E17/1221/AS-10-002/PR-0121



Rhodes East Priority Precinct o-Investigation Area

Planning Report

SEPTEMBER 2017

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Glossary

ACT	Environmental Planning and Assessment Act		
CBD	Central Business District		
Council	City of Canada Bay Council		
DCP	Development Control Plan		
Department	Department of Planning and Environment		
FSR	Floor space ratio		
GFA	Gross floor area		
ha	Hectare		
LEP	Local Environmental Plan		
lga	Local government area		
Minister	Minister for Planning		
RMS	Roads and Maritime Services		
SEPP	State Environmental Planning Policy		
SREP	Sydney Regional Environmental Plan		
TfNSW	Transport for New South Wales		

Cover image: RobertsDay

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EXECUTIVE SUMMARY

Rhodes East will be a model for sustainable, low-rise high density development, which builds upon the existing character and heritage of the area. It will provide more high quality housing choice, close to public transport and catering to a variety of household types. It will be supported by connections to the water, and local streets will be redesigned to support walking, cycling and use of public transport. Improved amenity will encourage residents and visitors to spend time and continue to take pride in the area.

The Department of Planning and Environment, in collaboration with the City of Canada Bay Council, has prepared a draft Precinct Plan for the Rhodes East Priority Precinct Investigation Area.

The draft Precinct Plan identifies the area between the railway line, Concord Road and the Parramatta River as suitable for accommodating housing growth. This report outlines the rezoning proposal for this area.

Draft Precinct Plan

The key objectives of the draft Precinct Plan that will deliver the Council endorsed vision for Rhodes East are:



Planning – ensure Rhodes East can meet the challenges of the future by building sustainability and longevity into planning, design and commercial capability from the start.

The investigation of the Rhodes East area has included numerous technical studies and assessments, including extensive transport modelling and feasibility analysis. Whilst the whole of Rhodes East was investigated, the results of the transport and feasibility work have determined that it is not currently viable to redevelop the whole of the Investigation Area. The draft Precinct Plan, therefore, proposes only to rezone the land between the railway line and Concord Road.



Active transport – design integrated transport services and experiences that prioritise, walking, cycling and the use of public transport.

The draft Precinct Plan has been designed to improve pedestrian connectivity across the Rhodes peninsula via a new pedestrian bridge across the railway, direct overpass into the station and a landbridge over Concord Road, linking to McIlwaine Park. In addition, amenity will be improved along Concord Road through additional landscaping and a proposed pedestrian bridge at the Averill Street / Concord Road intersection. The location of a range of retail, services and facilities connected to the Rhodes East community via safe, comfortable and easy walking and cycling connections, combined with reduced maximum car parking standards encourages walking, cycling and public transport use.



Affordable housing – provide affordable housing options for key workers in the area, for example people working in occupations such as teaching, child care, policing or nursing.

Of the new homes proposed within the draft Precinct Plan, 5% (between 150-200) will be affordable homes for key workers. They will be funded through a cash contribution or delivered via works in kind. Eligibility of tenants for the affordable housing will be determined in line with City of Canada Bay's Affordable Housing Policy which includes an assessment of income and employer type.



Density with a human scale – deliver a range of built forms, from terraces to apartment buildings, that promote activity on lower levels of buildings. The range of built forms will result in more open space, more sunlight to buildings and a closer connection to the ground.

The proposed planning controls, with a range of building heights and FSR controls, ensure that a range of building typologies and architectural styles are encouraged whilst delivering a prominently mid-rise, high density development. Increased density and height is proposed closest to the station and focused around proposed mixed uses along Leeds Street.



Waterfront access - provide enhanced public access to the Parramatta River foreshore, including the provision of housing and public open space with views to the water.

A large public plaza connected to a waterside promenade extends the existing public access to the water on the peninsula, opening up land that is currently privately owned. This area, located alongside a mix of uses, also provides safe and convenient access to the proposed Ferry Wharf. A river activation project, including a potential river pool, is envisaged off McIlwaine Park. The location, height and massing of proposed building have been designed to promote view sharing and encourage opportunities for new views towards the water.



Public spaces – provide a range of high quality, pedestrian prioritised public spaces that are safe for gathering and socialising.

A range of open spaces are proposed within the draft Precinct Plan, each providing differing functional opportunities, from small plazas adjoining 'mixed use corners' to larger formal plaza areas surrounded by retail, commercial and community uses and facilities. These spaces are connected to each other and the existing public spaces in the surrounding area by footpaths and cycleways, including bridges and overpasses over existing barriers to pedestrians. To implement the draft Precinct Plan an amendment to the City of Canada Bay Local Environmental Plan (LEP) 2013 is required. A description of changes to the LEP are provided in this report and an Explanation of Intended Effect appended.

Infrastructure and Funding

The draft Precinct Plan identifies the infrastructure required to support the proposed growth of Rhodes East over the next 20 years. This includes upgrades to district and local infrastructure to be progressively implemented as development occurs. The timing and prioritisation of infrastructure delivery is dependent on where development occurs. However it is anticipated that the areas closest to Rhodes Station and around Leeds Street are likely to develop first. Monitoring of growth will be undertaken to inform infrastructure delivery.

Growth in this part of the Canada Bay Local Government Area will require upgrades to key State infrastructure networks over the next 20 years. This includes planning for increased demand on the T1 Northern Line and upgrades to Concord Road, a key arterial route for road freight.

The proposed level of development in the Rhodes East draft Precinct Plan is predicated upon known traffic and transport interventions such as road intersection upgrades, new local streets, rail timetabling improvements and increased dependence on public transport. However, if Government decides in the future to invest in additional substantial transport infrastructure, if located close to Rhodes, such as the Sydney West Metro, the Precinct Plan may be subject to re-evaluation for increased density. Upgrades to district infrastructure may include a new and/or upgraded school provisions, upgrades to Concord Road within the Precinct, regional cycleway improvements, active transport connections to McIlwaine Park and new open space areas. Funding for these items is anticipated through the application of a Special Infrastructure Contribution (SIC). Affordable housing will also be provided for key workers in line with City of Canada Bay's Affordable Housing Policy and emerging Affordable Housing Program.

A number of upgrades to local infrastructure have also been identified. These include local road upgrades, provision of and upgrades to existing social infrastructure and open space, and improvements for pedestrians and cyclists. City of Canada Bay Council will undertake a review of relevant local infrastructure contribution plans developed under Section 94 of the Environmental and Planning Assessment Act 1979 (the Act) to accommodate these required upgrades. The draft Section 94 is also exhibited alongside the draft Precinct Plan.

In addition to local development contributions, the NSW Government has allocated approximately \$5 million to fund local infrastructure upgrades at Rhodes East. The funding will enable Council to provide early delivery of local infrastructure that will directly benefit the community.



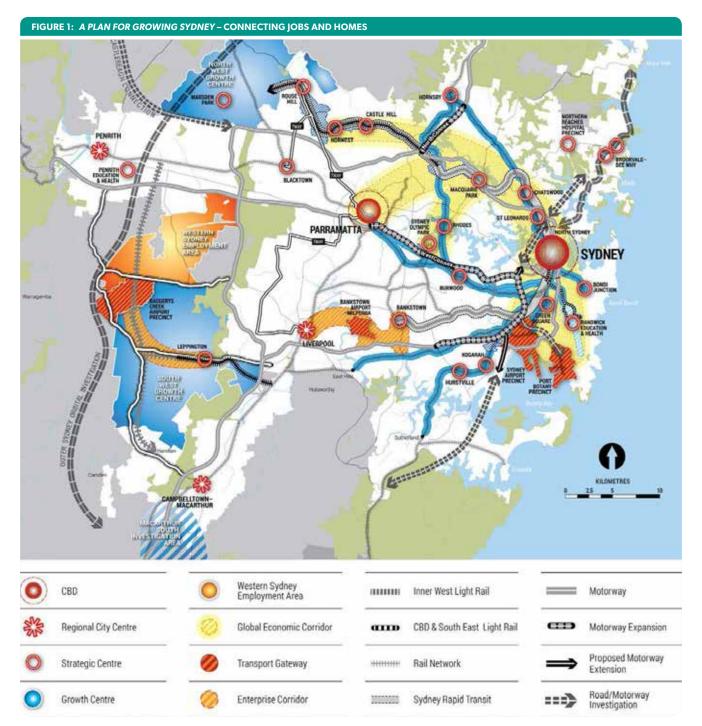
Source: RobertsDay

The Department of Planning and Environment has been working closely with City of Canada Bay Council to develop a draft Precinct Plan for the Rhodes East Priority Precinct Investigation Area.

