



## Department of Planning and Environment

### Greater Macarthur Investigative Area Social Infrastructure Assessment

July 2015



# Executive summary

Growth within Sydney's greenfield release areas has primarily been focussed within the North West and South West Growth Centres. In *A Plan for Growing Sydney* the State Government has acknowledged that planning will need to extend beyond these existing growth centres to identify future areas that will accommodate growth. Action 2.4.2 of the Plan requires the development of a framework for the identification of new growth centres. The Plan identified the Greater Macarthur Investigation Area as a potential new growth centre.

The purpose of this report is to investigate the provision of regional social infrastructure that would be required to support the potential population should the Greater Macarthur Investigation Area be pursued as a Growth Centre in the future. Regional social infrastructure typically services a population level above 50,000 and is provided by a State Government agency. This report has investigated social infrastructure comprising of education, health, justice, emergency services, cemeteries, cultural facilities and sport and recreation facilities.

This report has developed a framework that will guide the planning and staging of social infrastructure facilities that can be utilised in Greater Macarthur Investigation Area and other future growth centres. A key consideration in the development of such a framework is that there are no established 'benchmarks' for the provision of social infrastructure. Rather, facilities are typically developed through an operational model or in response to demand when existing facilities and services are at capacity. The development of a Growth Centre Framework provides an opportunity for infrastructure to be identified and land to be set aside so that the services are developed in response to population growth and change over time.

The Growth Centre Framework identifies a 'rate of provision' that provides guidance for forecasting when a new facility would be required and also the land area required to accommodate the facility. This rate of provision will be useful for the future planning of the precincts within the growth centre. The framework also identifies what type of centre each facility should be located in, for example a small strategic centre, town centre or village. Some facilities such as a prison or ambulance station are not required within a population centre but do have locational requirements that will need to be considered.

Each of the social infrastructure facility types operates within a service model that identifies criteria or thresholds for determining when a new facility is required. The service model has enabled the development of a Continuum for Adapting to Different Growth Scenarios. The Continuum allows for different phases to be considered prior to the development of a new facility or at least phasing within a facility. Whilst the framework provides a tool for developing a business case and informing high level master planning, the Continuums identify how each type of facility can be staged to accommodate various growth scenarios.

# Table of contents

1.	Introduction .....	1
1.1	Purpose of this report.....	1
1.2	Regional social infrastructure .....	3
1.3	Methodology .....	5
1.4	Scope and limitations.....	6
1.5	Implications for social infrastructure .....	6
2.	Location and context .....	7
2.1	Greater Macarthur Investigation Area.....	7
2.2	Appin .....	9
2.3	Wilton .....	9
2.4	South Campbelltown district .....	9
2.5	Menangle Park.....	9
3.	History of the Greater Macarthur Investigation Area .....	10
3.1	A Plan for Growing Sydney, December 2014 .....	10
3.2	Development potential within the Greater Macarthur Investigation Area .....	10
3.3	Potential Home Sites Program, Review of Potential Housing Opportunities in the Sydney Region (2013) .....	18
3.4	Implications for social infrastructure .....	18
4.	Policy context for regional social infrastructure .....	19
4.1	State Government policies.....	19
4.2	Local government policies .....	27
4.3	Implications for social infrastructure .....	28
5.	Population .....	29
5.1	Existing population within the Greater Macarthur Investigation Area.....	29
5.2	Regional communities located on the outskirts of the Greater Macarthur Investigation Area .....	33
5.3	Implications for social infrastructure .....	35
6.	Existing regional social infrastructure .....	36
6.1	Schools and education .....	36
6.2	Justice services.....	38
6.3	Emergency services.....	38
6.4	Health facilities.....	40
6.5	Cemeteries.....	40
6.6	Cultural facilities and multi-purpose community centres .....	40
6.7	Sport and recreation facilities .....	40
6.8	Regional open space .....	43
6.9	Implications for social infrastructure .....	43
7.	The future Greater Macarthur Investigation Area .....	45

8.	Framework for the provision of social infrastructure .....	47
9.	Staging .....	54
9.1	Education .....	54
9.2	Justice .....	56
9.3	Emergency services.....	57
9.4	Health.....	59
9.5	Cemetery .....	60
9.6	Sport and recreation .....	61
9.7	Cultural facilities.....	61
10.	Recommendations for Greater Macarthur Investigation Area .....	63

# Table index

Table 1 Multi criteria analysis input developed by the Department of Planning and Environment relating to social infrastructure .....	2
Table 2 Example of types of social infrastructure typically provided by local government, federal or state government and the private/non-government sector.....	3
Table 3 Landownership and net developable area that comprises the proposed Wilton Junction development.....	15
Table 4 Indicative development statistics.....	17
Table 5 Potential home sites .....	18
Table 6 Social infrastructure catchments .....	25
Table 7 Social infrastructure benchmarks.....	25
Table 8 Population of areas within the Greater Macarthur Investigation Area .....	30
Table 9 Age distribution and median age.....	31
Table 10 Household composition .....	32
Table 11 Potential dwellings and population estimates for the Greater Macarthur Investigation Area .....	46
Table 12 Definition of centre hierarchy .....	47
Table 13 Framework for the provision of social infrastructure .....	49
Table 14 Regional open space.....	65
Table 15 Education .....	66
Table 16 Health facilities .....	68
Table 17 Sport and recreation facilities .....	68
Table 18 Emergency and justice services.....	69
Table 19 Cemeteries .....	70

# Figure index

Figure 1 Social infrastructure hierarchy .....	4
Figure 2 Methodology for undertaking the social infrastructure assessment.....	5
Figure 3 Greater Macarthur Investigation Area.....	8
Figure 4 Planning proposals submitted to the Department of Planning and Environment within the Greater Macarthur Investigation Area .....	12
Figure 5 Draft Menangle Park Structure Plan .....	14
Figure 6 Wilton Junction Master Plan .....	16
Figure 7 Map of the South West Subregion .....	21
Figure 8 Age profile of Picton .....	33
Figure 9 Age profile of Camden .....	34
Figure 10 Education facilities that service the Greater Macarthur Investigation Area .....	37
Figure 11 Emergency services that service the Greater Macarthur Investigation Area.....	39
Figure 12 Health facilities that service the Greater Macarthur Investigation Area.....	41
Figure 13 Sport and recreation facilities that service the Greater Macarthur Investigation Area .....	42
Figure 14 Regional open space .....	44
Figure 15 Hierarchy of centres proposed for Greater Macarthur .....	45
Figure 16 Continuum of education facility provision to accommodate the various development scenarios .....	55
Figure 17 Factors identified in the <i>State Infrastructure Strategy</i> that will close the potential education infrastructure funding gap .....	56
Figure 18 Continuum of justice facility provision to accommodate the various development scenarios.....	57
Figure 19 Continuum of ambulance facility provision to accommodate the various development scenarios .....	58
Figure 20 Continuum of police station facilities.....	59
Figure 21 Continuum of fire station facilities .....	59
Figure 22 Continuum of health facility provision to accommodate the various development scenarios.....	60
Figure 23 Continuum of stadia facilities .....	61
Figure 24 Continuum of art and cultural facilities .....	62

## Appendices

Appendix A – Regional infrastructure audit



# 1. Introduction

## 1.1 Purpose of this report

Growth within Sydney's greenfield release areas has primarily been focussed within the North West and South West Growth Centres. Structure Plans for these areas were released in 2006 and these have guided the development and release of land within these areas. However, in *A Plan for Growing Sydney* the State Government has acknowledged that planning will need to extend beyond these existing Growth Centres to identify future areas that will accommodate growth. Action 2.4.2 of the Plan requires the development of a framework for the identification of new growth centres. The role of this framework is to assist with the orderly release of land enabling the efficient delivery of infrastructure whilst also enabling the cumulative impact of development to be assessed.

There have been a number of proposals submitted to the Department of Planning and Environment ("Department") to redevelop land within the Greater Macarthur Investigation Area. These land proposals were initiated as a result of the Potential Home Sites Program facilitated by the Department in 2013. For this reason, *A Plan for Growing Sydney* identified the Greater Macarthur Investigation Area as a potential new Growth Centre for Sydney. One of the priorities for the South West Region within the Plan is to investigate the suitability of the Greater Macarthur Investigation Area for a future Growth Centre.

The purpose of this report is to investigate the provision of regional social infrastructure that would be required to support the potential population should the Greater Macarthur Investigation Area be pursued as a Growth Centre in the future. In addition to informing any potential future development of the Greater Macarthur Investigation Area, this report has developed a framework for identifying the social infrastructure requirements of future growth centres.

This report has been developed to respond to the multi criteria analysis provided in Table 1 relating to social infrastructure developed by the Department of Planning and Environment in accordance with Action 2.4.2 of *A Plan for Growing Sydney*.

Table 1 Multi criteria analysis input developed by the Department of Planning and Environment relating to social infrastructure

Action 2.4.2 Criteria	How can this be measured relevant to Greater Macarthur (present with maps where possible)	Implications for urban development / future Growth Centre (present on map where possible)
<b>Cost of delivering services infrastructure, schools and health facilities</b> <b>Economic and social cost of higher transport costs, reduced social outcomes and poorer access to economic opportunities and services</b>	<ul style="list-style-type: none"> <li>Quantify existing social infrastructure items and capacity</li> <li>Identify optimal infrastructure required to service "ultimate development" footprint of urban capable land, optimal sequencing and strategic level costs</li> <li>Identify appropriate catchment areas for the provision of education, health and emergency services that takes into consideration travel time and distances.</li> <li>Determine thresholds for each facility type that identify when existing facilities are at capacity and additional facilities are required.</li> </ul>	<ul style="list-style-type: none"> <li>Ultimate development infrastructure needs and associated costs</li> <li>Sequenced development infrastructure needs based on dwelling milestone triggers and associated costs</li> </ul>
<b>Constraints to development</b>	<ul style="list-style-type: none"> <li>Identify geographical constraints to optimal servicing of "ultimate development" footprint</li> <li>Identify opportunities for co-location of social infrastructure.</li> </ul>	
<b>Private sector interest in developing particular land</b>	<ul style="list-style-type: none"> <li>Identify which items need to delivered as enabling infrastructure for release of particular land and changes to costs and sequencing (broken down by individual proposal)</li> </ul>	<ul style="list-style-type: none"> <li>Identify further assessment requirements specific to the relevant private proposals</li> </ul>

## 1.2 Regional social infrastructure

Social infrastructure incorporates the facilities and services that are used for the physical, social, cultural or intellectual development or welfare of the community. It includes physical infrastructure such as libraries, community centres and cultural facilities that facilitate the delivery of social services and activities, as well as open spaces, parks, recreation areas and sport fields that support sport, recreational and leisure uses. Regional social infrastructure also includes education, emergency services and justice facilities that are needed to service new communities.

Social infrastructure is not limited to that provided by federal, state and local governments. It also includes those services and facilities that are operated by non-profit community organisations as well as the private sector. Table 2 provides examples of the types of facilities that are provided by these different sectors. For some facilities, such as childcare, several sectors may be providers while there are many examples of facilities where funding has been “pooled” or shared by different sectors.

Table 2 Example of types of social infrastructure typically provided by local government, federal or state government and the private/non-government sector

Local Government	Federal or State Government	Private/Non-Government
Childcare	Public schools	Childcare
Libraries	Public hospitals	Entertainment facilities (cinemas, hotels etc)
Open space and Parks	Open space and parks	Private hospitals
Playgrounds	Sport stadiums	Private schools
Sports stadiums	Emergency services and justice services/facilities	Commercial gyms and recreation centres
Playing fields, pitches and courts	Playing fields, pitches and courts	Museums
Walkways/cycle ways	Museums	Galleries/exhibition spaces
Skate and BMX facilities	Gallery/exhibition spaces	Places of worship
Multi-purpose halls and community centres	Cultural centres	
Cultural centres	Public transport	

When planning and delivering social infrastructure it is important to consider the size and geographic distribution of the population that it is servicing. It is standard practice for social infrastructure to be considered in accordance with a hierarchy that extends from local, through to district and regional, as depicted in Figure 1.

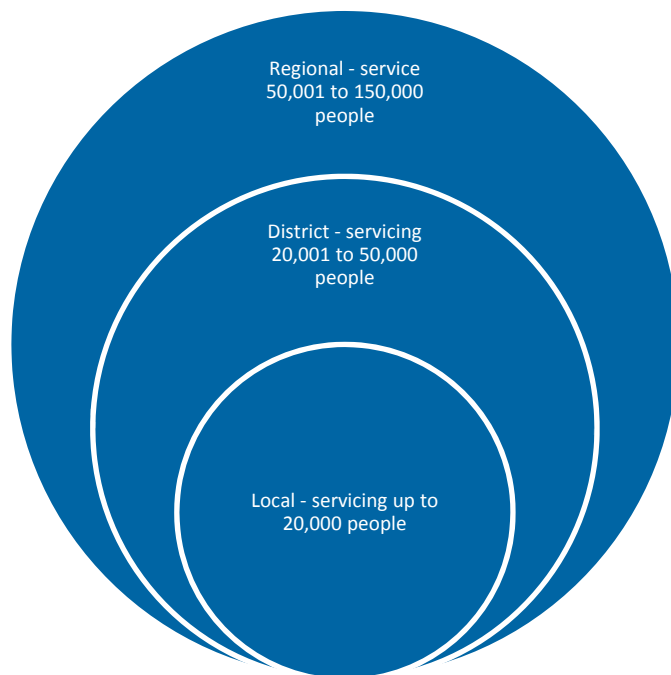


Figure 1 Social infrastructure hierarchy

The purpose of this report is to assess the level of provision for regional social infrastructure. In accordance with the hierarchy, regional social infrastructure is considered to be the facilities that would service above 50,000 people. Given that this regional infrastructure assessment will inform any future development that occurs in the Greater Macarthur Investigation Area, the focus of this assessment is for social infrastructure that is provided by the Public/Government Sector, as outlined in Table 2.

Regional social infrastructure for the purpose of this assessment will therefore incorporate the following facilities:

- Public schools including primary schools, central schools and high schools.
- Tertiary institutions.
- Justice facilities and services.
- Emergency services.
- Health services including health centres and hospitals.
- Cemeteries.
- Multi-purpose community centres servicing a population above 50,000.
- Performing arts/cultural centres.
- Sport and recreation facilities eg stadiums and competition facilities.
- Regional open space.

### 1.3 Methodology

Our methodology for this Study has been conducted in accordance with the Social Infrastructure Planning Process that has been developed by GHD. This process has been informed by a policy review of social infrastructure provision both nationally and internationally as well as consultation with 20 Councils across NSW. This process involves three distinct phases of work, as identified in Figure 2.

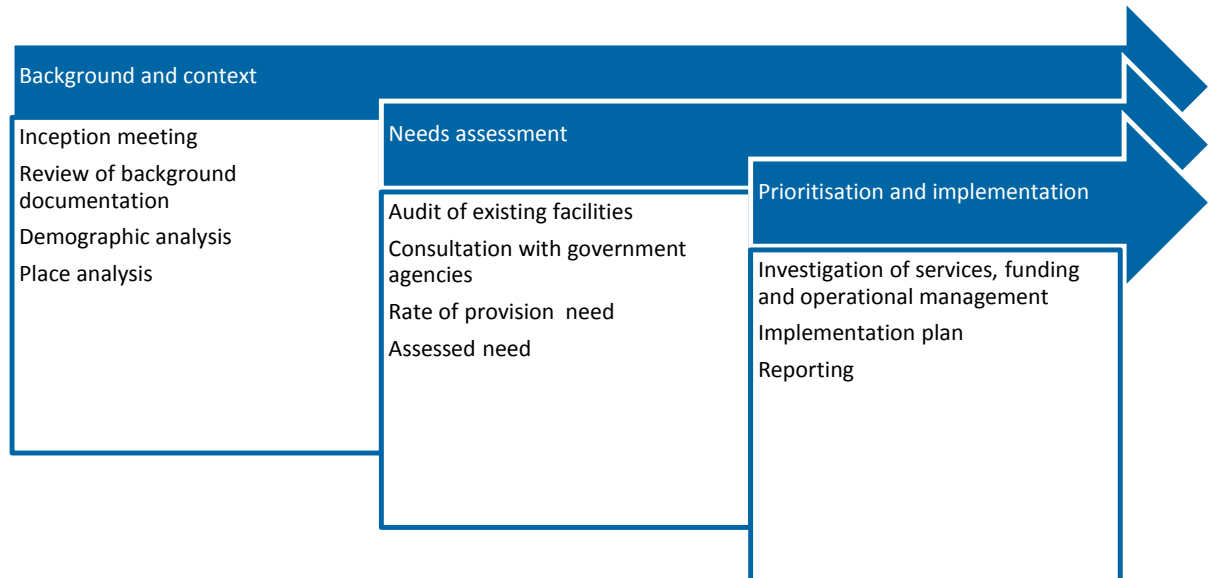


Figure 2 Methodology for undertaking the social infrastructure assessment

Consultation will need to be undertaken with all of the State Government agencies responsible for the provision of social infrastructure. However for some agencies consultation will be more effective at later stages of the project when there is a clearer understanding of the proposed population and its distribution throughout the Greater Macarthur Investigation Area.

At this stage in the development of the Structure Plan, priority was given for consultation with the State Government agencies responsible for social infrastructure that have large land area requirements. In addition to ensuring that an appropriate area of land is identified for these facilities, the cost of facilities would assist in developing the business case for the Greater Macarthur Investigation Area to become a future Growth Centre. Interviews were conducted with:

- NSW Department of Education and Communities.
- NSW Department of Justice.
- South Western Sydney Local Health District.
- NSW Ambulance.
- Cemeteries and Crematoria NSW.
- NSW Police.
- NSW Department of Sport and Recreation.
- Arts NSW.
- Rural Fire Service.
- Fire NSW.

## 1.4 Scope and limitations

This report has been prepared by GHD for the NSW Department of Planning and Environment and may only be used and relied on by Department of Planning and Environment for the purpose agreed between GHD and the Department of Planning and Environment as set out in section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than Department of Planning and Environment arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

GHD has prepared this report on the basis of information provided by Department of Planning and Environment and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

## 1.5 Implications for social infrastructure

- Action 2.4.2 of *A Plan for Growing Sydney* requires the development of a framework for the identification of new Growth Centres. This report responds to the multi criteria assessment developed by the Department to prepare a framework for the provision of social infrastructure.
- The focus of this report is regional social infrastructure. This level of infrastructure caters for populations over 50,000 people and it is predominantly provided at the State Government level.
- Consultation with the government agencies was focussed on those agencies that would have significant land requirements that would need to be identified at this early stage of planning. As further detailed planning is undertaken addition consultation will be required with these agencies as well as other community organisations and local government.

## 2. Location and context

### 2.1 Greater Macarthur Investigation Area

The Greater Macarthur Investigation Area is located within the Campbelltown and Wollondilly Local Government Areas (LGA). It is about 70km south-west from the Sydney Central Business District (CBD), with the closest regional city centre at Campbelltown-Macarthur. The site extends from Menangle Park in the north to Wilton in the south. It is predominantly rural with a number of small villages and suburbs distributed throughout, with the main population centres being Appin, Wilton, Menangle Park, and suburbs on the edge of Campbelltown-Macarthur. The site boundary has been based on the area identified within *A Plan for Growing Sydney* however it is anticipated that this boundary will evolve as the investigation studies confirm the urban developable footprint. The area is illustrated in Figure 3 below.

