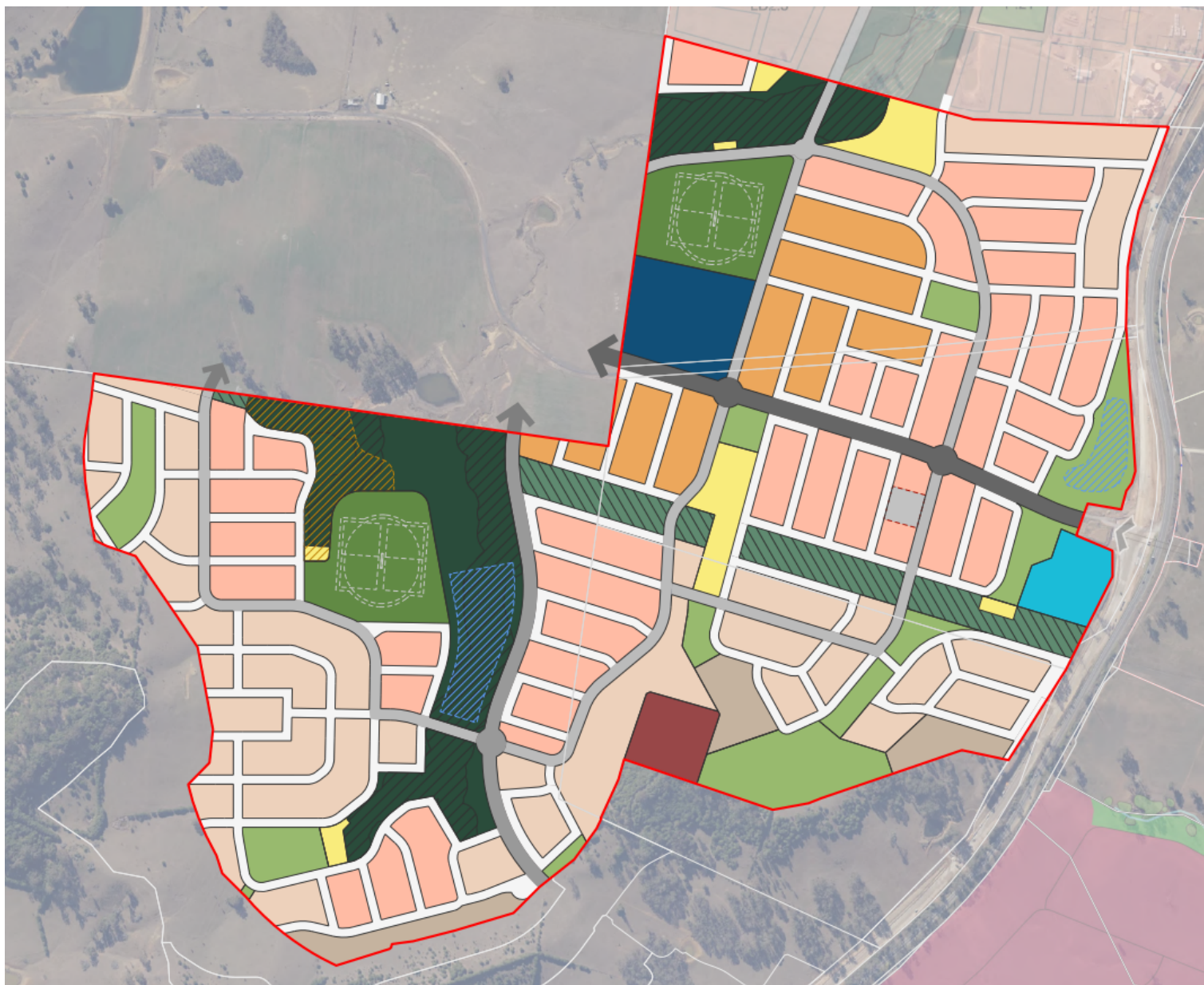




Demographic, Social Infrastructure and Community Needs Assessment

Cobbitty Sub-Precinct 5

Client: Boyuan Holdings Group
Ltd **Date:** 16 June 2022

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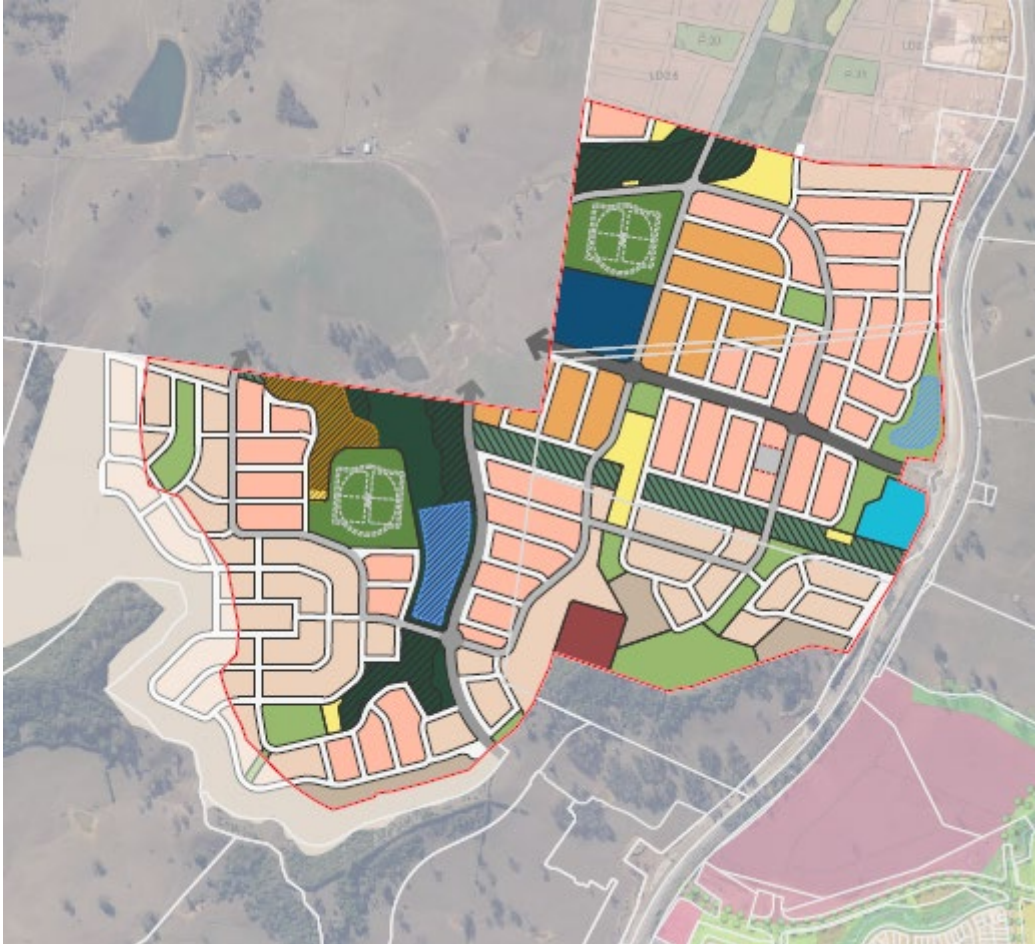
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Introductory statement

It is noted that the findings and recommendations of this Demographic, Social Infrastructure and Community Needs Assessment were based on a previous Indicative Layout which considered the entirety of Sub-Precinct 5.

The current ILP only incorporates Lots 2 & 4 in DP 1216380, Lot 2 in DP 1241819 and Lot 500 in DP 1231858 as shown in the following figure:



The findings and recommendations of this report remain relevant, providing a holistic assessment of the precinct to inform future development on the subject site. This report is intended to be updated to reflect the refined ILP and any comments received following public notification.

Executive summary

This report investigates the potential demographic characteristics and social infrastructure demand generated by a indicative layout plan for Cobbitty Sub-Precinct 5 in the South Creek West Land Release Area, in Cobbitty (Precinct 5).

Precinct 5 is positioned in a strategic location, adjoins the Lowes Creek Maryland Precinct to the north (rezoned), the Pondicherry precinct to the east (in the process of being rezoned) and Oran Park to the south.

An indicative layout plan for Precinct 5 has been prepared by Design+Planning (version: September 2021) and estimates an average of approximately 3,800 dwellings and approximately 11,903 people. Utilising comparative figures for full or near completion new developments of a similar scale, Precinct 5 is likely to develop the following future community profile and social infrastructure needs:

- » Babies, pre-schoolers and primary schoolers: Approximately a quarter of the future population will be aged 0-11 years. This has implications for childcare provision and primary schools, as well as open space (parks and active recreation), play spaces and health facilities for childhood and maternal services delivery.
- » High schoolers and young people: Older children and young people have specific recreation and socialisation needs, including higher participation in organised recreation and informal play spaces.
- » Young workforce, parents and home builders: Majority of the population will be aged between 25 to 49 years (consistent with the high rates of children). Access to a range of diverse passive and active open spaces will be important to support a variety of needs and uses, including family and social events/gatherings, kick-about spaces, spaces for quiet, etc.
- » Empty nesters and older: A relatively low proportion will be aged 60 years and older. However, accessibility and mobility for the elderly should be considered, as well as access to adequate health and community spaces, as well as general spaces which can promote social interaction to prevent isolation.

Key inputs into this report were:

- » Extensive policy and document review, investigating local to regional level planning directions regarding social infrastructure provision
- » High level context analysis of access to social infrastructure in proximity to the site, supported by a combination of mapping existing facilities, key document review and interviews with representatives in Schools Infrastructure NSW, the South Western Sydney Local Health District and Ambulance NSW (conducted September 2021)
- » Review of current Camden Council social infrastructure standards and benchmarks, as well as investigation of leading qualitative guidelines and trends in provision and utilisation.

These inputs were used to prepare a set of guiding principles for social infrastructure provision in Precinct 5:

- » Accessible: walkable, local neighbourhoods (400m), various modes of transport/movement
- » Equitable and safe: accessible, equitably distributed, universal design and Crime Prevention Through Environmental Design
- » Staged delivery: the types and sizes of facilities and spaces responds to population growth and demand
- » Local identity: incorporating natural and cultural heritage into design, fostering vibrancy
- » Central: positioned in town centres or adjacent to transport hubs
- » Multipurpose, flexible and adaptable: enabling multiple simultaneous uses, meeting diverse needs, design enables structural or architectural change to respond to changing community demand
- » Partnerships: with local (Camden and Liverpool councils) and other agencies (SWSLHD, DoE, DPIE, emergency services, etc), including government and non-government
- » Co-located and clustered: spaces can be shared and facilitate delivery of complementary services

- » Climate sensitive: fostering ecological value and embedding environmentally sustainable design (e.g. local urban heat reduction, water retention, etc) and embedding green infrastructure planning (e.g. covered walkways, increase tree canopy)
- » Responsive: responding to social infrastructure planning in surrounding centres and precincts, wider South Creek and South West Growth Area.

A summary of the potential demand generated by the indicative layout plan and projected population of approximately 11,903 people is provided below (potential demand based on an upper population estimate of 12,000 people is considered at a high level in **Section 6: Indicative layout plan**). Key considerations and recommendations are also nominated, for further consideration as the planning process progresses.

Community and cultural facilities

The preliminary average population estimate for the site:

- » Does not meet demand for a library or regional community centre. However, if the NSW State Library standard is applied, there is demand for up to 821sqm
- » Meets demand for up to 2 neighbourhood level community centres (approximately 655sqm of floorspace overall)
- » Generates demand for up to 1,050 sqm of youth focussed facilities (adjacent to open space)

The location of a community centres or youth focussed centres are not indicated on the Precinct 5 indicative layout plan. However, community centre floorspace would be incorporated into the local centre.

Key considerations:

- » Community spaces (free/affordable) are recognised as supporting community connections in new communities.
- » Camden Council are committed to the delivery of a network of larger but fewer community facilities, that can provide higher level services and service a larger catchment of people (a new benchmark of 1 community centre per 20,000 people, regional level).
- » Surrounding the site, there are several planned community and community facilities in adjoining precincts, including a district level multipurpose community facility with some library services planned for LCM (2,000sqm), regional multipurpose facility with creative and performance capabilities (and potentially a co-located library) in Leppington, as well as various proposed local community centres (approx. 500sqm)
- » Future planning should focus on regional service delivery, with the network supported by upgrades to existing neighbourhood and local facilities to multipurpose centres (not the delivery of more of these centres).
- » Existing community centres in Camden LGA are generally unstaffed buildings that provide spaces for community use and hire, which can adapt to meet the needs of incremental population growth.

Recommendations:

- » Although Camden Council do not recommend the delivery of new neighbourhood spaces, this is informed by the assumption of existing community spaces being available for free or affordable community use, or planned facilities being delivered as new communities reach a level to generate demand (i.e. staged delivery)
- » The provision of two smaller (approx. 300-350sqm each) neighbourhood community centres in the site is unlikely to support an integrated network of multifunctional spaces. The following two options could be delivery options:
 - > Option 1: The delivery of approximately 600-650sqm multipurpose community centre which supports various uses at once, including uses which can address demand for library and cultural activities. This facility should be co-located with the school site and local centre to create an activated community hub.
 - > Option 2: The provision of approximately 300-350sqm community space for local community hire and use, and contribution of approximately 300-350sqm off site (e.g. at Pondicherry in the Lakes Precinct).

Open space and recreation

The projected population of approximately 11,903 people generates demand for:

- » 33.7ha of open space (active and passive)
- » 6-7 sportsfields, 6 sports courts and 4 multipurpose courts
- » up to 6 playgrounds.

Sportsfields are shown in the indicative layout plan for Precinct 5. The open space sizes and layout have the potential to accommodate demand for courts and playspaces (refer to the Landscape Masterplan).

The indicative layout plan for Precinct 5 allocates up to 31.79ha of 'useable' open space for community access and use, comprised of:

- » 14.99ha of active open space, containing double playing fields and ovals
- » 16.8ha of passive open space, and all local parks equal to or greater than 5,000sqm
- » Approximately 41ha of riparian corridor space, including a 6ha easement which will be embellished for active connections and public recreational uses (e.g. walking, cycling, jogging).

Key considerations:

- » Camden Council's *Spaces and Places Strategy* (2020) adopts the historical Growth Centres Development Code standard of 2.83ha of open space per 1,000 peoples and no longer distinguishes between active and passive spaces.
- » Council's draft *Sportsground Strategy* (2020) supports the delivery of clustered sports grounds, through minimum requirement of 2 sportsfields in new developments and demonstrated delivery of sports hubs and multiple sports code sporting grounds which foster activation
- » The following two options should be considered further, recognised proposed sporting hubs in neighbouring precincts and the balance to support local demand and an integrated network:
 - > Option 1: The delivery of 10 multipurpose courts for multiple codes (over the demand generated for 3), in place of the delivery of sporting courts
 - > Option 2: The delivery of up to 6 multipurpose courts with the northern-most playing field and 4 sports courts allocated across the two remaining sportsfields.
- » The Camden community value walking and walking paths, play spaces and outdoor fields and find distance and inconvenient access the greatest impediments to current use of open and recreation spaces, highlighting the importance of an equally distributed network.

Recommendations:

- » The provision of total open space amount is adequate (a minor undersupply of 1.9ha) and does not consider the provision of the riparian corridor (40.93ha).
- » Passive open spaces and the riparian corridor easement will require amenity and supporting infrastructure (e.g. covered seating, playgrounds, amenities, etc) to provide a range of recreation experiences for community members, and the scale of these features should respond to the scale of the open space.
- » The riparian corridor and its easement should contribute to the network of passive open spaces, providing amenity and infrastructure to enable diverse and suitable recreation uses (e.g. fitness circuit, shared walkway/cycleway along the riparian corridor, smaller playgrounds and BBQ and picnic facilities in smaller passive parks).
- » Active open space should incorporate multi-code field design for use by different sporting code and have supporting infrastructure to maximise community use, such as lighting and sporting club amenities buildings (e.g. storage). There should also be space available for warm up and kick-around activities for sporting codes as well as the broader community. Further investigation is required to determine Camden Council's position towards multipurpose and/or sport courts (see the previous options).

- » Playgrounds should be provided, at a suitable scale and co-located with activations (i.e. larger space, larger playground, located with or near centres or sportsfields), across the open spaces.

Education and childcare

The projected approximate population of 11,903 people generates demand for:

- » 1 new government primary school
- » Up to 4 childcare facilities.

The demand for a government high school (2,000 student capacity) is not met.

The indicative layout plan for Precinct 5 shows a school site location adjoining the local centre, active open space and the riparian corridor.

Key considerations:

- » The DoE guidelines require 2ha for new primary school sites and shared community use of open spaces and suitable facilities (e.g. halls) is supported where the spaces are suitable.
- » The delivery of childcare and early childhood education is delivered by a range of providers, including Camden Council (Camden Family Day Care), private enterprises, not for profit and community groups.

Recommendations:

- » Ongoing consultation with the DoE is required as the planning process for the government primary school site progresses, to consider location, timing of delivery and equitable shared use of spaces and facilities.
- » The provision of diverse childcare options (e.g. long day care, occasional care) in accessible locations will require further detailed market analysis.

Health and wellbeing

The indicative layout plan for Precinct 5 does not indicate health and wellbeing facilities. The projected approximate population of 11,903 people generates demand for up to:

- » 13 GP's
- » 1 Primary Health Care Clinic
- » 3 Team General Practices.

Key considerations:

- » The provision of health and wellbeing infrastructure will need to be accessible, delivered in stages (in response to the stages as the site is delivered) and adaptable as community needs change over time.
- » There are significant upgrades planned to increase the capacity and capabilities of Liverpool and Campbelltown Hospitals in the near future and Leppington is marked for the delivery of a Regional Integrated Primary & Community Care Centre.
- » Planning for health care in South West Sydney is directed towards linked up/connected arrangements between health care services to support a holistic network.
- » Integrated health services planning in the South West Growth Area continues to be developed.

Recommendations:

- » Key considerations for provision will be community accessibility, staging of service delivery and adaptability as community needs change over time
- » Ongoing consultation with relevant public agencies is required as the planning process for the site progresses, and the potential for commercial provision requires detailed market analysis.

1 Introduction

This report investigates the potential demographic characteristics and associated social infrastructure needs of the future population of Cobbitty Sub-Precinct 5.

In 2020, Elton Consulting was engaged by Boyuan Holdings Group Ltd (BHL) to prepare a Demographic and Social Infrastructure Assessment for Cobbitty Sub-Precinct 5 in South Creek West Land Release Area (SCWLA), which forms part of the South West Growth Area (SWGA).

This report is focussed on Precinct 5 and intended to inform the Planning Proposal (PP), also known as Cobbitty Sub-Precinct 5, but referred to as Precinct 5 for this report. As part of this process, BHL is working closely with Camden Council (Council) and the Department of Planning, Industry and Environment (DPIE) to rezone the site.

Precinct 5 is located within the south-west portion of the SCWLA, within the suburb of Cobbitty in the Camden LGA. It covers approximately 303 hectares (ha) or close to 20% of the 1,587ha SCWLA, making it a significant holding in the SCWLA. It is located within the south-west portion of the SCWLA within the suburb of Cobbitty in the Camden LGA. The Precinct adjoins the Lowes Creek Maryland Precinct, which has recently been rezoned to the north, the Pondicherry precinct to the east which is in the process of being rezoned and the growing town centre and suburbs of Oran Park to the south.

1.1 Report structure

This report is divided into the following sections:

Section 2	Precinct 5	» Location
		» Ownership
Section 3	Document and policy review	» Document and policy review
Section 4	Social infrastructure review	» Existing and proposed social infrastructure
Section 5	Social infrastructure provision	» Guiding principles and objectives
		» Standards and benchmarks
		» Qualitative considerations
		» Trends
Section 6	Indicative layout plan	» Indicative layout plan and yield
		» Projected demographics
		» Projected demand for social infrastructure
		» Provision assessment
		» Social infrastructure implementation plan

2 Precinct 5

Summary of opportunities and constraints

Location:

It will be challenging to plan or and deliver social infrastructure which meets the needs of the future Precinct 5 community, while also planning collaboratively for social infrastructure delivery in Camden LGA, adjoining precincts (i.e. Oran Park, LCM, Austral and Leppington North and the Aerotropolis) as well as the larger SCWLA.

There is a unique opportunity to integrate natural features into the future Precinct 5 development, in particular two riparian corridors, one running in the north eastern corner and the other from the north diagonally through Precinct 5. Riparian corridors offer the opportunity to:

- » Become a central link for active connections and open spaces (including sport and recreation spaces)
- » Connect the northern and southern sections of the future community
- » Embed best practice in ecological design and functionality, through preserving and fostering biodiversity and integrating water sensitive urban design.

However, natural features also present challenges, as:

- » Flooding and associated development controls may impact on the useability of open spaces for recreation along the riparian corridor, which may be mitigated through infrastructure and design elements (e.g. drainage, etc). Note: the current Water Cycle Management Strategy for Precinct 5 indicates that open spaces are not flood affected
- » Passive surveillance within and/or along ridgelines could be minimal, depending on the orientation and sightlines of the future development, although it is noted that an existing development is situated opposite the ridgeline in Precinct 5 (in Oran Park) which could strengthen passive surveillance and activation.

Ownership:

There are only two private landholders for Precinct 5, and four of the five lots are owned by BHL. Due to less fragmented ownership, there is the possibility of some assurance over social infrastructure delivery as development progresses.

