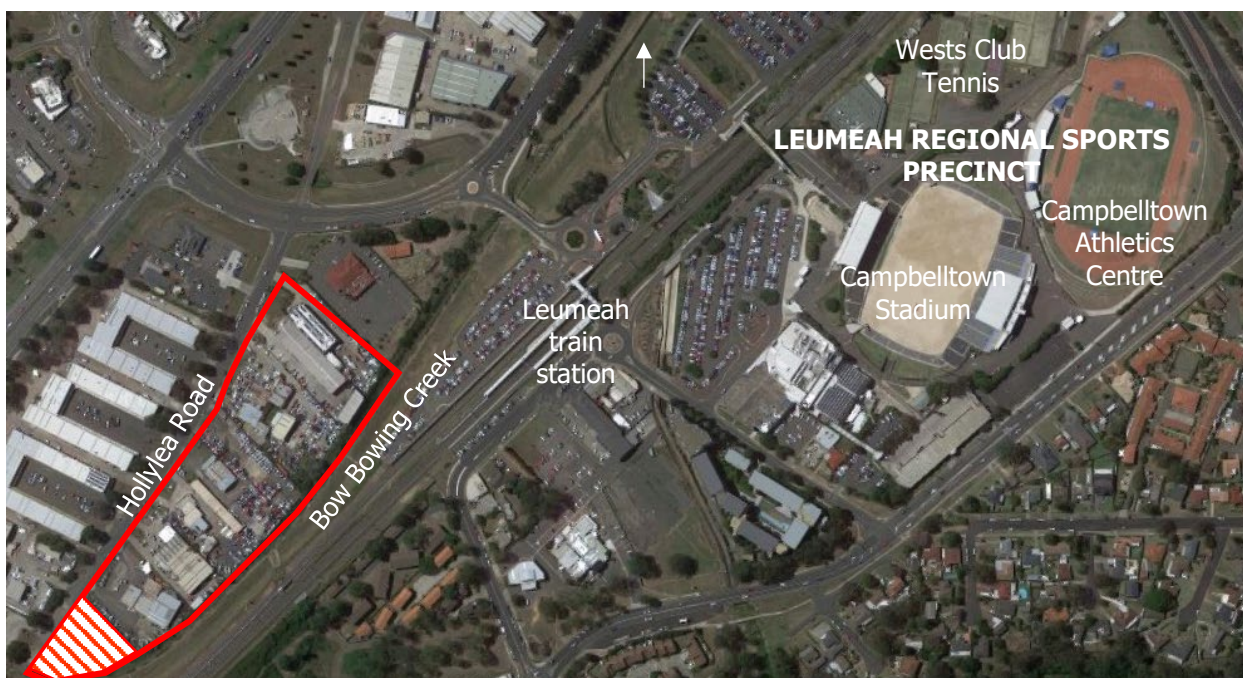
- » The Wests Tennis Club: 14 tennis courts (incl. 1 hard court), owned by Wests Sports Council and operated by the Tennis Macarthur (for organised competitions, lessons and public hire)
- » Campbelltown Stadium: a multi-use stadium (league) for elite sports owned by Council (nominal capacity of 20,000 people) and expected to be upgraded to host national league soccer.
- » Campbelltown Athletics Centre: premier athletics facility owned by Council (nominal capacity of 8,000 people), home to the Campbelltown Collegians Athletics Club and available for hire.

Council's *Campbelltown Sport and Recreation Strategy (2016 – 2036)* highlights the potential loss of 14 tennis courts through the redevelopment of the Wests Leagues Club (within a kilometre of the proposed site). Wests League Club has proposed Victoria Park (behind Campbelltown PCYC) in Minto to be used as a replacement site for the Tennis Courts (5km away from the current site) although Council has yet to determine a location. This new site would include 16 lit tennis courts, 3 basketball/futsal courts, clubhouse and amenities.

Other references to Leumeah include developing shared use agreements with Leumeah High School to utilised indoor court space.

Figure 7 below indicates the position of the Leumeah Regional Sports Precinct in relation to the site.

Figure 7 District and regional open and recreation spaces



Source: Googlemaps, 2019

Outside of the Leumeah Regional Sports Precinct, there are no other district or higher level open and recreation spaces located in Leumeah. District and higher level public open and recreation spaces in the adjacent centres along the corridor (15 mins driving time/5-6 km distance from Leumeah) are:

Campbelltown:

- » Apex Park: open space and two sporting ovals
- » Centenary Park: open space
- » Campbelltown Showground: open space and sporting field
- » Gordon Fetterplace Aquatic Centre: outdoor and indoor pools
- » Hurley Park: open space and sporting oval
- » Waminda Oval: sporting ovals.

Minto:

- » Benham Oval
- » Coronation Park: open space and netball courts
- » Kayess Park: open space and sporting fields
- » Minto Indoor Sports Centre: indoor courts
- » Sarah Redfern Park Fields and Oval
- » Victoria Park: open space and sporting fields.

High quality and high utilisation

Council are committed to providing high quality open space in high density living, associated higher density with a lower provision of private open space and requirement that public open spaces serve a larger range of uses and needs. High quality spaces also encourage greater utilisation, which promotes a range of positive health and social benefits (NSW GA Office *Draft Open Space and Recreation Guide*).

DPIE's Glenfield to Macarthur Urban Renewal Corridor identifies significant amounts of underutilised, low public value open space within the corridor, providing minimal usability for the public and incurring high use-to-maintenance costs (DPIE *Glenfield to Macarthur Urban Renewal Corridor*).

Promoting community

Both the NSW Government and Council recommend enhancements to Leumeah's local centre through public spaces that support community activation. They have identified public spaces as key for social interaction and community building in high density areas, especially when near public transport. (DPIE *Glenfield to Macarthur Urban Renewal Corridor*, Council *Campbelltown Open Space Strategic Plan* and GA Office *Draft Open Space and Recreation Guide*).

There is growing expectation and demand from Campbelltown LGA residents for community spaces. Residents want their public spaces to be more vibrant and liveable, with well activated, connecting them with the larger community (Council *Campbelltown CSP* and the DPIE *Greater Sydney Outdoor Survey*).

Contribute to and embellish the surrounding open space network

Both Local and State government are planning for new open spaces to integrate with the existing, broader network. The provision of complementary open space and recreation uses, identifying and filling gaps within the network and physically connecting spaces through active transport links are recommended (DPIE *Glenfield to Macarthur Urban Renewal Corridor* and Council *Campbelltown Open Space Strategic Plan*).

Leumeah is a part of a cohesive network of open spaces, planned to be connected through a regional active transport link running the length of the Renewal Corridor (DPIE *Glenfield to Macarthur Urban Renewal Corridor*). Campbelltown Council's *Cycleway* map shows the link along proposed and existing bike infrastructure on Plough Inn Road and Campbelltown Road.

Standards and design principles

A general industry standard for public open space provision in high density is 15% of the total land area delivered.

Open space planning standards related to open space elements of the revised PP for the site are:

- » Local open space: designed with more passive use capabilities, no smaller than 0.2ha and within 200m of homes
- » Larger, neighbourhood spaces: allow for multiple and also more active uses (e.g. half-court or fitness infrastructure), no smaller than 0.5ha and 800m from homes.

- » Community focused open spaces: inviting public gathering, include pedestrian friendly streets, outdoor dining, street tree planting and attractive street furniture
- » Active mobility/connections: 30 bike lockers be installed near Leumeah Station, and consider end of ride facilities.
- » Local play spaces: between 0.1 and 0.2ha in size
- » Tree canopy: increase tree canopy from 16.8% to 40% with five million trees by 2030, greater than 25% tree canopy coverage as per medium to high density guidelines.

Source: a combination of Council's *Campbelltown Sport and Recreation, Open Space Strategy* and *Campbelltown Bike Plan* and the GA Office *Draft Open Space and Recreation Guide* and *Draft Urban Tree Canopy Guide*

The GA Office has also developed categories for open space with defined criteria and examples of contextual suitability. Potentially relevant categories for open spaces, based on the PP and associated size requirements are summarised in **Table 6** below.

Table 6 Categories of relevant open spaces

Symbols	Category	Size requirements
LPY	local play for the very young	1,500sqm/play feature 50sqm
LPC	local children's play	1,500sqm/play feature 100sqm
OCA	older children's activity space	5,000sqm/play feature 1,000sqm
YRS	youth recreation space	5,000sqm
LRS	local recreation space	1,500sqm
LCOR	large community outdoor recreation area	1.5ha/500sqm picnic area
FES	fitness and exercise space	0.5ha
TPR	trail and path based recreation	min. 50 mins/4km
DEA	off-leash dog exercise area	400sqm (fenced)/within 5,000sqm

Source: GA Office *Greener Places: Draft Open Space and Recreation Guide* 2017

6.2 Active corridors

Bow Bowling Creek

Bow Bowling Creek is a modified creek canal which runs along the eastern edge of the site.