This introduction provides an overview the Investigation Area plus the studies and consultation undertaken to inform the preparation of the draft Precinct Plan.

1.1 Demand for growth

A Plan for Growing Sydney, released in December 2014, details the NSW Government's vision for Sydney's future, which is a **'strong global city, a great place to live'**. One of the biggest challenges to achieving this aim is how best to provide the 726,000 new homes and the new jobs needed for the forecast 2.7 million new residents by 2036. A key action of the Plan is to accelerate urban renewal across Sydney to provide homes closer to jobs and key transport nodes.



AERIAL PHOTOGRAPH



Source: Paul McMillan

Rhodes is identified as a Strategic Centre within the Global Economic Corridor in *A Plan for Growing Sydney* (see Figure 1) with the following strategic planning priorities for the NSW Government:

- Work with Council to protect capacity for long term employment growth in Rhodes;
- Work with Council to provide capacity for additional mixed use development in Rhodes including offices, retail, services and housing;
- Support health related land uses and infrastructure around Concord Hospital;
- Work with Council to improve walking and cycling connections between Rhodes train station and Concord Hospital; and
- Facilitate construction of a public transport, walking and cycling bridge over Homebush Bay to connect Rhodes to Wentworth Point (the Bennelong Bridge has now been constructed and was opened in May 2016).

District Plans

The Greater Sydney Commission has prepared draft District Plans to set the direction for the longer term regional planning of Greater Sydney. The District Plans will determine the **best locations for new homes with easy access to transport, jobs and open space**.

The identification of Rhodes as a Strategic Centre remains within the draft Central District Plan.

1.2 The Investigation Area

Rhodes East is part of the Rhodes Peninsula, located between Brays Bay and Homebush Bay on the southern bank of the Parramatta River, approximately 16km to the west of Sydney CBD (see Figure 2). It is a 36ha area located to the east of the Northern Line railway and bounded by the Parramatta River to the north and Brays Bay to the east. The Investigation Area is currently predominantly residential with general industrial land uses located along the northern edge. It also includes the large public recreation area of McIlwaine Park to the south and other community uses, such as Rhodes Community Centre on Blaxland Road, Concord Community Hostel and Coptic Church on Cavell Avenue, a Fire Station (voluntary) and the Sea Scouts / Dragon Boats hut.

The existing Rhodes Corporate Park is located immediately to the south of the Investigation Area with the Rhodes Shopping Centre beyond, on the western side of the railway line.

Rhodes Station is located on the western boundary of the Investigation Area, close to southern end of Blaxland Road.

1.3 Priority Precincts

Priority Precincts are identified as areas with good access to existing or planned transport infrastructure and that have the potential to provide for significant growth in housing and jobs. The purpose of the Priority Precincts Program is to ensure these important areas are **strategically planned and infrastructure is delivered in a coordinated manner**. They are planned to accommodate new homes and jobs whilst providing for the needs of the community. It is a NSW Government led program based on collaboration with local councils and comprehensive community consultation.

Part of the Rhodes East area, Rhodes Central, was nominated as a potential Priority Precinct by the City of Canada Bay Council in November 2014. The Department later expanded the study area to include the land to the east of Concord Road through to the foreshore to ensure a comprehensive investigation of the area was undertaken.



Source: RobertsDay

1.4 Purpose of this report

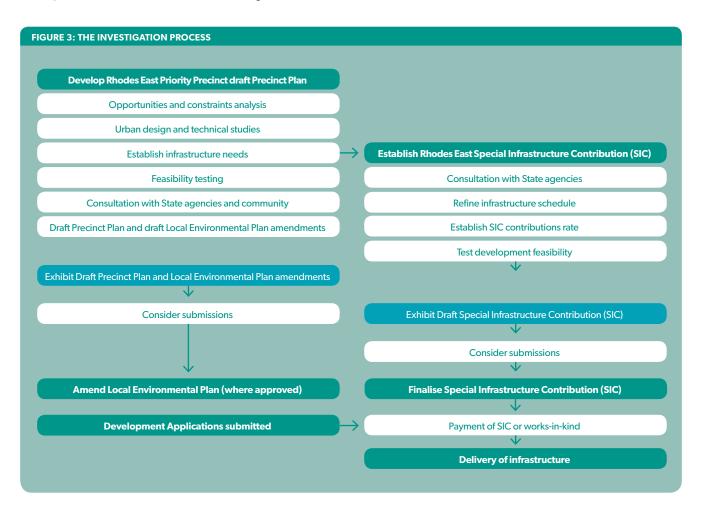
The purpose of this report is to outline and explain how the draft Precinct Plan for Rhodes East has been prepared, the key considerations taken into account and the community consultation that has informed the proposal. It also sets out the draft rezoning framework that will guide the future redevelopment of the precinct and the mechanisms that will deliver new homes alongside the necessary infrastructure and facilities to support the growth.

Since the endorsement of Rhodes East as a Priority Precinct, the Department has undertaken detailed investigations into

the opportunities and constraints of the precinct. Various community consultation exercises have also been undertaken and, combined with the detailed technical investigations, have been used to inform the draft Precinct Plan.

The investigation process undertaken is summarised below in Figure 3.

The presentation of the draft Precinct Plan provides an additional opportunity for the local community to have their say in the planning for Rhodes East, prior to the area being rezoned.





This section of the report gives an overview of the character of the Rhodes East Investigation Area, its relationship to surrounding growth areas and provides a brief planning context.

2.1 **Existing development and character**

The Rhodes peninsula comprises the two localities of Rhodes West and Rhodes East, divided by the north to south railway line.

Over the past decade Rhodes West has transformed from a heavy industrial area into a high density residential, retail and business park precinct around the recently upgraded train station.

In contrast, Rhodes East consists of predominantly single-storey detached houses with limited, small scale commerical uses located opposite the train station. An industrial area centred on Leeds Street is located at the northern end of the peninsula.

Across Rhodes East, five character areas have been identified based on their function, use, street pattern and built form attributes.

FIGURE 4: EXISTING CHARACTER AREAS

These are shown on Figure 4 and summarised as follows:

Rhodes East Gateway

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;

Leeds Street Foreshore Precinct

A predominately light industrial area on the waterfront with large, low scale buildings and which is heavily transport dominated (vehicles, trains, river traffic);

The High Point

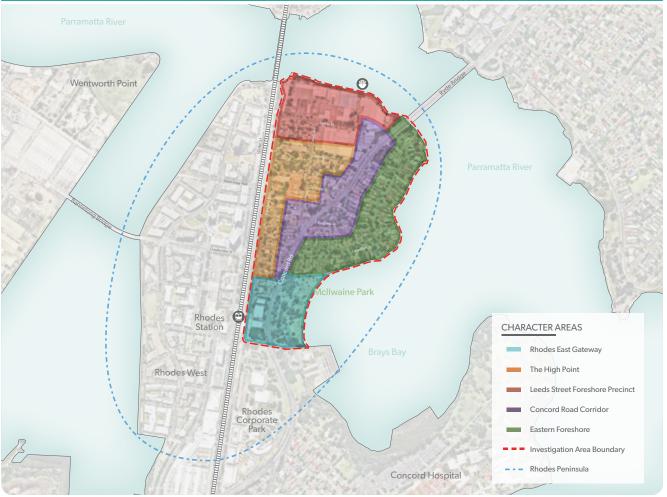
Centrally located area on the Rhodes Peninsula with a mix of residential and community uses situated on the most elevated part of the Investigation Area;

Concord Road Corridor

An area heavily dominated by the wide Concord Road corridor containing residential, community and light industrial uses; and

Eastern Foreshore

A green, leafy area characterised by low scale residential development with connections to the waterfront.



2.2 The existing community

In 2011 Rhodes East was home to 733 residents, representing around 10% of the Peninsula's total population.

The demographic profile (Appendix C) prepared as part of the Social Infrastructure and Open Space Assessment (Appendix D) indicated that the existing Rhodes East population is older, on average, than the Peninsula as a whole. The local population has a relatively large proportion of residents aged over 40 years, in part attributable to an aged care facility (Concord Community Hostel on Cavell Avenue, Rhodes) with 62 low care beds.

There are smaller proportions of young children, teenagers and mid-age adults than in the Canada Bay Local Government Area (LGA), indicating fewer families living in the area.