The area is far from major employment centres. From Wilton, Sydney CBD and Macquarie Business Park are over 90 minutes' drive, while Parramatta and Norwest CBDs are over 60 minutes' drive.

The area is south of both the North West and South West Growth Centres. The Hume Highway, which runs through the western part of Greater Macarthur Investigation Area, connects residents to the North West and South West Growth Centres via the M7 and the rest of Sydney via other motorway connections. Future major employment areas of the Badgerys Creek Airport Precinct and Broader Western Sydney Employment Area (WSEA) are up to 45 minutes' drive from Wilton. In the future, the proposed Outer Sydney Orbital motorway would connect the Growth Centres with the Greater Macarthur Investigation Area. Other potential infrastructure linkages are the Appin Bypass, Spring Farm Link Road, Maldon-Dombarton freight line, which would improve access for the Greater Macarthur Investigation Area.

The Southern Highlands railway line serves Menangle Park, Menangle and Douglas Park within the Greater Macarthur Investigation Area. Passengers travelling to the metropolitan Sydney area are required to change trains at Campbelltown Station.

The following section presents a description of the main population centres within the Greater Macarthur Investigation Area.

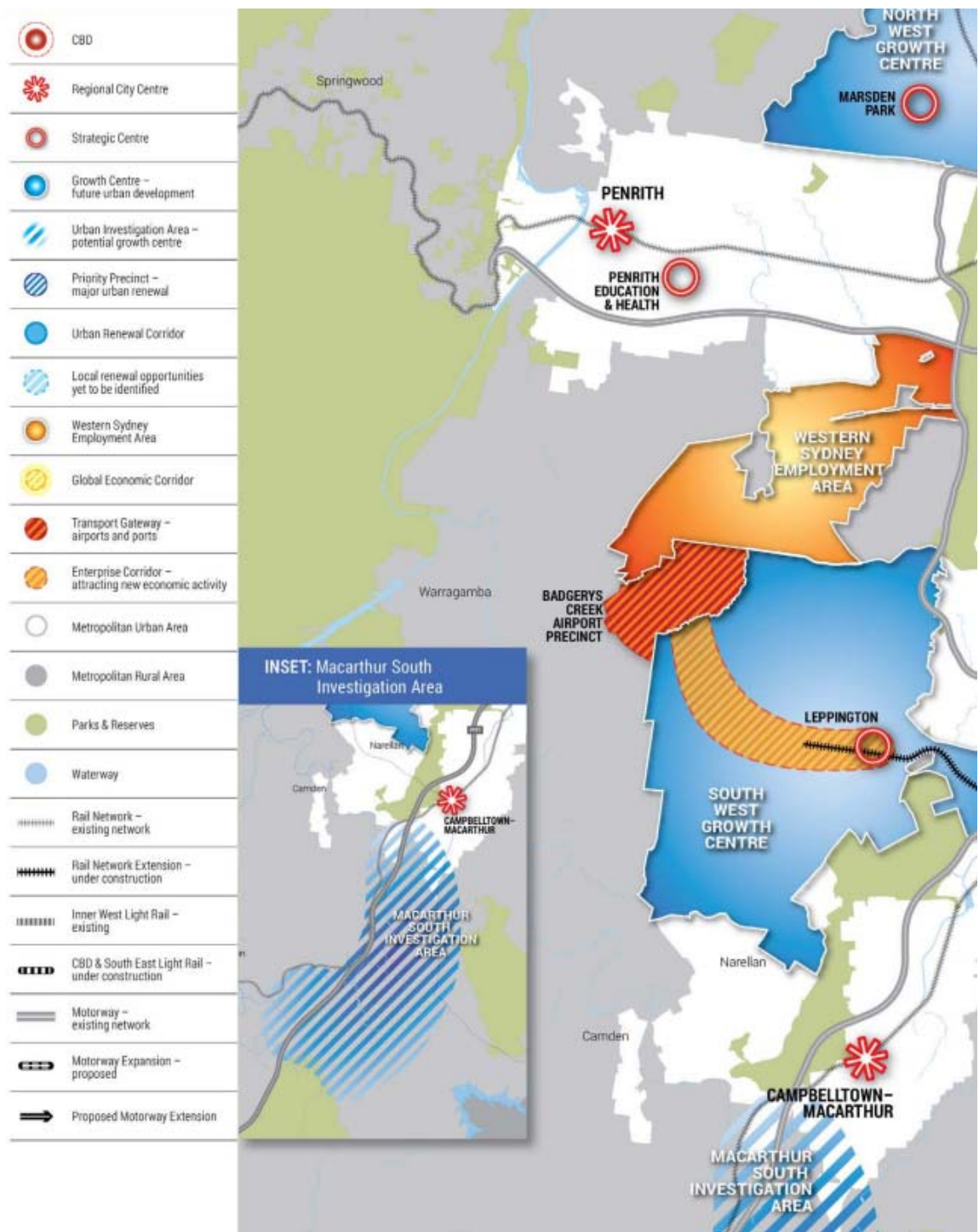


Figure 3 Greater Macarthur Investigation Area

## 2.2 Appin

Appin is a rural town in the Wollondilly Shire LGA, with a total population of 1,803 persons in 2011 (an additional 61 persons since 2006). Appin's development is concentrated along Appin Road, the town's main road which connects to Campbelltown to the north and Thirroul towards Wollongong to the south-east. The town is predominantly residential, with some historic buildings including the Appin Public School building.

In terms of regional social infrastructure, Appin Public School is the only primary school in Appin. There are currently no high schools, with the closest high schools located in Picton and South Campbelltown. It is likely that children from Appin attend both primary and high schools in these areas. Similarly, Appin residents may also access other services and facilities in these areas as well as the main regional centre of Campbelltown situated further north.

## 2.3 Wilton

Wilton is a small town in the Wollondilly Shire LGA. In 2011, the population was 1,890 persons (an additional 612 persons since 2006). Part of Wilton's growth can be attributed to the Bingara Gorge development, a residential land release area currently being developed by Lend Lease.

While Wilton covers a large area (64.9km<sup>2</sup>), most of the town's development is contained between Picton Road in the south and Hume Highway in the west.

Similar to Appin, Wilton residents are likely to access regional services and facilities in Picton. In the future, Bingara Gorge is planned to provide facilities, including 113 hectares of open space/bushland, and a country club and leisure centre to serve the growing resident population of Wilton. Wilton Public School opened in 2011.

## 2.4 South Campbelltown district

The Greater Macarthur Investigation Area contains the more densely populated suburbs of Ambarvale, Glen Alpine and Rosemeadow in the north-east. These are located within the established urban area surrounding the significant regional centre of Campbelltown-Macarthur and are likely to have different social characteristics to the rest of the Greater Macarthur Investigation Area, which is predominantly rural. As a result, these three suburbs are collectively referred to as the South Campbelltown district for the purpose of this Study.

The South Campbelltown district is adjacent to the Campbelltown, which provides major services and facilities for the Macarthur Region (Campbelltown, Camden and Wollondilly Shire LGAs), including health, tertiary education and sport and recreation facilities. These three suburbs are likely to contribute to the network of social infrastructure provided for the Macarthur Region due to their proximity to Campbelltown.

## 2.5 Menangle Park

Menangle Park is a rural residential suburb with a small population of 241 persons. It is located within the southern part of Campbelltown LGA being roughly bounded by Fitzpartick Street to the north; Cummins Road to the east; Racecourse Avenue to the south; and the Nepean River to the west. The suburb's residential area is located to the east of Menangle Park Station and the railway line. To the west of the railway line are land uses related to the Menangle Park Paceway.

Menangle Park's 2011 population of 241 persons has remained relatively constant since 2006 (237 persons). Historically however there has been slight population decline (from 262 persons in 2001).

### 3. History of the Greater Macarthur Investigation Area

#### 3.1 A Plan for Growing Sydney, December 2014

*A Plan for Growing Sydney* is the NSW Government's 20-year plan for the Sydney Metropolitan Area. The Plan outlines several Directions and Actions which are relevant to this assessment. Direction 1.11 of the Plan shows that growing populations will be more attracted to live in places with appropriate social infrastructure. Action 1.11.3 identifies that Government will undertake long term planning for social infrastructure for growing communities.

Direction 2.4 of the Plan is for the delivery of timely and well planned greenfield precincts and housing. According to the Plan, in recent years, greenfield housing has contributed almost a quarter of Sydney's housing growth. This growth has primarily been focused within the North West and South West Growth Centres. The State Government has however acknowledged that planning needs to extend beyond these existing Growth Centres to identify future areas that will be able to accommodate growth. Action 2.4.2 requires the development of a framework for the identification of new growth centres. The role of this framework is to assist with the orderly release of land enabling the efficient delivery of infrastructure whilst also enabling the cumulative impact of development to be assessed.

The Plan identifies the Greater Macarthur Investigation Area as a potential new growth centre for Sydney. Within the Plan for the South West Region, one of the priorities for is to investigate the suitability of the Greater Macarthur Investigation Area for a future growth centre. These investigations are to also enable the development of a framework for identifying new growth centres.

Action 1.11.5 calls for the delivery of long-term planning for cemeteries and crematoria infrastructure. Research suggests that cemetery space in Sydney may be exhausted by 2050 with critical shortages apparent by 2036. A pilot study of cemetery capacity/demand was recently undertaken in the South West Subregion. The findings will be fed into planning processes to ensure cemetery needs can be taken into account.

#### 3.2 Development potential within the Greater Macarthur Investigation Area

The Greater Macarthur Investigation Area was established due to a number of development proposals within the region that have been submitted to the Department of Planning and Environment for Gateway determination. The majority of these sites originated from the Potential Home Sites Program in 2013 (as described in section 3.3). Figure 4 presents a summary of the key planning proposals that have been submitted to the Department of Planning and Environment. The following section provides an overview of these planning proposals, focussing on the social infrastructure proposed by the proponents to support the planned development.

### 3.2.1 Macquariedale Road, Appin

The Macquariedale Road, Appin planning proposal details changes sought to the Wollondilly Local Environmental Plan 2011 (WLEP 2011) to rezone approximately 62.8 hectares of mostly rural land to permit low and medium density housing, the environmental management of ecologically important land, and to protect land required for the proposed future Appin Bypass.

It is estimated that Appin has a development potential of 437 to 587 dwellings. Applying a “marginal occupancy rate” of 2.66 persons/dwelling, the zoned, potential dwellings in Appin would result in a growth in Appin’s population from 1,530 to 2,800 (numbers have been sourced from the Wollondilly Development Contributions Plan 2005).

The Draft Voluntary Planning Agreement for Macquariedale Road, Appin details works proposed to be undertaken by developers to support the land to be rezoned for residential development instead of paying contributions under the Wollondilly Contributions Plan 2011. For community infrastructure, the Draft Voluntary Planning Agreement includes work to restore the Appin Inn and its subsequent use as a community facility for history related purposes, dedication of land for a neighbourhood park and embellishments to existing open space areas.

Appin has a public school offering education facilities for 4 to 12 year olds. The proponent has ascertained through personal communication with Appin Public School that it has room for about three additional classes within the school and the school could be expanded to accommodate some growth at Appin.

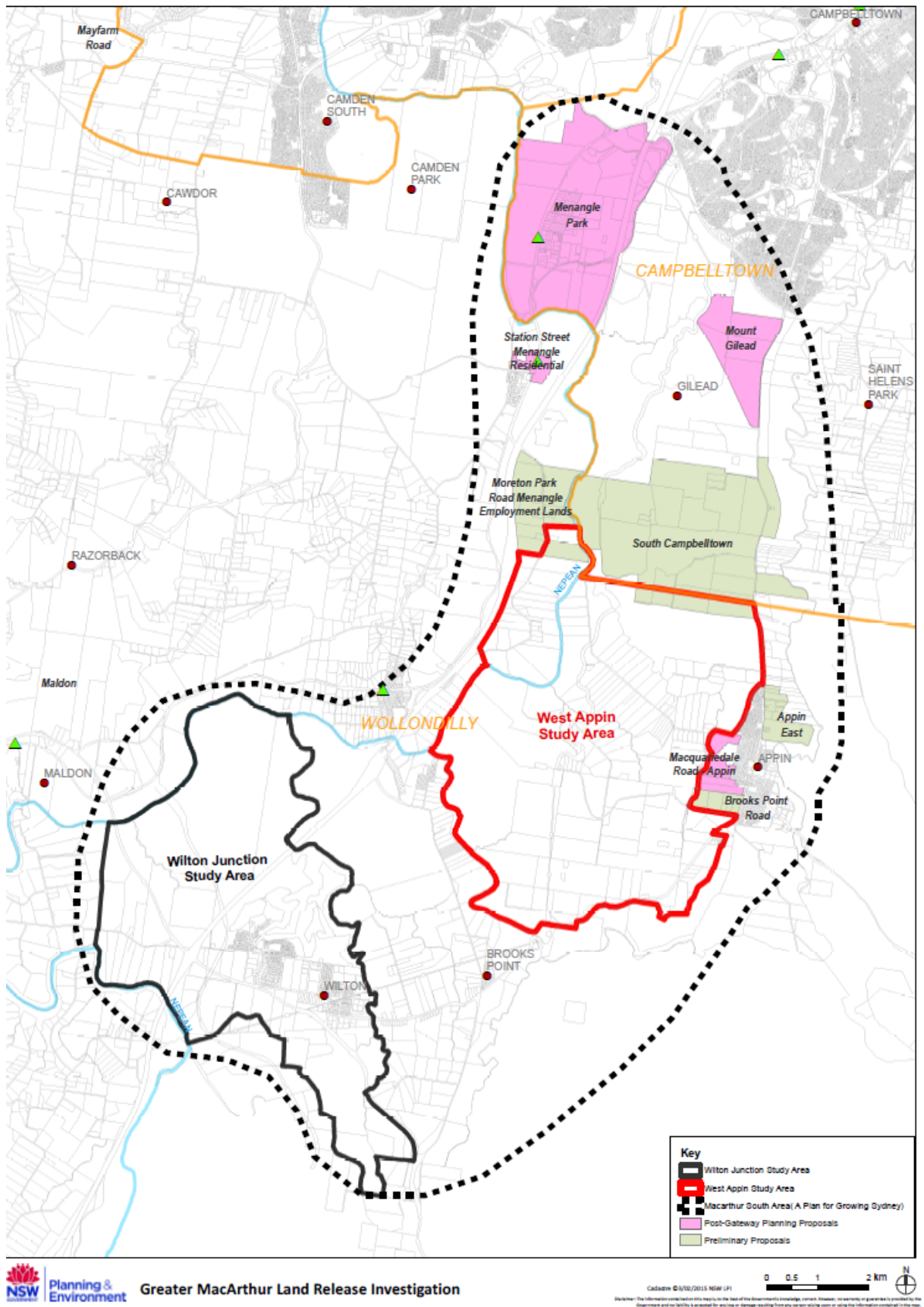


Figure 4 Planning proposals submitted to the Department of Planning and Environment within the Greater Macarthur Investigation Area

### 3.2.2 Menangle Park

Currently Menangle Park is a rural residential area used extensively by the horse industry. The proposed development is approximately 872 hectares, with UrbanGrowth NSW (formerly Landcom) and Campbelltown City Council as major landowners in the area.

In 2010 a draft Structure Plan, provided in Figure 5, was prepared to facilitate development within the area. Several land use scenarios with varying lot yields were assessed. In addition to the development of a new town centre, the Structure Plan allowed for the development of between 2,500 and 4,600 dwellings, yielding an estimated population of 8,000 – 15,502 residents.

Existing community infrastructure is very limited with residents travelling outside the area for work, shopping and services. The following community infrastructure is located within Menangle Park:

- Menangle Park Bush Fire Brigade.
- Menangle Park Paceway.
- Campbelltown Steam and Machinery Museum.
- Menangle River Reserve.
- Busways bus service to Macarthur Square and Campbelltown Town Centre.

In order to accommodate the proposed population growth, the Menangle Park Social Assessment report identifies the following issues relating to the existing provision of social infrastructure in the area.

- Lack of child care, preschool and parenting services.
- Lack of formal and informal youth recreation, social and cultural infrastructure with existing youth centres not fulfilling the needs of local youth.
- Lack of services for special needs groups ie people with a disability, indigenous residents, residents from non-English speaking backgrounds, etc.
- Lack of services and appropriate accommodation for older residents.
- Poor existing public transport services with no pedestrian/cycle network in place.
- Poor access to council library services.

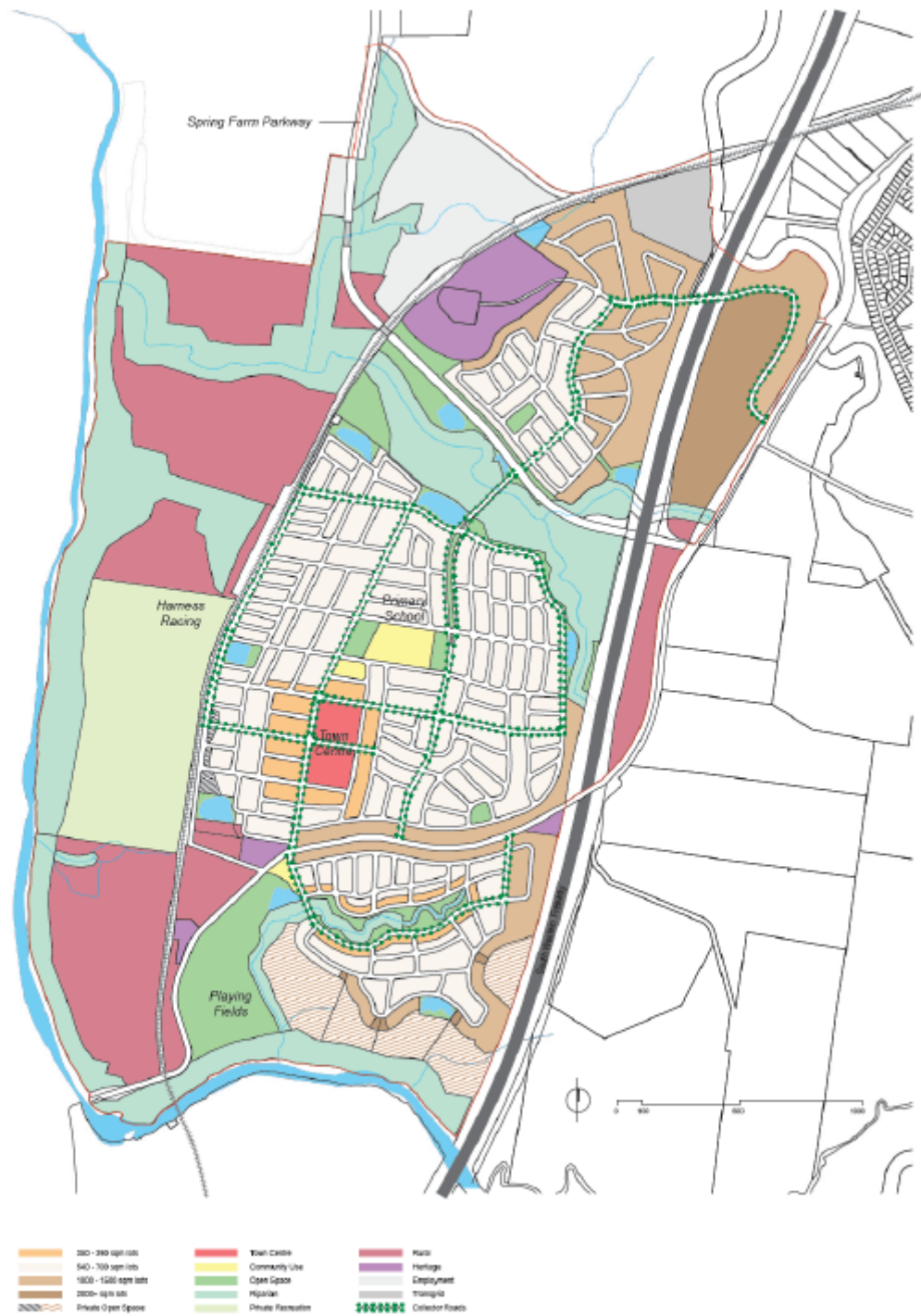


Figure 5 Draft Menangle Park Structure Plan

### 3.2.3 Wilton Junction

Wilton Junction is made up of a consolidated land ownership of more than 2,700ha. Details of landownership and the net developable area are provided in Table 3.

