



14-40 George Street, Leichhardt Open Space Study

October 2012, FINAL



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Executive summary

Urbis was commissioned by KGS Victoria Pty Ltd to undertake an Open Space Study in relation to the proposed rezoning of the former Kolotex and Labelcraft sites at 22, 30-40 George Street, Leichhardt (the site). Rezoning of the site has been referred to the Department of Planning and Infrastructure (DOPI) for Gateway Determination. As part of this process an Open Space Study is required to inform preparation of a Built Form and Urban Design Report which will lead to the formation of a site specific Development Control Plan (DCP) for the future development of the site.

It is important to note that both the Built Form and Urban Design Report is exploratory at this stage and the site specific Development Control Plan or similar document, will define the actual development, including number of dwellings and actual open space to be provided.

This Open Space Study provides:

- An independent assessment of the existing supply of open space in the local area
- An analysis of likely demand for new local open space created by the proposed development
- Guidelines to inform planning and design of the open space proposed on site.
- An evaluation of the open space proposed within the Built Form and Urban Design Report.

This study includes a review of existing reports, outlining the demand for and supply of existing open space in the area. A demographic assessment was conducted and population projections were used to assess the level of future demand for open space that the development may generate. Based on this research, the report makes recommendations on the most appropriate quantum and form of open space for the site.

PROPOSED OPEN SPACE

The proposed development indicates approximately 50%, of the site will be dedicated open space, of which (65%) will be hardstand, this includes the area surrounding the commercial and shared zone located through the centre of the site. Approximately (35%) of the open space is to be landscaping primarily in pockets across the site, with a large landscaped area in the middle of the site to form a communal open space for residents.

The current planned provision of open space on site:

- provides visual amenity and separation between buildings
- creates areas for social interaction and passive recreation
- addresses sustainability by assisting in water management across the site
- encourages walking and bicycle use by providing links across the site through appropriate design of shared zones;
- integrates the new development with the existing context

The Built Form & Urban Design report for the proposed development has considered a number of options for the site. Each option considered the development footprint and height of buildings across the site with the aim of providing the most valuable open space on the site. The proposal provides an optimal solution that ensures the open space on the site is well located, maximises, solar access and amenity for residents, and provides improvements to the surrounding streetscape.

The provision of deep soil planting and raised deep soil planting beds, allows for planting of substantial trees onsite to provide shade, shelter, privacy and visual amenity. The provision of shared access zones

through site for cyclists, pedestrians and vehicles will promote connectivity to surrounding facilities including schools, shops, transport, open space and recreation facilities.

EXISTING OPEN SPACE

The 'PedShed analysis' technique was used to assess the accessibility of the site to existing local and district level parks; this is a useful tool to assess the walkability of a neighbourhood. Based on the analysis there are currently six areas of open space within 10 minutes walking distance of the site including local pocket parks and playgrounds including Wangul Nura (which has been recently upgraded) and Marr Reserve, as well as larger district parks which provide active sports and recreation facilities, such as Lambert Park and Petersham Park (which is undergoing an upgrade). The presence of these high quality parks provide a range of publicly accessible open space, within a short walk of the proposed development and illustrates that the area is well serviced by existing open space assets. The district parks provide a range of opportunities for a range of active sport, and recreation.

DEMAND FOR OPEN SPACE

The demand for open space is influenced by population numbers and demographic characteristics (eg age, family structure) Open space provides a variety of functions for example:

- Residents in urban areas require public open spaces that is easily accessible from their homes to substitute for a lack of private open space at home
- Shoppers and visitors need spaces to wait, meet, relax, gather, be entertained, to take a break from shopping, allow children to play, or attend community events such as markets
- Workers need spaces to sit in the sun and fresh air, to eat and drink during their breaks, go for a walk, or relax at lunchtime.
- High quality and appropriately located civic space is important in creating more vibrant and interesting centres. They provide a place for people to gather and can provide opportunities for cultural activities such as markets, outdoor performances and local festivals eg food, art festivals.

There is a clear recognition in both the NSW Department of Planning, Open Space Guidelines, and Leichhardt Council S94 plan, that increasing population density in Sydney, and the lack of land available to provide new large areas of open space will result in increased demand for existing open space areas in Leichhardt and the inner west. The proposed development may result in an incoming population of up approximately 581 people to the site. This will create only a minor increase in demand for open space in the vicinity of the development.

Due to the proposed provision of open space on site, i.e. plaza, it is expected that the residents in the surrounding streets within walking distance of the proposed development may be attracted to the site to use the open space areas as a meeting or reference point, this is important for the viability of the commercial aspect of the site but also social connectivity and integration of the new residents with the existing Leichhardt community. This is consistent with Leichhardt Council's 2020 Strategic Plan, which identifies the need for new development to integrate into the existing community.

REQUIREMENTS FOR OPEN SPACE ON SITE

Open space is provided within residential developments for a number of reasons including: providing amenity, visual privacy, water cycle management as well as opportunities for recreation and social activities. The State Environmental Planning Policy No 65 (SEPP 65) Residential Flat Design Code (2011) aims to improve the design quality of residential flat buildings in NSW. It contains ten design principles which guide good design and assessment of the merit of design solutions. It also allows the Minister for Planning to form Design Review Panels to give consent authorities independent advice on the design quality of residential flat building proposals.

The SEPP does not specify a quantum of open space for developments, but takes into consideration the context, density, site size, availability of the public domain or private open space. SEPP 65 is currently under review, the final report is not available at this stage but the discussion document notes "as a rule of

thumb 25% – 30% percent of the site should be communal open space. In line with SEPP 65 the Urban Design of the development has increased building setbacks to accommodate more open space on the site. As the proposed development will provide approximately 50% of open space, including approximately 35% soft landscaping, the development would comply with this condition of SEPP 65.

Section 94 of the Environmental Planning and Assessment Act (EP&A) 1979 states developers should contribute towards and provide for public services and infrastructure needed by their developments and allow local Councils to plan for and introduce levies to provide for these additional requirements. Leichhardt Council's Section 94 (S94) Developer Contributions Plan for Open Space (2005) requires new developments to achieve 20.51m² of open space per person, which would equate to approximately 11,916m² (or 1.19 Ha) for the proposed development based on a projected population of approximately 581 residents. This is clearly not viable on a 14,662m² (1.4Ha) site.

In other high density developments, developers have undertaken Voluntary Planning Agreements (VPA) with planning authorities including Leichhardt Council relating to the provision of open space. These agreements have been undertaken either as an alternative to the provisions of developer contributions or in conjunction with those provisions. For example the developers of both the Balmain Leagues Club and the Anka developments in Rozelle have entered into VPA agreements with Leichhardt Council for a payment in lieu of S94 contributions.

RECOMMENDATIONS

There is a clear direction within many strategic documents (including the Department of Planning Open Space Guidelines, and the SEPP 65, Leichhardt Council 2020 Strategic Plan) as well as feedback from communities that the focus for open space, in particular on constrained urban sites, should be on the provision of quality open space and the experience it offers and not numerical compliance or out dated standards.

In discussions with Leichhardt Council's Open Space Planner, it was noted that small pocket parks are a cost liability for council's across Sydney. Leichhardt Council have a number of other objectives that a park (irrespective of size) on site could satisfy including:

- Provision of rooftop open space – Rooftop gardens can provide valuable private open space for residents, and improve the overall amenity of the local area. It also provides sustainability benefits: plants grown rooftops provide natural insulation to the buildings.
- Integration of heritage and public art – Provision of heritage items and public art as part of the open space at the site could improve the amenity and value of the open space and promote usage of open space areas by existing residents. This will have a beneficial impact on marketing of dwellings at the site and also support Council Cultural Planning Policy to improve the quality of open space in Leichhardt.
- Leichhardt Council's Community and Cultural Plan 2011 stresses the importance of linking Art and Open Space. Given the history of the site there is an opportunity for the proposed open space on site to incorporate pieces of public art or artefacts from the site to create a heritage theme for the park and the development.
- Support sustainable transport – the provision of bike storage and walking paths through the site will provide residents with the opportunity to use this form of sustainable transport. This will support the objectives of Leichhardt Council's Bicycle Strategy
- Developing community connections – The provision of a community or kitchen garden at the site could be considered. This will improve the overall use and value of open space at the site while also achieving a range of community health and wellbeing benefits. The garden would need to be operated through the body corporate for the development and could be eligible for funding from Leichhardt Council's Community Garden Policy

1 Introduction

1.1 BACKGROUND

Urbis was commissioned by KGS Victoria Pty Ltd to undertake an Open Space Study in relation to the proposed rezoning of the former Kolotex and Labelcraft sites at 22,30-40 George Street, Leichhardt (the site). Rezoning of the site has been referred to the Department of Planning and Infrastructure (DPI) for Gateway Determination. As part of this process an Open Space Study is required to inform preparation of a Built Form and Urban Design Report which will lead to the formation of a site specific Development Control Plan (DCP) for the future development of the site.

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This Open Space Study provides:

- An independent assessment of the existing supply of open space in the local area
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This study includes a review of existing reports, outlining the demand for and supply of existing open space in the area. A demographic assessment was conducted and population projections were used to assess the level of future demand for open space that the development may generate. Based on this research, the report makes recommendations on the most appropriate quantum and form of open space for the site.

1.2 METHODOLOGY

To complete this study Urbis have undertaken the following tasks:

- Review of literature of existing background documentation, state and local government studies, reports and plans including statutory planning, social and community plans, recreation and open space plans, culture and bicycle studies.
- Review of best practice in open space planning for mixed use developments.
- Demographic profile – Australian Bureau of Statistics (ABS) Census 2011 data for the area has been used to develop a local population profile. In addition DPI population projections, along with calculations of the likely incoming population profile, have been used to understand the characteristics of the local population and determine likely demand for open space
- Assessment of existing supply of open space – an audit of existing open space facilities in the local area has been undertaken to assess availability, accessibility and quality of provision
- Consultation with Council staff – Urbis has contacted key Leichhardt Council staff to discuss issues associated with open space provision and planning requirements associated in the area
- Analysis – Urbis has reviewed the Built Form and Urban Design Report for the site and conducted a site visit to assess the most appropriate open space form and design
- Recommendations – Urbis has provided a list of recommendations and principles for consideration of the open space design. These recommendations are based on our knowledge of open space best practice examples and our experience with provision in similar contexts.

