

# Social Infrastructure Assessment Riverstone East Precinct

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Final report

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# Executive Summary

This report considers the community facilities, human services and open space that will be required to support the population of the future Riverstone East Precinct, within the North West Growth Centre. The requirements of the adjoining Area 20 Precinct have also been considered in this assessment, associated with recent revisions to the Indicative Layout Plan (ILP) for Area 20. The report has been prepared for the Department of Planning & Environment (DP&E), as one of the studies needed to support preparation of the precinct plan for Riverstone East.

The report contains eight sections:

- » Section 1 provides an introduction and background to the study and describes the development context, the study scope and study process
- » Section 2 describes the policy context to the provision of social infrastructure through a review of key State and local government documents. These policies and objectives provide the guiding framework for the community facilities and open space strategy recommended in the report
- » Section 3 examines the social context of the Riverstone East Precinct. It discusses the pattern of development in the area and characteristics of the existing population. The social context of development in surrounding areas is then used to identify issues which may be relevant when considering future growth in the area
- » Section 4 examines the availability of existing services, facilities and open space in and around the Riverstone East precinct and their capacity to absorb demand likely to be generated by future residents. The assessment has shown there are no facilities within the precinct at present, but there are many local and some district level services and facilities available in Riverstone, Schofields, The Ponds and nearby areas. Some higher order services and facilities are also available within Rouse Hill. Any capacity within existing facilities and services is likely to be taken up by forecast population growth in the surrounding area, leaving little by way of spare capacity for Riverstone East.
- » Section 5 sets out the expected dwelling yields and future population of the Riverstone East precinct. The precinct is expected to have about 5,790 dwellings and a population of around 17,637 residents when completely developed. The characteristics of the new population would be broadly similar to those of other new development areas in north western Sydney.
- » Section 6 provides an assessment of the community facilities and services likely to be required for residents of the future Riverstone East precinct, based on Growth Centre Commission standards and the policies of Blacktown City Council. The assessment has considered requirements jointly with Area 20 Precinct for some types of facilities, but has not undertaken a full re-assessment of Area 20's needs. The analysis shows that the residential population of the two precincts will require a district level community centre of around 1,000 sqm and 3 primary schools. Riverstone East will also require several child care centres and local medical centres. The population will rely on district and regional facilities and services in the wider area, particularly those to be located in Riverstone and Rouse Hill town centres. Development will need to contribute towards a community hub containing some specialist facilities, to be provided in the Riverstone Precinct.

- » Section 7 examines the likely open space and recreation requirements of the precinct. It considers some general trends in the demand for open space and recreation and presents Department of Planning and City of Blacktown standards for the provision of open space and recreational facilities. In addition, a 'participation analysis' has been undertaken to more specifically determine potential future demand for sport and recreation activities and the implications for open space requirements. The analysis concludes that the forecast populations of Riverstone East and Area 20 Precincts will together create demand for about 86 hectares of open space (for passive and active uses). The population will also generate a need for 16 sporting fields or 8 double playing fields (included as part of the total quantum)
- » Section 8 draws together the findings and recommendations for the required facilities and open space outlined above. Next steps should focus on more detailed planning of proposed local government social infrastructure, to enable costings and a Section 94 Plan to be prepared.

# 1 Introduction

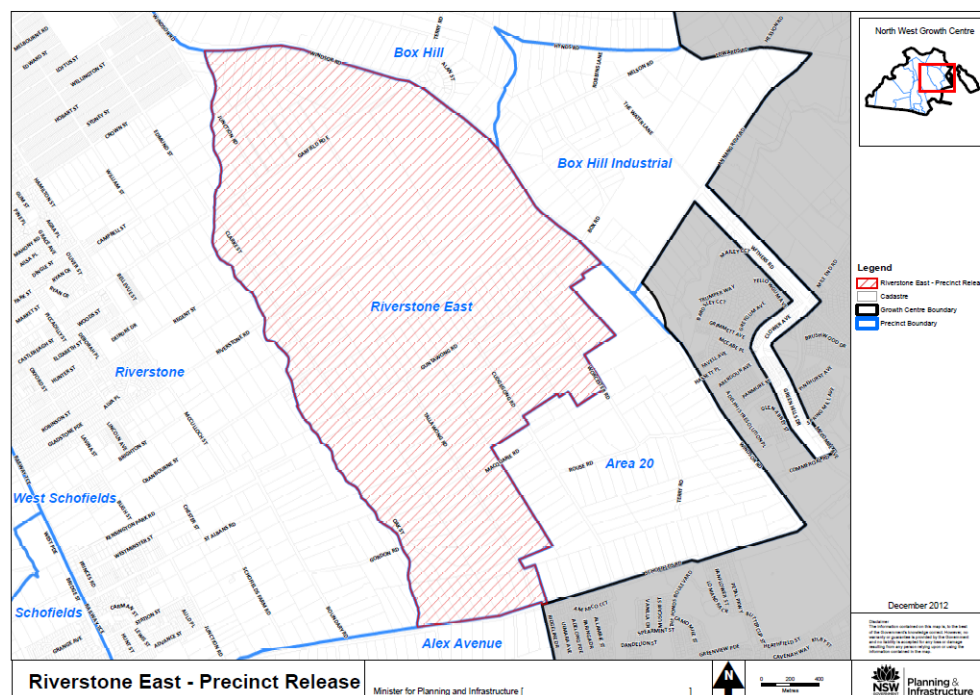
This report presents an assessment of the social infrastructure, including community facilities, human services and open space, that will be required to support residential development within the Riverstone East Precinct in Sydney's North West Growth Centre. In doing so, it also takes account of proposed revisions to the Precinct Plan for the adjoining Area 20 Precinct, which was rezoned for urban development in 2011. The report has been prepared by Elton Consulting for the Department of Planning & Environment (DP&E) as one of a number of technical studies to support the precinct planning process.

## 1.1 Background

In 2006 the NSW Government announced plans outlining the future of land releases in the North West and South West Growth Centres of Sydney to accommodate continuing population growth across the metropolitan area. The North West Growth Centre (NWGC) comprises 16 precincts across the Blacktown, Hills and Hawkesbury Local Government Areas, totalling approximately 10,000 hectares (ha) that will accommodate around 60,000 new dwellings and 180,000 people once fully developed.

Riverstone East Precinct (Figure 1), along with Vineyard Precinct, was announced for release in March 2013 and is one of the last of the precincts within the North West Growth Centre to be rezoned under the Growth Centres State Environmental Planning Policy (October 2006). The original Structure Plan for the NWGC identified a target of 5,300 new dwellings, with a population of around 15,000 people, for Riverstone East Precinct. This initial target has been revised as part of the detailed precinct planning process undertaken for this precinct in 2014.

**Figure 1 Riverstone East precinct boundaries**



Source: [www.gcc.nsw.gov.au/media/Pdf/Riverstone%20East/Precinct\\_Release\\_map.pdf](http://www.gcc.nsw.gov.au/media/Pdf/Riverstone%20East/Precinct_Release_map.pdf)

The Precinct is located in Blacktown Local Government Area (LGA) and has an area of approximately 656 ha.

Under the guidance of DP&E, precinct planning for Riverstone East involves the preparation of:

- » An Indicative Layout Plan (ILP) to guide planning and assessment of the precinct
- » An amendment to State Environmental Planning Policy (Sydney Growth Centres) 2006 to facilitate the formal rezoning
- » A Development Control Plan
- » An Infrastructure Staging and Delivery Plan.

These will be underpinned by a precinct planning report and supported by specialist technical studies.

## 1.2 Development context

Riverstone East Precinct is in the north eastern part of the North West Growth Centre at the north eastern edge of the Blacktown LGA. The precinct's north eastern boundary is defined by Windsor Road (see Figure 2). The precinct's western boundary is defined by First Ponds Creek and its south western boundary is Schofields Road. Area 20 Precinct forms Riverstone East Precinct's south eastern boundary, taking in parts of Worcester Road, Cudgegong Road and Rouse Hill Road and Second Ponds Creek.

The precinct is characterised by longstanding agricultural and rural residential uses, with some industrial land uses typical of rural fringe activities. The historic Rouse Hill House and estate and the surrounding Rouse Hill Regional Park are significant land uses in the precinct's east. The population has been relatively stable since the 1990s.

Key features of the precinct include:

- » The floodplain and flood-prone western boundary of First Ponds Creek and associated network of creeklines, drainage corridors and associated remnant bushland
- » A large portion of land in the east of the precinct along Windsor Road designated as Rouse Hill Regional Park
- » Some lands within the central and south eastern parts of the precinct remain vegetated, while lands designated for Rouse Hill Regional Park are relatively clear of vegetation.
- » A basic network of local and arterial roads, including Garfield Road East, Guntawong Road, Clarke Street, Tallawong Road, Cudgegong Road, Worcester Road and Macquarie Road, although there are no through routes at present
- » Two major transmission line easements through the centre of the precinct, one running from the north west to south east and a second running in a north easterly direction broadly parallel to Guntawong Road, divide the precinct approximately into quarters.

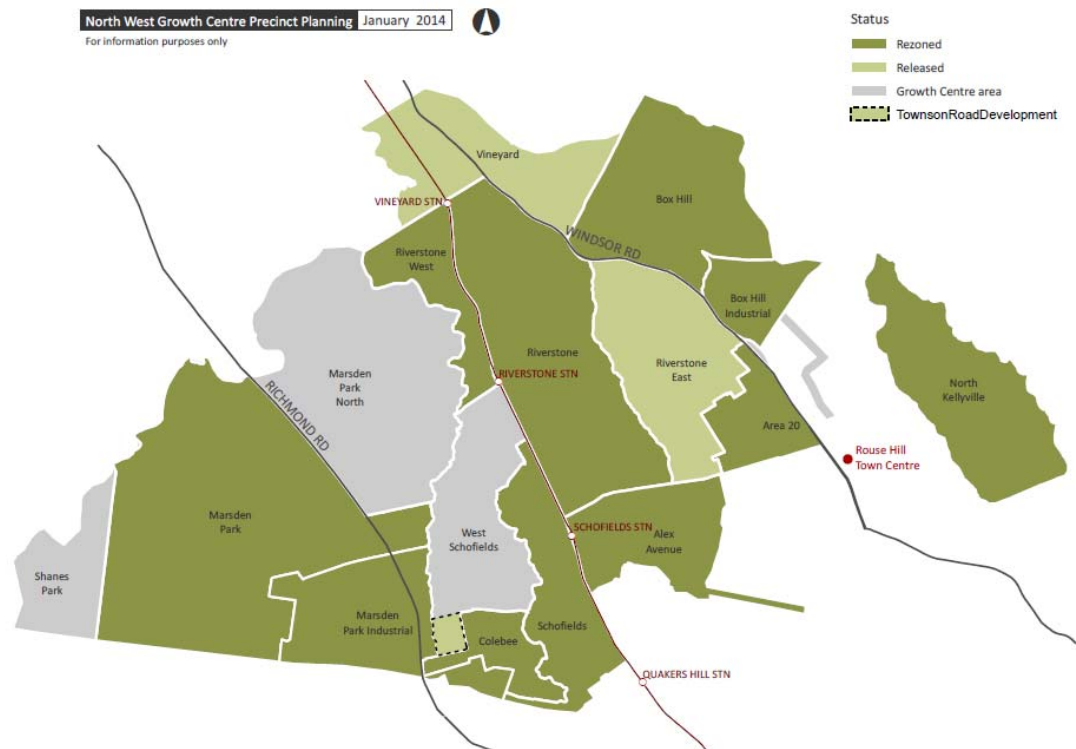
To the west of the precinct lies the NWGC precinct of Riverstone, while Alex Avenue and Area 20 Precincts lie to the south and south east respectively. Box Hill and Box Hill Industrial Area Precincts are located immediately to the east of Windsor Road, in The Hills LGA. All of these precincts have now been rezoned for urban development and are set to experience significant residential and employment growth over the next 20 years.

Of particular relevance is proposed development with the adjoining Area 20 Precinct. Following the precinct planning and rezoning of this precinct in 2011, the NSW Government determined that the proposed North West Rail Link would extend to Cudgegong Road in Area 20, creating a need for a



railway station and rail stabling yards. A town centre is now to be developed around the station, with higher density residential development than originally proposed. The social infrastructure planning for Riverstone East has been undertaken concurrently with revisions to the Precinct Plan for Area 20.

**Figure 2 Locational context - Riverstone East precinct within the North West Growth Centre**



Source: [http://growthcentres.planning.nsw.gov.au/Portals/0/docs/Growth%20Centres%20maps/A3\\_NW\\_Precinct\\_Status\\_Map\\_January2014.pdf](http://growthcentres.planning.nsw.gov.au/Portals/0/docs/Growth%20Centres%20maps/A3_NW_Precinct_Status_Map_January2014.pdf), accessed 5 May 2014

## 1.3 Scope of this study

This study provides specialist advice to support the preparation of the Riverstone East Precinct Plan with regard to:

- » Demographic analysis and forecasts of the size and nature of the future population within the Precinct
- » The community facilities, human services and open space (ie social infrastructure) which will be required to meet the needs of the future Riverstone East community, at the local, district and regional levels. This assessment also takes account of revisions to population forecasts for the Area 20 Precinct
- » Identification of spatial and locational criteria for recommended social infrastructure, taking into account changing community expectations and contemporary leading practice principles
- » Implementation strategies for the delivery of social infrastructure, including timing of provision
- » Opportunities for integration of open space with conservation, recreation, drainage, education and other infrastructure outcomes, and linkages to networks in the surrounding area

- » Opportunities for existing and planned regional social infrastructure to accommodate residents of the future Riverstone East Precinct, including existing capacity constraints, and the potential for facilities to be located within the Precinct, strategies for the timing and delivery of regional facilities, their relationship to the policies and plans of Blacktown City Council and the Growth Centre Development Code
- » Contributions towards the iterative development of the draft ILP for Stages 1 and 2, and other planning documents.

This study has considered the social infrastructure needs of the Riverstone East precinct as a whole. However, the draft Indicative Layout Plan for the precinct includes only Stages 1 and 2 of the precinct, being the areas which are to be initially rezoned and where infrastructure and services are to be delivered in the near future. The locations of recommended facilities across the balance of the precinct will not be identified until further stages of the Indicative Layout Plan are prepared.

## 1.4 Study process

Preparation of this report has involved:

- » Discussions and meetings with representatives of the Department of Planning & Environment (DP&E)
- » Review of existing plans, policies and background studies from Blacktown City Council, the former Growth Centres Commission and DP&E
- » Analysis of the social context of Riverstone East, including demographic analysis of the surrounding district population (using 2011 ABS census data for the local area) and social trends analysis undertaken previously by Elton Consulting for north western Sydney
- » An assessment of the existing community facilities and open space in the Riverstone East Precinct and surrounding areas and detailed understanding of the facilities to be provided in the surrounding areas through the Growth Centres planning process
- » Review of the Stage 1 /2 ILP for the precinct and feedback on its provisions
- » Review of revised plans for the adjoining Area 20 Precinct
- » Discussions with representatives of Blacktown City Council and relevant State Government agencies about existing services, future requirements of the forecast population and delivery arrangements
- » Identification of other social planning matters that have emerged during the research and are considered to contribute to positive social outcomes.

## 2 Policy framework

A range of policies have been examined to provide context and guidance for the planning and delivery of social infrastructure for the Riverstone East Precinct.

These policies also provide social planning criteria against which recommendations have been developed. More broadly, the policy review has also identified social objectives directed at ensuring that the communities created within the Precinct will be socially sustainable.

The policy review has considered:

- » The *Draft Metropolitan Strategy for Sydney to 2031*
- » *State Environmental Planning Policy (Sydney Region Growth Centres) 2006*
- » The *Growth Centres Development Code*
- » The strategic and social planning policies of Blacktown City Council.

A brief outline of relevant issues contained in these policies is presented below.

### 2.1 Draft Metropolitan Strategy for Sydney to 2031

The *Draft Metropolitan Strategy for Sydney to 2031* (NSW Government, March 2013) provides the overall context for the rezoning and development of the Riverstone East precinct. The *Draft Strategy* provides a framework for Sydney's long term and sustainable growth, by focusing on five key outcomes:

- » Balanced growth
- » A liveable city
- » Productivity and prosperity
- » Healthy and resilient environment
- » Accessibility and connectivity.

Increasing housing supply to meet the needs of a growing and changing population is a key priority of the Strategy, which sets a target of at least 545,000 new houses across Sydney by 2031, to be provided through both greenfield development and urban renewal. Minimum housing targets are set for each of six subregions, with a target of 148,000 additional dwellings by 2031 set for the West Central and North West Subregion, which includes most of the North West Growth Centre and hence the Riverstone East precinct. Diversifying housing opportunities by providing greenfield housing in the North West Growth Centre is also a priority. The North West Growth Centre will need to accommodate at least 54,000 of the estimated 70,000 new dwellings planned for this area over the next 20 years, ensuring this growth is well integrated with neighbouring suburbs.

Key directions identified for the West Central and North West Subregion Strategy recognise Rouse Hill Major Centre as the major centre to serve the new communities of the NWGC, the important contribution to be made by Rouse Hill Regional Park, and the capacity to concentrate business and industrial uses in the Box Hill and Marsden Park Industrial Precincts as specialised employment areas.

Note: The Strategy has been superseded by release of the new metropolitan strategy, *A Plan for Growing Sydney*, after this report was substantially completed.

## 2.2 The Growth Centres SEPP

*State Environmental Planning Policy (Sydney Region Growth Centres) 2006* provides the statutory planning framework for the Growth Centres and establishes the broad planning controls for their development. In particular, it identifies areas of open space and environment conservation to be protected, areas that are flood prone or major creek lands and transitional lands that need to be further assessed in the precinct planning process.

The objectives of the SEPP include to:

- » Enable the establishment of vibrant, sustainable and liveable neighbourhoods that provide for community well-being and high quality local amenity
- » Provide controls for the sustainability of land in those growth centres that has conservation value
- » Provide for the orderly and economic provision of infrastructure in and to those growth centres.

The SEPP also provides objectives for Public Recreation: Regional and Local Zones, which includes the following relevant objective:

- » To enable the land to be used for regional open space or recreation purposes that are consistent with the protection of its natural and cultural heritage values.

## 2.3 The Growth Centres Commission (GCC) Development Code

The *Growth Centres Development Code* provides the basis for the planning and design of precincts and neighbourhoods within the Growth Centres, and provides a guide to the incorporation of best practice standards. The *Development Code* contains a large number of objectives to guide the planning and provision of community facilities and open space. They include:

- » Achievement of quality design outcomes
- » Infrastructure investment to keep pace with development
- » A range of housing types to suit the needs of all members of the community
- » Planning to enable residents to walk to shops for daily needs
- » Easy access to town centres with a full range of shops, recreational facilities and services, along with smaller village centres and neighbourhood shops
- » A range of land uses to provide the right mix of houses, jobs, open and recreational spaces.

Specific objectives of the *Development Code* address particular elements and include to:

- » Increase housing choices
- » Provide facilities and services at a local level, including parks, libraries, shops, schools, and health facilities
- » Improve walking and cycling pathways, especially between residential areas and shops and schools
- » Integrate existing infrastructure

- » Provide, protect and maintain a range of open space opportunities throughout the entire precinct
- » Provide a range of commercial and retail opportunities
- » Enhance safety, maximise surveillance and minimise opportunities for crime
- » Utilise public places and public buildings to promote community identity.

Specific Development Code objectives with regard to community facilities include to:

- » Provide community facilities within walking distance of residential neighbourhoods and transport nodes
- » Provide access to a wide range of social and community facilities catering for different social groups and age groups
- » Create good access to new areas of open space and community facilities
- » Improve access to existing parks and recreational facilities
- » Minimise the impact of access ways on the environmental qualities of public open space
- » Provide good, but unobtrusive, access.

The Code also provides objectives in relation to the location, co-location and multiple use of community services and facilities in order to:

- » Facilitate efficient use of resources and services through maximising opportunities for joint, shared or multiple-use of open space and community facilities
- » Ensure that adequate social, cultural and community facilities are appropriately located in relation to public open spaces
- » Facilitate the viability of social facilities by means of appropriate location and distribution
- » Maximise accessibility and convenience of social facilities and services through co-location
- » Facilitate social and community facilities that meet the future requirements of the population
- » Provide for the social needs of future communities
- » Enable adequate land to be made available for the provision of social infrastructure
- » Facilitate the timely provision of community facilities and services
- » Locate community facilities within the centres and neighbourhoods
- » Create opportunities for the optimal use of land and resources, educational and community facilities.

The *Development Code's* objectives relating to public open space aim to balance the dual function of the undeveloped land for both recreational purposes and stormwater management systems. In addition the land needs to be accessible and useable by the public for a wide range of activities. Specific open space objectives include to:

- » Integrate stormwater management and water sensitive urban design with networked open space
- » Provide a balance of useable and accessible open space with neighbourhood and district stormwater management
- » Protect recreational uses
- » Provide an interconnected network of open spaces
- » Integrate public open space into the urban structure to maximise land use efficiency

- » Facilitate the provision of public open space of an appropriate quality and quantity
- » Facilitate the provision of public open space and its development as part of the subdivision process
- » Provide a diverse mix of open spaces and community facilities designed to cater for a range of uses and activities
- » Facilitate the provision of sporting and recreation facilities that can meet the needs of future communities
- » Provide amenity to residential areas
- » Avoid pressure to existing open space systems in surrounding areas.

Additional open space objectives with regard to urban spaces and connections include to:

- » Provide public open space that is pleasant, safe and usable both during daytime and at night
- » Integrate open space with the mix of uses in the town centre to form a focal point
- » Provide residents with accessible passive and active recreational opportunities
- » Provide open space that promotes local character and identity
- » Provide play spaces which are designed and located to be safe and convenient and to assist in childhood development
- » Retain existing stands of remnant vegetation and to associate them with passive recreational facilities
- » Provide open space for a diversity of interests catering for a wide range of users.