In terms of home ownership, a relatively high proportion of people live in dwellings owned outright (70%) in Rhodes East and relatively fewer rented than in the LGA or Sydney as a whole.

Most of the adult population have completed at least Year 10 a school (86%) which is only marginally lower that the LGA as a whole. Rates of post school qualifications (57.5%) are slightly above those for Sydney (54.9%) but slightly lower than the Canada Bay average (61.6%).

In comparison with Canada Bay LGA, Rhodes East has a similar proportion of people born in Australia (62%) and overseas. The main countries of origin of those born overseas are China, South Korea and England.

2.3 Surrounding areas of growth

The Rhodes East Precinct covers approximately 36ha and generally includes the area within 800 metres of Rhodes Station to the east of the railway line.

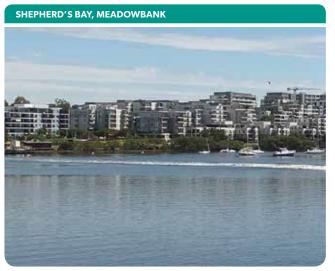
The precinct is located in close proximity to Rhodes West, a former industrial area which has been redeveloped over the past twenty years in to a retail, commercial and high density residential development alongside the Rhodes Train Station and rail line.

Beyond the Rhodes Peninsula, other areas of recent and anticipated growth include the following;

- Shepherds Bay, Meadowbank located on the northern side of the Parramatta River, this area is currently being developed for medium and high rise residential apartments as well as mixed uses;
- Wentworth Point located to the west, across Homebush Bay. This area is currently being developed for medium and high rise residential apartments plus a new primary school and park; and
- Sydney Olympic Park and Carter Street Precinct this is a key strategic mixed use precinct. The current (2016) review of the Sydney Olympic Park Master Plan proposes an increase in residential, retail and community facilities to revitalise the town centre. The Carter Street Precinct, located to the south-west of Sydney Olympic Park, is currently undergoing a master planning exercise to better integrate with the Sydney Olympic Master Plan and the proposed Hill Road off-ramp.

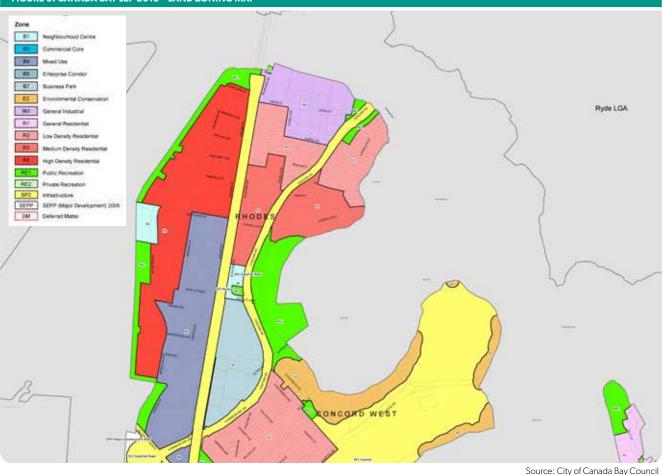


Source: Department of Planning and Environment



Source: Department of Planning and Environment

FIGURE 5: CANADA BAY LEP 2013 - LAND ZONING MAP



2.4 Current planning controls

The City of Canada Bay Local Environmental Plan (LEP) 2013 applies to the precinct. The precinct is currently zoned for General Industrial, Low and Medium Density Residential, Neighbourhood Centre and Public Recreation as shown in Figure 5.

The current zoning allows for:

- General industrial uses in the northern part of the precinct;
- Low and medium density residential development;
- A small area of neighbourhood centre on the eastern side of Rhodes Station; and
- Areas of public recreation including King George V Park, Uhrs Point Reserve, Churchill Tucker Reserve and Mcllwaine Park.

Building heights are limited to 8.5m (approximately 2 storeys) within the residential and neighbourhood centre areas and 12.0m (approximately 3 storeys) for general industrial uses.

A minimum lot size of 450m² applies to the residential and neighbourhood centre areas. Floor space ratios of 0.5:1 (residential), 1.0:1 (general industrial) and 1.5:1 (neighbourhood centre) apply to the precinct.

A summary of the relevant plans and strategies that cover Rhodes East are included at Appendix E.



This section of the report provides an analysis of the key considerations which have been used to inform the development of the draft Precinct Plan. These include the identification and assessment of the existing environmental and social features of Rhodes East.

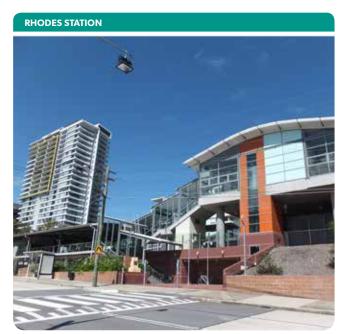
3.1 **Providing homes**

A Plan for Growing Sydney establishes the NSW Government's vision for Sydney's future, which is a '*strong global city, a great place to live*'. One of the biggest challenges to achieving this aim is how best to provide the 726,000 new homes and new jobs needed for the forecast 2.7 million new residents by 2036.

One key action of the Plan is to accelerate urban renewal in locations close to jobs and key transport nodes. Rhodes has been identified as a Strategic Centre given its proximity to employment at Rhodes Corporate Park and Rhodes Shopping Centre and, as it is served by a train station, passengers are able to travel to Sydney CBD in under 30 minutes, in line with the objective of the 30-minute city.

Accommodating residential growth is therefore a key issue for the Investigation Area. The preferred locations for the greatest increase in residential density identified in previous community consultation are adjacent to the station.

To deliver additional growth at Rhodes East, detailed technical investigations have been undertaken to determine appropriate locations and the extent of growth which can be accommodated in the Investigation Area. Amendments to the Local Environmental Plan (LEP) will be necessary whilst the preparation of a site specific Development Control Plan (DCP) will be required to ensure that the building typologies proposed will not only fit into the existing landscape and streetscape, but allow for residential growth.



3.2 Matching facilities with growth

If Rhodes East is to be redeveloped it is important to ensure that the needs of the existing and new residents are met in terms of their access to community facilities and open space provision.

A Social Infrastructure and Open Space Assessment (Appendix E) considered the likely needs and demands for community facilities based on the potential increased population forecasts at Rhodes East. Taking into account the existing community infrastructure across the Rhodes Peninsula and the wider area, potential gaps in the current provision were identified, namely;

- An expanded multi-purpose community centre.
- A primary school.
- Convenience retail and speciality retail venues.
- Three or four privately operated children centres, depending on size.
- Local medical centres.
- Open space areas at a rate of 5% land area.

In addition to specific community facilities, the demands placed on the existing transport network by the increased population and uses will need to be carefully analysed and assessed, with appropriate measures to minimise the impact of the development identified and implemented.

Education

No public schools are located within the Rhodes Peninsula. Rhodes East currently falls within the catchment for Concord West Public School (primary) and Concord High School (secondary).

Advice from the Department of Education has indicated that new primary school provision and/or existing school upgrades may be required as part of the redevelopment of Rhodes East, although the final education solution will be dependent on the proposed growth. In terms of secondary education, local schools are currently able to accommodate high school aged children living in Rhodes East. Future capacity is being investigated by the Department of Education.

Source: Department of Planning and Environment

3.3 Traffic and transport

Movement into and around Rhodes East is currently constrained by the busy arterial Concord Road. Connections to Rhodes West are also restricted by the railway line with one vehicular underpass in the north at Leeds Street and one pedestrian bridge crossing within the station concourse.

Previous consultation found that existing residents considered this a significant barrier to accessing the wider area and the existing facilities beyond the railway line. Access to the natural resource of the Parramatta River foreshore was also viewed as an important part of the future vision for the precinct, with current access limited.

Capacity of the road network

The precinct is well connected by an established road network providing a key north-south regional corridor plus local north-south and east-west routes.

Concord Road is a primary north-south road and freight route that forms part of the A3 corridor linking the Northern Beaches, Pymble, Macquarie Park, Ryde, Sydney Olympic Park and Hurstville as well as the M2, M4 and M5 motorways.

The remainder of the roads in the precinct are local roads. The underpass at Leeds Street is the only road access to the west of the rail line within the precinct.