Table 3 Landownership and net developable area that comprises the proposed Wilton Junction development

Landowner	Gross area (ha)	Net developable area (ha)
Lend Lease	455	240
Bradcorp	872.4	458.7
Governors Hill	175.3	123.5
Walker Corporation	405.2	230.3
Other landowners*	572.3	489.2
TOTALS	2480.2	1541.7

\* This comprises 113 other private landowners, excluding the new Bingara Gorge estate and the existing Wilton village, who will not be affected by any proposed amendments to the existing Wollondilly Shire Council planning provisions.

The proposal for Wilton Junction is the development of a new town accommodating between 11,000 and 13,000 new homes and 11,000 jobs. The Wilton Junction Master Plan (see Figure 6) allows for residential neighbourhoods to be created around green spaces providing a range of housing choice and facilitating healthy lifestyle options for all new residents. A new town, comprising of approximately 17ha, will be established within the north-west quadrant of the area and will be surrounded by employment generating uses for business, bulky goods and light industry, comprising of approximately 120 - 130ha of land.

The Master Plan has allowed for the development of smaller neighbourhood centres with local shops and community facilities. The objectives of the Master Plan include the creation of a self-sustaining community as well as the preservation of environmental features and heritage items.

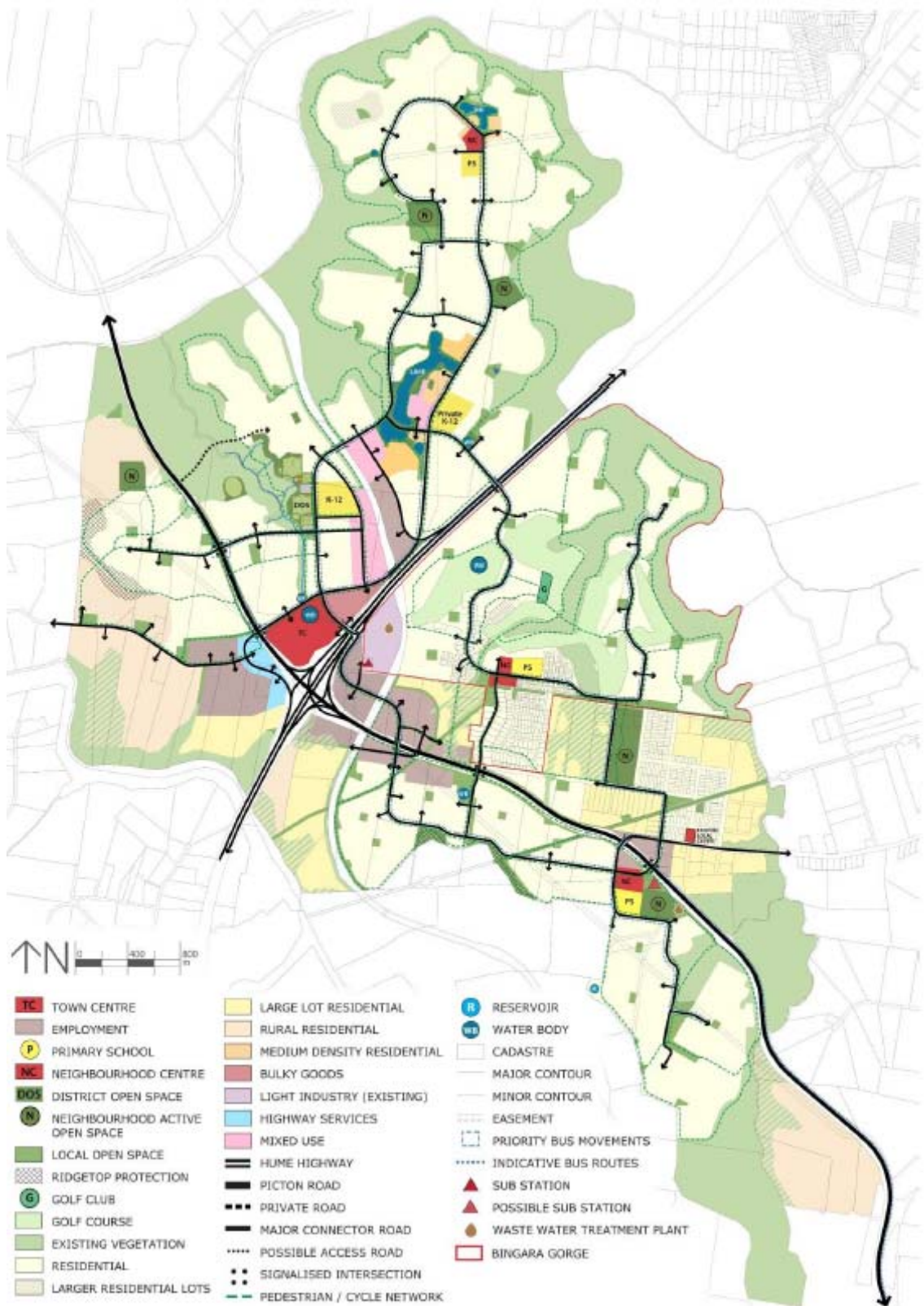


Figure 6 Wilton Junction Master Plan

Elton Consulting (2014) recommended the following district level infrastructure in Wilton Junction:

- A district community hub consisting of a multi-purpose community centre (1,430 square metres GFA) and a library (1,474 square metres GFA).
- A K-12 public school located in proximity of the new town centre and adjacent to adjoining district playing fields.
- An independent K-12 school located in Wilton West (Bradcorp land).
- A Regional Integrated Primary and Community Care Centre (community health facility) located in the town centre.
- An aquatic/gym/indoor sports centre of 4,000-6,000 square metres GFA located either in or near the town centre, school or lake precinct.
- A police station on a 4,000 square metre site located on the fringe of the town centre (could be co-located with courthouse).
- A fire station on a 2,000 square metre site located on fringe of commercial area with good access to arterial roads.
- An ambulance station on a 3,000 square metre site located in a fringe commercial or light industrial area with good access to arterial roads (could be co-located with fire station).

#### 3.2.4 Mount Gilead

The Mount Gilead site has been referred to in a number of State Government strategic planning documents including the Metropolitan Development Program 2010/2011 which identifies the site as a greenfield release area. It was estimated that the site could yield 1,500 lots as outlined in Table 4.

Table 4 Indicative development statistics

Land	Area
Site Area	210 ha
Total Developable Land	105 ha
Dwelling Yield	1500 lots
Average Lot Size	700sqm
Estimated % of undevelopable land (roads, infrastructure, riparian corridors) based on previous studies)	50%

According to the background information submitted to the Department of Planning and Environment to support the Mount Gilead planning proposal, the development would be constructed in several stages so that services and infrastructure could be modified and improved to cater for increasing demand. This would allow the development to be appropriately serviced with progressive upgrades and extensions of existing services.

The planning proposal states that the requirements for community services and the capacity of social infrastructure such as schools, community halls, libraries and playing fields, will need to be investigated.

In April 2015, Campbelltown City Council placed the planning proposal and Draft Development Control Plan (DCP) on public exhibition. The Draft DCP states that the development will be between 1,400 to 1,700 dwellings, and based on an occupancy rate of three people per household, a likely population of up to 5,088 people. The Draft DCP proposes to provide not only significant areas of passive open space, but also an integrated community hub which will include sporting facilities, a community building with a retail outlet, car parking and a connected biodiversity corridor.

### 3.3 Potential Home Sites Program, Review of Potential Housing Opportunities in the Sydney Region (2013)

The *Review of Potential Housing Opportunities* was established to test the market for large, well-located greenfield sites which could bring housing to the market quickly at no additional cost to government.

This review identified several sites as relatively close to enabling infrastructure with capacity at least for initial stages of development. The sites located in the Macarthur Region for immediate action were Blairmount and Eagle Vale Drive within Campbelltown LGA, and a number of strategic investigation sites were located within Wollondilly Shire LGA: Appin Vale, Bingara Gorge, Brooks Point, Appin, Cawdor, Mayfarm Road, Brownlow Hill, Silverdale, West Thirlmere, Wilton South and Wilton West.

During consultation associated with this review, councils expressed concern about the potential unfunded gap between the Section 94 cap and local infrastructure costs which, according to Penrith City Council, could be as high as \$58,500 per dwelling. Some councils were concerned about additional infrastructure burdens of development in adjoining council areas and their inability to recoup costs.

The review identified that most sites were not well located with many in relatively remote rural areas with poor or no access to public transport and risk of social isolation.

Table 5 Potential home sites

Site name	Explanation	Potential dwellings
Appin Vale	Consider under review of Wollondilly Growth Management Strategy and seek public comment	2,000
Bingara Gorge		535
Brooks Point, Appin		3,500
Cawdor		3,000 to 4,000
Mayfarm Road, Brownlow Hill		3,250
Silverdale		2,200
West Thirlmere		1,900
Wilton South		2,000
Wilton West		5,500 to 6,000

### 3.4 Implications for social infrastructure

- The Potential Home Sites Program encouraged developers and landowners within the Greater Macarthur Investigation Area to redevelop their land.
- A number of planning proposals across the Greater Macarthur Investigation Area have been submitted to the Department of Planning and Environment.
- Despite the number of planning proposals there has not been a study of the cumulative impact that these developments could have on local infrastructure including social infrastructure.

## 4. Policy context for regional social infrastructure

This section of the report outlines the key State Government and local council policy positions in regard to the provision of regional social infrastructure, and the implications for Greater Macarthur Investigation Area.

### 4.1 State Government policies

#### 4.1.1 Planning New Schools, School Safety and Urban Planning Advisory Guidelines (2014)

The Asset Management Directorate of the NSW Department of Education and Communities has developed this document as non-statutory general advice to facilitate the planning of new schools.

The document acknowledges that predicting where and when a new school is required is complicated by a range of social, economic and land use variables. Nevertheless it provides some high level demand calculations that are used as a basis for determining a new school. In greenfield areas it recommends:

- One primary school per 2000-2500 new dwellings.
- One high school per 6000 – 7500 new dwellings.
- One School for Specific Purpose per 17,000 new dwellings.

According to the document a school will only be funded, built and operated where there is demonstrated need for a new school. Consideration is therefore given to:

- Compliance with the *Education Act 1990*.
- Budget availability and competing priorities for funding of other infrastructure projects.
- Enrolment forecasting and demographic profiling.
- The effect on surrounding, existing schools.
- The capacity of existing schools to take new enrolments or be expanded to take them.
- The property tenure options that are available.
- The education model proposed.
- Dwelling occupation and take-up rates.
- Housing development staging.
- Housing market characteristics.

The document also provides a checklist for considering the range of issues that should be addressed when identifying a site for a new school. In regards to site area it is recommended that a primary school/special purpose school be up to 3ha and a secondary school up to 6ha. It is recommended that schools be located central to residential areas with the majority of students within a 1.6km catchment area.

#### 4.1.2 Sydney's Open Spaces: Vol 6: South West Subregion Audit (2014)

The *Sydney Open Space Audit* provides a quantitative assessment of public open space within Metropolitan Sydney. The Audit makes reference to open space benchmarks. The benchmarks are derived from the Recreation and Open Space Planning Guidelines for Local Government, published by the Department of Planning in 2010. The Audit includes the Greater Macarthur Investigation Area.

##### Open space designation

Open space is further differentiated by whether its primary use is for active recreation (outdoor sport), passive recreation (park) or linear and linkage purposes.

Active open space supports team sports training and competition. As such it is used for organised sports and typically features sports facilities such as playing fields, change rooms, grandstand or car parks.

Parks are open space areas that support general community recreation, development and well being uses. Although their primary focus is on passive or informal recreation they are also often used for individual health and fitness pursuits. They often include informal turfed areas as well as infrastructure such as playgrounds, ornamental gardens, walking tracks, lighting, picnic tables, shelters and BBQs. They may also include buildings such as toilets or community services.

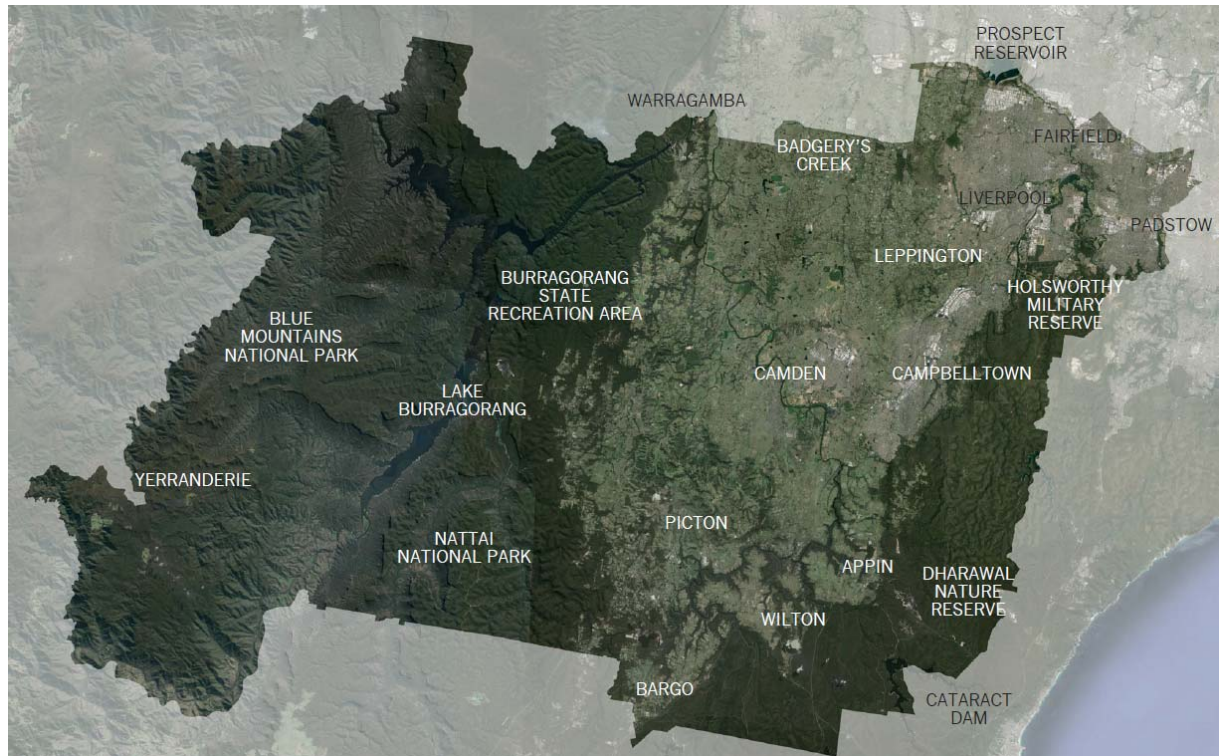
Linear and linkage open space includes creek and river reserves and flood ways, as well as small pathways linking residential areas to local and regional trails either via dedicated lands or using reserves such as former rail or water and trunk drainage reserves.

##### Open space in the South West Subregion

The subregion is very well supplied with regional open space, with it accounting for 52% of all land. The entire western half of the subregion is regional open space. As a result, regional open space constitutes the major portion (96%) of all open space in the subregion (170,844 ha). All residents including those in rural areas are located within 10km of regional open space.

The portion of regional open space that is categorised as active regional open space is fairly small (523 ha or 0.32%). The active regional open space is unevenly distributed across the subregion. The majority of residents in the subregion, including those in existing urban areas, have to travel further than the recommended distances to reach regional active open space.

Figure 7 Map of the South West Subregion



#### 4.1.3 State Infrastructure Strategy Update 2014 (2014)

Building on the findings of the *State Infrastructure Strategy*, this report is an update providing Infrastructure NSW's independent advice to the NSW Government on the next round of critical infrastructure priorities for NSW. Critical infrastructure priorities and recommendations related to the Greater Macarthur region are:

- An upgrade to Campbelltown hospital and a south-west Sydney paediatric facility new could be funded through the *Rebuilding NSW* initiative.
- Potential extension of the heavy rail network to the growth centres after completing the rapid transit network (including North West and South West Rail Links).
- Priorities for corridor protection, including the North West Rail Link extension to St Marys/Mt Druitt via Marsden Park.
- The Outer Sydney Orbital (M9) corridor from the Central Coast to the Illawarra via a corridor connecting the North West and South West Growth Centres and future Western Sydney Airport. It acknowledges that the actual delivery of the M9 is not planned to occur during the 20-year timeframe of the *State Infrastructure Strategy*.

#### 4.1.4 State Infrastructure Strategy (2012)

The *State Infrastructure Strategy* is Infrastructure NSW's 20-year strategy, which identifies and prioritises the delivery of critical public infrastructure in NSW. It provides independent advice and recommendations to the NSW Government. Critical infrastructure priorities and recommendations related to the Greater Macarthur Investigation Area are:

- Over the next 20 years, Greater Sydney's employment is expected to become more services based, with less manufacturing opportunities. This will present a challenge in the South West, which has a particular focus in this sector of the economy.

- Road links between Sydney's West and South-West and Global Sydney are particularly critical. They allow people in Greater Sydney – particularly Western Sydney – to access Global Sydney, and connect Sydney's gateways with the industrial lands of the West and South-West.
- Major new health projects are proposed for Liverpool and Campbelltown Hospital, which will help respond to growth in health service demand.