The *Development Code* also contains a set of Precinct Development Parameters which provide some guidance in establishing benchmarks and thresholds for the planning of open space and social infrastructure in precincts.

## 2.4 Blacktown City Council Policies

### 2.4.1 Blacktown City 2025 - Delivering the Vision

This document provides a strategic framework for creating a healthy and vibrant city as it changes over the next 15 years and beyond, based on the ideals, values and aspirations of Blacktown residents.

Strategies have been developed around the following eight key themes:

- » A creative, friendly and inclusive City
- » Environmental sustainability
- » Vibrant commercial centres
- » A smart economy
- » Urban living and infrastructure
- » Clean green spaces and places
- » Getting around
- » A sporting City

Focus areas within several themes which are relevant to the future social infrastructure needs of the Riverstone East precinct are summarised below.

A creative, friendly and inclusive city –

- > Expand the role of community centres so that they become community resource hubs, providing spaces for learning, human service delivery and recreational and cultural activities
- > Council to continue to play a role in providing high quality child care services which meet the needs of all children and their families

Vibrant commercial centres –

- > Implement planning strategies to describe the desired future development and foster partnerships with government, land owners and the private sector

A Sporting City -

- > Provide and promote indoor and outdoor sporting opportunities for a wide range of users
- > Establish relationships with peak governing bodies and identify innovative approaches in the creation of new venues and facilities
- > Support and promote local sporting champions as role models
- > Maximise community interest in sport and increase participation by actively promoting Council's facilities and the benefits of sport to the wider community
- > Promote community development through sport.

## 2.4.2 Blacktown City Social Plan 2012

The *Blacktown City Social Plan 2012* provides a snapshot of the City's social characteristics, strengths and social needs, as the basis for identifying issues, opportunities and strategies to assist local residents to achieve their full potential.

Eleven indicator based priority areas examine the health and social wellbeing of the community. Data analysis and stakeholder consultations have resulted in key concerns being identified. Key issues that are relevant for the NWGC include:

- » Population growth is identified as both the greatest strength and major challenge facing the City. Blacktown is identified as the LGA that will absorb the majority of the additional residents intended to be housed in the NWGC. At the same time, changes to planning legislation have limited the capacity of Council to deliver adequate social infrastructure in new release areas. The Plan notes that the effect over time will be the establishment of suburbs with few facilities and limited opportunities for recreation and participation. The existing City infrastructure will become increasingly stretched as demand grows and this is anticipated to have a negative impact on residents' overall quality of life.
- » In particular, there is a need for more community facilities, and especially multi-purpose Community Resource Hubs in areas of population growth, yet current restrictions in the levying of Section 94 contributions mean that there is no identified source of funding to build such facilities.
- » Concerns are identified about inadequate recreation opportunities and community facilities in some areas to meet the needs of a range of age groups, including both older and younger people. There is a need for more low cost recreation facilities, leisure programs and physical activity in the community as a contribution to achieving physical, mental, cultural, social and environmental health and well-being. There is also a need for open space and public space to be safe places, through application of 'safer by design' principles.



- » Concerns are identified about the lack of social support services in parts of the City and there is a need for a range of facilities, services and activities to support families, children and disadvantaged groups. Demand for local support services outstrips supply. The Plan proposes strategies to support and advocate for increased human service provision within the area, including the establishment of human service strategic planning consortiums to develop human services in new release areas.
- » A need is identified to increase opportunities to assist people to actively participate in their communities to address problems of social isolation and social exclusion. Strategies are proposed to promote and provide community events and programs that allow people to identify and see opportunities for a positive future.
- » A high proportion of residents have to commute long distances and endure lengthy travel times to work, with consequent impacts on family and community life. Employment opportunities close to home are limited. The Plan identifies the importance of developing employment lands in the LGA and delivering transport corridors. Strategies are proposed to support and advocate for increased transport infrastructure that is affordable, available and accessible.

### 2.4.3 Blacktown City Council Cultural Plan 2013

The *Cultural Plan* provides a statement of Council's commitment to arts and cultural development, to enhance civic pride and community identity through arts and cultural programs. It aims to support local arts and culture for residents in all stages of life and promote citywide access to and participation in arts and cultural development opportunities for all residents. It also expresses support for the development of professional artists in Blacktown and support for the expression of cultural diversity.

The *Cultural Plan* provides a framework to support creative communities and creative industries and for the delivery of opportunities, programs, services and facilities across the City. It provides specific goals and strategies in relation to each of the eight key themes identified in the Community Strategic Plan.

### 2.4.4 Blacktown City Council Affordable Housing and Homelessness Strategic Plan 2009

This plan, adopted by Council in June 2009, examines the issues of both affordable housing and homelessness in both a general and local context. These issues are canvassed separately in the report.

The plan defines Affordable Housing as being when 'households who are renting or purchasing are able to pay their housing costs and still have sufficient income to meet other basic needs such as food, clothing, transport, medical care and education'. The plan identifies that Blacktown still provides some relatively affordable housing stock; however there are still a significant number of moderate income households that are in housing stress (both those renting and with mortgages).

The plan identifies a range of issues for local action for Council and its partners to address to improve housing affordability in the Blacktown area:

- » Positioning Council for funding opportunities to assist in the provision of affordable housing initiatives
- » Increasing the supply of affordable housing available for purchase
- » Increasing the supply of affordable rental properties
- » Increasing access to support for people experiencing mortgage stress



- » Enhancing the capacity of community members to participate in affordable housing programs

The plan also recognises that homelessness can take many forms, ranging from people having no shelter, to people living in housing that is close to or below minimum standards including those in boarding houses and unemployed persons living in caravan parks.

The plan scopes a range of issues for local action to reduce the incidence of homelessness and address its impact on individuals and the community.

- » Positioning Council for funding opportunities to assist in the provision of initiatives to reduce homelessness and support those experiencing homelessness
- » Increasing the numbers of spaces in local emergency and supported accommodation services
- » Increasing the availability and accessibility of early intervention support for people at risk of homelessness
- » Increasing coordination of service providers at a strategic and grass roots level
- » Increasing the availability of social housing accommodation.

#### 2.4.5 Blacktown Contribution Plans

Council has prepared, or is preparing, Section 94 Contributions Plans for each of the Growth Centre precincts that have been rezoned to date. These include:

- » CP No. 20: Riverstone and Alex Avenue Precincts
- » CP No. 21: Marsden Park Industrial Precinct
- » CP No. 22: Area 20 Precinct
- » CP No. 23: Riverstone West Precinct
- » CP No. 24: Schofields Precinct

The Contributions Plans set out Council's approach to the provision of community facilities and open space in the growth Centre precincts and contain important information about Council standards and benchmarks and proposed levels of provision. This information is discussed further in Chapter 6 Community Facility Requirements and Chapter 7 Open Space and Recreational Requirements.

#### 2.4.6 Wellness through Physical Activity Policy 2008

The *Blacktown Wellness through Physical Activity Policy* (Blacktown City Council, 2008) aims to contribute to the City achieving its vision – “to be a vibrant, healthy and safe city” by promoting physical activity in the community as a contribution to achieving physical, mental, cultural, social and environmental health and wellbeing” (p. 3).

The Policy proposes the following principles for the promotion and development of wellness through physical activity. The principles of particular interest to this study relate to the provision of high quality, accessible open space, sport and recreation facilities. These include:

- » Provision and Access – an accessible network of recreation infrastructure provision and an opportunity for all members of the community to participate
- » Special Needs and Population Groups – a focus on activities that have a positive impact on groups who have lower levels of physical activity

- » Safe, Supportive & Sustainable Environments – providing physical environments that support the local community to participate in a range of activities that will lead to community wellness through physical activity.

#### 2.4.7 Blacktown Recreation and Open Space Strategy 2009

The *Blacktown Recreation and Open Space Strategy* (Blacktown City Council 2009) aims to provide future direction to the provision, development, management and maintenance of open space and recreation facilities for Council and the community.

The Strategy recognises that recreation and open space facilities contribute to, and are important for, the quality of life of residents. Development of the Strategy involved an assessment of demand and supply of open space and recreation infrastructure provision to determine what will be required to meet the needs of the existing and future communities.

The strategy provides the following vision for recreation and open space in the Blacktown LGA.



*Blacktown offers residents and visitors with every opportunity to pursue vibrant, healthy and family-oriented lifestyles all year round. Blacktown's open space, leisure and recreational facilities and services are renowned for being safe, appealing, accessible and diverse in nature, and they are underpinned by a rich, unique and varied environment for recreation, sport, leisure and a range of passive pastimes.*

This information will assist in the planning and management of enhancements to open space and service provision and in implementation of the City Vision strategies for 'Clean, Green Spaces and Places' and 'A Sporting City'. Priority strategies of particular interest to this study include:

- » The provision and development of sportsgrounds within a hierarchy
- » The provision of key facilities for some sports and organised activities
- » Development of Blacktown as the sporting capital of Western Sydney
- » Catering for informal recreation through the provision and development of parks, linear trails, playgrounds and youth facilities
- » The future provision and development of aquatic and indoor facilities
- » The protection, enhancement and maintenance of natural areas.

Key issues which need to be considered in planning for and maintaining open space areas within the LGA include:

- » Equity – there is a high demand for sportsgrounds and other areas of open space due to the large proportion of families and young people and the anticipated growth in physical activity participation rates. Equity in provision across the municipality is an important consideration
- » Quality – there will be a high priority for further development of reserves to enhance their quality and encourage their use
- » Access – Council needs to continue to provide for the needs of people with disabilities, people with prams, older people in using paths, accessing open spaces and recreational facilities
- » Safety – the community values safety highly and will use recreation and open space facilities more when they feel safe and secure
- » Sustainability – Council will need to balance values of biological diversity, ecological integrity and intergenerational equity with community demands and needs.

The strategy is comprised of a number of action plans. Those of interest to this study and key points are summarised below:

**An action plan for sport**

- » Maintain and enhance the hierarchy of sportsgrounds to provide state, regional, city-wide and district sportsgrounds
- » Where possible, avoid exclusivity of use of facilities by sporting groups
- » Investigate the opportunity to establish a tennis facility in the north eastern part of the LGA
- » Investigate the possible centralisation of softball to a single city-wide facility with links to the new development areas
- » Review the current provision for Blacktown District Netball Association
- » Undertake a detailed review of equestrian facilities with a view to assessing the establishment of an equestrian facility.

**An action plan for informal recreation**

- » Investigate the establishment of additional city-wide parks in key locations through the City of Blacktown
- » Develop an equitable spread of quality playgrounds operating in a hierarchical framework
- » Develop and implement plans that will assist in the development and enhancement of corridors and linear train systems
- » Plan for various youth-related formal and informal recreation facilities and places.

**An action plan for aquatic and indoor facilities**

- » Review the Riverstone Swimming Centre in light of forecast growth and anticipated demand
- » Investigate and additional indoor aquatic centre linked to health and fitness facilities in the North West Growth Centre
- » Plan for additional health and fitness facilities linked to existing and future indoor aquatic centres.

**An action plan for natural areas**

- » Explore opportunities to improve access and link trails between bushland, natural area reserves, parks and waterways.

## 2.4.8 North West Growth Centres Recreational Planning Framework

The *North West Growth Centres Recreational Planning Framework* (Blacktown City Council, February 2009) was developed to assist Council to adequately plan and cater for the anticipated demands for recreation and open space in the new release areas of the NWGC.

The Framework examines the projected demographic mix for the Growth Centre and also that of another Blacktown LGA new development (Glenwood) to identify potential factors that may influence sport and recreation demands. These are considered further in Section 7 of this report.

The Framework also examines benchmarks for sporting facilities from a range of sources and considers local factors to formulate standards for the North West Growth Centre. It also provides guidelines for different open space and facility types including sporting (or active) open space and

informal recreation and open space, indoor facilities, cycle and pedestrian pathways, aquatic facilities and youth recreation facilities. These standards and guidelines are considered further in Section 7.

#### 2.4.9 Blacktown Playground Strategy

The *Playground Strategy* (Blacktown City Council, undated) recognises the important contribution playgrounds make to the community's quality of lifestyle and the social and health benefits they offer.

The Strategy sets out a playground hierarchy consisting of large city play spaces, neighbourhood playgrounds and small, local playgrounds. This hierarchy has been incorporated into requirements outlined in Section 7.

## 3 Existing social context

It is important to understand the social context of any new development, to ensure that its planning takes account of, and is responsive to, the surrounding social conditions. An understanding of the social context will enable the new community and land uses to integrate, both physically and socially, with surrounding areas.

This chapter presents an overview of the social context for development within the Riverstone East Precinct. It considers the characteristics of the population currently living in and around the precinct. The availability of existing community facilities, human services and open space that could address some of the needs of the future new population are considered in the following chapter.

### 3.1 The regional social context

North Western Sydney has experienced very high levels of growth over the past two decades. New housing development and ongoing planning for the North West Growth Centre have created demands for shops, infrastructure, community facilities and services, employment lands, open space and recreational areas. In addition, upgraded roads and improved transport networks i.e. Windsor Road, M2, M7, Transitways and the North West Rail Link (NWRL), have attracted greater concentrations of business and industrial employment opportunities to this region.

At a regional level, the Rouse Hill Regional Centre will provide higher order commercial, service and recreational functions. This development, which is outside the North West Growth Centre, contains a town centre with about 100,000sqm of commercial and retail space, approximately 1,800 dwellings, parks and some community facilities. At completion, the Rouse Hill Regional Centre will house approximately 4,500 people. Housing comprises a mix of apartments and family homes. Within Area 20, the North West Rail Link terminus, including a station and stabling yards, will bring an important new transport interchange to residents of this area. Construction began in 2013 and the service is expected to be operational by 2019. This area will also be serviced by the North Western Bus Transitway in the immediate future.

To date, eleven Precincts (Colebee, North Kellyville, Riverstone West, Riverstone, Alex Avenue, Marsden Park Industrial, Area 20, Schofields, Marsden Park, Box Hill and Box Hill Industrial) have been rezoned to allow urban development to commence. Collectively, these Precincts have planned to provide land for approximately 40,000 homes.

To the south of Riverstone East, the 245 ha Area 20 precinct was rezoned in October 2011. This precinct was originally rezoned for 2,500 dwellings and 6,400 residents. However, plans for this precinct are continuing to evolve as the opportunities for urban uses near the North West Rail Link railway station, commuter car parks and train stabling yard are developed. As a result, the precinct plan for Area 20 is now being revised to enable development of a town centre and higher density residential development. Around 4,400 dwellings are now forecast for this precinct, resulting in a forecast population of 12,760 people, with consequent implications for social infrastructure.

Adjacent to Riverstone east, the 975 hectare Riverstone Precinct was rezoned in May 2010 to accommodate around 9,000 new dwellings and around 27,000 residents (GCC website). The precinct's existing population and local shops and services will be supplemented by an expanded industrial area of 14 hectares, providing for another 1,250 jobs, 170 hectares of open space and recreation areas including various walking and cycling paths. The precinct will also provide a new

railway station, new roads, three new primary schools, a high school and a community hub. Residential development will mostly take the form of low density areas, with some medium to higher density residential areas along Schofields Road. Facilities in the existing Riverstone town centre will be upgraded to cater for the increased population.

Much of the planning for the Riverstone Precinct was undertaken concurrently with the Alex Avenue Precinct. Alex Avenue Precinct was rezoned in May 2010 to accommodate 6,300 dwellings and a population of around 18,000 residents across the 420 ha site. The precinct will also provide for:

- » 32 hectares of open space
- » Two new schools with adjoining playing fields
- » At least 25,000 square metres of retail space
- » Access to the duplicated Richmond Rail line
- » A new railway station at Schofields with a commuter car park
- » Upgrades to Hambledon, Burdekin and Schofields Roads, including new rail crossings at Burdekin and Schofields Roads
- » Walking and cycle paths along major roads and open space corridors.

Box Hill and Box Hill Industrial Precincts were rezoned in April 2013. Together these precincts comprise 974 ha of land and will provide for 9,600 dwellings and almost 30,000 residents. The areas contain more than 130 ha of employment land, which is expected to create around 16,000 jobs. Other key features of these precincts include:

- » A new town centre and 3 village centres
- » 133 hectares of employment land
- » 50 hectares of open space and recreation areas
- » Upgrades to major roads
- » New primary and high schools
- » Protection of 59 hectares of significant vegetation
- » New pedestrian and cycle links.

Further residential development is envisaged in precincts to the west of the Richmond Railway line and Eastern Creek. Schofields Precinct, comprising 465 ha, was rezoned in May 2012 to accommodate almost 3,000 dwellings for 8,000 people. Marsden Park Precinct, in the western portion of the North West Growth Centre, was also rezoned in 2013 with an expected dwelling yield of 10,300, resulting in a population of around 30,000. This precinct will also contain a major town centre. The adjoining Marsden Park Industrial Precinct has the potential to provide around 10,000 jobs and housing for about 3,500 people. Employment lands will include 200 hectares of light industrial land, a 70 hectare business park and 40 hectares of bulky goods retailing.

Precinct planning is yet to commence in the West Schofields Precinct and the Marsden Park North Precinct.

Residential development is also occurring to the south of the North West Growth Centre at The Ponds. This development will generate 3,200 dwellings across the three stages with a projected population to reach 9,500 people.

This recent and proposed residential development and population growth have important implications for the planning and delivery of social infrastructure for the Riverstone East Precinct. Rapid population growth in surrounding areas and further intensification of dwelling yields

associated with town centres along the North West Rail Link will continue to place strain on existing services and facilities within Blacktown City.

Social issues associated with the rapid rate of urban development occurring in this area include:

- » A shortage of local employment opportunities, coupled with relatively poor public transport services. Many residents spend considerable time commuting to work outside the region. Time spent commuting can restrict time available for family life, recreation and for involvement in community life. This demonstrates a need for facilities and activities that are locally based, but also demands for higher order regional services and facilities.
- » Newcomers can be separated from established support networks and may experience isolation and dislocation. This indicates a need to foster social support networks and services.
- » The relatively high cost of new housing creates financial stress for many households. This may be exacerbated by uncertainties associated with the threat of unemployment or negative equity. There is a need for social and recreational opportunities that are affordable.
- » There is a need for strategies to promote integration of new and existing communities, to foster community cohesion and identity and help ensure that the change process does not strain social harmony
- » Challenges associated with planning and acquiring land for new schools. While DEC has, in the past, undertaken planning for school sites in parallel with the rezoning processes, difficulties and long lead times associated with acquiring future school sites has seen a shift towards a greater reliance on expanding capacity within existing facilities as a short to medium term solution to accommodating school children in new precincts within the North West Growth Centre.

Issues relating to development of a socially sustainable community within the Riverstone East precinct include:

- » The relationship of Riverstone East to the surrounding precincts and availability of district and regional level community infrastructure in the adjacent precincts of Area 20 and Riverstone. This is particularly important as the Town Centre of Area 20 is replanned to accommodate the needs and opportunities arising as a result of the NWRL and associated infrastructure
- » Ability to fund and provide the desirable levels of open space and community facilities for residents within the new precinct, given restrictions on the levying of development contributions for building facilities
- » The need for a strategic approach to the funding and provision of regional facilities that cannot be financed through developer contributions alone
- » The need for affordable housing and the availability of community infrastructure to support individuals and communities with relatively high social needs
- » Meeting objectives for healthy urban development and child friendly communities.

## 3.2 Social profile of the area

The population of this part of North Western Sydney has changed significantly over the past 20 years. Land within the region has previously been used primarily for farming and produce purposes; however significant population growth and a demand for new housing has seen many of these existing uses diminish in the area in favour of new urban development. With a change of land use and development type, many of the areas within Blacktown LGA have experienced significant demographic transformation. A demographic profile has been prepared in order to

understand the existing demographic characteristics of the Riverstone East area, and how they relate to Blacktown LGA and the wider Sydney area. This is summarised in Table 1.

**Table 1 Demographic Profile - Riverstone East and comparison areas**

Indicator	Riverstone East (approximate area)	Blacktown LGA	Sydney
<b>Population (2011)</b>	900	301,099	4,391,676
<b>Age groups (%)</b>			
0-4	5.6	8.4	6.8
5-11	7.5	10.8	8.7
12-17	7.9	8.9	7.4
18-24	10.0	9.7	9.5
25-54	36.0	43.3	43.8
55-64	15.0	9.9	10.8
65 and over	17.0	9.0	12.9
<b>Median age (yrs)</b>	41	32	36
<b>Household type (%)</b>			
Family household	77.1	81.6	73.1
Lone person	20.8	16.1	22.6
Group household member	2.0	2.2	4.3
Average household size (no. people)	2.9	3.1	2.7
<b>Family household structure (%)</b>			
Couples with children	48	53.5	48.9
Couples without children	33	25.4	33.5
Single parent families	19	19.5	15.7
<b>Cultural diversity (%)</b>			
Aboriginal or TSI heritage	2.4	2.7	1.2
Overseas born	33.9	37.6	34.2
Speaks language other than English at home	34.3	36.9	35.5
Most common non-English speaking ancestries	Maltese, Italian	Philippines, India	China, India
<b>Median household income (\$)</b>	918 - 1083	1388	1447
<b>Labour force status persons aged 15+ (%)</b>			
Employed full-time	56	63.6	38.2
Employed part-time	30	23.5	16.5
Unemployed	6.6	7.2	3.5
<b>Occupation (%)</b>			
Professionals	8.5	17.4	25.5
Clerical and administrative workers	10.0	18.3	16.2
Managers	15.1	9.0	13.3
Technician and trade workers	19.0	13.5	12.2
Sales workers	7.3	9.3	9.0
Machinery operators and drivers	10.0	10.9	13.0
Labourers	14.6	10.5	7.3
Community and personal service workers	7.6	8.9	8.8
<b>Housing types (%)</b>			
House	100.0	82.9	60.9
Semi-detached house	0.0	11.4	12.8
Apartment	0.0	5.1	25.8
Other	0.0	0.4	0.5
<b>Housing tenure (%)</b>			
Fully owned	50.5	23.2	30.4
Being purchased	12.0	43.6	34.8
Rented	32.6	30.1	31.6
Other / not stated	4.5	0.5	0.8
<b>Dwelling status (%)</b>			
Occupied private dwellings	99.0	95.5	92.8
Unoccupied private dwellings	1.0	4.5	7.2
Same usual address as 5 years ago	73.9	59.9	56.7

Source: Australian Bureau of Statistics Census 2011



The Riverstone East Precinct is not accurately captured by any ABS Census of Population and Housing geographies. For the purpose of describing the current population, characteristics of three small (SA1) areas (SA1 1131223, 1131228 and 1131231) which cover most of the precinct have been examined. The total population of these three small areas was approximately 900 people at the time of the 2011 census.