2 Site location and context

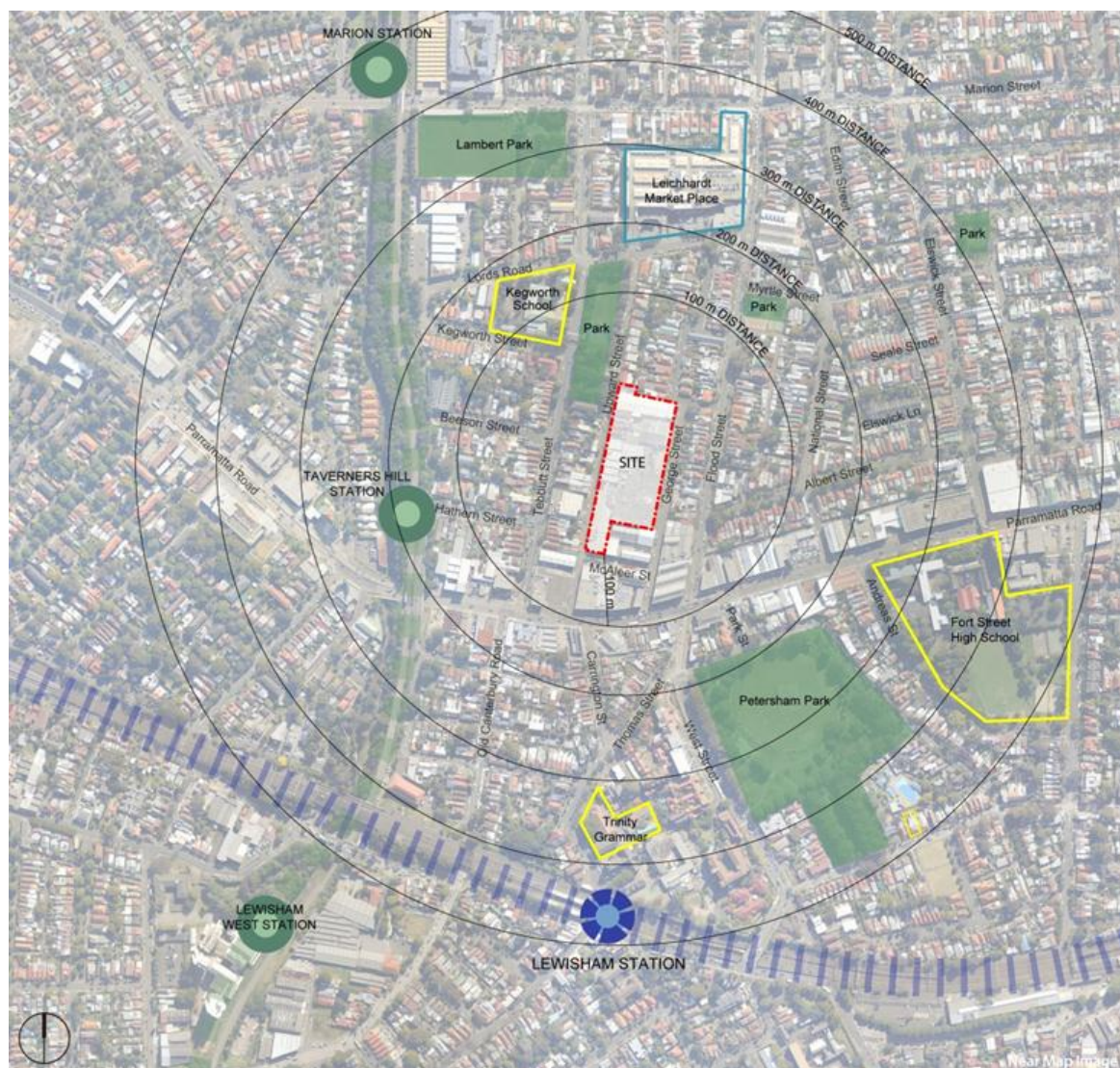
2.1 SITE LOCATION

The Kolotex and Labelcraft site (site area 1.46Ha) is located in the Leichhardt suburb and in Sydney's inner west, approximately 4km south-west of the Sydney CBD. The site is bound by George Street to the east, McAleer Street to the south and Upward Street to the west.

The Leichhardt LGA is characterised by a variety of land uses, in particular residential, retail and industrial development. The suburb and LGA have experienced some gentrification and residential development in recent decades. At present, the subject site is occupied by 'purpose built' industrial buildings and associated infrastructure. Buildings on the Kolotex site are no longer in use by Kolotex and largely vacant although part of the site is used for car storage.

Land located directly north, east and west of the site is zoned residential and characterised by one to two-storey detached dwellings. Kegworth Public School is located to the north of the site; whilst largely commercial and light industrial uses are located to the south and west. The site is within walking distance of public transport, retail, local schools and parks. The site is also walking distance to Parramatta Road.

FIGURE 1 – LOCATION OF SITE



LEGEND

HEAVY RAIL / STATION

LIGHT RAIL / STATION (PROPOSED)

KOLOTEX LABEL CRAFT SITE

NEIGHBOURHOOD CENTRE

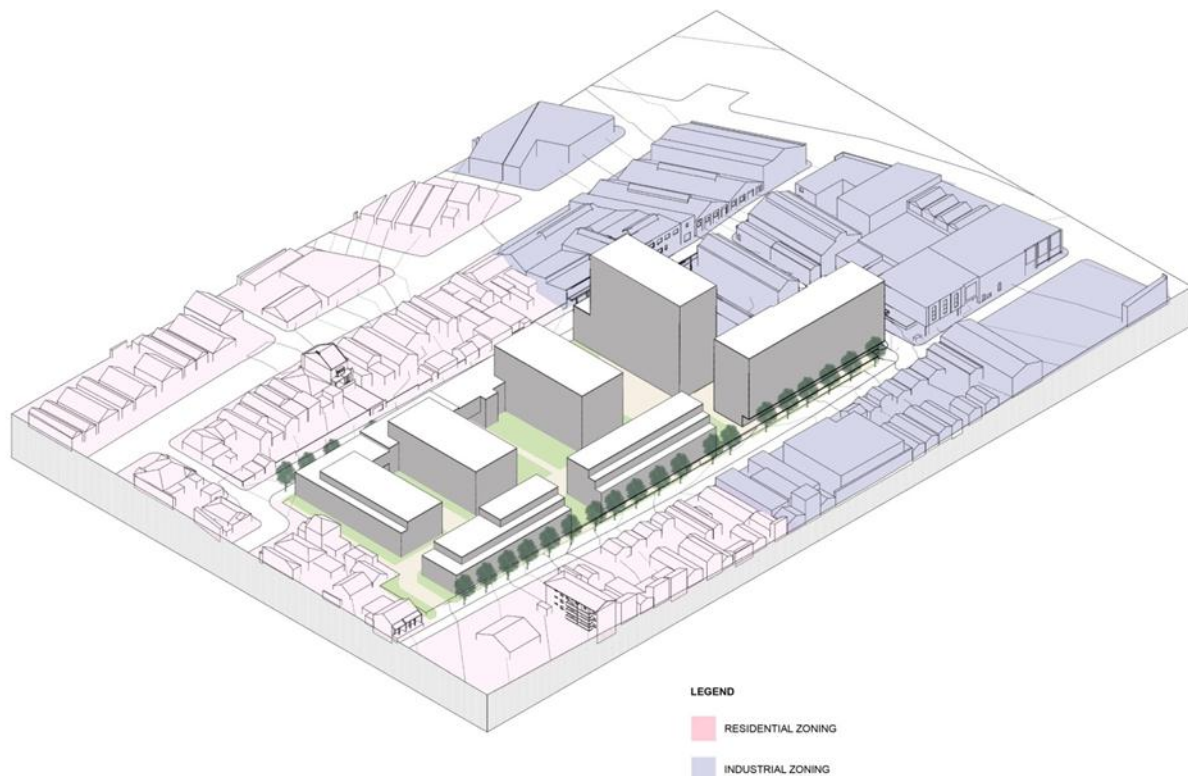
EDUCATION

PARKS

2.2 PROPOSED DEVELOPMENT

The proposed rezoning of the site from industrial use would provide the opportunity to create a new retail and residential development. Preliminary plans for the site identify the potential for the development of up to 350 apartments on site. These dwellings are likely to range from studio and one bedroom apartments, to two and three bedroom dwellings. The breakdown of dwellings will be confirmed at the next stage of the planning process. Figure 2 illustrates the proposed development massing.

FIGURE 2 – PROPOSED DEVELOPMENT MASSING

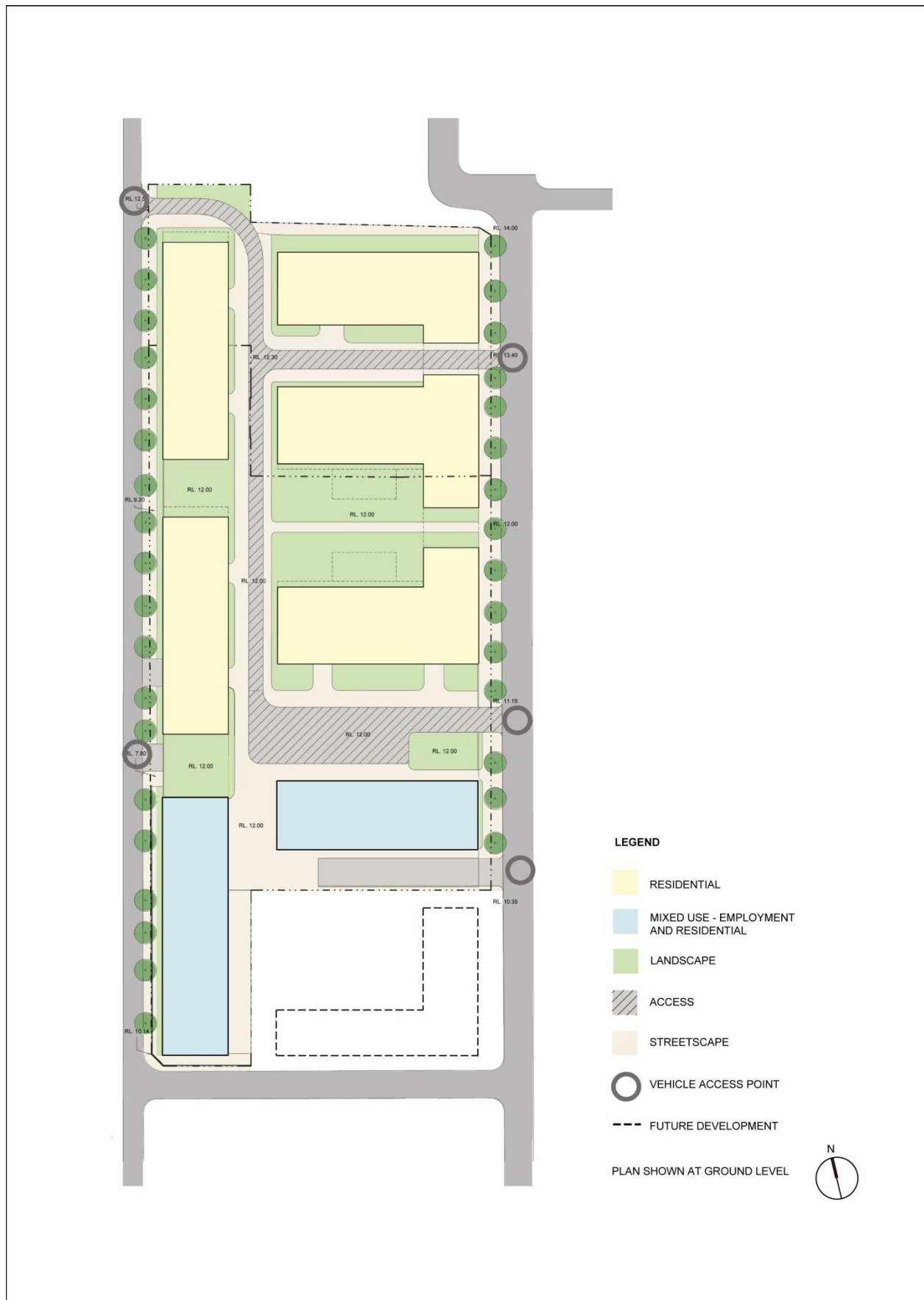


The Plans in Figure 3 overleaf identify landscaping and open space features including:

- A number of landscaped areas across the site
- Planting on the building line and street trees along Upward Street and George Street
- A central communal landscaped garden
- A pedestrian and landscaped access zone to the north of the site, which will provide a connection through the site from George Street to Upward Street
- An area of open space/Plaza near the entrance to the site on George Street, adjacent to the proposed commercial use

An overview of the areas of open space include hard landscaping and soft landscaping onsite indicates that there will be a total of 7,468m² (50%) of open space onsite, of which 4,884m² (65%) will be shared zones (eg hard landscaping such as roads, pathways, parking areas, and an open plaza to activate retail and commercial tenancies onsite) and 2,584m² (35%) will be soft landscaping, including 935m² of deep soil planting on the site.

FIGURE 3 – PROPOSED DEVELOPMENT THROUGH SITE CONNECTIONS



3 Assessment of existing supply of open space

An audit of existing areas of open space was undertaken to assess the current level and quality of supply of open space. Existing open space areas have been classified based on the NSW Recreation and Open Space Planning Guidelines (NSW Department of Planning, 2010), which identifies the classification and catchment for open space areas.