#### 4.1.5 The NSW Stadia Strategy (2012)

The NSW Stadia Strategy provides a framework for NSW Government investment and aims to achieve an optimal mix of venues to meet community needs and to ensure a vibrant sports and event environment in NSW. The Strategy was developed to achieve the Government's Commitments outlined in *NSW 2021: A Plan to Make NSW Number One* to:

- Provide the community with increased access to stadia.
- Encourage multi-purpose usage of stadia.
- Improve facilities for participants and spectators.
- Improve the competitive position of NSW when attracting major events.

The development of the Strategy included a review of current stadia in NSW, stakeholder consultation and supporting analysis.

The *Stadia Strategy* identified three tiers of stadium:

- Tier 1 have a seating capacity greater than 40,000 and regularly host international sporting events (e.g. Sydney Football Stadium).
- Tier 2 have a capacity of 20,000 – 40,000 and include home grounds for sporting teams playing in national competitions (e.g. Campbelltown Sports Oval).
- Tier 3 have a capacity of at least 10,000 (e.g. Blacktown International Sports Park).

The analysis in the Strategy covered a range of areas including benchmarking to other states, demographic and future demand analysis, the consideration of the value of major events and review of risks. The Strategy focusses on future investment on NSW Government stadia venues. In NSW there are seven stadia that are owned by the Government, these comprise of three Tier 1 and four Tier 2 venues, two international sporting hubs (Sydney Olympic Park and Sydney Entertainment Precinct) and other venues in the population centres of Wollongong, Newcastle and Western Sydney.

In regards to Western Sydney, the Strategy recognises that population growth, particularly within South Western Sydney will result in 51% of Sydney's population being located in Western Sydney by 2036. The Strategy, therefore proposes further consideration of options to increase capacity in Western Sydney to meet future demand. This includes the development of another Tier 2 stadium in Western Sydney. Further consideration of the options for this stadium is required and could include redeveloping an existing stadium or developing a new stadium in a strategic location

#### 4.1.6 NSW Arts and Cultural Policy Framework (2015)

The *NSW Arts and Cultural Policy Framework* provides direction for the arts and culture in NSW. Key recommendations relevant to the Greater Macarthur investigation area include:

- Mapping the arts and cultural landscape in Western Sydney to inform strategies, investment and infrastructure development decisions.
- Scoping cultural infrastructure opportunities in key Western Sydney centres.

- Encouraging screen activity in Western Sydney, including scoping new infrastructure to enable screen production.
- Convening a Western Sydney arts and cultural roundtable with leading practitioners to enable responsive and effective policymaking.
- Increasing strategic investment in Western Sydney to grow arts opportunities and support local Aboriginal artists.

#### 4.1.7 Integrated Primary and Community Care Development Plans for the South West Growth Centre (2012)

In 2012 the South Western Sydney Local Health District released their Integrated Primary and Community Care (IPCC) Development Plans for the South West Growth Centre. The plan identifies that IPCC is the prime vehicle to provide for emerging health care needs in the Growth Centre. This reflected strong clinical advice to the effect that the hospital inpatient and ambulatory care needs of Growth Centre residents would best be met through increased capacity at existing hospital facilities within close proximity to the Growth Centre boundaries (Liverpool, Campbelltown and Camden).

The plans identify four levels of integrated community-based health care services at varying levels of population catchment:

- Level 4 would generally be planned to service populations in excess of 200,000-250,000, comprising health care provided on a same day basis in a hospital setting, with inpatient backup in order to be safely and effectively delivered.
- Level 3 would generally service populations of between 100,000-200,000 and, although requiring specialist resources and a high critical mass for services to be effectively and efficiently delivered, inpatient backup is not required. Care provided at Level 3 could include day procedures, specialist services and diagnostic services. Outreach services such as ambulance and Aged Care Assessment Services could be co-located. A key role is envisaged in health promotion and secondary and tertiary prevention for people with chronic disease and complex care needs. This might include 24- hour access to some services.
- Level 2 would generally be planned to service catchment populations of between 50,000-100,000, requiring specialist resources, but with a reduced level of back-up and/or a lower level of critical mass for efficient and effective service delivery. Not requiring sterile theatres, but providing non-sterile procedure rooms and associated infrastructure. May include facilities such as minor injury units and walk in centres. Care provided includes GP care, nursing, some specialist care, access to diagnostic services, some procedural services (including fractures and suturing) and observation facilities. They could also provide a range of rehabilitation services integrating community health services and specialist community rehabilitation services. An important role is envisaged in health promotion and secondary and tertiary prevention for people with chronic disease and complex care needs. Some cancer services and antenatal and postnatal maternity services could also be delivered. This might include extended hours/after hours delivery of some services (including GP clinic services).
- Level 1 sites would generally be planned to service populations smaller than 50,000, down to only a few thousand and focus on delivering primary care in a minor centre, involving low levels of critical mass, with limited specialisation and low levels of clinical risk. Services could include general practice, drug and alcohol services, counselling services, community nursing, allied health services, aged services, integrated health

promotion and primary prevention, primary antenatal and postnatal care. They may operate as a base for outreach services. Generally at the level of a small town or suburb.

Population based planning ratios are also of assistance in identifying the demand from South West Growth Centre residents for some specialised services traditionally provided from hospital sites that could under an integrated primary care model be provided from the highest tier of integrated primary care centre.

#### 4.1.8 The Green Grid, Government Architects Office (2013)

The NSW Government's Architects Office Green Grid program will build on the open space network already established through the *Metropolitan Greenspace Program* and the *Regional Tracks and Trails Framework*. It aims to connect homes to open local, district and regional parks to improve urban communities and liveability within the communities.

Broadly the Sydney Green Grid program aims to:

- Conserve, improve and expand Sydney's strategic network of open spaces. Connecting town centres integrating public transport and connecting the residents, workers and visitors of Sydney with a diversity of open space, sports facilities and recreational experiences.
- Reinforce a sense of place within Sydney's subregions through enhancing open space quality and advocating an appreciation for Sydney's diverse natural and cultural environment.
- Safeguard and plan the green infrastructure of Sydney in parallel with the strategic planning of the city's other infrastructure. Promoting the multifunctional nature of the environmental, health, social and economic benefits open space offers.

This will be achieved by:

- Continuing to implement the Metropolitan Greenspace Program and Sharing Sydney Harbour Program.
- Working with councils to develop open space guidelines to encourage appropriate local planning for the open space needs of communities.
- Working with local councils and communities to connect walking trails identified in the Regional Tracks and Trails Framework and locate new recreation and sporting facilities within the Sydney Green Grid.
- Delivering new open space in greenfield locations to support the Sydney Green Grid.
- Implementing the Western Sydney Parklands Plan of Management which broadly identifies places for people of all backgrounds to meet, celebrate, learn, play and appreciate the environment.

#### 4.1.9 New South Wales Draft Recreation and Open Space Planning Guidelines for Local Government (2010)

The *Draft Recreation and Open Space Planning Guidelines for Local Government* were developed by the NSW Department of Planning to provide a best practice guide to local councils for open space and recreation planning. The Guidelines outline the necessary steps involved in strategic planning for open space and recreation facilities, activities and services. Various categories of open space are detailed (e.g. parks, linear and linkage, outdoor sport) as well as the various catchments open space and recreational facilities service (e.g. regional, district, local).

The Guidelines use a catchment access based standard which is based on the service area radius or maximum distance residents should have to travel to use open space. The Guidelines encourage the development of locally specific standards, with the specified standards used as a reference point.

The Guidelines also recommend a methodology for open space needs analysis that involves understanding current supply, research, profiling, and community consultation. The standards are only one, albeit an important, component of this methodology.

**Table 6 Social infrastructure catchments**

Category	Catchment
Regional	Whole cities or metropolitan subregions. Often requires State agency management.
District	Multiple neighbourhoods that may extend beyond the LGA where it is located.
Local	Single neighbourhood. Located close to or within residential areas.

#### 4.1.10 New South Wales Growth Centres Development Code (2006)

The *Growth Centres Development Code* was developed by the Growth Centres Commission to guide the planning and design of development in Sydney's North West and South West Growth Centres. The Code sets out principles and design elements which are linked to the *State Environmental Planning Policy (SEPP) (Sydney Region Growth Centres) 2006*. The aim is to ensure high quality design outcomes and timely infrastructure provision for new communities.

The document provides detailed information on the planning and design of a range of social infrastructure items, including community facilities and open space. In addition to planning considerations and design criteria the Code also includes population benchmarks for the provision of various social infrastructure items including education, health, community and cultural facilities, emergency services and open space. Table 7 displays these benchmarks.

The Code is intended to provide a reference point, to stimulate ideas, and to provide a guide to best practice. It is not to provide a prescriptive standard for social infrastructure.

**Table 7 Social infrastructure benchmarks**

Type of facility	Benchmark (number per population)	Size (site area)
<b>Education</b>		
Public Primary Schools	1:1,500 new dwellings (approx.)	3ha / 2.3 ha (if joint use)
Public High Schools	1:4,500 dwellings (approx.)	6 – 10 ha
Tertiary		
<b>Health and social welfare</b>		
Community Health Centre	1: 20,000 people	2,000 sqm (for 80,000 people)
Hospital	2 beds: 1000 people	
Aged Care:	1:10,000 (centre)	
• Aged Care Housing	40 beds:1,000 people 70yrs+	

Type of facility	Benchmark (number per population)	Size (site area)
<ul style="list-style-type: none"> <li>• High Care (Nursing home)</li> <li>• Low Care (Hostel) places</li> </ul>	48 places:1,000 people 70yrs+	
Youth Centres	1:20,000 people	
Community Service Centre	1:60,000	
Childcare facility	1 place: 5 children 0 - 4 yrs	
After school care facility	1 place: 25 children 5 - 12 yrs	
<b>Culture</b>		
Branch Library	1:33,000 people	2,400sqm
District Library	1:40,000 people	2,400 sqm
Performing Arts/Cultural Centre	1:30,000 people	0.24 - 8 ha
<b>Emergency services</b>		
Ambulance		To accommodate 12 ambulances
Fire Station		2,000 sqm min
Police Station		4,000 sqm (for first 10 yrs)
<b>Community centres</b>		
Local	1:6,000 people	2,000-2,500sqm
District	1:20,000 people	1,500sqm - 2,400 sqm
<b>Open space and recreation</b>		
	2.83ha:1,000 people*	

\* May be refined through specific studies.

#### 4.1.11 People Places: A Guide for Public Library Buildings in New South Wales (2013)

In 2000 the State Library of NSW developed *People Places: A Guide for Public Library Buildings in New South Wales* to guide the development of public library buildings. The planning tools, needs assessment process and benchmarking outlined in *People Places* has been widely used and accepted by councils across NSW.

The third edition of *People Places* was rereleased in 2013, placing increased emphasis on the changing nature and role of libraries. The new edition provides information on:

- The continuing popularity of libraries in the digital age.
- Future trends that will impact on library design.
- Processes for determining the need and size of a new facility or increasing capacity of an existing library.
- Designing and building a library that meets the needs of existing and potential future communities.
- Conducting a post occupancy evaluation on an existing library.

To assist councils in determining whether a new library facility or changed library service is required, *People Places* outlines four approaches to assessing need:

- **Identified need** – expressed by stakeholders such as library staff, community groups and Council officers.
- **Normative need** – based on socio-demographic analysis and indicators of library usage and provision per capita.
- **Comparative need** – based on comparing service provision with other communities.
- **Benchmark based need** – using specific tools related to the services provided by public libraries and the population served by a library, benchmark.

#### 4.1.12 Healthy Urban Development Checklist (2009)

The *Healthy Urban Development Checklist* was developed by NSW Health to assist health providers give advice on urban development policies, plans and proposals. Of specific relevance to the provision of social infrastructure were chapters 13 (Public Open Space) and 14 (Social Infrastructure). Key issues and priorities raised in these chapters that were relevant to the development of the Social Infrastructure Guidelines included ensuring:

- Access to green space and natural areas.
- Public open spaces are safe, healthy, accessible, attractive and easy to maintain.
- A sense of cultural identity and sense of place.
- A range of facilities to attract and support a diverse population.
- Responsiveness to community needs and current gaps in facilities and/or services.
- Early delivery of social infrastructure.
- An integrated approach to social infrastructure planning.
- Maximisation of efficiencies in social infrastructure planning and provision.

## 4.2 Local government policies

### 4.2.1 Campbelltown 2025, Campbelltown City Council

*Campbelltown 2025 Looking Forward* is a strategy for the longer term future of the City of Campbelltown. It identifies several areas where residents perceive concerns and areas for improvement. This includes crime and safety, with a perception that there has been an increase in crime and safety concerns on public transport/stations and in public places.

The strategy identifies housing affordability as a concern and the large concentrations of public housing as needing consideration. Key areas affecting social infrastructure included the belief

that more urban growth can bring better facilities and amenities, a need for more shade in reserves and passive recreation facilities. An increased number of pools/skate parks needed. And that there is currently a lack of affordable recreation activities for a range of user groups.

#### 4.2.2 Campbelltown City Council, Review of Open Spaces

The *Campbelltown City Council Review of Open Spaces* notes that the management of open spaces is being affected by other community demands. Council owns, maintains and manages approximately 1,700 hectares of open space of varying types, functions and quality of experience throughout the LGA, which is dominated by large areas of mown grassland, vegetated bushland and open space corridors.

The Review states that the Council provides an open space provision of 11.24 hectares per 1,000 persons. This figure includes bushland, sportsgrounds amenity green space, parks and green corridor, and excludes other open space held in State and Federal government and private ownership. The total area of open space owned and managed by Council, on a per 1,000 person basis, is far greater than many other councils within the State. This high quantum of open space allow Council the opportunity to develop an open space and recreation network for current and future residents of the area.

#### 4.2.3 Wollondilly Shire Council Growth Management Strategy 2011

The *Growth Management Strategy* outlines overarching policy directions and principles for growth management. The Strategy states that Wollondilly Shire Council will not support residential and employment lands growth unless increased infrastructure and servicing demands can be clearly demonstrated as being able to be delivered in a timely manner without imposing unsustainable burdens on Council or the Shire's existing and future community. Council will encourage sustainable growth which supports our existing towns and villages, and makes the provision of services and infrastructure more efficient and viable – this means a greater emphasis on concentrating on new housing in and around our existing population centres. The focus for population growth will be in two key growth centres, being the Picton/Thirlmere/Tahmoor Area and the Bargo Area. Appropriate smaller growth opportunities are identified for other towns.

#### 4.2.4 Wollondilly Shire Council Community Strategic Plan 2033

The *Wollondilly Shire Council Community Strategic Plan 2033* is a long-term strategic plan that looks at several key themes affecting Wollondilly Shire's future growth, including infrastructure. It notes the need for better access to health services for elderly residents improved transport infrastructure to encourage less people to drive cars and to instead walk, ride or catch public transport. The plan states that there is a major shortfall in funding which is required to maintain assets to a satisfactory condition.

### 4.3 Implications for social infrastructure

- The State Government Agency policies outline the process for the planning and provision of their respective facilities. This information has greatly assisted with the development of the Growth Centre Framework. For example *Planning New Schools* has provided a rate of provision for education facilities and outlined the specific site requirements that should be taken into consideration.
- The Local Government strategic plans provide a local context identifying current social issues and assessing the current provision of social infrastructure.

## 5. Population

### 5.1 Existing population within the Greater Macarthur Investigation Area

Analysis of the community profile, both current and future, is key to understanding the community and determining the characteristics that are likely to influence demands for social infrastructure into the future. Age and household structure are obviously important as some key services are age cohort specific like preschool, schools, youth services, and aged care. Other non-age variables such as tenancy and income are also important and influence participation and utilisation trends.

Understanding the profile of the existing population of an area can help in predicting the characteristics of new residents. It is also useful when developing strategies to promote integration of new and existing communities. The community profile is based on 2011 census data.

The site is predominantly rural with a number of small villages and suburbs distributed throughout. For the purpose of this study, the following community profile examines the suburbs of Appin, Wilton and Menangle Park. These suburbs have been selected as they are the main population centres within the Greater Macarthur Investigation Area. In addition, South Campbelltown which comprises Ambarvale, Glen Alpine and Rosemeadow has been examined.

#### 5.1.1 Existing residential population

In 2011, the Greater Macarthur Investigation Area had a total population of 25,622 persons. South Campbelltown was the most densely populated area, with three-quarters of the population living in this area. While the smallest population was recorded in Menangle Park, Mount Gilead was the least densely populated area within the Greater Macarthur Investigation Area.

Table 8 Population of areas within the Greater Macarthur Investigation Area

Area	Number of persons in 2011	% of Greater Macarthur Investigation Area as at 2011	Size of area (km <sup>2</sup> )	Persons per km <sup>2</sup>
South Campbelltown (district) comprising of Ambarvale, Glen Alpine and Rosemeadow	19,189	75%	8.4	2284
Appin	1,803	7%	102	18
Douglas Park	1,273	5%	44.4	29
Mount Gilead	349	1%	37.2	9
Menangle	877	3%	11.6	76
Menangle Park	241	1%	2.4	100
Wilton	1,890	7%	64.9	29
<b>Greater Macarthur Investigation Area</b>	<b>25,622</b>	<b>100%</b>	<b>270.9</b>	<b>95</b>

Source: ABS Basic Community Profile 2011

#### 5.1.2 Cultural diversity

The proportion of Aboriginal and Torres Strait Islander (ATSI) people varied between areas in the Greater Macarthur Investigation Area, from no ATSI persons in Menangle Park to 3.2% (618 persons) in South Campbelltown. All areas, except for Menangle Park, had a slightly higher proportion of ATSI people than Greater Sydney (1.2%).

Appin, Menangle Park and Wilton had a higher proportion of people who spoke English only (over 90% of residents), compared to the Greater Macarthur Investigation Area (78%), South Campbelltown (73%) and Greater Sydney (62%). This reflects a higher cultural diversity in South Campbelltown.

#### 5.1.3 Age profile

The median age of the Greater Macarthur Investigation Area at 34 years was 2 years younger than Greater Sydney. The median age and age profile of most areas in Greater Macarthur were broadly consistent, ranging from 33 years in South Campbelltown to 37 years in Wilton. Menangle Park however had a median age of 46 years, indicating a higher proportion of older residents living in this area, details regarding the age distribution are provided in Table 9.

Other key age indicators in the Greater Macarthur Investigation Area include the following:

- All areas had a higher proportion of children aged under 18 years than Greater Sydney, with the highest proportion of babies and young children in Menangle Park and highest proportion of primary school aged children in Appin.
- All areas had a lower proportion of 25 to 34 year olds than Greater Sydney.
- Appin and Wilton had a higher proportion of 35 to 49 year olds, compared to the other areas in the Greater Macarthur Investigation Area and Greater Sydney.
- All areas (except for Wilton) had a higher proportion of 50 to 59 year olds than Greater Sydney.
- Wilton had a higher proportion of 60 to 69 year olds, compared to the other areas in the Greater Macarthur Investigation Area and Greater Sydney.
- Menangle Park however, had a median age of 46 years, indicating a higher proportion of older residents living in this area. Details regarding age distribution are provided in Table 9.