Analysis of the census data indicates that the population currently living within the Riverstone East locality, when compared with the rest of Blacktown LGA, is characterised by the following features:

- » **An older population**, with a median age of 41 years, compared to the Blacktown average of 32 years and 36 years in Sydney. Associated with this, Riverstone East has a much lower proportion of children and young adults than comparison areas, and a much higher proportion of people in all age cohorts 55+.
- » A higher proportion of **lone person and couple only households** compared to the Blacktown LGA, and a lower proportion of families with children
- » **A relatively large post-war immigrant population** – while most residents are from Australian, English or Scottish backgrounds, around 20% of residents are of Maltese ancestry and another 12% are of Italian ancestry. Around 40% of residents reported both parents had been born overseas
- » Relatively **lower proportions of full time employees** and relatively higher proportions of part time employees in this area when compared with the LGA and Sydney as a whole
- » The three **main occupational groups are technicians and trade workers, managers and labourers**. The area has proportionately fewer professionals and clerical workers than comparison areas
- » Consistent with the rural character, **mushroom and vegetable growing and school education** are two of the main industries of employment
- » Median **household incomes are significantly lower** than the LGA or Sydney region
- » All housing consists of **detached dwellings**. Around one third of dwellings are rented and most of the remainder are owned outright
- » **Well established population**: Riverstone East has higher levels of people who are living at the same address they were 5 years ago compared with Blacktown and Sydney.

### 3.3 Issues for the existing population

The rezoning and future growth of this precinct will significantly change the demographic characteristics of this agricultural and rural residential area.

Potential social issues could include:

- » Community awareness of the planned changes to the precinct and wider area, including concerns about the scale of proposed changes and expectations around the timing of the rezoning and potential for future land sales
- » Need for connectivity and access to surrounding precincts to the west, south and east
- » Impacts on existing community facilities and demands for new community infrastructure, especially as the age profile changes.

## 4 Existing community facilities and open space

### 4.1 Existing community facilities

Existing community facilities, services, open space and recreation opportunities in and around the Riverstone East Precinct have been identified and examined to assess their availability and accessibility for the incoming population. Figure 3 shows the locations of existing facilities.

Consistent with its small population and semi-rural character, existing social infrastructure within Riverstone East is currently limited. The existing population of the precinct relies on local and district facilities such as schools, community centres, medical services, childcare centres and places of worship in the adjacent and nearby suburbs of Riverstone, Rouse Hill, Schofields, The Ponds, Kellyville Ridge, Stanhope Gardens and Beaumont Hills.

#### Primary schools

The closest government primary schools are Riverstone Public School and Rouse Hill Public School. Both are located several kilometres from the centre of the precinct and beyond the precinct boundaries.

Table 2 shows the enrolment history of local schools. While schools in the older suburbs of Riverstone and Vineyard have experienced a decline in enrolments between 2009 and 2013, schools in the new release suburbs such as Kellyville Ridge, The Ponds and Rouse Hill have experienced considerable growth in student numbers.

Spare capacity in Riverstone and Vineyard Public Schools is likely to be taken up by projected population growth in those precincts, while the newer schools in nearby new release suburbs will continue to grow as their local populations expand. There will be a need for new schools to service the Riverstone East Precinct.

The closest Catholic primary school is St John's Primary School to the west of the precinct in Riverstone. The Catholic Education Office has advised that there is currently significant capacity for new primary school students at this school, and potential for expansion on the site in future, if required.

#### High schools

The closest government high schools to the precinct are Riverstone High School and Rouse Hill High School. Both currently have significant spare capacity, but this is expected to be taken up by projected growth in the areas immediately surrounding these schools.

Independent schools in close proximity include Norwest Christian College, Rouse Hill Anglican College, Terra Sancta College and Australian Christian College. While none of these facilities are located within the precinct boundary, they are relatively close and would be accessible with a new road network better linking Riverstone East to Riverstone and surrounding areas. The Catholic Education Office has advised that new facilities are being built at Terra Sancta College, Hambledon Road, Schofields (within the Nirimba Education Precinct) which will create spare capacity within the year 7-10 facility as the Riverstone East precinct grows.

**Table 2 Schools near Riverstone East and historic enrolments**

School	Site size (ha)	2009	2010	2011	2012	2013	Utilisation %
<b>Government</b>							
<b>Primary schools</b>							
Casuarina School (Special School)	1.206	24	25	22	36	42	100%
Riverstone Public School	2.995	290	294	281	269	264	71%
Vineyard Public School	1.784	65	60	46	32	28	67%
Rouse Hill Public School	3.112	808	876	903	865	821	100%
Ironbark Ridge Public School*	8.712	346	421	513	547	553	100%
Kellyville Ridge Public School		609	676	713	771	831	
John Palmer Public School		135	267	412	496	641	
Schofields Public School	2.833	270	295	288	291	339	200%
Hambledon Public School		578	581	593	593	627	
The Ponds School (Special School)		n/a	n/a	n/a	24	49	
<b>High schools</b>							
Riverstone High School (7-10)	9.594	354	330	326	335	334	50%
Rouse Hill High School*	8.712	178	325	427	563	642	79%
<b>Independent non-government</b>							
<b>Primary schools</b>							
St Johns Primary School		163	139	113	115	109	
John XXIII Catholic Primary School		484	611	676	704	683	
St Joseph's Primary School		266	242	216	230	233	
Our Lady of the Angels Primary School		n/a	63	148	248	326	
<b>Combined Schools</b>							
Norwest Christian College (K-12)		380	361	436	389	394	
Rouse Hill Anglican College		1022	1046	1047	1095	1170	
Australian Christian College		n/a	n/a	n/a	n/a	n/a	
<b>High Schools</b>							
Terra Sancta College, Schofields (7-10)		1002	968	1002	984	1030	

Source: [www.myschool.edu.au](http://www.myschool.edu.au), accessed 21 February 2013 and DEC advice

\* Note: Rouse Hill High School and Ironbark Ridge Public School are co-located

## Community centres and libraries

There are no community centres within the Precinct. Those in surrounding areas include:

- » Schofields Community Centre – a small facility with meeting space capable of accommodating 80 people
- » Riverstone Neighbourhood Centre – a hall and meeting rooms capable of hosting a range of recreational and leisure classes, education programs, community groups, health and wellbeing services (i.e. counselling services) and emergency relief and assistance for low income individuals and families.
- » Kellyville Ridge Neighbourhood Centre – The Centre has the capacity to provide space for 20 people
- » The Ponds Community Resource Hub – A large newly opened community hub featuring meeting and activity spaces.

These facilities have been built to meet the needs of their local communities and will not have capacity to absorb the significant demand likely to be generated by Riverstone East.

Branch libraries within reach of the precinct include:

- » Riverstone Branch Library – located within the Marketown Shopping Centre and offers technological facilities (internet, computer and printing services) as well as a variety of activity spaces
- » Dennis Johnston Branch Library in Stanhope Gardens – This relatively new facility offers technological facilities (internet, computers, printing and laptop rentals), meeting rooms and a Justice of the Peace service.

Planning for the Riverstone and Alex Ave Precincts has made provision for the development of a Community Resource Hub to be located in the Riverstone Precinct. This large facility is intended to serve the precincts of Alex Ave, Riverstone, Riverstone East and Area 20. The Community Resource Hub will include:

- > Community centre spaces
- > Youth centre
- > Arts centre
- > Informal indoor recreation
- > Facilities for child and family services
- > Library.

### Child care facilities

There is a large number of child care facilities located within a few kilometres of the precinct, including several providers operating more than one facility. Most facilities offer long day care services. A review of [www.mychild.gov.au](http://www.mychild.gov.au) found that many have vacancies across many days of the week. This indicates that some of the demand for child care created by development within Riverstone East may be met by existing facilities, particularly in the early stages of development.

Riverstone Public Pre-school and Norwest Christian College Long Day Care are attached to primary schools within the area.

### Health and medical services

While no medical services are available within Riverstone East Precinct, there are a number of General Practitioners (GPs) located within close proximity. The closest service is the Riverstone Family Medical Practice. A number of other small GPs are located within the centre of Riverstone. Additional medical centres are located in Rouse Hill town centre..

In terms of public hospitals, the precinct is served by Blacktown Hospital and Mount Druitt Hospital, approximately 10 kilometres from the precinct.

The nearest private hospitals are The Hills Private Hospital and Norwest Private Hospital at Bella Vista.

Community health centres for residents of Blacktown are currently located at Blacktown Hospital, and at Mount Druitt and Doonside. A district level community health facility is planned for Rouse Hill Regional Centre in the medium to long term as part of an Integrated Health Care Centre. When developed, the Integrated Health Care Centre planned for Rouse Hill may also provide mental health services. The strategy of the Western Sydney Local Health District to meet demand generated by the NWGC is outlined in Section 6.3.3.

### Tertiary education

Western Sydney Institute of TAFE operates colleges at the Nirimba Educational Precinct at Schofields and a large facility at Mount Druitt. Nirimba campus specialises in building and

construction, but also offers courses in logistics, information technology, child studies, business services, community services and music and entertainment studies. Other TAFE colleges are located at Richmond (co-located with UWS), Blacktown, Castle Hill and Baulkham Hills, and elsewhere along the train line in western Sydney. However, TAFE is increasingly delivering courses from other sites, including workplaces and outreach programs within the community. Courses are currently being offered at Riverstone Neighbourhood Centre, for example.

The nearest university campuses are the UWS campus at Richmond, which offers courses in environmental health, forensic science, nursing, medical science, natural science (environmental, agricultural, horticultural) and secondary school science teaching. Other UWS campuses, each with their own specialities, are found across western Sydney at Blacktown, Parramatta, Penrith, and the UWS Colleges at Nirimba campus.

### **Aged care facilities**

Activities for older people in the area are provided at the Riverstone Senior Citizens Centre. The Riverstone Neighbourhood Centre also offers a diversity of services for the older population in the local area, including the Riverstone Carers Support Group.

Key facilities providing services to the aged population include Blacktown Community Aid and Information Centre, Healthwise Centre in Blacktown, Neighbour Aid Services in Riverstone, Food Services in Mount Druitt and Anglicare Community Options in Rooty Hill. However these services are already at capacity and would not be able to meet the needs of growing population in Riverstone East without additional funding.

The nearest residential aged care facility to Riverstone East is Quakers Hill Nursing Home at Quakers Hill, which offers a mix of high Care (77 beds), low Care (34 beds) and dementia care (16 beds). Other facilities within reasonable proximity to the precinct are located at Marayong and Kenthurst.

### **Youth facilities**

Blacktown LGA provides a number of youth services, including the Quakers Hill Youth Support Service, (which provides family support, counselling, group work and advocacy) and the Riverstone Neighbourhood and Youth Centre (which offers young people programs with a skill based focus). This centre also offers an after school leisure program. In addition to these facilities, the Blacktown Youth Services Association operates a diversity of programs (including photography, music, fashion design, dancing cooking and gardening), employment and education assistance, youth events, support and advocacy for the youth community of the Blacktown LGA.

Existing youth services are already stretched and are unlikely to have capacity for new residents of Riverstone East.

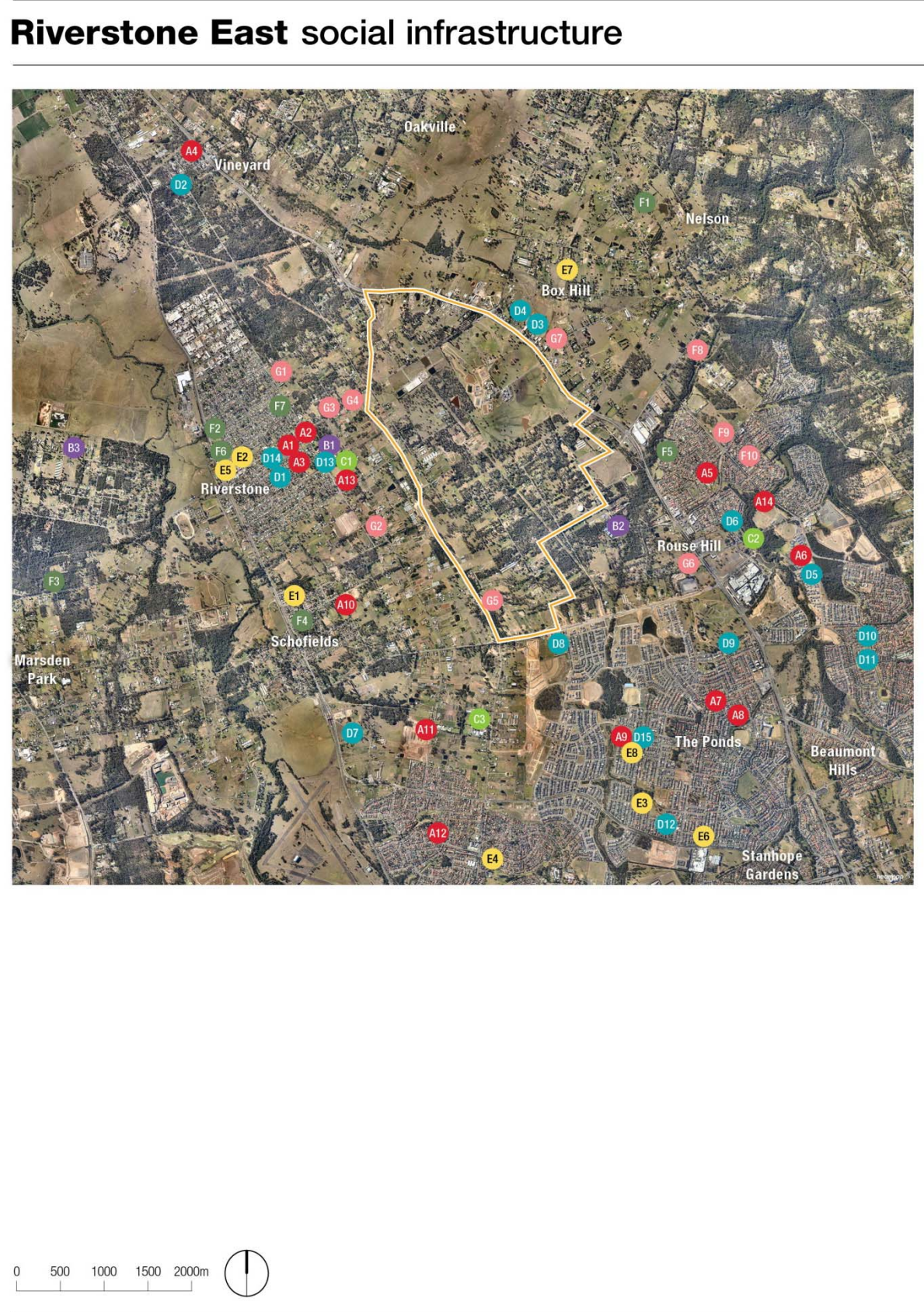
### **Emergency services**

The closest ambulance station to the site is a relatively small (4 ambulance) facility located at Riverstone. Other small stations also located at Castle Hill and Richmond. The nearest police stations are at Railway Terrace, Riverstone, the new Hawkesbury Police Station at Windsor and Quakers Hill Police Station. Local courthouses are located at Blacktown, Mount Druitt and Parramatta and district court facilities are also located at Parramatta.

Permanently staffed fire stations are located at Kellyville and Schofields, and these operate alongside 'retained' stations (ie staffed by on-call fire fighters) at Riverstone and Windsor. Much of the North West Growth Centre remains under control of the Rural Fire Service, with the nearest RFS stations at Oakville and Schofields.



Figure 3 Riverstone East social infrastructure



#### PRIMARY SCHOOLS

- A1 Casuarina School
- A2 Saint John's Primary School
- A3 Riverstone Public School
- A4 Vineyard Public School
- A5 Rouse Hill Public School
- A6 Iron Bark Ridge Public School
- A7 Kellyville Ridge Public School
- A8 John XXIII Catholic Primary School
- A9 John Palmer Public School
- A10 Schofields Public School
- A11 St Joseph's Primary School
- A12 Hambledon Public School
- A13 The Ponds School - Special School (temporary location)
- A14 Our Lady of the Angels Primary School)

#### COMBINED PRIMARY/HIGH SCHOOLS

- B1 Norwest Christian College (K-12)
- B2 Rouse Hill Anglican College (K-12)
- B3 Australian Christian College (K-12)

#### HIGH SCHOOLS

- C1 Riverstone High School
- C2 Rouse Hill High School
- C3 Terra Sancta College (7-10)

#### CHILD CARE

- D1 Riverstone Public Pre-School
- D2 Vineyard Children's Early Learning Centre
- D3 Country Bear Childcare Centre
- D4 Spunky Monkey's Early Learning Centre
- D5 Playdays Pre-School and Long Day Care Centre
- D6 The Berry Patch Pre-School
- D7 Hopscotch at Schofields
- D8 The Ponds Early Learning Centre
- D9 Kellyville Ridge Pre-School and Long Day Care
- D10 Beaumont Hills Long Day Pre-School
- D11 The Parkway Childcare Centre
- D12 Kindalin Early Childhood Learning Centres
- D13 Norwest Christian College Long Day Care
- D14 The Riverstone Children's Centre
- D15 Northwest Community Childcare at the Ponds

#### LOCAL COMMUNITY FACILITIES

- E1 Schofields Community Centre
- E2 Riverstone Neighbourhood Centre
- E3 Kellyville Ridge Neighbourhood Centre
- E4 Quakers Hill Neighbourhood Centre
- E5 Riverstone Branch Library
- E6 Dennis Johnson Branch Library
- E7 Box Hill-Nelson Community Hall
- E8 The Ponds Community Resource Hub

#### EMERGENCY SERVICES

- F1 Box Hill – Nelson Rural Fire Service
- F2 Riverstone Fire Station
- F3 Marsden Park Fire Station
- F4 Schofields Fire Station
- F5 Rouse Hill Fire Station
- F6 Riverstone Police Station
- F7 Riverstone Ambulance Station

#### PLACES OF WORSHIP

- G1 St Andrews Uniting Church
- G2 Riverstone Baptist Church
- G3 Christian Brethren Riverstone
- G4 Uniting Church in Australia
- G5 Lankarama Buddhist Vihara
- G6 Rouse Hill Anglican Church
- G7 Church of the Nazarenemore
- G8 Northwest Uniting Church
- G9 Mile End Community Church
- G10 Seventh Day Adventist Church

## Places of worship

There are a number of places of worship located within 5 km proximity of the precinct. Facilities range in religious standing and size, and details of their level of usage are not publicly available. It is considered that the diversity of religious facilities available in the local area will cater to the needs of much of the incoming population. Any additional requirements for religious facilities will likely be met as demand increases, and existing facilities reach upper capacity.

## 4.2 Existing open space and recreational facilities

### 4.2.1 Regional open space and recreational facilities

There is a range of significant regional level open space that is considered key infrastructure for the new communities of the North West Growth Centre, including Riverstone East. This regional open space includes a number of national parks/ nature reserves, regional parklands and regional level sporting facilities. These are described below and illustrated in Figure 4.

#### National parks/ nature reserves

**Scheyville National Park** is a 920 hectare site that is situated approximately 5 kilometres north of the Riverstone East Precinct. Managed by the NSW National Parks and Wildlife Service, the park offers a range of facilities and recreational activities including picnic facilities, guided tours, walking and horse riding trails as well as history walks through the parks heritage Camp Precinct. The park contains the largest reserved remnant of the Cumberland Plain woodland Endangered Ecological Community (EEC) and supports populations of threatened species<sup>1</sup>. Within the northern section of the park is Longneck Lagoon, a significant reserved freshwater wetland. Longneck Lagoon Environmental Centre is located on the eastern side of the lagoon which provides environmental education programs to schools in Western Sydney and offers camping and other recreational activities to these school groups including biking and canoeing<sup>2</sup>.

There are also a number of nature reserves situated within 10 kilometres of the Riverstone East Precinct, the closest of which is **Colebee Nature Reserve** at Colebee, approximately 5 kilometres from the Riverstone East Precinct.

Other nature reserves within the north-west region are:

- » Castlereagh Nature Reserve
- » Cattai National Park
- » McGraths Hill Wetland
- » Pitt Town Nature Reserve
- » Windsor Downs Nature Reserve.

#### Regional parklands

**Rouse Hill Regional Park** is a major 42 ha park which includes picnic areas, playgrounds, pathways, car parking, open spaces and natural vegetation. The park will be important open space to the new Riverstone East Community due to its direct proximity (with a section of the park

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<sup>1</sup> NSW Government, Office of Environment and Heritage, NSW National Parks and Wildlife, website, <http://www.environment.nsw.gov.au/NationalParks/parkNature.aspx?id=N0101>, accessed 18 February 2014

<sup>2</sup> Long Neck Lagoon Education Centre, website, <http://longneck.drawstring.com.au/>, accessed 18 February 2014



included within the eastern sector of the precinct). The park is managed by the NSW National Parks and Wildlife Service.