2.1 Location

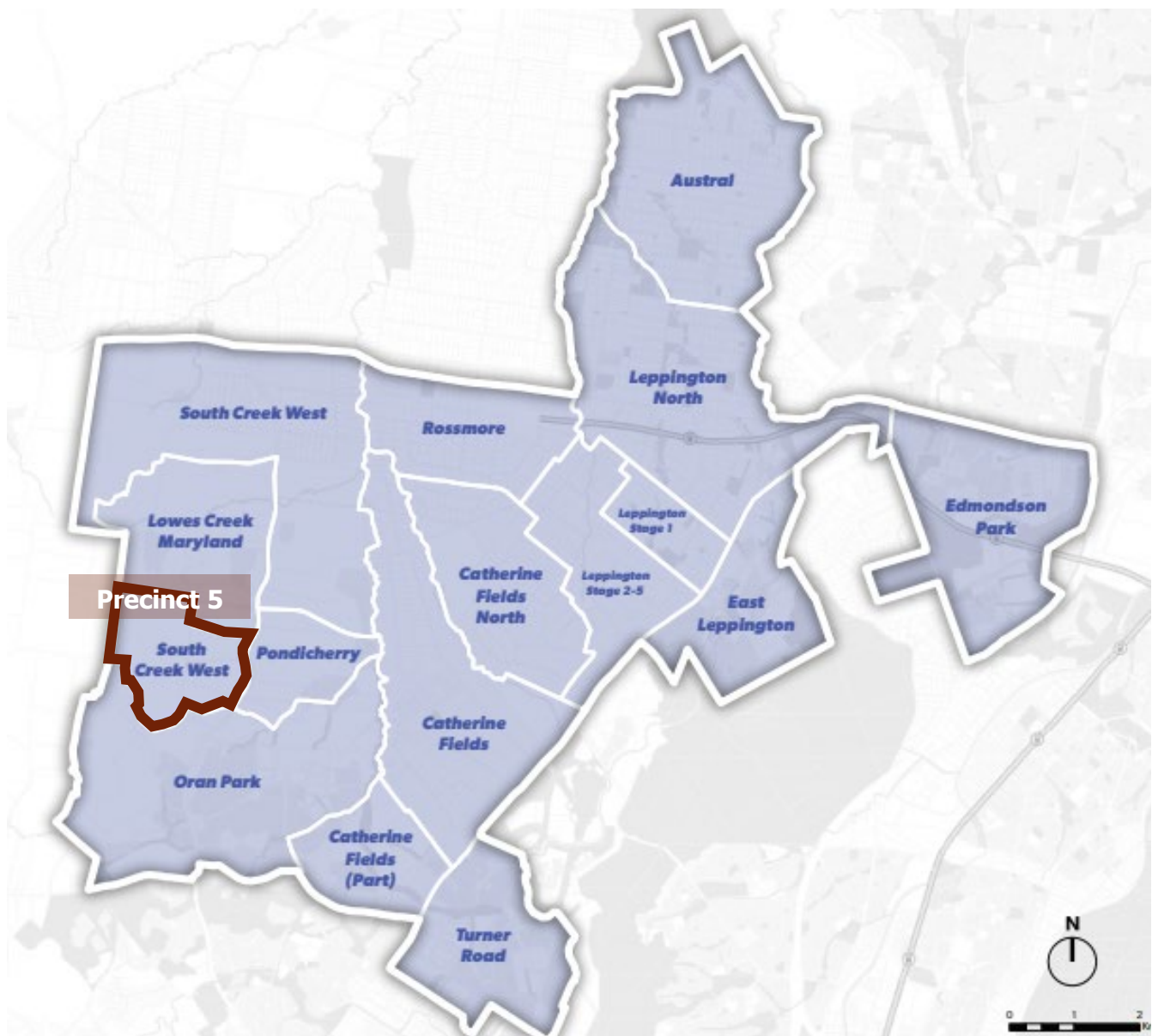
As indicated in **Figure 1** below, Precinct 5 is positioned along the western edge of the SWGA. It is the southern portion of SCWLA in Cobbitty, part of Camden LGA.

Precinct 5 sits amongst land release areas identified for significant urban and industrial land use change:

- » Lowes Creek Maryland (LCM) to the north
- » Pondicherry, Catherine Fields and Austral and Leppington North and to the east
- » Oran Park to the south.

The Western Sydney Aerotropolis (the Aerotropolis) is also located to the north, above the northern portion of SCWLA.

A site visit to Precinct 5 was not conducted as part of this report.

Figure 1 Location of Precinct 5 in SWGA

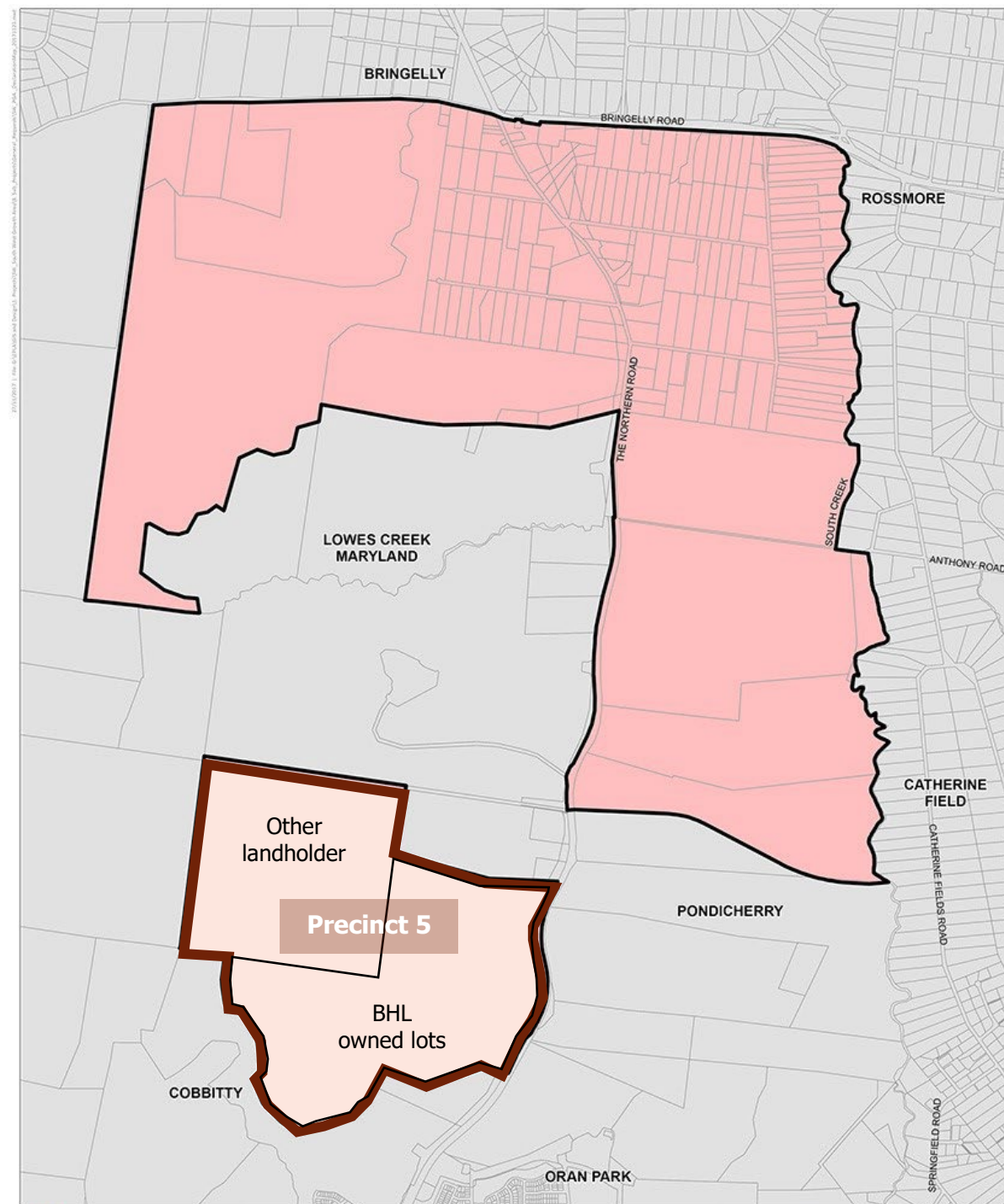
Source: NSW DPIE 2018

2.2 Ownership

Precinct 5 covers approximately 303 hectares (ha) of the larger 1,587ha SCWLA, close to 20% of the total SCWLA.

There are 5 lots contained within the borders of Precinct 5. Four lots (Lot 2 DP1216380, Lot 4 DP1216380, Lot 102 DP1217062 and Lot 500 DP1231858) are part of Lot 45 DP1104369 are owned by BHL. The remaining lot is privately owned.

Figure 2 Location of Precinct 5 in the SCWLA



3 Document and policy review

Planning for Precinct 5 is informed by a hierarchy of strategic planning documents, including:

- » Regional strategies aligned to the Aerotropolis and its catalyst for transport corridor investment, as well as open space planning for Greater Sydney
- » Western City District and investment in supporting infrastructure for strategic centres
- » SWGA, including comparative planned precincts in LCM, Oran Park and Austral and Leppington
- » Local planning and strategies for social infrastructure provision prepared by Camden Council.

Key opportunities and constraints are summarised below. The remaining section provides a detailed review under the following themes:

- » New approach to precinct planning
- » Principles and contributions planning
- » Surrounding precincts planning, considering the network of green and open spaces and community infrastructure and space spaces and planning for the Aerotropolis.

Summary of opportunities and constraints

New approach to precinct planning:

- » The strategic and collaborative approach between DPIE, councils, private sector and agencies for Precinct 5 has the opportunity to deliver the best outcomes (in a timely manner) for the future community in Precinct 5 and the broader SCWLA.
- » As the new approach is applied, there may be delays as the approach becomes normalised. Regardless, in this respect, the opportunity to be involved in the strategic and collaborative approach is likely to outweigh these types of constraints.

Principles and contributions / Surrounding precinct planning:

- » There are multiple levels of governance operating in the SWGA and SWC, each with guidance and requirements for social infrastructure delivery. However, there is generally strong correlation across these various strategies and policies, including elements such as sustainability, ecological value, high quality, enabling movement, etc, which give an indication on the collective intentions for outcomes for social infrastructure.
- » In the surrounding precincts of LCM, Oran Park and Austral and Leppington North, social infrastructure planning is focussed on the direct demand generated by the potential future communities within these precincts. However, there is also a need to recognise how social infrastructure can operate as part of a complementary network of spaces and services across Camden LGA and the broader SCWLA.
- » As Precinct 5 adjoins several precincts, there is a need for alignment in decisions towards social infrastructure recommendations and provision. In LCM, the riparian corridor is a focus of passive recreation and ecological values and active connections are highly valued.
- » The Aerotropolis is a critical component of the SWGA, and (at the time of writing this report) is progressing in its planning stages and infrastructure provision planning. This has implications for the delivery of regional social infrastructure, including in education, health, open space and cultural facilities across the larger SWGA.
- » There is the potential for Precinct 5 to be well connected to public transport networks, if a station on the north south rail link is provided as indicated on relevant Transport for NSW plans (at the time of preparing this report).

Community and cultural facilities / Open spaces / Education and childcare:

- » Precinct 5 will need to provide or contribute to social infrastructure to meet the demand generated by its future population. Social infrastructure provision in Precinct 5 will need to consider plans or delivery of social infrastructure in surrounding precincts to avoid duplication or an inconsistent approach, as well as the strategic directions and policies of Camden Council, DPIE and other significant stakeholders involved in planning in the SCWLA (e.g. Transport for NSW)
- » Active connections, providing options for walking and cycling, are highly valued and are considered as an integral contribution to the recreation options in the open space network.

Health and wellbeing:

- » For future residents, key considerations for health services delivery will be access to and staging of health services. Based on consultation with representative from the South West Sydney Local Health District, there are new emerging platforms which may contribute to addressing demand and access issues, such as virtual platforms, in conjunction with ongoing collaboration with DPIE and the Greater Sydney Commission and planning for adaptable services with the capabilities to respond to changing community needs.

3.1 New approach to precinct planning

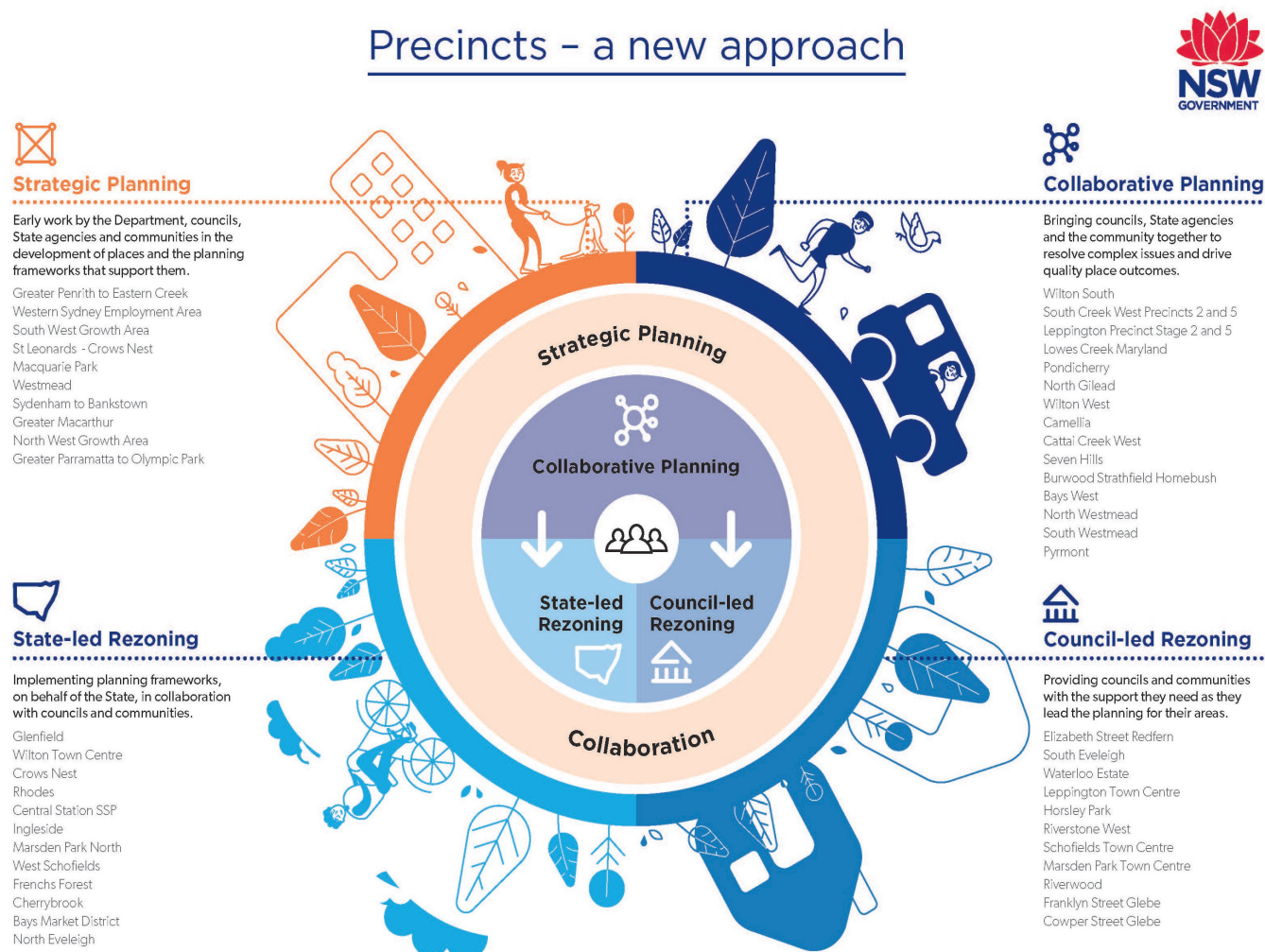
In early 2020, DPIE adopted a *New Approach to Precinct Planning*, providing a way forward for the planning and delivery of precincts. The new approach centres the planning system around people, places, public spaces and the environment, and provides councils and locals communities with greater responsibility in planning decisions.

The new approach has allocated all existing precincts in Greater Sydney under four planning pathways. Of relevance to this report, are:

- » Strategic Planning Precincts (SWGAs): precincts which require the resolution of significant issues or challenges before any works towards rezoning can begin. Resolution will need to include early work by DPIE, councils, state agencies and communities to develop planning frameworks which support the planning for these precincts.
- » Collaborative Planning Precincts (SCWLA Precincts 2 and 5): precincts which rely upon the integration of the various outputs from numerous public and private agencies for successful infrastructure timing and delivery. It is DPIE's intention that they will facilitate collaborative planning amongst these agencies, enabling precinct submissions which demonstrated holistic planning and delivery schedules.

DPIE's new approach to precinct planning is shown in **Figure 2** below.

Figure 3 DPIE's new approach to precinct planning



Source: NSW DPIE *A new approach to precincts* 21 January 2020 (retrieved <https://www.planning.nsw.gov.au/Plans-for-your-area/A-new-approach-to-precincts> on 23 March 2020)

In conjunction with new planning pathways, the process and outcome of the SCWLA must adhere to the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006 (Growth Centres SEPP)*. Aims of the Growth Centres SEPP relevant to this report are:

- » Co-ordinate the release of land for residential, employment and other urban development in the North West Growth Centre, South West Growth Centre, Wilton Growth Area and the Greater Macarthur Growth Area
- » Provide for comprehensive planning for growth centres
- » Enable the establishment of vibrant, sustainable and liveable neighbourhoods that provide for community well-being and quality local amenity
- » Provide controls for the sustainability of land in growth centres that has conservation value
- » Provide development controls in order to protect the health of the waterways in growth centres
- » Protect and enhance land with natural and cultural heritage value.

The Growth Centres SEPP also includes objectives from DPIE's *Camden Growth Centres Precinct Plan 2013*. Relevant objectives to this report are:

- » Ensure the creation of quality environments and good design outcomes
- » Protect and enhance environmentally sensitive natural areas and cultural heritage
- » Provide for recreational opportunities
- » Provide for multifunctional and innovative development (to encourage employment and economic growth)
- » Promote housing choice and affordability
- » Provide for sustainable development
- » Promote pedestrian and vehicle connectivity.

The *North West and South West Growth Centres Precinct Acceleration Protocol* (undated), *Precinct Acceleration Protocol Guidelines* (October 2006) and *Probit Plan for Precinct Acceleration Protocol Stage 1* (November 2006) describe the process by which precinct releases within the North West and South West growth centres may be accelerated.

All proponents are required to work closely with the Growth Centres Commission and appropriate infrastructure providers (e.g. Sydney Water, Roads and Maritime Services, Transport for NSW, Department of Education, and emergency services) to ensure that all projects plan for and integrate essential infrastructure in a whole-of-precinct approach. Infrastructure referred to in these protocols and guidelines, of relevance to this project, includes education facilities, emergency services and health facilities. These facilities are to be provided at no cost to government.

Collaborative Planning for the South West Growth Area

In July 2021, DPIE released the Lowes Creek Maryland *Finalisation Report* and the associated *Indicative Land Use Plan* (version: 14 July 2021), which indicates that a revised South West Growth Areas Structure Plan is being prepared in conjunction with Camden Council, as well as Liverpool City and Campbelltown City councils.

See also **Section 3.3.1: Lowes Creek Maryland** for more information.

3.2 Principles and contributions

DPIE's *Sydney Growth Centres Strategic Assessment – Program Report* (2010) seeks to provide residential, employment and conservation areas, as well as supporting infrastructure within the North West and South West Growth Centres of Sydney. Principles around urban development relevant to this report are:

- » Better public transport opportunities
- » A range of housing types and densities
- » Walkable neighbourhoods
- » Provision of major town centres with retail, recreation and services, with smaller village centres and neighbourhood shops
- » Employment opportunities
- » Right mix of housing, employment, service, open and recreational spaces
- » Protection of natural and cultural heritage and waterways.

The program identifies the following elements in relation to social infrastructure:

- » Health: improvements to existing hospitals and the construction of new community and health centres
- » Education: development of primary schools, high schools and TAFE facilities to service new communities
- » Emergency services: provision of police, ambulance and fire stations as communities grow
- » Local facilities: provision of local parks, community centres, libraries and sports fields.

A Special Infrastructure Contribution (SIC) applies to development within the North West and South West Growth Centres to contribute to the funding of infrastructure in the Growth Centres.

Sections 94ED to 94EM of the *Environmental Protection & Assessment Act 1979* (EP&A Act) enable the collection of a SIC for contribution towards funding regional infrastructure. The SIC applies to development within Growth Centres, for contribution towards:

- » Education facilities
- » Road networks
- » Emergency services and justice facilities
- » Health services
- » The preservation, protection or establishment of conservation lands.

3.3 Surrounding precincts planning

DPIE's *Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan Stage 1: Initial Precincts* (2018), identifies the SCWLA as a 'Surrounding Precinct', which will support the development of the Aerotropolis.

DPIE's *Sydney Growth Centres Strategic Assessment – Program Report* (2010) identifies that Leppington North precinct will be the major commercial centre of the SWGC, in Leppington. This is shown in **Figure 4** on the following page.

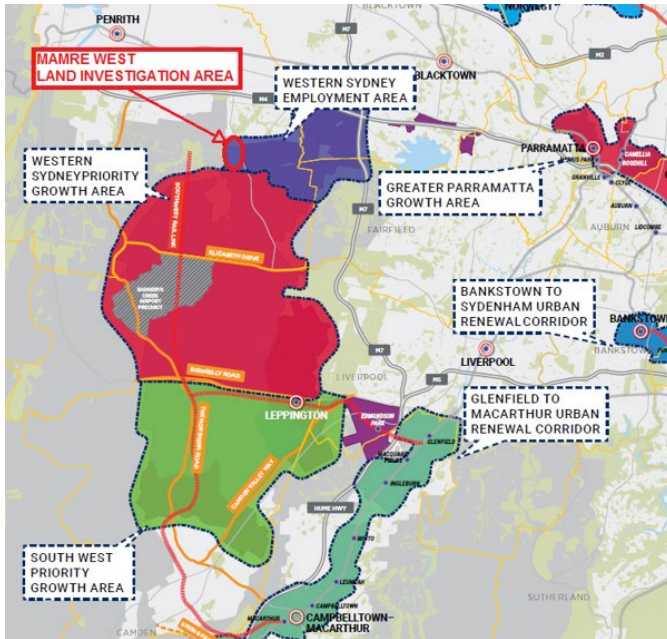
In accordance with DPIE's *South West Growth Centre Structure Plan Edition 3* (provided in the *Program Report*) local town and village centres are required in each of the precincts. Each precinct should also enable walkable neighbourhoods:

- » Within a 400-metre radius from a local shop (or group of shops) or from another community focus (e.g. A community centre with a bus stop)
- » Clustered around mixed-use centres, which include housing, community facilities, shops for daily convenience and other services.