Table 9 Age distribution and median age

Service age groups (years)	Appin (%)	Menangle Park (%)	Wilton (%)	South Campbelltown (district) (%)	Greater Macarthur Investigation Area (%)	Greater Sydney (%)
0 to 4	9%	9%	7%	7%	7%	7%
5 to 11	11%	7%	11%	10%	10%	9%
12 to 17	9%	7%	8%	10%	10%	7%
18 to 24	9%	10%	8%	12%	11%	10%
25 to 34	11%	12%	11%	13%	12%	15%
35 to 49	24%	16%	26%	20%	21%	22%
50 to 59	13%	16%	12%	15%	14%	12%
60 to 69	8%	9%	12%	8%	9%	9%
70 to 84	4%	10%	5%	4%	4%	7%
85 and over	2%	4%	Nil	1%	2%	2%
Median age	35	46	37	33	34	36

Source: ABS Basic Community Profile 2011

#### 5.1.4 Household composition

The most prominent household type of the areas in the Greater Macarthur Investigation Area was family households (84%), with a higher proportion than Greater Sydney (73%), as presented in Table 10. All areas in the Greater Macarthur Investigation Area had a lower proportion of lone person households than Greater Sydney (23%), ranging from 12% in Wilton to 14% in South Campbelltown and Greater Macarthur Investigation Area.

Table 10 Household composition

Type	Appin (%)	Menangle Park (%)	Wilton (%)	South Campbelltown (district) (%)	Greater Macarthur Investigation Area (%)	Greater Sydney (%)
Family households	85%	85%	87%	84%	84%	73%
Lone person household	13%	15%	12%	14%	14%	23%
Couple family with children	57%	45%	56%	52%	52%	49%
Couple family without children	28%	33%	33%	25%	27%	33%
One parent family	14%	21%	10%	22%	19%	16%

Source: ABS Basic Community Profile 2011

#### 5.1.5 Education

Most primary school aged children living in the areas of the Greater Macarthur Investigation Area attended a government school, ranging from 57% in South Campbelltown to 81% in Appin. Attendance at a Catholic school also varied from 11% in Appin to 17% in South Campbelltown. No primary school aged children from Menangle Park attended a Catholic school. It was noted however that Menangle Park had the smallest number of primary school aged children (18 persons).

Attendance at a government school among high school aged children who lived in the areas of Greater Macarthur varied from 35% in Appin to 52% in Wilton. Attendance at a Catholic school ranged from 13% in Wilton to 36% in Appin. No high school aged children from Menangle Park attended a Catholic or other non-government school. It was noted that Menangle Park had the smallest number of high school aged children (18 persons).

#### 5.1.6 Income

The median weekly household incomes vary across the areas from \$1,036 in Menangle Park to \$1,807 in Wilton. Overall, income levels were higher in the Greater Macarthur Investigation Area at \$1,510 than the average for Greater Sydney at \$1,447.

#### 5.1.7 Tenancy

Full home ownership varied across the areas of the Greater Macarthur Investigation Area from 23% in South Campbelltown to 51% in Menangle Park, with the average for Greater Sydney at 31%. Levels of renting across the areas were lower than Greater Sydney at 33% and ranged from 14% in Wilton to 28% in South Campbelltown.

#### 5.1.8 Residential mobility

In 2011, a large portion of the Greater Macarthur Investigation Area community (61%) had lived at the same address for five or more years. This was reflected broadly across the communities within the Investigation Area from 60% in Wilton to 67% in Menangle Park, showing a stable community. This was compared to 53% in Greater Sydney.

## 5.2 Regional communities located on the outskirts of the Greater Macarthur Investigation Area

Although slightly outside the Greater Macarthur Investigation Area the centres of Picton and Camden will be influenced by the development of the area, particularly in regards to the provision of social infrastructure. Both towns have facilities that will be utilised by the proposed future residents of the Greater Macarthur Investigation Area. Similarly residents of Picton and Camden will access facilities within the Investigation Area. For this reason, a demographic analysis of these communities has been undertaken.

### 5.2.1 Picton

Picton is a small town and administrative centre of the Wollondilly Shire. Located to the west of the Greater Macarthur Investigation Area close to Maldon and Wilton, Picton provides some regional facilities, including a sports centre, educational institutions and emergency services. Picton acts as a junction between major roads, Remembrance Drive and Picton Road. It is also connected by the Southern Highlands railway line.

In 2011, Picton's population was 4,595 persons. The median age was 37 years (one year older than Greater Sydney), indicating a slightly older age profile. This was characterised by:

- A smaller proportion of 25 to 34 year olds.
- A slightly higher proportion of 50 to 59 year olds.
- Despite this, there was a higher proportion of children aged under 18 years.

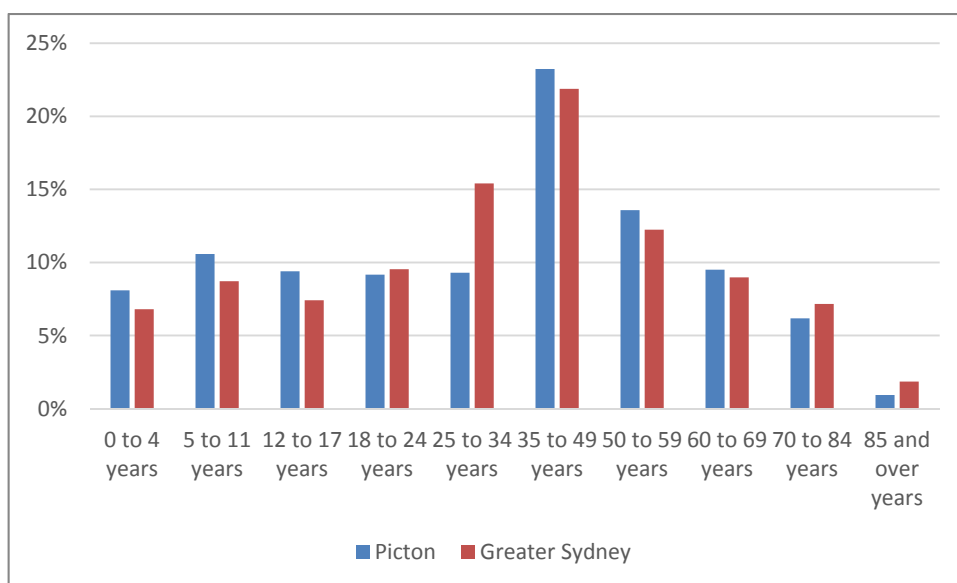


Figure 8 Age profile of Picton

Source: ABS Basic Community Profile 2011

A high percentage of residents only spoke English (92% compared to 62% in Greater Sydney). A higher proportion of residents identified as Indigenous (2.4% compared to 1.2% in Greater Sydney).

A high proportion of family households lived in Picton (79% compared to 73% in Greater Sydney). Most were couples with children (52% compared to 49% in Greater Sydney), while single parent families made up 14% of families (compared to 16% in Greater Sydney). Lone person households were also significant (20% compared to 23% in Greater Sydney).

Home ownership was high in Picton (79% compared to 67% in Greater Sydney). Of those that rented (21%), a significant proportion was public housing (14%).

The median household weekly income (\$1,488) was higher than Greater Sydney (\$1,447).

### 5.2.2 Camden

Camden is the administrative centre of Camden LGA. It is north of the Greater Macarthur Investigation Area close to Menangle Park. Several major facilities in the suburb include a major hospital, regional recreation facilities, educational institutions, a civic centre and emergency services.

In 2011, Camden's population was 3,244 persons. The median age was 40 years (four years older than Greater Sydney), representing an older age profile. Despite this, the age distribution was broadly similar to Greater Sydney, except for a high proportion of 70 year olds and over (around double that of Greater Sydney).

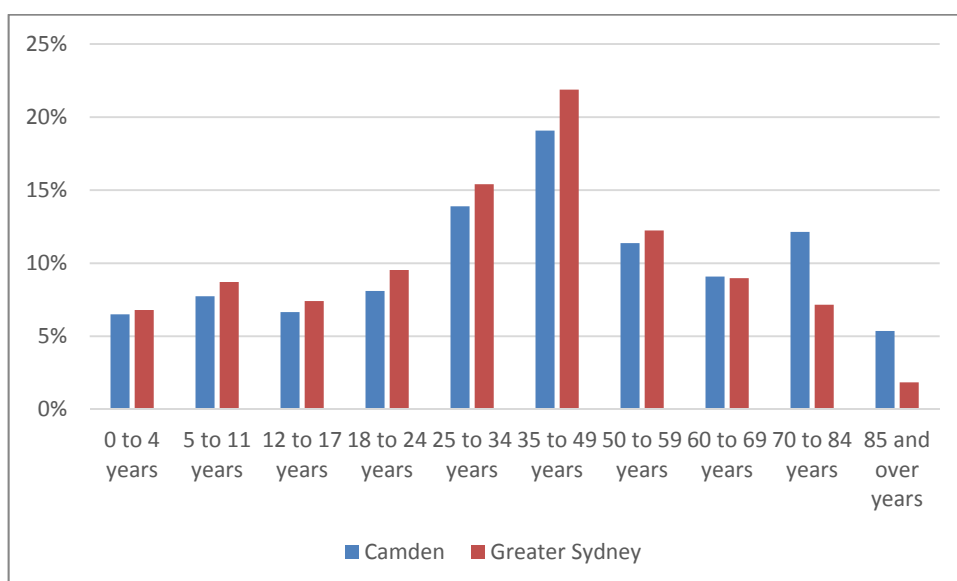


Figure 9 Age profile of Camden

Source: ABS Basic Community Profile 2011

A high percentage of residents only spoke English (91% compared to 62% in Greater Sydney), while 1.8% of residents identified as Indigenous (compared to 1.2% in Greater Sydney).

While most households were families (64% compared to 73% in Greater Sydney), a significant proportion of residents lived alone (33% compared to 23% in Greater Sydney). Due to Camden's older age profile, many lone person households may be elderly residents, particularly in the 70 years and over age group. Families were mostly couples with children (42% compared to 49% in Greater Sydney), while single parent families were also significant (21% compared to 16% in Greater Sydney).

The rate of home ownership in Camden was similar to Greater Sydney (67%). Of those that rented (33%), a significant proportion was public housing (21%).

The median household weekly income (\$1,188) was lower than Greater Sydney (\$1,447).

### 5.3 Implications for social infrastructure

- The population within the Greater Macarthur Investigation Area is currently very small. The demographic analysis has therefore focussed on the various towns around the area.
- Demographic profiles of each of the areas analysed are vastly different. Menangle Park has a much older population with a median age of 46 in comparison to South Campbelltown with a median age of 33.
- Picton and Camden are important neighbouring centres and it is anticipated that services and facilities within these towns will be utilised by the potential future population.

## 6. Existing regional social infrastructure

### 6.1 Schools and education

The Greater Macarthur Investigation Area is well served by existing primary schools within and outside the area. However, there are few high schools available to residents, with the closest located outside the area in Ambarvale and Rosemeadow to the north-east. High school aged children particularly those living in the southern part of the Investigation Area (e.g. Appin and Wilton) may need to travel further to access schools. Tertiary education is mainly provided by the University of Western Sydney and TAFE NSW South Western Sydney. The University of Sydney's campus for agriculture and environmental studies is also based in the Camden area. Tertiary education facilities are located to the north-east of the Investigation Area.

5,085 school aged children (between 5 to 18 years) live in the Greater Macarthur Investigation Area, with the more than half living in South Campbelltown (3,900 children). In the Investigation Area, there are two primary schools and one combined (both primary and secondary) school. These are in Appin, Douglas Park and Menangle Park, as illustrated in Figure 10.

Outside the Investigation Area (to the north-east), there are four primary, one special, and three secondary schools, with most in Rosemeadow and St Helens Park. These schools serve the large child population in South Campbelltown. Further away to the south-west, there are also three primary schools and one combined school, which may include Investigation Area as part of their catchment.

Overall, the Greater Macarthur Investigation Area is considered to be served by:

#### Government

- 9 primary schools
- 1 combined school
- 2 high schools

#### Non-government

- 1 primary school
- 2 combined schools
- 1 high school

Detailed information regarding the schools including enrolment information is provided in Appendix A.

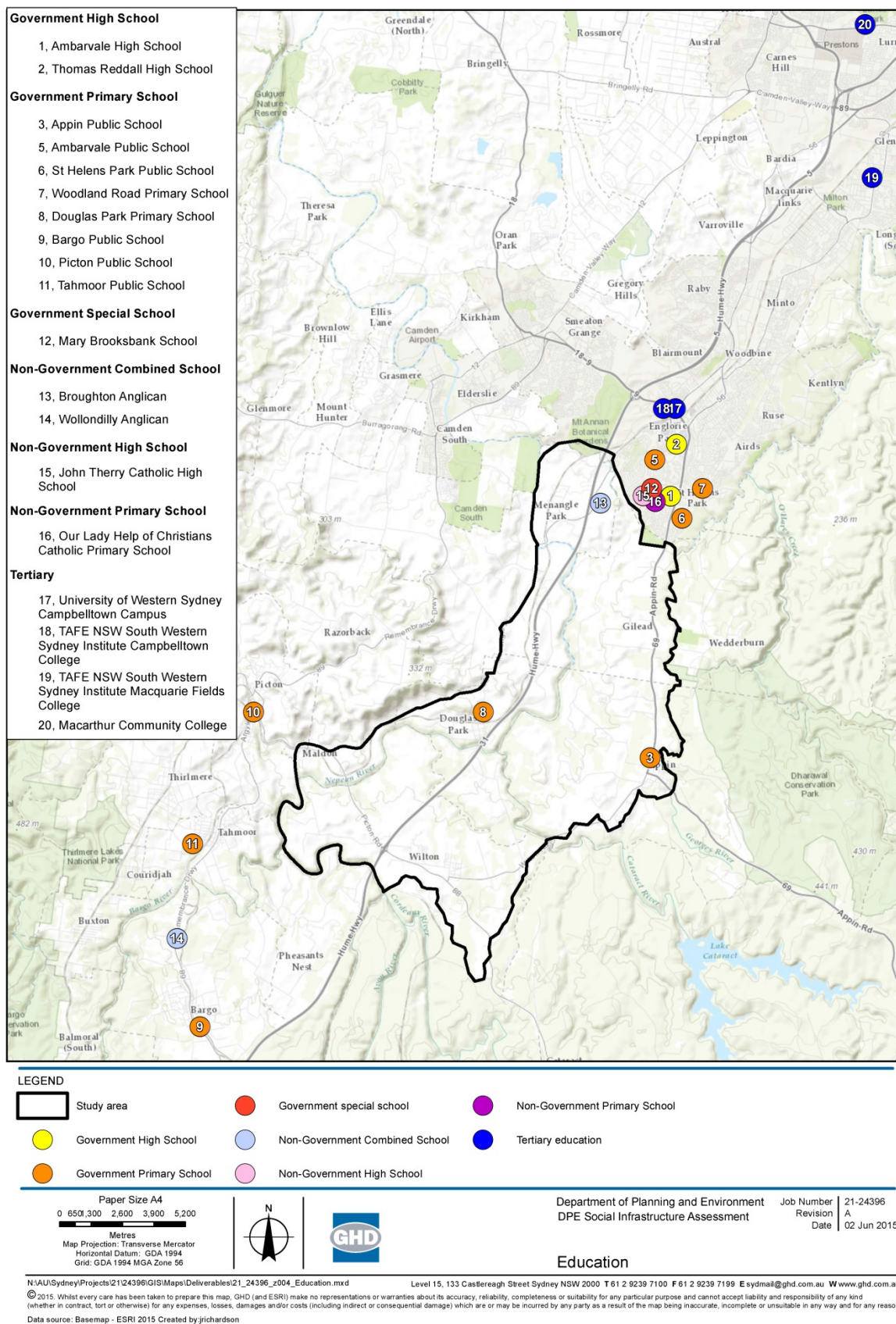


Figure 10 Education facilities that service the Greater Macarthur Investigation Area

## 6.2 Justice services

While there are no justice services within the Greater Macarthur Investigation Area, residents are likely to access local and district courts in nearby areas, such as Campbelltown, Picton, Camden and Liverpool. Campbelltown has local and district courts as well as a legal centre providing free advice to Macarthur Region residents. A list is in Appendix A.

## 6.3 Emergency services

The northern part of the Greater Macarthur Investigation Area (e.g. Menangle Park and South Campbelltown) is well serviced by emergency services based in Campbelltown. Campbelltown's services comprise two hospitals (Campbelltown Hospital has an emergency department), police, ambulance, fire and rescue, and state emergency services. Other than rural fire services, these are also the closest services to Appin (around 15km). Rural fire services are provided around the Investigation Area in Appin, Douglas Park, Menangle and Menangle Park.

Wilton is well serviced by Picton's services, including police, ambulance, fire and rescue, rural fire and state emergency services. However, the closest hospital (Campbelltown Hospital) is between 25 to 30km away. Details of the emergency services within the area are provided in Appendix A and illustrated in Figure 11.

Under Ambulance NSW's *Sydney Ambulance Metropolitan Infrastructure Strategy* (SAMIS), it will provide ambulance hubs in major urban centres supported by a network of standby points. The closest ambulance hub to Greater Macarthur is proposed in Liverpool (around 35km away).

There are three ambulance stations in the Investigation Area (Campbelltown, Picton and Camden). Picton is the closest and is not a busy station, handling about 250 to 300 cases per month. The closest hospitals are Campbelltown (31km) and Bowral (46km), and Liverpool Hospital is used for trauma bypass and STEMI heart attack patients.

To support the future growth of both the Greater Macarthur Investigation Area and the South West Growth Centre, planning will need to consider this system in relation to the current ambulance services.