The NSW National Parks and Wildlife Service has advised the following:

- » The park's key facilities (picnicking facilities, picnicking grounds, playground and on-site carparking) are at capacity most weekends of the year and beyond capacity in summer months
- » The park does have a considerable amount of open space, the majority of which is not mown (paddocks). Picnicking grounds (mown areas) could be expanded; however, there would be a limit to this expansion as the 'paddocks' are considered to be one of the site's heritage elements and, therefore, need to be preserved to a certain extent
- » While onsite car parking (on internal roads) is at capacity, the site's carpark (on the park's periphery) still have some capacity and peripheral parking could be increased. Restricting onsite parking and requiring users to use the carparks, would also improve the safety of park users which would otherwise become a significant issue if capacity and visitor numbers were increased
- » The most significant barrier to increasing park capacity is the site's lack of connection to sewer and water. The water supply and park's toilets are currently at capacity due to this factor, although this can be addressed as the necessary infrastructure is extended to serve proposed residential development within the Riverstone East Precinct.
- » Access to the park is also an issue. Pedestrian access from the Rouse Hill Centre needs to be improved. This will increase the park's use midweek (particularly for parents with small children)
- » To date, only one-third of the overall planned park has been established. The other, larger section of the park consists of two parcels of privately owned land to the north of the existing park. This land has been zoned for future regional park, but will need to be purchased from the current landowners. It is estimated that it would take approximately 4 to 5 years to develop this new section of the park so that it is operational
- » Increasing the capacity of the existing park would only address existing demand. It will not meet additional needs of the future, substantial growth centre population
- » The expanded park (together with the regional park on the former ADI site at St Marys) will be key open space amenity for the future population of the north-western region.

**The Western Sydney Parklands** are located approximately 5km south-west of the Riverstone East Precinct, commencing south of the M7 motorway. The Western Sydney Parklands, managed by a Trust, totals 5,280 hectares and stretch 27 kilometres from Quakers Hill to Leppington in the south west of Sydney. The Parklands include a diversity of recreation, sport, cultural, environmental and farming facilities. Recreation facilities include picnic facilities and a major walking and cycle track the length of the Parklands.

At the northern most section of the Western Sydney Parklands is the Northern Parklands Track. At the time of writing, these walking tracks are being upgraded. The track connects the northern section of the Parklands to Nurragingy Reserve, approximately 6.5 kilometres from the Riverstone East Precinct. The Reserve includes natural settings, picnic facilities, walking tracks, toilets and the Colebee Centre (wedding and function centre).

### Regional level sporting facilities

Sporting facilities located in Western Sydney Parklands include:

- » Blacktown International Sportspark
- » Western Sydney International Dragway

Figure 4 Riverstone East regional open space and recreation facilities



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**NATIONAL PARKS AND  
NATURE RESERVES**

- A1 Cattai National Park
- A2 Pitt Town Nature Reserve
- A3 McGraths Hill Wetland
- A4 Scheyville National Park
- A5 Windsor Downs  
Nature Reserve
- A6 Castlereagh Nature Reserve
- A7 Colebee Nature Reserve

 Precinct boundary

**REGIONAL PARKLANDS**

- B1 Rouse Hill Regional Park
- B2 Western Sydney Parklands

**REGIONAL SPORTING  
FACILITIES**

- C1 Governor Phillip Park  
(boat ramp)
- C2 Hawkesbury Race Club
- C3 Hawkesbury Showground
- C4 Richmond Race Track
- C5 Riverstone Trotting Track
- C6 Sydney Ice Arena
- C7 Blacktown Showground
- C8 Blacktown International  
Sportspark
- C9 Sydney Motorsport Park
- C10 Eastern Creek International  
Karting Raceway
- C11 Sydney International  
Shooting Centre  
(off the map)
- C12 Sydney International  
Equestrian Centre  
(off the map)



- » Eastern Creek International Karting Raceway
- » Sydney International Equestrian Centre
- » Sydney International Shooting Centre.

These facilities are significant, higher order facilities serving the greater Western Sydney Region.

Other regional level facilities in the north-west region include three horse racing tracks (Hawkesbury Race Club, Richmond Race Track and Riverstone Trotting Track), two show grounds (Hawkesbury and Blacktown) and one ice rink (Sydney Ice Arena in Baulkham Hills).

#### 4.2.2 District level open space and recreation facilities

There is no existing district level open space or recreational facilities within the Riverstone East Precinct. However, there are a number of facilities in surrounding areas. These are discussed in the following sections and illustrated in Figure 5.

##### Outdoor sport and recreation facilities

Within a 5 kilometres radius of the Riverstone East Precinct, outdoor sport and recreation facilities relevant to the planning for the Riverstone East community include:

- » 15 facilities providing playing fields
- » 7 facilities providing netball and/or basketball courts (one of which is competition netball venue – Kellyville Netball Complex)
- » 5 facilities with tennis courts
- » 2 facilities with baseball field/s
- » 1 BMX track
- » 2 facilities with grass athletics tracks (overlayed on sports field) and athletic field event amenities.

Those in closest proximity (within approximately 2 kilometres) include the following:

- » Schofields Park – includes 3 sports fields (1 with cricket pitch) cricket practice nets and 1 netball court
- » Riverstone Park – includes 2 sports fields (1 with cricket pitch and grass athletics track) cricket practice nets, 2 tennis courts and 4 netball courts
- » Mill Street Reserve – includes 1 sports field with cricket pitch and cricket practice nets.

Additional detail is provided in Appendix 1.

**The Blacktown Showground Precinct** (which includes the neighbouring Francis Park) also serves as a regional level park for the Blacktown LGA. The park includes a multi-use track for walking, jogging and cycling, outdoor sports courts, parks and picnic facilities, wetland areas, a community garden, play grounds for different age groups and a water play park.

### Indoor sporting and aquatic facilities

The indoor facility nearest the Riverstone East Precinct is the Riverstone Sports Complex. This facility, owned and managed by the Riverstone Community Church, includes indoor soccer courts.

The closest Council owned facility is the Blacktown Leisure Centre Stanhope, in Stanhope Gardens. The facility has two indoor sports courts, fitness studios and a squash court, as well as aquatic facilities. There are also indoor sports facilities provided by Blacktown Council at the Emerton Leisure Centre, although this facility is a substantial distance from the Riverstone East Precinct.

There are a small number of other indoor facilities provided in neighbouring LGAs however, these too some distance from the precinct. These include:

- » Bernie Mullane Sports Complex at Kellyville
- » Castle Hill RSL Gymnastics Club at Castle Hill
- » Hawkesbury Indoor Stadium at South Windsor.

Additional detail is provided in the table in Appendix A.

The closest aquatic facility to the Riverstone East Precinct is the Riverstone Swimming Centre in Riverstone. The centre includes an outdoor aquatic facility consisting of 50 metre pool, leisure pool, program pool and children's pool. This is the only aquatic facility in the North West Growth Centre.

The *Section 94 Contributions Plan No. 20 – Riverstone and Alex Avenue Precincts* (Blacktown City Council, 1 December 2010) observes that the Riverstone Swimming Centre is a small rural outdoor pool that will not be able to accommodate the leisure needs of the incoming population of the North West Growth Precincts and funds will be required to redevelop the centre. The Contributions Plan proposes that the Riverstone Swimming Centre be redeveloped to serve the future needs of the Riverstone, Alex Ave, Riverstone East and Area 20 Precincts.



Figure 5 Riverstone Swimming Centre

Other aquatic facilities within 5 kilometre radius of the precinct include:

- » Blacktown Leisure Centre Stanhope
- » University of Western Sydney Nirimba Campus aquatic facilities, Quakers Hill
- » Annangrove Aquatic and Leisure Centre, Annangrove.

Additional detail is provided in the table in Appendix A.

In addition to these facilities, there are plans for new facilities at the following locations within the North West Growth Centre (Blacktown City Council, *Information for NWGCC Regional Planning*):

- » The Schofields aerodrome site is earmarked as a potential site for a competition netball facility with a minimum of 40 courts
- » Blacktown Leisure Centre Stanhope is planned to become a regional tennis facility with 16 courts (scheduled for completion late 2015/early 2016)
- » Schofields West is earmarked for a regional outdoor sporting complex.
- » A tennis court complex is proposed for Box Hill Precinct (*Box Hill Social Plan*).

### Other district sport and recreation facilities

Other sport and recreation facilities in the wider district include:

- » 7 golf facilities
- » 3 bowling clubs
- » 4 equestrian facilities.

The nearest skate facilities to the precinct are:

- » Rooty Hill Skatepark (Blacktown LGA)
- » North Richmond Skatepark (Hawkesbury LGA).

These facilities are both a considerable distance from the precinct.

### 4.2.3 Local parks

Although a regional level facility, Rouse Hill Regional Park, located partly within the Riverstone East Precinct, will provide some local park functions for the north-eastern section of the Precinct. The Park includes a playground, picnic and barbeque areas, bike and walking trails. Although, being a regional park, it cannot be considered in the overall quantum of open space required to meet local needs, it may influence the distribution of open space in the Riverstone East Precinct (with consideration of access to open space it provides to nearby residents).

There are no other local parks located within the Riverstone East Precinct. Those within approximately 1.5 kilometres radius of the Precinct include:

- » Cudgegong Reserve, Area 20 Precinct
- » Ridgeview Park, Riverstone
- » Connie Lowe Reserve, Rouse Hill and Turnbull Reserve, Box Hill (although these facilities are located on the other side of Windsor Road which provides a significant barrier between the site and these parks)
- » Kalina Reserve, Peel Reserve and Lakes Edge Park at The Ponds
- » Second Ponds Creek Walk.

## 4.3 Summary of existing capacity

Consistent with its small population, Riverstone East Precinct contains very little in the way of community facilities and open space at present and clearly this low level of provision will be inadequate to absorb the very considerable demand likely to be generated by the future Riverstone East population. As a result, a range of new facilities and services will be required. Riverstone East will also contribute to demand for district and regional facilities and services, which are located outside the precinct boundaries. Many of these facilities and services are already at capacity and will need additional resources to meet the needs of the Riverstone East population.

In terms of open space and recreational facilities, the Precinct is easily accessible to many areas of regional and district open space and sporting facilities which may contribute to meeting some of the needs of this growing community. However, there is no local open space or sporting facilities presently available other than limited facilities within the Rouse Hill Regional Park. As a result, new parks and local sports facilities will be required within the precinct as the population grows.

Assessment of capacity in existing social infrastructure also needs to take account of the very substantial new development proposed for the wider area. Any spare capacity identified now in facilities and services in Blacktown is likely to be taken up by future population growth in adjoining Growth Centre precincts and areas beyond the Growth Centre boundaries which may occur prior to development in Riverstone East. In addition, existing facilities in adjacent Growth Centre precincts are likely to change substantially as precinct plans are prepared, and cannot be relied upon to exist in their current form into the future. The facilities, services and open spaces that have been proposed for surrounding precincts have not included Riverstone East in their demand assessments and cannot be expected to meet its needs in addition to their own.

Accordingly, there will be a need not only for local facilities within Riverstone East, but also for funding (both recurrent and capital) to expand district and regional facilities and services in the wider area.



Figure 6 Riverstone East regional open space and recreation facilities

## Riverstone East District and local open space, sport and recreation facilities





#### OUTDOOR SPORT AND RECREATION PARKS

- A1 Colbee Park
- A2 Oakville Reserve
- A3 Vineyard Park
- A4 Mill Street Reserve
- A5 Riverstone Park
- A6 Schofields Park
- A7 Russell Reserve
- A8 The Hills Centenary Park
- A9 Kellyville Netball Complex
- A10 Bruce Purser Reserve
- A11 Caddies Creek Sports Complex Reserve
- A12 Connor Greasby Park
- A13 Stanhope Reserve
- A14 Paterson Reserve
- A15 Mikhelson Reserve
- A16 Quakers Hill Park
- A17 University of Western Sydney Nirimba Campus Facilities

 Precinct boundary

#### INDOOR SPORTING/ RECREATION FACILITIES

- B1 Hawkesbury Indoor Stadium
- B2 Riverstone Sports Centre
- B3 Blacktown Leisure Centre Stanhope
- B4 Bernie Mullane Sports Complex
- B5 Castle Hill RSL Gymnastics Club gymnastics facility
- B6 Emerton Leisure centre

#### AQUATIC CENTRES

- C1 Hawkesbury Oasis Aquatic and Fitness Centre
- C2 Riverstone Swimming Centre
- C3 Annangrove Aquatic and Leisure Centre
- C4 University of Western Sydney Nirimba Campus Aquatic Facility
- C5 Blacktown Leisure Centre Stanhope
- C6 C2K Fitness and Aquatic Centre
- C7 Waves Fitness and Aquatic Centre
- C8 Blacktown Aquatic Centre
- C9 Emerton Leisure centre

#### GOLF FACILITIES

- D1 Richmond Golf Course
- D2 Run Corps Barracks Golf Club
- D3 Windsor Country Golf Club
- D4 Lynwood Country Club
- D5 Killarney Golf Practice Fairway
- D6 Marsden Park Golf Academy
- D7 Stonecutters Ridge Golf Club

#### BOWLING CLUBS

- E1 Windsor Bowling Club
- E2 Riverstone Bowling Club
- E3 Castle Hill Bowling Club

#### EQUESTRIAN FACILITIES

- F1 Vines Pony Club (at Oakville Park)
- F2 Calm Wood Equestrian Centre
- F3 Oakville Equestrian Centre
- F4 Horsecworld Stadium

#### LOCAL PARKS/RESERVES

- G1 Florence Short Reserve
- G2 Turnbull Reserve
- G3 Ridgeview Park
- G4 Rouse Hill Regional Park
- G5 Connie Lowe Reserve
- G6 Cudgegong Reserve
- G7 Lakes Edge Park
- G8 Kalina Reserve
- G9 Peel Reserve

## 5 Population forecasts

This chapter considers the future population of the Riverstone East Precinct, in terms of its size, rate of growth and broad demographic characteristics.

### 5.1 Dwelling yields

The *Housing Study for Riverstone East Precinct* (SGS August 2014) examined market demand and other factors that would be likely to influence the future demand and supply of different dwelling types within the Riverstone East precinct. The analysis of potential lot sizes, dwelling types and affordability resulted in a suggested mix of dwelling types, which has then been adjusted to account for site constraints in the masterplanning process. A net developable area of 337.75ha for residential development has been identified for the precinct, resulting in a forecast yield of 5,790 dwellings, as shown in Table 3 below.

**Table 3 Dwelling yields and density mix - Riverstone East**

Density	Average lot size (sqm)	Number of dwelling lots	Percent of dwelling lots
High density	127.0	606	10%
Medium density	453.2	949	16%
Low density	683.8	4,160	72%
Large lot / environmental living	952.5	75	2%
<b>Total residential dwellings</b>		<b>5,790</b>	<b>100%</b>

Source: Cox Richardson, *Riverstone East Yield Table*, November 2014

The great majority of dwellings planned for this precinct will be low density detached houses, although there will be a sizeable proportion of medium and some higher density housing as well.

It should also be noted that planning for the adjoining Area 20 Precinct is currently being revised, to take account of opportunities for higher density development around the town centre to be located adjacent to the proposed North West Rail Link station. The revised yield forecast for Area 20 Precinct is currently 4,400 dwellings, up from the original 2,200. The associated population forecast has risen from 6,900 to 12,760 people (based on an average occupancy rate of 2.9 persons/household – a median occupancy rate for medium density dwellings for the Blacktown LGA from the 2011 Census).

### 5.2 Population numbers

The average household sizes for different dwelling types within the Blacktown LGA, derived from the 2011 ABS Census, have been applied to this dwelling mix and yield, resulting in a forecast population of 17,637 people for Riverstone East, as shown in Table 4.

**Table 4 Forecast population – Riverstone East**

Density type	Number of dwelling lots	Average household size (no. of persons)	No. of persons
High density	606	2.2	1333
Medium density	949	2.9	2752
Low density	4,160	3.2	13,312
Large lot/ environmental living	75	3.2	240
<b>Total population</b>	<b>5,790</b>		<b>17,637</b>

This dwelling yield and population is marginally higher than the Growth Centre original targets of 5,300 dwellings and 15,000 residents.

When Riverstone East is considered in conjunction with the Area 20 Precinct, the combined population forecast of the two precincts is 30,397 people.

### 5.3 Age and household characteristics

Forecasting age or household characteristics of a future population requires consideration of factors such as dwelling size and mix, market price and segment, experience in similar areas and the influence of other factors particular to the site. It is assumed that Riverstone East will appeal to a population with similar characteristics to that moving into other new release areas in Blacktown Council with a similar mix of dwelling types.

The *Housing Study for the Riverstone Precinct* (SGS August 2014) examined population and household characteristics for the Blacktown LGA. In relation to household characteristics, the study found:

- » Three bedroom houses were the most popular dwelling type by a large margin, with weaker demand for apartments. Homes on larger blocks were in high demand, especially by investors seeking to create additional income through construction of a granny flat or similar
- » Across Blacktown, investors make up the largest group of home buyers, although the area is attractive for first home buyers because of its affordability. Younger people, including couples without children and young families are buying townhouses and villas, and older homes to renovate, with three bedroom homes in greatest demand
- » Homes near train stations are most in demand, and people are prepared to live in smaller dwellings near stations. Smaller complexes are favoured. Demand for these dwellings is mainly from downsizing baby boomers and Gen Y families looking to enter the housing market
- » There appears to be an increasing acceptance of smaller lot detached housing as a result of increasing housing prices across Sydney
- » Projections based on existing household characteristics indicate that there is likely to be little change in the types of households living in the LGA in future. The proportion of one parent families is expected to increase marginally (from 14% to 18%) between 2011 and 2046. Couples with children are expected to continue to make up around 50% of all households over this time period.

Evidence of the demographic characteristics of people who have recently moved into Blacktown LGA shows the following picture (SGS, August 2014):

- » More than 70% are aged under 40 years, compared with only 56% aged under 40 years in Sydney. Most incoming residents are of working age
- » Incomes of residents moving to the area are slightly less likely to be over \$104,000 pa than the Sydney average. The proportion of medium and lower income residents is similar to Sydney averages.

Residents in this area are expected to share characteristics of populations of recent land releases in other nearby parts of north western and western Sydney. Some common features of residents of these new release areas include:

- » Households will usually move into the area from within a 5-10 km radius
- » A high proportion of first home buyers
- » There is likely to be a general predominance of young families with young children and couples who have not yet started a family
- » Most adults will be in the 25-49 years age cohorts
- » There will be a small but significant number of single person households
- » Some older people wanting to live close to children and grandchildren
- » Larger numbers of home owners
- » Increasing family sizes over time, as couples have children.

Other projected population characteristics are expected to be as follows:

- » Predominantly middle income households, in keeping with housing being affordable to better off first-time buyers. A large proportion of household income is likely to be devoted to housing cost however, which may restrict the spending of residents on non-essentials and services
- » High levels of workforce participation, with two working parents in many families, and consequently high levels of commuting and a need for child care
- » High levels of car ownership
- » High levels of mortgaged home ownership. However, depending on general economic and investment conditions, up to 20% of the dwelling stock is likely to be privately rented, with a higher figure for medium density homes
- » Increasing cultural diversity. Blacktown is a diverse LGA, with a relatively affluent middle class, particularly among people from Chinese and Indian backgrounds

A number of other demographic trends in the wider population will have an impact on future demographics of the area. These include trends such as:

- » Smaller households and declining occupancy rates
- » Increasing numbers of people choosing not to have children
- » The later age at which people do have children
- » Increasing numbers of people choosing to live alone
- » Higher incidence of relationship breakdown
- » The ageing of the population, increasing life expectancy and growing numbers of people in the oldest age cohorts
- » Changing lifestyle trends, including increasing numbers of people working from home and the extent to which housing forms will attract particular lifestyle groups.

As land release areas develop over time, the peaks in the age distribution associated with a predominance of young families tend to reduce and the population will become more diverse in terms of age and household type. The proportion of the population who are young children and young adults will decline as the population ages and the proportion of older children with older parents grows. The proportion of the population aged 55+ will also increase considerably as the area matures and older people are attracted to the area to be near family, or to downsize to a smaller home.

In this way, the population profile is likely to come to more closely approximate that of an established area with a variety of age and household characteristics, rather than a traditional new release area with particular age concentrations.

## 6 Community facility requirements

This chapter considers the community facilities and human services that will be required to meet the needs of the future Riverstone East population, estimated to reach approximately 17,718 people over the next 10-15 years. Some types of facilities and services have been considered for larger catchment areas including adjacent precincts, especially Area 20. Open space, sporting and recreation facilities are considered in the following chapter.

### 6.1 Approach to planning social infrastructure

In social infrastructure planning, facilities and open space resources are commonly considered at three levels:

- » Local neighbourhood level services and facilities - generally provided for a population of about 5,000–15,000 people to meet everyday needs, and including community centres, childcare centres, primary school, local park and doctor's surgery
- » District level services and facilities - more specialised services which operate on a broader district catchment of about 15,000 – 50,000 people, and including libraries, sporting facilities, high school, community health centre, family support services, emergency services
- » Sub-regional and regional level services - Major facilities for a population of over about 100,000 people, and including hospitals, tertiary education, major cultural facilities.

Social infrastructure is provided by a wide variety of agencies, including all levels of government, non-government organisations and the private sector. At this precinct planning phase, the strategy for social infrastructure provision needs to focus on the facilities which may have significant land requirements, to ensure that sufficient land is identified in appropriate locations to meet future need. This focuses particularly on facilities and services provided by local government and State Government agencies (such as schools). Services provided by the Commonwealth Government (eg employment services, some family services, veterans' services,) have land requirements that are likely to be relatively modest, and most likely will use available commercial office space within designated centres. Such sites can be identified in subsequent detailed levels of planning.