An assessment of the capacity of the existing road network is detailed in the Traffic and Transport Report (Appendix F). The key issues include:

- Concord Road is subject to high traffic volumes for private vehicles, freight and public transport, and is currently operating close to capacity.
- Concord Road northbound experiences congestion as a result of the steep uphill gradient and significant traffic volumes entering from Victoria Road to the north.
- Concord Road intersection with Averill Street is constrained due to the limited length of the right hand turn waiting lanes.
- Concord Road intersection with Mary Street has a long pedestrian crossing phase and inefficient signal phasing.
- Congestion and constrained intersections beyond the Investigation Area to the south at Homebush Bay Drive.

Overall the traffic and transport investigation has found there are limited opportunities to provide additional capacity on the existing road network within the Investigation Area, particularly on Concord Road, without significant or substantial improvements and interventions that do not address the vision and objectives for Rhodes East.

Public transport

The precinct has good access to public transport infrastructure, including trains running through Rhodes Station and buses along Concord Road.

Capacity of the rail network

Rhodes Station is located on the T1 Northern Line. The services operating through Rhodes Station provide public transport access to the CBD (via Central, Town Hall and Wynyard Stations), Epping to the north, plus other centres such as Strathfield, Eastwood and Burwood. The travel time by train from Rhodes to Central is 21 minutes for the express service and 25 minutes for the all stops service.

Over the past ten years, rail patronage at Rhodes Station has experienced significant growth as the Peninsula has been redeveloped. This has meant that both AM and PM peak rail services achieved their loading capacity in 2015.

The planned 2018 timetable, resulting from the new Sydney Metro Northwest line, could see two additional services stopping at Rhodes during the AM peak, although more patronage from north of Rhodes may result due to other timetable changes.

The T1 Northern Line also provides freight services outside of peak hours and is part of Australia's busiest freight rail line, the east coast rail network (serving Melbourne, Sydney and Brisbane).

The NSW Government recently announced a new underground metro railway line linking the Parramatta and Sydney CBDs, and communities along the way, including Sydney Olympic Park. This will result in faster and more frequent services between the two CBDs and to / from outer western Sydney areas. It is expected to be operational in the second half of the 2020s. The proximity of Rhodes to the Olympic Park may assist in increasing rail capacity along the T1 Northern Line in the future.

RHODES STATION



Source: Department of Planning and Environment

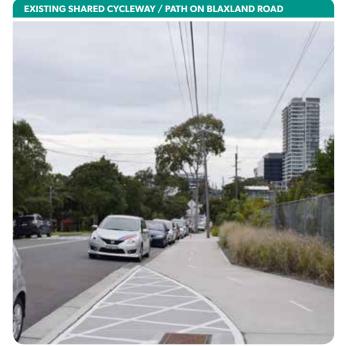
Capacity of the bus network

A number of bus services run through the precinct as detailed in Table 1.

TABLE 1: BUSES SERVICING RHODES			
Bus Service	Route		
M41 Metrobus	Macquarie Park to Hurstville via Macquarie Centre, Ryde, Rhodes (Concord Road), Concord, Burwood, Campsie and Bexley		
458	Ryde to Burwood via Rhodes, Concord Hospital, Concord West, North Strathfield and Strathfield Station		
459	Macquarie University to Strathfield via Macquarie Centre, Ryde, Concord West and North Strathfield		
526	Sydney Olympic Park Wharf to Burwood via Wentworth Point, Rhodes and Strathfield		
533	Sydney Olympic Park to Chatswood via Rhodes, Ryde, North Ryde and Mowbray Road		

Sydney's Bus Future is the NSW strategic plan for bus services which was released in December 2013. It identified the Macquarie Park to Hurstville route, now the M41 Metrobus, as a rapid bus route; defined as one of the most important bus routes within the Sydney metropolitan region and therefore a strong candidate for investment.

As referenced in the Traffic and Transport Report (Appendix I) opportunities exist to provide additional high quality bus services across Bennelong Bridge to Wentworth Point and Sydney Olympic Park. Stronger connections to Ryde and Macquarie Park could also be realised through improving priority and the frequency of services from Rhodes to the north.



Source: Department of Planning and Environment

Ferry wharf opportunities

The Rhodes Peninsula does not currently benefit from a ferry wharf despite its location along the Parramatta River. The nearest ferry wharves are located at Meadowbank to the north and Sydney Olympic Park to the west.

As part of the Transport Access Program, the NSW Government has committed to deliver a new ferry wharf and potential interchange at Rhodes and is currently reviewing the proposed wharf location.

Initial consultation was undertaken into the potential location of a new wharf on the western side of the John Whitton Rail Bridge (on the northern edge of Rhodes West) in 2015. During the consultation concerns were raised regarding this location including reduced visibility with ferries under the rail bridge between Meadowbank and Rhodes, and the impact of increased congestion, wash and turbulence on other river users.

The appropriate location for the new ferry wharf should be given consideration through the Rhodes East Priority Precinct Investigation process.

Pedestrian and cycle network

The rail line along the western boundary of the precinct and Concord Road bisecting the peninsula form barriers to pedestrian and cycle movement from west to east.

The area has an established pedestrian street network but has potential to provide improvements to walking and cycling.

Existing shared pedestrian / cycle paths within the precinct and the wider peninsula comprise the following routes:

- along the eastern foreshore of Homebush Bay, connecting across Parramatta River via John Whitton Bridge and the south to Bicentennial Park;
- between John Whitton Bridge and Rhodes Station; and
- along the eastern side of Ryde Bridge access to this path for cyclists is via Leeds Street, Uhrs Point Reserve and a shared path under the bridge deck.

Opportunities exist to extend walking and cycling connections along the foreshore from the west at the John Whitton railway bridge into Rhodes East.

Access and movement summary

A summary of the access and movement constraints and opportunities is set out in Table 2 and shown in Figure 6.

TABLE 2: ACCESS AND MOVEMENT CONSTRAINTS AND OPPORTUNITIES			
Constraints	Opportunities		
Existing road network is operating close to capacity	Maximise the existing public transport options currently operating		
Existing public transport services are currently under pressure	Improve east to west connectivity for pedestrians and cyclists – across the railway line and Concord Road		
Existing road pattern does not promote walking and cycling	Promote public transport use by developing a transport strategy which includes improvements and service upgrades		
Only one vehicular crossing point under the railway line between	Integrate the proposed ferry wharf into the rezoning		
Rhodes East and Rhodes West	Promote walking, cycling and public transport use through increasing route options and increasing walking and cycling access to the river foreshore		
	Provide a variety of car parking rates across Rhodes East to reduce the reliance on cars and promote walking and cycling		



Source: RobertsDay

3.4 Delivering affordable housing

Affordable Housing is "*Housing that leaves sufficient family* household income to meet other household needs.

This has become understood to mean housing that costs no more than 30% of a family's gross income in rent or 35% in mortgage repayments. This is especially the case for those in the lowest 40% of Australian's ranked by income" (Affordable Housing Policy, City of Canada Bay, August 2007 (revised April 2016)).

The NSW Government is committed to delivering more opportunities for affordable housing across Sydney. A Plan for Growing Sydney outlines that the NSW Government will provide more affordable housing in Government-led urban renewal projects to meet the shortfall in affordable housing (Action 2.3.3). In response to this action, the Government is currently preparing a policy on affordable housing provision and, once finalised, will be applied to development at Rhodes East.

City of Canada Bay Council is also committed to delivering more opportunities for affordable housing within the LGA. Therefore, a key consideration of the redevelopment of Rhodes East is to deliver affordable housing as an integral part of the draft Precinct Plan.

3.5 Responding to existing character

An analysis of the current urban fabric of Rhodes East in terms of the land use, street pattern, public domain and built form has identified five distinct character areas, as presented in Section 2.1.

The existing urban structure of the Investigation Area provides the opportunity for any new development to build upon an established character. Previous consultation has revealed the importance the local community places on the existing character of Rhodes East and that any development should respond to the key characteristics evident across the precinct.

By responding and respecting the identified character areas and their respective features, opportunities exist for any redevelopment at Rhodes East to sensitively integrate into the area over time.

The local community have also identified the area adjacent to the station as the location most suitable for greater density with heights stepping down towards the water in the east / around Llewellyn Street.

RHODES EAST CHARACTER AREAS





breshore Precinct







Source: Department of Planning and Environment & RobertsDay

3.6 Sensitively integrating existing heritage

The City of Canada Bay Local Environmental Plan (LEP) 2013 identifies 18 local heritage items within the Investigation Area as shown in Figure 7.