TABLE 1 – OPEN SPACE TYPOLOGY

CLASSIFICATION	DETAILS
Local Parks Reserves	- To support community development and recreation these include gardens, play facilities, community gardens. - Local open space serves one neighbourhood and is located close to or within residential areas.
District Parks	Outdoor sports area and venues designed to support team sports training and competition Venues designed to support team sports training and competition. District Open space serves a number of neighbourhoods and usually has a catchment extending beyond the LGA
Urban public space	Street and road reserves, lanes and town plazas and squares which accommodate walking, cycling, social gatherings or outdoor dining. This also includes the public domain
Conservation and heritage	Reserves created to protect and enhance natural and cultural resources.
Landscape and amenity	Reserves created for their attractiveness and to add to or protect the character of an area. Includes reserves adjoining residential and industrial areas, ridge lines, river flats
Streetscape	Successful streetscapes acknowledge the surrounding context, addresses the functional needs of a diverse group of users and conveys a sense of community

The 'PedShed', analysis technique was used to assess the accessibility of the site to local and district level parks. This is a useful tool to assess the walkability of a neighbourhood. The most appropriate 'PedShed', or catchment area for consideration, was a walking distance of 10 minutes from the site. Figure 5 in Appendix A presents the location of existing open space assets within this local catchment

Based on this analysis there are currently six areas of open space within 10 minutes walking distance of the site including a number of small local pocket parks, such as Wangul Nura (recently updated) and Marr Reserve, and larger district parks which provide active sports and recreation facilities, such as Lambert Park and Petersham Park (currently being upgraded) – Table 7 provides a typology of the range of open space in the catchment.

The following section provides an overview of the existing quality of open space facilities in the local area.

3.1 WANGUL NURA RESERVE

Wangul Nura Reserve is located 300m from the site at the corner of Flood and Myrtle Streets, Leichhardt. This reserve is 0.4Ha in size and provides a large children's play area with play equipment, sun shades, seating, passive open space, half basketball court, seating and a drinks fountain. This local park will provide easy access to open space and play space for incoming residents of the site.

PICTURE 1 – WANGUL NURA RESERVE



3.2 LAMBERT PARK

Lambert Park is located to the north east 350m of the proposed site, at the corner of Foster and Marion Streets and is the historical home of the Associazione Polisportiva Italo-Australiana (APIA) Soccer Club. The park is approximately 2Ha in size and is subdivided into two separate areas. The larger of the two open spaces is roughly 1.4Ha in size and forms an enclosed sports ground for the APIA Soccer Club. This area includes fenced oval, grandstand, change rooms, toilets, office, ticket office, rainwater tanks and grass embankment with seating.

The adjacent park area includes a child care centre with associated parking, children's playground facilities, pathways, and passive open space with rest areas.

This local outdoor sports area and park can be easily accessed by incoming residents for sports and recreation activities.

PICTURE 2 – LAMBERT PARK



3.3 MARR RESERVE

Marr Reserve on Cary Street is approximately 400m from the site and less than 10 minutes' walk away. This area of open space provides two children's play areas with activity equipment, seating areas with shade, picnic tables and a drinks fountain. This open space is approximately 0.15Ha in size.

Due to the distance of this local park, and the proximity of Wangul Nura Reserve, it is anticipated that residents at the site would be inclined to use the Wangul Nura Reserve or Petersham Park, rather than Marr Reserve.

3.4 PETERSHAM PARK

Petersham Park is a district scale park and outdoor sports area, located approximately 400m to the south west of the proposed development and is approximately 6Ha of open space. Petersham Park has a range of facilities on site including:

- Fanny Durack Aquatic Centre
- cricket oval
- seating for viewing sports on the cricket oval
- BBQ and picnic areas
- shaded seating areas
- passive open space
- bandstand
- children's play area
- toilets and changing facilities.

PICTURE 3 – PETERSHAM PARK



Access to the park from the site is across the major arterial route of Parramatta Road, however there is a pedestrian crossing point at Flood Street. This crossing point makes Petersham Park more accessible to the site. There are current plans to further upgrade this park.

3.5 CADIGAL RESERVE

Cadigal Reserve is located on Grosvenor Crescent approximately 400m from the proposed development site. The Reserve covers approximately 0.3Ha and is owned by Ashfield Council. The Reserve is a key site for the Inner West Environment Group (IWEG) who has planted over 40 local-provenance species at the site. The area can be accessed from Parramatta Road via the canal footpath, or via Haig Avenue.

Facilities at the site are limited, however the area is well used for dog walking and includes an off-leash area. There are footpaths linking to the canal, and bike paths.

It is anticipated that due to the lack of facilities and direct access to this local park, usage by incoming residents of this area will be limited.

3.6 KEGWORTH PUBLIC SCHOOL PLAY AREA

The closest area of open space to the site is the Kegworth Public School Play Area, a rectangular area of open space adjacent to the site to the north east. This area is approximately 1Ha in size with enclosed sports and recreation areas, including play equipment, cricket net and synthetic basketball/netball court.

PICTURE 4 – KEGWORTH PUBLIC SCHOOL PLAY AREA



While this area is not accessible to the general public, it is understood that the park is accessed informally by families of the school outside school hours.

It is anticipated that incoming residents would not access this facility, unless they have children who attend the school, and would instead access the existing facilities in Wangul Nura Reserve or Petersham Park.

3.7 OPEN SPACES IN THE WIDER AREA

There are a number of open space areas in the wider area which could also meet the needs of local residents. Including Hawthorne Canal, a district scale parkland that incorporates the Richard Murden Reserve to the north. The total open space is approximately 9.25Ha but access is limited by the disused rail line. The combination of facilities at the park includes:

- three children's play areas (two at Richard Murden Reserve and another at Shields Playground)
- two basketball courts
- four tennis courts
- a fitness course
- BBQ and picnic areas
- public toilets
- walking paths

- a café
- large off leash dog area
- on leash dog area
- shaded seating areas
- native garden.

There are other areas of open space available in Petersham LGA including the Brighton Street Reserve which include combined facilities, a children's playground, a basketball court and BBQ and picnic areas. The Quinn Playground is smaller and includes a children's playground only. Both of these reserves are approximately 1km from the proposed site.

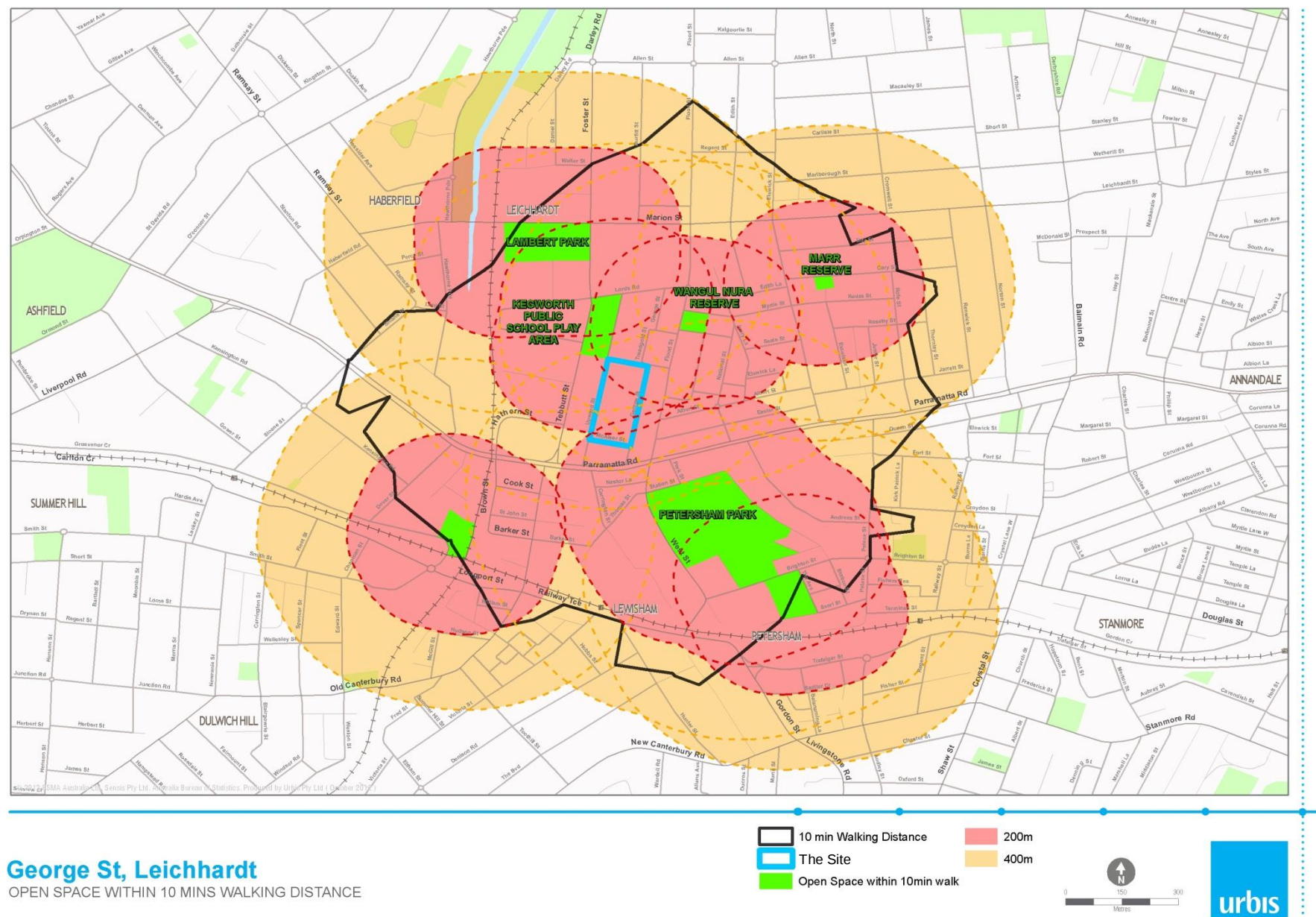
3.8 OPEN SPACE ACCESS

Figure 4 below presents the site location and provides a 200m and 400m boundary around each open space area within 10minutes walking distance of the site.

The site is within 400m of the Wangul Nura Reserve, Lambert and Petersham Park, which provide a range of active sport and recreation facilities.

This map highlights that the existing area is well served by a range of open space and recreation opportunities.

FIGURE 4 – OPEN SPACE ACCESS AND CATCHMENTS



3.9 OPEN SPACE ISSUES AND CONSIDERATIONS

The Leichhardt Recreation and Open Space Needs Study (Leichhardt Council, 2005) identified the following open space issues in the Leichhardt LGA.

- Open space will become the “new backyard” for many people as high density residential development continues across the Leichhardt LGA
- Open space distribution is varied across the Leichhardt LGA with relatively good provision in most areas north of the City West Link and lower provision south of the City West Link. Sports grounds and other formal recreation facilities are largely situated on the edge of residential areas throughout the LGA
- Waterways and foreshore reserves within the LGA continue to provide opportunities for developing quality, diverse recreation areas and establishing linear linkages throughout the LGA
- There are a number of Council owned pocket parks in the LGA. These facilities are generally of good amenity value for local residents, however these facilities have limited uses and flexibility of use, and result in a high cost of maintenance for the Council
- The general quality of passive open space areas is good, and while the quality of many outdoor sports grounds is good in summer, this deteriorates in winter due to overuse
- Provision and distribution of outdoor recreational areas/facilities for young people (14 – 24 years) is relatively poor across the LGA and appears largely confined to 5 informal basketball courts (half and full courts) and one skate facility. However it is noted that new facilities have been provided, such as a new skate park in Callan Park, since the Open Space Needs Study was published.

3.10 SUMMARY OF EXISTING SUPPLY OF LOCAL OPEN SPACE

The location of the site provides easy access to open space opportunities in Leichhardt LGA but also access to facilities in Petersham.

There are currently six areas of open space within 10 minutes walking distance of the site including a number of small local pocket parks, such as Wangul Nura and Marr Reserve, and larger district parks, such as Lambert and Petersham Park which provide opportunities for active sports and recreation.

The presence of this diverse range of publicly accessible open space, within a short walk of the proposed development suggests that the area is well serviced by existing open space assets.

Small local pocket parks which provide play equipment for children are likely to be an important asset for local residents, especially those with small children. The larger district parks will also provide incoming residents with the opportunity for active sports, and general recreation.