Sites for facilities provided by the non-government and private sectors are usually acquired through the private market and will need to be considered at a later stage of development as demand is established. At the same time, it is recognised that some types of private / non-government facilities may have significant land requirements. These include private schools, private hospitals and medical services, churches, private childcare services, commercial gym and fitness facilities, residential aged care facilities and entertainment facilities such as cinemas, hotels and restaurants. The Precinct Plan will need to allow sufficient scope and flexibility to accommodate such uses as demand emerges.

Overall, a forecast of population of around 17,718 people is considered to provide a catchment of sufficient size to support a range of local level facilities and services within the development. It will not be large enough, however, to warrant the provision of higher order district level facilities and will rely primarily on those to be provided within the neighbouring Area 20 Town Centre, Riverstone Precinct and in the Rouse Hill Town Centre.



Facilities have been considered in terms of those which are provided by local government, those provided by State Government agencies, and those provided by the private and non-government sectors.

## 6.2 Local government community facilities

For this assessment, initial consideration has been given to the standards for local and district level community facilities contained within the Growth Centres Development Code. These standards, outlined in the table below, provide a starting point for assessing future local government community infrastructure needs.

It can be seen from this table that the population of Riverstone East would be large enough to support provision of local community centres, but none of the higher order facilities, although it would contribute substantially towards their need. The combined populations of Riverstone East and Area 20 (30,400 people) would support a district level community centre, youth centre and arts facility under these benchmarks.

**Table 5: Growth Centres Development Code Guiding Thresholds**

Type of facility	GCC benchmarks (no. per population)	No. required for 17,637 people	No. required for 30,400 people
Local (small)	1:6,000 people	3	1
Neighbourhood / District	1:20,000 people	0	1
Community Service Centre	1:60,000 people	0	
Youth Centres	1:20,000 people	0	1
Branch library	1:33,000 people	0	
District Library	1:40,000 people	0	
Arts and cultural facilities	1:30,000 people	0	1

However, it should be noted that the GCC standards do not represent the most efficient or sustainable means of meeting community facility demand, nor contemporary best practice models in facility delivery. Blacktown City Council has developed its own policy in relation to community facility provision, and this policy supports the development of fewer, but larger facilities that combine a number of functions together, known as community resource hubs, rather than multiple small, local facilities.

### 6.2.1 Community centre

Preliminary consideration of the needs of the Riverstone East Precinct for community centres occurred in 2008 and 2010 as part of the planning of community facilities for the adjoining Riverstone, Alex Avenue and Area 20 Precincts. It was proposed by Blacktown City Council that a large, district level community resource hub would be provided in Riverstone town centre, and that this facility would serve the combined catchments of the Riverstone, Alex Avenue, Riverstone East and Area 20 Precincts.

The proposed Riverstone community resource hub facility would incorporate a number of components, including:

- » Multi-purpose community centre
- » Youth facility

- » Cultural / community arts component
- » Branch library
- » Family and children's services
- » Informal indoor recreation.

Blacktown City Council has expressed commitment to the development of this facility in its *Section 94 Contributions Plans* for Riverstone / Alex Avenue (CP 20). The Area 20 Contributions Plan, developed following changes to Section 94, provides for the levying of contributions towards land for this facility, but not for its building, as by this time reforms to the development contribution system restricted contributions to “essential works” only, which did not include community buildings.

The Riverstone Alex Avenue Contributions Plan identifies the expected population to be served by the facility as follows:

> Riverstone Precinct	26,229 people
> Alex Avenue	17,999 people
> Riverstone East	7,800 people
> Area 20	6,400 people
> <b>Total</b>	<b>58,428 people</b>

However, in this catchment the assumed population for the Riverstone East Precinct has been considerably under-estimated, for as discussed in the previous chapter, the future population is likely to be around 17,637 people, not the 7,800 assumed above.

In addition, the Area 20 Precinct is now forecast to have a population of around 12,760, nearly double the 6,400 originally estimated.

This would bring the combined catchment population of the four precincts for the Riverstone hub to around **74,625 people**.

This is considered to be too large a catchment to be served by only one community facility, especially when considered against the Growth Centre Development Code guiding thresholds for community infrastructure outlined in Table 5. These benchmarks suggest an indicative need for three district community centres, each including a youth component for a population of around 75,000 people, of which two facilities would also include library and cultural facility components. One of the facilities should also be sized to function as a community service centre.

Given the current funding limitations of the development contribution system and on-going burden of operational costs for community facilities to Council, the strict application of the benchmarks is not supported. However, they do help to make clear that just one facility for a combined catchment of nearly 75,000 people is well and truly below accepted benchmarks and also existing levels of provision in the balance of Blacktown LGA.

The insufficiency of the single facility is also highlighted in comparison to proposed provision for the other Growth Centre precincts within Blacktown. Schofields Precinct, with a forecast population of just 8,500, will have a local community facility, while Marsden Park Precinct will contain a district community hub, serving a combined precinct population of around 44,000 people, as well as a local community centre.

It is understood that initial plans for the Riverstone / Alex Avenue Precincts included provision for a second, smaller community hub to be located within the Alex Avenue town centre. However, Blacktown Council subsequently determined not to commit to providing this facility, due to lack of funding opportunities.

The precinct planning process for Riverstone East and associated identification of the error in population forecasts for Riverstone East in the Contribution Plan No.20, together with revisions to the Area 20 Precinct Plan, provide an opportunity to revisit community facility requirements for this part of the Growth Centre.

On the basis of the issues outlined above, it is recommended that one additional community hub be provided to serve this combined catchment area. This would be a smaller, secondary hub, compared to the larger primary hub proposed in Riverstone, and would not include the library, youth, arts and cultural components. These needs for more specialist facilities would be met for the whole combined catchment from the primary hub in Riverstone. Consistent with Blacktown Council's Community Hubs Policy, it would include facilities and services that would complement, not replicate, those in the Riverstone hub.

In terms of a location for the secondary hub, Blacktown Council has advised that its criteria for the siting of community hubs include:

- » Location in an activated town centre
- » Accessible by public transport
- » Does not abut or impact on residential neighbours
- » Occupies an iconic space that contributes to civic identity
- » Is co-located with other community uses to form part of a multi-purpose destination.

These criteria would be difficult to meet within the Riverstone East Precinct, as it will not contain an activated town centre accessible by public transport, but only a smaller neighbourhood retail centre.

However, within the adjoining Area 20 Precinct, the development of the North West Rail Link and associated railway station are bringing about changes to the hierarchy of centres and design of the town centre proposed for this Precinct. The redesign of the town centre presents opportunities to identify a site for the secondary community hub which satisfies the Council criteria. The planning process associated with the larger town centre will also provide a trigger for Council to revise the existing *Contributions Plan* for Area 20 and to incorporate a commitment to include a second community hub in the town centre.

**It is therefore recommended that:**

- » A secondary multi-purpose community hub be provided within the new town centre for Area 20, to serve the combined Riverstone East and Area 20 populations (forecast population 30,400) in providing spaces for:
  - > Community activities, programs and services that promote social interaction and the development of community networks and which support the health and well-being of residents
  - > Meetings of local organisations and community groups
  - > Accommodation for community services and the delivery of sessional and outreach services
  - > A base for community development activities and events
  - > Education, training and lifelong learning activities
  - > Hire for corporate or private functions, such as birthday parties.
- » The secondary community hub should have a floorspace of around 1,000 sqm. To provide flexibility in design, the site should be in the order of around 4,500 sqm. The exact site size will depend on the extent to which the facility might share parking with nearby commercial uses, given its town centre location.

- » A site for the facility should be identified on the northern side of the Area 20 town centre, to promote accessibility for the Riverstone East population. Other locational criteria include:
  - > Provision of a high level of safety and security, particularly at nights and weekends. This is most usually associated with high levels of activity and casual surveillance, as well as lighting and proximity to public transport
  - > Adjacent to open space to allow for larger outdoor community events, spill-over activities and children's play
  - > Ensure access to safe and convenient parking, including shared parking with surrounding land uses where appropriate.
- » Riverstone East and Area 20 populations will also contribute to the development of the primary community hub in Riverstone with regard to the specialist components to be provided in that facility ie
  - > Youth facility
  - > Cultural / community arts component
  - > Branch library
  - > Informal indoor recreation.
- » The planning and costing for the proposed Riverstone Community Resource Hub will need to be revised within Blacktown Council to take account of changes to the catchment populations for its various components.

It is understood that a site for the recommended community hub within the Area 20 town centre has been considered by Blacktown City Council and relevant NSW Government landowners in the period that this study was being finalised. No agreement on a site has been reached and instead, Blacktown City Council has proposed that the community hub now be located within the Riverstone East Precinct, on Tallawong Road, as indicated in the Draft Indicative Layout Plan. This location is not supported by this study, as it does not meet Council's location criteria or other leading practice criteria for the location of community facilities, which include:

- » Clustering community centres with other facilities that generate activity and where people already have cause to congregate, such as shops and schools, in order to create a focal point for the community. While located opposite sporting fields, these will not provide an activated focal point for community activity across most of the week, leaving the community centre standing alone in the midst of a residential area.
- » Locations adjoining open space, to allow for children's play activities, spillover use and outdoor community and cultural events associated with use of the community centre. While there is open space adjacent to two sides of the community centre site, this is separated from the site by roads, thereby precluding the indoor / outdoor flow that would help enhance the appeal and utilisation of the facility.

It should be noted that capacity to levy Section 94 contributions towards the building of both the primary community hub in Riverstone and secondary community hub in Area 20 is dependent upon reforms to the development contribution system, linked to broader reforms to the planning system. Under current provisions, there is no capacity to levy contributions to fund the building of either of the recommended community hubs. Inability to provide the recommended community facilities will, in the longer term, threaten the achievement of government objectives for the creation of liveable and socially sustainable communities within the Growth Centre. This issue is considered further in Section 6.5 below.

### 6.2.2 Facilities and services for older people

As discussed in the previous chapter, the proportion of older people expected to be attracted to Riverstone East will not be high, particularly in the early stages of settlement. Nevertheless, there will still be a number of older people in the area, and it will be important that their needs are met in order to ensure that they do not become isolated in an otherwise child and family oriented community.

The social, leisure and recreational needs of older people may be met through mainstream services and facilities for the whole community, and through programs and activities for older people delivered through existing civic and cultural facilities at the district level and those that could be delivered through the primary community hub proposed for Riverstone Precinct and the secondary community hub recommended for inclusion within the Area 20 town centre. Leading practice now steers away from providing age-specific buildings, such as senior citizens centres, which can only be used by specific sections of the population and which thereby run the risk of being under-utilised for much of the week or as the population changes. Instead, the usual practice now is to provide multi-purpose facilities which have flexibility to incorporate activities for different target groups as required.

### 6.2.3 Facilities for young people

Within Riverstone East, there will be a need for “things for young people to do” at the local level and within walking distance, given likely limited public transport services.

As for facilities for older people, leading practice now steers away from providing separate facilities just for young people, on the grounds of their under-utilisation for much of the time while young people are at school or work.

At the local neighbourhood level, the needs of young people for space for social and leisure activities may be met through a well-designed public domain and the open space, sporting and recreation facilities described in the following chapter. Young people will also have ready access to the programs and activities to be offered in the secondary community hub recommended for the Area 20 town centre and the primary community hub in Riverstone (assuming these facilities are constructed). The Riverstone community resource hub will also have a ‘youth’ component, providing some specialist facilities for young people and spaces for the delivery of youth support services.

### 6.2.4 Libraries and cultural facilities

As noted above, a branch library and a cultural / community arts facility have been planned for the Riverstone Community Resource Hub to serve the combined catchments of the Riverstone, Alex Avenue, Riverstone East and Area 20 Precincts.

The population of Riverstone East will not be sufficiently large to support a library or cultural facility within the precinct. The combined Area 20 and Riverstone East populations will also not be large enough to warrant their own library and cultural spaces.

This study supports the previous planning undertaken by Blacktown Council that Riverstone East will contribute towards the development of library and cultural facilities within the proposed Riverstone Community Resource Hub. However, the sizing of the library and cultural spaces will need to be expanded and apportionment of costs for that facility will need to be revised to reflect the changes in populations forecast for Riverstone East and Area 20.

## 6.3 State Government social infrastructure

### 6.3.1 Schools

The Department of Education and Communities (DEC) *School Safety and Urban Planning Advisory Guidelines* (June 2014) set out the following criteria for the provision of schools in areas of new greenfield residential development:

- » One primary school per 2,000 to 2,500 new dwellings;
- » One public high school per 6,000 to 7,500 new dwellings (ie catchment of three primary schools)
- » One school for Specific Purposes (special needs students) per 17,000 new dwellings.

The DEC Planning Advisory Guidelines also advise as follows:

- » Primary schools and Special Purpose schools require a site area of approximately 3 ha. There may be opportunities to reduce the site size to a minimum of two hectares if joint use of open space facilities can be negotiated
- » High schools require a site of approximately 6 ha, although there may be some scope to reduce this to a minimum of four hectares if schools are co-located with community sporting fields.

Locational guidelines for DEC schools include:

- » Schools should be located relatively central to their residential catchment (within approximately 1.6kms by road for a primary school)
- » Schools should be located on local distributor or collector roads to alleviate noise and traffic problems and promote the safety and welfare of students
- » It is preferable to locate schools along existing or proposed bus routes to avoid duplication of bus traffic
- » High schools should be located at a distance from commercial centres, especially where liquor outlets may be located
- » Co-location with other community facilities is encouraged.

Urban design features to ensure safe and accessible schools should include:

- » Sites should have a substantially regular shape
- » Has two to three street frontages to reduce traffic congestion
- » Separation of bus and car traffic at the kerbside
- » Main site access should not be located opposite a T-intersection
- » Footpath, kerb and guttering along school road frontages
- » Lay-by areas adjacent to schools for picking up and dropping off students and bus lay-by for pick-up and drop-off
- » Road width and turning circles to enable safe and convenient bus and private vehicle access
- » All vehicles to enter and leave a site in a forward direction
- » Desirable to be adjacent to a community playing field
- » Allows for security and privacy through visibility and appropriate surrounding development
- » Is not overly overshadowed by surrounding development



- » Site should allow for other socially inclusive uses such as election days, community markets, emergency meeting points etc.
- » Considers future form and structure of centres, towns and future development.

Land for schools should not be located within:

- » Land mapped as bushfire prone or a site that requires an Asset Protection Zone
- » Land mapped as being within 1 in 100 year flood levels
- » Land that has significant level changes or requires significant cut and fill
- » Contaminated land audited as unsuitable for schools uses, with high soil erosion and/or stability concerns or mapped as high probability of acid sulphate soils occurring
- » Land that supports endangered ecological communities, threatened or endangered flora and fauna or sensitive ecological areas
- » Land identified as a site of cultural significance or subject to Native Title claim or identified as an archaeological site.

Schools should not be sited immediately adjacent to:

- » Developments that are likely to result in significant health issues associated with noxious emissions or the like
- » Land where children would pass through riparian corridors, creeks and bushland
- » Land in close proximity to special uses such as correction centres, electricity substations, mobile phone towers, sewage treatment plants, sewage systems, high voltage transmission lines, waste disposal facility, waste or resource management facility, water recycling facility, water supply system, wind farms and the like
- » Inappropriate retail and commercial development and restricted premises
- » Development with potential undesirable impacts or risks such as hazardous or offensive development, high noise or vibration generating development, mining and extraction industries.

### **Primary schools**

Application of the DEC dwelling thresholds above would suggest that the Riverstone East Precinct would generate a need for at least two new primary schools. Area 20 Precinct, now forecast to have around 4,400 dwellings, would also require two schools now, rather than the one recommended in the 2011 precinct planning studies.

However school planning also takes account of capacity in the surrounding area and opportunities to augment existing schools, rather than providing new schools in every new development. There is also potential to create fewer, but larger, schools than the guidelines suggest.

Advice from DEC representatives is that in the short term, children from Riverstone East would be directed to Riverstone Public School. In the longer term, planning for this precinct would take into consideration the growth occurring in the surrounding areas of Riverstone, Alex Avenue and beyond. In the short term, children from Area 20 would be directed to an expanded Rouse Hill Public School.

DEC has advised that in the longer term, three public schools will be required for the combined Riverstone East and Area 20 catchments (forecast around 10,000 dwellings). These should be distributed geographically across the Riverstone East precinct in accordance with DEC planning guidelines:

- » A primary school in the north of the precinct, near the Riverstone precinct boundary
- » A primary school in the centre of the precinct near the neighbourhood centre

- » A third primary school in the south of the precinct, near the border with (or just within) the Area 20 Precinct. This assumes that the site for a primary school identified in the 2011 ILP for Area 20 will not be developed for that purpose, and an alternative site will be required.

DEC has expressed a preference that the Indicative Layout Plan not designate particular sites for the proposed primary schools, as its longer term needs cannot be confirmed at this stage, and school site identification in structure plans has resulted in site acquisition difficulties in other precincts.

In locating specific sites for schools, consideration should be given co-location of schools and public open space, to provide potential for smaller school sites and more efficient use of land.

### **High school**

Riverstone East will not be large enough by itself to warrant the provision of a new high school. Although Riverstone East and Area 20 will together meet the DEC guiding thresholds for a high school, the DEC has determined that there will be sufficient capacity in existing or proposed high schools in the surrounding area, and no new high school will be needed for these precincts.

In particular, DEC has advised that as the population of the Riverstone East and Area 20 Precincts grows, high school students will be accommodated within an expanded Riverstone High School in neighbouring Riverstone Precinct, or within a proposed new Riverstone North High School (also known as Vineyard/Otago Rd), within Riverstone Precinct.

Schools provide a vital role in the building of social networks and community identity. School facilities such as halls and classrooms can also be made available for community use, subject to approval by school principals. In this way, use of school halls can complement the facilities provided in council community centres, expanding the range of activities and programs available to a local community. However, it should be noted that community use of school facilities, while promoted at a policy level, is still often difficult to achieve in practice. Furthermore, community use is generally only permitted outside of school hours, and so does not remove the need for council community facilities.

Independent schools are discussed in Section 6.4.3 below.

### **6.3.2 Higher education**

The higher education needs of Riverstone East residents will be met through the existing TAFE and university facilities outlined in Section 4.1. Western Sydney Institute of TAFE has no plans to build new facilities within the North West Growth Centre and few upgrades are expected to existing colleges. Major changes to the TAFE funding model from 2015 will instead see greater competition for course delivery, increasing specialisation amongst TAFE campuses, greater flexibility in where courses are delivered (eg at workplaces) and changes to use of TAFE buildings and sites. The need to deliver courses within workplaces and demand for outreach classes, may increase the need for rooms to be available within community facilities, such as the Riverstone Neighbourhood Centre. However, these classes would also require specialty equipment, and are not likely to be suitable for multi-purpose shared use facilities.

UWS campuses at Nirimba Education Precinct in Schofields and Richmond will continue to serve the Growth Centre Precincts, as will other university campuses across Sydney.

Accommodation for other lifelong learning activities (eg community colleges, evening classes, U3A) can be provided through other types of facilities such as community centres and schools, without the need for purpose-built facilities. These needs should be considered in the design of such facilities.

### 6.3.3 Public health services

The future population of Riverstone East will not be large enough to justify provision of any community health or hospital facilities within the precinct, but will instead rely on those in the wider region.

The **Western Sydney Local Health District** *Asset Strategic Plan 2013-2023* provides an assessment of the health facility needs of the District and details how the agency will meet future needs, including needs generated by development within the North West Growth Centre. The Plan is based upon forecast population growth for the District of around 120,000 people to 2021, which will bring the District population to nearly one million people by that date.

Particular proposals of relevance to the Growth Centre precincts within Blacktown include:

- » Significant redevelopment and expansion of the Blacktown Mount Druitt Hospital (Blacktown Mount Druitt Hospital is considered by NSW Health to be one hospital over two campuses). Blacktown Mount Druitt Hospital is targeted as the tertiary hospital to serve the North West area and will undergo expansion in several stages. Stage 1 is currently underway, with works due for completion in mid-2016. The Stage 1 Blacktown Mount Druitt Expansion Project will increase in-patient capacity by 170 beds over the next three years and provide a greater range of services at these hospitals as the key strategy to accommodate population growth in NWGC. New facilities will include a new clinical services building, cardiac care centre, cancer care centre, respiratory care service, mental health unit and dental unit. Additional Emergency Department places and outpatient clinic spaces will also be provided. Stage 2, to be undertaken in 2017-2020, will see further development of the Emergency Department, Diabetes Centre and in-patient units.
- » Further redevelopment of Westmead Hospital as the main teaching and research hospital with specialist facilities for Western Sydney, through upgrades to infrastructure and clinical services to increase capacity and provide a standard required of a Principal Referral Hospital.
- » The key initiative for the Growth Centre will be development of an Integrated Health Care Centre, to be located in close proximity to the Rouse Hill Regional Centre. The size and potential scope of this Centre are still to be confirmed, but it is likely to comprise a mix of public and private health services and co-locate community health services, general practice, ambulatory care (such as day surgery and day therapies), outpatient clinics, diagnostic services and mental health services. The 2013 *Asset Strategic Plan* was updated in June 2014 with regard to this proposal. It is currently proposed as a 40,000 sqm facility, with a cost estimate of \$349.66 million (2014\$). A site is yet to be secured and it is understood that NSW Health Infrastructure is currently scouting for site options that will be within easy reach of a NWRL station. A site is required that will allow for future expansion in subsequent stages, and which will be readily accessible for the future Growth Centre population.
- » In addition, expansion of community health services for the District will occur through proposed works to upgrade the Blacktown Community Health buildings as part of Stage 2 works at the Blacktown Mount Druitt Hospital (Blacktown campus). Proposed work at the Mount Druitt campus will upgrade and expand oral health and ambulatory services.

These planned facilities will have sufficient capacity to meet the needs of the Riverstone East and Area 20 populations without further augmentation. There will be, however, a need for high quality transport links to major hospitals and health facilities from Riverstone East and other precincts in the North West Growth Centre.