The heritage items comprise;

- Nine early to mid-20th century houses, scattered in a relatively random fashion across the Investigation Area;
- Two community and one light industrial building;
- Two small local parks;
- Three tree lined streets; and
- One large waterfront reserve (McIlwaine Park).

There are no heritage items of State significance located within the Investigation Area although there are two located close to the boundary relating to the railway. It is highly unlikely that there will be any negative impacts on the two State heritage items located in the vicinity of the Investigation Area. A Heritage Assessment has been undertaken (Appendix G) to inform the draft Precinct Plan and outline suitable approaches to protect the heritage items and minimise potential adverse heritage impacts arising from any development at Rhodes East. These approaches include;

- All heritage items to be retained in-situ;
- Street setbacks for new development should match the prevailing front setbacks;
- Setbacks from common boundary lines proposed for lower and upper development storeys;
- Street trees to be retained, protected and enhanced;
- Heritage trees on site to be retained and incorporated into any redevelopment; and
- Indigenous planting in the parks and reserves to be retained, protected and enhanced.

The Heritage Assessment also references the large, modern Coptic Church Centre which, whilst not heritage listed, is a major community facility within the Rhodes Peninsula.



Source: City of Canada Bay Council

EXISTING COMMUNITY FACILITIES









3.7 Integrating sustainability goals

Goal four of A Plan for Growing Sydney is to ensure Sydney is A sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources. As the city grows it is critical to make the city's built environment sustainable and energy efficient while also protecting the environment through the careful planning and design of where new development occurs.

A Sustainability Assessment has been undertaken (Appendix H) to inform the draft Precinct Plan. It recommends the following key sustainability goals be considered as part of any development proposals at Rhodes East:

- Built and natural ecology implementing passive design to create healthy buildings that minimise reliance on artificial systems and creating habitats for people, plants and animals.
- Community provision of shared facilities close to living and working areas to prioritise walking and cycling over the use of private vehicles, and enable opportunities such as growing food and promoting active lifestyles on site.
- Resources a priority focus area to support the guiding principle of reducing water and energy use.
- Greenhouse gas priority focus area that combines the benefits of reduced resource demand and improved connections.
- Connections prioritising walking, cycling and use of public transport as a key principle.
- **Resilience** ensuring the development is adaptable and protected from future change including climate, economic and work practices.

The Sustainability Assessment assesses how development at Rhodes East can achieve these goals and sets out some recommendations for the precinct.

3.8 Landscape and open space Existing open space

The following areas of open space are located within the Investigation Area boundary:

Mill Park and John Whitton Bridge Reserve

- Unique open space that links the east and west side of Rhodes.
- Includes a boat ramp and a shared path along the foreshore.

Uhrs Point Reserve and King George V Park

- Uhrs Point features a foreshore park with picnic facilities and parking available.
- King George V Reserve comprises landscaped natural vegetation.

Churchill Tucker Reserve

- Located opposite Rhodes Station, on the corner of Mary Street / Blaxland Road.
- Contains formal gardens and public seating.

Cavell Avenue Landscape Area

 Landscaped areas on the corner of Cavell Avenue / Concord Road.

Source: Department of Planning and Environment & RobertsDay

Mcllwaine Park

- Very popular waterfront recreational spot with amenities such as picnic tables, BBQ's, play equipment and mini golf.
- Ceremonies and wedding photography are permitted.
- Used frequently by personal trainers.

It is important to note that whilst McIlwaine Park is included in the Investigation Area, no development is proposed to the Park.

Rhodes East has good access via rail, cycle and foot to regional open space due to its waterfront location and close proximity of Sydney Olympic Park and its wide range of metropolitan and regional sporting and recreational facilities.

Topography and flooding

A high point, with an approximate elevation of 21m Australian Height Datum (AHD), is located around the central western part of the precinct. The ground then slopes down to sea level at the Parramatta River.

As determined by a hydrological and hydraulic assessment (Appendix I), Rhodes East is subject to stormwater flooding from several overland flow paths. The area is also subject to tidal inundation from the Parramatta River. However, there are no significant areas subject to high hazard in the 100 year average recurrence interval (ARI) flood event.

Redevelopment of Rhodes East provides the opportunity to decrease the risk of flooding via upgrading stormwater drainage, provision of a flood wall, development consolidation and use of rainwater tanks and on-site detention to improve stormwater quality.

Views

The topography of the Investigation Area allows for some views across to the Parramatta River and Sydney CBD to the east. In other directions views are limited and / or restricted by the existing built form within the Investigation Area, the raised level of the railway line and the adjoining development at Rhodes West.

The main view corridors and axis include:

- View corridor from the highest point eastwards to the Parramatta River;
- Views from Rhodes Station across McIlwaine Park to Brays Bay;
- Glimpses of the Parramatta River and Sydney CBD beyond through breaks in the built from along Llewellyn Street;
- Visual connection to the west across the railway line to Hoskins Reserve; and
- Views towards the Parramatta River at the top of Blaxland Road from the boat ramp adjacent to the railway bridge.

The retention of these views within the redevelopment of Rhodes East is an important element in retaining the existing character and context of the area. Whilst opportunities exist to create new views and vistas within the development, retention of existing view axis may require the establishment of view setbacks which limit build-to lines, ground floor and upper level setbacks. In addition, opportunities existing to respond to the existing landscape and land uses through a high-low urban form that not only provides a variation in building heights and densities but also assists in ensuring existing views are respected and enhanced.

It is not always possible to retain all view lines. A variety of building heights are considered an appropriate approach to view sharing.

VIEWS OF RHODES EAST









Source: Department of Planning and Environment and RobertsDay

Landscape and open space summary

A summary of the landscape and open space constraints and opportunities is set out in Table 3 and shown in Figure 8.

TABLE 3: LANDSCAPE AND OPEN SPACE CONSTRAINTS AND OPPORTUNITIES			
Constraints	Opportunities		
Need to sensitively integrate the existing landscape features, including heritage street trees, into the new development	Build upon the established existing landscape character		
Existing views and view corridors	Utilise the topography to create and define views and view corridors		
Localised overland stormwater flooding	Improve and maximise linkages between existing and new areas of open space		
Tidal inundation from the Parramatta River	Create new open spaces in the northern part of the precinct where existing lots can be readily redeveloped		
	Integrate new, quality areas of open spaces into new development		
	Decrease the risk of flooding via stormwater management and a flood wall		



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3.9 Built form

Building heights

The existing built form across the precinct comprises predominately single storey detached houses with limited small scale commercial uses located opposite the station and an industrial area centred around Leeds Street.

During previous consultation it was clear that the local community considered the need for building heights design to step down to the water, scaled to retain key views and minimise overshadowing, and create a human scale development was important.

The community also generally favoured lower rise development and some feeback received considered taller buildings may be appropriate in certain locations if lower densities could be achieved elsewhere.

Existing social infrastructure

The following existing community facilities are located within the Rhodes East precinct:

- Rhodes Community Centre, Blaxland Road former primary school containing two large rooms and kitchen facilities. Used by a wide variety of community groups;
- Rhodes Fire Station, Concord Road volunteer (retained) facility;
- St Mary and St Merkolius Orthodox Coptic Church, Cavell Avenue – established in the LGA at Burwood in 1987, moving to Rhodes East in 1988. The current church building was opened in 1999;
- Childcare centres two privately run childhood education and care centres; and
- Concord Community Hostel, Cavell Avenue
 62 bed residential care hostel and secure dementia unit.

A new multi-purpose community facility, The Connection, has recently been opened (January 2017) in Rhodes West. This is one of the LGA's largest centres, offering several multi purpose rooms, an auditorium / hall, a learning space including suites and some staff offices, and a café / restaurant. Surrounding the site is a waterplay facility, playground and waterfront promenade.

As part of proposals for the Rhodes Station Precinct, west of the station, a new public recreation centre is planned comprising a gym, swimming pool, health and wellness facility, indoor courts, child care centre, café and retail units. Council is currently awaiting a development application for this centre and associated residential development.