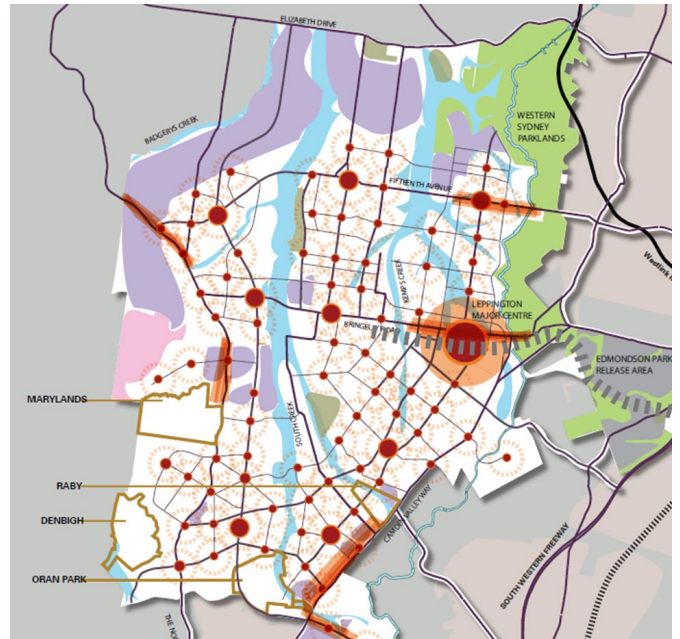
Future residential growth and planned social infrastructure delivery in surrounding precincts is shown in **Figures 5 and 6** on the following pages. The population and dwelling figures for Precinct 5 have been informed by **Section 6.2: Projected demographics**.

The precincts most relevant to this report are LCM, Oran Park, Pondicherry and Austral and Leppington North, due to their proximity. These are discussed in more detail in the following pages.

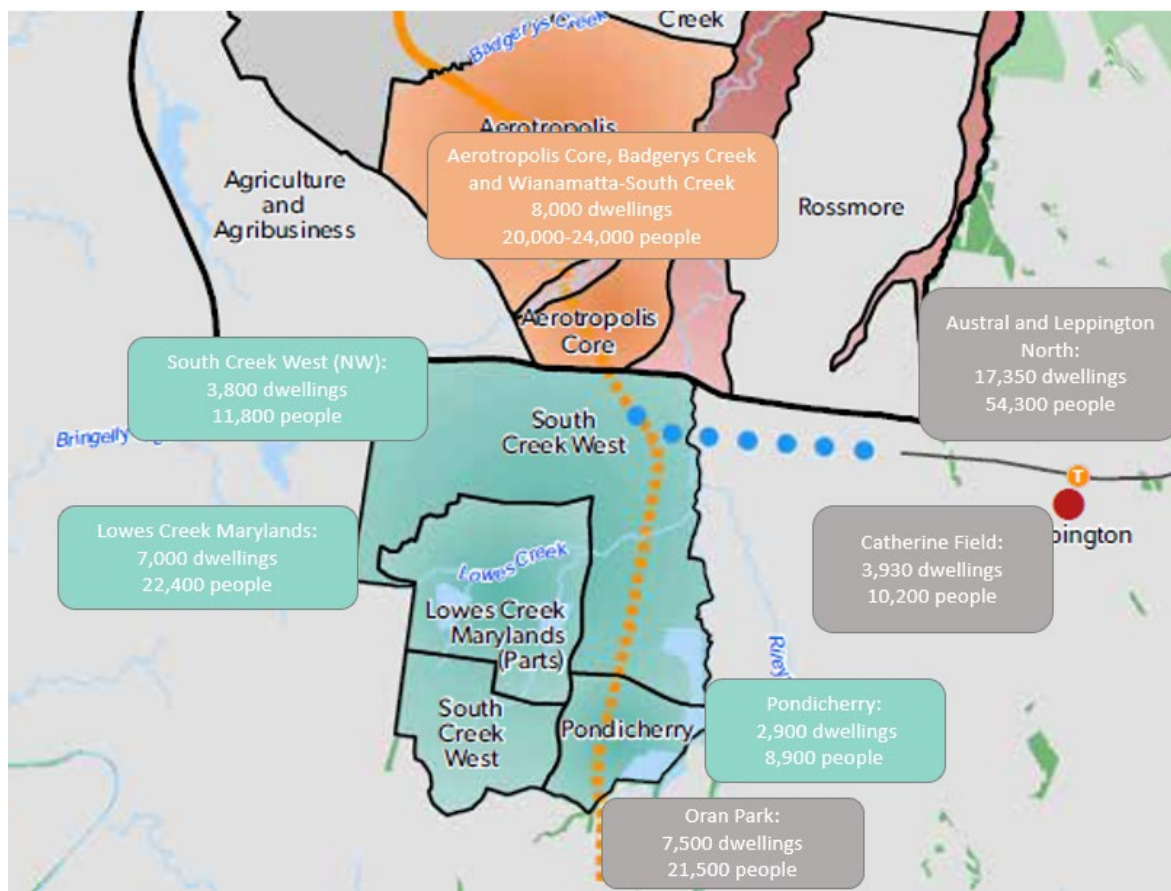
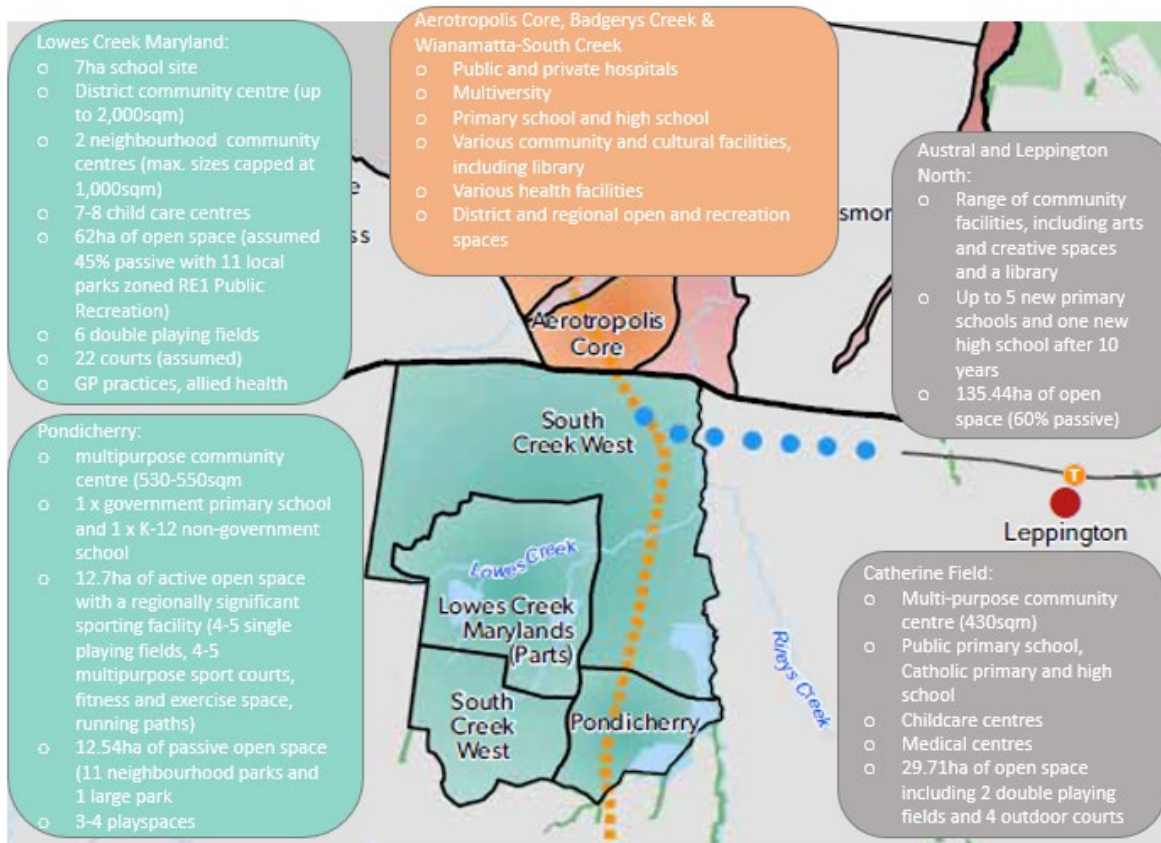
Figure 4 Position of Precinct 5 in relation to surrounding precincts



Source: NSW DPIE Media release: Rezoning of land paves the way for 500 jobs in Western Sydney' 8 August 2016 (retrieved: <https://www.planning.nsw.gov.au/News/2016/Rezoning-of-land-paves-the-way-for-500-jobs-in-Western-Sydney> on 23 March 2020)



Source: NSW DPIE Sydney Growth Centres Strategic Assessment – Program Report (2010)

Figure 5 Future residential growth in surrounding precincts**Figure 6 Planned social infrastructure in surrounding precincts**

3.3.1 Lowes Creek Maryland

As previously mentioned, LCM is located directly north, adjoining the northern border of Precinct 5.

DPIE's *Draft Schedule 6 Lowes Creek Maryland Precinct* (2018) incorporates a Development Control Plan (DCP). The DCP was informed by a series of technical studies and contributed to DPIE's *Draft Lowes Creek Maryland Precinct Plan* (2018) with inclusive draft indicative layout plan (ILP).

The guiding vision for LCM is:

A range of housing types to meet the needs of a well-connected and diverse community, supported by local facilities and infrastructure, in a manner that responds to the unique characteristics (waterways and landforms) of the Precinct.

The draft plan nominates that a local town centre is located in LCM, providing a mix of retail, commercial and community spaces and functions. The Lowes Creek waterway is envisioned as an important green corridor:

- » Enabling the protection and/or enhancement of biodiversity
- » Integrating sustainable water management
- » Fostering passive recreation values, retaining remnant vegetation in public parks where possible.

In July 2021, DPIE released the *Lowes Creek Maryland Finalisation Report* and the associated *Indicative Land Use Plan* (version: 14 July 2021). The *Finalisation Report* responds to public submissions received for DPIE's *Draft Lowes Creek Maryland Precinct Plan* (2018) and makes some change to the previous LCM ILP. It also suggests that the DCP is in a process of review and expected to be released soon (i.e. within 2021). **Table 1** on the following page summaries the original objectives for enabling different modes of connections and the planning and delivery of open and recreation spaces against the latest *Finalisation Report* and associated ILP.

Elton Consulting's *Demographic and Social Infrastructure Assessment: Lowes Creek Maryland* (2018) investigated possible social infrastructure requirements for the new future population of LCM. It was informed by assumptions that:

- » DPIE's *Draft Lowes Creek Maryland Precinct ILP* indicated 6,982 dwellings and 22,441 people
- » A lower density scenario of the larger Context Plan Area (i.e. western portions of the SCWLA and LCM, up to the Northern Road) could generate 17,761 dwellings and 58,079 people
- » A higher density scenario of the larger Context Plan Area could generate 20,256 dwellings, 65,731 people

The future population of LCM is expected to have characteristics similar to the populations moving into other nearby release areas, such as Oran Park Turner Road and Catherine Fields (part) precincts. The *Finalisation Report* places a cap of 7,000 dwellings in the LCM Precinct.

Table 1 Objectives for connectivity and open spaces in LCM

Focus area	Draft LCM Precinct Plan (2018)	LCM Finalisation Report (July 2021)
Connections		
Public transport	» To encourage the use of public transport through the provision of integrated bus, pedestrian and cycle routes within the Precinct	» Continued
Pedestrian and cycle networks	» To encourage the use of active transport through the provision of pedestrian and cycle routes within the Precinct » To provide opportunities to extend the pedestrian and cycle routes beyond the Precinct » To provide a network for pedestrian and cyclists to traverse across the Precinct safely	» Continued With the adjustment: » Supported by the repositioning of some park spaces along the riparian corridor, to encourage more use of off-road/separate shared pedestrian and cycleways
Open space and recreation network		
Open spaces	» To provide open space to local residents for social interaction and passive recreation activities » To establish a sense of place and orientation within the neighbourhood by locating open space to take advantage of significant or prominent landscape features, such as views, high points, and areas of natural and cultural heritage significance » To provide for the equitable distribution of public open space and recreation opportunities » To ensure high quality design and embellishment of all public open space » To encourage the use of the major creek corridors and drainage land for passive recreation purposes consistent with environmental objectives	» Continued Adjustments include: » All residents are within 400m of a park space in accordance with the Premier's Priorities (as well as NSW GA guidelines – see Section 5: Social infrastructure provision) » Minimum park space of 5,000sqm, in accordance with Camden Council's <i>Spaces and Places Guide</i> (2021) » Drainage basins do not contribute to the provision of 'formal' open space (i.e. park or open space classification), but are recognised as contributions to cooling and greening, and for informal uses (i.e. visitors choosing to spend time, even if there is not the supporting infrastructure such as seats)

Source: NSW DPIE *Draft Schedule 6 Lowes Creek Maryland Precinct: Development Control Plan* (2018)

The social infrastructure proposed in Elton Consulting's *Demographic and Social Infrastructure Assessment: Lowes Creek Maryland* (2018) is compared against the *Finalisation Report* in **Table 2** in the following pages. Key issues common across both documents include:

- » A lack of a regional or Camden-wide social infrastructure Plan
- » Uncertainty around future yield and population forecasts and the location of secondary centres across the SWGA in the context of the review being undertaken of the South West Land Use and Infrastructure Implementation Plan (SW LUIIP).
- » A lack of agreed population catchments and benchmarks for key types of social infrastructure
- » Several issues requiring resolution by DPIE and Camden Council before a schedule of required social infrastructure could be confirmed, including:
 - > identifying catchments for an indoor sports centre and aquatic centre that will incorporate the LCM Precinct, and the broader Context Plan Area more generally
 - > agreeing preferred scale and locations for these facilities
 - > confirming size, distribution and site areas of recommended community centres / library
 - > confirming number and location of sporting facilities, the quantum and distribution of sports fields in the balance of the Context Plan Area and the overall open space plan.

Other commentary and recommendations received in the public submissions for the *Precinct Plan* (2018) and of specific relevance to this report are:

Staged and equitable access:

- » Liverpool City Council:
 - > Appropriate staging, enabling the progressive delivery of social infrastructure (such as open space and community facilities) as residents move in to the new development – not addressed
 - > Investigate the current capacity of regional facilities and, if a shortfall exists, plan for the provision of regional community facilities for future populations (in suitable locations, and appropriately staged)

The *Finalisation Report* (2021) suggests that a (revised) South West Growth Areas Structure Plan is being prepared in the 2021/22 financial year, with a commitment to work closely with Camden Council, as well as Liverpool City and Campbelltown City councils.

Open and recreation spaces:

- » Camden Council:
 - > a Public Domain and Landscape Plan is to be submitted for each local sporting field, neighbourhood park, recreation activity node and other passive open space areas at the time of subdivision of the adjoining residential area
 - > the design of open spaces is to be in accordance with Camden Council's open space design policies (current and draft)

- » NSW Office of Sport: Ensure female friendly amenities are provided at sport grounds

The *Finalisation Report* (2021) nominates that a Public Domain and Landscape Plan must be submitted for each local sporting field, neighbourhood park, local park and other passive open space areas (with the intention of offsetting climate change impacts, but likely to influence potential future recreational and public uses)

Local centre and walkability:

- » Camden Council: Maryland local centre allows a range of retail, commercial and community uses, is accessible, well connected and walkable. Ensure pedestrian access is designed to link the local centre to the community facility
- » NSW Office of Sport: dedicated shared paths are provided in active corridors, particularly riparian corridors.

The *Finalisation Report* (2021) recommends the provision of safe cycling and walking paths along all roads, and that additional provisions are made in the next iteration of the DCP for a 'well designed movement network' which encourages walking and cycling. The associated ILP has also relocated two parks to adjoin the riparian corridor to create a stronger network of connected green spaces with active linkages across LCM

Retention basins:

- » Camden Council: no objection to the use of the dry basins for passive recreation. However, these spaces shouldn't be considered in open space calculations, as they are not accessible in a 1 in 100-year storm event. If proposed density/yield is not decreased, additional open space should be provided for the community in both dry and wet weather. Regardless of resulting yield, long-term maintenance should be funded.

The *Finalisation Report* (2021) does not classify retention basins as 'formal' open space but recognises these spaces can offer informal uses (see previous **Table 1**). The riparian land will be dedicated and managed by Council in accordance with Camden Council's Dedication of Constrained Lands Policy, which provides a framework for managing the dedication of these types of land, so that Council is not burdened unreasonably by the maintenance costs for environmental and hazard management purposes of these lands.

Education:

- » Department of Education and Communities: potential sites for primary and high schools will need to meet relevant size, safety and accessibility requirements.

A 7ha school site adjacent to three double playing fields is indicated in the ILP (see following **Table 2**). The *Finalisation Report* (2021) also notes that bus capable roads will immediately adjoin the school site.

Contributions:

- » Camden Council:
 - > satisfactory arrangements clause be included into the Growth Centres SEPP (relating to the Camden Growth Area) to ensure that agreements for the delivery of infrastructure are in place between the developer and Council prior to issue of the consent for a Subdivision Certificate, or that an IPART-approved contributions plan is in place
 - > regardless of resulting yield, long-term maintenance of design enhancements and functionality of retention basins should be funded.

According to the *Finalisation Report* (2021), Camden Council is preparing a Section 7.11 plan to be exhibited in late 2021 to inform local developer contributions for the LCM Precinct, which is expected to provide local open space. The South West Growth Centres Special Contributions Area and the State Infrastructure Contribution levy will be applied to fund the delivery of State infrastructure, which could fund schools, emergency services, open space and conservation and health facilities. This levy requires financial contribution by any developer/landowner seeking development or subdividing land in the SWGA

Recommendations for social infrastructure provision in the LCM precinct are provided in **Table 3** in the following pages

Table 2 Comparison of social infrastructure provision in LCM

Focus area	Recommendations from Demographic and Social Infrastructure Assessment (2018)	LCM Finalisation Report (July 2021)
Connections		
Community and cultural facilities	» A district community facility (up to 2,000sqm)	» A community centre is indicated towards the centre of the ILP, adjacent sports fields/open space » No size is indicated, assumed no change
	» Two local community centres (total 2,760sqm)	» Two neighbourhood centres are located in the north and south of the western portion of the ILP » Recommends a cap of 1,000sqm for community centre and 500sqm in these neighbourhood centres, to support a mix of small-scale retail and community centre floorspace
	» No standalone library, but the provision of key library programs and services (such a book drop off and collection, homework club and story time) within the district community centre	» No indication, assumed no change
Open space	» Up to 59ha of open space (45% passive, 55% active)	» Increase in open space up to 62ha – no indication of active to passive percentage in this amount
	» Comprised of 19 local parks, 6 double playing fields and 22 courts	» Continues to provide 6 double playing fields » Increase to 21 local parks, but due to heritage considerations, only 11 are classified as RE1 Public Recreation land uses (i.e. could have potential implications for types of recreational uses in remaining 10 parks) » Courts not indicated, assumed no change
Education	» A combined primary (on a 2ha site) and high school (on a 4ha site) and between 7-8 childcare centres	» Education site located adjacent to 3 double playing fields and adjoining the local centre » Increase to 7ha of land for the school site. » Provided on a R3 Medium Density zoning, which permits a range of uses, including schools, childcare and other community uses » DPIE and the developer are engaged in ongoing discussions regarding a Voluntary Planning Agreement potentially for the of land for the school site. If a planning agreement is not reached, the Western Sydney Growth Area Special Infrastructure Contribution will apply.
Health and wellbeing	» A variety of health services, including GP practices and Allied Health.	» Not indicated, assumed no change

Table 3 LCM indicative social infrastructure provision

Social infrastructure types and recommendations
Community facilities » 1 district community centre around 2,000sqm » 2 local community centres in two neighbourhood centres, capped at 1,000sqm each » Approx. 835 sqm of library space, contributing to a district or regional library in the northern part of the SWGA (based on NSW State Library Standards, see Section 3.3.1: Lowes Creek Maryland) » A variety of retail and commercial services, including entertainment and leisure facilities
Open spaces and recreation 63ha of public open space, comprised of: Passive open space, recommendations integrated into the draft ILP: » Elton Consulting's <i>Demographic and Social Infrastructure Assessment: Lowes Creek Maryland</i> (2018) assumed 45% of open space for passive uses » All residents are within 400m easy walking distance of park spaces » Local parks, minimum of 5,000sqm / 0.5ha Active open space, recommendations integrated into the draft ILP: » Elton Consulting's <i>Demographic and Social Infrastructure Assessment: Lowes Creek Maryland</i> (2018) assumed 55% of open space for active uses » 6 double playing fields, comprised of clusters co-located with the school site, adjoining the riparian corridor and/or a neighbourhood centre » 22 courts provided across the LCM precinct Indoor and aquatic facilities: » Not indicated in LCM Precinct – may be indicated in the revised South West Growth Areas Structure Plan, expected to be prepared in the 2021/22 financial year Connected open space network: » Active connections utilise the park spaces and riparian corridors, to create a network of walking and cycle paths, and safe cycling and walking paths along all road
Education and childcare Schools: » 7ha school site, adjoining 3 double playing fields and co-located with local centre. » Elton Consulting's <i>Demographic and Social Infrastructure Assessment: Lowes Creek Maryland</i> (2018) suggested 1 public high school (4ha land area) and 1 public primary school (adjoining 2ha site), in accordance with DoE guidelines towards land area (see Section 3.3: Surrounding precincts planning) Childcare: » Elton Consulting's <i>Demographic and Social Infrastructure Assessment: Lowes Creek Maryland</i> (2018) suggested 7 or 8 childcare centres, to be provided by private / non-government providers
Health and wellbeing » Elton Consulting's <i>Demographic and Social Infrastructure Assessment: Lowes Creek Maryland</i> (2018) recommended several GP medical centres and associated allied health services
Religious/Denominational » Some places of worship, depending on population demand

Source: NSW DPIE's *Draft Lowes Creek Maryland Precinct Plan* (2018)

3.3.2 Oran Park Precinct

Oran Park is part of the SWGA and sits directly south east of Precinct 5. The delivery of social infrastructure in the Oran Park Precinct is guided by Camden Council's *Oran Park and Turner Road Precincts Section 94 Contributions Plan 2008* (s94 Plan) and associated indicative layout plan (ILP), and DPIE's *Oran Park Development Control Plan* (DCP).