Along the site edge, Bow Bowling Creek is currently not accessible by the public and does not incorporate any active corridors for pedestrians or cyclists. There is a significant gradient leading down from road or street level into Bow Bowling canal.

Further north, along Airds Road, Bow Bowling Creek is unfenced and accessible. This section of the canal also has better public visibility and vegetation control (most likely due to easy vehicle access for mowing).

There is currently an existing shared pedestrian and cycle route which runs along Airds Road. This route is not continuously sign posted, as there is no signage or identification along Plough Inn Road, but formal signage resumes to the south east of the Precinct on Campbelltown Road, heading towards Campbelltown centre.

Airds Road is a component of the proposed strategic bicycle network in Council's *Bicycle Plan 2010*, linking Leumeah to Macarthur (to the south) and Liverpool (to the north).

Figure 8 on the following page shows Airds Road currently and its positioning along Bow Bowing canal. **Figure 9** provides a visual snapshot of Bow Bowing Creek from the site and from Airds Road.

Figure 8 Airds Road shared pedestrian and cycle path



Source: Author's own, Wednesday 8 January 2020



Source: Council's *Bicycle Plan 2010*

Figure 9 Current Bow Bowling Creek

From the site



Looking south into Bow Bowling Creek, from the southern edge of the site.

from Airds Road



Looking south into Bow Bowling Creek from Airds Road.



The edge of Bow Bowling Creek along the site's eastern edge, from Leumeah train station.



An access road into Bow Bowling Creek.



Looking south into Bow Bowling Creek from the northern edge of the site, the site's eastern edge to the right.



Looking south into Bow Bowling Creek, from the access road off Airds Road.

Source: Author's own, Wednesday 8 January 2020

Contributing to mobility

Providing safe, conveniently accessible and efficient active corridors for pedestrian and cyclists mobility is now a key consideration in integrated transport and centres planning.

Transport for NSW's (TfNSW) *Future Transport Strategy 2056* (2018) identifies that active corridors are a key component of larger transport system planning, supporting TfNSW's objective of sustaining and enhancing the liveability of places through:

- » Convenient walking and cycling options for short trips around centres and local areas, supported by a safe road environment and suitable pathways
- » Supporting the creation of vibrant centres through street networks which balance convenient access and aesthetics.

Active and/or mobile corridors also supports the Greater Sydney Commission's (GSC) 30-minute city vision, supporting travel structures which will facilitate access to work places within 30-minutes from the home.

Council's *Bicycle Plan* indicates that the road and pathway network aligning Bow Bowing Creek is already identified as a strategic route, contributing to active mobility across Campbelltown LGA.

Contributing to open space

DPIE's *Streets as Shared Spaces* program highlights the importance of corridors (pathways, streets, lanes, etc) as essential components of the larger public space network, contributing to:

- » Creating better quality public space
- » Supporting physical distancing requirements and encourage safe social connection
- » Supporting community well-being and ability to exercise
- » Attracting people back into public spaces in a safe way (when deemed appropriate).

Similar to open space planning practice (see **previous**), active corridors require supporting infrastructure and amenity to support equitable, accessible and suitable use by the community. Dimensions (i.e. width and length) and the incorporated spaces are key elements when considering the suitable functions and types of uses for corridors spaces, such as:

- » Sufficient width and indicators/signage for safe shared use by pedestrians and cyclists
- » Lighting to enable use or travel at all times
- » Break out spaces for rest (with seating) or exercise (e.g. fitness stations)
- » The aesthetic, providing an visually appealing place which encourage people to spend time
- » Visibility, enabling passive surveillance and safety for users

6.3 Implications for open space opportunities on the site

- » The provision of high quality public open spaces is a priority for Council, particularly in high density as a supplement for private open and outdoor space.
- » Inclusive, safe and attractive community focused public spaces which serve a variety of needs and create opportunities for community interaction and relationships are highly valued.
- » A connected open space network is a government priority and new open spaces should respond to the quality and types of existing open and public spaces, address gaps where possible and set the tone for the future direction of the wider network.
- » With amenity and access, corridors can contribute to the larger open space network, providing space for socialisation, spending time, recreation and movement.
- » A general industry standard for public open space provision in high density is 15% of the total land area delivered.
- » There are no local, public and free to use active recreation spaces currently surrounding the site, and no local open spaces for passive recreation less than 15 minutes walk or 400m from the site.
- » Outside of the Leumeah Regional Sports Precinct, there are no other district or higher level open and recreation spaces located in Leumeah.
- » Along the site edge, Bow Bowling Creek is currently not accessible by the public and does not incorporate any active corridors for pedestrians or cyclists.

6.4 Site masterplan open space

- » The site masterplan includes a combination of public and private open spaces. Combined, the **total public open space estimated on the site masterplan is 5,715sqm, equating to 20 per cent** of the total site area (28,520sqm). In addition, **7,633sqm of open space is provided for resident use (private use)**, accounting for approximately 27 per cent of the total site.
- » Publicly accessible open spaces in the preferred masterplan option are:
 - > A **public plaza and public open space** entering in from Holylea Road from the northern corner of the site, providing an open connection to the public promenade and larger space for passive and active recreation activities
 - > The **widening of Bow Bowling Creek - public promenade** extending the length of the site provides a new active corridor and contributing to the larger active corridor network, as well as enabling community connection to Bow Bowling Creek.
- » Areas allocated as public open space within the site could be delivered in two ways, depending on Council's desire to take on and maintain as an asset:
 - > Zoned RE1 - All open space (as defined by the Master Plan): zoned open space to give Council and the public confidence that the land will be public and delivered as described. This may be a complicated process and better delivered as an integrated publicly accessible open space associated with the mixed use.
 - > Zoned RE1 - Corridor Widening and Public Open Space: a consistent strip immediately adjoining the corridor plus a creekfront park footprint could be zoned RE1, delivered and maintained privately as residential zoned land, but publicly accessible 24/7. The provision of non-RE1 land enables flexibility in open space character and configuration and would be mandated by minimums in the DCP for the site.

The positioning of public and private open spaces across the site is shown in **Figure 10** in the following pages (previously shown in **Figure 4**). **Figure 11** illustrates the indicative concept design for the public promenade along Bow Bowling Creek.

A general industry standard for public open space provision in high density is 15% of the total land area delivered. Based on this standard:

- » An **adequate supply of local public open space** is provided on the site (20%)
- » **Residents will be able to access public and private open space** (approximately 13,300sqm), and the **wider community will be able to access all public open spaces** (5715sqm)
- » The **widening of Bow Bowling Creek - public promenade will establish stronger active links to surrounding open and recreation spaces** (local, district and regional) for residents of the site and the wider Campbelltown LGA community.

