

DELIVERY

LEP CONTROLS

To enable development to take place in line with the endorsed vision and objectives, amendments are required to City of Canada Bay Local Environmental Plan (LEP) 2013. At this time, the amended controls are limited to the zoned area west of Concord Road.

The proposed draft LEP amendments seek to achieve the following:

- Rezoning to a predominant area of R4 –

High Density Residential within the central spine of the Peninsula. The extended Leeds Street industrial area is to be rezoned to B4 – Mixed Use, along with the area immediately surrounding the Rhodes Railway Station. A 20m wide foreshore RE1 – Public Recreation zone will extend from Uhrs Point Reserve to the termination of Blaxland Road.

- New building height controls –

Concord Road will have heights of 20m and there will be heights of 27m-30m in the central spine and towards Blaxland Road. Spot heights of 35m are proposed along Blaxland Road with up to 77m in the Leeds Street Foreshore Precinct and 116m in the Rhodes East Gateway.

- New FSR controls –

Generally ranging from 1:18:1 to 9:5:1 are proposed to facilitate the new fine grain and low rise higher density environment in tandem with the new height controls.

- Provision of new roadways will be provided via a new bonus height and FSR provision.

- New Active Street Frontages –

Proposed in the Rhodes East Gateway along Blaxland Road and within the Leeds Street Foreshore Precinct.

- Controls to help define a finer grain and human scaled development outcome to promote a more pedestrian friendly and activated urban form and community. This includes a Mixed Use Corners Strategy throughout the area and flexible planning provisions to ensure adaptable ground level floor space along Concord Road is available should the market decide retail and commercial uses are preferred.

- New foreshore access and linkages through rezoning and other appropriate measures.

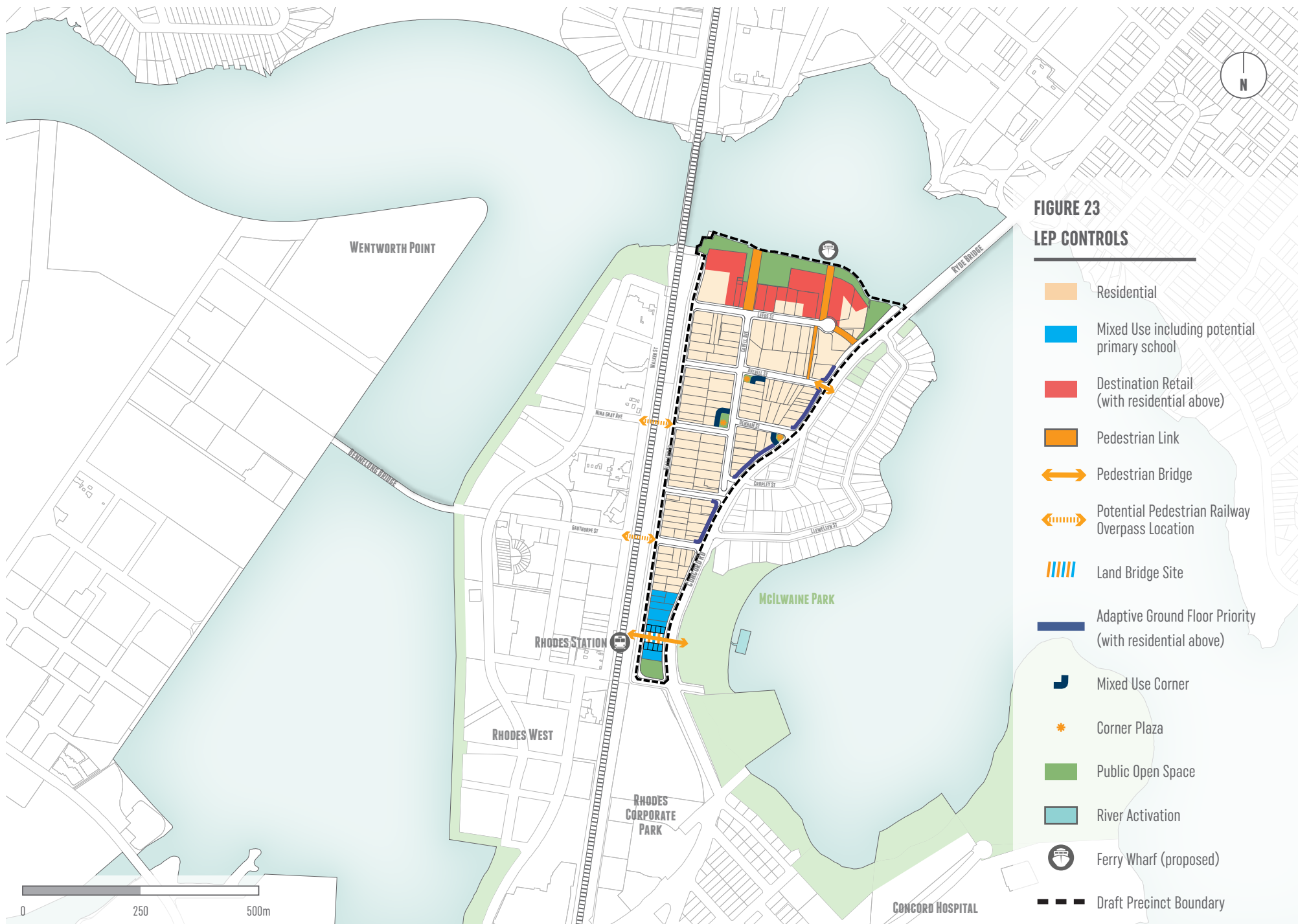
- The aim is to secure a continuous publicly accessible link from McIlwaine Park to Blaxland Road.

- Establishment of new built form controls to achieve improved outcomes adjacent to or near built items.

- Additional land uses in selected locations to assist with the provision of local services, and to bring a new richness, diversity, vibrancy and vitality within key parts of the Peninsula for the local and wider community. This includes seeking to provide for destinations at the foreshore within the Leeds Street Foreshore Precinct tied to new ferry infrastructure and a walking/cycling environment; more shops, food and drink premises, services and community facilities and social infrastructure in pockets of the Peninsula, as well as potential for a new public river pool off

McIlwaine Park.

- A targeted provision of 5% Affordable Housing through new development to assist key workers and lower income earners to live within the Rhodes East area.
- Upgrading of the sustainability credentials of development at Rhodes East to achieve new higher water and energy savings targets under the BASIX SEPP process.



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Level 4, 17 Randle Street Surry Hills NSW 2010

T: +612 8202 8000 www.robertsday.com.au

ABN 53 667 373 703 ACN 008 892 135

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APPENDIX A

DEMOGRAPHIC & ECONOMIC SUMMARY

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1 Introduction

This profile provides background population statistics to assist in the structure planning of the East Rhodes Urban Activation precinct as defined by NSW Department of Planning and Environment (DP&E). This profile is based on information drawn from the 2011 Census of Population and Housing (ABS) and the 2014 Final NSW and Local Government Area Population, Dwelling and Household Projections (DP&E).