The *s94 Plan* was informed by the Growth Centres Infrastructure Plan (focussed on regional level infrastructure needs) and the Growth Centres Development Code 2006. At the time of its preparation, the *s94 Plan* acknowledged minimal social infrastructure existed in the land to become Oran Park Precinct and stipulated that new social infrastructure would be required to meet the need generated by future residents, including open space and recreation facilities.

Key estimations which informed Camden Council's *s94 Plan's* projected open space and recreation needs were:

- » Approximately 7,500 dwellings and 21,500 people in the completed Oran Park Precinct (contributing to 11,500 dwellings and anticipated 33,700 residents across Oran Park and Turner Road Precincts)
- » A new Oran Park town centre surrounded by smaller neighbourhood centres, containing retail, commercial, civic and community uses
- » Educational, institutional, community and recreational land uses to support residents
- » A 20-year development timeframe. Since the adoption of the s94 Plan, the development of Oran Park Precinct has progressed.

DPIE's *DCP* stipulates that the staging of delivery and social infrastructure provision in the Oran Park Precinct is to be consistent with staging and timing of the *s94 Plan*.

At the time of preparing this report the Oran Park Precinct:

- » Is more than halfway through its assumed precinct delivery timeframe of 20 years
- » Accommodates approximately 16,450 people and 5,000 dwellings (2021 forecast id figures)
- » Has delivered several operational district and regional level open and recreation spaces.

An overview of existing and proposed social infrastructure in Oran Park and the Camden LGA is provided in **Section 4: Social infrastructure review.**

3.3.3 Pondicherry Precinct

Pondicherry is part of the SWGA and is located directly east of the Precinct 5.

In mid-2020, Greenfield Development Corporation submitted a PP to Camden Council for the rezoning of Tranche 41 in the Pondicherry Precinct. This was submitted before the whole of Pondicherry Precinct PP, to enable the Oran Park Precinct to respond to demand for housing while complex planning issues surrounding the larger Pondicherry Precinct were being resolved. The ILP prepared for Design+Planning's *Pondicherry Precinct Planning Proposal: Pondicherry (Part) Precinct Tranche 41* (July 2021) are integrated into the whole of Pondicherry Precinct Planning Proposal

Design+Planning's *Pondicherry Precinct South West Growth Area: Planning Proposal* (March 2021) includes key findings from a social infrastructure assessment prepared by Elton Consulting. The Pondicherry Precinct comprises 242ha of land and key assumptions regarding the potential future development and community are:

- » A range of 7,840 to 8,830 people, residing in a low to medium density mix ranging from 2,530 to 2,850 dwellings
- » An average occupancy rate of 3.2 people/household
- » A new community predominately comprised of children, young workers and home builders, with majority household types being couples with children and couples without children.

- » Expectation that it will play an important role in supplying homes for larger households.

Based on findings and recommendations from the social infrastructure study, the *Pondicherry Precinct South West Growth Area: Planning Proposal* (March 2021) PP and ILP indicate the majority of social infrastructure provision will be provided in the Lake Precinct, on the eastern edge of the Pondicherry Precinct, including:

- » A neighbourhood centre: intended to provide mixed use activities including commercial, residential, civic, recreation, and social infrastructure in the form of a community centre and childcare services
- » A multipurpose community centre (530-550sqm): inclusive of a large hall with a seating capacity of 120-150 people and a smaller hall with a seating capacity of 80-90 people that can be divided into meeting rooms, kitchen and storage areas and ideally connected to an area of open space. The PP also assumed that future residents will access existing and planned facilities in Oran Park due to scale and proximity (Note: This facility is relocated from the northern location indicated in the Oran Park ILP, to support more equitable distribution and access).
- » Government primary school: Land for one primary school (1.5ha) in the western portion of the Pondicherry Precinct that is regular in shape, has road frontages on three sides, is in central accessible location, and is close to open space.
- » Non-Government school: Although demand for non-government primary and secondary schools is not reached by the expectant population, increasing demand for non-government school places was identified. The ILP nominates a site for a new K-12 private school on the eastern edge of the Pondicherry Precinct
- » On-site open spaces, well designed and high amenity, including:
 - > Active: 12.7ha of active open space with a regionally significant sporting facility supplying 4-5 single playing fields, 4-5 multipurpose sport courts, fitness and exercise space with equipment and running paths (Note: The social infrastructure study found that there was adequate supply of sport courts in Camden LGA but need for additional multipurpose sport courts). This is located in the north eastern edge of the Pondicherry Precinct.
 - > Passive: 12.54ha of passive open space, including 11 neighbourhood parks (minimum of 0.4ha within 400m of all residents) and 1 large local park (greater than 4ha), further supported by embellished and publicly accessible riparian and environmental corridors (where permissible)
 - > Playspaces: 3-4 high-quality and multi-age playspaces (including 1 in the sporting facility above)
- » Contribution to regional open space through the Western Sydney Growth Areas Special Infrastructure Contribution (SIC)
- » Shared walking and cycling paths linking residents to the open spaces in the Pondicherry Precinct and to open spaces in Oran Park
- » No on-site provision of health, childcare, tertiary education, aged care and/or emergency and justice services, as this demand will either be met in surrounding local centres or provided by private market.

An overview of proposed social infrastructure in the Pondicherry Precinct is provided in **Section 4: Social infrastructure review**.

3.3.4 Austral and Leppington North Precincts

Austral and Leppington North are part of SCWLA, located north east of Precinct 5 (no adjoining boundary).

DPIE's *Austral and Leppington North Infrastructure Delivery Plan* (2012) (Delivery Plan) estimates 17,350 dwellings and up to 13,000 jobs in a range of sectors including retail, commercial and administrative services.

DPIE's *Delivery Plan* has nominated Leppington as the SWGC's regional centre and estimates that it will need to incorporate regional open space for the recreation needs of the SWGC, including a regional stadium, indoor sports and aquatic centre, as well as a new TAFE.

The combined area of Austral and Leppington North is projected to need:

- » Local open space across the precinct, with 90% of all dwellings within walkable distance (up to 400m) and with a provision rate of 2.9 ha/1,000 people
- » A range of community facilities, including a regional cultural and performing arts facility in Leppington, potentially integrating a library and possibly co-located with the civic precinct and adjacent to open space (see following **Section 4.1: Community and cultural facilities** for more detail)
- » Upgrades to capacity of major existing hospital facilities, namely Liverpool (Liverpool Health and Academic Precinct planned for completion in 2026¹), Campbelltown (Stage 2 redevelopment underway²) and Camden Hospitals will need to be increased to accommodate the needs of a larger population
- » A hierarchy of integrated primary and community care centres (IPCC) provided across the SWGA, in Leppington, Oran Park and Bringelly, with the largest in the Leppington (the main centre), and plans for a Regional Integrated Primary & Community Care Centre (RIPCC) in Leppington to serve a population catchment of 75,000-100,000 people (1 of 3 planned for the SWGA³)
- » Up to five new primary schools and one new high school after 10 years, as the Department of Education (DoE) has identified that the capacity of existing schools in the Precinct and in adjoining areas (e.g. John Edmondson High School and Hoxton Park High School) is sufficient to cope with initial demand (to be monitored by DoE and reassessed as development occurs).

In addition, the capacity and response areas of emergency services networks will need to be expanded. Suitable outpost and control centre sites will need to be determined once the road network is determined which allow the fastest possible travel times, and support response rates.

An overview of existing and proposed social infrastructure in the Austral and Leppington North Precinct is provided in **Section 4: Social infrastructure review**.

3.3.5 Planning for the Aerotropolis

Planning for the Aerotropolis and its inclusive precincts is being guided by DPIE's *Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan Stage 1: Initial Precincts* (2018). The Plan incorporates a series of principles:

- » Productive: accessible, innovative, 24-hour city, connected globally, nationally, locally and digitally, and a prime location for investment. It will make a significant contribution to 200,000 jobs for Western Sydney, creating an innovation precinct and a home for technology, science and the creative industries.
- » Compact and connected: compact urban form, minimising urban footprint, preserving environmentally valuable lands, allowing for a diversity of housing (within 10-minutes of centres and five minutes of parks and open space).
- » Liveable: diversity of jobs and homes including affordable housing, high-quality public transport, vibrant urban centres and unique amenity, creativity and recreation attracting new and highly skilled and diverse communities.
- » Sustainable: planning in each of the Aerotropolis' precincts will create opportunities to introduce aspirational energy and water solutions, and sustainable approaches to the creation of public areas, new built form and social infrastructure.
- » Aligned with infrastructure and funding: sequenced precinct planning will align population and economic growth, with the planning and construction of new transport, services and activated facilities and spaces for residents and workers.

¹ <http://lhap.health.nsw.gov.au/>

² <http://campbelltownredevelopment.health.nsw.gov.au/projects/campbelltown-hospital-redevelopment-stage-2>

³ https://www.swhlhd.health.nsw.gov.au/pdfs/SWGC_IPCCS.pdf

- » Compatible with a landscape led approach to urban development: South Creek and its tributaries will shape an open space network that combines recreation, stormwater management and biodiversity, and combat influence of heat on the health and lifestyle of residents and workers.

DPIE's *Overview of Aerotropolis Core, Badgerys Creek & Wianamatta - South Creek Precinct Plans* (November 2020) indicates that the Aerotropolis Core and Badgerys Creek Precincts will deliver:

- » Up to 71,000 jobs by 2056, in addition to DPIE's *Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan Stage 1: Initial Precincts* (2018) plan to accommodate up to 24,000 residents
- » Social infrastructure ranging from local to regional scale (e.g. active spaces, parks and community facilities), to meet the needs of local residents as workers, as well as visitors
- » A future metro station.

In DPIE's *Draft Aerotropolis Precinct Plan: Draft for Public Comment* (November 2020), social infrastructure recommendations up to 2056 for the Aerotropolis Core, Badgerys Creek and Wianamatta-South Creek relevant to this report are:

- | | |
|--|--|
| <ul style="list-style-type: none"> » Community and cultural facilities: <ul style="list-style-type: none"> > 2 local community spaces and 1 district community centre co-located with the district library (see below) > 1 district library connected to makers spaces and /or community services, and later joined to the multiversity, and 1 branch library incorporating cultural and maker spaces > 2 local cultural facilities, as well as Cultural Performance Centre > An Aboriginal Arts and Cultural Centre » Open and recreation spaces: <ul style="list-style-type: none"> > 3 district sportsfields (2 playing fields and 1 oval), and later 1 football field > 1 indoor sports facility, 10 netball courts and 1 indoor/aquatic facility > 1 youth focussed outdoor recreation facility > Up to 15 local parks and 7 district level parks | <ul style="list-style-type: none"> » Education and health: <ul style="list-style-type: none"> > 2 new government primary schools and 1 new government high school, as well as delivery on non-government schools > One community health facility and a specialised Indigenous Health Facility > An Aerotropolis outreach innovation and/or centre of excellence > Contribution to the Aerotropolis multiversity and establishment of a Vocational Education and Training (VET) facility » Emergency services: <ul style="list-style-type: none"> > 2 fire stations > a new multipurpose Police Hub with specialist resources (e.g. e.g. traffic, highway and forensics) and 1 police station > 1 new courthouse. |
|--|--|

The location of the Aerotropolis in relation to Precinct 5 is shown in the previous **Figures 5 and 6**.

3.3.6 Transport planning

Transport for NSW's *North South Rail Line and South West Rail Link Extension Corridor Identification* (2018) nominates corridors of land for future rail lines between the South West and surrounding North West Growth Areas, the Aerotropolis and Greater Macarthur Growth Areas. The transport links will support the growth of future town centres in these areas. The proposed route (to be finalised post Aerotropolis finalised) is shown in **Figure 7** on the following page. At the time of preparing this report, the identified link could possibly be accessed by future residents in Precinct 5 at the proposed Oran Park station.

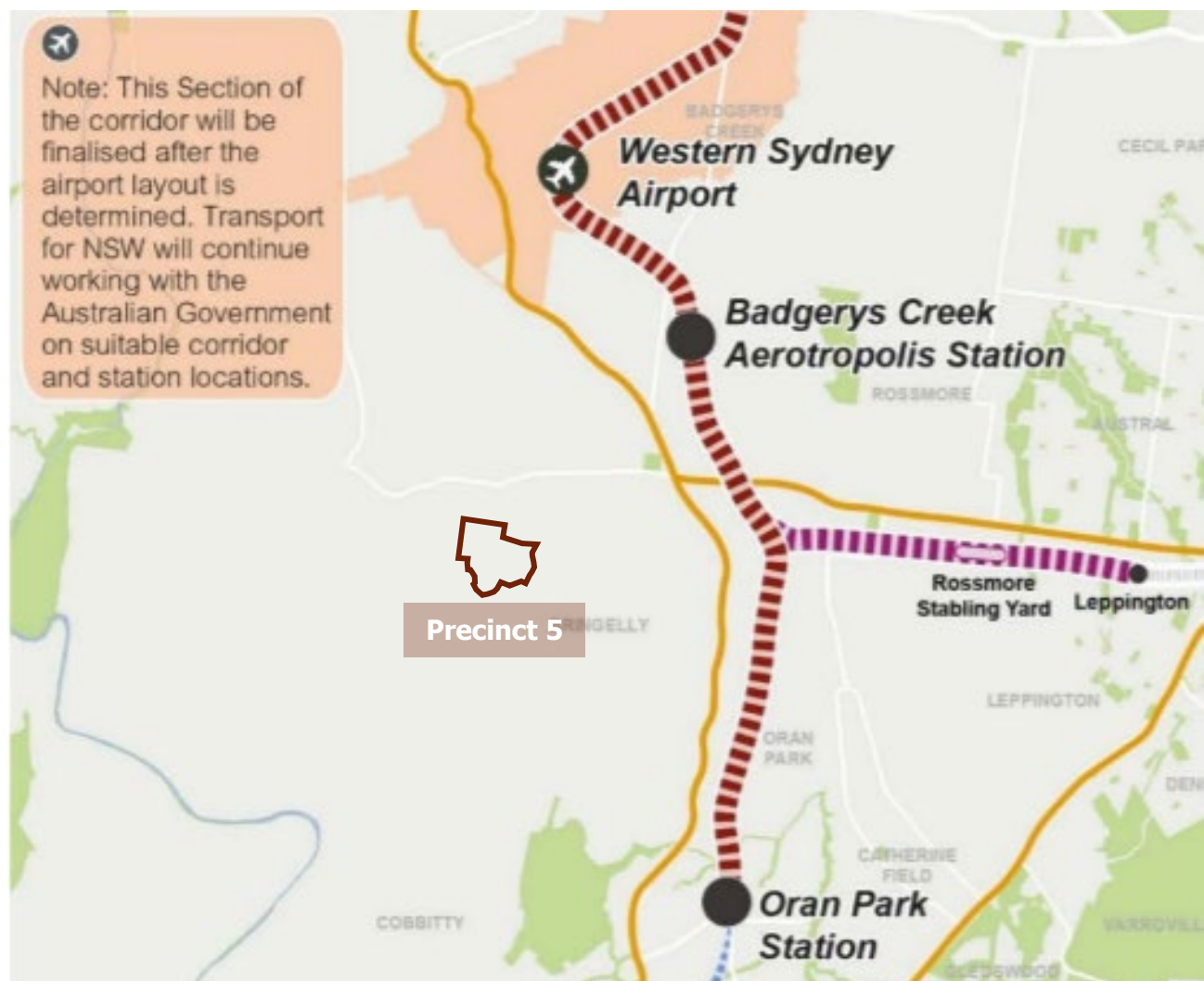
The NSW Government's *Future Transport 2056* (2018) identifies planned initiatives for greater connectivity between Sydney CBD and growth areas over the next 20 years, including improved public transport connections and services and better east-west connections. Key planning suggestions relevant to this report are:

- » A north-south train link through the Western Sydney Airport-Badgerys Creek Aerotropolis
- » Rapid bus connections and improved bus connections between Western Sydney Airport – Badgerys Creek Aerotropolis and Penrith, Liverpool, Blacktown and Campbelltown–Macarthur
- » The Oran Park to Western Sydney Airport–Badgerys Creek Aerotropolis Rail Link
- » A safe cycleway network
- » The Sydney Metro City and Southwest Extension to Liverpool.

If approved, it is likely these plans will be implemented in stages, with emphasis transitioning from high volume north-south corridors towards improving critical east-west movements.

GHD's *Camden and Campbelltown Council's Integrated Transport Strategy* (2006) recommends that higher density residential areas and commercial areas are located around the existing and proposed public transport networks. The strategy suggests that a working group or committee is established to align the delivery of residential with transport infrastructure delivery and/or enhancement for the SWGC. This infrastructure includes rail networks as well as roadways.

Figure 7 Proposed route of future North South Rail Line



Source: Transport for NSW's *North South Rail Line and South West Rail Link Extension corridor identification* (2018)

4 Social infrastructure review

The following section investigates existing and planned social infrastructure surrounding the Precinct 5.

4.1 Community and cultural facilities

There are no existing community and cultural facilities within current Precinct 5. The nearest existing facilities (within approximately 10-minutes drive are:

- » Oran Park: Julia Reserve Youth and Community Centre and Oran Park Library (which includes the multifunctional Sandown Rooms for uses for meetings, playgroups, community groups and dance, fitness and art classes), as well as the Oran Park Town Sales and Information Centre
- » Catherine Field: Catherine Park Community Centre and Catherine Field Community Hall
- » Harrington Park: Harrington Park Community Centre and Birriwa Reserve Community Hall (with enclosed open space and adjoining playground)
- » Bringelly: Bringelly Community Centre.

With the exception of Julia Reserve Youth and Community Centre and Oran Park Library (and its Sandown Rooms), all existing facilities are local level and have minimal or limited multifunctionality (e.g. hall and meeting rooms). Beyond this proximity, local level community and cultural facilities are dispersed in the surrounding town and urban centres.

As shown previously in **Figure 6**, Precinct 5 is positioned amongst several significant precincts, which have proposed community and cultural facilities for the need generated by their communities including:

- » LCM: multipurpose community centre (up to 2,000sqm) with library services provision and 2 neighbourhood community centres (capped at 1,000sqm each)
- » Austral and Leppington North: a range of community facilities, including performing arts, exhibition and workshop and studio spaces, and a multipurpose community centre (as well as a recommendation from Camden Council for a new library to create a community and cultural hub of 5,000-5,500sqm – see following pages).
- » Catherine Fields: a 430sqm multipurpose community centre
- » Pondicherry: a 530-550sqm multipurpose community centre with large hall and small hall (capable of being turned into smaller rooms)

DPIE's *Draft Western Sydney Aerotropolis Plan* (2019), also proposes a focus on arts and creativity, through the delivery of public art and cultural infrastructure, such as art galleries, museums and libraries, and community hubs which integrate other social infrastructure as well as open and green spaces for enhanced activation adaptable uses of public spaces.

Camden Council's *Spaces and Places Strategy* (2020) has revised previous community and cultural facility standards, to population benchmarks. A summary of the evolution of Camden Council's community and cultural provision is provided in **Table 4** on the following page.

Existing and proposed community and cultural facilities surrounding Precinct 5 are shown in **Figure 8** in the following pages.

Table 4 Current Camden open and recreation space benchmarks

Demographic and Social Infrastructure Assessment: Lowes Creek Maryland (2018)	Spaces and Places Strategy (2020)
» Multipurpose community centres: 55sqm per 1,000 people for multipurpose community centres, comprised of: > 42sqm per 1,000 people contributing to local level community facility floorspace > 13sqm per 1,000 people contributing to district level community floorspace.	» Regional community facility: 40,000 people, provided as a large facility offering buildings /spaces that enable multiple and diverse uses » Local community facility: 20,000 people, offering multipurpose space for flexible uses » Neighbourhood community facility: 6,000 people, generally basic structures that are unstaffed and available for regular hire and for neighborhood programs and activities (e.g. playgroup, dance classes, etc.)
» Libraries: 57.5sqm per 1,000 people (+20% of this size for circulation), for population less than 20,000 people (NSW State Library standards)	» 1 library: 40,000 people
» None	» 1 civic/community centre (community space with performance capabilities, e.g. theatre): 30,000 people

Community centres

Camden Council's *Spaces and Places Strategy (2020)* recognises the role free and/or affordable community spaces play in building connections in new communities. In the *Spaces and Places Strategy (2020)* Camden Council have nominated that community centres, scout halls and clubrooms are classified as community centres.

According to the *Spaces and Places Strategy (2020)*, current best practice is the delivery of network of larger but fewer community facilities, that can provide higher level services and service a larger catchment of people. This has informed Camden Council's decision to move to the benchmark of 1 local community centre per 20,000 people, enabling the provision of fewer and larger multipurpose centres which have the capacity to accommodate increasingly diverse and changing community needs.

Based on a review of lease and hire schedules conducted for the *Spaces and Places Strategy (2020)*, there is capacity in existing community centres to accommodate greater use and future planning should focus on upgrading these facilities to multipurpose centres, rather than the provision of more neighbourhood/local community centres. The *Spaces and Places Strategy (2020)* also found that existing community centres in Camden LGA are generally unstaffed buildings providing spaces for community use and hire, which could be adapted to meet the needs of incremental population growth.

DPIE's and the Western Sydney Planning Partnership's (WSPP) latest *Draft Aerotropolis Precinct Plan* (November 2020) indicates that the Aerotropolis Precinct will provide local, state and regional scale social, community and cultural infrastructure. While the types of facilities are not indicated (and locations are preliminary) it does suggest that they will support research and innovation, health, training and education opportunities for workers, visitors, tourists and residents. There is also an indication of an Aboriginal Arts and Cultural Centre and Cultural Performance Centre.

Libraries

Camden Council's *Draft Camden Libraries Strategy 2021-2025* (April 2021) highlights the trend of libraries being community hubs, offering space for communities to gather, connect and learn, and increasing community expectation that they offer services and an experience 'beyond the shelves'.