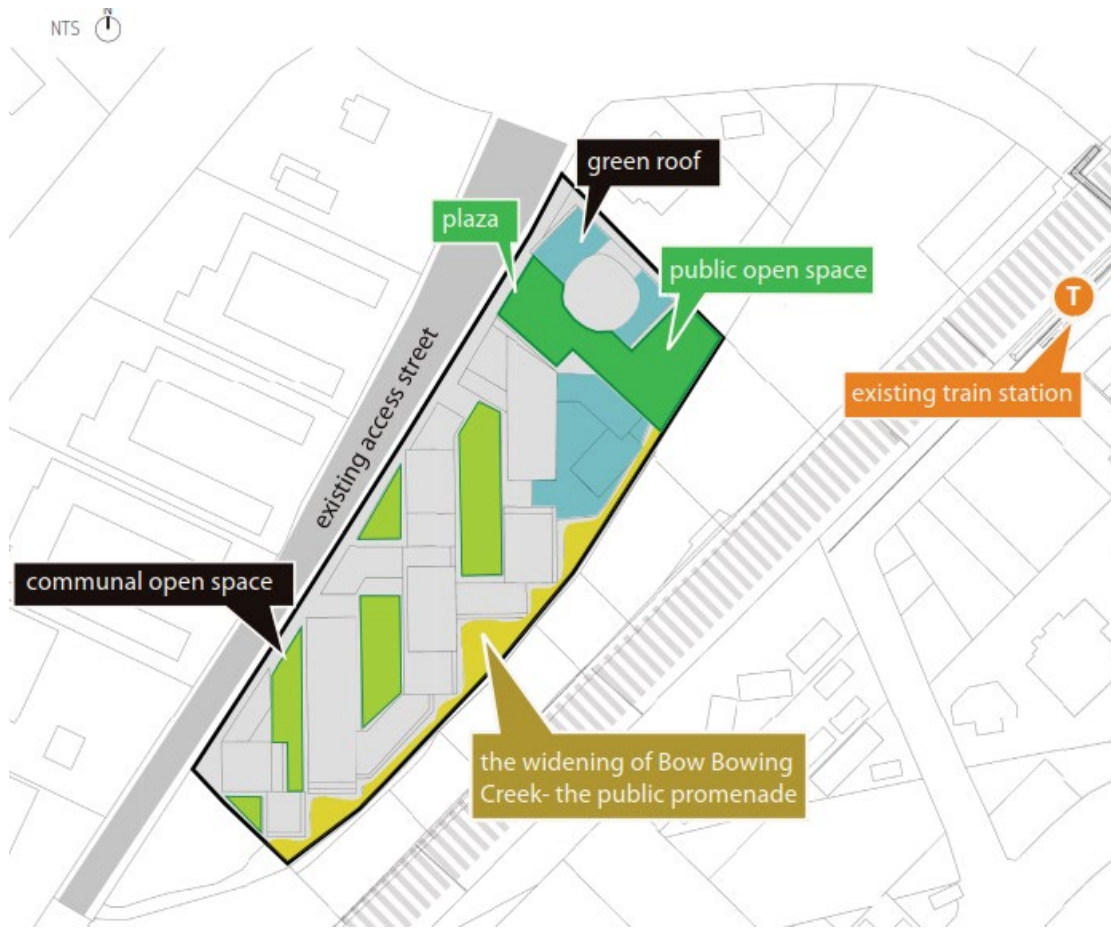
Open space calculations are provided in **Table 7** below.

Table 7 Open space provision calculations for the site

The site		
Number of dwellings	895 dwellings	
Potential population	1,701 people	
Total land area	28,520 sqm	
Public open spaces	Area (sqm)	Proportion of site (%)
Public plaza and open space	3,105	10.9%
Public promenade	2,608	9.1%
<i>Subtotal: Public open spaces</i>	5,715	20.0%
Private open spaces (for residents of the site)		
Green roof	4,092	14.3%
Open spaces between buildings	3,525	12.4%
<i>Subtotal: Private open spaces</i>	7,633	26.8%
TOTAL	13,348	

Source: RobertsDay, 1 June 2020

Figure 10 Public and private open spaces across the site



Source: RobertsDay 23 June 2020

Figure 11 Indicative concept plan for the Public Promenade



Source: HATCH Roberts Day, March 2021

7 Response to Council

Council requires that the next submission of the PP quantifies the need for public open space, likely to be generated by the future resident and worker capacity of the site.

Table 8 on the following page provides a summary of the request for additional information, key findings from this report and representation in the *Planning Proposal, Urban Design Report – Leumeah July 2020*.

Table 8 Summary of response to Council's *Request for Additional Information*

Council request	Key report findings	Revised PP response
Demographic character The potential future population of the site, including residents and workers, as well as surrounding Leumeah town centre.	<ul style="list-style-type: none"> » The future residents on the site will be living in high density, and access to private open space traditionally provided in low and medium housing will need to be adapted and complemented with close access to public open and recreation spaces » An increase in the size of Leumeah's current population could result in significant proportional changes, even if the actual population number may seem low. An increase in population in a shorter time period may be experienced more intensely on existing local open and recreation spaces, designed to accommodate a smaller population. » The dominant occupations reflect the dominant industries of employment, indicating that people may work close to home, and would therefore may also access spaces, services and facilities close to their residence (local). » Open and recreation spaces in the site should provide infrastructure which supports use by families with children and should foster interaction and connection between an increasing proportion of the population living alone. » The future resident population is likely to be culturally diverse, so the provision of types of open and recreation spaces and supporting infrastructure will need to consider the unique social and recreational needs of diverse, new and emerging cultures. » Proportional growth is expected in older persons (70-84 years) and young people aged between 18 to 34 years of age, who have very different recreation and socialisation needs. 	<ul style="list-style-type: none"> » The variety and sizes of private and public open spaces on site will be able to accommodate a diversity of local passive and unorganised active recreation activities for residents and the community, facilitating utilisation by diverse household types and age groups. » The diversity of sizes and scales in the communal open spaces provides a foundation for diverse recreation types and amenities (such as a playground), for different household types in the site » The public plaza is 'designed for people' and will support social interaction among residents and the Leumeah community, fostering social connections among culturally diverse groups » The public plaza and public open space will provide accessible (within 400m) high-quality open space for workers to spend time, which should be enhanced with supporting infrastructure for passive and unorganised recreation activities.
Sport and recreation Integration of leading industry benchmarks and standards aligned to sport and recreation trends, planning and provision.	<ul style="list-style-type: none"> » Open and public spaces should be designed to be multi-use and inclusive and should respond to increasing preferences for passive and self-directed recreation. » Council standards for open space and recreation are generally consistent with Government Architect benchmarks. 	<ul style="list-style-type: none"> » Considering Council's recommendation for sporting grounds, the location, access and scale of the site is unlikely to meet requirements for the provision sport and recreation spaces and facilities. » Linear active travel and recreation space act as an unimpeded public extension of the public promenade, providing space for activities, passive surveillance and community connection

Council request	Key report findings	Revised PP response
	<ul style="list-style-type: none"> » Council has a set of sporting grounds recommendations which incorporate qualitative and quantitative considerations, addressing size, location, visibility, access and surrounding uses. » Active recreation supplies are currently adequate across the LGA, but no local and district active recreation spaces are currently available for broader community use in Leumeah and significant undersupply is projected across the Campbelltown LGA by 2036. » District and regional active recreation spaces require suitable land size and locations to facilitate access, supporting infrastructure and break out spaces. » There is high play space demand in Leumeah and recommendations for play spaces types, with associated fitness stations. » In Western Sydney, access to quality outdoor spaces that support a variety for passive recreation activities is highly valued » Participation in unorganised sporting and recreation activities continues to steadily increase. » Open spaces, such as parks and/or reserves are the spaces and facilities used most often for sport and recreation. 	<p>(resident and surrounding community) without disturbing the active mobility</p> <ul style="list-style-type: none"> » The public open space offers opportunities for small gatherings, a play ground and outdoor fitness activities » Open space for future residents is provided predominantly at ground level, but also supplemented on the roof top of some residential buildings on the site (the location and configuration of roof top open space is subject to later detailed design as it is part of the private block). The DCP being prepared by RoberstDay, in conjunction with the revised PP, outlines requirements for the balance between privacy and activation in open space on the site » Health and fitness facilities will be accessible from this area and connect with the public promenade, which will provide a public active corridor » The size, function and design of break-out spaces will provide human-scale spaces for community interaction and small gatherings, with passive surveillance making spaces feel safe and activated.
<p>Active recreation participation</p> <p>Incorporation of active recreation participation data for Campbelltown local government area (LGA) and potential connections between the site and existing surrounding active recreation infrastructure.</p>	<ul style="list-style-type: none"> » Council is estimated an undersupply in all active recreation facilities across the LGA by 2036 » In Australia, most of the sports and recreation activities undertaken by adults are unorganised, and the top five activities are predominately individualised (e.g. walking, fitness, swimming, cycling) » The highest NSW participation rates for recreation among children (aged 5-13 years) indicate that most organised sports and recreation activities can take place indoor or outdoor, but require 	<ul style="list-style-type: none"> » The location, access and scale of the site is unlikely to meet Council's requirements for the provision sport and recreation spaces and facilities » The variety and sizes of private and public open spaces on site will be able to accommodate a diversity of local passive and unorganised active recreation activities for residents, facilitating utilisation by diverse household types and age groups.