The East Rhodes precinct is part of the suburb of Rhodes in Sydney's Inner West and includes the area adjacent to the Rhodes railway station along the Main Northern Rail Line.

The precinct is located within Canada Bay Local Government Area (LGA).

Figure 1 Location of East Rhodes precinct



For the purpose of this analysis:

- the East Rhodes precinct (see Figure 2) refers to the following:
 - Bureau of Transport Statistics (BTS) Travel Zones: 711
 - Australian Bureau of Statistics (ABS) Statistical Areas Level 1 (SA1s): 1138426, 1138437, 1138438
- Canada Bay LGA refers to Canada Bay local government area, as defined on 1 July 2011.
- Sydney refers to the Sydney Metropolitan planning region.

Figure 2 East Rhodes precinct map identifying the Bureau of Transport Statistics' Travel Zone and Australian Bureau of Statistics' Statistical Area Level 1 (SA1)



This profile will provide analysis of the population and dwelling characteristics of the East Rhodes precinct, making comparisons to Canada Bay LGA and Sydney.

2 Age structure

In 2011, the East Rhodes precinct was home to 733 residents, representing just less than one per cent of the entire Canada Bay population. There were smaller proportions of young children, teenagers, and mid-age adults compared to Canada Bay LGA and Sydney as a whole indicating fewer families living in the area (Table 1). A greater share of the precincts' population was aged over 65 years, predominantly female (Figure 3), a reflection of the precincts location which includes two aged care facilities. The median age in the East Rhodes precinct was older compared to Canada Bay LGA and Sydney as a whole (Table 2).

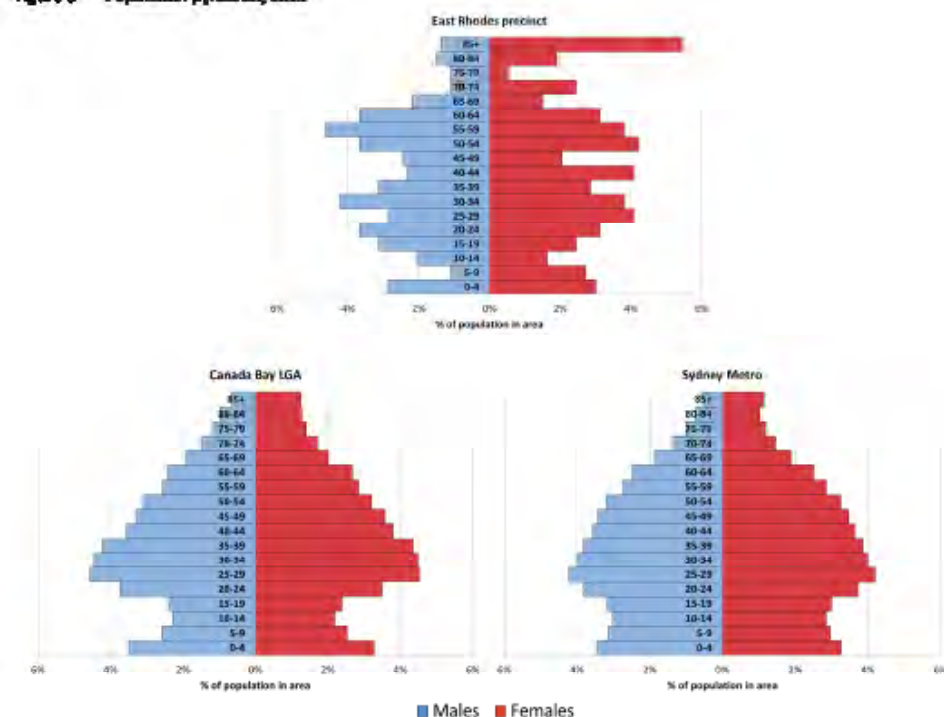
Table 1 Population by age group, 2011

Age Group (years)	Number			Age Distribution (%)		
	East Rhodes precinct	Canada Bay LGA	Sydney	East Rhodes precinct	Canada Bay LGA	Sydney
Under 15	98	13,080	801,837	13.4%	16.3%	18.7%
15-39	245	30,974	1,622,604	33.4%	38.7%	37.9%
40-64	250	24,866	1,336,048	34.1%	31.1%	31.2%
65+	140	11,135	525,728	19.1%	13.9%	12.3%
Total	733	80,065	4,286,217			

Table 2 Median Age (years), 2011

East Rhodes precinct	Canada Bay LGA	Sydney
42.5	37.1	35.7

Figure 3 Population pyramids, 2011



3 Culture and Language

In 2011, 62% of East Rhodes precinct residents were born in Australia, and this was also the case for Canada Bay LGA and Sydney as a whole (Table 3). In total 254 people living in precinct were born overseas. Of these overseas born, China (excludes SARs and Taiwan), Republic of Korea (South) and England were the most common countries of birth (Table 5). Additionally, less precinct residents were the children of migrants compared with Canada Bay LGA and Sydney as a whole (Table 4).

Table 3 Population by place of birth, 2011

Area	Australia	Overseas
East Rhodes precinct	62.0%	38.0%
Canada Bay LGA	62.0%	38.0%
Sydney	62.0%	38.0%

Table 4 Population with one or both parents born overseas, 2011

Area	At least one parent born overseas
East Rhodes precinct	59.8%
Canada Bay LGA	65.4%
Sydney	63.5%

Table 5 Top 10 Countries of birth of people living in East Rhodes precinct, 2011

Rank	Country of birth	Share of population (%)
1.	Australia	62.0%
2.	China (excludes SARs and Taiwan)	6.3%
3.	Korea, Republic of (South)	3.9%
4.	England	3.6%
5.	India	3.1%
6.	New Zealand	1.6%
7.	Egypt	1.3%
8.	Philippines	1.3%
9.	Sri Lanka	1.3%
10.	Ireland	1.2%

In East Rhodes precinct almost two thirds of residents spoke English at home (65%). This is a slightly larger proportion than Canada Bay LGA and Sydney as a whole (Figure 4). Of the people who spoke a language other than English, the share who also spoke English very well (62%) was higher than Canada Bay LGA (57%) and Sydney as a whole (56%).

Many other languages were spoken by residents of the East Rhodes precinct community, reflecting the cultural diversity of the precinct (Table 6).