### 6.3.4 Emergency services

The ways in which emergency services (including police, fire, rural fire, ambulance and SES) plan to service the northern precincts of the North West Growth Centre will determine how the Riverstone East Precinct is serviced.

#### Fire & Rescue

Fire & Rescue NSW (FRNSW) monitor and assess resource needs across the North West Growth Centre as precincts are released. Negotiations also occur between FRNSW and the Rural Fire Service, as jurisdictions and responsibilities change with population growth over time. The Riverstone East precinct will be serviced by existing permanent (24/7 staffed) fire stations at Kellyville and Schofields, the 'retained' (ie on call) stations at Riverstone and Windsor, and new stations planned for the Box Hill and Marsden Park Precincts. No new facility will be required within Riverstone East. The timing and resourcing / staffing of each of the stations will be subject to the timing of local development and funding allocations through State budgetary processes.

#### Police and justice facilities

Police services within Riverstone East Precinct fall within Quakers Hill Local Area Command (LAC). Future needs for policing within this precinct will be met through construction of a new police facility on the site of the existing Riverstone Police Station. Construction is expected to begin late in 2014. The new facility will be significantly larger and capable of accommodating around 160 police. Should additional police services be required at short notice within the Riverstone or Riverstone East areas, resources are shared within the LAC, with the main station at Quakers Hill able to provide support.

Advice from the Attorney General's Department indicates that any plans for expansion of court facilities are likely to focus on larger facilities in major centres (such as Mount Druitt, Blacktown, Parramatta), as part of a new 'hub and spokes' model. There are no plans to expand facilities in this part of the region.

#### Ambulance service

The Ambulance Service is reviewing its strategic planning and modelling undertaken in 2010 to update for changes in population and to test a new model of service provision across Sydney. Rather than the previous approach of serving a response area of around 80,000 residents from 12 car (ambulance) stations, the new model is likely to involve a network of larger 'depot' style facilities capable of accommodating up to 40 ambulance vehicles, and smaller, satellite 'standby' facilities with room for 2 ambulances, a meals room and shed. Within the North West Growth Centre, this may involve 1 depot and 3 standby facilities of around 5,000m<sup>2</sup> and 1,000m<sup>2</sup> respectively.

It is unclear at this stage whether the large depot would be located at a new site at Blacktown or Quakers Hill, or within industrial zones such as Box Hill or Marsden Park. Although it is possible that Riverstone could be chosen as a depot location, it is more likely that the existing facilities at Riverstone and Castle Hill would become standby facilities.

In general, demand for ambulance services is determined by the proportion of older people within a population, particularly those aged over 85 years. Due to the expected patterns of growth and change across the North West Growth Centre, high levels of demand are not anticipated for 20-30 years, as the new resident population ages.

In selecting new sites, the Ambulance Service aims to avoid congested areas such as town centres and hospitals (to spread services) and does not like to co-locate with other emergency services.

In summary, no ambulance services will be located within the Riverstone East Precinct and it will rely upon services provided in the surrounding district.

## 6.4 Private / non-government sector facilities

### 6.4.1 Neighbourhood shopping

Residents of Riverstone East will have access to the neighbourhood shopping centre proposed to be located in the central part of the precinct near the intersection of Guntawong and Tallawong Roads. As well as a supermarket and a variety of local shops and commercial services, the shopping centre is also likely to include places for informal meeting and gathering, such as cafes and outdoor plaza spaces.

### 6.4.2 Childcare facilities

A number of different forms of childcare and activities for young children are generally provided in a community, including long daycare, family daycare, pre-school, occasional care and playgroups. It is not appropriate at this stage of the planning process to try to anticipate need for the various types of services. Instead, leading practice encourages planning of multi-purpose childcare centres, which can adapt as precise needs are identified or provide a mix of services.

Blacktown City Council has advised that it will not be providing Council operated childcare centres in the Riverstone East Precinct. The provision of childcare has changed substantially in recent years, associated with shifts in government regulation and funding policy, such that the private sector is now the provider of the majority of childcare centres in Australia. In common with the provision of childcare in most new developments, childcare in Riverstone East Precinct will be provided by private sector or community based non-government providers, to meet demand as it arises.

As a broad indication of need, based on the GCC benchmarks of 1 place per 5 children aged 0-4 years and an assumption that around 10% of the population could be aged 0-4 years, at full development Riverstone East would generate a need for around 353 childcare places. The number of childcare centres required will depend upon the size of each centre in terms of number of places. There is no standard size of centre. However, for reasons of cost efficiencies, there is a trend to provide larger centres (80+ places), where local demand justifies this. This would suggest at least four large childcare centres will be required.

It is not necessary that precise requirements for childcare are identified at this rezoning stage. Childcare centres are generally a permitted use within residential areas and do not necessarily require land to be designated at the master planning stage. However, there can be benefits in identifying sites for childcare centres within neighbourhood and district centre hubs, even if these are ultimately developed by private operators, for the following reasons:

- » To ensure some childcare is provided in central and conveniently accessible locations, and to reinforce the role of the hub as the focal point for the community
- » To locate childcare adjacent to complementary land uses such as schools and community centres
- » To help avoid childcare centres locating inappropriately in residential areas with amenity impacts on adjoining residents (particularly in terms of traffic congestion)
- » To encourage the provision of multi-purpose children's services which incorporate a mix of long daycare, pre-school, occasional care and out of school hours care for primary school children
- » To allow for government / community sector provision of childcare for sections of the population not profitable for the private sector, such as children aged 0-2 years, children of shift workers and those with special needs.

Planning for childcare will also need to address the need for out of hours school care for primary school aged children. Such need is usually met through multi-purpose childcare centres, through before and after school programs co-located within schools or through vacation care programs in community centres. Most councils provide spaces within multi-purpose community facilities to accommodate children's services, particularly for services like playgroups, before and after school care and vacation care.

### 6.4.3 Private schools

Providers of independent schools undertake detailed demographic and feasibility assessments before committing to new release areas. They also tend to acquire their sites through market processes, rather than necessarily acquiring sites designated in master plans.

Demand for private schools reflects the socio-economic and religious profile of an area as well as the availability of private schools in the surrounding area.

The Catholic Education Office has advised that it has adequate capacity to accommodate a large growth in students in this part of the Growth Centre in future. Construction is underway to expand Terra Sancta School (years 7-10) at Hambledon Road, Schofields, a K-12 school is planned for Terry Road, Box Hill, and there is room to expand St Johns primary school at Riverstone to cater for 840 students (currently 115) if required. St Joseph's primary school within the Nirimba Education Precinct at Schofields also has the potential to cater for up to 600 students (currently 230). In addition, the Catholic Education Office is in the process of purchasing a large 8ha site at Marsden Park, near the intersection of Richmond Road and Garfield Road for a K-12 school. There are no plans for site acquisition within the Riverstone East precinct itself.

At least one other independent school is planning to build a new primary school within the Precinct. It is understood that an 8ha site on Tallawong Road is subject of an application for a new primary school for around 30 students to serve the Sikh community. In time, this may be expanded to include a high school.

### 6.4.4 Medical services

A population of around 17,637 people will generate a need for about 12 local general practitioners, based on a Western Sydney benchmark of one GP per 1,500 people. The proposed neighbourhood centre will provide commercial space suitable for local medical centres, which are also a permitted use within residential areas. Commercial space within the neighbourhood centre will also be suitable for local services such as dentists and allied health services.

In addition, the Area 20 town centre will also provide office and commercial space suitable for medical and allied health practitioners.

### 6.4.5 Welfare and support services

As discussed in the previous chapter, the Riverstone East population is expected to be reasonably affluent and active, and demand for welfare and support services will be modest. However, given the experience of nearby release areas (particularly in relation to stress associated with the high cost of housing, both parents needing to work and long commuting times), there may be some need generated for family support services.

There may also be some demand for youth support services and for home and community care services for older people and people with a disability.

A key need of welfare and support services in the area is for affordable office accommodation. Such services are best located in major centres where they are accessible by public transport. In



this part of Blacktown LGA, welfare and support services will be best located in the Riverstone town centre, or in the proposed Area 20 town centre around the railway station. The neighbourhood retail centre in Riverstone East, while providing for some commercial uses, will not contain office accommodation and is not considered an appropriate location for district level services serving a broad catchment area.

The expansion of welfare and support services to meet the needs of the Growth Centre population will primarily be dependent upon increases in recurrent funding for staffing and programs, rather than capital facilities. Increases in recurrent funding for non-government and community-based organisations are dependent upon budget increases to government funding programs and State Treasury budget processes.

#### 6.4.6 Places of worship

As well as providing places of worship, churches can provide an important base for community development, youth, volunteer and welfare support activities in new communities, and are important in building community spirit and identity. Churches may also provide halls and other spaces which can be utilised for community activities by the general community. For these reasons, it is important that places of worship can be established within the Riverstone East area.

The acquisition of sites for places of worship is generally left to market forces, according to their ability to purchase sites, and it is difficult to specifically identify sites in the precinct planning process. However, the relatively high cost of zoned and serviced sites, particularly in central, accessible locations, often precludes places of worship from establishing in new communities.

At the same time, it is recognised that not every religious organisation needs its own facility, and that such organisations may also utilise other community facilities for their meetings, (such as community centres and schools), particularly as these are often not used by others when demand for space for religious activity is at its highest (for example on a Sunday morning for most Christian denominations).

The following issues should be taken into consideration in the future planning of places of worship within the Riverstone East Precinct:

- » Places of worship can contribute significantly to community identity and activity. They should be located close to other types of community facilities to create synergies and help provide a focal point for the community (eg located within centres).
- » Places of worship need to be readily accessible and visible, and located so as not to impact on adjoining residential areas.
- » Given the limited utilisation of such facilities across the week, it is important that opportunities for shared or joint use be explored with other types of facilities, or multiple church groups, in the interests of making the most efficient use of land resources. This includes shared provision of parking and meeting/activity space.
- » Church design and placement can offer significant urban design benefits in terms of providing iconic buildings, landmark features, community identity and way finding.

The draft concept Plan for Riverstone East does not need to identify specific sites for places of worship. It will be important, however, that consideration be given to the issues raised above regarding churches as detailed planning of the precinct gets underway and the Development Control Plan is prepared.

#### 6.4.7 Residential aged care

In the longer term, some provision will also need to be made in the area for residential aged care facilities (formerly known as hostels and nursing homes). These facilities are funded by the Commonwealth Government according to planning benchmarks based on numbers of people aged 70+. As these numbers cannot be forecast at this early stage of planning, (and as the planning benchmarks are regularly changed in line with policy shifts) it is not possible to predict precise needs now.

Residential aged care facilities are permitted uses within residential neighbourhoods (in keeping with the principle of integrating, rather than segregating older people and people with a disability) and so may be provided within any of the proposed residential areas, without the need to identify sites at this stage. Sites for these facilities are purchased through market processes and do not need to be identified at the rezoning stage. Site criteria include proximity to shops, services, community facilities and public transport, and so such facilities should be located close to district and neighbourhood activity centres.

#### 6.4.8 Leisure and entertainment opportunities

Entertainment and leisure facilities such as restaurants, cinemas, clubs, bars and pubs are provided on a commercial basis according to market demand. It is anticipated that the neighbourhood centre in Riverstone East will provide limited facilities such as cafes, but that residents will rely on the town centres at Area 20, Riverstone and Rouse Hill for a wider range of leisure and entertainment opportunities, consistent with their status as town centres. The new population of Riverstone East will contribute to demand for these types and facilities and help enhance their viability.

Cultural facilities such as spaces for performing and visual arts are provided on a regional basis for large population catchments. The new community hub planned for Riverstone will incorporate some cultural and community arts components that will be accessible for residents of Riverstone East.

### 6.5 Funding and delivery arrangements

Ideally, the proposed community hub should be provided by the time about 50% of the catchment population is in place, to ensure that there is sufficient population to sustain the new facility, but that also the growing population is not disadvantaged through lack of access to community meeting and activity spaces.

However, under current Section 94 arrangements, there is no capacity to levy contributions towards the building of any community facilities, unless the per dwelling contribution rate is less than the cap of \$30,000 per dwelling. Thus currently contributions can only be sought towards land costs for community facilities.

The current Section 94 regulations therefore pose major challenges to the delivery of any local government community facilities to serve this precinct. The capacity for Council to deliver the recommended community hub will be dependent upon reforms to the developer contribution system that allow contributions to be levied for buildings as well as land, or new grant programs for local government social infrastructure.

As recommended in Section 6.2.1, the planning and costing for the proposed Riverstone Community Resource Hub will need to be revised within Blacktown Council to take account of changes to the catchment populations for its various components. This will require revisions to the

Area 20 and Riverstone / Alex Ave Contribution Plans to reflect the changed catchment arrangements and population forecasts.

Confirmation of primary school requirements will be subject to on-going monitoring of population growth and enrolment trends by DEC. Any new primary school in Riverstone East Precinct would be constructed in the longer term, beyond the 5 year timeframe of DEC's capital works program. Provision of a primary school in Area 20 or the southern part of Riverstone East has been tentatively proposed for 2021-22 or beyond. In the meantime, upgrades to Rouse Hill Public School and Riverstone High School will be required to accommodate student growth in the two precincts.

Most of the local facilities required to serve the Riverstone East population will be provided by private sector or non-government service providers. Delivery will depend upon the build-up of the population and assessment of need and commercial feasibility by providers.

## 6.6 Conclusion

With a forecast population of about 17,637 people, Riverstone East will generate a need for the following facilities to be located within the precinct:

- » 2 primary schools, with a third to be located either within the southern part of this precinct or in the adjoining Area 20 Precinct
- » A range of facilities to be provided by the commercial / non-government sectors, as demand emerges and according to their own feasibility assessments. These facilities are likely to include:
  - > A neighbourhood shopping centre
  - > Several childcare centres
  - > GPs and medical centres
  - > Places of worship
  - > Residential aged care facilities
  - > Local neighbourhood leisure and entertainment facilities.
- » Riverstone East will also contribute to demand for local government community facilities to be provided for a wider catchment, including:
  - > A multi-purpose community resource hub to serve the combined Riverstone East and Area 20 Precincts (population approx. 30,400). This facility will have around 1,000 sqm floorspace and require a site of around 4,500 sqm. A location within the Area 20 town centre is recommended. The site proposed in the draft Riverstone East ILP does not meet leading practice principles for the location of community centres.
  - > Youth, library, cultural and indoor recreation components of the primary level community resource hub proposed for the Riverstone town centre. The size and costing of the proposed Riverstone Community Resource Hub will need to be reviewed in light of revisions to population forecasts and catchments for this facility.

The future population of Riverstone East will also require access to a variety of district, sub-regional and regional level services facilities in the wider area, generally provided for larger population catchments. These types of facilities and services are generally best located in larger activity centres that are well served by public transport, to maximise access for the whole catchment. They include:

- » Higher order shopping and commercial services, to be provided in town centres in Riverstone, Area 20 and Rouse Hill

- » High schools to be located within Riverstone Precinct
- » A variety of private schools in adjoining precincts
- » Public hospital services at Blacktown, Mount Druitt and Westmead Hospitals
- » Community health services in Blacktown and in the longer term at Rouse Hill
- » Tertiary education and lifelong learning opportunities across Western Sydney
- » Welfare and support services, primarily located in Riverstone, Blacktown, Mount Druitt and Rouse Hill
- » Emergency and safety services, existing or proposed, in adjacent precincts
- » Leisure and entertainment opportunities across the region, and particularly in nearby town centres.

# 7 Open space and recreational requirements

## 7.1 Demand analysis

The following information has been considered to determine the likely needs of the future Riverstone East community for open space, sporting and recreation facilities:

- » Broad national trends in sport and recreation participation
- » NSW participation rates in sport and recreation activities
- » The projected demographic profile of the precinct (and an assessment of the likely needs based on this profile).

This information is outlined below.

### 7.1.1 Broad trends

National trends in recreation participation and facility use across Australia include:

- » A swing from outdoor team sports to individual fitness
- » Substantial growth in indoor sport and recreation
- » Growth in year-round swimming
- » Increasing participation by women and girls in traditional male sports such as AFL, soccer, rugby union and rugby league
- » Increasing impact of design technology on leisure choices, such as computer games and new recreational equipment. Associated with this a decreasing involvement by young people in active recreation activities, and an increase in indoor 'passive' activities such as computer use and watching television, videos and DVDs
- » Apparent decline in the physical activity levels of children causing concerns about obesity
- » Changes in participation in competitive sport (greater diversity of codes, reduced younger participation, greater participation in seniors and masters sports) and more participation in informal recreation activities
- » Continuing emergence of new activities as a result of overseas trends and increasing cultural diversity (with increased participation in sport and recreation of people born overseas, including people from non-English speaking countries)
- » Changing recreation preferences amongst older groups, as the population ages and 'baby boomers' enter retirement
- » Increase in the proportion of families with two parents working full time (with probable reduced time for leisure)

- » Flexibility in the times that people enjoy their recreation, as demands on time increase and work practices change. Greater demand for indoor facilities that are available all day, every day of the year.

The relevance of these trends to the Riverstone East Precinct lies in the need to ensure that the quality and design of open space reflects these lifestyle trends.

### 7.1.2 Participation rate analysis

Australian Bureau of Statistics (ABS) data (*Participation in Sport and Physical Recreation, Australia, 2011-12*) shows that, for people 15 years and over in NSW, the sport and recreation activities with the highest participation rates in NSW are:

**Table 5 Participation rates in sport and recreation**

Activity/sport	Participation rate (%)
Walking	23.6
Fitness/gym	16.6
Swimming/diving	8.6
Jogging/running	8.1
Cycling/BMXing	6.1
Golf	5.3
Tennis	4.7
Soccer (outdoor)	3.5
Bushwalking	2.8
Football sports	2.7
Yoga	2.2
Surf sports	2.1

Of those sports with the highest participation, the following have experienced the most significant increase in participation rates between 2009-10 and 2010-12:

- » Fitness gym (increase of 3.4%)
- » Walking (increase of 2.4%)
- » Jogging/running (increase of 1.3%)
- » Golf (increase of 1.1%)
- » Cycling/BMXing (increase of 0.8%).

Australian Bureau of Statistics data (*2011-12*) further suggests that:

- » Participation in sport and recreation has increased slightly over this period (from 62.7% in 2009-10 to 65.7% in 2011-12)
- » The majority of participation in physical activity in 2011-12 was non-organised activities. Such participation has increased slightly, while participation in organised activity has remained stable



- » Of the population participating in organised activities, activities are most commonly taking place in/at:
  - > Indoor sports and fitness centres (41.0% of participants)
  - > Public playing fields or ovals (38.4%)
  - > Outdoor sports facilities (31.3%)
- » Of the population participating in non-organised activities, activities are most commonly taking place in/at:
  - > Parks or reserves (43.3% of participants)
  - > Indoor sports and fitness centres (25.5%)
  - > Public playing fields or ovals (22.3%)
  - > Off-road cycleways or bike paths (21.2% of participants).

The ABS *Survey of Children's Participation in Culture and Leisure Activities, Australia, 2012* provides data in relation to the participation of children in sport and recreation across Australia. This data also indicates trends that may inform the planning of sport and recreation infrastructure for the Riverstone East Precinct. Key findings from this survey are outlined below.

Amongst Australian children (5-14 years) in 2012:

- » Of boys participating in organised sport, the most popular sports were outdoor soccer (22%), swimming/diving (16%), Australian Rules football (15%) and basketball (9.2%)
- » Of girls participating in organised sport, the most popular sports were dancing (27%) swimming/diving (19%), netball (16%) and gymnastics (8%)
- » 60.2% of all children participated in organised sport. Participation decreased from 63% in 2009.

The survey also examined participation in the informal/non-organised activities of bike riding, skateboarding, rollerblading and scooter riding and identified an increase in participation in these activities by both boys and girls.

With engaging in physical activity a key component of a healthy lifestyle, the above data highlights the importance of providing adequate, high quality facilities in the Riverstone East Precinct. Provision of a broad range of facilities will assist the continuing growth in participation of adults and children in organised and non-organised sport and recreation into the future.

### 7.1.3 Local sport and recreation participation rates

Levels of participation in various sport and recreation activities in the Blacktown LGA were last analysed in 2004 in the Open Space and Recreation Strategy Demand Findings Report (Suter and Associates 2004), so are now outdated. Blacktown City Council however, is, at the time of writing, developing a strategy for sports and facility provision which will include examining local levels of participation.

### 7.1.4 Likely needs and demands of the future Riverstone East community

While precise needs for different sport and recreation facilities cannot be identified at this stage, there are a number of potential future factors that suggest likely need and demand for open space, sport and recreation facilities by the Riverstone East community.