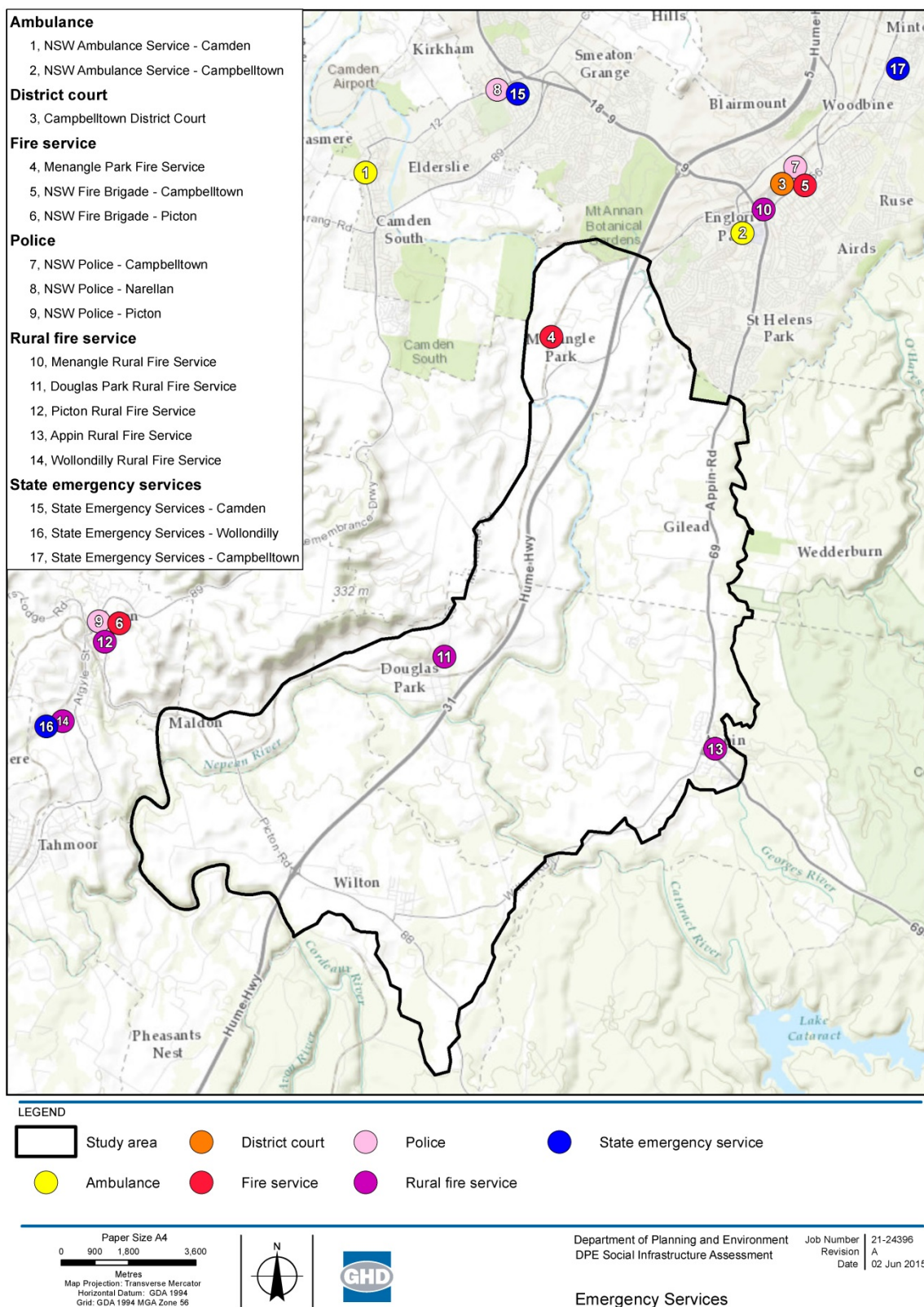


Figure 11 Emergency services that service the Greater Macarthur Investigation Area

## 6.4 Health facilities

There are no regional level health facilities provided in the Greater Macarthur Investigation Area. All facilities, except the Wollondilly Community Health Centre, are located to the north.

Medical, surgical, emergency and rehabilitation services in the Macarthur Region are provided by the NSW Department of Health through the South Western Sydney Local Health District (SWSLHD). Health services comprise two public metropolitan hospitals, three community health centres and one youth health service. There is also one private hospital in Campbelltown. Campbelltown Hospital to the north is the closest public hospital to the Investigation Area. For Wilton residents, Campbelltown Hospital is between 25 to 30km away. These are illustrated in Figure 12 and listed in Appendix A.

## 6.5 Cemeteries

There are no cemeteries within the Greater Macarthur Investigation Area. The closest cemeteries are located in Picton, Cawdor, Narellan and Campbelltown. These are listed in Appendix A

## 6.6 Cultural facilities and multi-purpose community centres

Within the Greater Macarthur Investigation Area, there are no regional level community centres or libraries. Residents are likely to access HJ Daley Central Library, which is centrally located in Campbelltown adjacent to the main transport interchange and business area of the Macarthur Region.

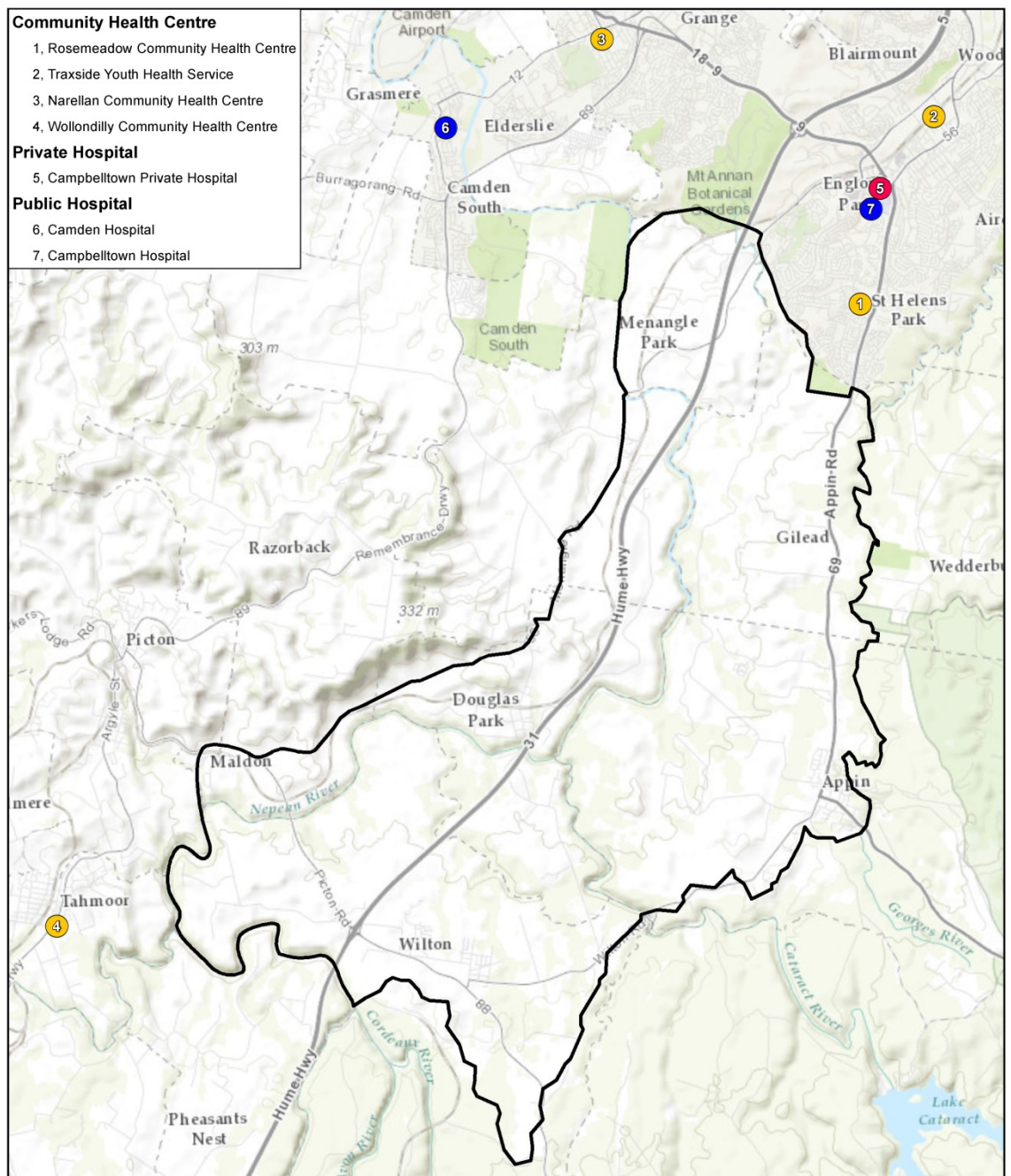
The HJ Daley Central Library provides library resources, including a technology centre, extensive reference/local studies/family history collections, study resources, home library service and administrative functions for the central and branch libraries.

The Campbelltown Arts Centre, includes gallery spaces, workshop rooms, a performance studio and an outdoor amphitheatre, to cater for multi-purpose community uses.

The Camden Civic Centre has a theatre with a capacity of 200 people and auditorium for up to 650 people.

## 6.7 Sport and recreation facilities

Within the Greater Macarthur Investigation Area, Menangle Park Paceway is located in the north and is a harness racing competition facility. Although there are few facilities within the area, sport and recreation is supported by regional facilities in surrounding areas with the closest facilities being the Ambarvale Sports Complex and Bridge Street Indoor Sports Centre (Picton). Details of the sport and recreation facilities are provided in Appendix A and are located in Figure 12.



#### LEGEND

- |   |  |
|---|--|
|  Study area              |  Private hospital |
|  Community health centre |  Public hospital  |

Paper Size A4  
0 850 1,700 3,400  
Metres  
Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 56



Department of Planning and Environment  
DPE Social Infrastructure Assessment

Job Number | 21-24396  
Revision | A  
Date | 02 Jun 2015

#### Health Facilities

N:\AU\Sydney\Projects\21\24396\GIS\Maps\Deliverables\21\_24396\_005\_HealthFacilities.mxd Level 15, 133 Castlereagh Street Sydney NSW 2000 T 61 2 9239 7100 F 61 2 9239 7199 E sydney@ghd.com.au W www.ghd.com.au  
© 2015. Whilst every care has been taken to prepare this map, GHD (and ESRI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.  
Data source: Basemap - ESRI 2015 Created by jrichardson

Figure 12 Health facilities that service the Greater Macarthur Investigation Area

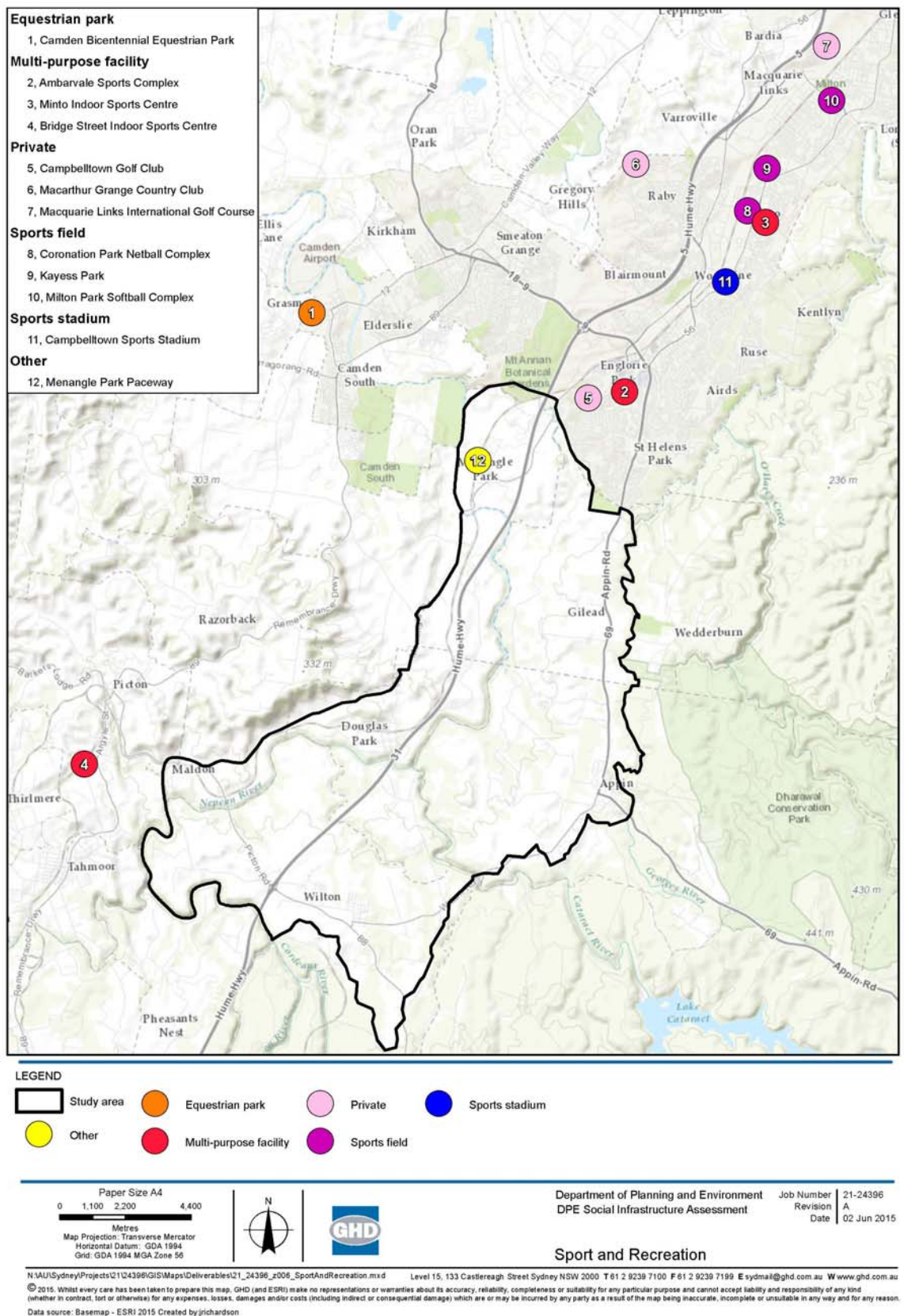


Figure 13 Sport and recreation facilities that service the Greater Macarthur Investigation Area

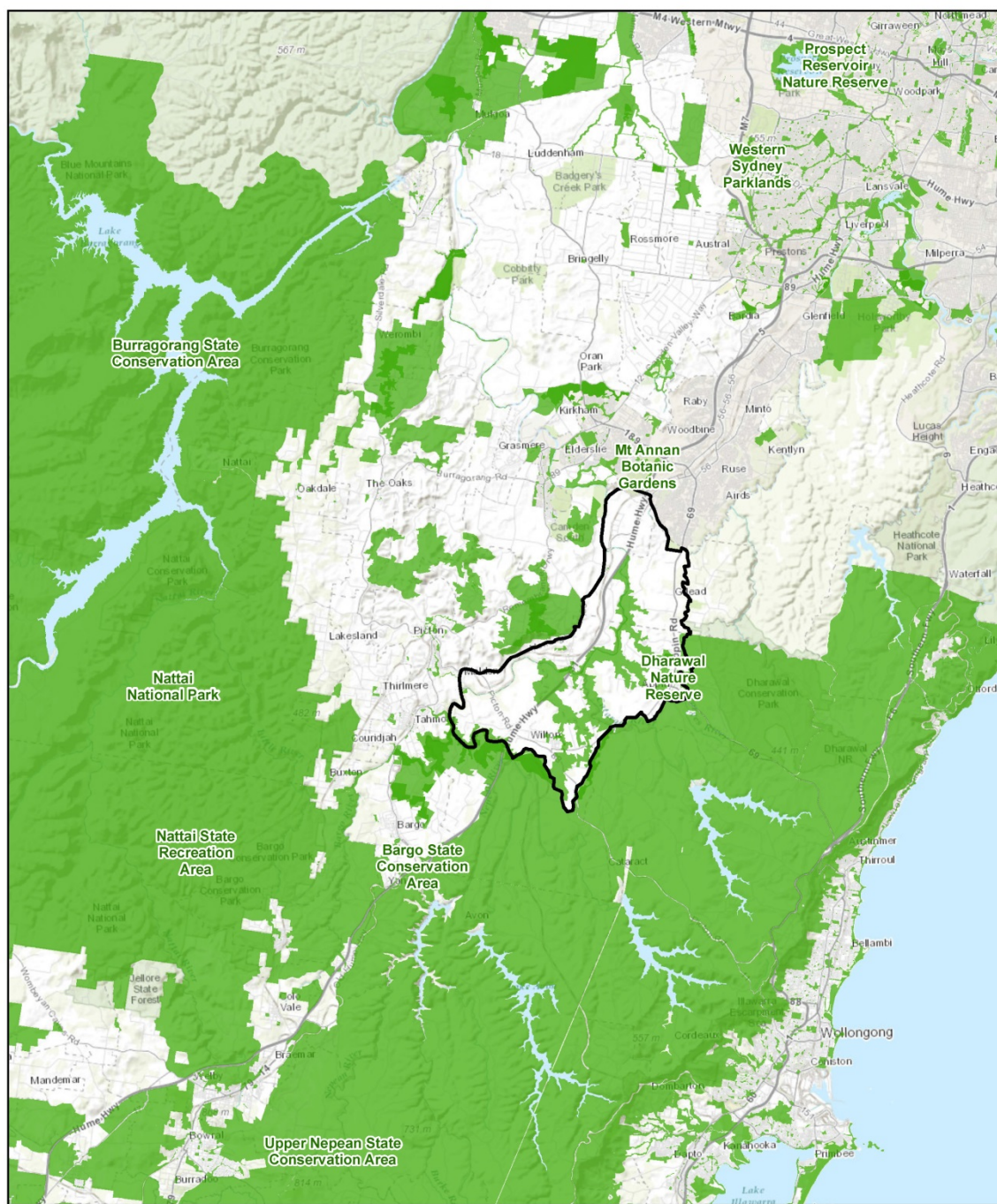
## 6.8 Regional open space

The Greater Macarthur Investigation Area is well supplied with regional open space as identified in Figure 14. The site includes a small portion of the Upper Nepean State Conservation Area and Dharawal Nature Reserve, which are managed by the NSW National Parks and Wildlife Service (NPWS). Together, these lands make up over 25,000 hectares of regional open space. Adjacent to the site in the north is the Mount Annan Botanic Gardens. Although located further away, the Western Sydney Parklands, Prospect Reservoir Nature Reserve and other NPWS lands such as Nattai National Park are likely to be accessed by residents from the Greater Macarthur Investigation Area.

While there is an existing high provision of regional open space, it is noted that most of these are used for passive recreation (e.g. walking and cycling) rather than active recreation (e.g. team sports). As a result, most residents are required to travel further to access active regional open space.

## 6.9 Implications for social infrastructure

- The Greater Macarthur Investigation Area is well served by existing primary schools within and outside the area. However, there are few high schools available to local residents.
- There are no regional level health facilities provided in the Greater Macarthur Investigation Area. There are also no regional level community centres or libraries.
- While there is an existing high provision of regional open space, it is noted that most of these are used for passive recreation (e.g. walking and cycling) rather than active recreation (e.g. team sports).



#### LEGEND

Study area  Open space

Paper Size A4  
0 2,500 5,000 10,000  
Metres  
Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 56



Department of Planning and Environment  
DPE Social Infrastructure Assessment

Job Number 21-24396  
Revision A  
Date 02 Jun 2015

#### Regional Open Space

N:\AU\Sydney\Projects\21\24396\GIS\Maps\Deliverables\21\_24396\_z003\_RegionalOpenSpace.mxd Level 15, 133 Castlereagh Street Sydney NSW 2000 T 61 2 9239 7100 F 61 2 9239 7199 E sydney@ghd.com.au W www.ghd.com.au  
© 2015. Whilst every care has been taken to prepare this map, GHD (and ESRI) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.  
Data source: Basemap - ESRI 2015 Created by jrichardson

Figure 14 Regional open space

## 7. The future Greater Macarthur Investigation Area

Urbis is currently putting together a Growth Framework that identifies the future opportunities within the Greater Macarthur Investigation Area. Their preliminary findings have identified six precincts for growth as well as a hierarchy of centres, as illustrated in Figure 15.