Council request	Key report findings	Revised PP response
	supporting infrastructure (e.g. swimming pool, court or field outlines).	<ul style="list-style-type: none"> » The activation of Bow Bowing Creek as an active linear corridor will contribute a significant component of links to regional cycleway and pedestrian connections, and local, district and regional open and recreation spaces » Open spaces on the site have been designed and located so residents, workers and visitors experience the connection from urban to natural spaces and can move between them safely and freely » The size and quantity of frontage spaces breaking off the public promenade increases connection to Bow Bowing Creek and encourages people to walk further, spend more time outside and facilitates community interactions » Future residents will have access to diverse options for spending time, recreation and gatherings, both locally in the public plaza and open spaces on the site as well as by connections to surrounding open and recreation spaces established by the public promenade / Bow Bowing Creek.
Open space opportunities Potential for the site to contribute to open space and recreation in the Glenfield to Macarthur Urban Renewal Corridor, with direction from Council's open space, recreation and connections planning, as well as embellish and transform Bow Bowing Creek with planting and active corridors.	<ul style="list-style-type: none"> » The provision of high quality public open spaces is a priority for Council, particularly in high density as a supplement for private open and outdoor space. » Inclusive, safe and attractive community focused public spaces which serve a variety of needs and create opportunities for community interaction and relationships are highly valued. » A connected open space network is a government priority and new open spaces should respond to the quality and types of existing open and public spaces, address gaps where possible and set the tone for the future direction of the wider network. 	<ul style="list-style-type: none"> » Areas allocated as public open space within the site could be delivered in two ways, depending on Council's desire to take on and maintain as an asset: <ul style="list-style-type: none"> > Zoned RE1 - All open space (as defined by the Master Plan) > Zoned RE1 - Corridor Widening and Public Open Space » An adequate supply of local public open space is provided on the site (20%)

Council request	Key report findings	Revised PP response
	<ul style="list-style-type: none"> » With amenity and access, corridors can contribute to the larger open space network, providing space for socialisation, spending time, recreation and movement. » A general industry standard for public open space provision in high density is 15% of the total land area delivered. » There are no local, public and free to use active recreation spaces currently surrounding the site, and no local open spaces for passive recreation less than 15 minutes walk or 400m from the site. » Outside of the Leumeah Regional Sports Precinct, there are no other district or higher level open and recreation spaces located in Leumeah. » Along the site edge, Bow Bowing Creek is currently not accessible by the public and does not incorporate any active corridors for pedestrians or cyclists. 	<ul style="list-style-type: none"> » Residents will be able to access public and private open space (approximately 13,300sqm), and the wider community will be able to access all public open spaces (5715sqm) » The widening of Bow Bowing Creek - public promenade will establish stronger active links to surrounding open and recreation spaces (local, district and regional) for residents of the site and the wider Campbelltown LGA community.

Appendices

- A Demographics
- B Document review
- C Context analysis

A Demographics

Number

Leumeah has a population of 10,273 people (2020), accounting for close to 6% of the Campbelltown LGA population (175,527 people in 2020).

Leumeah is projected to experience minimal growth in population number (roughly 1,000 people), representing approximately 1% of the total population growth of Campbelltown LGA (close to 115,000 people). However, proportionally Leumeah represents significant growth. An increase of population of approximately 1,100 people represents more than 10% growth for Leumeah from 2020 (10.4%). Leumeah's growth is projected to be slightly lower than Minto (approximately 2,000 people by 2036) and significantly lower than Campbelltown suburb (close to 60% on 2020 population, approximately 18,500 people).

Suburbs	2020	2026	2036	Change 2020-2036	
				No.	%
Leumeah	10,273	10,684	11,309	+1,173	+10.4%
Minto	14,088	14,438	14,845	+1,989	+13.4%
Campbelltown	16,516	22,723	31,427	+18,582	+59.1%
Campbelltown LGA	175,527	212,002	275,778	+114,370	+65.2%

Population growth and change, 2020-2036 (Source: Forecast.id, Campbelltown City Council, November 2017)

An increase in the size of Leumeah's current population could result in significant proportional changes, even if the actual population number may seem low. An increase in population in a shorter time period may be experienced more intensely on existing local open and recreation spaces, designed to accommodate a smaller population.

Diversity

Close to 3,000 people of the current Leumeah population were born overseas (2016). This represents almost 30% of the total Leumeah population (2016). The top four countries of birth, other than Australia, are:

United Kingdom (4.0%)

New Zealand (3.1%)

India (2.6%) / Philippines (2.6%).

The provision of types of open and recreation spaces and supporting infrastructure will need to consider the unique social and recreational needs of diverse, new and emerging cultures.

Dwelling types

There are 3,880 dwellings in Leumeah, accounting for close to 7% of all dwellings in Campbelltown LGA (2016).

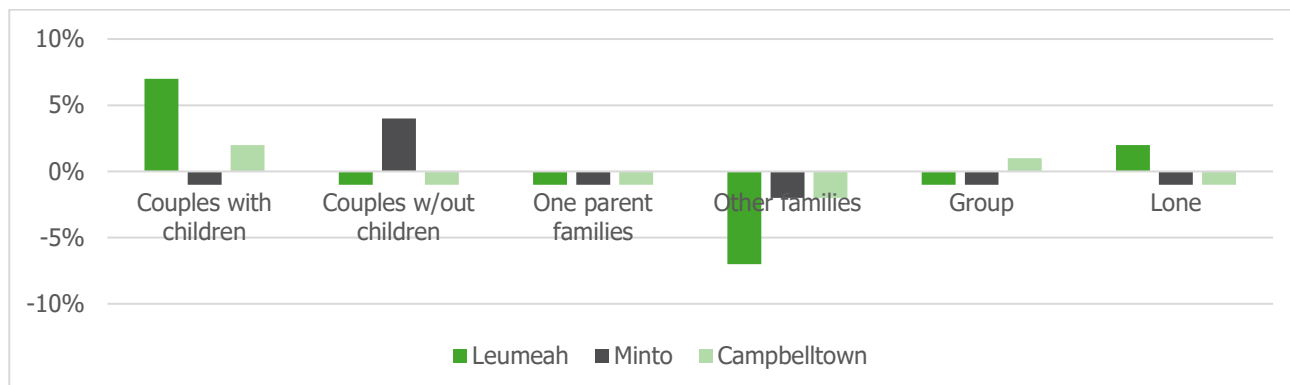
Separate or standalone dwellings are the dominant dwelling type (75%, 2016), with some town house or terrace style (20%, 2016). There is minimal to no high density in Leumeah (5%, 2016).

Provision of higher density housing (apartments) in Leumeah will be a new emerging dwelling type, and the relationship between private and public space can set a precedent for quality public spaces within private residential.

Household composition

There are approximately 3,800 households in Leumeah (2020). Almost half are currently family households with children (couples and single parents, 46% in 2020), followed by couples without children (26% in 2020) and lone persons (22% in 2020).

In 2036, couples with children and couples without children will increase most in actual number (675 and 265 households), followed by lone persons (125 households). Families with children (couples and single parents) are predicted to represent approximately 25% of the total population, a proportional decrease. However, this is due to a decrease in the representation of single parent families. Couples with children and lone person households are estimated to increase proportionally (by approximately 7% and 2%). Leumeah is also predicted to have similar proportional representations in both couple with children and lone person households to Minto (approximately 38% and 15%), and higher than Campbelltown suburb (approximately 28% and 14%) in 2036.



Proportion of household type change, 2020-2036 (Source: Forecast.id, Campbelltown City Council, November 2017)

Open and recreation spaces should provide infrastructure which supports use by families with children, and should foster interaction and connection between an increasing proportion of the population living alone.

Age groups

Approximately 25% of people in Leumeah are within the parents and homebuilders and young workforce age ranges (35-49 years, and 25 to 34 years, 2020).

The greatest increase in age groups (actual and proportional) in Leumeah is projected for seniors (70-84), predicted to represent almost 20% of total population growth up to 2036. Combined, young people (between 18 to 34 years), may account for almost 30% (312 people) and parents and homebuilders (35-49 years) are expected to increase (+110) in number but represent a lower proportion of the population (-1%).

Compared to Leumeah, the majority of Minto's growth will be seniors (close to 28% of total population growth 2020-2036), and Campbelltown suburb's young workforce and parents and homebuilders will increase most (almost 34% of total population growth 2020-2036).

Service age groups	Years	2020	2020-2036 change					
		Leumeah			Minto		Campbelltown	
		No.	No.	%	No.	%	No.	%
Babies	0-4	792	+55	-0.2	-70	-0.9	+1,418	+1.2
Primary school	5-11	931	+75	-0.2	-34	-0.4	+1,512	+1.3
Secondary school	12-17	771	+53	-0.2	+156	+0.7	+931	0.0
Tertiary education	18-24	933	+146	+0.4	-28	-0.7	+1,565	-1.2
Young workforce	25-34	1,607	+166	+0.1	-62	-1.3	+3,102	+0.3
Parents and homebuilders	35-49	2,007	+110	-0.8	+22	-0.9	+3,083	+0.7
Older workers and pre-retirees	50-59	1,202	+124	0.0	+50	-0.2	+1,511	+0.5

OPEN SPACE AND RECREATION ANALYSIS

Empty nesters and retirees	60-69	1,064	+21	-0.8	+58	-0.1	+809	-0.7
Seniors	70-84	871	+217	+1.1	+550	+3.5	+755	-2.2
Elderly aged	85+	95	+68	+0.5	+60	+0.4	+226	-0.2

Change in age groups, 2020-2039 (Source: Forecast.id, Campbelltown City Council, 2019) / Number and proportion of people in age groups in Leumeah, 2020 (Source: Forecast.id, November 2017)

Growth is expected in older persons (70-84 years) and young people aged between 18 to 34 years of age, who have very different recreation and socialisation needs.