The *North West Growth Centres Recreational Planning Framework* (Blacktown City Council, January/February 2009) examined the projected demographic mix for the Growth Area and also that of another Blacktown LGA new development (Glenwood). The study identified a number of factors that may influence sport and recreation demands. These are outlined below:

- » A large proportion of couples with children and young people, resulting in the need for facilities that cater for children and young people as well as adults
- » Higher income families, suggesting a higher capacity to pay for recreation. However this should be cautioned as it is loosely aligned to asset debt in the form of household mortgages and will be influenced by economic variables
- » Existing subsidised housing makes up 6.6% of the total Riverstone and Vineyard areas, with a further 21% of the area renting. This suggests the need to accommodate affordable recreation and open space opportunities
- » High levels of employment, suggesting that adults may have less time available or tendency to commit to sport. However, having less time for organised sport could mean that people will place a greater emphasis on quality and informal recreation/leisure time
- » A higher level of independence and the availability of private transport. This indicates that people will have greater capacity to travel to facilities
- » Population wide health issues will continue to place stress on improving opportunities within the built environment for everyday incidental physical activity
- » There will be a sustained demand for health and fitness opportunities, requiring both indoor and outdoor facilities
- » Quality of open space and related facilities is as important as quantity. Open space will need to be more carefully designed to take into account a wider range of needs and uses and adoption of multi-use principle
- » Recreation programs for all age and cultural groups will continue in popularity, resulting in increased demand for indoor multipurpose sport and leisure centres as well as a diversification of sporting needs
- » There will be an increased demand for natural areas as places to experience the natural environment, away from the urban setting and for appealing areas to walk and relax in a natural setting. In particular, more natural river settings, creek corridors and larger bushland parks are valued. There is high demand for walking and cycle networks, including track systems linked to corridors and natural areas
- » Competition between recreation activities and governing business philosophies will intensify with particular emphasis on the use of natural areas and how they balance the increasing demands being placed on them
- » Sporting codes are increasing the duration of playing seasons and increasing demand for training as well as competition grounds ('season creep'). Coupled with climate change, consideration needs to be given to all-weather/synthetic surfaces as an alternative to grass so that facilities can be used all year round and minimise demand for irrigation
- » Sporting clubs are demanding higher standards of provision, with changing facilities, meeting rooms, storage and floodlighting essential inclusions so they can play in the evening and in winter
- » Increasing need and the growth within urban areas to meet the needs of young people
- » The increase in community events within parks requires additional facilities and utilities such as power, water, parking infrastructure

- » With an increasing trend to indoor multipurpose facilities, consideration should be given to the design of community centres to ensure that they can accommodate a range of leisure and recreation programs, for example dance, yoga, exercise, martial arts
- » There is increasing demand for passive recreation opportunities for families, and for affordable facilities and activities
- » Transport to sport is difficult for young people due to lack of public transport
- » Demand is strong for a hierarchy of playgrounds with more diverse opportunities for older children.

Some of these needs should be satisfied by local open space and facilities to be provided within Riverstone East, while others will be addressed by accessing facilities in the wider district and more broadly in the region.

## 7.2 Opportunities and constraints

The precinct presents a number of opportunities and constraints that will influence the planning of open space and recreational facilities, including the following:

- » Rouse Hill Regional Park, adjacent to the precinct, is a major, regional open space offering passive recreation opportunities that future Riverstone East residents will have direct access to. As a popular place and major destination for a wide regional catchment, consideration will need to be given to potential impacts on Riverstone East residents in relation to traffic, parking and access
- » Riverstone East is well located, adjacent to Rouse Hill Town Centre, the Riverstone Precinct and Box Hill and close to Schofields and The Ponds. In addition to amenities provided within the precinct, the new Riverstone East community will also be in close proximity to open space and recreational facilities in these neighbouring areas (including those facilities identified in Chapter 4)
- » The extensive riparian corridors running through and alongside the precinct and associated land which is flood affected present opportunities to create a network of linear open space (as further considered in section 7.6.5). Blacktown City Council, however, has directed that flood prone land should not be included in the overall quantum of land to be provided as public open space (refer section 7.3.3)
- » The transmission line/easement running through the site also poses another constraint (as Council does not permit the provision of public open space under transmission lines)
- » A shortfall in the planning of open space in the adjacent Area 20 Precinct has been identified by the Department of Planning and Environment. There is the opportunity to address this shortfall through additional open space in the Riverstone East Precinct.

## 7.3 Standards, guidelines and benchmarks

Guidelines, benchmarks and standards from a number of relevant sources have been considered in determining open space and recreation requirements for the Riverstone East Precinct. These are outlined below.

### 7.3.1 NSW guidelines

NSW Government guidelines for open space provision, the *Recreation and Open Space Planning Guidelines for Local Government* (SGS Economics and HM Leisure Planning, 2010), advocate to Councils that they:

- » Establish the current supply of open space in an area by open space type (parks, outdoor sport, linear and linkage), hierarchy (regional, district, local), size, and distance from most dwellings
- » Adapt default standards for open space planning in NSW to define locally- specific provision standards. The default standards for local open space in NSW are:
  - > About 9% of non-industrial land to be allocated for local and district open space, with a rough 50:50 split between sporting and recreational uses
  - > Local informal parks – 0.5-2 hectares in size and within 400 metres from most dwellings
  - > District parks to be 2-5 ha and 2 km from most dwellings
  - > Local outdoor sporting areas: 5 hectares in size and 1 kilometre from most dwellings.
- » Develop locally-appropriate provision standards, after considering existing provision of open space as well as local needs, and locally-specific alternatives to meeting the default standard.

The open space planning guidelines also set out opportunities for and constraints to providing open space to fill gaps between supply and demand. Considering the high demand for open space and finite open space resources, there is a need for smarter use of existing assets through means such as:

- » Converting or adapting existing open space
- » Integrating the provision of a wide range of recreation facilities and programs
- » Co-locating recreation opportunities with other community and commercial services
- » Using alternative, commercial facilities and venues for recreation on an opportunistic basis
- » Using new technologies and enhanced design
- » Providing an equitable mix of outdoor and indoor recreation facilities
- » Rationalising underused or poorly located facilities
- » New partnerships and cross-boundary local government co-ordination to address resource and capacity constraints
- » Seeking agreements with educational and other institutions for co-use of open space
- » Innovations in providing and maintaining open space are required given increasing costs
- » Using marginal land (former landfill, drainage, utilities easements) that is acceptable for open space purposes
- » Acquiring larger sites for multiple and changing uses over time
- » Incorporating environmental resources as open space.

The levels of open space provision are recommended with an understanding that site opportunities and constraints may influence outcomes, and will ensure that the final quantum of open space proposed will reflect the realities of the landform, soils, drainage and other physical considerations, rather than the exact adopted standard.

### 7.3.2 Growth Centre benchmarks

The *Growth Centres Development Code* (Growth Centres Commission, 2006) specifies a standard for the quantum of open space provision in the Growth Centres at **2.83 hectares per 1000 people**.

### 7.3.3 Blacktown LGA guidelines and benchmarks

Blacktown City Council has identified the following key principles for the provision of public open space:

- » Quality
- » Multi-use
- » Accessible
- » Flexible
- » Connected
- » Activity generators
- » Co-location of open space/creation of 'hubs'
- » Safe and secure
- » Hierarchical provision
- » Attractive
- » Targeted at local need
- » Sustainable.

Blacktown City Council has accepted the Growth Centres Development Code standard for the provision of open space of **2.83 hectares per 1000 people as a minimum** level of provision in Growth Centre precincts. This should exclude regional open space, drainage areas, areas of cultural significance, conservation land, land under transmission lines, flood prone land and creeklines.

In addition, Council has also provided a number of guidelines and standards for different types of open space, sport and recreation facilities, as shown in the following table. This study proposes that these standards be used as a starting point to guide the planning of open space, sport and recreation facilities in the Riverstone East precinct.

**Table 6 Blacktown Council standards for open space, sport and recreation facilities**

Facility type	Open space, sport and recreation guidelines and standards
<b>Active open space/sportsgrounds (general)</b>	<ul style="list-style-type: none"><li>» Councils sportsgrounds are managed in the following hierarchy:<ul style="list-style-type: none"><li>&gt; State – Facilities that will draw users from across the State and further afield, e.g. Blacktown International Sports Park</li><li>&gt; Regional – Facilities that will draw users from the Sydney Metropolitan Region, e.g. Joe McAleer Reserve</li><li>&gt; City – Facilities that will draw users from across the Blacktown Local Government Area, e.g. Whalan Reserve</li><li>&gt; District – Facilities that provide for a suburb wide catchment that will draw users from a suburb area, e.g. Ashley Brown Reserve</li></ul></li></ul>

Facility type	Open space, sport and recreation guidelines and standards
	<ul style="list-style-type: none"> <li>» Sportsgrounds to have a minimum of 2 street frontages (allows for better passive surveillance and minimises impact on local residents)</li> <li>» To be located on main roads and generally not located in residential settings or surrounded by housing</li> <li>» Site to accommodate car parking and good access</li> <li>» Site should not incorporate bushland (though could be located adjacent to it)</li> <li>» To include other recreational needs (e.g. playspace, casual courts, seating, walking and cycle paths)</li> <li>» Allow for buffer zone between adjacent land-use and roads.</li> </ul>
<b>Sports fields</b>	<ul style="list-style-type: none"> <li>» 1 playing field/1,850 people</li> <li>» Arrangement to consist of: <ul style="list-style-type: none"> <li>&gt; a) Minimum double playing field layout (2 winter fields overlaid with 1 summer cricket oval) or</li> <li>&gt; b) An area equivalent to 2 or more winter playing fields that could accommodate baseball or softball diamonds</li> </ul> </li> <li>» Ideally footprint to support AFL</li> <li>» Cricket pitch accommodated between double playing fields</li> <li>» Site to accommodate amenities, lighting spill and practice facilities</li> <li>» Allow for adequate space between playing areas</li> <li>» Requires an area of approximately 4.5ha for each double playing field</li> <li>» 1 playing field/1850 people @ 4.5ha for each double playing field equates to 1.2ha/1000 people for sporting open space (refer note* at the bottom of the table)</li> </ul>
<b>Outdoor sports courts</b>	<p><b>Netball:</b></p> <ul style="list-style-type: none"> <li>» <b>1 netball court/3500 people</b> (includes centralised competition courts and satellite training courts)</li> <li>» For competition venues – minimum 40 courts (consideration to be given to access, off street parking and future expansion of courts).</li> </ul> <p><b>Tennis:</b></p> <ul style="list-style-type: none"> <li>» <b>1 tennis court/4500 people</b></li> <li>» Minimum 4 courts (in line with Tennis Australia guidelines)</li> <li>» Preferably to be incorporated with other sports facilities (e.g. aquatic centres or other indoor sports facilities) to support management.</li> </ul>
<b>Aquatic and indoor sport and recreation facilities</b>	<ul style="list-style-type: none"> <li>» Preference is for co-locating aquatic facilities with indoor health and fitness facilities to create multi-purpose leisure facilities with more flexibility and greater opportunity for increased financial performance</li> <li>» Any future facilities to be built along similar standards to existing structures at Blacktown Leisure Centre, Stanhope and Emerton Leisure Centre (pending</li> </ul>



Facility type	Open space, sport and recreation guidelines and standards
	<p>further feasibility and detailed design)</p> <ul style="list-style-type: none"> <li>» Blacktown has an expansive and varied hierarchical network of aquatic and leisure centres. These include: <ul style="list-style-type: none"> <li>&gt; Regional – 100,000+ catchment</li> <li>&gt; District – 40,000+ catchment</li> <li>&gt; Local – 10,000+ catchment</li> <li>&gt; Neighbourhood – catchment less than 10,000 people.</li> </ul> </li> <li>» All facilities, regardless of hierarchy level will have a primary catchment (5km radius, 50% of users) and a secondary catchment (10km, 80% of users). Patrons are typically willing to travel further for regional and district facilities. Primary catchments for facilities should not overlap</li> <li>» <b>1 indoor sport court per 25,000 people</b></li> <li>» Four court facility – approximately 4,200sqm GFA</li> <li>» One court facility/space (co-located in community hub) – approximately 785sqm GFA.</li> </ul>
<b>Other recreation facilities</b>	<p>Other facilities to considered for provision include the following (which cater to the needs of young people as well as other groups):</p> <ul style="list-style-type: none"> <li>» Skate facilities</li> <li>» BMX and mountain biking facilities</li> <li>» Basketball courts – to be co-located with other facilities</li> <li>» Outdoor fitness equipment</li> <li>» Youth appropriate playground equipment in larger parks, co-located with basketball courts.</li> </ul>
<b>Passive open space</b>	<ul style="list-style-type: none"> <li>» Provision for usable high quality parks of approximately <b>1.9ha/1000 people</b></li> <li>» Within 400-500 metres walking distance of all residents</li> <li>» Minimum 2 street frontages (allows for better passive surveillance and minimises impact on local residents)</li> <li>» <b>1 playground per 1,750 people and within walking distance of 500 metres</b> of all residents</li> <li>» Hierarchy to include the following: <ul style="list-style-type: none"> <li>&gt; <b>City parks:</b> <ul style="list-style-type: none"> <li>– Key destinations with a regional catchment of approximately 10km radius (e.g. Western Sydney)</li> <li>– Generally located with/near other major attractions (e.g cultural, sporting or recreation facilities/spaces)</li> <li>– Approximately 5ha minimum</li> <li>– Visitation by car or public transport. Duration – several hours</li> </ul> </li> </ul> </li> </ul>

Facility type	Open space, sport and recreation guidelines and standards
	<ul style="list-style-type: none"> <li>– Carparking (including spaces for people with a disability)</li> <li>– Landscape setting with social gathering spaces and a variety of informal recreation and play opportunities</li> <li>– Unique and large range of play activities in a custom designed setting. Includes different play experiences (physical, creative, imaginative) for a range of ages and children of all abilities and their families</li> <li>– Facilities to accommodate a large number of people. To include a hierarchy of access pedestrian and cycle paths, choice of seating, natural and built shade, drinking water, toilets, BBQs, picnic shelters and open grass areas</li> </ul> <p>&gt; <b>Neighbourhood parks:</b></p> <ul style="list-style-type: none"> <li>– Catchment area of approximately 5km radius (a number of suburbs)</li> <li>– Approximately 2-4ha in size</li> <li>– Visitation by vehicle or public transport (between 30 minutes and 2 hours)</li> <li>– Limited carparking (including spaces for people with a disability)</li> <li>– Play equipment catering to different play experiences (physical, creative, imaginative), a range of ages and children of all abilities. Some custom designed elements</li> <li>– Accessible pathways, seating, plantings, natural shade, toilets, drinking water, open grass areas for informal ball games</li> </ul> <p>&gt; <b>Local parks:</b></p> <ul style="list-style-type: none"> <li>– Located within 400-500 metres walking distance of all residents</li> <li>– Consideration to be given to the location and impact of barriers (e.g. major roads, railway lines and absence of footpaths) when accessing walking distance</li> <li>– Minimum size – 0.3ha (preferably between 0.5-2ha)</li> <li>– Visitation – mainly pedestrians. Short duration</li> <li>– Simple play opportunities (small play space)</li> <li>– Open grass areas, accessible pathways, seating, plantings, soft surfaces and natural shade.</li> </ul>
<b>Green corridors</b>	<ul style="list-style-type: none"> <li>» Shared pathways to be incorporated, where possible, and provide linkages to the main cycleway/shared path network within the LGA. The minimum width required for a shared pathway is 2.5 metres</li> <li>» Also consider shared pathways as a buffer between vegetated riparian corridors and developed open space</li> <li>» Preferably these green corridors would be in public ownership as private ownership decreases opportunities to create they physical active corridors.</li> </ul>

Source: Blacktown City Council

\*NOTE: The specified 1.2ha/1000 people for sports fields and 1.9ha for passive open space equates to an overall quantum of 3.1ha/1000 people (over the 2.83ha/1000 *Growth Centres Development Code* standard). Providing passive recreation opportunities in active open space areas enables opportunities for efficiencies in open space planning and overlap in passive and active open space provision. There is also the opportunity for embellished open space along drainage corridors to be included in the passive open space allocation (but not in overall quantum due to the specification for the exclusion of flood prone land in the *Growth Centres Development Code*).

## 7.4 Proposed approach for the Riverstone East Precinct

The following approach to the planning of open space and recreational facilities in the Riverstone East Precinct is recommended:

- » For consistency across the Growth Centre precincts (to ensure an equitable provision), it is recommended the *Growth Centres Development Code* standard of a minimum of 2.83ha/1000 people be utilised to determine the overall quantum of open space for the Riverstone East precinct
- » The application of Blacktown City Council standards for sports fields, outdoor courts and indoor sports facilities
- » Consideration of the Blacktown City Council standard for the total quantum of passive open space – 1.9ha/1000 people. This would be a component of overall quantum (at 2.83ha/1000 people). Some usable, embellished areas along the drainage corridors could also be included in this allocation of passive open space (although not included in the overall quantum due to the exclusion of flood prone land). There are also opportunities for overlap in passive and active open space provision by providing some passive recreation opportunities in sports parks
- » The application of Blacktown City Council standards and guidelines for parks, playgrounds and green corridors.
- » As mentioned previously, for the purpose of open space planning the Riverstone East Precinct has been considered together with the revised planning for the Area 20 Precinct, creating a combined catchment of 30,500 people. This recognises that opportunities to address requirements for additional open space in Area 20 resulting from the forecast increases in dwellings and population are limited, and that Riverstone East Precinct offers the opportunity to address the notional shortfalls that would arise if Area 20 were considered alone.

## 7.5 Recommended provision for the Riverstone East and Area 20 Precincts

The following table applies the proposed approach, outlined in the previous section, to the Riverstone East and Area 20 Precincts to determine open space and recreational facility requirements.

**Table 7 Requirements for open space, sport and recreation facilities**

Facility type	Standard*	Requirement for population of 30,400 people
<b>Total quantum of open space</b> (excludes regional open space, drainage, areas of cultural significance, conservation land, flood prone land, land under transmission lines and creeklines)	Minimum 2.83 ha/1000 people	Minimum 86.03 ha
<b>Sports fields</b>	1 sports field/1,850 people. 4.5ha/double playing field	16 sports fields (equiv. 8 double playing fields) Equates to approximately 36ha
<b>Netball courts</b>	1 netball court/3,500 people	9 netball courts
<b>Tennis courts</b>	1 tennis court/4,500 people. Minimum provision of four courts/site	7 tennis courts
<b>Indoor sports facility</b>	1 indoor sport court/25,000 people (Council preference for a 4 court facility)	1.2 courts Will contribute to need for a 4 court facility in the wider area
<b>Aquatic facility</b>	No recognised standard	Facility not required for Riverstone East / Area 20 population alone. Needs will be met through the proposed redeveloped Riverstone Swimming Centre
<b>Total quantum of passive open space</b>	1.9ha/1000 people (included as part of the 2.83ha/1000 people)	57.76ha
<b>Parks</b>	<ul style="list-style-type: none"> <li>» Within 400-500 metres walking distance for all residents</li> <li>» Local parks – minimum size 0.3ha (preferably between 0.5-2ha)</li> <li>» Neighbourhood park – 2-4ha. Catchment area 5km radius</li> <li>» City park – minimum 5ha. Catchment area 10km radius</li> </ul>	The provision of local parks within 400-500 metres walking distance for all residents. There will also be a requirement for one neighbourhood park in the Riverstone East Precinct. A city park will not be required in Riverstone East; however, the Riverstone East population will still generate demand for larger parks. If not provided in Riverstone East, this demand will need to be met in areas within 10km.

Facility type	Standard*	Requirement for population of 30,400 people
<b>Playgrounds</b>	» 1 playground per 1,750 people and within walking distance of 500 metres of all residents	Approximately 17 playgrounds (or as required to achieve a walking distance of 500 metres for all residents)

\*Based on Growth Centre Development Code standard and Blacktown City Council standards

### 7.5.1 Required overall quantum of open space

As outlined in the above table, the minimum quantum of open space required to be provided in the Riverstone East / Area 20 Precincts is 86.03ha. Blacktown City Council's requirements specify this is to exclude regional open space, drainage, areas of cultural significance, conservation land, flood prone land, land under transmission lines and creeklines.

### 7.5.2 Requirements for sports fields

A total of 16 sports fields will be required to meet the needs of the proposed Riverstone East /Area 20 community. Council has advised of a requirement for a minimum of two playing fields (equivalent to one double playing field) be co-located on any one site. This required arrangement is aimed at creating more functional facilities that can be used for multiple sports, by multiple teams and be suitable for competitions. These 16 sports fields could be arranged as double or triple playing fields. These triple/double playing fields should be multi-use facilities, capable of accommodating a range of sports (including, soccer, rugby league, rugby union, cricket, athletics, baseball, softball and AFL). Such facilities provide greater flexibility by enabling programming of exact sporting use to occur at a later date. This is particularly important as it is not possible at this stage of the planning process to identify the exact sporting interests and needs of the new population. The clustering of sports fields is also supported in order to provide facilities suitable for both competition and training and to allow for economies in providing amenities and parking areas.

Planning of the precinct should ensure equitable distribution of playing fields, providing good access to residents in different parts of the precinct. Planning should also ensure a good mix of layouts/arrangements to cater to different sporting needs for competition and training, by providing sports parks of different sizes.

Council's detailed requirements for embellishment of sporting fields have not been identified, but are likely to include parking (e.g. 50 spaces per single field), lighting and amenities buildings (toilets, change rooms, canteens).

### 7.5.3 Requirements for outdoor courts

In accordance with Blacktown City Council standards, approximately 9 netball courts and 7 tennis courts will be required to meet the needs of the new Riverstone East / Area 20 community. In order to provide facilities suitable for competition and practice, sporting associations favour the clustering of courts. This is supported by Council, who also preferences the co-location of tennis courts with indoor sporting and recreation facilities to simplify management arrangements.

The requirement for 7 tennis courts meets the standard for minimum provision on a site of 4 courts, and it is recommended that at least 4 of the required courts be provided together within the precincts. In determining whether all 7 courts should be provided in the Riverstone East

Precinct, consideration should be given to the provision of courts in other nearby precincts. Planning should aim to establish a network of well distributed competition and training venues across the Growth Centre. This may lead to the amalgamation of some of the courts required by the Riverstone East /Area 20 community into a larger complex in a nearby precinct. This issue will require further consideration by Blacktown Council.

With regard to netball courts, a competition level facility generally clusters a large number of courts. It is recommended that the netball courts required by the Riverstone East / Area 20 community be provided off-site as part of a large netball complex. It is understood that Blacktown Council is still considering where a new regional netball complex might be located.

#### 7.5.4 Requirements for aquatic centres and indoor sport and recreation facilities

The forecast population alone will not meet the thresholds to justify indoor sport and aquatic facilities within the two precincts. However, it will contribute to demand for these facilities in the broader district.

In terms of aquatic facilities, it is proposed that the needs of the new Riverstone East / Area 20 community will be met through the proposed redevelopment of the Riverstone Swimming Centre, located in the neighbouring Riverstone Precinct. It is proposed that this facility will be upgraded and enlarged to cater for the needs of the combined Riverstone East, Area 20, Riverstone and Alex Ave precincts. The Section 94 Contributions Plan for Riverstone East will need to reflect this arrangement.