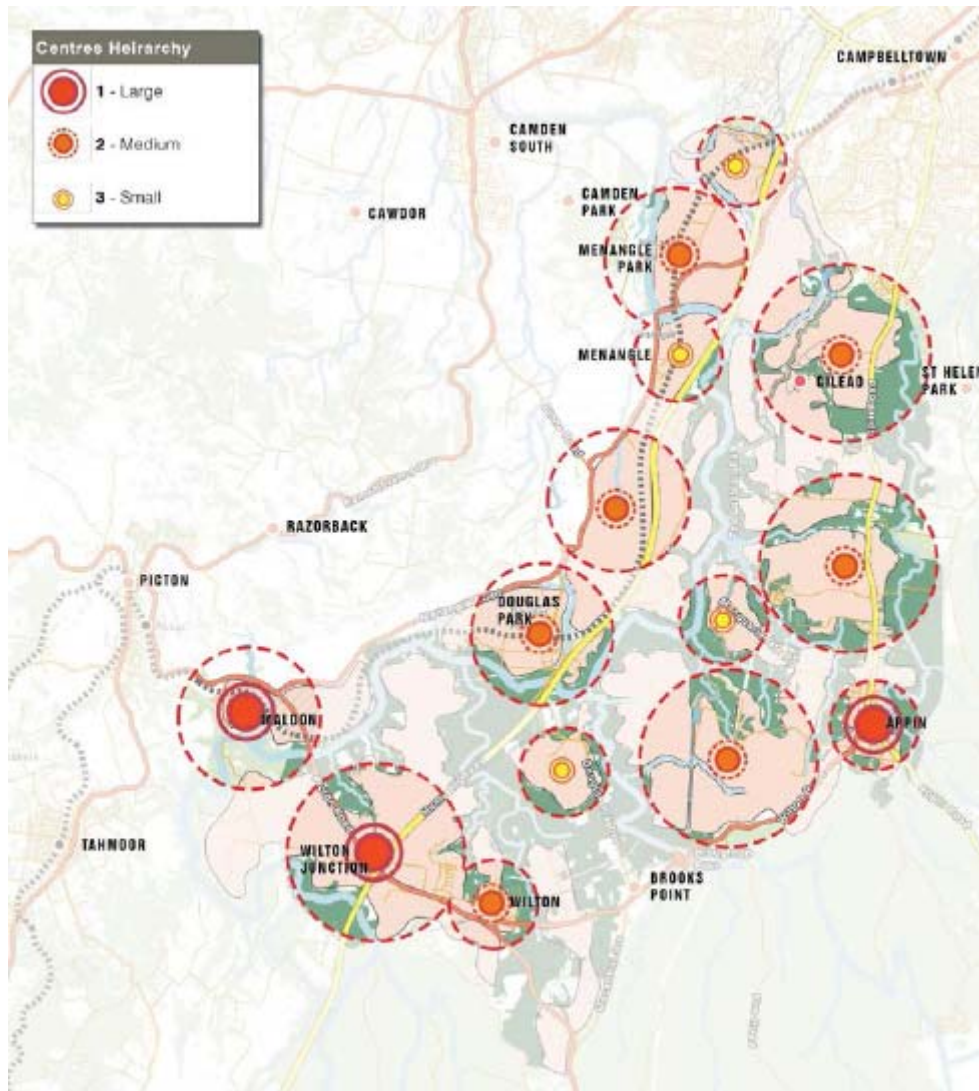


Figure 15 Hierarchy of centres proposed for Greater Macarthur

Based on the planning proposals received to date as well as the urban capable footprint, Urbis estimates that the Greater Macarthur Investigation Area could accommodate 85,284 dwellings as outlined in Table 11. This dwelling potential could equate to a population of 247,325 people. The population estimate has been based on an occupancy rate of 2.9. A more accurate occupancy rate will be able to be calculated at the more detailed planning stage when dwelling type and yield are determined. It should be noted that the urban capable footprint that has facilitated the testing of this scenario is still subject to various technical studies as part of the Greater Macarthur Land Release Investigation.

Table 11 Potential dwellings and population estimates for the Greater Macarthur Investigation Area

Precinct	Centres	Potential dwellings	Potential population (based on OR of 2.9)
1	Menangle Park – Medium South Campbelltown - Small	7,060	20,480
2	Douglas Park – Medium North Douglas Park – Medium Menangle – Small	15,235	44,179
3	Gilead – Medium	14,998	43,494
4	Appin – Large West Appin – Medium North Appin – Medium Two small centres	23,962	69,489
5	Wilton Junction – Large Wilton – Medium	9,681	28,074
6	Maldon – Large	14,348	41,609
Total		85,284	247,325

## 8. Framework for the provision of social infrastructure

Action 2.4.2 of the Plan for Growing Sydney requires the development of a framework for the identification of new growth centres. The role of this framework is to assist with the orderly release of land enabling the efficient delivery of infrastructure whilst also enabling the cumulative impact of development to be assessed. This Chapter has developed a framework for the provision of social infrastructure that will be used for all future growth centres including Greater Macarthur. In developing a framework to guide the future provision of social infrastructure it is important to acknowledge that there are many variables that will influence the rate of demand for a facility.

A key consideration in developing this framework is that there are no established 'benchmarks' for the provision of social infrastructure. Rather, facilities are typically developed through an operational model or in response to demand when existing facilities and services are at capacity. The development of a Growth Centre Framework provides an opportunity for infrastructure to be identified and land to be set aside so that the services are developed in response to population growth and change over time.

As such, the framework outlined in Table 12, identifies a 'rate of provision' that provides guidance for forecasting when a new facility would be required and also the land area required to accommodate the facility. This rate of provision will be useful for the future planning of the precincts within the Greater Macarthur Investigation Area once it is established as a future Growth Centre. The framework also identifies what type of centre each facility should be located in (e.g. strategic centre, town centre or village) in accordance with the centre types identified by SGS and defined in Table 12.

Table 12 Definition of centre hierarchy

Centre	Definition
Strategic centre (large centre)	The centre comprises of multi-level, mixed-use buildings with ground floor retail, high public transport accessibility and is often centred around a train station or major bus route interchange.
Town centre (medium centre)	Retail and commercial cluster servicing a local population. A town centre is generally ground floor retail with office or shop-top residential above with on street parking or small carpark adjacent. Town centres often have good public transport connections and is often located proximate to civic buildings (town halls, libraries etc.).
Village (small centre)	Small centre containing convenience retail and services.

Some facilities such as the prison or ambulance station are not required within a population centre but do have locational requirements that will need to be considered. It should be acknowledged that the rate of provision identifies that a facility is required to service a particular population. The facility type will determine whether the facility needs to be provided within or in close proximity to the population (e.g. a school) or whether the facility can be provided outside of the Growth Centre (e.g. a prison).

Each of the social infrastructure facility types operate within a service model that identifies criteria or thresholds for determining when a new facility is required. The service model has enabled the development of a Continuum for Adapting to Different Growth Scenarios discussed

in Chapter 9 . The Continuum allows for different phases to be considered prior to the development of a new facility or at least phasing within a facility. Whilst the framework provides a tool for considering a business case and high level planning, Chapter 11 identifies how each type of facility can be staged to accommodate the various growth scenarios.

As such, the framework in Table 13 should be read in conjunction with the staging Continuum in Chapter 9 of this report.

Table 13 Framework for the provision of social infrastructure

Type of facility	Facility	Rate of provision	Land requirements per facility	Centre hierarchy (based on Urbis classification)	Phases within the Continuum of service provision
Education	Primary schools	One primary school per 2,000-2,500 new dwellings.	3ha	Village	<ul style="list-style-type: none"> <li>• Increase capacity of existing schools</li> <li>• Placement of schools in large centres</li> <li>• Placement of schools in medium centres</li> </ul>
	High school	One high school per 6,000 – 7,500 new dwellings.	6ha	Town centre	
	School for specific purpose	One School for Specific Purpose per 17,000 new dwellings.	3ha	Strategic centre	
Justice	Court	No court facility required		N/A	N/A
	Prison	One prison per 250,000 people		Not within a centre but with sufficient access for workers.	<ul style="list-style-type: none"> <li>• Increase capacity of existing correctional facilities</li> <li>• Development of initial stages of new facility</li> <li>• Expansion of new facility to full development scenario</li> </ul>

Type of facility	Facility	Rate of provision	Land requirements per facility	Centre hierarchy (based on Urbis classification)	Phases within the Continuum of service provision
Emergency services	Ambulance	<p>Rate of provision is based on the number of calls to 000.</p> <p>As a population rate one hub could be required to support 250,000 people.</p>	Dependent on size of facility.	Not necessarily within a centre but with good access to surrounding centres.	<ul style="list-style-type: none"> <li>• RFS volunteers trained in first aid</li> <li>• Traditional ambulance station</li> <li>• Development of an ambulance hub</li> <li>• Multiple standby points supported by Western Sydney hub</li> </ul>
	Fire	<p>Rate of provision is based on ensuring that there is a maximum call out time of ten minutes. Factors are dependent on a range of factors including the demographic profile in an area, SEIFA, volume of 000 calls, transport factors and property values.</p>	Site should be approximately 2,000 – 3,000m <sup>2</sup>	Not necessarily within a centre but with good access to surrounding centres.	<ul style="list-style-type: none"> <li>• Retained station (volunteer or operated by RFS).</li> <li>• Staffed facility during office hours.</li> <li>• Staffed facility that operates 24 hours, 7 days a week.</li> </ul>
	Police	Rate of provision is based on	Land area for a	Town centre for	<ul style="list-style-type: none"> <li>• Police shop front</li> </ul>

Type of facility	Facility	Rate of provision	Land requirements per facility	Centre hierarchy (based on Urbis classification)	Phases within the Continuum of service provision
		crime rate. Major centres require one police station. Town centres require a police shop front.	police station is 2,000m <sup>2</sup>  Land area for a police shopfront is 150m <sup>2</sup>	police shop front  Strategic centre for police station (e.g. Wilton Junction)	<ul style="list-style-type: none"> <li>Police station - single storey</li> <li>Police station – double storey</li> </ul>
Health	Integrated Health Facility with inpatient facilities	One facility per 200,000 to 250,000	Dependent on the service models within the facility	Strategic centre (e.g. Wilton Junction)	<ul style="list-style-type: none"> <li>Team General Practice</li> <li>Primary Care Clinic</li> <li>Regional Integrated Primary and Community Care Clinic</li> <li>Integrated Health Facility with inpatient facilities</li> </ul>
	Regional integrated primary care clinic with day surgery facilities	One facility per 75,000 to 100,000		Town centre (e.g. West Appin or Maldon)	
	Primary care clinic	One facility per 15,000 to 18,000		Town centre	
Cemetery	Cemetery	Additional burial sites required to service population.	11 – 15ha	Within a 30-45 minute drive of the Greater Macarthur Investigation Area	

Type of facility	Facility	Rate of provision	Land requirements per facility	Centre hierarchy (based on Urbis classification)	Phases within the Continuum of service provision
Cultural facilities	Cultural facilities	One district/regional level facility for 20,000 to 50,000	The centre should be a minimum of 500m <sup>2</sup>	Five facilities in total. Three larger regional facilities to be provided in each of the three main centres	
Sport and recreation	Regional competition facilities	Additional regional competition facilities required to service the population.	To be determined in consultation with the State based sporting bodies.	These facilities do not need to be located in or adjacent to these centres, they should however be within a 20-30 minute drive of the Greater Macarthur Investigation Area.	Continual liaison with Department of Sport and Recreation and State based sporting bodies and associations to identify appropriate sites for high quality competition facilities
	Sport stadium	Development of a tier 2 facility in Western Sydney.	To be determined in consultation with NSW Department of Sport and Recreation.	Strategic centre (this centre will not necessarily be within the Greater Macarthur Investigation Area)	<ul style="list-style-type: none"> <li>• Upgrade existing stadia</li> <li>• Development of new tier 2 or tier 3 facility</li> <li>• Upgrade new facility to a tier 1</li> </ul>

Type of facility	Facility	Rate of provision	Land requirements per facility	Centre hierarchy (based on Urbis classification)	Phases within the Continuum of service provision
					or tier 2 facility.
Open space	Regional open space	1 Regional park: 50,001 – 150,000 people	5+ha in size	Two regional parks	
	District open space	1 District park: 20,001 – 50,000 people	2-5 ha in size	Five district parks	

## 9. Staging

Social infrastructure, particularly at the regional level, is often planned as a network of facilities. The planning is often determined by the service model utilised by the respective State Government agencies. The service models vary in regards to the amount of interdependence each facility has on the surrounding facilities within the network.

For some social infrastructure types such as cemeteries and regional open space there is little interaction with their surrounding networks. These facilities are often planned to meet demand, such as burial spaces, and their service offering is standardised. In contrast, health and education have complex networks of services and the planning of a new facility is determined based on a deficit within the existing facilities. It is this level of interdependence that has enabled the development of the Continuums for Adapting to Different Growth Scenarios.

This chapter assesses the service models of each of the facility types to develop a Continuum for Adapting to Different Growth Scenarios. This Continuum has been designed to assist in identifying the phases for facility planning and investigating options for increasing capacity. In addition it identifies situation based thresholds for determining when new facilities are required.

Long term planning is subject to a number of variables that will influence service provision. These variables include changes in government policies, shifting demographics, a change in service provision. The chapter has attempted to identify the various factors that have the ability to influence demand across the different types of facility.

### 9.1 Education

#### 9.1.1 Continuum for adapting to different growth scenarios

For a new school to be funded, built and operated there has to be demonstrable need the facility is required. The Department of Education and Communities' (DEC) policy *Planning New Schools* outlines stringent criteria that are used to assess need. This includes an assessment of the capacity of the existing schools to take new enrolments.

According to the *State Infrastructure Strategy Update*, by 2031 there will be 173,000 additional students attending public school with 80% of these anticipated to be located within the metropolitan Sydney, West Central and South West Sydney. Infrastructure NSW recommends that a reservation of \$700 million from the *Rebuilding NSW* initiative to create a 10-year Schools Growth Program for education infrastructure projects to service growing student populations.

Planning schools within the Growth Centres is a challenge particularly as population growth fluctuates. For the DEC there is significant risk in sites being developed too early, similarly if planning is inadequate then there is significant risk of existing sites being overcrowded. In determining appropriate phases for development in relation to the Greater Macarthur Investigation Area the assessment criteria for planning a new school has assisted in a Continuum for Adapting to Different Growth Scenarios as depicted in Figure 16 .

The first stage is to increase capacity of existing schools. Information obtained from the School Asset Strategic Plan will assist in identifying schools that have a capacity whilst also identifying strategies for further increasing capacity.

If it is determined that a new school is required then the second phase recommends that these be located in larger centres. These centres are strategically connected to other areas within the Growth Centre through either road or rail, enabling students to travel to attend these schools. It is anticipated that population levels in the larger centres will increase at a faster rate than some of the other areas within the Growth Centre. Once schools within the larger areas start to reach capacity then new schools within smaller centres should be considered.



Figure 16 Continuum of education facility provision to accommodate the various development scenarios

#### 9.1.2 Situation based thresholds

*Planning New Schools* outlines criteria that can be used to assess whether a new facility is required. This criteria includes:

- Enrolment forecasting and demographic profiling.
- The effect on surrounding, existing schools.
- The capacity of existing schools to take new enrolments or be expanded to take them.
- The property tenure options that are available.
- The education model proposed.
- Dwelling occupation and take-up rates.
- Housing development staging.
- Housing market characteristics.

#### 9.1.3 Factors that may influence demand

The DEC is currently preparing the School Asset Strategic Plan. In addition to conducting an audit of existing facilities, the Plan will make recommendations regarding how existing assets should be utilised. Factors to be considered in the Strategic Plan that will influence the future provision of schools include:

- Developing larger schools in highly urbanised areas so that expensive land acquisition is minimised.
- Removing land use planning policy barriers to increasing school densities and confirming that developer contributions will partially fund both land and buildings.
- Acquisition and the construction of the infrastructure needed to provide education services to new developments.
- Better co-ordination between government land holders and non-government providers to:

- secure strategic sites ahead of time in greenfield areas to be on-sold to education providers when a school is required.
- identify opportunities in areas of high demand to repurpose surplus government sites for the provision of education facilities.
- identify opportunities for incorporating schools into compatible government developments.
- Using existing school assets more intensively, with opportunities for staggered school starting times potentially increasing the number of classes taught per facility.
- Partnering with the development industry to develop schools in multi-storey buildings to service dense population areas.

The *State Infrastructure Strategy Update* recognises that there is a gap between the number of school places and the future population. It is anticipated that the Strategic Plan will address a number of factors that will assist in closing the potential education infrastructure funding gap.

### Factors that will close the potential education infrastructure funding gap over 20 years



Source: Infrastructure NSW

Figure 17 Factors identified in the *State Infrastructure Strategy* that will close the potential education infrastructure funding gap

## 9.2 Justice

### 9.2.1 Courts

Our meeting with the NSW Department of Justice confirmed that there are no benchmarks or thresholds to determine needs for local or district court facilities. The Department is working towards consolidating services and facilities into existing hubs. Similarly, with the use of technology court administrative matters can be undertaken remotely preventing the need for attendance at the court building.

Picton and Camden Courts are currently underutilised and only operate when there is a need to be open. Consequently, these courts are capable of accommodating the justice needs of the proposed Greater Macarthur Investigation Area.

### 9.2.2 Continuum for adapting to different growth scenarios

Advice from the Department is that the threshold for either expansion of existing facilities or the provision of a new facility is a new population of 250,000 people. The Department has acknowledged that a new facility will be required in the next 10 to 20 years within the South West of Sydney. Whilst the proposed population of the Greater Macarthur Investigation Area would require a prison in accordance with the threshold this would be dependent on whether a new facility is constructed in South West Sydney.

The Continuum illustrated in Figure 18 comprises three phases. The first is to increase capacity at existing correctional facilities. The closest correctional facilities to the Greater Macarthur Investigation Area include Silverwater and Goulburn. These sites could have capacity to expand and accommodate the proposed increase in population. The second phase involves the construction of a correctional facility that could be used to service the population across the North West, South West and Greater Macarthur Growth Centres. The prison could be located between Penrith and Campbelltown to service this population.

The final phase is the development of a facility to full capacity. During this Structure Planning Phase land could be set aside for a 1,000 bed facility. Whilst the complete facility might not be constructed till the full development scenario is achieved, the facility could be constructed in stages accommodating 500 beds initially.



Figure 18 Continuum of justice facility provision to accommodate the various development scenarios

## 9.3 Emergency services

### 9.3.1 Ambulance

#### **Continuum for adapting to different growth scenarios**

The Sydney Ambulance Metropolitan Infrastructure Strategy (SAMIS) has developed an effective system of forecasting and responding to changes in service provision. Rather than anticipating service need based on a per capita ratio, NSW Ambulance monitors 000 calls and tracking population groups. For example areas with a higher proportion of elderly residents will have a greater need for ambulance services.

In accordance with the SAMIS model Ambulance services are provided through an Ambulance Hub and standby facility system. Locations for ambulance hubs with the capacity of up to 30-40 vehicles have been identified across the Sydney Metropolitan Region. Each hub is supported by a network of up to 10 standby locations. The infrastructure for a standby hub is minimal and can be colocated facilities such as police station, fire station etc. The minimal infrastructure required enables standby locations to be easily relocated should there be a change in demand.