3.11 SUMMARY OF EXISTING SUPPLY OF DISTRICT AND REGIONAL PARKS AND OPEN SPACE

Figure 6 in Appendix A shows a 20 minute drive time from the proposed development site. Within this catchment there are a number of significant district and regional parks which the new population could access. The following list provides a summary of just some of the parks within this 20 minute drive time, together with an overview of some of the facilities provided at these locations. This list is not exhaustive, but aims to demonstrate the range of significant open space and recreation facilities available at a district and regional scale:

- Leichhardt Park – Approximately 2.2km north of the site, Leichhardt park provides a range of sport and recreation facilities including sports fields and aquatic centre
- Timbrell Park – Approximately 2.0km northwest of the site, Timbrell Park provides a number of sports fields and hard courts

- Johnsons Creek Parklands – Located approximately 3.0km to the northeast of the site, Johnsons Creek consists of Federal Park, Bicentennial Park, and Jubilee Park and Oval. The site offers a wide range of active and passive recreation opportunities. The park includes a large sports oval, training pitches, playgrounds, a skate ramp, and a foreshore walking path as well as bbq areas. There is a master planning process to further improve this park
- Sydney Park – Located approximately 3.7km to the southeast of the site, Sydney Park provides a range of active and passive recreation facilities. Large areas of open space, walking and cycle tracks, water courses and wetlands, bbq areas and sports pitches
- Royal Botanic Gardens – Located approximately 6.7km from the site the Royal Botanic Gardens and Domain precinct provides valuable recreation assets for the inner city. Facilities range from large areas of open space which host a range of events, sports pitches, foreshore walks, aquatic facilities amongst other assets
- Centennial Parklands – Located approximately 8km from the site, Centennial Park provides a large number of sports pitches for various sports groups, and large areas of open space, lakes, and equestrian facilities.

4 Open space demand analysis

4.1 PARTICIPATION AND DEMAND FOR OPEN SPACE AND RECREATION FACILITIES

The following section provides an overview of national, state and local participation and demand trends for recreation and sport. This review is based on the ABS Multipurpose Household Survey (MPHS) 2009-10 (Australian Bureau of Statistics, 2009), and the Leichhardt Recreation and Open Space Needs Study (Leichhardt Council, 2005).

4.1.1 NATIONAL PARTICIPATION TRENDS

In 2009-2010 nearly two-thirds of the Australian population aged 15 years and over (64%) participated in sport and physical recreation at least once during the year (Australian Bureau of Statistics, 2011).

Participation rates generally decrease with age, with highest participation rates for people aged 15-17 years old (79%) and lowest for those over 65 years old (48%). There were also significantly higher participation rates for people born in Australia or in overseas English-speaking countries (66%) when compared with those born in other countries (56%).

While there was little difference between participation based on employment status (69% employed, 66% unemployed) there was significant difference based on income and education. A higher proportion of those whose highest level of education was graduate diploma (84%) participated in sport compared to those who achieved year 10 or below (65%). Those with a household income in the highest quintile reported a higher participation rate (80%), with those in the lowest quintile reporting lower participation rates (45%).

Nationally, participation rates in non-organised activity (52%) were significantly higher compared to organised activity (26%). This is reflected in the most popular types of open space activities. Walking at least once during the year was the most popular form of physical activity (23%). The next most popular activity was aerobics, fitness or gym activities (14%) followed by swimming or diving (7%). Among those who participated in sport and physical recreation, non-structured outdoor facilities such as parks, beaches or walking trails (58%) were the most popular followed by gyms, public pools and courts (52%).

These trends highlight the importance of informal, and non-organised sporting and recreation facilities, in particular local parks and walking trails which support a range of activities.

4.1.2 NSW PARTICIPATION TRENDS

In 2009-10 over half the NSW population (62%) participated in some form of organised or non-organised physical activity. A large proportion (27%) participated in activity five or more times per week compared with (21%) who participated two times per week. The NSW participation rates are similar to the national average profile with higher rates of participation for younger people and those with higher educational attainment.

Compared with 2005-06 data, participation in NSW has decreased (64% to 62%), with significant decreases in those people from a main English-speaking country (-9.3%), those employed part time (-4.2%) and those from lone person households (-4.9%).

Participation rates for various types of activities in NSW follow a similar pattern to national trends with high participation in walking (21%), aerobics, fitness and gym (13%) activities. Since 2005-06 the only activities which have witnessed an increase in participation rates in NSW are aerobics, fitness, gym (0.9%) and jogging and running (2.2%).

The most popular sports and activities in NSW are consistent with Australia wide trends, however overall participation in physical and sporting activity is higher than national averages.

4.1.3 DEMAND FOR OPEN SPACE IN LEICHHARDT

A review of the Leichhardt Recreation and Open Space Needs Study (Leichhardt Council, 2005) identifies differing recreational needs for the Community.

- The distribution of useable public open space across the LGA is insufficient, especially within the suburb of Leichhardt
- There is a high value placed on the provision of quality and accessible parks and open spaces by residents
- Facilities for young people are a key area of demand
- There is also high demand for passive recreation space for walking, and dog exercise. This places pressure on the sports pitches to be multi-functional spaces which can be accessed by all members of the community
- There is a need for linear links between areas of open space, and to ensure the local community remains mobile

Specific needs relating to sports and active recreation include:

- Demand for indoor sporting facilities, as well as soccer fields, synthetic hockey fields, and AFL ovals
- The review also highlights that existing sporting facilities are overused
- The report suggests that the rates of participation by residents in Leichhardt in physical activity is below the NSW average, however it is noted that this is based on 2005 data. This also suggests that there may be some latent demand for high quality open space and sports activity facilities in the area
- There is a significantly higher participation rate in unorganised or informal recreation activities, compared to organised activities.

It is noted that this document is dated and does not reflect the current demands of the population of Leichhardt.

4.2 DEMOGRAPHIC ANALYSIS

In order to identify the potential impact of the proposed development on the demand for open space in the area, an understanding of the characteristics of the existing and future population of the area, and of the potential residents of the development was conducted.

4.2.1 CURRENT POPULATION

In order to identify the characteristics of the current population in the area the following catchment areas have been identified:

- Local residents – Those residents within 10 minutes walking distance of the proposed development site have been considered as local residents. These are residents which are likely to access similar facilities as new residents at the site, and may reflect the characteristics of the incoming population
- Residents in the wider area – A 20 minutes' drive time from the site has been used as a catchment to identify the characteristics of residents in the surrounding area. This is used as a basis for comparison with the local population
- Sydney residents – The Sydney Statistical Division (SD) has been used as a basis for comparison to help identify the unique characteristics of the local population

These catchment areas are presented in Figure 6 in Appendix B of this report.

ABS Census 2011 data was used to develop the demographic profile for both catchments and compare this to the Sydney Statistical Division (SD) area. The following table presents the key demographic characteristics for these catchments. These demographic indicators have been selected due to their potential implications and relevance to open space and recreation demand.

TABLE 2 – DEMOGRAPHIC PROFILE OF CURRENT POPULATION

INDICATOR	LOCAL RESEIDENTS	WIDER AREA	SYDNEY SD
Total population	6,631	1,197,302	4,605,992
0-4 years	8%	6%	7%
5-14 years	10%	9%	12%
15-24 years	9%	13%	13%
25-54 years	53%	50%	44%
55-64 years	9%	10%	11%
65 years and over	11%	12%	13%
Average household income	\$118,504	\$99,671	\$94,428
Average household size	2.3	2.4	2.7
Car ownership – No car households	17%	21%	12%
Family households	64%	64%	73%
Couple family with no children	39%	40%	34%
Couple family with children under 15 years	35%	30%	33%
Lone person households	28%	28%	23%
Australian Born	70%	54%	64%
Overseas Born	30%	46%	36%
Total European	7%	5%	4%
Total Asian	2%	18%	14%
English only language spoken at home	78%	55%	66%
Highest level of schooling – year 12 or equivalent	74%	73%	62%

The key findings of the above table, and implications for the demand for open space in the vicinity of the site, include:

- A lower number of 15-24 year olds
- Higher incomes in the immediate catchment of the site
- Higher couple families with children under 15 years
- Higher lone person households
- The local area also has a higher proportion of residents aged between 25 and 55 years old. The level of demand from such an age group for open space and recreation facilities is known to vary depending upon employment status, education and ethnicity. Due to the higher level of income and greater proportion of residents achieving the equivalent of year 12 education, it is anticipated that demand and participation in recreation would be high for the area

- Average household size in the local area is smaller than in the wider areas. This may be as a result of smaller, studio or one bedroom, dwellings in the area
- There are a higher number of households without cars in the local (17%) and regional (21%) area compared to the rest of Sydney (12%). This may increase the demand for local open spaces within walking distances to dwellings as people will be inclined to walk to access open space
- The area has fewer family households compared to the metro area. Couples with children generally have higher rates of participation in recreation and sporting activities, and in high density areas with limited private open space, the provision of local public open space within walking distance is a key priority
- The area has a higher Australian born, and European population compared to other areas, suggesting demand for traditional open space and recreation uses.
- The demand for open space from families with young children is significant, in particular for open space within walking distance of home. Additional considerations including safety and security of open space are also important.

Further details of the demographic characteristics in the suburb of Leichhardt, Leichhardt LGA and Sydney SD are provided in Appendix C.

4.2.2 PROJECTED POPULATION GROWTH

NSW Department of Planning and Infrastructure (DOPI) population forecasts for the inner west sub-region suggest that the area of Leichhardt is expected to grow by approximately 3,000 people between 2011 and 2026. Table 3 below provides further details.

TABLE 3 – POPULATION GROWTH FORECAST, INNER WEST 2011 - 2026

	LEICHHARDT LGA		SYDNEY SD	
	No.	Average annual growth (%)	No.	Average annual growth (%)
2011	52,700	0.4	4,550,300	1.3
2016	53,800	0.4	4,822,000	1.2
2021	54,900	0.4	5,104,100	1.2
2026	55,700	0.3	5,394,500	1.1

Source: NSW DOPI, (2010)

4.3 INCOMING POPULATION PROJECTIONS FOR THE PROPOSED DEVELOPMENT

The proposed plans identify the potential development of approximately 350 dwellings onsite, including a mix of one, two and three bedroom apartments. The final dwelling mix will be determined at the next stage of the planning process.

ABS Census data indicates that average household sizes in Leichhardt have increased from 2.2 people per dwelling in 2006 to 2.3 people per dwelling in 2011 this is equivalent to a 5% increase in the number of people per dwelling. The 2011 Census data illustrates the occupancy rates for apartment and flat dwellings is 1.66 persons/dwelling up from 1.65 persons/dwelling in 2006.

Urbis has calculated the potential total population of the new residential development onsite using 2011 Census equates to approximately 581 persons.

4.4 TRENDS IN PROVISION OF OPEN SPACE

A review of trends in open space provision was conducted to identify themes and considerations that could be used to inform the type of open space that could be provided as part of the proposed development.

- With a general increase in the number of people aged over 60 years the demand for easily accessible public spaces will also increase, as well as the need for physical environments to welcome people with limited mobility. The need to plan for mobility issues is of increasing importance in the design of open space.
- Climate change is increasing in importance and transport currently accounts for a large percentage of carbon dioxide emissions. Accordingly, councils are increasingly promoting walking and cycling as the most appropriate forms of travel for short journeys, especially as it is over short distances that vehicle engines produce the highest levels of emissions per km.
- There is a greater emphasis on walking and cycling for health benefits. To encourage walking and cycling, routes need to be planned to pass through well designed and managed open spaces. Leichhardt Council has taken a proactive approach to providing bicycle initiatives with the introduction of a bicycle fleet for Council staff to use whilst at work. It is aiming to provide 500 bicycle parking spaces over the next 5 years across the LGA.
- Vegetated open space is being linked to reduction in carbon levels. For example, one hectare of urban park can remove 600kg of carbon dioxide from the air and convert it into 600kg of oxygen.
- Parks and open space are proven means of assisting social inclusion. Urban parks and other public open spaces are one of the few publicly-provided leisure facilities for which there is no admission charge and using them requires no special skills, clothing, equipment or knowledge, however social interaction needs “providing props to support people while they socialise”. This includes natural furnishing, places for sitting, watching and informal interaction.
- Incorporation of community gardens into urban renewal projects has become very successful and has been included at Rouse Hill as a means of encouraging social interaction and increasing availability of fresh produce.
- Due to the increase in population density in Sydney, there is a trend to developing rooftop gardens in conjunction with apartment developments due to space constraints.
- Developing edible gardens is also increasing in popularity from a sustainability perspective. Leichhardt Council pilot project "Adopt a Plot", gardening program is designed to link people who can no longer maintain their garden, to a local household wanting to grow vegetables, herbs or flowers, this is also an integral part of social inclusion and means of linking intra-generational groups.
- Leichhardt Council's Cultural Plan is focused on increasing opportunities to 'connect people to place' and supports residents to share stories and memories, create a sense of belonging to places and to give residents a sense of ownership and responsibility over the area."
- The integration of heritage items and public art into areas of open space to reflect the history, a local story or an issue of the time adds to a community's sense of place and identity particularly in the context of rapid urban growth. Given the industrial history of this site there is an opportunity to reflect the heritage of Kolotex in art and street furnishings.