Some of the needs of the new Riverstone East community for indoor sports facilities could be met through the existing Riverstone Sports Centre (provided by the Riverstone Community Church in the neighbouring Riverstone Precinct). Blacktown City Council has advised that the preferred approach to addressing additional indoor sports facility needs involves an expansion of the existing two court facility at the Blacktown Leisure Centre Stanhope.

In terms of fitness, aerobic and gym facilities, these are most commonly provided by the private sector, as demand emerges.

In addition, the Riverstone East community will have access to informal indoor recreation areas within the proposed community hubs in Riverstone and Area 20, which will contain spaces suitable for activities such as yoga, dance, martial arts and gymnastics.

#### 7.5.5 Requirements for passive open space

When applying the Blacktown City Council standard of 1.9ha/1000 people, around 57.76ha will be required to meet the passive open space requirements of the combined Riverstone East and Area 20 Precincts.

In accordance with Blacktown City Council guidelines, the planning of open space should ensure all future residents are within 400-500 metres walk from passive open space opportunities. Locating passive open space and calculating access and walking distances should consider key barriers such as major roads and creek corridors.

Passive open space in the Riverstone East community should be provided through the following:

- » The provision of a number of stand-alone local parks of minimum 0.3ha (preferably between 0.5-2ha) which include play opportunities and simple embellishments (refer Council standards)
- » Local park amenities (as described above) may also be provided within/co-located with active open space



- » A neighbourhood park of approximately 2-4ha with limited car parking, toilets, a range of play opportunities and more extensive embellishments (refer Council standards). This park would be best located in an accessible, central location and co-located with other key amenity such as a neighbourhood centre
- » Open space associated with riparian corridors. It is proposed that these corridors include embellishments to support passive recreation – refer section 'Green corridors' below.

Council requirements for the embellishment of different parks will need to be factored into the costings for these facilities. These requirements include seating, shade, lighting, pathways and picnic and barbecue facilities.

### Playgrounds

A network of playgrounds should be provided within open spaces across the precincts. Playgrounds encourage children to engage in non-organised physical activity and provide important community meeting places that encourage social interaction and assist social cohesion. Playgrounds should collectively provide a range of play environments for children of various ages and a range of play experiences.

The application of Blacktown City Council standards suggests a requirement for 17 playgrounds across the two precincts. This, however, should be considered as a guide only and the focus should be on creating a good distribution of playgrounds, access to local play opportunities for all residents and quality play opportunities for children of different ages. This may necessitate fewer, but larger and higher quality playgrounds. These play opportunities can be provided within a range of settings including standalone local parks, active open space as well as the proposed neighbourhood park, which should include a larger playground catering to various ages and abilities. This playground should also include challenging play opportunities for older children.

Open spaces within the precinct should also include other amenities that cater to older children and young people. Options include facilities for skateboarding, rollerblading, bike/BMX and scooter riding (identified as emerging popular activities for children 5-14 years). Other possible facilities include multisport courts or half courts and climbing walls.

Such facilities for young people require very specific locations, primarily in relation to safety and securing by ensuring very high levels of passive surveillance. Some of these facilities may be best located in a neighbourhood park, near a neighbourhood centre or adjacent to major roads.

### Green corridors

The extensive riparian corridors through and alongside the precinct and associated land which is flood affected present opportunities to create a network of linear open space for informal recreation along the main creek lines and its tributaries.

These open space areas should be appropriately vegetated to create the amenity of a natural bushland setting and include embellishments to create valuable, usable open space for passive recreation. Embellishments must be located outside of any core conservation areas (with buffers provided between) so as not to impinge on the future ecological value of the corridor. Suitable embellishments include:

- » Pathways and cycleways – this is key infrastructure to support popular non-organised sports and recreation activities such as walking, jogging/running and cycling (identified as key non-organised sports and recreational activities in NSW). The pathway network should include shared-use, minimum 2.5 metre wide paths. The critical success factor for these pathways is ensuring that they are safe by having passive surveillance and regular activity nodes and points of interest.
- » Fitness equipment (also supports participation in non-organised physical activity)

- » Seating, barbeque and picnic facilities
- » Signage and lighting
- » Playgrounds
- » Public art and/or interpretive signage (cultural heritage and environment).

Walking and cycle tracks should connect to other key destinations within the precinct, including neighbourhood centre/s, primary schools and sporting fields to create a linked network throughout the precinct. This network should also link with the wider regional network.

## 7.6 Regional and district facilities

It is envisaged that the regional and wider district level open space, sport and recreation facility needs of the new Riverstone East Precinct community will be met through existing regional level facilities outlined in Chapter 4, or through new or upgraded facilities required to meet the needs of the Growth centre as a whole.

Issues in relation to the access of future Riverstone East residents to major facilities include the following:

- » Rouse Hill Regional Park will provide a key open space amenity, given its proximity to the precinct. It will also provide local access to passive open space for those residents that will be within walking distance. As outlined in Chapter 4, NSW National Parks and Wildlife Service has advised that this park in its present form is currently at capacity. However a significant expansion of the regional park is proposed and it is envisaged that the park, at full development, will be large enough to serve the regional population into the future. At this stage, the embellishments and facilities to be provided in the expanded sections are still to be determined, as are sources of funding for its development. However, to provide a valued recreation resource, the regional park will need to provide more than basic picnic facilities, grassed areas and walking / cycling tracks. There is a need for discussions between NPWS and Blacktown and The Hills Councils to consider the extent to which the regional park might accommodate some major regional recreation facilities, and how they might be funded to avoid cost-shifting issues
- » As previously identified, the Riverstone East / Area 20 population's needs for some of the required outdoor sports courts (9 netball courts and 7 tennis courts) may also be best co-located with other courts in nearby areas to create larger competition venues
- » The Riverstone East population's needs for indoor sports and aquatic facilities will also need to be met elsewhere in the Blacktown LGA. Planning undertaken by Blacktown Council has included the two precincts within a proposed catchment for a redeveloped Riverstone Swimming Centre, but no provision has been made for indoor sports courts.

Associated with this study, Elton Consulting has undertaken a strategic review of social infrastructure provided or planned across the North West Growth Centre as a whole (documented in a separate report). A key issue is that the practice of undertaking planning progressively on a precinct by precinct basis has resulted in limited opportunity to consider 'bigger picture' needs on a broader scale beyond the boundaries of individual precincts.

In terms of open space planning, this approach has meant there has been limited consideration of needs for more specialist district or regional facilities for particular population sub-groups or particular types of activities across the Growth Centre as a whole. The strategic review has identified the following needs within the Growth Centre which to date have not been addressed in precinct plans:

- » Larger major city-wide destination parks with quality amenities and unique features
- » Regional/ city-wide playgrounds
- » Recreation facilities for young people, such as skate parks and BMX tracks
- » Spaces for outdoor cultural activities and events
- » Regional competition level sports parks
- » Complexes for tennis and netball courts
- » Indoor sports facilities

The suitability of Riverstone East Precinct for these types of major facilities has been considered in this study. The precinct is not considered suitable for major facilities because:

- » It already contains Rouse Hill Regional Park as a regional facility, and any additional city-wide or regional facilities should be distributed across other parts of the Growth Centre to promote equitable access, rather than clustered in the one area
- » Riverstone East will not contain any major centres or transport hubs to enhance access to any major facilities. Leading practice principles suggest that such facilities should be accessible by public transport and be centrally located.

The planning of major sport and recreation facilities has also been hampered by the lack of any funding source for them. Where the per dwelling cap exceeds \$30,000 (as is the case in all recent Growth Centre precincts), current regulations concerning Section 94 contributions allow contributions to be sought only for “essential works”. This includes land for open space and sporting facilities and base level embellishment ie basic park structures and equipment. Indoor sports courts, skate parks, bmx tracks, aquatic facilities and the sorts of higher order facilities associated with city-wide parks and outdoor event spaces are not considered to be “essential works” and so cannot be funded through Section 94.

This study notes that the development of Riverstone East Precinct will contribute to the cumulative need for higher order sport and recreation facilities needed to support the Growth Centre as a whole. While there is no funding source for such facilities at present, Blacktown Council should nevertheless identify notionally where such facilities might be developed, so that proposals can be pursued if funding becomes available in the longer term. These issues should also be considered in the on-going planning for development of Rouse Hill Regional Park.

## 7.7 Delivery

In order to develop costings for open space provision suitable for inclusion in a Section 94 Contributions Plan, more detailed plans for each of the proposed areas of open space will need to be prepared by Blacktown Council, taking account of site works for preparation as well as required embellishments.

The costing and cost apportionment of the redevelopment of the Riverstone Swimming Centre will need to be revised to take account of updated population forecasts for Riverstone East and Area 20.

The staging of delivery will need to reflect the staging of servicing and anticipated pattern of development to ensure that open space is provided in a timely manner, consistent with the growth of the population.

## 7.8 Conclusion

In terms of local and district open space and recreation facilities, the study has identified a need across both Riverstone East and Area 20 Precincts for:

- » About 86 ha of public open space, including 57.76 ha of passive open space
- » Local parks to meet Council requirements in relation to size, embellishment and distribution and one neighbourhood level park
- » At least 16 playing fields, to be provided as double playing fields or larger clusters
- » Provision of 9 outdoor netball courts in an off-site complex and 7 tennis courts either provided on-site as a 4 court facility or co-located with other courts off-site to contribute to the provision of a larger training and competition venue
- » Green passive open space along the creek corridors to provide walking and cycle trails that provide recreation opportunities and linkages to key destinations.

The future Riverstone East population will rely on existing or proposed open space and recreation facilities in the wider district for access to regional open space and sporting facilities and aquatic facilities. Rouse Hill Regional Park will provide a locally accessible resource for the new communities. The precincts will contribute to demand for redevelopment of the Riverstone Swimming Centre, and to demand for other types of facilities such as regional sporting complexes, indoor sports facilities, city-wide parks and youth recreation facilities. The precinct planning process and Blacktown City Council have to date not identified requirements or locations for such facilities, and at present there is no capacity to levy contributions for their funding under Section 94 arrangements.

## 8 Conclusion

This study has considered the community facilities, human services and open space that will be required to meet the needs of the future population of the Riverstone East Precinct, in order to create a community that will be socially sustainable.

Currently only about 900 people live within the Riverstone East area. When fully developed, the precinct is expected to contain approximately 5,790 dwellings and 17,637 residents. Existing facilities and services in this area are currently limited, or sized for the smaller rural residential population, and will not be able to meet the needs of this new release area. There is therefore a need for new community facilities, services and open space to meet the needs of incoming residents within the Riverstone East precinct.

The report has identified the types of facilities and services that will require further consideration as the planning of the Riverstone East precinct moves forward. Key issues include:

- » Uncertainties around funding for the proposed Riverstone Community Hub and timing of its development. This facility was originally sized to accommodate new populations within several surrounding precincts including Riverstone East, but complexities around funding the hub and the size of its catchment have raised questions about what functions it should serve, how it will be funded and when it might be built. This facility is required to meet some of the needs of Riverstone East residents with regard to library, youth, cultural and community arts programs.
- » The proposed development of a higher density town centre within Area 20, associated with the new railway station, has led to a need to revise social infrastructure requirements for this precinct and to consider its needs in association with Riverstone East. As a result, a new, secondary community hub is recommended to service the Riverstone East and Area 20 Precincts, to be located within the Area 20 Town Centre.
- » Under current developer contribution arrangements, there is currently no source of funds to build the recommended community hub in Area 20 (refer section 6.6), or the facilities proposed to serve the Riverstone East Precinct within Riverstone Precinct (including the primary community hub and Riverstone Swimming Centre). There is a risk that, without an identified funding source, these facilities will not be provided and Riverstone East will be left without the social infrastructure necessary to support the health and well-being of its residents.
- » The need to provide adequate open space and recreation facilities for the population within the Riverstone East Precinct, including embellishments to create quality sport and recreation opportunities, in a context where current developer contribution arrangements allow for only "base level" embellishments for "essential works", precluding many of the facilities ideally required in the district (eg indoor sports courts, aquatic facilities, bmx tracks).

Social, recreational infrastructure and open space recommended to be provided within the Riverstone East Precinct includes:

- » At least 2 primary schools, with a third to be located either within the southern part of this precinct or in the adjoining Area 20 Precinct
- » A range of facilities to be provided by the commercial / non-government sectors, as demand emerges and according to their own feasibility assessments. These facilities are likely to include:
  - > A neighbourhood shopping centre

- > Several childcare centres
- > GPs and medical centres
- > Places of worship
- > Residential aged care facilities
- > Local neighbourhood leisure and entertainment facilities.
- » Riverstone East will also contribute to demand for local government community facilities proposed to be provided for a wider catchment, including:
  - > A multi-purpose secondary community hub to serve the combined Riverstone East and Area 20 Precincts (population approx. 30,400). This facility will have around 1,000 sqm floorspace and require a site of around 4,500 sqm
  - > Youth, library, cultural and indoor recreation components of the primary level community hub proposed for the Riverstone town centre.

The future population of Riverstone East will also require access to a variety of district, sub-regional and regional level services facilities in the wider area, generally provided for larger population catchments. These types of facilities and services are generally best located in larger activity centres that are well served by public transport, to maximise access for the whole catchment. They include:

- > Higher order shopping and commercial services, to be provided in town centres in Riverstone, Area 20 and Rouse Hill
- > High schools to be located within Riverstone Precinct
- > A variety of private schools in adjoining precincts
- > Public hospital services at Blacktown, Mount Druitt and Westmead Hospitals
- > Community health services in Blacktown and in the longer term at Rouse Hill
- > Tertiary education and lifelong learning opportunities across Western Sydney
- > Welfare and support services, primarily located in Riverstone, Blacktown, Mount Druitt and Rouse Hill
- > Emergency and safety services, existing or proposed, in adjacent precincts
- > Leisure and entertainment opportunities across the region, and particularly in nearby town centres.

In terms of local and district open space and recreation facilities, the study has identified a need for:

- » About 86 ha of public open space, including 57.76 ha of passive open space
- » Local parks to meet Council requirements in relation to size, embellishment and distribution and one neighbourhood level park
- » At least 16 playing fields, to be provided as double playing fields or larger clusters
- » Provision of 9 outdoor netball courts in an off-site complex and 7 tennis courts either provided on-site as a 4 court facility or co-located with other courts off-site to contribute to the provision of a larger training and competition venue
- » Green passive open space along the creek corridors to provide walking and cycle trails that provide recreation opportunities and linkages to key destinations.



The future Riverstone East population will rely on existing or proposed open space and recreation facilities in the wider district for access to regional open space and sporting facilities and aquatic facilities. Rouse Hill Regional Park, once fully developed, will provide a locally accessible resource for the new communities. The precincts will contribute to demand for redevelopment of the Riverstone Swimming Centre, and to demand for other types of facilities such as regional sporting complexes, indoor sports facilities, city-wide parks and youth recreation facilities. There is a need for further planning for district and regional sport and recreation facilities to ensure that these types of facilities are not overlooked in the precinct planning process.

Planning for the delivery of the community facilities and open space should focus on the recommended local government social infrastructure, and in particular more detailed design of open space, sporting facilities and the community hub to enable costings to be prepared, suitable for inclusion within a Section 94 Contributions Plan. This will also necessitate revisions to the costings and apportionment for the facilities proposed within the Riverstone Precinct – community hub and swimming centre – to take account of revised population forecasts and a separate new community hub for Riverstone East and Area 20. The Section 94 Plan for Riverstone and Alex Ave Precincts will need to be revised accordingly.

## 9 References

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# Appendices

A District and local open space and recreational facilities

# A District and local open space and recreational facilities

District open space/ recreation facility	Description
<b>Outdoor sport and recreation parks</b>	
Ownership/management is Council unless stated otherwise.	
Bruce Purser Reserve	Location: Rouse Hill (Hills Shire LGA) Inclusions: New multipurpose playing field, cricket practice nets
Colbee Park	Location: McGraths Hill (Hawkesbury LGA) Inclusions: 2 sports fields with cricket pitches, cricket practice nets, baseball field, bmx track
Connor Greasby Park	Location: Stanhope Gardens (Blacktown LGA) Inclusions: Multipurpose playing field, 2 basketball courts, amenities building
The Hills Centenary Park	Location: Rouse Hill (Hills Shire LGA) Inclusions: Multipurpose playing field with cricket pitch, baseball diamond and grass athletics track, cricket practice nets, athletics field event amenities
Kellyville Netball Complex	Location: Kellyville (Hills Shire LGA) Ownership: Hills Shire Council. Leased to Baulkham Hills Shire Netball Association Inclusions: 38 outdoor netball courts
Mihkelson Reserve	Location: Quakers Hill (Blacktown LGA) Inclusions: Sports field with cricket pitch
Mill Street Reserve	Location: Riverstone (Blacktown LGA) Inclusions: Sports field with cricket pitch, cricket practice nets
Oakville Reserve	Location: Oakville (Hawkesbury LGA) Inclusions: Sports field with cricket pitch and amenities building
Paterson Reserve	Location: Quakers Hill (Blacktown LGA) Inclusions: Inclusions: Sports field with cricket pitch, 1 basketball court, 3 netball courts, 2 tennis courts
Quakers Hill Park	Location: Quakers Hill (Blacktown LGA) Inclusions: Sports field with cricket pitch, 2 tennis courts, cricket practice nets, 5 netball courts
Riverstone Park	Location: Riverstone (Blacktown LGA) Inclusions: 2 Sports fields (1 with cricket pitch and grass athletics track),

District open space/ recreation facility	Description
	cricket practice nets, 2 tennis courts, 4 netball courts
Russell Reserve	Location: Rouse Hill (Hills Shire LGA) Inclusions: Multipurpose playing field
Schofields Park	Location: Schofields (Blacktown LGA) Inclusions: 3 sports fields, cricket practice nets, 1 netball court
Stanhope Reserve	Location: Stanhope Gardens (Blacktown LGA) Inclusions: Sports field with multiple baseball diamonds, 2 netball courts, 4 tennis courts
University of Western Sydney Nirimba Campus Facilities	Location: Quakers Hill (Blacktown LGA) Ownership/management: UWS (facilities available for general community use) Inclusions: 2 rugby league fields (are also used for hockey), 4 tennis courts (bitumen)
Vineyard Park	Location: Vineyard (Hawkesbury LGA) Inclusions: Sports field with cricket pitch
<b>Indoor sporting/recreation facilities</b>	
Bernie Mullane Sports Complex	Location: Kellyville (Hills Shire LGA) Ownership: Hills Shire Council Management: Private (Belgravia Leisure) Inclusions: Indoor multipurpose sports courts, fitness centre
Blacktown Leisure and Aquatic Centre Stanhope	Location: Stanhope Gardens (Blacktown LGA) Ownership/management: Blacktown City Council Inclusions: 2 indoor sports courts, fitness studios, squash court (and aquatic facilities)
Castle Hill RSL Gymnastics Club gymnastics facility	Location: Castle Hill (Hills Shire LGA) Ownership/management: Private (Castle Hill RSL Club and Gymnastics Club) Inclusions: Gymnastics facility
Emerton Leisure centre	Location: Emerton (Blacktown LGA) Ownership/management: Blacktown City Council Inclusions: 2 indoor multi-purpose sports courts, outdoor beach volleyball court (and aquatic facilities)
Hawkesbury Indoor Stadium	Location: South Windsor (Hawkesbury LGA) Ownership: Hawkesbury Council Management: YMCA Inclusions: 6 indoor multi-purpose sports courts, gymnastics training area

District open space/ recreation facility	Description
Riverstone Sports Centre	Location: Riverstone Ownership/management: Private (Riverstone Community Church) Inclusions: Indoor soccer courts
<b>Aquatic centres</b>	
Annangrove Aquatic and Leisure Centre	Location: Annangrove (Hills Shire LGA) Ownership/management: Private (Annangrove Aquatic & Leisure Centre) Inclusions: Pool
Blacktown Aquatic Centre	Location: Blacktown (Blacktown LGA) Ownership/management: Blacktown City Council Inclusions: Indoor 50 metre pool, outdoor 50 metre pool, children's pool (and gym)
Blacktown Leisure and Aquatic Centre Stanhope	Location: Stanhope Gardens (Blacktown LGA) Ownership/management: Blacktown City Council Inclusions: Indoor 25 metre pool, children's pool, wave pool, program pool (and indoor sports facilities)
C2K Fitness and Aquatic Centre	Location: Castle Hill (Hills Shire LGA) Ownership/management: Private (Castle Hill RSL Club) Inclusions: Indoor 25 metre pool and program pool (and fitness centre)
Emerton Leisure centre	Location: Emerton (Blacktown LGA) Ownership/management: Blacktown City Council Inclusions: Indoor 25 metre pool, leisure pool, program pool (and indoor sports facilities). Outdoor 50 metre pool and 25 metre pool
Hawkesbury Oasis Aquatic and Fitness Centre	Location: South Windsor (Hawkesbury LGA) Ownership: Hawkesbury City Council Management: YMCA Inclusions: Indoor 25 metre pool and leisure pool, outdoor 50 metre pool
Riverstone Swimming Centre	Location: Riverstone (Blacktown LGA) Ownership/management: Blacktown City Council Inclusions: Outdoor 50 metre pool, leisure pool, program pool and children's pool
University of Western Sydney Nirimba Campus Aquatic Facility	Location: Quakers Hill (Blacktown LGA) Ownership/management: UWS (pool available for general community use) Inclusions: Outdoor 50 metre pool
Waves Fitness and Aquatic	Location: Baulkham Hills (Hills Shire LGA) Ownership: Hills Shire Council



District open space/ recreation facility	Description
Centre	<p>Management: Private (Belgravia Leisure)</p> <p>Inclusions: Indoor program pool, outdoor 50 metre pool and children's pool (and fitness centre)</p>



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