B Document review

Campbelltown Sport and Recreation Strategy (2016 – 2036)

Author: Otium Planning Group

Published: May 2017

Purpose: This strategy aims to 'deliver a comprehensive and prioritised plan for future development and management of sport and rec facilities in Campbelltown till 2036'.

Within Council's document hierarchy, it sits under the Operational Plan and alongside the Open Space Strategy. An Outdoor Recreation Strat and aquatics strategy will be built off the Sport and Rec Strategy

The strategy worked off a four-stage framework of research, engagement, analysis and recommendations and was guided by the principles of:

- » Sustainable
- » Accessible
- » Adaptable
- » Increase active participation

This Strategy assumes that there will be 342,458 residents of Campbelltown in 2036. It broadly recognises that areas of anticipated growth currently have no sport and recreation facilities (East Leppington, Macarthur, Mt Gilead and Menangle Park. Leumeah is mentioned only a handful of times and also does not have any identified sports facilities (according to their mapping).

The strategy's demand analysis is based off this population projection and developed the table below.

Facility Groups	Participants	Size (Ha)	Facilities
Field Sports	36,705	243.29	121 playing fields
Indoor Court Sports	14,306	3.00	22 courts
Outdoor Court Sports	16,345	14.25	81 courts
Outdoor Green Sports	1,788	0.40	2 greens
Indoor Sports and Recreation	53,927	4.94	89 activity spaces
Pool Sports and Recreation	21,957	6.00	3 centres
Totals	145,029	271.89Ha	

The sports infrastructure in Leumeah is currently 14 Tennis Courts and the Wests League Club and the Skate Park at the corner of Campbelltown Road and Plough Inn Road.

The strategy highlights the potential loss of 14 tennis courts through the redevelopment of the Wests Leagues Club (within a kilometre of the proposed site). Wests League Club has proposed Victoria Park (behind Campbelltown PCYC) in Minto be used as a replacement site for the Tennis Courts (5km away from the current site) although Council has yet to determine a location. This new site would include 16 lit tennis courts, 3 basketball/futsal courts, clubhouse and amenities.

Other references to Leumeah include developing shared use agreements with Leumeah High School to utilised indoor court space.

Tennis New South Wales

Tennis New South Wales provided the following advice:

The projection of population to courts ratio contained in the NSW State Master Plan for the Campbelltown City Council is as follows:

- » 2010: 3,180

- » 2015: 3,381
- » 2020: 3,585
- » 2025: 3,789

In a NSW context, these figures fall outside of expectations for court provision for the local community. The expectation nationally would be for this provision to fall between 1,200-1500 figure for courts/per head of population.

There are currently 22 tennis courts in Campbelltown.

The Campbelltown Structure Plan has proposed Leumeah to be designated as the place for sport.

There is also reference to the Renewal corridor below that highlights the opportunity that infill development could bring to improving existing facility capacity.

"Some of the future land and facility requirements may be able to be serviced from improving the capacity and increasing use of existing sport and recreation facilities, particularly in the planned infill developments associated with the Glenfield to Macarthur Renewal Corridor."

Key trends: Higher densities and smaller backyards in the area necessitate a need for high quality, useable public open space.

Walking, running cycling to grow in popularity, evening activities also to grow and need for lighting to grow accordingly. Flexible, multi-use spaces are needed to respond to changes in social trends.

The Strategy was informed by current Sport and Recreation trends which recognises a growing demand for 'self-directed exercise related recreation' – namely walking, running and cycling and the associated infrastructure. Local and regional linkages through walk and cycleways were identified as being key to satisfying future demand generated by this trend.

Other notable trends included the likeliness for evening use to increase and the need for appropriate amounts of lighting to ensure safety and accessibility. Multi-use facilities and spaces that would be flexible to changing social trends was also identified as being important.

Recommendations

One of the Strategy's recommendations was to impose stricter guidelines for developer contributions to ensure greater consistency and to the best community outcome regarding open space for sport and recreation. From their Standard for sport and rec land, relevant criteria include:

- | | |
|---|---|
| » Be accessible by road, bikeway and public transport | » Playing fields and surfaces should not be subject to regular inundation and generally would be expected to achieve immunity of 20% AEP (annual exceedance probability) or greater |
| » An overall supply rate of around 1.37 ha/ 1000 residents (of land that meets provision standards) | » Land should be free of contamination or hazards such as High Voltage Transmission Lines, land fill, or contaminated waste |
| » Square or circular shape, as opposed to a narrow linear shape, to maximise useability. As a rule of thumb, no boundary should be less than 150m | » Land is not situated adjacent to noxious industries or other uses that would be incompatible with high levels of public use |
| » Direct street frontage to a minimum 50% of the sport park's boundary to promote casual visual surveillance and public access | » Land is situated and/ or developed so as to minimise residential conflict from noise or light issues. |
| » Road frontage to a major collector or higher order road | |

These standards seem more focused on larger scale areas than the proposed site as one of the future planning and design considerations recommended against local level facilities.

» Avoid providing local level facilities due to inability to meet demands and generate economies of scale from larger facilities

Current Provision

The relatively low median intensity of use of Campbelltown City playing fields of 15 hours per week and the 2015 analysis of demand indicating an oversupply of land of 9.55Ha, suggests that the current provision of sport and recreation space is adequate to meet the current needs of the Campbelltown community.

Indoor Courts

The four courts at the Minto Indoor Sports Centre are the only multi-purpose indoor courts owned by Council.

In order to service the demand from an estimated 145,029 extra participants due to 2036 population growth, an additional 22 indoor courts comprising 3.0Ha of land are projected to be needed

Campbelltown Open Space Strategic Plan – March 2018

Author: Campbelltown City Council

Published: March 2018

The Open Space Plan aims to provide high level direction to assist in developing 'an integrated and balanced response to the demands of existing and future Public Open Space'. The Plan sits with a range of plans and strategies such as the Sport and Rec and Playspaces strategies to form a planning framework for open space.

The plan identifies four key focus areas which include:

11. Strengthening the existing open space network – Guiding principles and their relevant actions include:

a. Connected – Campbelltown's Open Space areas are part of an integrated and connected network.

i. 4. Recognise that connectivity is extremely important to the utilisation of parks and reserves Parks & Reserves Strategy and increases the activity and length of time spent in the park.

ii. 6. Encourage people to use the existing natural connections linking Open Space areas along Open Space Strategy the creeks and across the ridge lines (eg, the linked Open Space areas through Leumeah).

iii. 7. Strengthen walking and cycling connections, current or future, between Open Spaces to Bicycle Plan, Footpath Plan capitalise on the natural assets. Improve connections between smaller Open Space areas to increase community opportunities to use these for local recreation.

iv. 8. Promote ecological corridors, green links and connections along creeks linking Open Space Biodiversity Conservation areas. Investigate opportunities for accessible paths and boardwalks in bushland reserves.

v. 9. Provide high quality civic spaces to form better links to, and between, existing Open Spaces, creating welcoming and pleasant spaces.

b. Functional – Campbelltown's Open Space areas are of an appropriate size, shape and slope and many areas can be adapted to support a range of activities, experiences and settings.

i. Small parcels of land make up the open space in some areas of Campbelltown and this lacks flexibility in creating a network of open space – as the proposed arrangement of open space is similar to this - a plan to develop the open space parcels cohesively is important.

ii. 2. Ensure that a range of Open Space opportunities are provided for the community, catering for both active and passive recreation and offering areas that are adaptable as the population changes.

iii. 4. Prioritise connectivity and functionality as key aspects before planning any park embellishment.

iv. 6. Create nodes of activity in local and neighbourhood parks by grouping together, in accessible locations within each park, those facilities that require high levels of maintenance.

v. 7. Ensure that embellishments are flexible and adaptive so future needs can be accommodated.

vi. 10. Consider opportunities for multiple uses (eg, stormwater infrastructure in parks) where the recreational values of the land will not be restricted. Take into account negative impacts that can result, including the effects of periodic flooding on playing surfaces and the need for accrued field top dressing and storm sediments to be removed periodically to restore flood water storage volumes in detention basins. Fenced stormwater detention basins in Open Space should be rezoned as Infrastructure.

c. Accessible – Campbelltown's Open Space is accessible and safe, visually appealing and easy to interpret.

i. 1. Incorporate Crime Prevention through Environmental Design (CPTED) considerations into all Open Space designs, management and maintenance (eg, through the provision of way finding elements to build the perception of public safety).

ii. 3. Provide quality playspaces for all ages, not only children and young people.

iii. 4. Increase opportunities for young people to access sporting and recreational activities. Provide places for youth to recreate and socialise near safe and affordable public transport.