4.5 SUMMARY OF DEMAND FOR OPEN SPACE

The proposed development may result in an incoming population of approximately 581 people to the site. This will have little impact on increased demand for open space and recreation facilities in the vicinity of the development.

It is expected that the incoming residents will use open space assets in the local area, within walking distance of the development as well as having access to a wide range of regional parks.

- Trends in open space provision identify the important role open space play in promoting a healthy lifestyle and improving community cohesion. As such there is potential for demand for bicycle paths and racks at the site, a community or edible garden to allow residents to grow their own food, and provision of accessible open space for all ages and levels of ability.
- Open space on site is essential for the visual amenity of the site. The provision of open space on site is essential to provide opportunities for social integration of residents on site as well as accommodating visitors to the site which is essential for the viability of commercial businesses on site.

The design inclusions for the open space has the potential to incorporate the history of the site through public art or the inclusions of proposals identified which would provide a unique experience in Leichhardt and helps define the character of the site.

5 Open space requirements

In determining the amount of open space that would be required on site consideration was given to state local government guidelines for open space provision. The NSW Recreation and Open Space Planning Guidelines (NSW Department of Planning, 2010) identifies an historical standard provision rate of 28.3m² per person (2.83Ha per 1,000 people). However there are significant limitations to this standard. The standard was developed in Britain in the early 1900's, and was based on a professional estimate rather than detailed evidence and research. The standard does not consider issues associated with the quality and diversity of open space provision.

The standard has been applied here for illustration purposes only. Table 4 below presents the current provision ratios for Leichhardt LGA, the study area, and the proposed development, and compares this to the standard.

TABLE 4 – COMPARISON OF EXISTING AND PROPOSED OPEN SPACE TO STANDARDS

	EXISTING LEICHHARDT LGA	STUDY AREA (10MINUTE CATCHMENT)	S94 REQUIREMENTS	PROPOSED DEVELOPMENT
Total open space	129Ha	9.69Ha		0.26Ha
Total population	52,198	6,631	581	581
Current provision ratio	2.47Ha/1,000 people	1.46Ha/1,000 people	2.05Ha/1,000 people	0.44Ha/1,000 people
Required provision of open space*		18.8Ha	1.2Ha	1.43Ha
Surplus/deficit compared to standard*		-9.1Ha		-0.99Ha
Notes: *Based on "fixed" standard of 2.83ha/1,000 people				

The above table demonstrates that the current provision rate for Leichhardt LGA is (2.47Ha/1,000) the study area (1.46Ha/1,000people) and the proposed development (0.44Ha/1,000people). These are significantly smaller than the "fixed" standard provision ratio of 2.83Ha. Assessment of the local provision rate illustrates that this standard rate is not being achieved in Leichhardt.

As the development site is only 1.4Ha in size, the provision of this standard level of open space on site is not feasible.

The Planning Guidelines acknowledge the limitations with the traditional standard and illustrate that actual provision rates in inner urban Sydney average only 5% of residential areas. They also indicate a more appropriate benchmark is having a 1.5Ha park within 1km of dwellings is a more relevant standard. There is approximately 9.69Ha of open space and recreation facilities within 10minues walk of the site, illustrating that the site is well located for open space.

5.1.1 LEICHHARDT OPEN SPACE AND RECREATION DEVELOPER CONTRIBUTIONS PLAN

In determining the quantum of open space, consideration was also given to the Leichhardt Open Space and Recreation Developer Contributions Plan (Leichhardt Council, 2005). Section 94 of the Environmental Planning and Assessment Act (EP&A Act 1979) states developers should contribute towards or provide for open space and infrastructure generated by their developments. Leichardt Council's Section 94 (S94) Developer Contributions Plan for Open Space (2005) requires new developments to achieve 20.51m² of open space per person, which would equate to approximately 11,916m² (or 1.19 Ha) for the proposed development based on a projected population of approximately 581 residents. This is clearly not viable on a 14,662m² (1.4Ha) site.

However the proposed development includes provision for of open space which could be deducted from the S94 contribution requirement.

In other high density developments, developers have undertaken Voluntary Planning Agreements (VPA) with planning authorities including Leichhardt Council in relation to the provision of open space. These agreements have been undertaken either as an alternative to the provisions of developer contributions or in conjunction with those provisions. For example the developers of the Balmain Leagues Club and the Anka developments in Rozelle have entered into VPA agreements with Leichhardt Council for a payment in lieu of S94 contributions.

There is a clear direction within many strategic documents (including the Department of Planning Open Space Guidelines, and the SEPP 65, Leichhardt Council 2020 Strategic Plan) as well as feedback from communities that the focus for open space, in particular on constrained urban sites, should be on the provision of quality open space and the experience it offers and not numerical compliance or out dated standards.

In adopting a standards based approach the following important points should be noted:

- The plan does not account for the close proximity of Petersham Park to the site
- As a result of Section 94 Contribution Plans, many Councils have a number of small pocket parks which are costly to maintain and provide very little amenity to residents
- The current Developer Contributions Plan for Open Space in Leichhardt was calculated based on 2001 data, and the research within the Plan extends to 2011. Therefore the calculations and assumptions related to the ratio of open space are likely to be out of date. It is anticipated that the ratio of open space required will decrease naturally due to the continued increase in population of the area, and the limited capacity for development of additional areas of open space. This raises the importance of the quality of open space over the issues of the total quantum of open space. Higher quality planned open space is becoming more important than the total volume of open space. Urbis has contacted Leichhardt Council to discuss these issues. Council are currently in the process of updating their S94 plan.
- The above calculations do not consider additional shared zones or hard landscaping which will provide additional open space to the area, including a courtyard plaza for use in relation to commercial premises onsite, as well as, walking and bicycle routes through the site
- Due to the relatively small nature of the site (14,622m² / 1.46Ha), the additional provision of 1.1Ha of open space onsite is not feasible. The design of open space at the site can consider a range of potential features which will add to the quality of provision of open space and help to meet the needs of incoming residents, and the wider community. Other open space requirements

The following table provides an overview of key planning documents and guidelines which provide requirements or suggestions for open space on new residential developments. The key considerations or responses to these issues for the proposed development are also identified.

TABLE 5 – OPEN SPACE REQUIREMENTS AND SUGGESTIONS

SOURCE	KEY ISSUES	CONSIDERATIONS AND RESPONSE
State Environmental Planning Policy No 65 (SEPP 65) Residential Flat Design Code (2011)	▪ SEPP 65 aims to improve the design quality of residential flat buildings in NSW ▪ It contains 10 design quality principles which guide good design and assessment of the merit of design solutions ▪ It also allows the Minister to form Design Review Panels to give consent authorities independent advice on the design quality of residential flat building proposals.	▪ The SEPP is more concerned with quality than quantity and allows for contextual considerations outside local government boundaries. Eg People in Leichhardt using parks in Petersham.
Leichhardt Local Environmental Plan (LEP) 2000	▪ Encourages the design of buildings and structures to provide adequate access and linkages to public open space ▪ To ensure development is compatible with any Parks Plans of Management, Landscape Plans	▪ The proposed development includes the provision of bicycle paths and walkways through the site which will improve access through the site and linkages to public open spaces

SOURCE	KEY ISSUES	CONSIDERATIONS AND RESPONSE
	and the Bicycle Plan adopted by Council To provide opportunities in open space for public art	- The development will also include the provision of bicycle bays and racks for residents to promote sustainable travel in the area - The potential for public art and heritage items is considered in Section 7.1 Below.
Leichhardt Development Control Plan (DCP) 2000	- Requires that new development should be designed to incorporate landscaping of a minimum of 40% of the total site area – this includes parts of the site at ground level, not occupied by a building, which is used for recreation, lawns, gardens and planting. This does not include balconies, driveways and parking areas - Requires that 85% of planting is from native species - Provision of one tree of at least 4m is provided for each ground floor dwelling 25% of the landscaped areas to be on natural or un-paved ground that is not above any structure and drains naturally - Rooftop open space should have a minimum areas of 10m² and a minimum width of 2m with safe and convenient access - Encourages land uses and urban design which protects heritage items and conservation areas and contribute to the character of the area - Maintain the prevalence of street trees and provide mature and visually significant trees	- As indicated in Section 2.2 above 51% of the proposed development site will be for open areas which will include hard and soft landscaping areas. However this also includes the provision of roads and parking areas. Approximately 18% of the site will be used for soft landscaping - Deep soil planting areas have been designated at the site to provide the opportunity for planting of mature trees - Due to site constraints in terms of size and access, it is anticipated that a basement level will be required across a large proportion of the site, however it is anticipated that there are opportunities for the provision of deep soil, freely draining soft landscaping areas - The potential for rooftop open space and heritage items at the site is discussed further in Section 7.5 below - The development will include deep soil planting facing adjacent roads which will provide the opportunity for planting of visually significant trees which will improve the overall amenity of the street scape
Leichhardt Bicycle Strategy (2007)	Strategy aims to promote sustainable travel and improve the health and wellbeing of residents and the local environment by implementing policies and activities to promote bicycle use. This includes targets to double the weekday bicycle trips and provide 500 bicycle parking spaces.	The provision of bicycle parking at the site, and connections through the site, would encourage bicycle usage by residents, and potentially reduce traffic impacts
Leichhardt Community and Cultural Plans	The Plan outlines the provision of over \$250,000 by Councils for newly commissioned art installations in parks and streetscapes, with the specific aim of making a bold approach to public art. The Plan also outlines the development of art-based street-scape projects to link the open space of Callan Park to the Parachute Regiment site.	The provision of art or heritage pieces associated with open space on the site would support the strategic direction of the Cultural Plan
Leichhardt Recreation and Open Space Needs Study (2005)	The study suggests that population growth in the area will place additional pressure on the existing open space network and highlights deficiencies in the distribution of open space across the suburb. The report also highlights the need for open space facilities suitable for young people, passive space for dog walking, and multi-functional space.	As demonstrated above, it is suggested that the capacity of the site to address such issues is limited due to the size of the site. However the provision of quality open spaces with an appropriate function at the site can support the needs of local residents

6 Assessment of proposed open space

6.1 PROPOSED OPEN SPACE

The open space proposed on site includes approximately 50% the site. This includes the area surrounding the commercial and shared zone located through the centre of the site. Approximately (35%) of the open space includes landscaping primarily in pockets across the site, with a large landscaped area in the middle of the site to form a communal open space for residents.

The Built Form & Urban Design report for the proposed development considered a number of options for the site. Each option considered the development footprint and height of buildings across the site with the aim of maximising the potential use of the open space on the site. The proposal provides an optimal solution that ensures the open space on the site is well located, maximises, solar access and amenity for residents, and provides improvements to the surrounding streetscape.

The provision of deep soil planting and raised deep soil planting beds allows for planting of substantial trees onsite to provide shade, shelter and privacy. The provision of shared access zones through site for cyclists, pedestrians and vehicles will promote connectivity to surrounding facilities including schools, shops, transport, open space and recreation facilities.