Contamination

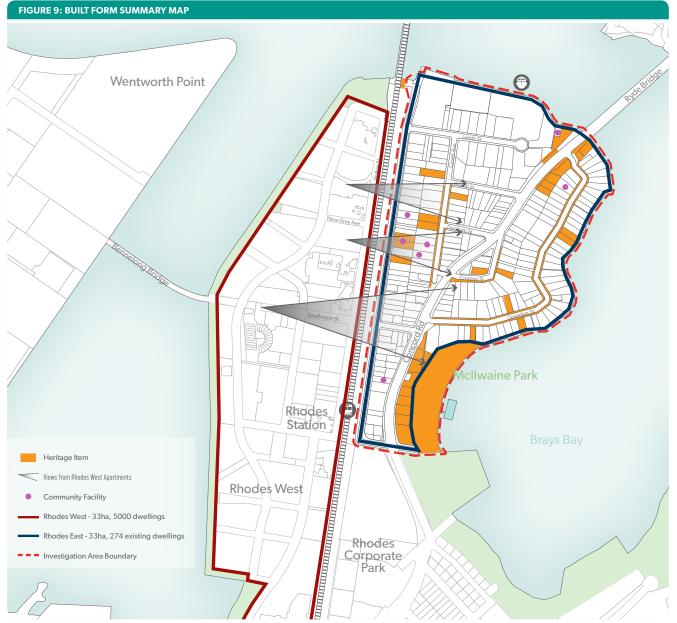
Land in the north of the precinct has a long history associated with industrial use. A Contamination and Acid Sulphate Soils (ASS) Assessment has been undertaken (Appendix J) to identify the potential for contamination issues that may have a material impact on the draft Precinct Plan. This identified six Areas of Environmental Interest (AEI) in relation to contamination in the Investigation Area. Of these six areas, two areas - industrial land which was formerly used as a sawmill and reclaimed land in the northern portion of 1-3 Leeds Street - were considered to require further investigation and assessment.

This further investigation and assessment has subsequently been undertaken and, while a number of potential contamination risks were identified, these risks can be managed through the Council's current DCP controls and with guidance in the Council's Contaminated Land Policy. The investigation findings did not indicate any issues that would have a material impact on the preparation of a draft Precinct Plan.

Built form summary

A summary of the built form constraints and opportunities is set out in Table 4 and shown in Figure 9.

TABLE 4: BUILT FORM CONSTRAINTS AND OPPORTUNITIES				
Constraints	Opportunities			
Need to sensitively integrate the heritage items into new development	Plan and deliver affordable homes as an integral part of the rezoning			
Existing community uses to be integrated	Build upon the established existing character of Rhodes East			
Lot amalgamation will be necessary to deliver a	Enhance and sustain established community uses			
cohesive plan	Plan and deliver a new school, if required, for the existing and future community			
	Maximise good solar access provided by the location of the Parramatta River			
	Develop a building height and density strategy that focusses around the station, adjacent to existing tall buildings and around key destinations			
	Provide a variation of building heights and density that responds to the existing landscape and land uses, and delivers a high – low urban form			



Source: RobertsDay



The involvement of the local community and key stakeholders has been an important part of the planning for Rhodes East. The Department has worked closely with Council and various government agencies, as well as key stakeholders, community groups and the local community.

A range of consultation activities have already been undertaken and the feedback has been useful in the development of the draft Precinct Plan.

The presentation of the draft Precinct Plan provides an additional opportunity for the local community to have their say in the planning for Rhodes East, prior to the area being rezoned.

4.1 Overview

An overview of the key consultation activities undertaken to date is outlined below.

<u> </u>		The Department launched an online survey in October 2015 to seek the community's feedback on their vision for Rhodes East.
	Online Survey and information session	A community drop in information session was held at Rhodes in December 2015, attended by 150-200 people.
		196 responses were received to the survey - a summary of the survey results is available on the Department's website and also shown in the graphic opposite.
		The Department and Council held three community workshops in March 2016 to explore community and stakeholder preferences for any new development at Rhodes East. Approximately 200 people attended.
	Community workshops	Questions discussed during the workshops were also placed on the Department's website to give community members who could not attend the workshops an opportunity to give feedback. 57 responses were received.
		A summary of the responses received from the workshops and via the website is available on the Department's website and also shown in the graphic opposite.
 www	Website	A dedicated webpage is available on the Department's website which provides an overview of the investigation and allows people to register for project updates. The webpage is updated as planning progresses.
		planning.nsw.gov.au/rhodeseast
	Working Group meetings	The Department has met regularly with Council, Transport for NSW, RMS, Department of Education and other government agencies to develop the draft Precinct Plan.
	Stakeholder briefings	The Department has held a number of stakeholder briefing sessions during the investigation phase to understand the key opportunities and constraints throughout Rhodes East. This has involved a Steering Group and local community groups.

SECTION 4: COMMUNITY AND STAKEHOLDER CONSULTATION



4.2 How consultation has informed the proposal

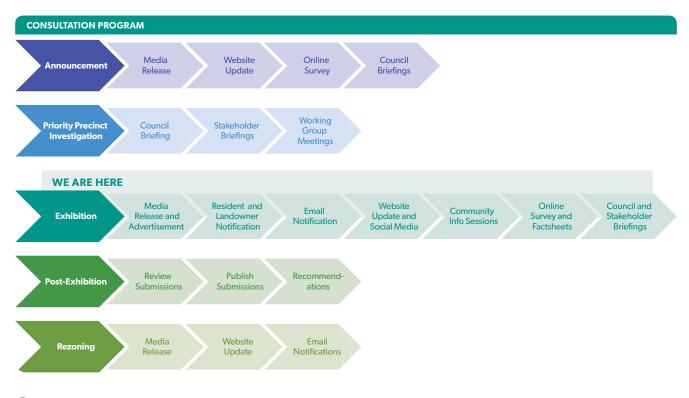
The information gathered through the various consultation methods outlined above has been a used to develop the draft precinct proposal. The following key messages, from the community, have shaped the proposed land use and built form outcomes.



Source: City of Canada Bay Council

4.3 Consultation strategy

To ensure the community is informed about the proposals for Rhodes East, a range of communication tools will be used to seek community and stakeholder involvement. A summary of the consultation program is provided below.





Rhodes East will be a model for sustainable, low-rise high density development, which builds upon the existing character and heritage of the area. It will provide more high quality housing choice, close to public transport and catering to a variety of household types. It will be supported by connections to the water, and local streets will be redesigned to support walking, cycling and use of public transport. Improved amenity will encourage residents and visitors to spend time and continue to take pride in the area.

This vision is supported by the following key objectives:

Planning



Ensure Rhodes East can meet the challenges of the future by building sustainability and longevity into planning, design and commercial capability from the start;



Active transport

Design integrated transport services and experiences that prioritise walking, cycling and the use of public transport.



Affordable housing

Provide affordable housing options for key workers in the area, for example people working in occupations such as teaching, child care, policing or nursing;



Density with a human scale

Deliver a range of built forms, from terraces to apartment buildings, that promotes activity on lower levels of buildings. The range of built forms will result in more open space, more sunlight into buildings, and a closer connection to the ground;



Waterfront access

Provide enhanced public access to the Parramatta River foreshore, including the provision of housing and public open space with views to the water; and



Public spaces

Provide a range of high quality, pedestrian prioritised public spaces that are safe for gathering and socialising.

The draft Rhodes East vision and supporting objectives were developed by the City of Canada Bay Council following Future Cities Program workshop, coordinated by the Future Cities Collaborative.

The draft vision and objectives have been further developed and refined using community input received during the investigation process.

Planning Report



This section of the report illustrates how the Rhodes East draft Precinct Plan was prepared in response to various in-depth investigations, modelling and testing. It also summarises the proposed land uses within the precinct, access, movement and transport measures, public open space and built form, social infrastructure provisions as well as proposed planning controls.

6.1 Transport capacity modelling

During previous consultation sessions, the local community raised reservations with respect to the existing traffic and transport situation in the precinct. The community commented that the road and rail network was currently operating at, or close to, capacity. Subsequent detailed transport analysis confirmed the same.

Any additional vehicular or passenger movements from new development at Rhodes East would therefore need to be carefully modelled and appropriate mitigation measures put in place and improvements proposed to ensure that any additional population can be supported.

Accordingly, various development scenarios were modelled to assess the traffic impacts on the road network but to also provide an indication of potential public transport demand. These scenarios ranged from land use options that proposed new development across the entirety of the investigation area, to more modest land use options which indicated development at limited locations within the precinct.

The results of the transport modelling are set out in detail within the Traffic and Transport Assessment (Appendix F) and have been prepared in close collaboration with Transport for NSW (TfNSW) and the Roads and Maritime Services (RMS).