- iv. 6. Enhance the local centres with pedestrian friendly streets, new trees, inviting civic spaces and attractive street furniture. Develop the public domain as the community focus through public art, playspaces, community events and so on.
- d. Sustainable – Campbelltown’s Open Space is managed sustainably to maximise the protection of the local environmental values.
 - i. This Focus area includes several general actions towards the sustainable use of open space and consideration towards biodiversity and wildlife.
- 12. Managing the existing open space network,
 - a. Integrated - The management of Campbelltown’s Open Space is well coordinated.
 - b. Predictive - Upgrades and improvements to Campbelltown’s Open Space are based on well-developed policies, plans and strategies.
 - c. Proactive – Council takes the initiative in ensuring that Open Space is actively managed and well maintained, with clear procedures and protocols.
 - i. 4. Investigate a broad range of options to reduce maintenance costs on underutilised areas. Reinvest any savings from reduced open space maintenance costs towards other works within Open Space (eg, upgrades to parks and reserves close to town centres, bush regeneration works within the urbanised valley and new parks and reserves as they are handed over to Council) and maintenance for newly established areas.
 - ii. 12. Continue to respond rapidly to damage from graffiti and other vandalism. Look to design out safety and security concerns with better lighting, fencing, signage, CCTV and so on.
 - iii. 19. Introduce a program of rainy day workshops with Council’s Operations Staff on other Open Space matters, including rain gardens and other water sensitive urban design (WSUD), no-mow zones, and hold two way discussions on existing work practices and potential improvements.
- 13. Preparing for future open space and
 - a. Planning – Council develops the appropriate plans and strategies for future Open Space.
 - i. 2. Ensure that new development areas include an adequate amount of Open Space for the full range of open space types; for active recreation including team sports; informal recreation including playgrounds; and for environmental protection, biodiversity conservation and heritage conservation where these assets are present.
 - b. Responding – Council proactively responds to external plans and submissions that will directly or indirectly affect Open Space.
 - i. 1. Protect existing Open Space in close proximity to town centres and look for opportunities to make new and improved connections between Open Space. Consider land swaps in some locations for better street access to open space (eg, Matthews Reserve at Ingleburn).
 - ii. 5. Investigate other options for new Open Space areas, with the developers to retain the Open Space Strategy maintenance liability for new open spaces (eg, through covenants on community title, or through public access to private Open Space).
 - c. Funding – Council is able to fund the existing and proposed Open Space to meet the community needs.
 - i. Identify opportunities, consistent with the zoning provisions, for small scale commercial development such as kiosks and cafes within Public Open Space to provide additional funds for ongoing maintenance (eg, cafés at Burrendah Reserve, Raby, and Marsden Park, Campbelltown).
 - d. Anticipation – Council will prepare for the future and develop Open Space concept plans to help drive that future.
- 14. Involving the community in open space.
 - a. Communication – Information on Campbelltown’s Open Space is readily available and conveyed to the community.

- b. Education – Council actively works with the community to raise awareness and understanding of issues related to Open Space.
 - i. 1. Encourage people to explore Open Spaces in their area, not only those parks and reserves with structured activities. Promote parks as spaces for many activities, not just playgrounds, including nature appreciation, relaxation, contemplation, social interaction, exercise and other health benefits. Emphasise the value of bushland areas for community health and well-being
 - ii. 4. Highlight the value of trees to provide scale and shade, encourage people to walk and use parks, help define the character of a neighbourhood and perpetuate the green city image. Environmental Education Strategy. Promote parks as spaces for trees and undertake community tree planting in local parks in addition to the annual National Tree Planting Day.
- c. Participation – The Campbelltown community is encouraged to be involved in the management of the existing Open Space and the planning for future Open Space
 - i. 1. Involve the local Indigenous community regarding sites of cultural heritage, through guided walks and talks, interpretive signs and so on. Develop an Aboriginal perspective in other Public Open Space. Encourage the Indigenous community to participate in the management of natural areas and other environmental programs in parks and reserves.
 - ii. 5. Investigate ways to increase the community stewardship of Public Open Space

Defining the space

The plan defines local open space as smaller spaces usually between 0.2 and 1 hectares within a 5-minute walk from most residential areas and mostly serving as accessible, passive recreation areas.

A neighbourhood space is defined as being at least 0.5 hectares that provides more utility and facilities to residents within an 800m radius. This would include facilities such as eating and picnic areas, play and fitness equipment, some active recreation such as half courts, walking tracks or bush tracks and areas of vegetation.

Strategic Planning and Management of Playspaces in the City of Campbelltown 2016 - 2036

Author: OneEighty Sport & Leisure solutions on behalf of Campbelltown City Council

Published: Nov 2016

The Playspaces strategy looks at current trends, examines existing playspaces and identifies gaps and overlaps in provision.

Playspaces are broken up in distinct age groups:

- » Toddlers (1-3)
- » Juniors (3-6)
- » Seniors (6-12)
- » Teenagers (13-18)
- » Adults (18+)
- » Accessibility (all ages)

Playspace are defined in a similar hierarchy to other open, sport and recreation spaces.

» **Local:** Normally small in size (approx 0.1 – 0.2ha) and offering passive and low key recreation opportunities such as seating and landscaping, local playspaces would be small in nature and would target toddlers and/or juniors (0-3 and 3-6 year olds). Equipment would normally include basic swing and slide aspects and minor landscaping.

» **Neighbourhood:** Targeting a broader demographic catchment and therefore (normally) located on larger parcels of land, neighbourhood playspaces would include equipment for toddlers to seniors and may include assets such as seating, shade bins and picnic tables.

Includes 5 elements:



Trends

Playspaces are now seen as areas for the whole family and now include aspects for adults such as BBQs, Shade, water, bike racks and carparks. The inclusion of adults in the design also spreads to the equipment itself. To enable the growing social interaction between adults and children at the park – equipment is made to bear an adult's weight. Elements such as fitness areas are popular with both children and adults and are often standalone.

Due to these trends, playspaces are now designed with a more balanced consideration towards all age groups such as the elderly and those with disabilities.

Audit

Campbelltown has 95 fully public playspaces and 8 private and a large majority of these were local (34%) and neighbourhood sized (31%).

An average distribution of neighbouring LGAs in NSW shows that there is one playspace per 1448 people. Campbelltown has 1 playspace per 1:1848 – less supply than neighbouring LGAs but more than the NSW average of 1:2000.

However, Leumeah scored poorly with 3 playspaces in total for the 9463 residents – a distribution of 1:3154 and was the 2nd worst performing suburb in the LGA.

Of the three playspaces in Leumeah – two are recommended to be removed and replaced (those at Colong and Leumeah Park). Colong is the closest to the site but still a 1 km walk from Leumeah station.

The Plan recommends the provision of 2 neighbourhood and 1 district playspace and 1 fitness zone in the south and east of Leumeah (not really near the site)

Campbelltown City Council Sustainability Strategy

Author: Campbelltown City Council

Published: Oct 2015

The Strategy outlines Council's role in promoting a sustainable Campbelltown. The Strategy is mainly inward facing and looks for opportunities for organisational actions for reducing impacts (using 23% less paper!). However, it does have a few actions that are relevant and that we may be able to speak to.

Sustainable governance framework of which 3.2. and 3.5 are particularly relevant:

» 3.1 Sustainable Procurement

> Investigate the use of recycled road and footpath materials in new projects, and seek to mandate a target for such use.

» **3.2 Sustainable Transport**

> Provide secure bicycle storage facilities at Council sites.

> Support the inclusion of cycleways in new development areas.

> Increase cycleway linkages throughout the LGA.