Figure 4 Language spoken at home, 2011

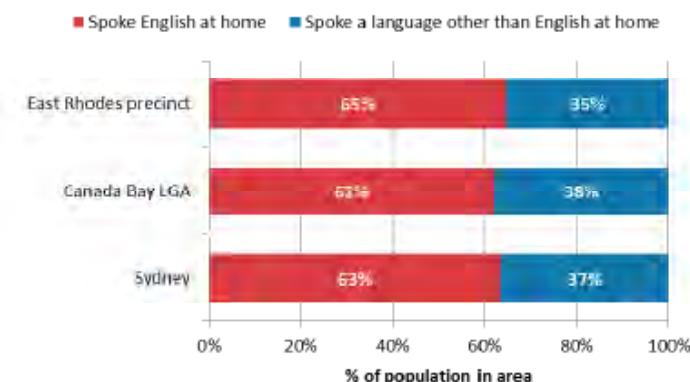


Table 6 Top 10 Languages spoken at home in East Rhodes precinct, 2011

Rank	Language spoken at home	Share of population (%)
1.	English	64.7%
2.	Mandarin	7.5%
3.	Korean	4.0%
4.	Arabic	3.8%
5.	Italian	3.7%
6.	Cantonese	1.8%
7.	Greek	1.5%
8.	Japanese	1.5%
9.	Russian	1.3%
10.	Spanish	1.2%

4 Education

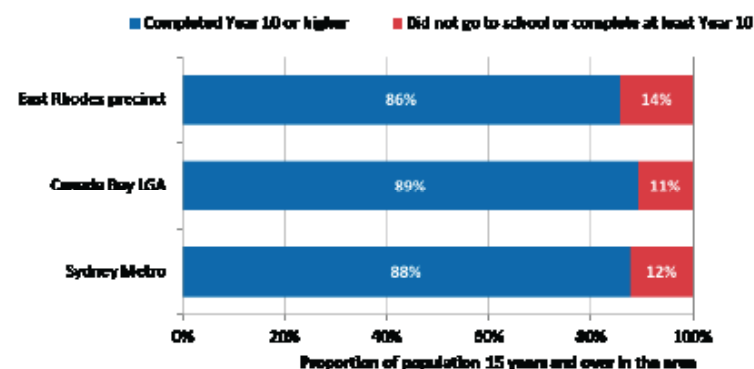
The share of students attending each type of educational institution reflected the age profile of the East Rhodes precinct population. Fewer young families meant a greater share of students attended a tertiary institution (29.1%) or technical or further education (14.6%), whereas a smaller proportion attended preschool (4.6%) or primary school (23.2%) compared to the Canada Bay LGA and the Sydney region (Table 7).

Table 7 Type of education institution^(a) being attended by student population, 2011

Area	Preschool	Primary school	Secondary school	Technical or further education institution	Tertiary institution
East Rhodes precinct	4.6%	23.2%	25.8%	14.6%	29.1%
Canada Bay LGA	7.3%	29.1%	23.1%	8.3%	28.6%
Sydney	7.2%	31.5%	26.0%	9.8%	21.9%

^(a)Excludes 'other' institutions

Most of the adult population (aged 15 years and over) who lived in East Rhodes precinct had completed at least Year 10 at school (86%). This is only slightly lower than the proportion of residents who completed at least Year 10 in Canada Bay LGA (89%) or Sydney as a whole (88%; Figure 5). Year 12 completions were attained by 66% of East Rhodes precinct residents aged 15 years and over, which is a higher proportion compared to Sydney as a whole (62%) but slightly lower than Canada Bay LGA (68%).

Figure 5 Level of Education, 2011

More than half of the population in East Rhodes precinct aged 15 years and over held a post-school qualification (57.5%), which is higher than Sydney as a whole (54.9%) but lower than Canada Bay LGA (61.6%). The most common post-school qualification attained in the precinct was at the Bachelor Degree level (23.3%), which again was higher than Sydney (19.8%) but slightly lower than Canada Bay LGA (24.9%, Table 8).

Table 8 Highest post-school qualification attained for the total population aged 15 years and over, 2011

Area	Postgraduate Degree Level	Graduate Diploma and Graduate Certificate Level	Bachelor Degree Level	Advanced Diploma and Diploma Level	Certificate Level	No Post-School Qualification
East Rhodes precinct	7.5%	2.1%	23.3%	11.2%	13.3%	42.5%
Canada Bay LGA	9.0%	2.4%	24.9%	11.0%	14.2%	38.4%
Sydney	6.6%	1.8%	19.8%	10.2%	16.4%	45.1%

5 Employment

In 2011, 370 East Rhodes precinct residents were part of the labour force. They represented 68% of the precincts population that were aged 15 years and above—a slightly lower labour force participation rate compared to Sydney as whole (66%) and Canada Bay LGA (69%). The lower labour force participation rate for the precinct, compared to Canada Bay LGA and Sydney, can be partly attributed to the larger proportion of people 65 years and over who have lower participation rates in the workforce. The unemployment rate for East Rhodes precinct (3.0%) was lower than the Sydney region (5.7%, Table 9). Of the employed persons in East Rhodes precinct, just over two thirds (69%) worked full-time.

Table 9 Employment status of the population in labour force^(a), 2011

Area	Employed	Unemployed
East Rhodes precinct	97.0%	3.0%
Canada Bay LGA	95.7%	4.3%
Sydney	94.3%	5.7%

^(a)Labour force only includes persons aged 15 years and over who were either employed or unemployed

Table 10 Top 5 Industries of employment for employed persons living in East Rhodes precinct, 2011

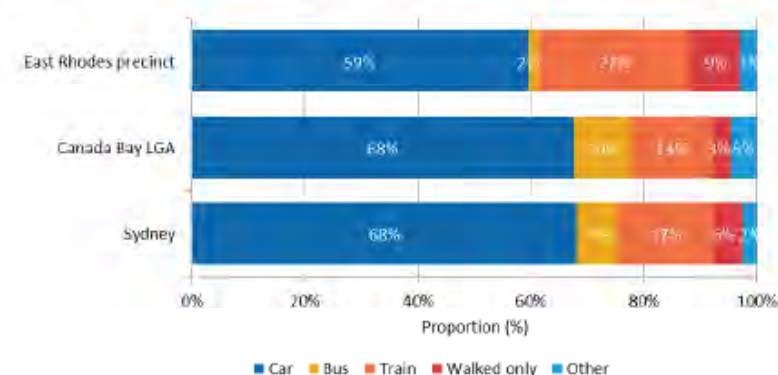
1. Retail Trade (12.2%)
2. Health Care and Social Assistance (11.4%)
3. Professional, Scientific and Technical Services (11.1%)
4. Education and Training (9.9%)
5. Manufacturing (9.6%)

The most common industries of employment for the East Rhodes precinct were Retail Trade (12.2%), Health Care and Social Assistance (11.4%) and Professional, Scientific and Technical Services (11.1%, Table 10). A higher proportion of the employed population were employed in Retail Trade compared to Canada Bay LGA (9.6%) and Sydney as a whole (9.9%), while a similar proportion were employed in Health Care and Social Assistance in Canada Bay LGA (10.4%) and Sydney as a whole (11.0%). The top ranked industries for the precinct as listed in Table 10 are consistent with that of Canada Bay LGA, with the exception of Manufacturing (6.5% in Canada Bay LGA) being replaced by Financial and Insurance Services (9.1% in Canada Bay LGA compared to just 4.7% in East Rhodes precinct).

6 Transport

The most common mode of transport used to travel to work by East Rhodes precinct residents was by car, either as a driver or passenger. Three out of five precinct residents used a car to travel to work, a lower proportion compared to Canada Bay LGA and Sydney (both 68%). Precinct residents were more likely to take the train or walk to work and less likely to take the bus to work. The precinct had a higher proportion of its residents taking the train (27%) compared to Canada Bay LGA (14%) and Sydney overall (17%), Figure 6).