In summary:

- Concord Road, a congested arterial road, is a key bus and freight corridor;
- During peak hours train loads approach capacity at Rhodes Station;
- The local road network is constrained and has a lack of bus priority opportunities;
- Major transport infrastructure (such as the railway line and Concord Road) act as barriers to east-west movements for walking and cycling;
- Mitigation measures will be required to key intersections on Concord Road to ensure travel times are not significantly altered;
- Additional southbound train services will be required during the morning peak; and
- A change in travel behaviour is critical for the success of the draft Precinct Plan.

6.2 Development feasibility testing

Another key investigation involved testing the scale of development required to provide a commercially acceptable return whilst ensuring that agreed broader public benefits could be achieved.

Noting traffic and transport constraints, combined with community and Council's vision of medium rise high density development for Rhodes East, an assessment of the base feasibility i.e. the minimum commercially viable level of development, was undertaken (Appendix K). This analysis identified a series of building typologies for each 'Character Area' within the precinct and took into consideration the following criteria:

- Existing land values;
- Units sales and size of comparable developments;
- Construction costs;
- Affordable housing contribution;
- State infrastructure contribution;
- Council fees and charges; and
- Other miscellaneous costs.

In certain locations, FSR and building height controls in excess of base feasibility are proposed in order to incentivise developers to deliver public benefits such as new streets. These incentives would be delivered via site-specific bonuses and carefully controlled to ensure taller buildings are strategically located to minimise impact on adjoining development, and to minimise visual impact from the public domain.

6.3 Rezoning of land

The results of the detailed transport analysis and feasibility testing have determined that it is not viable to redevelop the whole of the Investigation Area. In response to the results of technical studies and investigations undertaken, the draft Precinct Plan proposes to rezone land between the railway line and Concord Road only. However, it is to be noted that committments to the delivery of infrastructure are essential to trigger rezoning within the precinct post exhibition. Government may also choose to consider a phased approach to the rezoning based on infrastructure availability.

Landscaping along Concord Road will provide shade and pedestrian amenity whilst also screening residential development from the busy road. A combination of retail, residential and adaptable building frontages will activate and future-proof this character area.

SECTION 6: DRAFT PRECINCT PLAN

6.4 **Character-led development**

Following a thorough site analysis, four character areas have been identified (see Appendix L) within the land proposed to be rezoned. Statements of intent have been developed for each of the character areas, providing an outline of the future vision and desired future character:

Rhodes East Gateway

This character area will proudly announce arrival at Rhodes East from the south and guide people to the Station, to McIlwaine Park and foreshore links beyond. The built form will reflect its location adjacent to the Station with increased density and encourage the use of public transport as opposed to the private vehicle.

The proposed heights will allow views over McIlwaine Park and Parramatta River. The built form will provide an active, mixed used podium and street level frontage with and formal landscaping that complements the character of McIlwaine Park.

There will be street level activation and a safe, pedestrian friendly environment will be prioritised to promote connectivity between the Station, across Concord Road, into McIlwaine Park and link to Parramatta River.

Leeds Street Foreshore Precinct

This character area will provide a multi-modal, water-based destination. The Leeds Street Foreshore Precinct will introduce meaningful visual and physical connections to the water in addition to a vibrant mix of uses. The lifestyle and activities promoted within this Character Area will prioritise pedestrians and facilitate human interaction.

Buildings will be flexible and multi-purpose and, whilst they may have larger floor plates, a fine grain frontage to public areas will be created. The built form will respond to the northern aspect of the character area through the sensitive allocation of height combined with block permeability and building separation ensuring pedestrian level views of Parramatta River from the centre of Rhodes East.

The High Point

The High Point will largely consist of residential and community uses through a 'density done well' approach that will deliver a diversity of heights and human scale built form focusing on a balance between increased housing, public/ private amenity and an active and safe pedestrian environment.

Future development will facilitate enhanced connectivity between the east and west of the Peninsula, to public transport and will create localised 'place' features along key desire lines and view axis.

Concord Road Corridor

The Concord Road Character Area will build on its primary role as a transit-focused corridor. Increased walking, cycling and bus patronage will be promoted through combined public domain and built form frontage strategies.



6.5 Draft Precinct Plan

The draft Precinct Plan proposes the following uses:

- 3,589 dwellings (8,255 population);
- 6,000-6,500m² (GFA) of convenience and 7,000m² of destination retail space;
- A new primary school;
- New areas of public open space including a civic plaza, foreshore plaza, corner plazas and potentially a river pool;
- 300m² (GFA) of space within 'mixed use corners' for community, cultural or retail use; and
- 2,900m² (GFA) of adaptive ground floor uses (office space).

6.6 Land uses

Residential

Forecasts

The draft Precinct Plan represents the long term vision for the redevelopment of Rhodes East. It envisages that development will be delivered over a 20 year period; the overall effects on the precinct will therefore not be evident immediately. Also, the existing land ownership within the precinct means that land amalgamation is required in order to deliver the draft Precinct Plan.

Some locations, particularly around the station and in the north around Leeds Street, may be redeveloped in the short-term following any rezoning.

The dwelling growth likely to occur as a result of the proposed rezoning at Rhodes East has been projected in order to identify the infrastructure needs over time. Rhodes has been one of the fastest growing suburbs in Sydney in terms of dwelling completions with an average of around 450 dwellings every year from 2008-2013. Given the need to amalgamate sites a lower annual completion rate of between 200-350 dwellings per year has been used to inform the dwelling projections shown in Table 5.

TABLE 5: DWELLING AND POPULATION PROJECTIONS TO 2030					
	Extg	2019 - 2022	2023 - 2026	2027 - 2030	2031- 2034
Dwgs/ annum		200	350	250	200
Dwgs	274	800	2200	3200	3600
Рор	733	1840	5060	7360	8280

Affordable Housing

Economic modelling, based on the minimum feasible residential development across the Investigation Area concluded that a 5% Affordable Housing contribution (in cash or works in kind) from residential development was viable across the precinct.

Eligibility of the tenants for the Affordable Housing will be determined in line with the criteria set out in City of Canada Bay's Affordable Housing Policy. This includes an assessment of income with priority given to applicants working in the LGA and who are permanently employed in health services, childcare, public primary and secondary education, emergency services, public transport, City of Canada Bay, retail, laboring, manufacturing and hospitality. City of Canada Bay Council commissioned an Affordable Housing Strategy to be prepared (Appendix M) outlining the mechanisms by which affordable housing could be delivered at Rhodes East.

The Government has recently amended the EP&A Act relating to the delivery of affordable housing which allows affordable housing to be applied to an area subject to a Special Infrastructure Contribution.

Council is currently considering the outcomes of the Affordable Housing Strategy and working with the Department to determine how the Affordable Housing will be delivered.

Retail / Commercial

A range of retail and commercial uses are proposed across the precinct to support the new population and offer retail choice. The type and location of the proposed retail has been designed to complement the existing retail and commercial uses in the peninsula and to improve access and convenience for the local community.

The proposed retail and commercial uses include:

Rhodes East Gateway – convenience retail is proposed adjacent to the station as part of the Rhodes East Gateway area. Potential uses may include a supermarket, speciality grocer, restaurants and takeaways, speciality and personal services, and non-retail services.

Leeds Street Foreshore Precinct – destination based retail – stores that attract customers regardless of location – are proposed within the Leeds Street Foreshore Precinct. Such uses could include a micro-brewery, speciality retail, wine bars and cafes and a small gourmet supermarket (maximum 1,600m² GFA).

'Mixed use corners' – in addition to specific retail and commercial use locations, future flexibility and opportunities for growth are proposed via the identification of three mixed use corners. These mixed use corners, combined with corner plazas, are potential locations for a small cafe, wine bar, art gallery, bike workshop or office space.

Adaptive Ground Floor – adaptive ground floors are proposed for buildings along Concord Road to provide flexible spaces for either residential or office use. These will be controlled through the Local Environmental Plan (LEP).

Community Uses

The additional population at Rhodes East will be supported by a range of community uses including a variety of open spaces, a new primary school and community facilities.

The existing community facilities of the Coptic Church, Community Hostel, Community Hall and Fire Station have also be integrated into the draft Precinct Plan as part of the community spine associated with Cavell Avenue. The proposed planning controls provide flexibility for the services to either remain in their current form or to be redeveloped into new facilities.