Camden Council currently manages the following three existing libraries in Camden LGA:

- » Camden Library: Council's smallest library (806sqm), co-located with Camden Museum, Camden Historical Society and Camden Area Family History Society. It includes a multipurpose meeting room and welcoming foyer which acts as a meeting place
- » Narellan Library: Council's largest library (3,111sqm) located adjacent to Narellan town centre. It offers a range of spaces including an indoor/outdoor play space, study rooms, multipurpose community rooms and a semi-professional recording studio and computer lab
- » Oran Park Library: Council's newest library (2,500sqm), co-located with Oran Community Resource Centre within the new Oran Park Town Centre. It was designed to maximise adaptability and multifunctionality, has access to outdoor space as well as study and multipurpose community rooms. It was delivered through a voluntary planning agreement for Oran Park Precinct.

The *Draft Camden Libraries Strategy 2021-2025* (April 2021) identifies that Camden Council is investigating opportunities for a new library in future Leppington town centre, preferably co-located with a future multipurpose community centre and cultural and performing arts centre. If the future library was located close to the planned Leppington train station, Camden Council suggests that it could be delivered as a joint service between Camden and Liverpool City councils.

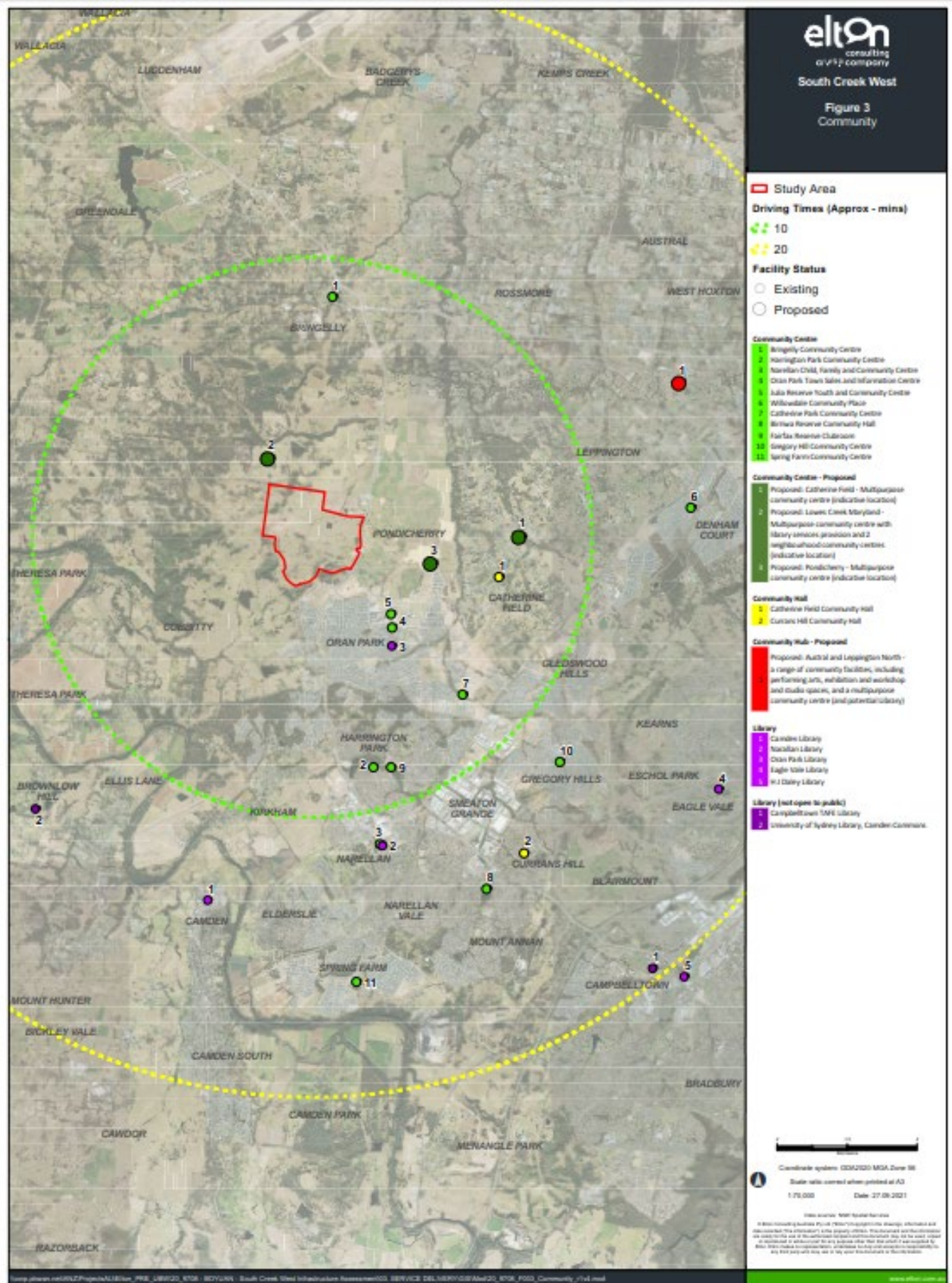
Based on the *Spaces and Places Strategy* (2020) benchmark of 1 library:40,000 people, it was found that there were sufficient libraries to meet current demand. It also found that:

- » Both Camden and Narellan libraries were nearing capacity. Demand is being generated for operational and multifunctional adaptations, including increased hours of operation, more staffing, parking at Narellan, more digital resources and meeting rooms.
- » The projected population of Camden LGA (approx. 233,000 by 2036) will create a shortfall in 2 libraries, likely to be in the Growth District, which contains the site. However, it also recognises that while additional need should be monitored, as the provision of regional level services in a future library at Leppington in conjunction with the existing Oran Park Library may meet this demand.

Strategic priorities for Camden Council's libraries are:

- » The community feels welcome, safe and connected
- » Library spaces are vibrant, well utilised and for everyone
- » Inclusive programs and activities inspire learning, creativity and discovery
- » Collections and resources provide contemporary opportunities for lifelong learning and to tell our stories
- » Well managed libraries continue to support our growing and changing community.

Figure 8 Existing and proposed community and cultural facilities



4.2 Open spaces

There are no existing public open and green or recreation spaces within current Precinct 5.

Within approximately 10-minutes drive from Precinct 5, there are numerous passive open green spaces and up to 3 off-leash dog parks in Oran Park. In this proximity there are also a combination of formalized active open spaces (i.e. for sporting codes) and informal (i.e. turn up and play) and specialised recreation spaces:

- » Oran Park: Jack Brabham Reserve (district active sporting hub, with capacity to accommodate various codes including soccer, rugby league and cricket) Wayne Gardner Oval (a local sportsground with playground) and the skate park and basketball court provided with Julia Reserve Youth Precinct (adjoining Julia Reserve Youth and Community Centre
- » Harrington Park and Kirkham: Harrington Park Sports Fields and Sir Warwick Fairfax Oval (local club sports fields and courts) as well as Macarthur Regional Hockey Centre and Narellan Sports Hub (44 netball courts, athletic facilities, multi-purpose sportsgrounds and playground – see **Section 4.2.2: Sport and recreation**).
- » Bringelly: Bringelly Park and Reserve (local sportsfields with courts) and a specialised recreation space (agistment and equestrian centre).

Proposed open spaces surrounding Precinct 5 are:

- » LCM: up to 62ha of open space, incorporating 21 local parks, 6 double playing fields and 22 courts
- » Oran Park: the future Oran Park Leisure Centre, projected to provide aquatic, indoor sports, health and fitness areas (see **Section 4.2.2: Sport and recreation**)
- » Austral and Leppington North: approximately 135ha of open space, 60% of which is passive (81ha)
- » Catherine Field: up to 30ha of open space, including 2 double playing fields and 4 outdoor courts
- » Leppington: a regionally significant sporting facility, including 4-5 single playing fields, 4-5 multipurpose sport courts, fitness and exercise space with equipment and running path, and passive open spaces (11 neighbourhood parks of minimum of 0.4ha within 400m of all residents and 1 large local park), plus 3-4 high-quality and multi-age playspaces.

As indicated in DPIE's *Draft Western Sydney Aerotropolis Plan* (2019), the Aerotropolis is also projected to provide district-scale open space (such as playing fields) and regional parks are provided towards the edge of centres to maximise catchment areas, as well as sporting fields are shared with educational institutions, wherever possible.

Camden Council's *Spaces and Places Strategy* (2020) is consistent with historical open space benchmarks and standards adopted by Council, including the open space standard of 2.83ha per 1,000 people. A summary of Camden Council's evolved open and active recreation standards is provided in **Table 5** on the following page, key features are:

- » No proportional allocation to active or passive spaces
- » An increased benchmark in playspace provision, but general expectation of larger, multipurpose spaces
- » A consistent benchmark for sportsfields, but adaptation regarding pervious hardcourt provision to consider sports courts and multipurpose courts.

The *Spaces and Places Strategy* (2020) defines passive and active open spaces as:

- » Passive: Council owned or managed public open space.
- » Active: Council owned or managed playspaces, sports fields, aquatic facilities, sports courts, dog off leash areas, skate parks, BMX or mountain bike tracks.

Existing and proposed passive and active open and recreation spaces surrounding Precinct 5 are shown in **Figures 9 and 10** in the following pages.

Table 5 Current Camden open and recreation space benchmarks

Demographic and Social Infrastructure Assessment: Lowes Creek Maryland (2018)	Spaces and Places Strategy (2020)
» 2.83ha per 1,000 people	» 2.83ha per 1,000 people
» 50% active / 50% passive	» No passive or active allocation
	» Min 5,000sqm for local parks
» 1 playground per 1,200 residents	» 1 play space: 2,000 people
» Youth focussed facilities, with adjoining recreation spaces: 89sqm per 1,000 people, with adjoining outdoor spaces	» Not indicated
» Sportsgrounds: 1 playing field per 1,850 people	» Sports fields: 1 sports field per 1,850 people
» Hardcourts: 1 hard court per 1,075 people	» Sports courts: 1 court per 2,000 people
	» Multisport courts: 1 court per 3,000 people
» None	» 1 off leash dog park: 16,000 people

Figure 9 Existing and proposed passive open spaces

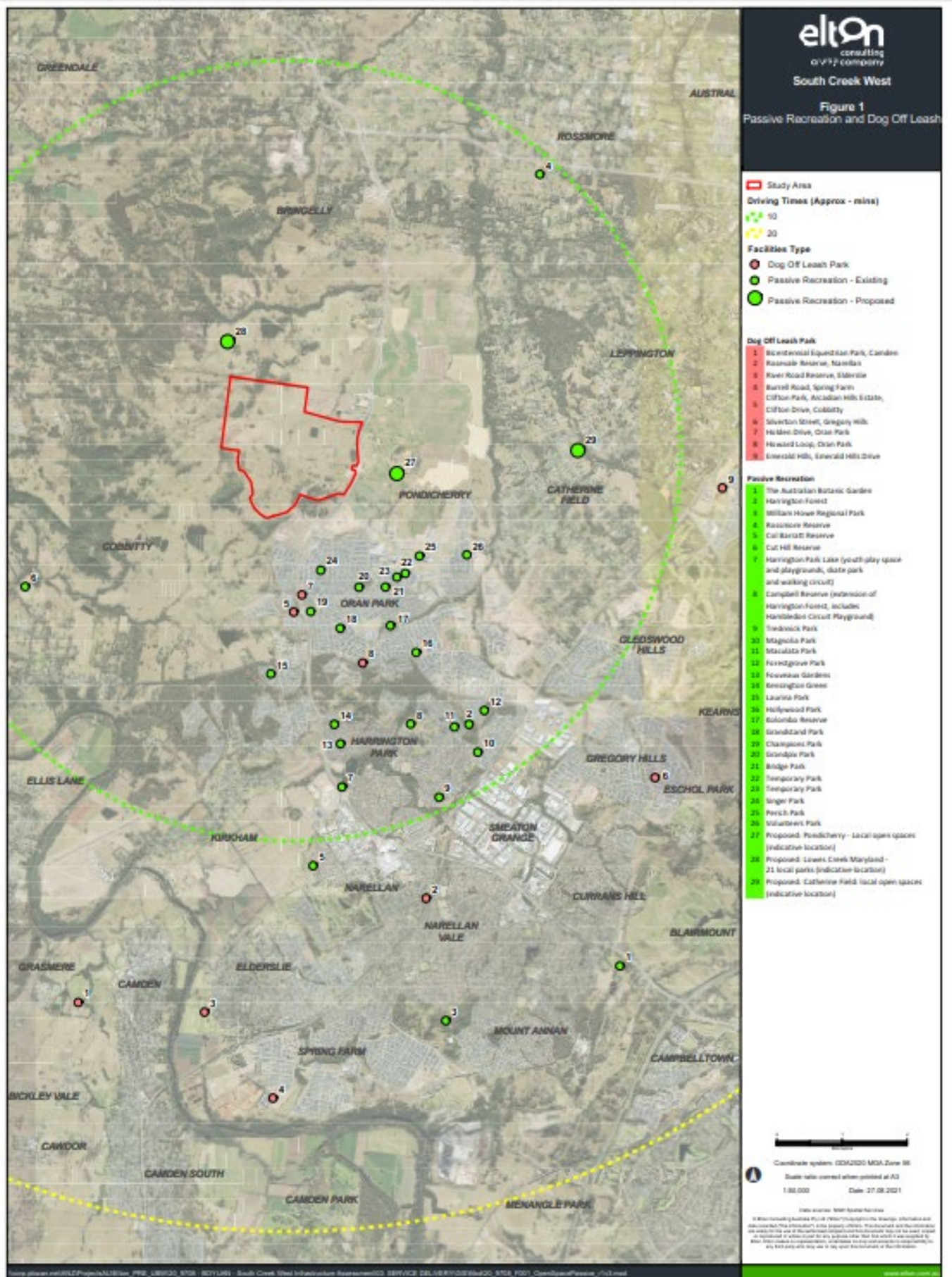
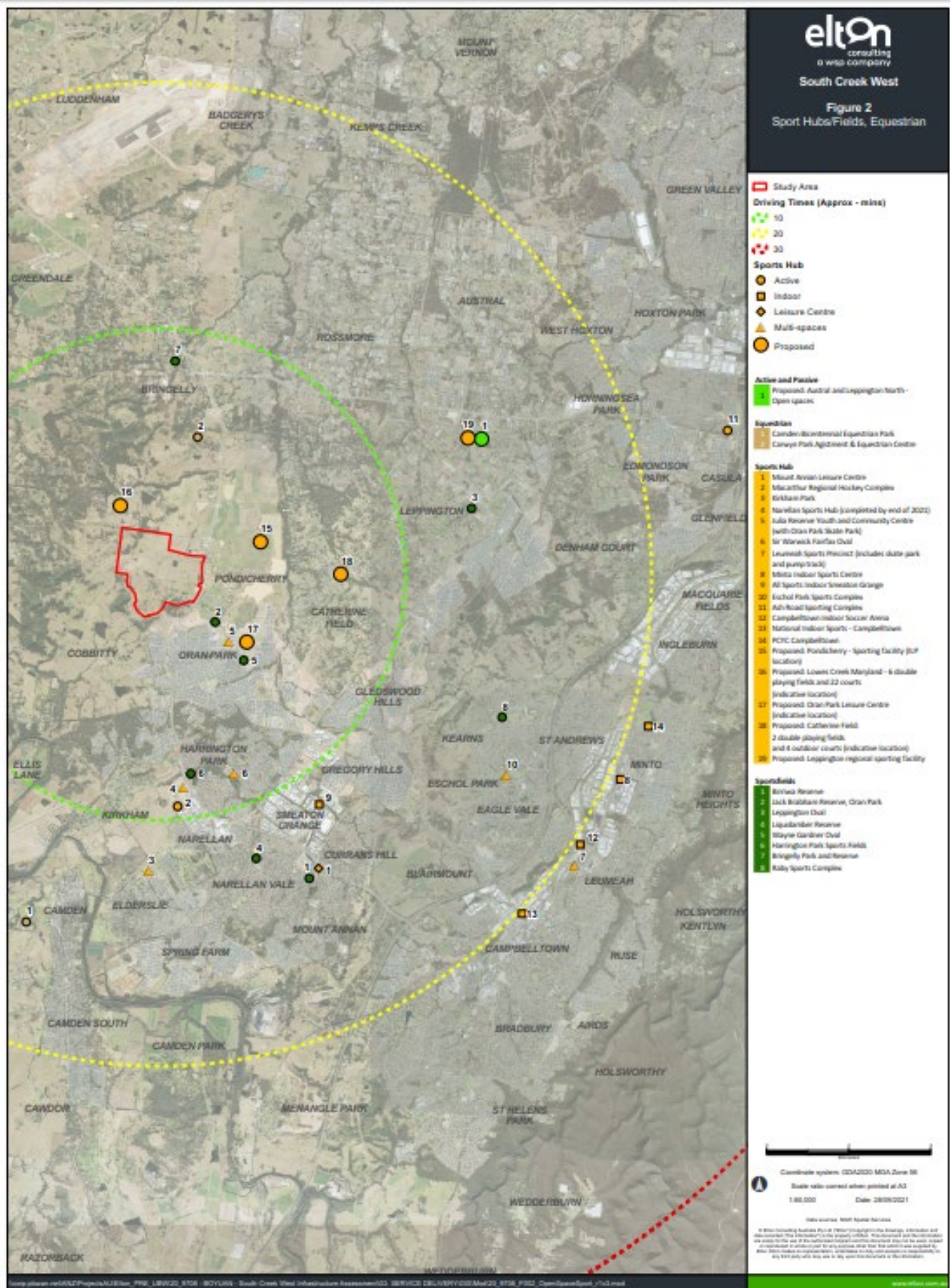


Figure 10 Existing and proposed active open spaces



4.2.1 Network of green and open spaces

The NSW Government Architect's (NSWGA) *Green Grid* (2014) recognises that South Creek, adjoining the north eastern corner of Precinct 5, will play an important role in open space provision and distribution for the SWGA. The South Creek Green Grid project, which incorporates South Creek and its tributaries, aims to create a continuous open space corridor along the entirety of South Creek. The corridor has the potential to be a regionally significant recreation and active transport corridor for Western Sydney.

The *Green Grid* (2014) envisions a cohesive green infrastructure network across Greater Sydney. The NSW GA nominate that new developments provide an opportunity to plan for and deliver greater (a combination of size and quality) open spaces and integrated networks in Greater Sydney. High quality and an interconnected network of open space will provide the opportunity to promote greater liveability. The NSW GA recommends:

- » New developments provide new open space and integrated networks of pedestrian and cycle connections to accommodate the needs of existing and new residents
- » Completing the regional trail connecting South Creek with the Great River Walk on the Hawkesbury-Nepean River
- » Prioritising the importance of rivers as recreational destinations
- » Establishing Kemps Creek and South Creek as major open space destinations and connectors to support development in the SWGC
- » Strengthening or establishing connections from the SWGA to key regional open spaces and parklands.

In DPIE's *Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan Stage 1: Initial Precincts* (2018), the South Creek Precinct is located to the north east of SCWLA. The South Creek Precinct is intended to become the parkland spine to the Aerotropolis and the broader Western Parkland City and will be envisioned to provide open spaces and water-oriented recreation activities for communities. DPIE's and the WSPP's latest *Draft Aerotropolis Precinct Plan* (November 2020) continues to reflect this commitment.

Camden Council's definitions for active and passive open spaces was previously provided (see **Section 4.2: Open spaces**). The NSW GA *Draft Greener Places Guide* (2020) incorporates a wider classification of open spaces and examples of the embellishment and potential uses:

- » Natural areas: nature and low-impact recreational activities (e.g. walking, cycling, picnics)
- » Passive open spaces: parks, gardens and linear corridors for passive recreation activities and supported by suitable infrastructure (e.g. walking paths, picnic tables, areas for gathering in the outdoors)
- » Active open spaces: outdoor spaces for formal community sports, typically with sporting facilities (e.g. playing fields, amenities and changing blocks, spectator stands/seating, car parks)
- » Riparian corridors: open spaces or connections aligning or traversing waterbodies.

Camden Council's *Open Space Asset Management Plan* (2011) nominates a category of critical assets, which are the essential to ongoing enjoyment and activity for the community. Critical assets are determined by an analysis of their characteristics, including:

- » Size: classified as large (>2ha), medium (1-2ha) or small (<1ha)
- » Inclusions: such as playgrounds, amenities buildings, off leash dog facilities or historical park facilities
- » Natural features: including proximity to waterways and/or significant natural components
- » Usage: as a type of recreation activity, such as sporting facilities, passive recreation, civic gardens/pocket parks.

The *Spaces and Places Strategy* (2020) locates Precinct 5 in the Growth Areas district, which it identifies as currently and projected to be (2036) undersupplied in open space. In an assessment of the demographic profile of Camden LGA, the following demands for open space assets in the future were identified:

- » Need for recreational spaces for young adults and families, for active sport

- » Need for passive sport and recreation activities suitable for older adults (e.g. lawn bowls and golf) as well as access to activities such as walking.
- » Strong demand expected for 'traditional' or club sports (e.g. cricket, league, netball, tennis, etc).

Camden Council's *Camden Recreation Demand Study* (2014) identified the types of recreation spaces most needed by demographic characteristics, including:

- » Households with children: playgrounds and playspaces
- » Young people and young adults: adventure play facilities, sporting fields, sports courts, bike tracks, outdoor and indoor spaces
- » Older adults: walking/cycling tracks, picnic and BBQ, sports courts, lawn bowls, golf, indoor social
- » Medium density dwellers: parks close to home, community gardens, gathering spaces
- » Small households: meeting places
- » Above average employment/income: range of free, low cost and 'pay to play' sporting and recreation options
- » Above average vehicle ownership: vehicle parking areas, balanced by encouraging walking and cycling.

A community survey conducted for Camden Council's draft *Space and Places Strategy* (2020) found:

- » Walking was the most population recreation activity and walking paths were highly valued
- » The provision of play spaces, outdoor fields and walking paths were the community's highest priorities
- » Active open space is at or over capacity across Camden LGA, and there is demand for additional sports fields
- » Increasing sports club memberships which has implications for outdoor playfield fields, sportsgrounds and sports facilities in Camden LGA (many of which do not meet sporting club standards for senior games or finals, meaning large game events are hosted outside of Camden LGA)
- » Distance and inconvenient access where the greatest impediments to current use of open and recreation spaces, highlighting the importance of an equally distributed network.