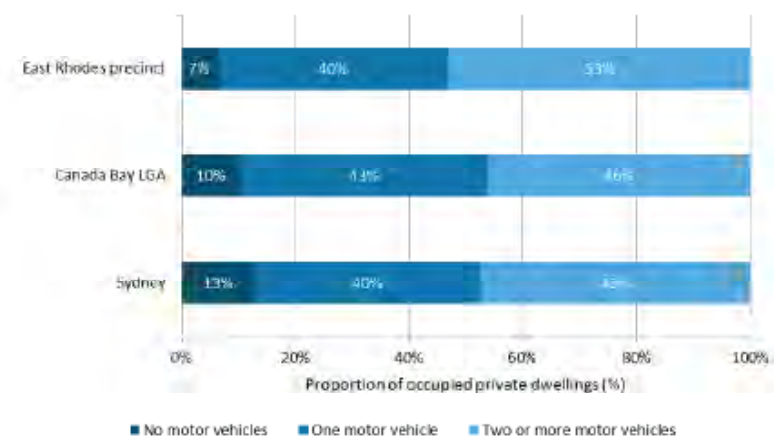
Figure 6 Main mode of transport to work⁶¹ in Sydney for employed East Rhodes residents, 2011.



⁶¹ Excludes persons who worked from home, did not go to work or did not state their mode of transport

In the East Rhodes precinct, 7% of occupied private dwellings did not have any registered motor vehicles garaged or parked at their address – a lower proportion than Canada Bay LGA and Sydney as a whole (Figure 7). Of the dwellings in the precinct which had a registered motor vehicle garaged or parked, more than half had two or more vehicles.

Figure 7 Registered motor vehicles⁶² for occupied private dwellings, 2011.

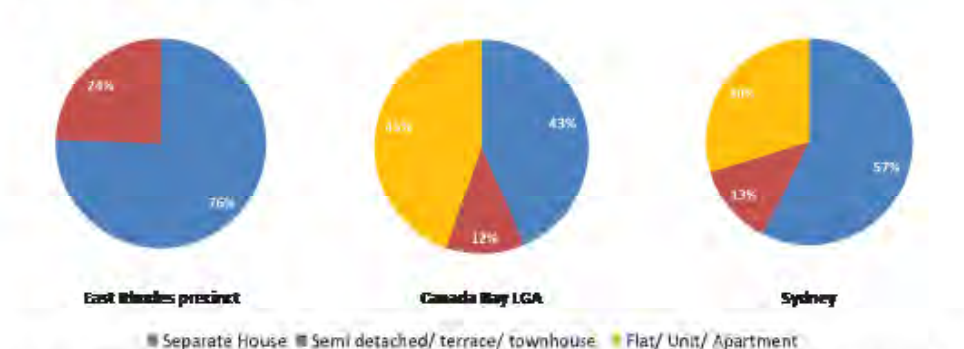


⁶² Excludes motorbikes and scooters

7 Households and Dwellings

There were 274 private dwellings in the East Rhodes precinct in 2011, representing less than one percent (0.9%) of all private dwellings in Canada Bay LGA. Over three quarters of these dwellings (76%) were separate houses, which was substantially higher compared to Canada Bay LGA (43%, Figure 8). The rest of the private dwellings in the precinct were semi-detached, terraces or townhouses, which represented a greater proportion of medium density residential land use than that seen in Canada Bay LGA and Sydney as a whole (Figure 8). There are no flats, units or apartments in the East Rhodes precinct (Figure 8).

Figure 8 Types of private dwellings, 2011



The 2011 Census data reveals a strong relationship between the predominant household types of an area, the population's age profile and housing stock available. The most common household types, contributing to almost 60% of all households (across the precinct, Canada Bay LGA and Sydney), were families consisting of couples with children and couple only households (Figure 9). The precinct had a lower proportion of lone person households (20%) compared to Canada Bay LGA (23%) and Sydney (22%) and a higher proportion of multiple and other households (8%) compared to Canada Bay LGA and Sydney (4% for both). The average household size of the precinct was 2.67 persons per household, which was similar to Sydney as a whole and higher than Canada Bay LGA (Figure 10).

Figure 9 Household types, 2011

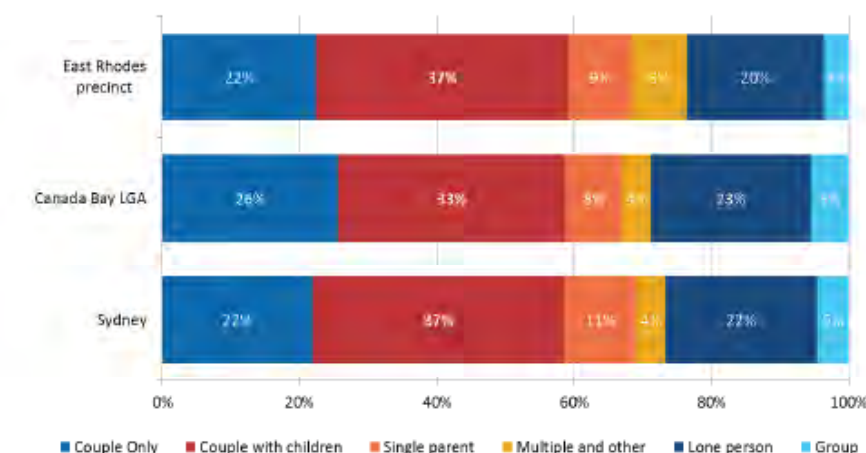
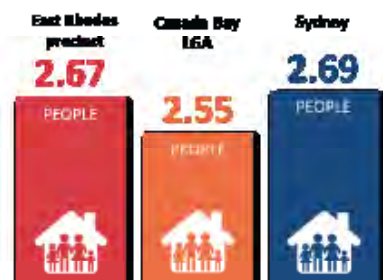
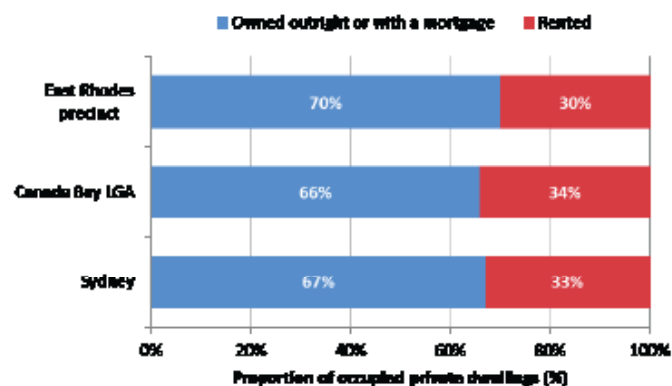


Figure 10 Average household size, 2011

In East Rhodes precinct, 70% of dwellings were owned outright or with a mortgage, which is a higher proportion than for households in other parts of Canada Bay LGA and Sydney (Figure 11).

Figure 11 Distribution of dwellings by tenure type, 2011

8 Socio-Economic Advantage

Slightly more families in the East Rhodes precinct experienced housing stress (that is, when the household has an income level in the bottom 40 per cent of Sydney's income distribution and is paying 30 per cent or more of its income on rent) compared to Sydney as a whole, and significantly more than Canada Bay LGA (Table 11).