The current planned provision of open space on site:

- provides visual amenity and separation between buildings
- creates areas for social interaction and passive recreation
- addresses sustainability by assisting in water management across the site
- encourages walking and bicycle use by providing links across the site through appropriate design of shared zones;
- integrates the new development with the existing context
- improves access to current schools, parks and transport links

Urbis have conducted an independent assessment of the proposed open space based on the NSW Department of Planning Open Space guidelines presented in Table 2 of this report. From the table overleaf it is evident that the open space areas proposed will offer a range of opportunities for residents on site as well as visitors to the site or commuting through the site. It is acknowledged that the plans at this stage are not the final plans for the site.

TABLE 6 – ASSESSMENT OF PLANNED PROVISION OF OPEN SPACE

CLASSIFICATION	OBJECTIVES	COMMENTS
Local Parks Reserves	- To support community development and recreation these include gardens, play facilities, community gardens. - Local open space serves one neighbourhood and is located close to or within residential areas.	The communal park located in the centre of the proposed development will act as a local reserve for residents, it will also assist in creating a sense of place and ownership
Urban public space	Street and road reserves, lanes and town plazas and squares which accommodate walking, cycling, social gatherings or outdoor dining. This also includes the public domain	The plaza outside the mixed use zone will provide a new urban space and a place for social gathering and networking, given its proximity to local schools it may provide an opportunity for mothers in the post school drop off and pick up.
Landscape and amenity	Reserves created for their attractiveness and to add to or protect the character of an area. Includes reserves adjoining residential and industrial areas,.	The landscaping on site will provide an attractive addition to the existing streetscape and improve the amenity of the wider area which will benefit local residents and commuters.
Streetscape	Successful streetscapes acknowledge the surrounding context, addresses the functional needs of a diverse group of users and conveys a sense of community	Currently George and Upward Street provide very little amenity, and as such backyards of houses along these areas are enclosed and turn inwards away from the streets. The proposed streetscape and landscaping will significantly improve these streets as well as increase the passive surveillance and perceptions of safety.

7 Analysis and recommendations

It is clear from the research and analysis that standards based approach will require a higher level of open space on site than the proposed provision. However these are historical benchmarks and there is a clear recognition in both the NSW Open Space Planning Guidelines, and the Leichhardt Developer Contributions Plan, that as a result of broader trends and urban policies there will continue to be an increasing pressure on existing open space in Sydney. The potential population increase of 581 additional residents will not make a significant impact on the existing parks and open space.

The proposed open space on site will provide valuable resource for new and existing residents in the local area and will make a significant improvement to the overall amenity of the local area. As such, the quality rather than quantity of open space is more relevant in urban areas, with significant land restrictions and limited open space.

The proposed development is located in an area which is well served by a range of open space assets. There are a number of parks and playgrounds within 10minutes walking distance of the site. These areas comprise a mix of sport, aquatic, playing fields, playgrounds and pocket parks. These facilities are likely to meet the needs of the potential population for both formal and in-formal sport and recreation activities.

A number of options for the proposed development have been created to ensure open space at the site is useable and provides amenity and opportunities for both the incoming residents and the existing residents of the local area.

The proposed development will provide hard and soft open space and landscaping at the site. This will include some deep soil planting for mature trees, also a central courtyard area. In addition the proposed development will provide street planting and a new streetscape will provide a wider benefit for the local area.

The following recommendations identify ways in which the proposed development may improve the quality of open space, satisfy Council's broader policies in health, heritage, culture and sustainability and therefore better meet the needs of the local (new and existing) community.

7.1 HERITAGE AND OPEN SPACE

Leichhardt Council's Community and Cultural Plan 2011 stresses the importance of linking Art and Open Space. Given the history of the site there is an opportunity for the proposed open space on site to incorporate pieces of public art or artefacts from the site to create a heritage theme for the park. For example the park illustrated below is from a TAFE site in Brisbane but the incorporation of industrial design elements particularly a fence with labels stamped on it could be used to tell the story of the site or previous workers, key dates etc. It could also provide a connection to the continued commercial uses of the area.

Picture 5 – Heritage incorporated into public parks



Also oversized furniture/public art featuring sewing machines and other industrial pieces (Picture 5 –) could provide areas of interest and create a unique park area for visitors, residents and patrons of the proposed ground floor retail.

PICTURE 6 – BALLAST PARK SYDNEY SYMBOLISES THE SITE'S WORKING HARBOUR HISTORY



7.2 PUBLIC ART

Increasingly within residential developments public art is being incorporated as 'props' to encourage social interaction and provide a focal point. For example Cammeray Square development, located on the corner of Miller and Amherst Streets, was completed in 2008. The mixed-use project involved the development of 4 storey residential blocks, and 17 speciality retail stores.

Approximately 1,600m² of open space was provided as part of a "European style" town square. This included seating for residents and shoppers, and a focal point for the development. Key features and lessons from this project include:

- The focus on quality and interesting open space which is appropriate to the location and the potential incoming population is an important consideration. The site constraints limit the potential for active or large scale open spaces, and therefore tailored open space on site to improve usage
- The provision of public art in open space creates an interesting and well used space. While this may include sculptures and large pieces of art, this could also be achieved using a theme for the open space and smaller individual pieces which together tell a story of the place
- The provision of thoroughfares providing links between the site and surrounding neighbourhood
- Active frontages onto the public plaza provide greater opportunities for social interaction and a usable open space. Less emphasis is given to grass and more emphasis is on water sensitive urban design and planting.

PICTURE 7 – STOCKLAND CAMMERAY SQUARE



7.3 KITCHEN GARDENS

The open space on site could accommodate a small community garden in line with Leichhardt Council's 'Adopt a Plot' program. This could provide local produce, facilitate interaction between residents and commercial tenants as well as contribute to sustainability elements of the site. In the context of urbanisation, increasing residential densities and a broader move towards sustainability, these initiatives are highly valued and well-received by both decision makers and communities.

A number of Councils (including Leichhardt) have adopted specific community gardens guidelines and are investing in community greening initiatives. Community gardens are, in the majority of cases, initiated, resourced and managed by the community through a range of mechanisms such as Codes of Conduct and management agreements. In the first instance, however the establishment of gardens is often encouraged by financial and in-kind support from external organisations (e.g. provision of an area of suitable land, grant funding, construction of garden beds, knowledge sharing etc.).

Leichhardt Council express support for community gardens in the LGA through the Community Gardens Policy, have been involved in the establishment of a number of community gardens locally and run the 'adopt a plot' program that facilitates garden sharing amongst local residents. Culturally diverse communities and residents in higher density areas are found to be particularly receptive to community gardening programs and in this regard, we further consider the subject site to be suitable for such a use.

An example of a successful community garden includes the Rouse Hill Town Centre 'Kitchen Garden'. This is an initiative of the GPT Group and Stephanie Alexandria Kitchen Garden Foundation. It is the seventh GPT Centre to feature a community garden. The project involves local schools and residents and has been the catalyst for starting up a local monthly produce market. The garden is set up on planter boxes for ease of location. Over 193 schools are enrolled in community gardens projects across Australia.

PICTURE 8 – ROUSE HILL KITCHEN GARDEN



This has been a very successful project for the residential community, schools and businesses on the site at Rouse Hill.

At the proposed development site there is potential to involve the Kegworth School, in a community garden onsite, to improve connections with the community. A small number of produce bearing species may be planted by the developer in the first instance, the area can reasonably be converted to a standard landscaped area should it be required or if it is not supported by the community.

The approach can be further refined at more detailed design stages.

7.4 SUSTAINABLE TRANSPORT

The NSW Premiers Council for Active Living and Leichhardt Council is proactively promoting active transport links and there is an opportunity to create bike racks on site to provide the opportunity for incoming residents and visitors to the site to use this form of sustainable transport. This would also support the aim of the Leichhardt Bicycle Strategy to increase the number of bicycle trips. Cyclepods that store up to eight bikes could be considered for the site.

PICTURE 9 – CYCLEPODS



7.5 ROOFTOP OPEN SPACE

There is potential to provide rooftop open space at the site, and it is recommended that provision of such a space would provide a valuable amenity for the resident population and make use of this space.

The provision of rooftop open space as part of high density development is becoming increasingly popular and the function and uses of such space are being expanded to ensure the space is well used by residents. This could include basic facilities such as seating and planting, and potentially BBQ areas.

In addition the provision of rooftop open space could be used to offset any requirements for developer contributions as part of the Leichhardt Developer Contributions Plan. Rooftop gardens are designed to reduce storm-water runoff, mitigate urban heat-island effects and be aesthetically pleasing when viewed from above, particularly on sites that are stepped.