NSW Ambulance has an effective volunteer system that enables facilities to be staffed by trained volunteers and NSW Ambulance Staff. This is particularly effective in rural areas where basic service provision is provided by RFS volunteers with first aid training. The Continuum of facility provision depicted in Figure 19 relates both to facility provision as well as volunteer to staffing ratios. The figure illustrates RFS volunteers as the first type of facility provision.

As the population grows a Standby Point or a single ambulance bay could be staffed by a mixture of volunteers and NSW Ambulance Staff. The number of Standby Points would eventually increase and these could be supported by some of the existing hubs in Metropolitan

Sydney. At the full development scenario an Ambulance Hub could be constructed servicing multiple standby points across the Greater Macarthur Investigation Area.



Figure 19 Continuum of ambulance facility provision to accommodate the various development scenarios

### Situation based thresholds

NSW Ambulance continually monitor demographic projections as well as 000 data in relation to the number of call outs and their need for an ambulance service. They utilise a consultant firm to investigate facility provision. NSW Ambulance has stated that they would be able to do a standard projection for demand for the Greater Macarthur Investigation Area if sufficient population data is provided. This assessment would include estimates with regards to capital costs, assets (e.g. ambulances and recurrent costs including staffing).

### Factors that may influence demand

NSW Ambulance has acknowledged that there are many factors that influence the level of demand for their service. These factors include:

- Demographic profile.
- Health management processes for example low acuity calls are now referred to the HealthDirect phone service.
- Changes to Government policy for example the potential Medicare levy.
- Availability of local volunteers.
- Availability of GPs, medical centres and community health centres.

#### 9.3.2 Police

The provision of police services is dependent on the amount of crime in an area rather than population size. Whilst demographic indicators can be used to anticipate crime level, such as age, unemployment rates and socio-economic status, crime rates determine the level of policing required within an area.

All town and regional centres require some form of police presence. For smaller centres this can comprise of police shopfront approximately 150m<sup>2</sup> whilst larger centres would have a police station on a 2,000m<sup>2</sup> site. Should larger facilities be required then there should be capacity on the site for the facility to construct an additional storey to allow future expansion if necessary. These scenarios are depicted in Figure 20. It is anticipated that for the Greater Macarthur Investigation Area a police station in one of the major town centres such a Wilton Junction could be sufficient to service the entire area provided the station is supported by Police Shopfronts in each of the minor centres.

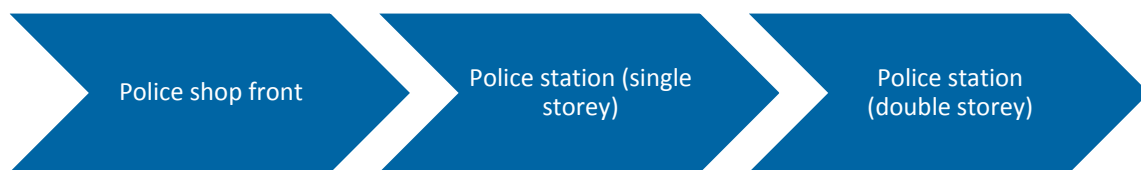


Figure 20 Continuum of police station facilities

### 9.3.3 Fire

Currently, fire services within the Greater Macarthur Investigation Area are predominantly serviced by the Rural Fire Service (RFS). However, as the area becomes developed and increasingly urbanised it is anticipated that services would then transfer to Fire NSW. Boundary determination regarding service provision is discussed between NSW Fire and RFS, both agencies should therefore be regularly consulted as the area becomes developed. The continuum of fire services, as depicted in Figure 21 considers the transfer of service from RFS to NSW Fire.

The provision of fire services is based predominantly on the key performance indicator of achieving a ten minute call out time, which is applied to all metropolitan areas. This indicator is used to determine where new facilities are required and also the level of resources required at each station. Other factors that also influence the rate of provision include: demographic profile, SEIFA index, volume of 000 calls, accessibility to the area, transport and property values.

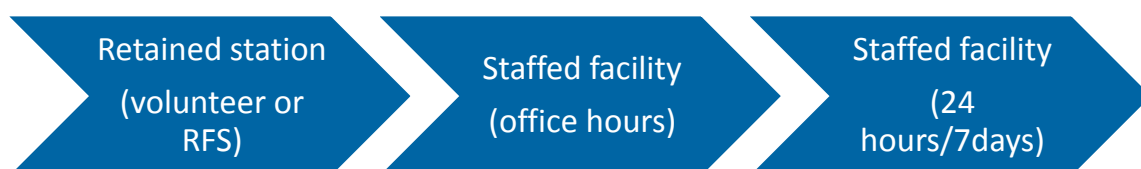


Figure 21 Continuum of fire station facilities

## 9.4 Health

### 9.4.1 Continuum for adapting to different growth scenarios

In undertaking health facility planning for the South West Growth Centre, the South West Local Health District developed a hierarchical model for the provision of health care within the Growth Centre. This model has formed the basis of the Continuum of health facility provision depicted in Figure 22. Staging of the facilities would depend on the rate and location of the population growth.



Figure 22 Continuum of health facility provision to accommodate the various development scenarios

#### 9.4.2 Situation based thresholds

A detailed study, similar to that undertaken for the South West Growth Centre would need to be undertaken to determine the exact number of facilities for each type identified in the Continuum as well as their location.

#### 9.4.3 Factors that may influence service demand

There are number of factors that influence how health facilities are utilised and these will determine whether additional facilities are required.

- Health facilities tend to work as a network with different specialties and services available across different facilities. The types of services at the proposed facilities would depend on what services already exist within the region, particularly with regards to those provided at Campbelltown and Camden Hospitals.
- The number of GPs and Private Medical Centres can reduce demand on the public health system.
- Private health facilities could reduce the demand on both inpatient and outpatient facilities.
- The increased focus on moving inpatient services to outpatient reduces the number of hospital beds required to service the population.
- Advances in medical technology and methods of treatment will influence the type of services required by the population.

### 9.5 Cemetery

Cemeteries and Crematoria NSW are currently conducting an audit of burial sites across NSW. It is anticipated that their findings will confirm that over the next 5-10 years there will be a deficit in burial sites across Sydney. The Greater Macarthur Investigation Area provides an opportunity for a suitable site to be identified. It is understood that some sites have been proposed within the region for this purpose. It is recommended that as more detailed planning is conducted for Greater Macarthur Investigation Area that the consideration of a new cemetery be considered.

Cemeteries and Crematoria NSW want to ensure that any planning for this area identifies the significant need for a new facility within the near future, planning for this area needs to ensure that such facilities are permissible within some of the land use zones in the area.

## 9.6 Sport and recreation

The *NSW State Infrastructure Strategy Update 2014* announced that long term planning would now commence for the development of a 30,000 seat stadium in outer Western Sydney. The State Government has not made any decision regarding the location of the facility. Key locational requirements include transport connectivity both in relation to public transport and car parking facilities as well as being surrounded by a vibrant entertainment precinct. It is recommended that the Department of Planning and Environment consult with the Office of Sport and Recreation to ensure that if a new facility is required that sufficient land is made available.

In accordance with the *2012 Stadia Strategy* the planning of a new facility can be staged. One of the main priorities of the Strategy is to upgrade existing facilities so that they are used more efficiently for a wide range of activities. Should a new facility be required then this facility could be a tier 2 or tier 3 facility, The new facility should have the potential to be upgraded into the next tier if required.



Figure 23 Continuum of stadia facilities

## 9.7 Cultural facilities

Cultural facilities are those centres or spaces that support the development of culture and the arts. They can include: community art galleries, exhibition spaces, rehearsal and performing spaces, museums, multimedia space and art centres. Cultural facilities can range in size from a local facility such as an art space within a multipurpose centre, to a district level recording studio, through to a museum which attracts visitors from a regional area.

At a regional level there are no established rates of provision or guidelines regarding what should be provided. Arts and cultural facilities are often owned and managed by the local council, the need for these facilities is therefore determined by demand from the local population. The meeting held with Arts NSW on 9 July confirmed that art and cultural activities should be encouraged at a local level to demonstrate that there is a need for larger facilities. The continuum depicted in Figure 24 has therefore been based on the importance of local and district facilities facilitating cultural activities.

Cultural spaces are provided at the local level and comprise of a designated space or facility located within another council facility or building such as library, tourism centre or multipurpose centre. Alternatively a cultural space could be a feature within an existing space (for example hanging space in a library for an art exhibition or recording equipment in a multipurpose community centre)

A cultural centre is a stand-alone facility that may be co-located with other social infrastructure buildings such as a library or civic centre. A cultural centre would most likely be provided at a district or regional level.

A regional cultural facility is larger stand-alone facility that attracts visitors from the broader area. Whilst these facilities can have local uses, such as venue hire and smaller community areas, they are also able to accommodate, national and international performances.



Figure 24 Continuum of art and cultural facilities

## 10. Recommendations for Greater Macarthur Investigation Area

This report has investigated the provision of regional social infrastructure that would be required to support the population should the Greater Macarthur Investigation Area be pursued as a growth centre in the future. Chapter 8 has developed a framework that will guide the planning and staging of social infrastructure for all future growth centres including Greater Macarthur.

Each of the social infrastructure facility types operates within a service model that identifies criteria or thresholds for determining when a new facility is required. The framework is supported by a series of Continuums outlined in Chapter 9 that can be adapted for different growth scenarios. The Continuums have been designed to assist in identifying the phases for facility planning and investigating options for increasing capacity. In addition they identify situation based thresholds for determining when new facilities are required.

Urbis is currently putting together a Growth Framework that identifies the future opportunities within the Greater Macarthur Investigation Area. Their preliminary findings have identified six precincts for growth as well as a hierarchy of centres. The staging of social infrastructure will be directly related to the release of these precincts and the centres within each. The Continuums can be used to plan the staging of facilities based on the proposed population numbers that will be estimated within Urbis' Growth Framework. The location of the proposed facilities will be determined through the hierarchy of centres.

Whilst the staging of social infrastructure facilities is predominantly determined by the needs of the population, other variables will influence the rate of demand for a facility. These variables include:

- Services provided by existing facilities within the region and their ability to accommodate an increase in demand as a result of the increase in population.
- Demographic composition of the potential future community and the influence this has on the demand for social infrastructure.
- Operational model for each social infrastructure type and the influence this has on facility provision.

The next phase of planning for the Greater Macarthur Investigation Area will provide more detail with regards to population distribution and hierarchy of centres. The Framework for the Provision of Social Infrastructure (Chapter 8) and the Continuums for Adapting to Different Growth Scenarios (Chapter 9) can utilise this information to identify the number of facilities required at each stage of development.

DRAFT

## Appendices

## Appendix A – Regional infrastructure audit

Table 14 Regional open space

Name	Address	Size of area (ha)	Facilities
Mount Annan Botanic Gardens	Narellan Road, Mount Annan	416	Facilities include picnic areas, mountain bike trail, guided bus and walking tours, visitor centre and disability access.
Western Sydney Parklands	Elizabeth Drive, Abbotsbury	5280	Facilities include playgrounds, barbecues and disability access.
Prospect Reservoir Nature Reserve	Reconciliation Road, Pemulwuy	325	Picnic areas, barbecues, walking and cycling tracks.
Nattai National Park	Wattle Ridge	50,000	Picnic facilities and walking routes.
Burraborang State Conservation Area	Burraborang	17,500	Picnic area and facilities.
Bargo State Conservation Area	Hume Highway, Bargo	4,618	-
Dharawal Nature Reserve	Appin	376	-

Table 15 Education

School	Address	School type and years	Number of enrolments (2014)
<b>Primary education</b>			
Appin Public School	97 Appin Road, Appin	Government K-6	219
Wilton Public School	11 Greenbridge Drive	Government K-6	198
Ambarvale Public School	Copperfield Drive, Ambarvale	Government K-6	272
St Helens Park Public School	Kellerman Drive, St Helens Park	Government K-6	462
Woodland Road Primary School	20 Woodland Road, St Helens Park	Government K-6	224
Douglas Park Primary School	111 Camden Road, Douglas Park	Government K-6	136
Our Lady Help of Christians Catholic Primary School	80 Demetrius Rd Rosemeadow	Non-government K-6	299
Bargo Public School	Southern Rd, Bargo	Government K-6	358
Picton Public School	27 Lumsdaine St, Picton	Government K-6	458
Tahmoor Public School	Bronzewing St, Tahmoor	Government K-6	358
<b>Combined schools</b>			
Broughton Anglican College	81-83 Menangle Road, Menangle Park	Non-government K-12	909
Wollondilly Anglican College	3000 Remembrance Driveway, Bargo	Non-government K-12	706
Mary Brooksbank School	Anthony & Cleopatra Drives, Rosemeadow	Government, special needs K-12	82
<b>Secondary school</b>			
Ambarvale High School	Thomas Rose Drive, Rosemeadow	Government 7-12	761
Thomas Reddall High School	Jaggers Place, Ambarvale	Government 7-12	592
John Therry Catholic High School	Demetrius Road, Rosemeadow	Non-government 7-12	927
<b>Tertiary education</b>			
University of Sydney Camden Campus	107 Cobbitty Road, Cobbitty 425 Werombi Road, Camden 410 Werombi Rd, Camden		
University of Western Sydney Campbelltown	Narellan Road and Gilchrist Drive, Macarthur		

School	Address	School type and years	Number of enrolments (2014)
Campus			
TAFE NSW South Western Sydney Institute Campbelltown College	181 Narellan Road, Campbelltown		
TAFE NSW South Western Sydney Institute Macquarie Fields College	32 Victoria Rd, Macquarie Fields		
<b>Community college</b>			
Macarthur Community College	7 Willan Drive, Cartwright (Courses held in Liverpool, Ingleburn, Campbelltown, Picton, Fairfield and St Johns Park)		

Table 16 Health facilities

Name	Address	Services
Rosemeadow Community Health Centre	5 Thomas Rose Drive, Rosemeadow	Community health services, including occupational therapy, speech pathology, social work, psychology, palliative care and women's health.
Traxside Youth Health Service	4 Langdon Ave, Campbelltown	Services for young people aged 12 to 24 years who live in the Macarthur Region.
Narellan Community Health Centre	14 Queen St, Narellan	Community health services, including occupational therapy, speech pathology, social work, psychology, women's health and drug and alcohol counselling.
Wollondilly Community Health Centre	15 Harper Close, Tahmoor	Community health services, including occupational therapy, speech pathology, social work, psychology and women's health.
Camden Hospital	Menangle Road, Camden	Small metropolitan hospital with an emergency department
Campbelltown Hospital	Therry Road, Campbelltown	Major metropolitan hospital with an emergency department
Campbelltown Private Hospital	42 Parkside Crescent, Campbelltown	Private hospital providing medical, surgical and rehabilitation services to the Macarthur Region.

Table 17 Sport and recreation facilities

Name	Address	Capacity/facilities
Menangle Park Paceway	Racecourse Avenue, Menangle Park	Holds harness racing competitions
Ambarvale Sports Complex	Jinwin Place, Ambarvale	1 x concrete cricket pitch, 2 x grass netball courts, 3 x soccer fields
Coronation Park Netball Complex	Redfern Road, Minto	46 x netball courts
Minto Indoor Sports Centre	9 Redfern Road, Minto	4 x volleyball courts, 4 x netball courts, 4 x basketball courts, 4 x futsal
Camden Bicentennial Equestrian Park	Argyle St, Camden	88 hectares, including equestrian full eventing cross country course, large main arena, pony club arenas, rodeo arena, 6 polocrosse fields and pavilion
Kayess Park	Memphis St, Minto	9 x touch football fields
Milton Park Softball Complex	Henderson Road, Macquarie Fields	7 x softball fields
Bridge Street Indoor Sports Centre	54 Bridge Street, Picton	Holds competitions for men, women, mixed and children for indoor soccer, cricket, netball, volleyball and dodgeball
Campbelltown Sports Stadium	Rose Payten Dr & Pembroke Rd, Leumeah	20,000 person capacity

Table 18 Emergency and justice services

Name	Address	Description
<b>Police</b>		
Campbelltown	65 Queen Street, Campbelltown	Campbelltown LAC covers Menangle Park, Appin and Gilead.
Narellan	278 Camden Valley Way, Narellan	Camden LAC covers Wilton and Douglas Park.
Picton	84-86 Argyle Street, Picton	Camden LAC covers Wilton and Douglas Park.
<b>Ambulance</b>		
Camden	81 Broughton St, Camden	
Campbelltown	6 Parkside Crescent, Campbelltown	
Picton	Cliffe St, Picton	
<b>Fire and rescue</b>		
Campbelltown	66 Broughton Street, Campbelltown	Retained firefighters are not rostered on duty at this station but employed to respond to emergency incidents when notified.
Picton	7 Margaret Street, Picton	
<b>Rural fire services</b>		
Menangle	Menangle Rd, Menangle	
Menangle Park Rural Fire Service	Racecourse Avenue, Menangle Park	
Douglas Park	Camden Road, Douglas Park	
Picton	Cnr Colden and Menangle Sts, Picton	
Appin	King Street, Appin	
Wollondilly	65 Bridge Street, Picton	
<b>State Emergency Services (SES)</b>		
Camden	15 Queen St, Narellan	South Western Sydney Zone 1
Wollondilly	65-69 Bridge Street, Picton	South Western Sydney Zone

Name	Address	Description
		1
Campbelltown	Cnr Alderney & Townson Sts Minto	South Western Sydney Zone 1
<b>District courts</b>		
Campbelltown	95 Railway Street, Campbelltown	
<b>Local courts</b>		
Campbelltown	95 Railway Street, Campbelltown	
Camden	John Street, Camden	
Liverpool	150 George Street, Liverpool	
<b>Legal centre</b>		
Macarthur Legal Centre	317 Queen St, Campbelltown	Provides free legal advice to all community members who live in the Campbelltown, Wollondilly and Camden regions (Macarthur) and possible on-going assistance to low earning income people.

Table 19 Cemeteries

Name	Address
Picton Cemetery	27 Dunlop Pl, Picton
Redbank Cemetery	177 Thirlmere Way, Picton
Camden General Cemetery	Main Southern Rd, Cawdor
Narellan Cemetery	21 Richardson Rd, Narellan
St Peter's Anglican Church Cemetery	Broughton Street, Campbelltown
Pioneer Park	St Johns Rd, Campbelltown

GHD

133 Castlereagh St Sydney NSW 2000

-





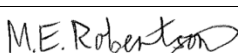
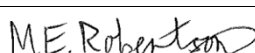
T: +61 2 9239 7100 F: +61 2 9239 7199 E: sydmail@ghd.com.au

© GHD 2015

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

\\ghdnet\ghd\AU\Sydney\Projects\21\24396\WP\207128 GMIA.docx

#### Document Status

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
1	Michala Lander	Anna Chubb		Anna Chubb		15/05/2015
2	Michala Lander	Michael Robertson		Michael Robertson		4/06/2015
3	Michala Lander	Michael Robertson		Michael Robertson		16/07/2015

[www.ghd.com](http://www.ghd.com)