Table 11 Share of families experiencing housing stress, 2011

Area	Families experiencing housing stress
East Rhodes precinct	37.3%
Canada Bay LGA	27.2%
Sydney	36.8%

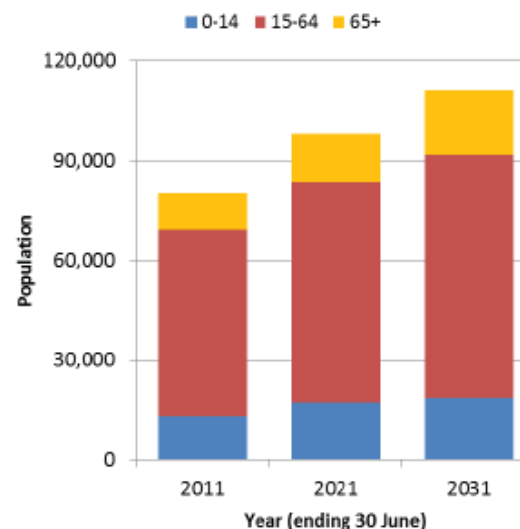
In 2011, the median weekly household income in the East Rhodes precinct was between \$1,500 and \$1,999, which is the same income range as households in Canada Bay LGA, but higher than the Sydney region (\$1,250 - \$1,499).

9 Projected Population

As the East Rhodes precinct is located within the Canada Bay LGA, analysing the population projections for Canada Bay LGA can give us an indication of the potential changes to the precincts' population profile over the next 15-20 years. Differences between the precincts' age profile and Canada Bay LGA do however need to be taken into account when analysing these projections.

Canada Bay LGA is expected to grow by 31,300 people over the next 20 years, from 80,050 in 2011 to 111,350 people by 2031. This is a 39% increase, compared to a 37% increase in the population of the Sydney region over the same period. Just over half (54%) of this growth is expected to come from natural increase, with the number of children born in the area likely to outnumber deaths.

Like everywhere else, the population of Canada Bay LGA is ageing. By 2031, there may be 19,750 residents aged 65 years or older in Canada Bay, making up 18% of its population; this older population made up 14% of Canada Bay's population in 2011. This represented a 77% increase in the population 65+ versus 43% and 31% for the 0-14 and 15-64 age groups respectively. Canada Bay is projected to have a more similar age structure to Sydney as a whole by 2031.

Figure 12 Projected population of Canada Bay LGA, by age group

Date prepared: November 2015

Sources:

Australian Bureau of Statistics, 2012, *Census of Population and Housing 2011*, ABS, Canberra.

<http://www.abs.gov.au/websitedbs/census/home.nsf/home/Census>

Bureau of Transport Statistics, 2012, *2011 Journey to Work data*, BTS, Sydney, <http://www.bts.nsw.gov.au/Statistics/Statistics>

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Level 4, 17 Randle Street Surry Hills NSW 2010

T: +612 8202 8000 www.robertsday.com.au

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APPENDIX B

COMMUNITY CONSULTATION SUMMARY

CONSULTATION ACTIVITIES

INITIAL CONSULTATION

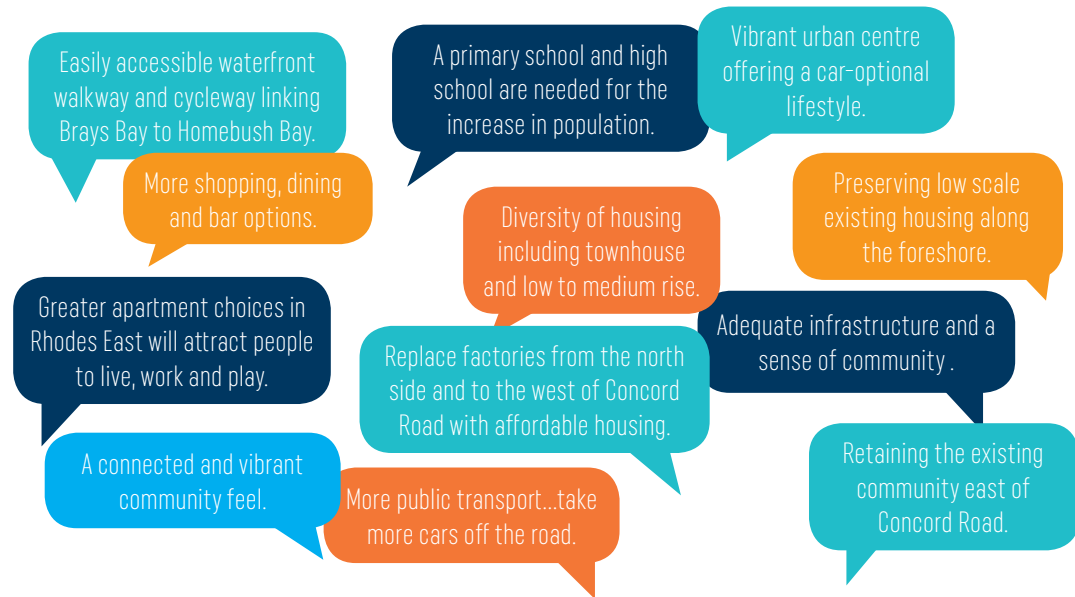
Preliminary consultation with the local community, key stakeholders and relevant government agencies has been undertaken during the preparation of this proposal.

In October 2015 initial consultation was undertaken with the local community comprising a drop-in information session and an online survey.

A total of 196 respondents completed the survey. As part of the online survey, participants were asked to outline, in their own words, their vision for the future of Rhodes East.

Key findings of this engagement were:

- Local character is important
- Housing choice and affordability is important
- More shopping, cafes and restaurants are desired
- Parramatta River foreshore access should be continuous
- It can be difficult to get on trains in the morning
- Concord Road gets congested
- Infrastructure is required to support any future growth



COMMUNITY WORKSHOPS

In March 2016 three community workshops, involving approximately 200 participants were convened to further explore community and stakeholder preferences and needs.

Key findings of this engagement were:

HOUSING DENSITY

- Increased housing density was considered to be more appropriate in Rhodes Central between Concord Road and the train line. Particular suggestions included on Leeds Street and by Rhodes Station.
- Important that building heights are scaled throughout Rhodes East to retain views, minimise overshadowing and create a human scale.
- Concern with increased housing density to the east of Concord Road with many noting this area should not be redeveloped at all, although some participants did support housing density in this area.
- Clarification sought on what low rise high density means and how it could be achieved within Rhodes East, particularly concerning potential building heights.

BUILDING HEIGHTS

- Rhodes East and West should be readily distinguished through building heights and urban design.