Future priorities for open spaces listed in the Camden Council's *Spaces and Places Strategy* (2020) are:

- » Improved understanding of community needs to meet increasing open and recreation spaces demand, including providing spaces for all ages and abilities
- » Co-located, multipurpose, multi-use and flexible facilities and partnership with other agencies to deliver improved spaces which enable high utilisation
- » Prioritisation of access to natural areas and the delivery of green linkages.

4.2.2 Sport and recreation

The Greater Sydney Commission's (GSC) *Western City District Plan* (2018) contains a series actions aligned to recreation and open space planning, including:

- » Develop a South West District sport and recreation facility plan
- » Planning for shared spaces, including an increase in community facilities and open space
- » Use funding priorities to deliver the South West Green Grid priorities
- » Develop support tools and methodologies for local open space planning
- » Review criteria for monitoring of water quality and waterway health.

DPIE's and the WSPP's *Draft Aerotropolis Precinct Plan* (November 2020) nominates that a range of sporting and recreation infrastructure will be provided within 30 minutes with Precinct 5, including a district indoor sports facility, indoor aquatic facility and youth focussed outdoor recreation facility.

Closer to Precinct 5, the Oran Park Leisure Centre is scheduled for completion in 2024. The future facility will be co-located with the Oran Park Library and will offer a 50m swimming pool, indoor sports and health and fitness. Its position and offerings is expected to create a prominent community hub in Oran Park town centre⁴.

The finalisation of Stage 2 of the Narellan Sports Hub⁵ is also on track for completion by the end of 2021. Currently, Narellan Sports Hub offers 30 netball courts, an amenities building and playground. When Stage 2 is complete, it will provide:

- » An additional 14 netball courts with floodlighting (44 in total)
- » A synthetic athletics track, including field and jump facilities, floodlighting, drainage and irrigation and athletics administration/club building
- » An additional full-size rugby league field to replace the existing smaller 'mod league' field, including floodlighting and drainage
- » A criterium cycling track
- » A large turfed area for future multi-purpose use
- » A pedestrian and cycle path network.

Camden Council's *Camden Recreation Demand Study* (2014) identifies that the most common recreation activities of Camden residents are walking, and walking the dog, swimming, bike riding and cycling, as well as picnics and BBQs. In newly developed areas, the types of recreation spaces most likely to be used by new communities were identified as:

- » Active connections, including walking trails/paths
- » Natural areas, including lakes or water bodies
- » Local passive open spaces, including picnic and BBQ facilities, children's playgrounds and dog exercise area
- » Local active open spaces, with hard courts
- » Fee-based spaces and services, such as gym/health and fitness facilities
- » Regional spaces and facilities, including botanic gardens, swimming pools, gymnastics hall, mountain bike tracks, facilities for motorsports as well as aviation activities.

Camden Council's *Spaces and Places Strategy* (2020) identified the following demand for recreation activities:

- » Accessible spaces with cycling facilities and close to public transport
- » Passive and active recreation opportunities, including play spaces for young and older children, as well as whole-of-life sports and low impact recreation options (e.g. walking, tennis, etc)
- » Family friendly spaces, with facilities for picnics and BBQs, and spaces for social interaction and gatherings
- » Sporting facilities for team and competition sport, which also cater not non-traditional Australian sports
- » Extended access hours (outside of school and business hours).

Camden Council's *Camden Sportsground Strategy* (2014) provides a of guiding principles for sporting grounds:

- » Multiuse, multi seasonal and multipurpose, enabled through adaptable designs
- » Supporting infrastructure, including lighting, basic amenities
- » Accessible by public transport, and by walking and cycling
- » Sustainable, through environmentally sustainable design and community capacity building
- » Public art

⁴ <https://www.camden.nsw.gov.au/major-developments/oran-park-leisure-centre/>

⁵ <https://www.camdenadvertiser.com.au/story/7121626/stage-two-of-narellan-sports-hub-under-way/>

- » The expansion of existing facilities and potential rationalisation or consolidations
- » Safe, quality and equitable
- » Partnerships and school use.

The *Camden Sportsground Strategy* (2014) also lists preferences for sport grounds hierarchies and features and sportsfield layout, including:

- » district sports grounds will include a cluster of 4 full-sized fields and training facilities with spaces for storage and amenities facilities, as well as quality landscaping elements, larger playgrounds and BBQ facilities
- » 2 field configuration the with provision of a cricket wicket in-between, and approximate lengths at ends of wicket to accommodate full oval (cricket, AFL, etc)
- » Amenities and parking located mid-field at one side
- » Adequate space for floodlighting poles as well as any necessary physical barriers
- » Single field configurations or junior sizes cannot be accepted as they have limited use and are burdensome.

Council's draft *Sportsground Strategy* (2020) identifies that existing sportsfields across the Camden LGA are generally at capacity (most equal to or over 30hrs of utilisation/week). According the draft *Sportsground Strategy* (2020), Council is predicting an additional 23 sports fields, 3 baseball diamonds and 26 courts will be delivered through new developments between 2020 to 2040 and will require all new facilities to have a minimum 2 field layout (with a preference for larger facilities).

4.3 Education and childcare

There are no existing education or childcare facilities in Precinct 5. Existing and proposed education facilities in surrounding areas are shown in **Figure 11** on the following page.

4.3.1 Primary and high schools

In September 2021, an interview with representatives from School Infrastructure NSW (SINSW) identified that several existing schools surrounding Precinct 5 are, or will be, at capacity accommodating demand within their existing catchments. This includes Oran Park Public School, Cobbitty Public School, Barramurra Public School, Bringelly Public School and Leppington Public School. While the expansion to Oran Park Public School was recently completed (an additional 24 new flexible learning spaces, a new covered outdoor learning area and upgrades to administration and staff areas), these upgrades were delivered to address existing demand in this catchment.

Non-government schools are beyond the remit of SINSW and, therefore, the existing and future capacity of these schools (such as Oran Park Anglican College) is not known.

Key challenges placing pressure on government school capacity and delivery is the:

- » Size of their sites, as many are located on smaller sites and hold a limited number of classrooms
- » Timing of the delivery of education infrastructure (either as a complete facility or in stages)
- » Suitable site locations, considering draft *School Site Selection and Development Guidelines* (March 2021).

A key comment from the SINSW representatives was that new developments of scales similar to LCM, Austral and Leppington North and Catherine Fields will need to accommodate the demand for school places generated within their by their individual development. In each of these sites, school future government (and in some case non-government) school provision is indicated:

- » LCM: 7ha of land is set aside for a future education site, likely to be a future co-located government primary school and high school
- » Austral and Leppington North: Up to 5 government primary schools and 1 new government high school

- » Pondicherry: Land set aside for a new government primary school (1.2ha) and a K-12 non-government school
- » Aerotropolis: Up to 2 new government primary schools and 1 new government high school, as well as delivery on non-government schools

SINSW advised that additional development could not rely on educational facilities planned in surrounding precincts to accommodate the demand for government school spaces in Precinct 5. It was also recommended that planning for a potential school site in Precinct 5 should be further discussed with SINSW for information on timing, size and delivery method (VPA etc), with guidance from the draft *School Site Selection and Development Guidelines* (March 2021).

The demand for school places in South West Sydney is growing exponentially, as the housing types and affordability (understood to be subject to different circumstances) attracts new and young families. It was also noted by the SINSW representatives that the indication or commitment to deliver new or enhanced school infrastructure in growth areas, can influence decisions to move into a location, versus a location with no future school commitments. This can compound the demand originally calculated.

The SINSW representatives provided approximate figures for government school student numbers in South West Sydney (Oran Park, Gregory Hills and Catherine Field catchments) over the past 5 years. The figures demonstrate the rapid growth in enrolment, which was inferred to be due to the overall increase in the number of new young families in these growth areas, as well as the possibility of preference to enrol in government schools compared to non-government. Approximate student numbers enrolled in a government schools in South West Sydney from 2016 to 2020 are provided in **Table 6** below.

Table 6 Increased Enrolment in government schools in South West Sydney over 5 years

	Total no. of school aged children	No of government primary school students	No. of government high school students	Portion of total number of school aged children
2016	3,600	500 students	200 students	21%
2019	8,000	1,600 students	500 students	26%
2020	9,500	2,200 students	760 students	31%

Previously, the DoE were guided by a standard of 3,000 dwellings for 1 primary school and 4,500 dwellings for 1 high school. This has been reconsidered, as new schools are focussed on being provided on larger sites with greater functionality for increased capacity. In South West Sydney, the standard is generally considered to be 1 new primary school for every 4,000 dwellings. In the surrounding precincts, newer schools and their increased student catchment are:

- » New primary schools in Catherine Field (Barramurra Public School) and Leppington (Denham Court Public School): The recently completed Barramurra Public School has a 1,000 student capacity supported by 44 flexible learning spaces and a new library and hall. A schematic of the school indicates multipurpose sports courts and playing field/green area, as well as an indication of a future sporting field opposite the school⁶. Denham Court Public School is scheduled to open in late 2021 and will also accommodate approximately 1,000 students.
- » Completion of Oran Park Primary expansion and Oran Park High School: the completed expansion of the existing primary school (see previous page) to increase capacity from 704 to 1,000 students, and delivery of a new high school for up to 2,000 students.

⁶ https://www.schoolinfrastructure.nsw.gov.au/content/dam/infrastructure/projects/b/barramurra-public-school/jan-2021/Barramurra_PS_Welcome_Pack_D1T1_Jan2021_DIGITAL.pdf

While the representative stressed that the delivery of each new school delivery should be considered on a case by case basis, in addition to accordance with DoE's *Planning New Schools Guidelines 2016/17* and draft *School Site Selection and Development Guidelines (March 2021)* it was recognised that there is:

- » A trend towards more shared open spaces (where size is suitable) and community access to school facilities (in accessible locations).
- » Consistency in site size recommendations, being 2ha for primary schools and 4ha for high schools
- » Larger lot sizes (such as 'lifestyle lots') in greenfield locations, can lead to a higher dwelling number than anticipated as they can lead to subdivision or dual occupancies.

4.3.2 **Childcare**

Camden Council operate Camden Family Day Care, a support service which caters for families with children:

- » during standard and non-standard hours (flexible hours)
- » before/after school
- » during school holidays
- » in some circumstances overnight and weekends.

Other childcare options are provided by a mixture of private enterprises, not for profit and community groups.

4.4 Health and wellbeing

Health and wellbeing services in proximity to Precinct 5 are indicated in **Figure 12** in the following pages.

4.4.1 Hospital and medical services

In the surrounding areas, planning and works are underway to improve the capacity of existing hospitals as well as to deliver new integrated health care facilities:

- » Liverpool Hospital: The Liverpool Health and Academic Precinct will expand and enhance the capacity and capabilities of current Liverpool Hospital into a world-class hub for innovation and medical research. It is scheduled for completion by 2026
- » Leppington: The Leppington Regional Integrated Primary & Community Care Centre will become a hub for multidisciplinary and specialist medical care and potentially day surgery for the entire population. It will be supported by mixed public and private service provision through an attached or incorporated Primary Care Clinics. The future facility at Leppington will service a catchment population of 75,000-100,000 people (consistent with catchment populations identified for Major Town Centres in the SWGC Structure Plan)
- » Campbelltown Hospital: Campbelltown Hospital Redevelopment – Stage 2 will deliver the expansion of key clinical and support services, integrated and expanded mental health services and enhanced paediatric services for the Macarthur region. It is expected to be completed by mid-2023.

DPIE's *Draft Western Sydney Aerotropolis Plan* (2019) has also identified the potential for world-class health facilities in the Aerotropolis including a major public hospital and a private hospital.

A representative from the South Western Sydney Local Health District (SWSLHD) nominated that a key consideration for community use of health spaces and services is accessibility (based on consultation in September 2021). According to the representative:

- » HealthNSW are transitioning out of the old community health model (based on universal services) into targeted services (the right care at the right time, for the people who need it).
- » The distance between home and transport nodes and/or commercial centres in South West Sydney is gaining stronger recognition as a challenge to access (e.g. travelling to Merrylands or to Campbelltown)
- » Within increasing development and population growth in South West Sydney, road networks are also becoming more congested, and therefore it is also taking longer to get to larger health services and spaces.

According to the representative, the large land area of the SWSLHD supports the delivery of larger community health hubs, located in strategic centres with good transport connections. Oran Park (existing), Leppington and the Aerotropolis (both indicative, early stages) community health hubs are positioned radially from the hub. These hubs are intended to offer a wide range of co-located services, suitable to the scale of the catchment and the health needs of the community.

The representative also recognised that many lessons had been learnt, regarding health services delivery, during the COVID periods of 2020, particularly in virtual care and staying connectivity. The COVID-19 pandemic highlighted the need for more accessible-less contact options which would also make visitation less travel intensive, such as virtual pop-in clinics in local and village centres (possibly operating from community facilities). Learnings from COVID-19 had highlighted the potential for more virtual and remote health access options, which could support the face-to-face services delivery (e.g. local pop up clinic attended by nursing staff, who virtually connect patients and support their visits with GPs, specialists, etc), providing a possible hybrid health services model.

The NSW SWSLHD's *Integrated Primary and Community Care (IPCC) Development Plans for the South West Growth Centre (SWGC)* (June 2012) recommends that linked up arrangements are established between the RIPCCs, Primary Care Clinics and Team General Practices to support a holistic network. The representative identified that community services and integrated health services planning continued to be developed in SWSLHD, and that ongoing engagement with the SWSLHD would be required as planning for Precinct 5 progressed.

When asked to consider the cumulative demand of new populations of Precinct 5 and SCWLA on the health network, the representative indicated that these populations would not generate the need for a community health hub. Still, the representative recognised that new community members would need accessible health services in their locality, and that these services would need to adapt as the local community changes (i.e. as people move in, they will be younger and fitter and potentially have young children, but this will change as the population ages).

4.4.2 Emergency services

Ambulance

The site is located within the NSW Ambulance (NSWA) Camden Response Area (RA).

NSWA Service Planning advises that key drivers for community access of ambulance services are:

- » Population growth and ageing: older patients are the most frequent users of ambulance services
- » Disease patterns, including chronic disease
- » Social support and alternative transport options for primary care
- » Access to alternative services, particularly primary health care, and access to telephone advice and referrals as an alternative to an emergency response
- » Community expectations of the role of ambulance and response times, and community knowledge of alternative options in relation to non-emergency transport
- » Changes in other parts of the health system that impact on ambulance service demand (e.g. increased hospital throughputs and rates of treatment)

NSWA regularly updates modelling for ambulance response needs in Sydney growth areas, including greenfield areas, by investigating demographic characteristics (e.g. age, population size and population density) and common utilisation rates of greenfield areas to project demand associated with new developments.

The current rates of utilisation in Camden Response Area are provided in **Table 7** below. In correlation with the key drivers, persons aged 70 years and older are accountable for 87% of utilisation. Please note: this data is not reflective of increased demand due to COVID-19.

Table 7 Camden Response Area – ambulance utilisation rates

Age group (years)	Utilisation rate (per 1,000 pop)	Percentage of utilisation (to nearest 1)
0-14	41.6	3%
15-44	57.4	4%
45-69	81.9	6%
70-84	312.8	23%
85 or above	882.6	64%

Source: Ambulance NSW, 2021

According to the representative from NSWA (based on consultation in September 2021), staging is a key consideration, as the potential demand of new NSWA Service Planning advises that ambulance stations cover a response area, rather than localised demand (i.e. suburb or town level), which influences ambulance station placement including:

- » Ambulance station locations need not necessarily be placed within the centre of the population, instead location is determined by prioritisation of need.

- » Where a new station is required due to demand levels, additional analysis determines where the station should be located, with consideration of the impact on the new community as well as the existing demand.

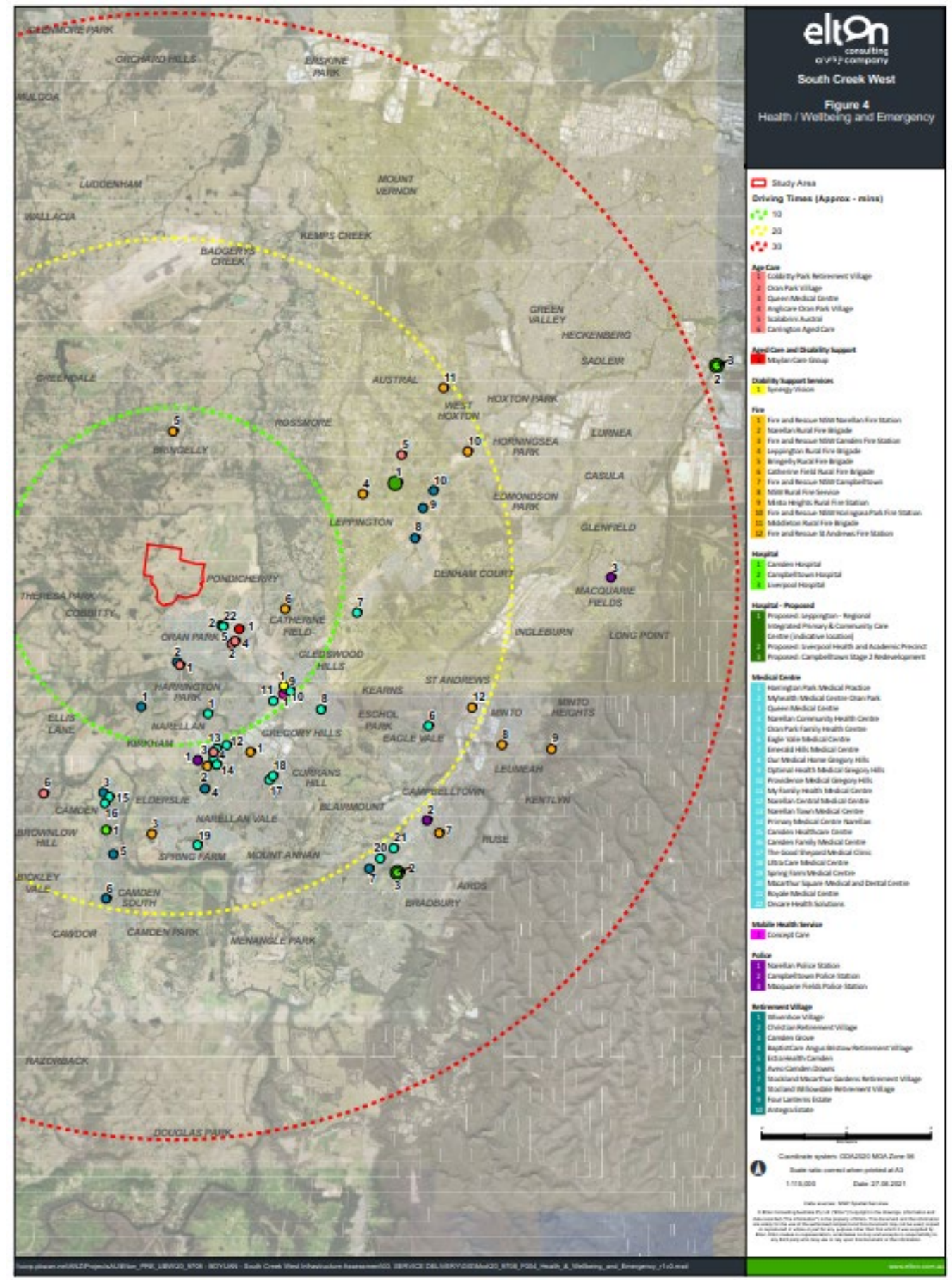
The representative indicated that NSWA is regularly consulted on the need for new services in identified Sydney growth areas, primarily via DPIE and the GSC, and submits planning information to DPIE and GSC for identified growth regions for centralised coordination of planning. They recommended that developments connected with DPIE and GSC, such as the site, should liaise with these groups as the best source for current information.

Police

The site is located in the Camden Local Area Command (LAC). Within this command, there are three police stations, located at Camden (Camden Police Area Command, or PAC), Picton and Narellan (head office).

According to minutes from the *Camden Police Area Command Community Safety Precinct Committee Meeting* (2018) and *Camden Police Area Command Community Safety Precinct Committee Meeting* (2019) the Camden PAC has a stable workload. Common investigation related to non-domestic violence assaults, commercial licensing, malicious damage, stealing vehicles and stealing from vehicles as well as fraud.

Figure 12 Existing and proposed health and wellbeing facilities



5 Social infrastructure provision

In social infrastructure planning, numerical standards are commonly used to provide an initial indication of the requirements for a given population. They are usually expressed as the number of facilities, places, floor space or land area required for a population of a given size.

However, planning for social infrastructure requires a combination of numerical and quantitative considerations for the delivery of quality spaces and facilities which respond to unique locational and social contexts.

It is common for qualitative considerations to have significant overlap with guiding principles for the provision of social infrastructure. Guiding principles for this report are provided on the following page.

The following section investigates quantitative and qualitative considerations for:

- » Community and cultural facilities, encompassing community centres and libraries
- » Open spaces, considering both passive and active open green spaces
- » Sport and recreation, identifying the types of active recreation spaces within active open spaces
- » Education and childcare, including early education and government and non-government primary and secondary schools
- » Health and wellbeing, the demand for GPs and health and emergency response catchments.

Standards and benchmarks have been considered from a range of sources, including Elton Consulting's *LCM Social infrastructure Assessment* (2018) and Camden Council's *Spaces and Places Strategy* (2020), as well as leading open space and recreation guidelines prepared by the NSW Government Architect.

5.1 Guiding principles and objectives

The following guiding principles and objectives for the Cobbitty site have been informed from findings in the preceding sections.

At this stage in the planning process, the guiding principles and objectives are for all social infrastructure and intended to provide a degree of flexibility and adaptability for the planning of social infrastructure. As plans progress for the site, the guiding principles and objectives may need to be revised, to address the different types of social infrastructure required as well as the latest planning and directions for social infrastructure provision.

Guiding principles and objectives for social infrastructure are provided in **Table 8** below.