» 3.3 Sustainable Staff

» 3.4 Sustainable Events

» **3.5 Sustainable City**

> Will be influenced through **Planning**,

— DCP to encourage building designs to reduce energy consumption, water recycling, solar panels

— BASIX a mandatory tool to assess a range of sustainability targets: rainwater tanks, water saving fixtures, insulation, solar orientation etc.

— Green Star Communities Framework

> **Design and Construction**

— Building Code of Australia

— Green Star

— Sustainable Design Scorecard

> **Performance Monitoring**

— National Australian Built Environment Rating System (NABERS)

> **Relevant actions include:**

— Investigate community precincts obtaining a Green Star – Communities framework.

— Investigate impacts associated with the Urban Heat Island Effect, and seek to support initiatives to either mitigate the impacts, or where unavoidable, increase the resilience and adaptability of communities.

Other relevant actions

» Assess the feasibility of undertaking an energy savings program for the street lighting network.

» Investigate options for increased diversion of garden organic waste. For example mulching on-site in parks and gardens.

» Investigate the development of an 'adopt a street tree' program.

» Investigate the development of community gardens run by community members (similar to Council's Bushcare program).

Glenfield to Macarthur Urban Renewal Corridor

Author: NSW Government DPE

Published: July 2015

The corridor looks to support growth in Sydney's Southwest by identifying opportunities for homes and job close to existing public transport links, employment areas and Campbelltown – Macarthur city.

Over the next twenty years, 'demand for an additional 664,000 homes and 689,000 jobs will be generated in the south-west'. The corridor however will focus on areas that are between 800m – 1.5km from the south west rail line that stretches 15km from Glenfield to Macarthur.

To facilitate this growth and demand, the strategy identifies potential opportunities for transport connection routes, open space, community facilities and education infrastructure.

Broadly, open space along this corridor consists of 'large expanses of underutilised, low quality grassed areas that do not contribute to the amenity of the region, provide little to no recreational value and incur significant on-going maintenance costs.'

The Strategy encourages Council to:

- » Consider alternative uses for underutilised and small-scale parcels of open space.
- » Consider the possible utilisation of any savings from reduced open space maintenance costs towards embellishment works within station precincts to improve liveability

A Map within the strategy identifies the adjacent Bow Bowing Creek area as an 'activity centre' (no definition offered – inferred as centre of activity)

Recommendations concerning Leumeah Precinct

Open Space and Public Domain recommendations:

- » Enhance the local centre around Leumeah station with pedestrian friendly streets, outdoor dining, street tree planting, inviting public gathering spaces and attractive street furniture.
- » Establish a quality open space and public domain network that provides better linkages to and upgrades of existing open spaces.
- » Promote ecological corridors linking the precinct with Smiths Creek Reserve to the Georges River
- » Investigate opportunities to review underutilised open space to contribute towards improved recreational outcomes

Built Form:

- » Campbelltown Sports Stadium and surrounding lands to be redeveloped as a regionally significant

precinct, providing a gateway to the Campbelltown Macarthur regional city centre.

- » Ground floor retail and mixed residential uses within an enhanced local centre to generate activity and ensure a highly visible station.

Movement Network

- » Promote cycling and walking by providing new shared pathways, separated cycleways, footpaths, pedestrian refuges, street tree planting, bicycle storage facilities and lighting.
- » Develop a continuous, safe regional commuter and recreational cycle route from Glenfield to Macarthur adjacent and perpendicular to the rail corridor.
- » Introduce new local cycle routes to improve connections with Leumeah station and the surrounding area.

Relevant Campbelltown and Minto Precinct recommendations:

Both adjacent precincts share a focus for enhancing open space and active transport networks and speak to Leumeah's precinct plan through the creation of 'a continuous, safe regional commuter and recreational cycle route from Glenfield to Macarthur.'

Campbelltown CSP 2017 -2027

Author: Campbelltown City Council

Published: Not stated – assume 2017 (although PDF title is CSP 2019?)

The CSP was developed with four key outcomes in mind. The outcomes and relevant indicators are detailed below:

» **Outcome 1: A vibrant, liveable city. Relevant indicators:**

- > Visitation rates at major attractions increases as a result of activation initiatives.
- > The community reports a feeling of connectedness and vitality through activated public spaces.
- > The community reports a strong connection with arts and cultural activities, and are able to participate freely.

» **Outcome 2: A respected and protected natural environment. Relevant indicators:**

- > Activation initiatives achieved that result in natural spaces being used differently and more frequently.
- > The community reports more opportunities to access well activated natural and open spaces.

» **Outcome 3: A thriving, attractive city. Relevant indicators:**

- > Support the capacity of businesses to establish and become successful.

» **Outcome 4: A successful city. Relevant indicators:**

- > Open space, passive and active recreational spaces are managed responsibly.
- > The community reports satisfaction with the level of engagement provided to be part of decision-making processes for the strategic planning of the city.
- > The community reports increased satisfaction with the open and recreational spaces provided throughout the city.
- > The community reports satisfaction with their ability to get around the city as new development occurs.
- > The community reports satisfaction over the quality of new development.
- > The community reports satisfaction over the accessibility, environmental and urban quality attributes of the city.

When residents of Campbelltown were asked about aspects of their city that they enjoyed the most, 35% responded with green open spaces, parks and bushland – it was the highest response rate.

Campbelltown LGA Bicycle Plan

Author: GTA Consultants

Published: December 2010

The Strategy identified that Leumeah has two of the top five busiest roads in the LGA.

- » Campbelltown Road, Leumeah 2nd – 40,430 Annual Average Daily Traffic (AADT)
- » Pembroke Road, Leumeah 5th – 24,288 AADT

The Plan found that Campbelltown had a below average rate of bike trips (0.41% of commuter trips) when compared with other outer Sydney LGAs (0.53%). Despite the low uptake of biking at the time, the plan identified that the Campbelltown LGA had 'strong potential for cycling to become a serious mode transport'. This is due to a large amount of regional, district and local centres being 'generally contained within a 10-minute cycling radius'.

The general barriers to cycling include:

- » Fragmented cycling networks lacking continuity and connectivity
- » Insufficient knowledge of alternate back street routes
- » Lack of end of trip and parking facilities
- » Poor perception of cycling as a physical activity
- » Poor integration with general road transport system – high speed and high-volume roads along popular desire lines
- » Actual and perceived lack of safety
- » Narrow and poorly maintained roads, shoulders and footpaths

The Campbelltown Bike Strategy recommended the installation of 30 bike lockers at Leumeah station and several road upgrades within Leumeah.

Campbelltown LGA Cycleway Plan (Map)

Author: Campbelltown City Council

Published: April 2019

Campbelltown's cycleways map identifies opportunities for the site to integrate and speak to the existing and proposed cycle infrastructure. This site sits between existing on and off-road cycle lanes, with a proposed on-road track to go along Plough Inn Road.

Greater Sydney Outdoors Study

Author: NSW DPE

Published: June 2019

Broad takeaways: Sydneysiders strongly believe that open spaces are important – 70% said it was an important factor in their lives and many Sydneysiders visit local parklands more than once a week.

Western City District residents broadly participated slightly less than the average NSW resident – with 'swimming in public beaches, rivers and creeks' standing out with 10% less participation (43%) and 'viewing, creating or performing art' 8% less (22%). However, those from the west were 6% more likely to walk their dog (40%). Overall Sydneysiders engaged in more passive recreation activities such as walking, picnicking and relaxing in open spaces. These types of activities can be catered towards through the type and size of open space planned by Roberts Day.

Western City District attitudes towards the quality of and access to open spaces were more negative than the NSW average

Aspirations for public spaces aligned well with existing Council and DPIE plans – multiuse high-quality spaces that aim to build a sense of community and that are connected by an active transport network.

Detail: The aim of study included better understanding how Sydneysiders use and value open spaces for recreation, the current and future demand for types of activities and to identify gaps. Aspiration for Greater Sydney included:

- | | |
|--|--|
| » More high quality, open spaces supported by good facilities. | » Improvements to walking and cycling networks, to help get to outdoor recreation areas without a car. |
| » More opportunities for swimming and water-based activities in the local area. | » Improvements to existing parks, to ensure they're being well utilised. |
| » Larger open spaces, to provide greater opportunity for diverse, outdoor recreation activities. | » Protection of existing open spaces and recreational areas for future communities. |
| » Open spaces that assist in building a greater sense of community. | » Open spaces that feel safe and provide for multiple uses. |

Many of these aspirations resonate with Council's Sport and Recreation strategy and DPIE's Urban renal corridor plan.