- Important that building heights are scaled throughout Rhodes East stepping down from the railway station and railway line to lower rise near the water. There was strong preference to see foreshore areas have low rise development.
- Lower scale buildings were generally viewed as more appropriate.
- Some feedback noted that medium or high rise may be appropriate around the station if this lessened the need for height in other areas within the overall Rhodes East precinct.
- Buildings would need to be separated and staggered to provide visual interest and maintain views through and from the precinct.
- Important that development controls provide certainty, particularly with regard to building heights and minimum lot sizes.
- Concern about overshadowing.
- Some support for a mix of building heights and housing types in Rhodes East.
- Some concern about economic feasibility to justify the redevelopment of land.

LAND USE

- Retail and community uses were considered appropriate where co-located with increased density. Particular suggestions included Leeds Street and by Rhodes Station.

- Strong views that the water front area north of Leeds Street should be for neighbourhood level food, gathering and recreation.
- General support for a local centre in Rhodes East, although some feedback queried whether more retail is suitable in Rhodes.
- Further understanding required on what retail and community uses are appropriate for the area.
- Clarification sought and some concern regarding the potential for land acquisition.

OPEN SPACE

- Opportunity to derive a public benefit from any redevelopment of the area.
- Opportunity to provide continuous access to the foreshore.
- Create better connections between existing open spaces including Brays Road Reserve, the Concord Hospital area and Sydney Olympic Park.
- Some concern that the area requires local open space, with particular suggestions including creating a foreshore open space with a local centre at Leeds Street.

Following the workshops, the questions discussed were also placed on DP&E's website for four weeks to give community members who could not attend the workshops an opportunity to share their input. The questions centred on the three key themes of:

1. Urban design and public domain
2. Traffic and transport
3. Social infrastructure.

Key findings from the responses to the questions comprised;

- 61% of respondents felt that near the Station was a suitable location for greater density
- The preferred location for a new local centre was divided between the centre of Rhodes East (46%) and in the north, near the water (43%)
- Approximately half of respondents thought the Station should be connected to the land east of the railway line via a pedestrian bridge to McIlwaine Park.

ONGOING ENGAGEMENT

Community feedback from numerous engagement processes in recent years has been incorporated into Council's planning policies as high level visions, principles and strategies.

Community engagement can create reasonable expectations that feedback will be translated into actions and plans by Council and government agencies. There is therefore a need to ensure the values, principles and strategies are integrated into the future plans for Rhodes.

Consultation with government agencies in relation to the future of Rhodes East will be ongoing through this Investigation Area study.

Source: Elton Consulting



Community Workshops (Source: Canada Bay Council)



INFORMATION POSTERS



Rhodes East, get involved!

Have your say and stay up-to-date...

- Get added to the Rhodes East email list – ask us how!
- Visit the Rhodes East website and complete the online survey:
www.planning.nsw.gov.au/rhodeseast
- Letters, newsletters and fact sheets will be sent to landowners and residents at key milestones.
- Community workshops will be held in early-2016.
- Following the preparation of draft plans for Rhodes East, there will be a public exhibition period. Community drop-in sessions will be held, and community members will be invited to comment on the draft plans.
- Do you have a question or would like to discuss Rhodes East further? Please contact:

Council's Strategic Planning team

P: 9911 6410

E: strategicplanning@canadabay.nsw.gov.au



Help shape the future of Rhodes East

The NSW Government has identified Rhodes East as an area that can benefit from new homes, services and open spaces.

Planning for the future

The Department of Planning and Environment and City of Canada Bay Council are looking at opportunities for new homes, jobs, shops and cafes, community services and open space in Rhodes East.

A key feature of any plans will be connecting people with new services, infrastructure and open spaces so that Rhodes East continues to be a great place to live.

This will include improvements to the public domain such as foreshore parks, pocket parks, well-connected footpaths and cycle paths, and street furniture.

Planning will be done by the Department of Planning and Environment in partnership with the City of Canada Bay Council and supported by the Futures Cities Collaborative, University of Sydney.

Your involvement will also be crucial to shaping plans for the future of Rhodes East.

What studies will inform the plans?

Studies will help to inform plans for the future of Rhodes East. These will examine heights and locations of buildings, traffic and transport, open space/parks, streetscapes and economic feasibility.

The types of future development will be considered as part of the investigation and through consultation with the community. Any left-over contamination from industry will be identified for future clean up.

Where is this taking place?

The City of Canada Bay identified the area between the railway line and Concord Road to the north of Mary Street as having potential for increased open space, new homes and improved connections to Rhodes railway station. The Department of Planning and Environment expanded the study area to include land to the east of Concord Road through to the foreshore. A map showing the boundary of the study area is on the back of this page.

How can you get involved?

The community will play an important role in shaping plans for the future of Rhodes East.

You can join your neighbours in giving your opinion on what you like about Rhodes East, your vision for the future and what local infrastructure, such as parks, is needed.

There are two main ways you can have your say:

1. Complete an online survey at
www.planning.nsw.gov.au/rhodeseast
2. Attend community workshops and information sessions, which will occur during the planning process.



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**Planning &
Environment**



**City of
Canada Bay**

APPENDIX C

CHARACTER AREA ANALYSIS

CHARACTER AREA ANALYSIS

EXISTING CHARACTER AREAS

Five existing character areas have been identified based upon their function, use, street pattern and built form attributes. Their boundaries have been defined by their respective attributes and therefore are not necessarily bounded by the existing streets.

The identified character areas are shown on the Character Areas Plan and detailed within the following table / pages. The Character Areas will be used to inform the Character Area Intent Statements and the Structure Plan proposals.

CHARACTERISTIC	RHODES EAST GATEWAY	LEEDS STREET FORESHORE PRECINCT	THE HIGH POINT	CONCORD ROAD CORRIDOR	EASTERN FORESHORE
Summary	A key transport hub with limited commercial uses located between Rhodes Station and Concord Road with a character influenced by adjoining built form and functions.	A predominately light industrial area on the waterfront with large building structures and which is heavily transport dominated (vehicles, trains, river traffic).	Centrally located area on the Rhodes Peninsula with a mix of residential and community uses situated on the most elevated part of the Investigation Area.	An area heavily dominated by the wide Concord Road corridor containing residential, community and light industrial uses.	A green, leafy area characterised by low scale residential development with connections to the waterfront.
Function	Transport hub and bus / rail connections. Small area of retail and office uses. Pocket park.	Vehicle- based destination with homeware shopping and light industrial uses providing limited employment opportunities.	Largely a residential area with community based uses.	Concord Road is a heavily trafficked transit street and through route for private vehicles and buses.	High amenity, waterfront residential enclave that reflects the heritage values of Llewellyn Street. In the absence of a continuous foreshore link, Llewellyn Street provides a leafy green informal north/ south pedestrian and cycle link in contrast to the busy Concord Road environment.