Table 8 Guiding principles and objectives for social infrastructure

Guiding principles	Description	Objectives
Accessible	» Walkable, local neighbourhoods (400m), various modes of transport/movement	Social infrastructure: » Supports and fosters community interactions and connections » Promotes community health and wellbeing » Can be accessed by all community members, regardless of abilities, age, etc. » Delivery is staged to accommodate levels of community demand » Is delivered collaboratively » Reflects cultural and natural heritage, but also fosters new local identities » Strategically located to take advantage of/contribute to the activation of (mixed use) centres » Can be adapted to response to changing community composition, size etc – long operational life » Functions as part of the larger SWGA social infrastructure network.
Equitable and safe	» Accessible, equitably distributed, universal design and CPTED	
Staged	» Delivery of social infrastructure (types and sizes) responds to population growth and demand	
Local identity	» Incorporating natural and cultural heritage into design, fostering vibrancy	
Central	» Positioned in town centres or adjacent to transport hubs	
Multipurpose, flexible and adaptable	» Multiple simultaneous uses, meets diverse needs, design enables structural or architectural change to respond to changing community demand	
Partnerships	» With local (Camden and Liverpool councils) and other agencies (WSLHD, DoE, DPIE, emergency services, etc), including government and non-government	
Co-located and clustered	» Spaces can be shared and facilitate delivery of complementary services	
Climate sensitive	» Fostering ecological value and embedding environmentally sustainable design (e.g. Local urban heat reduction, water retention, etc) and embedding green infrastructure planning (e.g. Covered walkways, increase tree canopy)	
Responsive	» Responding to social infrastructure planning in surrounding centres and precincts, wider South Creek, SWGA	

5.2 Standards and benchmarks

A key consideration for the investigation of potential quantitative standards to be applied to the site were the standards and benchmarks nominated in Elton Consulting's *LCM Social Infrastructure Assessment* (2018) as well as the latest standards and benchmarks in Camden Council's *Spaces and Places Strategy* (2020) and draft *Sportsground Strategy* (2020).

A summary the adopted social infrastructure standards and benchmarks for this report are provided in **Table 9** on the following page (with their source). **These are applied to the site indicative layout plan in Section 5: Indicative layout plan**

Table 9 Standards and benchmarks applied to this report

Social infrastructure type	Provision standard and/or benchmark	Source
Community and cultural centres		
Community centre	Regional: 1 community centre: 20,000 people (catchment of 40,000 people) Neighbourhood: 1 community centre: 6,000 people (catchment of 10,000 people)	<i>Spaces and Places Strategy</i> (2020)
Library	1 library: 40,000 people	
Civic/cultural centre	1 civic/cultural centre: 30,000 people	
Open and recreation spaces		
Open space	2.83 ha/1,000 people (active and passive)	<i>Spaces and Places Strategy</i> (2020)
Active recreation spaces:		
» Sportsfields	1 sports field: 1,850 people	
» Sports courts	1 court: 2,000 people	
» Multipurpose courts		
» Athletics tracks	1 track: 75,000 residents	<i>LCM Social Infrastructure Assessment</i> (2018)
» Leisure centres	1 centre: 37,500 residents.	
Off leash dog park	1 off-leash dog park: 16,000 people	<i>Spaces and Places Strategy</i> (2020)
Playspaces	1 playground: 2,000 people	
Youth focussed facilities	89sqm per 1,000 people, with adjoining outdoor spaces	<i>LCM Social Infrastructure Assessment</i> (2018)
Childcare and Education		
Childcare	All market led as Camden Council don't operate long day or pre-school childcare centres in the Growth Centre precinct » No. of places: 30% of children in the 0-4 age cohort » No. of facilities: 75-150 children per facility.	Camden Council's <i>Childcare review</i> <i>LCM Social Infrastructure Assessment</i> (2018)
Primary schools	» No. of potential students (aged 5-11): 70% for government school and 30% for non-government school	DoE's <i>Planning New Schools Guidelines</i> 2016/17

Social infrastructure type	Provision standard and/or benchmark	Source
	» Demand for a new school: approx. 1,000 enrolment places (based on new Catherine Field and East Leppington primary schools, and recent expansion of Oran Park Public School) » Size of school: 2ha site	
High school	» no. of possible students (aged 12-18): 60% for government school and 40% for non-government school » Demand for a new school: up to 2,000 enrolment places (based on new Oran Park High School) » Size of school: 4ha site	
Health and wellbeing		
GPs	» 1 GP per 950 people	Informed by SWSLHD (South West Sydney ratio)
Primary Health Care Clinics	Privately operated, needed for each precinct: » 15,000-18,000 people per clinic	
Team General Practices	Secure own premises: » 4,000-5,000 people per practice	

Camden Council's open space benchmarks

Camden Council's benchmark of 2.83ha/1,000 people has been adopted from the NSW *Growth Centres Code* (2006), which was derived from the historical 1900's British quantification of 7 acres/1,000 people. The standard of 1 playing field/1,850 people originated in a study undertaken by GHD in 1993.

This report acknowledges and applies the open space benchmarks adopted by Camden Council. However, it also recognises that contemporary open space planning fosters greater recognition of the unique site constraints and opportunities (e.g. topography, floodplains, riparian corridors, connections, etc) which can impact on the quantity of open space delivered, as well as supporting high quality design and amenities which can enhance and increase the usability of open space (see the following **Section 5.3: Qualitative considerations** and **Section 5.4: Trends**).

5.3 Qualitative considerations

Qualitative considerations consider how the features of social infrastructure (and in some cases their surrounds) can maximise community benefit and use.

At this stage in the PP process, qualitative considerations most relevant for the planning and delivery of social infrastructure (i.e. development of an indicative layout plan) include:

- » **Contributing to the network:** an understanding of the existing and/or planned social infrastructure, and providing infrastructure which contributes to the broader network, avoiding duplication or ongoing gaps in types of spaces and/or services
- » **Location:** centrally located and clustered facilities and spaces in commercial or town centres, creating hubs of activity where the community can equitable access a combination of services, spaces and social experiences.
- » **Clustering:** integrating social infrastructure within centres, with other facilities and services, so that community access and use to spaces and services can be maximised
- » **Accessibility:** integrating universal design elements into built structures, crime prevention through environmental design (CTPED) principles as well as considering ease of travel and diverse travel options, in particular, walkability.
- » **Connections:** creating connections and/or linkages between social infrastructure, which can enhance both physical and social connections, create spaces for informal interactions and maximise the capacity of social infrastructure
- » **Sustainability:** efficiencies in management and operation of social infrastructure can be supported through co-location (e.g. facilities sharing amenities, such as bathrooms or open spaces), design (e.g. water sensitive urban design elements) and the delivery of large, clustered, multifunctional and high quality infrastructure (in comparison to several smaller, standalone and single or limited use)
- » **Incremental delivery:** particularly important in the planning and delivery of new communities, providing infrastructure of suitable size, scale and in suitable locations with the capacity to be increased and enhanced as the community increases
- » **Management and operation:** recognising who will be the responsible for the maintenance, management and/or operation of social infrastructure, and considering resource parameters (e.g. staff, budgeting, etc.) as well as broader planning strategies of policies (e.g. open space strategy, community facility strategy, school planning guidelines, etc).

These considerations are applied to the site indicative layout plan in Section 5: Indicative layout plan.

5.4 Trends

5.4.1 Community and cultural facilities

Size and scale

There is a move away from small, single purpose community buildings that serve local neighbourhoods due to management and maintenance costs, limited use, lack of flexibility, security issues and limited capacity for staffing. Instead, there has been a move towards the provision of larger, but fewer, community centres that are designed for bigger population catchments.

Larger facilities can provide a wider range of activities, programs and services to a wider range of community members and are more likely to be activated across the week and to attract higher rates of utilisation. Fewer, but larger, facilities also provide scope for having higher quality facilities that can accommodate some special uses (e.g. cultural activities, training rooms), rather than just comprising a single hall for hire.

Clustering

Leading practice favours the clustering of community buildings in centres to enhance accessibility and connectivity with related uses. Well-used community facilities tend to be located in places that are readily accessible by public transport and where people already tend to congregate, such as shopping centres and schools. These locations increase convenience and decrease car trips by reducing the need for multiple trips. They also enhance visibility, safety and convenient access.

Co-location

Co-location of community facilities and services, involving shared use of buildings among a number of facility types as well as service providers, is a commonly identified objective of most recent planning efforts. It can involve accommodating community centre space, libraries and community service providers (in some cases, multiple organisations and services) in a single location or building. Co-location has potential advantages in pooling resources to provide better facilities than may be available if provided separately

Community hub

An increasing popular model of community facility provision that incorporates the trend for size, scale and co-location is the 'community hub'. A community hub is a multipurpose public gathering and activity place where a variety of activities occur and where a wide range of community needs can be met in both formal and informal ways.

Multipurpose and multifunctional

To make the best use of limited resources and ensure that facilities are utilised as much as possible, community facilities need to provide for multiple uses and serve a range of population groups, as well as being capable of adapting as needs change over time. Successful community facilities tend to be those that offer a diversity of well organised and well attended services, programs and activities.

This diversity requires a variety of flexible spaces and amenities, capable of being multifunctional and accessible. At multipurpose community centres there has been a focus in more recent years on flexible spaces that can accommodate a range of activities, including creative and performing arts, rather than specific-use spaces. Such flexible spaces have proven to be better able to adapt as community needs and interests change and to ensure these spaces are better utilised as they are also suitable for other uses.

Sustainable

Community facilities are increasingly being used to showcase sustainable building methods and design. Sustainable initiatives can include rainwater harvesting, solar panels, energy efficient lighting and stormwater treatment. Another example of environmental sustainability is adaptive reuse.

In addition to environmental sustainability, financial sustainability has become a core focus area in the provision of community facilities. In an environment of limited resources, local governments are becoming increasingly interested in exploring ways to decrease costs in relation to developing, operating and maintaining community facilities, including through, for example:

- » incorporating environmentally sustainable design features that will reduce a facility's operating costs
- » undertaking partnerships with private developers or community organisations in the delivery and/or management of community facilities and services
- » securing a range of funding grants to assist the delivery of new facilities and programs

Incorporating income generating space and activities in new facility developments (e.g. commercial space for hire, spaces to hire suitable for larger private and business functions, cafes and retail space, fitness centres and monthly markets).

Third spaces

Reported to be some of the most popular spaces in contemporary community facilities, are the informal community meeting spaces such as a foyer area or a 'community lounge' or 'community living room'. These spaces which typically include couches, chairs, tables and reading material (and typically an adjoining café) encourage people to linger and gather, to meet and socialise. They can become important community focal points that bring people together and promote social connection and integration.

Responding to the importance of the 'third place', the 'community living room' model of library is becoming increasingly prevalent. This model involves a focus on levels of comfort, space and amenity that encourage people to 'linger' and spend some time. This includes comfortable seating, WiFi, reading material, games, art installations, displays, lounge areas with newspapers and magazines, as well as cafes. These same features are increasingly being provided in community centres, and in community hubs that include both community centre and library components.

Partnerships

Partnerships may also be utilised for the capital development of facilities. Increasingly, Section 7/11 contributions are not substantial enough to fund the delivery of facilities and there are increasing numbers of facilities being delivered across NSW through delivery partnerships, including through:

- » Voluntary Planning Agreements (VPAs) – an agreement between a council and a developer to deliver a facility as part of a residential or mixed-use development, in place of payment of Section 94 contributions. Facility specifications, requirements and the level of completion are outlined in the agreement. VPAs can be a successful method for delivery for all parties (the council, developer and the community). However, not all VPA proposals received by a council will necessarily be suitable. Success relies on the council ensuring that the proposed facility represents the best possible solution for the council and the wider community in the long run
- » Public Private Partnerships (PPPs) – where a council and a private developer partner to deliver a facility as part of a mixed-use development. With a desire to maintain a higher level of involvement in the delivery of a facility, a number of local governments are choosing PPPs as a preferred delivery model. In these arrangements the council is a partner developer. These arrangements can involve the council running an Expression of Interest (EOI) process for the redevelopment of a council site. Partners can include commercial or retail developers and operators and residential developers.

Shared use

In NSW, the DoE has a policy which recognises schools as valuable community assets which can be made available for community use when not required for school purposes. There are also examples of projects where councils have contributed funds towards the joint provision of facilities which can be accessed by both school and community. While most of these examples relate to open space, and sporting fields in particular, there is increasing interest within the DoE to consider joint provision of built facilities, including community halls, performing arts facilities and indoor recreation facilities.

5.4.2 Open spaces

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 were passive recreational activities and included:

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

DPIE's recent *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).

Active corridors require supporting infrastructure and amenity to foster 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 a visually appealing place which encourages people to spend time
- » Visibility, enabling passive surveillance and safety for users.

5.4.3 Sport and recreation

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 to 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).

Of the 11.1 million people, less than half had participated in organised sport and recreation (an estimated 5.2 million). This continues to reflect established trends which indicate that participation in organised sports and recreation are 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 facilities at any time, any day.

The NSW Office of Sport also recognises:

- » Increasing competition to attract sporting team and club members as new and diverse sporting and recreation options become available
- » Preferences for sport and recreation are changing and developing as our population becomes more culturally diverse.

The ABS's *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%).

Adult recreation

The ABS's *Participation in Sport and Physical Recreation, Australia 2013-14* data found that participating in sport and recreation generally decreased with age, as people aged 65 years and over had the lowest participation rates (47% of 11.1 million people).

The NSW Office of Sport's *Participation in sport and active recreation AusPlay April 2017* results for NSW reflect similar figures to previous ABS statistics (59% of NSW adults participating sport or physical activity at least three times/week in 2016). National findings indicate that seven of the top 10 sport and recreation activities are unorganised. The remaining sports, soccer/football, athletics and tennis, could include a combination of organised and unorganised activities:

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's 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 two top activities require designated spaces, while the remaining activities could take place in multifunctional outdoor and indoor spaces:

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

Local sporting clubs and codes

The NSW Office of Sport's *Strategic Plan 2018-2028* (2018) identifies that population growth and federal and State-based goals for increased sporting participation have driven community demand and expectation for more and higher quality facilities.

According to the plan, there is currently a deficient in sporting and recreation spaces and infrastructure. This is generating community demand for access to and use of quality places and spaces for sport and recreation, particularly in urban areas. The result is constrained or capped community involvement in sport and active recreation determined by the capacity of current infrastructure.

The critical challenge, identified by the NSW Office of Sport, is to adopt a flexible approach to the provision and use of sport and recreation places and spaces, so that community utilisation is increased and facilities are fit for purpose.

The plan sets an ambitious target of 100 per cent utilisation of sport facilities across NSW. To contribute to this target, the NSW Office of Sport is establishing and strengthening partnerships with sporting organisation agencies and governments to:

- » Identify current and future requirements for sport and recreation infrastructure and inform strategic planning and investment decisions
- » Influence policies and coordinate grants and funding for facilities and upgrades
- » Improve the access and utilisation of spaces and infrastructure for sport and active recreation across metropolitan and regional areas.

In addition, the plan contains several strategic initiatives, including the Greater Sydney Sport Facility Fund. This fund allocated \$100 million over three years for sport facility projects. The objectives of the fund are to:

- » Increase the number and type of sport facilities
- » Improve the standard of existing sport facilities
- » Increase participation in sport.

Elite level infrastructure

The NSW Office of Communities' *Stadia Strategy* (2012) includes a clear direction that future capital investment is prioritised towards the delivery of NSW Government-owned or leased stadia. The strategy suggests that this will ensure improved facilities for spectators and participants and enable venues to cater for multipurpose sports and community use.

The strategy is focused on supporting community-level facility networks (i.e. local sporting club facilities), maintaining the link between elite sport and community engagement, and generally increasing community access to sporting events (as spectators and sporting participants).

Key directions for stadiums are:

- » Improving community access
- » Achieving an optimal mix of venues to meet diverse community needs
- » Increased utilisation to improve financial and community investment.

The Office of Communities has also recommended that more detailed work regarding community sport and recreation facilities is completed, contributing to a revision of the current strategy.

6 Indicative layout plan

The indicative layout plan (ILP) for the site (prepared by Design+Planning, version: September 2021), is shown in **Figure 13** on the following page.

Key features of the ILP relevant to this report are:

A local centre, clustered with the proposed school site and active open space (double playing fields), and in proximity to the riparian corridor

A projected average estimate of 3,800 dwellings – based on preliminary composition estimates of a mixture of dwelling types:

- » Lifestyle lots: detached dwellings on larger lots (approx. 5%)
- » Low density: detached dwellings on smaller urban lots (approx. 50%)
- » Medium density: semi-detached and terrace or row houses (approx. 40%)
- » High density (up to 4 storeys): dwellings located in proximity to the village centre (approx. 5%).

A school site, located adjoining the local centre, double playing fields and the riparian corridor, roughly positioned in the centre of the site.

An estimated total 'useable' open space provision of 31.79ha, comprised of:

- » 14.99ha of active spaces that are within 400m of most dwellings, provided as three active spaces with adjoining the riparian corridor and providing three double sportsfields (six fields in total) and three ovals. Two double playing fields and their inclusive ovals are positioned to the north (one co-located with the school site and the other adjacent), and the third in the south (connected to the riparian corridor)
- » 16.80ha of passive open spaces, establishing a network of green spaces within 400m of all dwellings and providing a variety of passive recreation opportunities, such as fitness stations, playgrounds and BBQ facilities. This also includes a ridgeline park in the south east corner, which could be used for trail-based recreation. All passive open spaces are 5,000sqm or larger.

Approximately 41ha of riparian corridors, including a 6ha easement which will be embellished for active connections and public recreational uses (e.g. trails for walking, cycling, jogging)

The range of open and recreation spaces considered for the site are shown in **Figure 14** in the following pages.

Figure 14 Types of open and recreation spaces indicated in the ILP



Source: Design+Planning Precinct 5 Open Spaces (version: September 2021)

6.1 Indicative yield

Design+Planning provided the indicative dwelling yield and estimated average household size for the ILP (version: September 2021).

The ILP situates the majority of lower density and larger lots in the western portions of the site, while the medium and all high density dwellings are positioned in the eastern portion. Dwelling types have implications for the estimated average household size which informs the projected population.

Overall, an estimated average household size of 3.1 people/household generates a future potential population of approximately 11,903 people.

To ensure that demand for social infrastructure types could continue to be met by the ILP if the population estimate increased as the project progresses, an upper population range of 12,000 is also considered in the following pages.

6.2 Projected demographics

The population of the SWGA has grown significantly in the last few years largely driven by development in Oran the Park and Turner Road Precincts, with approximately 6,500 new residents in 2016 compared to 30 in 2011.

6.2.1 Comparison areas

The broader SCWLA currently has relatively low population levels. The closest population centres are located in nearby suburbs (e.g. Leppington and more recently Oran Park). As such, the current demographic character of the site does not offer a comparative indication of the future site population (either through stages of completion of the development, or at 100% complete).

To understand the potential future population profile for the site, this report examined forecast population characteristics for areas in the SWGA that are undergoing or planning similar forms of residential development (e.g. Oran Park, LCM and Catherine Field).

Forecast.id provides a forecast for service age groups for each of these areas, as detailed in **Table 10** on the following page. These figures show the gradual increase of population and similar changes in age group composition as the development reaches completion, then entering a natural lifestyle cycle (shown in **bold**).

Table 10 Age group composition of comparison areas

Service age groups	Oran Park (%)			Catherine Field Precinct (%)			Lowes Creek Precinct (%) (av. Lowes Creek / Maryland)		
	2016	2026	2036	2016	2026	2036	2016	2026	2036
Babies and pre-schoolers (0 to 4)	13.4	10.7	8.7	7.9	11.7	8.5	5.3	11.7	10.0
Primary schoolers (5 to 11)	11.4	14.3	12.6	7.1	14.2	12.9	8.1	13.5	13.7
Secondary schoolers (12 - 17)	6.0	9.1	9.8	7.1	8.7	10.0	8.2	7.4	9.6
Tertiary education and independence (18 to 24)	8.4	7.9	8.9	12.8	8.6	9.6	11.6	10.2	8.9
Young workforce (25 to 34)	25.3	17.9	13.4	12.3	20.2	13.3	9.5	25.8	16.0
Parents and homebuilders (35 to 49)	20.0	27.1	26.7	15.5	24.9	25.8	21.0	21.9	27.0
Older workers and pre-retirees (50 to 59)	6.7	7.1	11.2	12.3	6.7	11.1	16.0	5.4	8.6
Empty nesters and retirees (60 to 69)	5.5	3.6	5.4	13.9	3.5	5.7	12.7	2.7	4.2
Seniors (70 to 84)	3.1	1.9	2.9	9.9	1.3	2.9	7.4	1.2	1.8
Elderly aged (85 and over)	0.2	0.5	0.5	1.3	0.2	0.2	0.3	0.1	0.2
Total population	5,331	23,301	27,660	45	9,182	8,755	510	10,248	19,506

Source: Forecast id, 2021

6.2.2 Assumptions for the site

Based on the comparative figures of full or nearly completed developments, we have assumed a future population and age group composition for the site as it becomes fully operational (see **Table 11** on the following page).

Based on the ILP dwelling yields, only a small proportion of the population will be living in high density (<5%). However, the provision of social infrastructure, particularly open space, should be adapted to suit high density environments, given the small provision of private open space in this type of residential development. Another consideration for social infrastructure, is its ability to adapt and continue to meet community needs, as a community changes over time. Key implications for social infrastructure provision in the site are likely to include:

- » **Babies, pre-schoolers and primary schoolers:** Approximately a quarter of the future population will be aged 0-11 years. This has implications for childcare provision and primary schools, as well as open space (parks and active recreation), play spaces and health facilities for childhood and maternal services delivery.
- » **High schoolers and young people:** Older children and young people have specific recreation and socialisation needs, including higher participation in organised recreation and informal play spaces
- » **Young workforce, parents and home builders:** Majority of the population will be aged between 25 to 49 years (consistent with the high rates of children). Access to a range of diverse passive and active open spaces will be important to support a variety of needs and uses, including family and social events/gatherings, kick-about spaces, spaces for quiet, etc.

- » **Empty nesters and older:** A relatively low proportion will be aged 60 years and older. However, accessibility and mobility for the elderly should be considered, as well as access to adequate health and community spaces, as well as general spaces which can promote social interaction to prevent isolation.