PICTURE 10 – ROOFTOP GARDEN



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Appendix A

Existing Open Space Facilities

FIGURE 5 – EXISTING OPEN SPACE FACILITIES

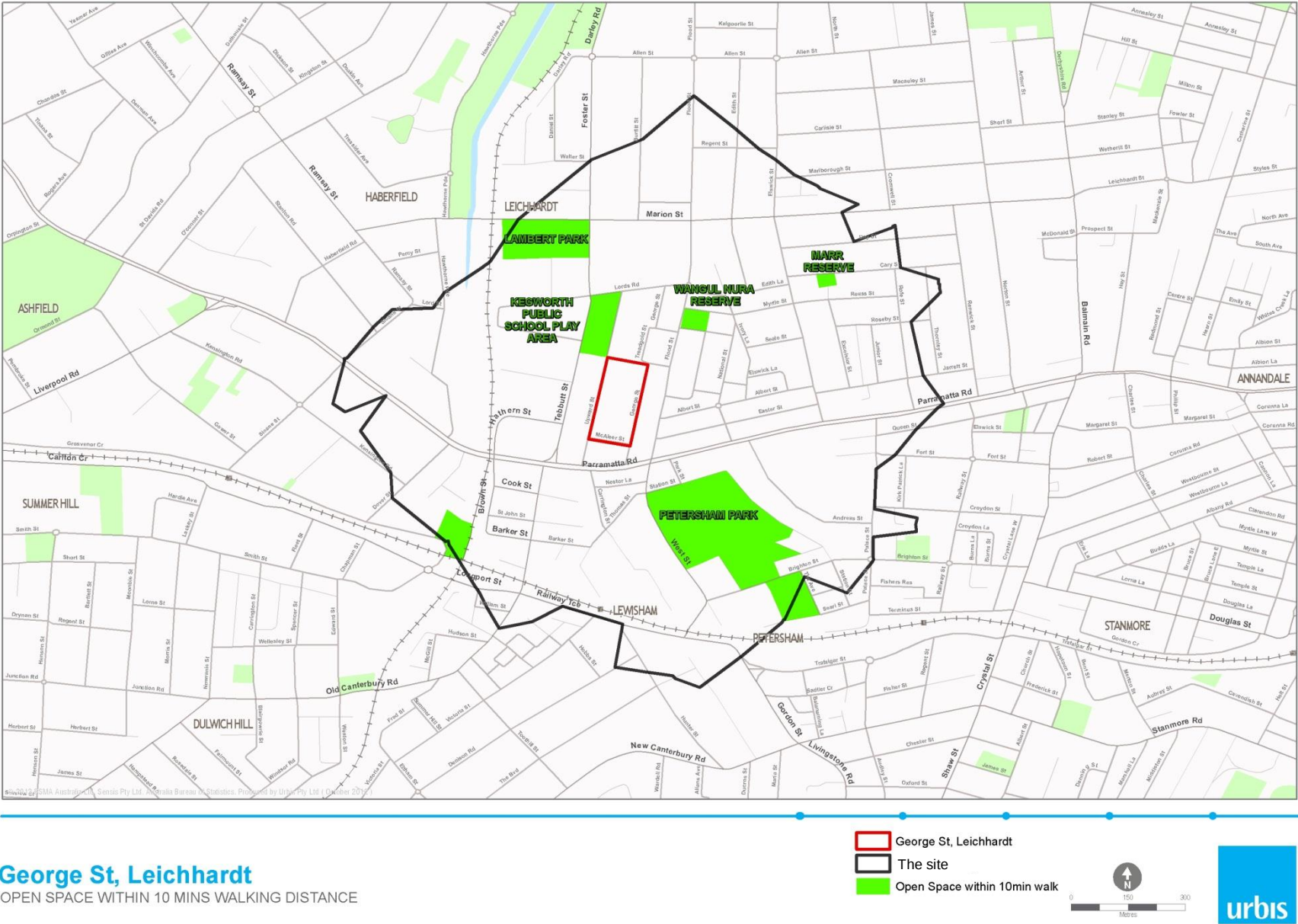


TABLE 7 – EXISTING OPEN SPACE FACILITIES

NAME	STREET ADDRESS	SUBURB	FACILITIES	USES	AREA (HA)	TYOLOGY	CATCHMENT
Open space within 10minutes walking distance							
Kegworth Public School Play Area	Tebbutt St	Leichhardt	Basketball Open recreational space Children's play apparatus	Privately used by school children	1.01	Park	Private
Wangal Nura Reserve	Cnr of Flood & Myrtle St	Leichhardt	Play equipment Shaded play area Fully fenced Half-court basketball court Drink fountain Seating Open grass area	This park is a dog on leash area only. Dogs not permitted within 10m of playground	0.4	Park	Local
Lambert Park	Cnr of Foster and Marion Sts	Leichhardt	Enclosed sports field Rest areas with shade Children's play equipment	Soccer Recreation	1.96	Outdoor sports area	District
Marr Reserve	Cary St	Leichhardt	Two playground areas Shade trees Drink fountain Picnic tables	Can be hired for: Weddings Parties Picnics Filming under 100 people	0.14	Park	Local
Petersham Park	West Street	Petersham	Historic park Fanny Durack Aquatic Centre Sports ground Bandstand Gardens Toilets Playground BBQ and picnic area	Sport and recreation Children's activities Music Swimming Cricket	5.88	Outdoor sports area	District
Cadigal Reserve	Grosvenor Crescent	Summer Hill	Off leash dog area	Dog recreation	0.30	Park	Local

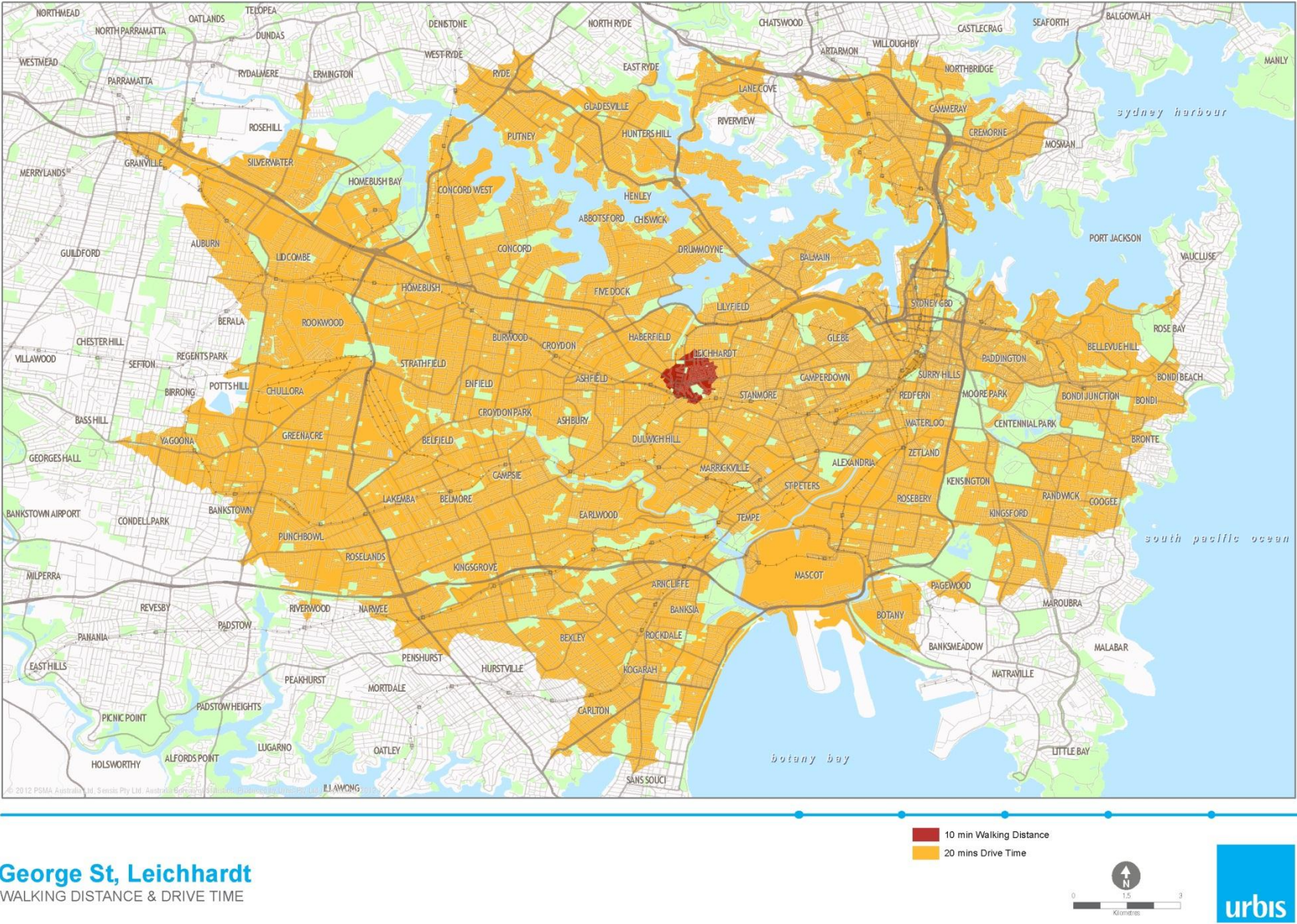
NAME	STREET ADDRESS	SUBURB	FACILITIES	USES	AREA (HA)	TPOLOGY	CATCHMENT
Open space in the wider area							
Explorer's Park	Cnr of Liverpool & Parramatta Roads	Ashfield	Shade trees Rest areas Children's climbing frame	Landscaped rest park	0.34	Park	Local
Richard Murden Reserve	Hawthorne Parade	Haberfield	Children's play area (junior and senior) 2 basketball courts 4 tennis courts picnic areas fitness course	Sport and recreation	6.24	Outdoor sports area Linear and linkage	Local
Hawthorne Canal	Darley Rd	Leichhardt	Large open off-leash area for dogs Café Bones Toilets Path along Hawthorne Canal	Can be hired for: Weddings Parties Picnics Filming under 100 people	1.95	Linear and linkage	District
Marlborough St Playground	Marlborough St	Leichhardt	Play equipment	Play area Dogs on leash		Park	Local
Shields Playground	Darley Rd	Leichhardt	Playground Seating shaded area New native garden Shared dog park on/off leash Dogs are prohibited in the play area	Can be hired for: Weddings Parties Picnics Filming under 100 people	1.08	Linear and linkage	Local
Brighton St Reserve	Brighton St	Petersham	Playground BBQ and picnic area Basketball	Recreation	0.47	Park	Local
Quinn Playground	Elswick St	Petersham	Playground	Children's recreation	-	Park	Local
64 Kensington Road	64 Kensington Road	Summer Hill	Rest park Children's play area	Recreation	0.12	Park	Local
78 Kensington Road	78 Kensington Road	Summer Hill	Children's play area Rest areas	Recreation	0.05	Park	Local

NAME	STREET ADDRESS	SUBURB	FACILITIES	USES	AREA (HA)	TPOLOGY	CATCHMENT
Underwood Reserve	9-15 Gower Street	Summer Hill	Rest areas Recreation area Cricket nets Children's playground	Recreation Sports	0.43	Park	Local
Blackmore Oval	Canal Rd, Leichhardt, 2040	Leichhardt	Sports ground Floodlighting Bathrooms Linked to bay run	Recreation Sports	-	Outdoor sports area	Local

Appendix B

Demographic Catchment Areas

FIGURE 6 – WALKING DISTANCE AND DRIVE TIME CATCHMENTS FOR DEMOGRAPHIC ANALYSIS



Appendix C

Demographic Analysis

DEMOGRAPHIC ANALYSIS

The following section provides a demographic analysis of the entire suburb of Leichhardt, Leichhardt LGA, and the Sydney SD.

AGE PROFILE AND DISTRIBUTION

The ABS 2011 Census identifies a total of 13,520 residents living in the suburb of Leichhardt, the Aboriginal and Torres Strait Islander population (1.4%) is slightly above the Sydney average (1.2%). Table 1 below sets out the age distribution for the suburb of Leichhardt, Leichhardt LGA and Sydney SD.

TABLE 8 - AGE PROFILE AND DISTRIBUTION (ABS 2011 CENSUS)

Age	Leichhardt	Leichhardt LGA	Sydney SD
Total population	13,520	52,198	4,391,674
Median age	36	37	36
0-4 years	8.9%	8.2%	6.8%
5-14 years	7.7%	8.6%	12.4%
15-24 years	9.2%	8.1%	13.3%
25-54 years	53.9%	53.5%	43.9%
55-64 years	9.4%	11.3%	10.8%
65 years and over	10.7%	10.2%	12.7%

The following aspects of the community age profile are important for this study:

- There is a higher proportion of children and youth aged between 0-24 years in Sydney SD (32.5%) than in the suburb of Leichhardt (25.8%) or Leichhardt LGA (24.9%). The median age of the community in the suburb is 36.
- The suburb of Leichhardt has a slightly lower proportion of people aged 65 years and over (10.7%) when compared with Sydney SD (12.7%), Leichhardt LGA is slightly lower (10.2%)
- The suburb of Leichhardt has a high proportion of people aged 25-54 years (53.9%) compared with Sydney SD (43.9%), and Leichhardt LGA (53.5%).

CULTURAL AND LINGUISTIC CHARACTERISTICS

The suburb of Leichhardt has a similar proportion of residents born overseas compared to the Leichhardt LGA (35.0% compared to 34.7%).

At the time of the 2011 Census, those born overseas (65%) were from the three main countries of England (5.1%), Italy (3.8%) and New Zealand (3.2%). These three countries are also those most represented in the broader Leichhardt LGA: England (7.3%), New Zealand (3.2%) and Italy (1.8%). The difference in those born overseas between 2006 (81.9%) and 2011 (65%) demonstrates the changing cultural makeup of Leichhardt.

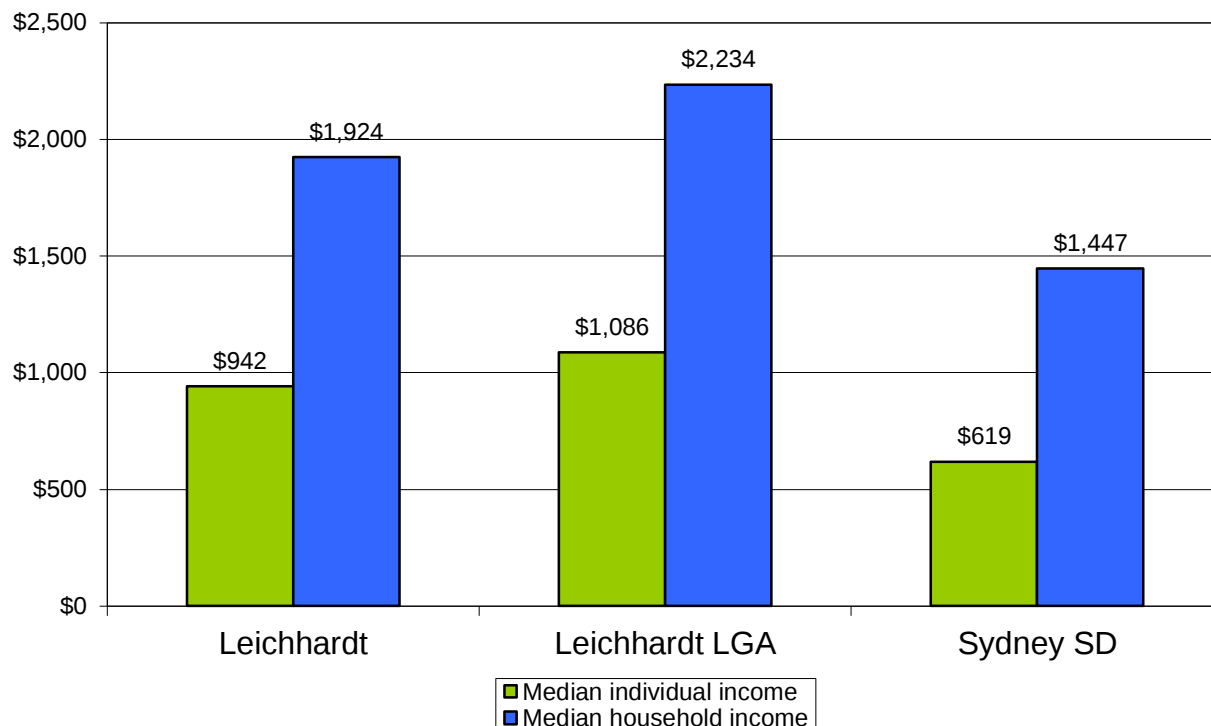
Of the languages spoken at home other than English, Italian (6.1%), Spanish (1.8%) and Greek (1.6%) are most prominent.