CHARACTERISTIC	RHODES EAST GATEWAY	LEEDS STREET FORESHORE PRECINCT	THE HIGH POINT	CONCORD ROAD CORRIDOR	EASTERN FORESHORE
Users / Activities	Transit Commuting Working Public Open Space - Passive and active recreational activities	Employment/ Light industrial Limited residential Destination homewares shopping and limited incidental ancillary uses include the Schibello Warehouse Café Scout Hall and Dragon Boat facilities provide recreational opportunities	Residential Civic hub including the Coptic Church, community hall and hostel.	Commercial Sporadic residential Uhrs Reserve/ King George Park Transit corridor Bus stops	Residential – regular residential subdivision pattern consisting of mainly single dwellings with some strata development.
Street Pattern	Perimeter street located between the 'Station' area and McIlwaine Park.	Leeds Street culminates in a cul-de-sac to the east and the only vehicle rail connection to the west.	Strong north/ south grid connections to surrounding Character Areas but with east/ west connections limited to Llewellyn Street at the south.	Concord Road is a vehicle dominated north/ south spine with a few local street connections.	Characterised by a single north/ south road terminating on Concord Road on the southern end. Cropley Lane provides the only mid block east/ west connection.
Linkages	Station concourse access via Blaxland Road. Pedestrian crossing.	Pedestrian and cycleway access to the rail bridge and Rhodes West public foreshore. Limited water transport from the boat ramp.	Long frontage to Blaxland Street that provides a connection to the Station and the cycleway/ pedestrian path across the Rail Bridge. Llewellyn Street extends east across Concord Road into the Eastern Foreshore Character Area and aligns with, but does not currently link to, Gauthorpe Street and Bennelong Bridge.	Concord Road provides the only north/ south road access into, and out of, the peninsula. Local streets feed traffic into, and off, Concord Road. There are currently three traffic light controlled pedestrian crossings on Concord Road. Currently Concord Road functions as a barrier.	Street connections to Concord Road north and south. Pedestrian and cycle connections to the Concord Road underpass but public waterfront access alongside the light industrial uses is not permitted.

CHARACTERISTIC	RHODES EAST GATEWAY	LEEDS STREET FORESHORE PRECINCT	THE HIGH POINT	CONCORD ROAD CORRIDOR	EASTERN FORESHORE
Landscape	<p>McIlwaine Park is a large recreational area and is simply and elegantly landscaped enabling it to be used for a wide range of passive and active recreational uses.</p> <p>The park provides the primary conduit to the Parramatta River on the eastern side of the Peninsula for Rhodes East residents and visitors.</p>	<p>High value mangroves are clustered underneath the rail bridge and visible from this Character Area.</p> <p>Due to the limited publicly accessible urban foreshore in this area, the Rhodes West foreshore public domain is a significant influence on the existing character.</p>	<p>The landscape is defined by the sloping topography.</p> <p>Heritage palm trees line a portion of Cavell Avenue.</p>	<p>King George Park and Uhrs Reserve are passive open spaces with native vegetation but lack connectivity to a broader open space system.</p>	<p>The landscape character is defined by the heritage trees along Llewellyn Street and is further enhanced by generous and open planted front gardens</p>
Public Spaces	<p>McIlwaine Park</p> <p>Mary Street pocket park</p>	<p>Boat ramp</p> <p>Scout Hall</p>	<p>The commuter path along Blaxland Road</p> <p>Streets</p>	<p>King George Park</p> <p>Bus stops</p>	<p>Uhrs Reserve is a passive space with native planting.</p>
Block Formation	<p>Variety of block sizes</p>	<p>Large floor plate buildings with high levels of site coverage and surface car parking.</p>	<p>Detached dwellings on lots oriented east/ west with low levels of site coverage.</p>	<p>Ad hoc and variable</p>	<p>Detached dwellings on lots with low levels of site coverage.</p>
Building Heights	<p>2 to 4 storeys opposite the station</p> <p>The proximity and presence of the 40 storey Rhodes West tower contributes to the existing building height character.</p>	<p>Most of the buildings are 1-2 storeys but typically at least 9 m in height due to the industrial nature of the precinct.</p> <p>Views to the water are restricted due to a lack of permeability and/ or built form breaks.</p>	<p>1 to 2 storeys</p>	<p>1 to 2 storeys</p>	<p>1 to 2 storeys</p>

CHARACTERISTIC	RHODES EAST GATEWAY	LEEDS STREET FORESHORE PRECINCT	THE HIGH POINT	CONCORD ROAD CORRIDOR	EASTERN FORESHORE
Building Types	Rhodes Station Commercial buildings The mixed use/ residential towers of Rhodes West and the commercial buildings of the adjoining Rhodes Corporate Park contribute to the existing character as much as the on-site building types	Warehouses Large floor plate commercial buildings Residential	Cottages and bungalows Heritage listed 'old school' Civic/ Community Heritage housing	Mix of cottages, commercial buildings and warehouses.	Bungalows Heritage housing Strata development north of McIlwaine Park
Building Frontages	75m fronting the Station Elsewhere, typically 10 -15m	15-60m but perceived as a long street walls.	Typically 10 -15m	Varies	Typically 8 -15m
Private Spaces	Servicing and private spaces largely hidden within the blocks if present.	Private areas associated with the light industrial uses are visible from the Concord Road pedestrian underpass but not publicly accessible.	Generous, landscaped front and rear residential gardens.	Limited personal recreational use of front gardens and private rear gardens due to unattractive nature of Concord Road.	Generous, landscaped residential gardens fronting Llewellyn Street. Privatised waterfront associated with the residential lot.
Parking Layout	Restricted diagonal and parallel parking along Blaxland Road used by commuters. Dedicated surface parking for McIlwaine Park.	Unrestricted on street parallel parking along Leeds Street. On-site at grade visitor car parking visible and accessible from the street.	Restricted on street parallel parking along Cavell Avenue and Blaxland Road. Residential parking provided on site in garages, carports and visitor spaces on driveways.	At grade, visitor car parking accessible from the street for the light industrial area Residential parking provided on site in garages, carports and visitor spaces on driveways.	Unrestricted on street parallel parking along Llewellyn Street, often used by commuters. Residential parking provided on site in garages, carports and visitor spaces on driveways.
Safety and Security	Concord Road is a busy, unsafe and unattractive environment for pedestrians/ cyclists to move along and to cross.	The lack of 'after hours' activity in this Character Area combined with long stretches of blank walls and a lack of surveillance creates an environment that is likely to be perceived as unsafe at night.	The fine grain nature of this residential character area provides frequent address and entries to streets. Activation and surveillance could be improved with more 'eyes on the street' facilitated by building pushed closer to the street.	Concord Road is a busy, unsafe and unattractive environment for pedestrians/ cyclists to move along and to cross.	A lack of east/ west mid block connections is not optimum for pedestrian safety.

RHODES EAST GATEWAY



LEEDS STREET FORESHORE PRECINCT



THE HIGH POINT



CONCORD ROAD CORRIDOR



EASTERN FORESHORE



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APPENDIX D

TFNSW MOVEMENT & PLACES FRAMEWORK

MOVEMENT & PLACES FRAMEWORK

In order to achieve good transport and land use outcomes, Transport for NSW has developed the Movement and Place strategic framework.

The framework defines the future function of the street networks on the basis of land use and transport objectives and desired outcomes for each precinct.