The most popular activities for Sydneysiders were more **passive** and included:

- » Walking, hiking, jogging, running (85%)
- » Relaxing in open spaces (77%)
- » Gathering in Open spaces for BBQs and picnics (64%)
- » Visiting playspaces (49%)
- » Walking the dog (34%)

Western Sydney's attitudes towards open spaces also trended away from the NSW average. Namely 58% of respondents felt that they had good access to outdoor recreation in the areas they lived – 9% less than the NSW average. Likewise – 66% of respondents from the west would like to see more outdoor recreation in areas they live, 8% higher than the NSW average (58%) and just 42% of those from the west said that the quality of outdoor recreation areas in Sydney is a key reason they enjoy living here, 10% less than the rest of NSW (52%).

What would Western City District residents like to see?

- » More open spaces in the local area, to help increase participation in outdoor recreation.
- » Open spaces that assist in building a greater sense of community.
- » Higher quality parks, with good facilities.

OPEN SPACE AND RECREATION ANALYSIS

- » Improvements to walking and cycling networks, to enable getting around without a car.
- » Protecting existing open spaces and other recreational areas for future communities.
- » More opportunities for swimming and water-based activities in the local area.
- » Open spaces that feel safe and provide for multiple uses.

Government Architect - Greener Places: Draft Open Space and Recreation Guide

Author: NSW Government Architect

Published: 2018

This guideline represents contemporary thinking and measurements as defined by the NSW Government Architect. This specific guideline is part of a broader 'Greener Places' policy and is supplemented by the 'Bushland and Waterways' and 'Urban Tree Canopy' guidelines.

There is broad range of benefits to green spaces including physical and mental health, social inclusion and connectedness, biodiversity, cultural heritage and character, economics and tourism, mitigation of urban heat and opportunities for events and the arts.

Performance indicators include:

- » Accessibility and connectivity
- » Distribution
- » Size and shape
- » Quantity
- » Quality
- » Diversity

Benchmarks

- » Local Access means within 5 minutes of safe walking, district means 20 to 30 minutes.
- » For higher density sites (>60 dwellings/ha) the local access requirements fall to 2-3 minutes walk/200m distance.
- » For high-density areas, local open space for recreation can be 0.1–0.5 ha
- » Distance of open space from workplaces 400 m
- » Parks in higher density areas can be as small as 1500sqm (down from the minimum 3000sqm of a normal local park).

In high-density areas, good provision of public open space is essential to compensate for the lack of private open space to support active living and contribute to a more liveable neighbourhood.

The quality of park embellishment and ongoing maintenance and management is critical to attracting use and activation of the open space network. Performance indicators include:

- » visual and physical access
- » landscape setting
- » condition of facilities and equipment
- » maintenance
- » number of activations within the space
- » size, shape, and topography
- » adjacent land uses
- » amount of vegetation
- » biodiversity outcomes.

The guide outlines 11 common categories of outdoor recreation that occurs in public open spaces.

Government Architect - Greener Places: Draft Urban Tree Canopy Guide

Author: NSW Government Architect

Published: 2018

The Government architect Urban Tree Canopy Guide highlights the benefits and need for greater tree coverage in Sydney. And provides targets. These guidelines recommended greater than 25% tree canopy cover in medium to high density residential areas and over 40% in suburban areas.

Five million Trees

NSW DPIE also has strategy with a similar intent with the 'Five Million Trees for Greater Sydney' policy that aims to grow tree canopy from 16.8% to 40% with five million trees by 2030. This policy also included \$6 million in funding for Councils in greater Sydney to increase their tree canopy cover – of which Campbelltown City Council Mintowas a recipient.

C Context analysis

Existing open and recreation spaces

Leumeah

Site	Distance from site	Size	Category	Unique features – things to do (fitness, playground , BBQ)
Leumeah Skate Park (Hollylea Reserve)	<400m	Local	Informal active, informal passive	Skate Park, BBQ, cycleways, floodlights, public toilets, tables, water bubblers
Campbelltown Indoor Soccer Arena (private)	400-800m	Neighbourhood	Formal + informal active	Indoor soccer, toilets, spectator seating, cafe
Campbelltown Stadium		Regional	Formal active	Rugby league, Rugby union, Soccer/Football, café, floodlights, parking, toilets
Campbelltown Athletics Centre		Regional	Formal active	Athletics, café, floodlights, parking, toilets.
West Tigers Leagues Club – Tennis Courts		District	Formal active	14 tennis courts
Leumeah Park	>800m	Local	Informal active, Passive	Playspace
Kimberley Park (also Bellevue Park)		Neighbourhood	Informal active, Passive	Dog walking, playspace (Normandy Reserve)
Various reserves Including: » Abercrombie Reserve » Biehler Reserve » Colong Reserve » Corunna Reserve » Ernest Walsh Reserve » Fitzroy Walk » Smiths Creek Reserve » Sherack Park		Local	Informal passive + active	Predominate uses: Dog walking, shade and limited walking and cycleways. Colong Reserve has a playground

Minto

Site	Size	Category	Unique features – things to do (fitness, playground , BBQ)
Coronation Park	Regional (?)	Formal + informal active, passive	40 Netball courts, Soccer field, floodlights, parking, playspace
Victoria Park (Minto Showgrounds)	District	Formal + Informal active, passive	Hockey fields, Oztag, floodlights, toilets, parking
Minto Indoor Sports Centre	District	Formal + informal active	Basketball, Netball, indoor sports, toilets, café, parking, playspaces
Pembroke Park	District	Informal active + Passive	Bushwalking, BBQ, Cycleways, Parking, Toilets, Dog Walking, Playspace
Minto PCYC	District	Formal active, Passive	Martial arts, Gym. Playspace
Benham Oval	District	Formal + informal active, Passive	Rugby field, Floodlights, Parking, Playspace, Fitness
Redfern Park	Neighbourhood?	Informal active, passive	Basketball, Cricket, Cycleways, BBQs, Parking, Amphitheatre, Playspace
Sarah Redfern Playing Fields	Neighbourhood	Formal + informal active, Passive	Cricket, Soccer, Rugby League, Change rooms, Toilets, Parking
Kayess Park	Neighbourhood	Formal + Informal active + passive	Touch Football, Floodlights, Toilets, Parking
Valley Vista Reserve	Local?	Informal active + passive	BBQ, Parking, Cycleways, Playspace
Rose Park	Local	Informal active + passive	BBQ, Dog walking
Kids Park (Minto One)	Local	Informal active + passive	Playspace, Fitness, Parking, Shade
Various reserves » Strome ferry Reserve » Salter Reserve » John Rider Reserve	Local	Informal active + passive	Salter Reserve and John Rider Reserve have playspaces

Campbelltown

Site	Size	Category	Unique features – things to do (fitness, playground , BBQ)
Bicycle Education Centre	District?	Formal + informal active	Bike education and training, BBQ, parking, playspaces, toilets
Bon Wrightson Reserve	Local	Passive	Playspaces
Bradbury Oval	District?	Formal + Informal active, Passive	Basketball, Cricket, Rugby League, Dog walking, Cycleways, Parking, Floodlights
Campbelltown Cycle Way	District	Formal + informal active	Cycleways
Campbelltown Showground	District?	Formal + Informal active, Passive	Rugby Union, Cricket, Floodlights, Parking, Toilets +Changerooms
Centenary Park	Neighbourhood	Passive	Dog walking, Parking, Shade
Gilchrist Oval	Neighbourhood ?	Formal + informal active	Baseball, Parking, Floodlights, Changerooms
Gordon Fetterplace Aquatic Centre	Neighbourhood	Formal + informal active	Swimming pool - Outdoor, BBQ, Parking, Shade, Toilets
Hurley Park	Neighbourhood	Formal + informal active, Passive	Scout Hall, Cricket, Soccer, Floodlights, Parking, Change rooms
Kanbyugal Reserve	Local	Informal active, Passive	Bushwalking, Dog Walking
Koshiyaga Park	Neighbourhood	Informal Active, Passive	Playspace, Dog walking, BBQ, Parking, Toilets, Cycleways, Shade, Picnic tables
Marsden Park	Neighbourhood	Informal Active, Passive	BBQ, Playspaces, Fitness, Toilets, Parking, Dog Walking, Cycleways, Shade
Mawson Park	Local	Informal Active, Passive	Bog walking, Cycleways, Toilets, Shade Playspace,
Robinson Park	Local	Informal Active, Passive	Basketball, Dog Walking, Cycleways, Shade, Tables, Playspace,
Waminda Oval	District?	Formal + informal active, passive	Cticket, Rugby League, Floodlights, Parking, Toilets, Playspace,