This is in contrast to the Sydney SD where the most prominent languages other than English were Arabic (4.1%), Cantonese and Mandarin (3.0%), and Vietnamese (1.9%). This data highlights the European influence of the Italian and Greek communities within the suburb of Leichhardt and Leichhardt LGA.

INCOME AND RELATIVE AFFLUENCE

Figure 7 below illustrates the median weekly individual and household incomes for the suburb of Leichhardt, Leichhardt LGA and the wider Sydney SD.

FIGURE 7 - MEDIAN WEEKLY INDIVIDUAL AND HOUSEHOLD INCOMES.



The following income characteristics are highlighted:

- The median individual and household income within the suburb are slightly lower than Leichhardt LGA, but higher significantly than the Sydney SD
- According to ABS 2006 census data¹, over a third of the population of the suburb of Leichhardt are professionals (36.5%), managers (16.6%) and clerical and administrative workers (14.6%) are the next highest occupation groupings. This may also help to explain the higher median incomes in the suburb.

HOUSING TENURE AND HOUSEHOLD STRUCTURE

Figure 8 overleaf provides an overview of tenure types within the suburb of Leichhardt, Leichhardt LGA and the Sydney SD, at the time of the 2011 Census.

The following points are highlighted:

- When compared with the Sydney SD (32%) there are an above average proportion of rented dwellings in the suburb of Leichhardt (40%) and the Leichhardt LGA (41%).
- The suburb of Leichhardt is characterised by a lower proportion of outright home ownership (23%) than both the wider Leichhardt LGA (24%) and Sydney SD (30%).

¹ ABS 2011 census data for employment and occupation will not be available until late October 2012.

FIGURE 8 - TENURE TYPE

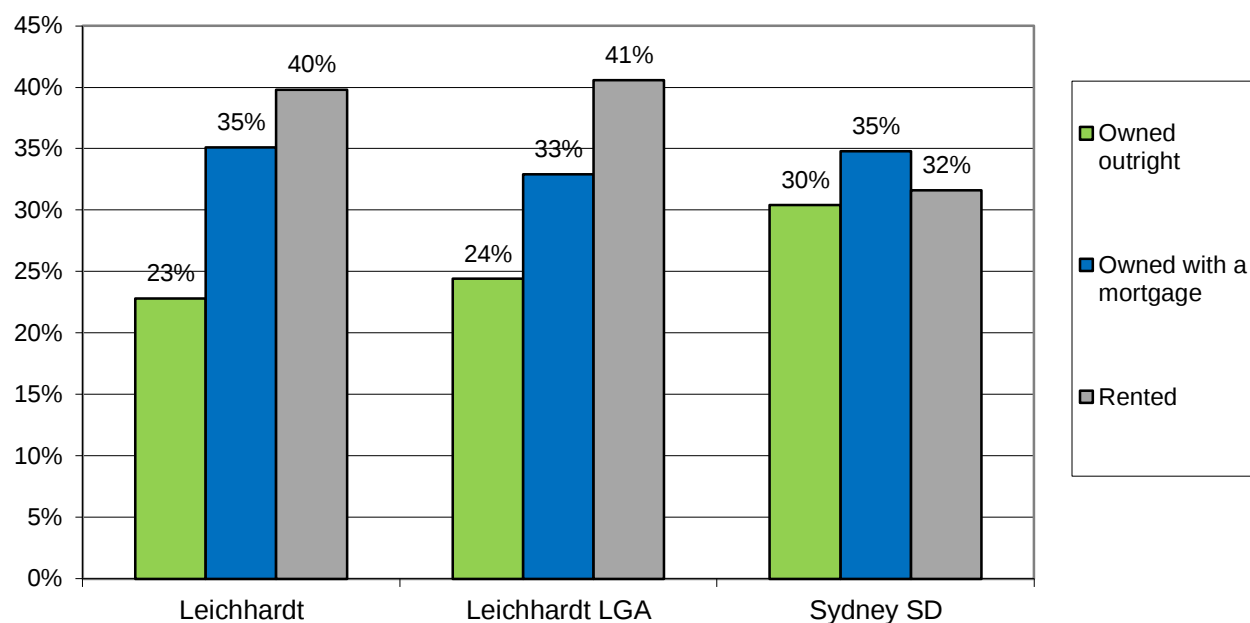
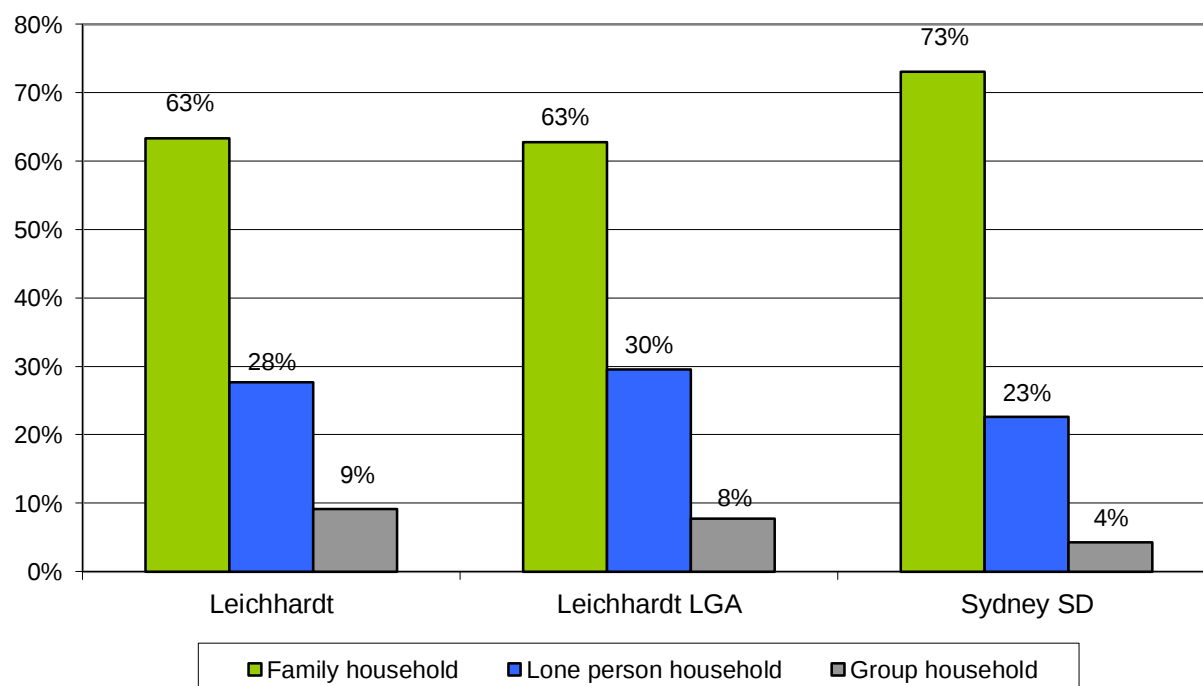


Figure 9 overleaf illustrates the predominant household structures within the suburb of Leichhardt, the wider Leichhardt LGA and Sydney SD at the time of the 2011 Census. The following points are highlighted:

- There is a smaller proportion of family households within the suburb and LGA (63%) than the Sydney SD (73%)
- There is a higher number of lone person households in the suburb (28%) compared to the Sydney SD (23%). There is a slightly higher proportion of lone person households in the LGA (30%)
- The proportion of group households is greater in the suburb of Leichhardt (9%) compared to the LGA (8%) and the Sydney SD (4%)

FIGURE 9 – HOUSEHOLD STRUCTURE



EMPLOYMENT AND TERTIARY EDUCATION

At the time of the 2006 Census, the unemployment rate in Leichhardt (3.3%) and Leichhardt LGA (3.2%) was lower than the Sydney SD (5.3%). Employment and education data for the 2011 Census will not be available for analysis until late October 2012.

Table 9 below provides an outline of key occupation categories for the suburb of Leichhardt, the Leichhardt LGA and the Sydney SD in 2006.

TABLE 9 – OCCUPATION CATEGORIES (ABS 2006 CENSUS)

Occupation	Leichhardt	Leichhardt LGA	Sydney SD
Managers	16.6%	19.9%	13.2%
Professionals	36.5%	39.8%	23.7%
Technicians and Trades Workers	8.8%	7.2%	12.7%
Community and Personal Service Workers	7.2%	6.2%	8.0%
Clerical and Administrative Workers	14.6%	13.5%	16.7%
Sales Workers	8.3%	7.0%	9.5%
Machinery Operators and Drivers	3.8%	1.8%	6.0%
Labourers	2.5%	3.1%	8.1%

The following aspects are highlighted:

- The occupation profile of Leichhardt and Leichhardt LGA suggests a high proportion of 'white collar' workers, with a higher proportion of managers (16.6% and 36.5% respectively) and professionals (19.9% and 39.8% respectively) compared to the Sydney SD (13.2% and 23.7% respectively).
- Leichhardt and Leichhardt LGA both have a considerable lower proportion of 'blue collar' workers – machinery operators and drivers as well as labourers – when compared to the Sydney SD.
- There is a lower proportion of technicians and trades workers within the suburb of Leichhardt and Leichhardt LGA (8.8% and 7.2% respectively), when compared to the Sydney SD (12.7%).

Table 10 below shows the highest educational qualifications achieved by residents (15 years and over) at the time of the 2006 Census.

TABLE 10 – HIGHEST TERTIARY EDUCATION QUALIFICATION ACHIEVED BY RESIDENTS AGED 15 YEARS AND OVER (ABS 2006 CENSUS)

Highest qualification achieved (15 years+)	Leichhardt	Leichhardt LGA	Sydney SD
Bachelor or higher degree	33.3%	38.6%	20.0%
Advanced diploma or diploma	9.6%	9.2%	8.1%
Vocational	11.3%	10.0%	14.9%
No qualifications	33.6%	29.1%	42.7%
Not stated/inadequately described	12.2%	13.1%	14.3%

As the table shows:

- There is a considerably higher proportion of people with a Bachelor or higher qualification living in Leichhardt (33.3%) and Leichhardt LGA (38.6%), when compared with the Sydney SD (20.0%).

- With regard to the proportion of the population with an advanced diploma or diploma, Leichhardt and Leichhardt LGA score slightly higher than the Sydney SD.
- Approximately a third of those aged 15 years and older living in Leichhardt (33.6%) and Leichhardt LGA (29.1%) stated that they had no tertiary educational qualification, lower than the Sydney SD average (42.7%).

Appendix D

Bicycle Routes

FIGURE 10 – LEICHHARDT BICYCLE ROUTES



Sydney

Tower 2, Level 23, Darling Park
201 Sussex Street Sydney, NSW 2000
t +02 8233 9900
f +02 8233 9966

Brisbane

Level 7, 123 Albert Street
Brisbane, QLD 4000
t +07 3007 3800
f +07 3007 3811

Melbourne

Level 12, 120 Collins Street
Melbourne, VIC 3000
t +03 8663 4888
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- **Perth**

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