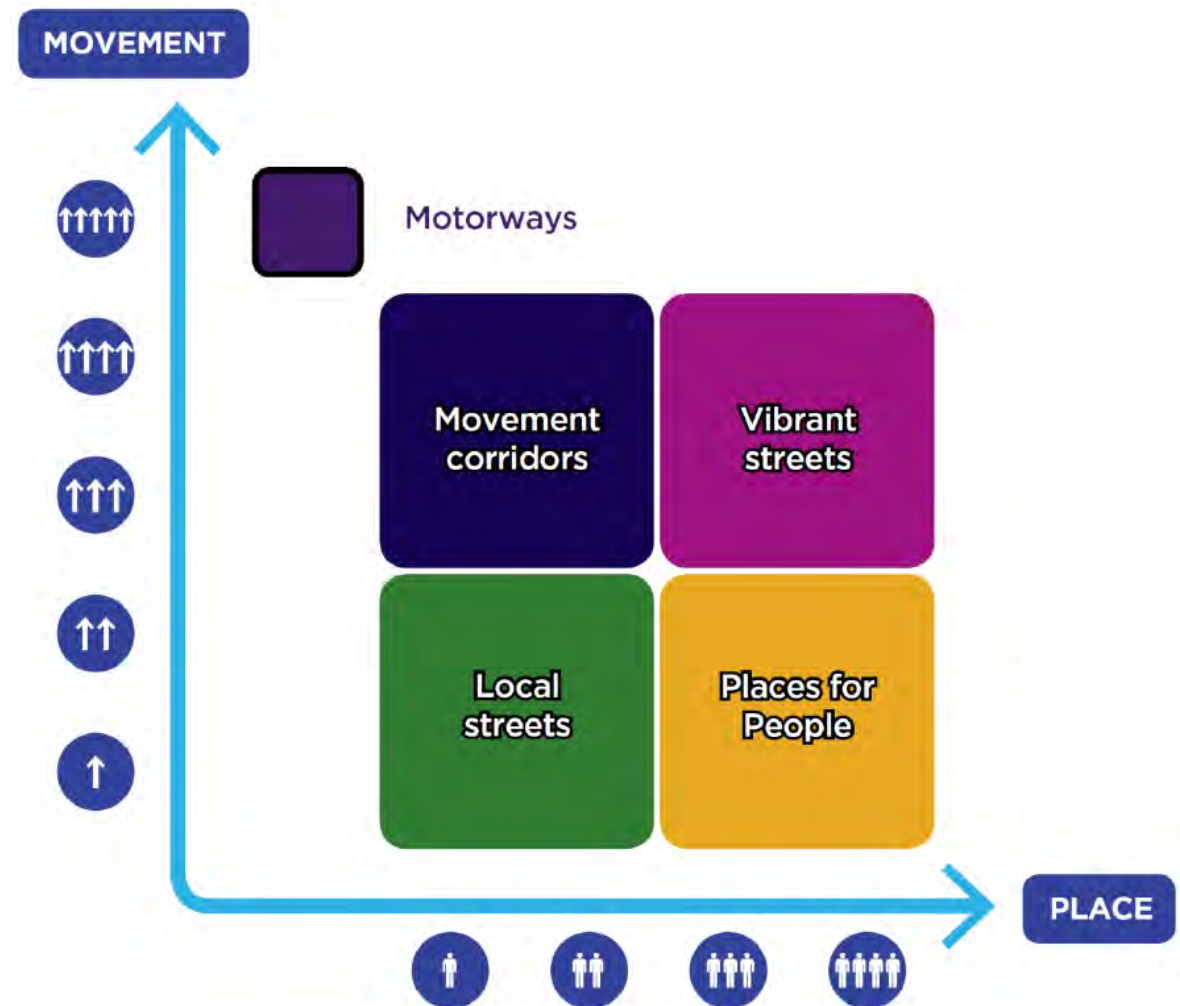
The roads provide two functions:

Movement: the ability to travel between places

Place: the ability to access origins and destinations

The street network consists of the following mixture of different road types serving different functions within the transport network:

- **Motorways:** Move people and goods rapidly over long distances with motorways playing a strategically significant function within the road network.
- **Movement corridors:** Main roads provide safe, reliable and efficient movement between regions and strategic centres.
- **Vibrant Streets:** High demand for movement as well as destinations and activity centres within the same road space.
- **Places for People:** High demand for activities on or adjacent to the street and lower levels of vehicle movement create places people enjoy, attract visitors and are places communities value.
- **Local Streets:** The streets that facilitate local access to communities.



Movement and Place Framework (Source: Transport for NSW, 2015)

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APPENDIX E

SOLAR ANALYSIS

SOLAR ANALYSIS

The solar studies provide a shadow analysis for the ultimate proposed development in Rhodes East. Both Winter Solstice and Equinox are modeled. The solar impact of development over public realm, communal courtyards and adjoining properties can be visually assessed from the diagrams provided.

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BONUS CASE: EQUINOX	16

PRINCIPLES

The structuring and built form design principles for Rhodes East were established at the early stages of the project with a key driver being the delivery of public benefit and amenity. The following principles have been applied and directly relate to solar access and amenity at Rhode East. The realisation of these principles is described in the Key Findings opposite.

- Strategically locate public open space with a northerly or easterly aspect wherever possible.
- Optimise north-south streets as priority streets for walking, cycling and activation.
- Use a combination of controls including Maximum Lot and Frontage, Height, Floor Space Ratio (FSR) and Terrace Frontage requirements to achieve the intended built form and public domain character, limiting bulk and mass.
- Embed the High-Low Model (refer to the Urban Design Report) into the base case and bonus development scenarios to promote height in the locations with the least solar impact to streets and neighbouring developments, such as the southwest corner of blocks.
- Establish a base case development scenario that balances commercial feasibility and priority public realm whilst remaining compliant with the Apartment Design Guide (ADG) requirements.
- Identify specific locations where height and floorspace bonuses are permitted in return for public benefit delivery to ensure that development is ADG compliant and minimises impact on the public domain.
- Supplement at-grade setbacks with upper level setbacks to increase solar access to the public domain.

KEY FINDINGS

The following pages illustrate the solar analysis studies for the potential development at Rhodes East. The key findings of such analysis are presented below.

- All indicative development massing within this document demonstrates the ability to achieve ADG compliance whilst maximising the FSR controls.
- Solar access is achievable for North-South oriented streets (Blaxland and Cavell) between 10am and 2pm, mid winter, for base case scenario, and between 11am and 1pm, for bonus scenario.
- Mid winter solar access is possible in east-west oriented streets (Denham, Averill and Leeds) in part due to the fine grain built form, building height and building separation.
- Solar access to communal open spaces within the perimeter blocks is largely achievable between 10am and 2pm (base case and bonus) and always achieves ADG compliance.
- Development sites within the High Point character area, eligible for height and floorspace bonuses, are located on the western end of new east-west oriented streets, consistent with the High-Low Model and minimising overshadowing of development to the south.

BASE CASE

WINTER SOLSTICE
(21 JUNE)



BASE CASE

EQUINOX

(21 MARCH OR SEPTEMBER)



BONUS CASE

WINTER SOLSTICE
(21 JUNE)



BONUS CASE

EQUINOX

(21 MARCH OR SEPTEMBER)



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