Age characteristics in the site community will naturally evolve from a newly delivered full development to an established community. Children will age, move from childcare to primary school, primary to high school, and parents will move onto pre-retirement/retirement, becoming empty nesters or older lone households, thereby reducing the average household size. Providing adaptable and flexible facilities that can be easily modified to adapt to evolving community needs is essential to ensure that the infrastructure provided remains well suited. Given the proximity to the Aerotropolis and future employment hubs, it can be assumed that there will be constant demand from working households (and therefore relatively high proportions of children long term).

Table 11 Population and age breakdown for the site

Service age groups	Percentage (%)	Projected population: 11,903 people*	Upper estimate population: 12,000 people*
Babies and pre-schoolers (0 to 4)	10.9	1,297	1,308
Primary schoolers (5 to 11)	14.1	1,678	1,692
Secondary schoolers (12 to 17)	9.0	1,071	1,080
Tertiary education and independence (18 to 24)	8.7	1,036	1,044
Young workforce (25 to 34)	18.9	2,250	2,268
Parents and homebuilders (35 to 49)	25.8	3,071	3,096
Older workers and pre-retirees (50 to 59)	7.3	869	876
Empty nesters and retirees (60 to 69)	3.6	429	432
Seniors (70 to 84)	1.6	190	192
Elderly aged (85 and over)	0.3	36	36

*numbers may not add up to total as they have been rounded to nearest 1

6.3 Projected demand for social infrastructure

The following assumptions of the site ILP (version: 25 February 2021) have informed this section:

- » Projected average dwelling yield: **3,800 dwellings**
- » Projected average household size: **3.1 people/household**
- » Projected total population: **11,903 residents**
- » Total open space: **31.79ha**, all residents within 400m of open space, comprised of:
 - > Passive open spaces: 16.8ha, all larger than 5,000sqm
 - > Active open space: 14.99ha, with 6 double playing fields and 3 ovals
 - > Riparian corridor: 40.93ha, intended to offer trails and active connections for public use.

Based on projected average demographic composition of the site (see previous **Section**), it is also assumed that:

- » Approx. 11% of the population will be aged 0-4 years: approximately **1,297 babies and young children**
- » Approx. 14% will be aged between 5-11 years: approximately **1,678 primary school aged children**
- » Approx. 9% will be aged 12-17 years: approximately **1,071 high school aged children**.

6.3.1 Quantitative calculations

This section focusses on the pure application of quantitative or mathematical standards. While a starting point to consider provision of social infrastructure, the formulaic approach to provision is generally considered to be one input of many into a more complex and context-specific assessment.

It is also noted that some of the standards applied here, particularly for open space, are remnant of the historic Growth Centres Development Code (2006) which is not commonly applied in leading open space planning.

Section 6.3.2 considers this quantitative assessment with more contemporary qualitative guidance.

The following **Table 12** applies the future population estimate of 11,903 people as well as the upper population estimate of 12,000 people.

Table 12 Summary of quantified demand

Social infrastructure type	Provision standard and/or benchmark	Projected population: 11,903 people	Upper estimate population: 12,000 people
Community and cultural centres			
Community centre	Local: 1 community per 20,000 people, offering multipurpose space for flexible uses	Not reached - but cumulatively adding to demand (approx. 60% contribution)	Not reached - but cumulatively adding to demand (approx. 60% contribution)
	Neighbourhood: 1 community centre: 6,000 people (catchment of 10,000 people)	Up to 2	Up to 2 Slightly higher than the catchment, not reaching local community centre benchmark
	LCM standard: 55sqm/1,000 people	655sqm (combined)	660sqm (combined)
Library	1 library: 40,000 people	Not reached (approx. 30% contribution)	Not reached (approx. 30% contribution)
	NSW State Library standards: 57.5sqm + 20% circulation space for < 20,000 people	821sqm	828sqm
Civic/cultural centre	1 civic/cultural centre: 30,000 people	Not reached (approx. 40% contribution)	Not reached (approx. 40% contribution)
Open and recreation spaces			
Open space	2.83 ha/1,000 people (active and passive)	33.7ha (active and passive)	34.0ha (active and passive)
Active recreation spaces:			
» Sportsfields	1 sports field: 1,850 people	6-7	6-7
» Sports courts	1 court: 2,000 people	Up to 6	Up to 6
» Multipurpose courts	1 court: 3,000 people	Up to 4	Up to 4
» Athletics tracks	1 track: 75,000 residents	Not reached (approx. 20% contribution)	Not reached (approx. 20% contribution)

Social infrastructure type	Provision standard and/or benchmark	Projected population: 11,903 people	Upper estimate population: 12,000 people
» Leisure centres	1 centre: 37,500 residents.	Not reached (approx. 30% contribution)	Not reached (approx. 30% contribution)
Off leash dog park	1 off-leash dog park: 16,000 people	Up to 1 (70% contribution)	Up to 1 (80% contribution)
Playspaces	1 playground: 2,000 people	Up to 6	Up to 6
Youth focussed facilities	89sqm per 1,000 people, with adjoining outdoor spaces	1,059sqm	1,068sqm
Childcare and Education			
Childcare	All market led (Council don't operate long day or pre-school centres in the Growth Centre precinct): » no. of places: 30% of children in 0-4 age cohort » no. of facilities: 75-150 children per facility.	Non-Government: » Up to 389 places » Up to 4 facilities	Non-Government: » Up to 392 places » Up to 4 facilities
Primary schools	» no. of potential students (aged 5-11): 70% for government school and 30% for non-government school » demand for a new school: approx. 1,000 enrolment places (based on new Catherine Field and East Leppington primary schools, and recent expansion of Oran Park Public School) » size of school: 2ha site	Government: » Up to 1,175 places » Demand for public primary school Non-Government: » Up to 503 places	Government: » Up to 1,184 places » Demand for public primary school Non-Government: » Up to 508 places
High schools	» no. of possible students (aged 12-18): 60% for government school and 40% for non-government school » demand for a new school: up to 2,000 enrolment places (based on new Oran Park High School) » size of school: 4ha site	Government: » Up to 643 places » Demand for public secondary school not met Non-Government: » Up to 429 places	Government: » Up to 648 places » Demand for public secondary school not met Non-Government: » Up to 432 places
Health and wellbeing			
GPs	» 1 GP per 950 people	Up to 13	Up to 13
Primary Health Care Clinics	Privately operated, needed for each precinct: » 15,000-18,000 people per clinic	Up to 1 (approx. 80% contribution)	Up to 1 (approx. 80% contribution)
Team General Practices	Secure own premises: » 4,000-5,000 people per practice	Up to 3	Up to 3

6.3.2 Qualitative considerations

There is a strong correlation between qualitative considerations (see previous **Section 5.3**) and trends (see previous **Section 5.4**), as trends highlight best practice guidance in planning and delivery of social infrastructure beyond a numerical approach.

As this stage in the planning process, not all trends can be considered due to lack of detail. However, key qualitative considerations for social infrastructure which have relevance to the site ILP are:

- » **Contributing to the network:** Facilities in the site should complement the existing and planned network in the LCM precinct and in the broader SCWLA and Camden LGA (where known), by addressing gaps or a lack of provision while also being able to accommodate the needs of future site community.
- » **Location:** Locating infrastructure close to retail and transport options, and equitable distribution of open spaces across the site, supporting equitable access to and use of social infrastructure for all future residents.
- » **Clustering:** Clustered social infrastructure in the site to enable greater interaction and connection with the broader public sphere to contribute to activation, as well as supporting efficient infrastructure use and management, such as clustered sporting codes with multi-code sporting fields and shared amenities.
- » **Accessibility:** Social infrastructure should be physically accessible (e.g. within 400m walking distance, transport options, central location, etc) and safe (e.g. visibility for passive surveillance) for all users.
- » **Connections:** Embedding strong connections (e.g. walking, cycling, etc), between social infrastructure, potentially utilising natural features, such as the riparian corridor traversing the site as well as built networks, such as proposed road networks.
- » **Sustainability:** Co-locating community and cultural facilities to pool resources and lead to higher quality and higher functioning spaces and ensuring that infrastructure can be adapted (e.g. embellished or increased) over time as the needs of the community change.
- » **Incremental delivery:** Providing community and cultural facilities with adequate facilities (size and services offered) as future residents begin to occupy the site, and the expansion and/or enhancement of these facilities as it reaches full occupancy.
- » **Management and operation:** Camden Council may prefer fewer, larger, higher quality infrastructure rather than more, smaller, simple amenity infrastructure for operational and maintenance reasons, and social infrastructure should address Council's strategic directions for social infrastructure provision across Camden LGA (where available).

The NSW GA *Draft Greener Places Guide* (2020) (the Guidelines), nominates a series of performance criteria for open space, which guides open and recreation spaces accessibility and distribution as well as suggestions regarding supporting infrastructure to contribute to the quality of these spaces and support maximum community use and enjoyment (e.g. active play, fitness and exercise spaces). These Guidelines address different types of open spaces, which has a strong correlation to types of open spaces in Camden Council's *Spaces and Places Strategy* (2020), summarised in **Table 13** on the following page.

In addition to the Guidelines, the provision of open space should also consider the preceding qualitative considerations.

Table 13 Summary of relevant open space and recreation guidelines and criteria

Open space type	Criteria
Open space	All residents, in: » High density: 2-3 minutes' walk or 200m walking distance to local open spaces » Medium density: 5 minutes' walk or 400m walking distance to local open spaces All residents, within: » up to 25 minutes' walk or 2km to district open space » up to 30 minutes travel time, by public or private transport, to regional open space. » 400m to any type of open space for workers and from education (e.g. schools)
Active recreation	All residents should also be within 1,000m of an active recreation space At least two forms of organised sport and recreation within 20 minutes of safe walking or 15 minutes cycling e.g. fields, courts, indoor sports, aquatic facilities. Fitness and exercise space should be provided within 300m
Play spaces	All residents should be within walking distance of playgrounds e.g. 300m (0-5 age group) or 400m (5-12 age groups) Older children should be within 10 minutes of walking or cycling of an active play space, and those aged 13-20 within 600-800m of youth spaces
Outdoor recreation	All residents should also be within 1,500m of a large community outdoor recreation area
Path-based recreation	Trail and path-based recreation to be provided within 400m

Source: NSW Government Architect Office *Draft Greener Places Guide* (2020)

6.4 Provision assessment of site ILP

The following pages compare the quantitative demand and qualitative considerations, against the provision of social infrastructure in the site ILP (version: 25 February 2020).

Key findings and recommendations based on the **population estimate of 11,903 people** for the site are:

6.4.1 Community and cultural facilities

The ILP does not indicate community and/or cultural facilities at this stage. However, community centre floorspace would be incorporated into the local centre as planning progresses.

The projected population generates demand for up to 2 neighbourhood level community centres. If the community facility floorspace benchmark of 55sqm/1,000 people is applied to the future projected population, this generates demand for up approximately 655sqm of community centre floorspace.

While the benchmark for library and civic/cultural centres is not reached, the population does continue to 30% and 40% of these benchmarks (respectively). If the NSW State Library standard of 57.5sqm of library floorspace (+20% for circulation space) is applied, this generates demand for up to 821sqm.

Key considerations:

- » In the Finalisation Report for LCM, there was a recommendation for a minimum 1,000sqm of floorspace for neighbourhood community centres, to support multifunctionality and activation.

- » Surrounding the site, there are several planned community and community facilities in adjoining precincts in the SWGA, including a district level multipurpose community facility with some library services planned for LCM (2,000sqm), regional multipurpose facility with creative and performance capabilities (and potentially a co-located library) in Leppington, as well as various proposed local community centres (approx. 500sqm)
- » Camden Council are committed to the delivery of a network of larger but fewer community facilities, that can provide higher level services and service a larger catchment of people (a new benchmark of 1 community centre per 20,000 people, district to regional level). Future planning should focus on regional service delivery, with the network supported by upgrades to existing neighbourhood and local facilities to multipurpose centres (not the delivery of more of these centres).
- » Community spaces that are free/affordable are recognised as supporting community connections in new communities
- » Existing community centres in Camden LGA are generally unstaffed buildings that provide spaces for community use and hire, which can adapt to meet the needs of incremental population growth.

Recommendations:

- » Although Camden Council do not recommend the delivery of new neighbourhood spaces, this is informed by the assumption of existing community spaces being available for free or affordable community use, or planned facilities being delivered as new communities reach a level to generate demand (i.e. staged delivery)
- » The provision of two smaller (approx. 300-350sqm each) neighbourhood community centres in the site is unlikely to support an integrated network of multifunctional spaces. The following two options could be delivery options:
 - > Option 1: The delivery of approximately 600-650sqm multipurpose community centre that supports various uses at the one time, including uses which can address demand for library and cultural activities. This facility should be co-located with the school site and local centre to create an activated community hub.
 - > Option 2: The provision of approximately 300-350sqm community space for local community hire and use, and contribution of approximately 300-350sqm off site (e.g. at Pondicherry in the Lakes Precinct). In the site, the co-location of the facility with the local centre and school would align to several guiding principles.

If the upper population estimate of 12,000 people was reached, the above options could satisfy the demand generated for community centre floorspace.

6.4.2 Open space and recreation

The ILP for Precinct 5 indicates approximately 31.79ha of active and passive open spaces for public use and recreation. This is slightly below the demand for 33.7ha generated by the application of the standard of 2.83ha/1,000 people for a projected population of 11,903 people. Based on the LCM standard of 50/50 active to passive split:

- » Active open space: the indicative yields demonstrate 14.99ha, which is close to the required 16.85ha (approx. 2ha shortfall)
- » Passive open space: approximately 16.80ha, which meets the quantified demand for 16.85ha.

The riparian corridor, including the 6ha easement for active connections, runs diagonally through Precinct 5 and connects with the centrally located and larger active (with sportsgrounds and courts) spaces as well as the school and village centre (through active open space). Combined with the riparian corridor (40.93ha). These green and open spaces could accommodate diverse types of passive recreation, such as walking, jogging, cycling and other forms of individual-based fitness, as well as gathering and social activities. The riparian corridor with easement have not been included in calculations of passive open space or total open space site provision.

Based on information received by BHL, all dwellings are located within 400m of open space (active, passive and/or riparian). All local parks are also equal to or greater than 5,000sqm (in accordance with Camden Council's *Space and Places Strategy* requirements).

Considering the numerical demand for sporting spaces:

- » Sportsfields (and ovals): The provision of 6 double sportsfields and 3 ovals will meet demand
- » Sports courts: No sports courts are indicated in the ILP, and there is demand for up to 6
- » Multipurpose courts: No multipurpose courts are indicated in the ILP, and there is demand for 4
- » Playspace: Playspaces are not indicated at this stage in the ILP, but there is demand for up to 6 multi-age spaces
- » Off leash dog park: The benchmark for off-leash dog park is not met (1 per 16,000 people), but the population contributes to 70% demand for this type of open space.

Sportsfields are shown in the ILP for Precinct 5. The open space sizes and layout have the potential to accommodate demand for courts and playspaces (refer to the Landscape Masterplan).

Key considerations:

- » Camden Council's *Spaces and Places Strategy* (2020) continues to adopt the historical Growth Centres Development Code standard of 2.83ha of open space per 1,000 people, which is not reflective of leading open space guidelines, and no longer distinguishes between active and passive spaces.
- » Council's draft *Sportsground Strategy* (2020) supports the delivery of clustered sports grounds, through minimum requirement of 2 sportsfields in new developments and demonstrated delivery of sports hubs and multiple sports code sporting grounds which foster activation
- » There are significant upgrades and investment occurring in Camden LGA to increase the capacity of Council's sports courts (e.g. Narellan Sports Hub Stage 2). The following two options should be discussed further with Camden Council, with consideration of proposed sporting hubs in neighbouring precincts and the balance to support local demand and an integrated network:
 - > Option 1: The delivery of 10 multipurpose courts for multiple codes (over the demand generated for 3), in place of the delivery of sporting courts
 - > Option 2: The delivery of up to 6 multipurpose courts with the northern-most playing field and 4 sports courts allocated across the two remaining sportsfields.
- » The Camden community value walking and walking paths, play spaces and outdoor fields and find distance and inconvenient access the greatest impediments to current use of open and recreation spaces, highlighting the importance of an equally distributed network.

Recommendations:

- » **Total open space** amount is adequate (a minor undersupply of 1.9ha) and does not consider the provision of active connections and recreation options offered in the open spaces of the riparian corridor (40.93ha).
- » **Passive open spaces** will require amenity and supporting infrastructure (e.g. covered seating, playgrounds, amenities, etc) to provide a range of recreation experiences for community members.

The scale of these features should respond to the scale of the open space. The largest centrally located passive open space should have the largest and greatest functioning amenities and infrastructure (e.g. the largest playground, BBQ and picnic facilities, kickaround spaces), able to accommodate greater numbers of people and multiple uses.

The riparian corridor, and its inclusive 6ha easement should contribute to the network of open spaces in Precinct 5. It is intended to offer amenity and infrastructure to enable diverse and suitable recreational uses for the space (e.g. fitness circuit, shared walkway/cycleway along the riparian corridor, smaller playgrounds and BBQ and picnic facilities in larger areas along the corridor).

- » **Active open space** should incorporate multi-code field design for use by different sporting code and have supporting infrastructure to maximise community use, such as lighting and sporting club amenities buildings (e.g. storage). There should also be space available for warm up and kick-around activities for sporting codes as well as the broader community.

Further investigation is required to determine Camden Council's position towards multipurpose and/or sport courts (see the previous options).

- » **Playgrounds** should be provided, at a suitable scale and in co-located open spaces (i.e. larger space, larger playground, located with other activations such as centres or sportsfields), across the passive and active open spaces.

If an open space is not suitable for the delivery of a playground (e.g. too small, noise consideration, etc), the investment should be allocated to the playgrounds in suitable locations, to accommodate more users. This may result in the provision of fewer playgrounds (i.e. less than 6), but a higher capacity to accommodate more users and offer more diverse play options.

If the upper population estimate of 12,000 people was reached:

- » *There would continue to be an approximate shortfall of 2ha in total open space. Again, this is not considering the riparian spaces, which would contribute as type of 'open' space for public recreation (approx. 41ha additional).*
- » *The preceding assessment of provision and demand for active spaces would be unchanged.*

6.4.3 Education and childcare

The ILP indicates a site for a future school, co-located with the local centre, riparian corridor and active open space (including a double sportsfield with oval).

Based on qualitative calculations, there is demand for 1 new government primary school (capacity for up to 1,000 students) and up to 4 childcare facilities. The demand for a high government school (up to 2,000 capacity) is not met, and it is likely the demand for approximately 642 places could be met through a combination of the existing Oran Park High School and plans for new government high schools in Leppington and LCM.

Key considerations:

- » The DoE guidelines require 2ha for new primary school sites and shared community use of open spaces and suitable facilities (e.g. halls) is supported where the spaces are suitable.
- » Currently, the delivery of childcare and early childhood education is delivered by a range of providers, including Camden Council (Camden Family Day Care), private enterprises, not for profit and community groups.

Recommendations:

- » Ongoing consultation with the DoE is required as the planning process for the government primary school site progresses, to consider location, timing of delivery and equitable shared use of spaces and facilities.
- » The provision of diverse childcare options (e.g. long day care, occasional care) in accessible locations will require further detailed market analysis. If a childcare facility is provided in the village centre, further discussions are required with Camden Council to determine if this facility will be allocated to commercial or community floorspace.

If the upper estimate of 12,000 people was reached, the preceding assessment of provision and demand for education and childcare facilities would be consistent.

6.4.4 Health and wellbeing

The ILP does not indicated health and wellbeing facilities. Demand is generated for up to 13 GP's, up to 1 Primary Heath Care Clinic (80% of benchmark reached) and up to 3 Team General Practices.

Key considerations:

- » The provision of health and wellbeing infrastructure will need to be accessible, delivered in stages (in response to the stages as the site is delivered) and adaptable as community needs change over time.
- » There are significant upgrades planned to increase the capacity and capabilities of Liverpool and Campbelltown Hospitals in the near future (within the next 10 years). Leppington has also been marked for the delivery of a Regional Integrated Primary & Community Care Centre (RIPCC).
- » The NSW SWSLHD's *Integrated Primary and Community Care (IPCC) Development Plans for the South West Growth Centre (SWGCG)* (June 2012) recommends that linked up arrangements are established between the RIPCCs, Primary Care Clinics and Team General Practices to support a holistic network.
- » It is recognised that the SWSLHD is continuing to development integrated health services planning in the SWGA area.

Recommendation:

- » Key considerations for provision will be community accessibility, staging of service delivery and adaptability as community needs change over time
- » Ongoing consultation with relevant public agencies (e.g. HealthNSW) is required as the planning process for the site progresses, and the potential for commercial provision requires detailed market analysis.

6.5 Social infrastructure implementation planning

The timing and scale of social infrastructure delivery in conjunction with stages of development delivery can influence community connections and resilience in new communities. The staged delivery of the future site will need to consider which open spaces can be delivered in conjunction with the occupation of new residences by the new community.

Table 14 below shows an example of incremental delivery of social infrastructure as the site is developed, applying standard estimates of 25%, 50%, 75% and full completion (100%) based on the ILP yield of 11,903 people (version: September 2021). It indicates that at 75% capacity, approximately:

- » 25.3ha of open space should be provided
- » Up to 5 sportsfields, 4 sportscourts and 3 multipurpose courts may be needed in the active open space (ideally in a clustered position)
- » Up to 4 playgrounds should be delivered
- » Demand for close to 900 government primary school places could be reached.

Table 14 Recommendations for staged social infrastructure delivery in the site

	25% capacity	50% capacity	75% capacity	100% capacity
Population	2,976 people	5,952 people	8,927 people	11,903 people
Government primary school	Approx. 294 student places	Approx. 587 student places	Approx. 881 student places	Approx. 1,175 student places
Open space (active and passive)	8.4ha	16.8ha	25.3ha	33.7ha
Sportsfields	Up to 2	Up to 3	Up to 5	Up to 6
Sports courts	Up to 2	Up to 3	Up to 5	Up to 6
Multipurpose courts	Up to 1	Up to 2	Up to 4	Up to 4
Playspaces	Up to 2	Up to 3	Up to 5	Up to 6