SECTION 6: DRAFT PRECINCT PLAN

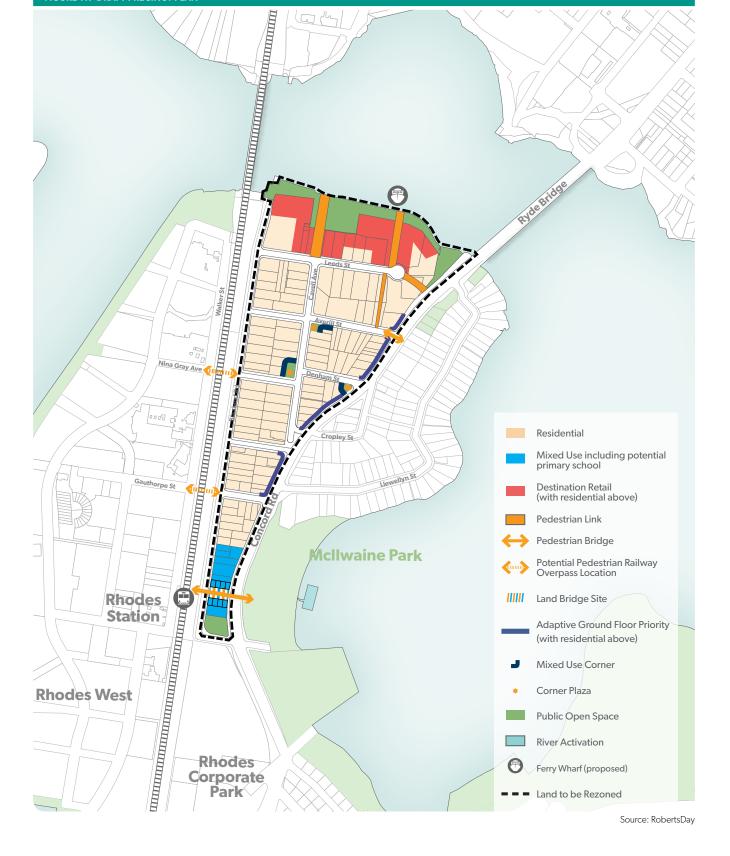


FIGURE 11: DRAFT PRECINCT PLAN

Public Open Space

A variety of public open spaces, pedestrian connections and public plazas are proposed within the draft Precinct Plan, connecting with the existing open space network and increasing public access to the waterfront.

The plaza in the Leeds Street Foreshore Precinct is intended to be publicly accessible at all times and provide seamless integregation of private uses such as restaurant seating within public use of soft landscaped open space.

New Primary School

Floorspace for a new primary school for up to 600 pupils is proposed as part of the Rhodes East Gateway. It's size and general location has the following benefits;

- proximity to public transport, including the bus and rail interchange at Rhodes Station and the bus corridor along Concord Road;
- connecting to Rhodes West at a key existing crossing of the railway line as part of the station concourse;
- promotion of active transport, particularly walkability within the Precinct and en route to other services and facilities in the local area; and
- proximity and ease of access to McIlwaine Park and the Parramatta River foreshore.

The Department of Education is exploring all opportunities to cater for future growth in this area and will continue to work with Council, Department of Planning and Environment, other agencies and the local community to meet the needs of students within the area.

ARTIST'S IMPRESSION OF RHODES EAST GATEWAY



Source: RobertsDay

Community meeting and activity spaces

The central and accessible location of the Rhodes East Gateway provides the opportunity for the primary school location and its grounda to also be used for community meeting and activity spaces outside of school hours. The existing heritage listed Community Hall on Blaxland Road could be retained and enhanced.

Further investigations into the various options for accommodating the additional community use spaces will be undertaken by Council progressively as the new community moves into the area.

6.7 Access and movement

The Traffic and Transport Assessment has been completed (Appendix F) which considers the impact of the proposed rezoning on traffic, performance of roads and intersections, parking, public transport usage and travel demand management.

To improve connectivity, the draft Precinct Plan proposes additional streets, pedestrian / cycle paths and bridges, each located to maximise the choice for movement and reduce travel times for pedestrians and cyclists to key destinations such as the station, planned ferry wharf and community facilities.

Context sensitive streets

The principles of TfNSW's Movement and Place Framework (TfNSW) have been used to inform the Context Sensitive Streets Strategy adopted for the proposed rezoning.

The primary aim of the Context Sensitive Streets Strategy is to integrate transport, urban design, landscape and place making to realise positive improvements to the public domain and to help facilitate a modal shift that will reduce private car reliance and use.

The Rhodes East Context Sensitive Streets Strategy creates a street network where the key linkages will provide safe and efficient access for all users, prioritising pedestrians, cyclists, public transport and then vehicle infrastructure/ investment in order to support a vibrant civic life.

The proposal generally reflects this intent, and supports the land use, density and street function of the different Character Areas. However, the character of the north – south streets remains consistent across different Character Areas to ensure legibility and provide clear connections to the station and to the Parramatta River.

The future character of the Rhodes East Streets will be further reinforced through the scale, location and appearance of the built form, complementing existing character areas.

New streets

New streets are proposed to improve connectivity and promote pedestrian activity across the precinct. Their addition also assists with encouraging a finer grain of development as smaller, more compact blocks are created to provide a human scaled environment that has the ability to accommodate a range of housing types and sizes.

The three new streets provide east to west connections between Cavell Avenue and Blaxland Road. It is proposed that these streets will be delivered as a bonus incentive to developers via new clauses in the Local Environmental Plan (LEP). These clauses will link the additional height and FSR to the delivery of the new streets and will clearly identify the maximum height and FSR increase that can be achieved. An outline of the proposed street types and a description of the Rhodes East context is provided in Table 6 and shown on Figure 12.

TABLE 6: PROPOSED STREET TYPES				
Character area	Street name	Rhodes East street type	Description	
Concord Road Corridor	Concord Road	Greenway Boulevard	An arterial road with generous setbacks to allow for mature landscaping and wide footpaths creating a buffer between Concord Road and the adjacent development.	
Rhodes East Gateway/ The High Point / Leeds Street Foreshore Precinct	Blaxland Road	Commuter Street	An important link between the Leeds Street Plaza / Ferry Wharf and the station with a dedicated cycleway connecting commuters and residents to these key destinations. New tree planting between parking bays will provide screening of the rail infrastructure and shade for pedestrians.	
Leeds Street Foreshore Precinct	Leeds Street	Destination Street	A shared street where pedestrians have priority reflective of the intent to create an activated mixed use destination around the Leeds Street Plaza.	
The High Point / Leeds Street Foreshore Precinct	Cavell Avenue	Community Spine	An important connection between Leeds Street Foreshore Precinct and Rhodes East Gateway providing access to key existing community uses such as the Coptic Church, Community Hostel and Community Centre.	
The High Point	Averill Street Denham Street New streets	Local Street	Fine grain diverse streets that offer pedestrian amenity with landscaping that provides seasonal variation.	

FIGURE 12: CONTEXT SENSITIVE STREETS PLAN



Source: RobertsDay

6.8 Public and active transport

Aside from creating a local street network that is designed for people, a key transport objective of prioritising public and active transport is adopted as part of the draft Precinct Plan.

Train

As identified in the Traffic and Transport Assessment, the existing rail network is already congested and approaching capacity at Rhodes Station during peak hours. With the additional demand anticipated from the additional population proposed at Rhodes East the Traffic and Transport Assessment identified that a further 1.1 southbound rail services are required in the one-hour morning peak.

To provide these additional services, several options could be adopted;

- Timetable adjustments to allow for additional services to stop at Rhodes or diversion onto Metro lines (such as at Epping) thereby increasing capacity further along the Northern Line at Rhodes;
- Quadruplication of the Northern Line through Rhodes and north over the Parramatta River rail bridge, allowing more services to stop at Rhodes Station; and
- Mass transit introduction by providing a new station and service at Rhodes or by allowing existing passengers to interchange and connect through to the Sydney or Parramatta and therefore alleviating congestion on the Northern Line.

These options will require further investigation by TfNSW and will require significant government funding and approvals.

Bus

Opportunities for better bus services, improvements and upgrades within the local area and along Concord Road to address future growth challenges to meet customer demand in the long term have been identified, namely;

- Increased frequency and span of hours of services using the Bennelong Bridge to connect to Wentworth Point and Sydney Olympic Park;
- Improving frequency and span of hours of the M41 along Concord Road, consistent with Sydney's Bus Future (TfNSW, 2013) to provide stronger connections to Ryde and Macquarie Park;
- Local bus network redesign opportunities to improve wayfinding and quality of services for customers;
- Improved bus stop facilities and walking access to stops on Concord Road and linking to Rhodes Station;
- Improving interchange facilities at Rhodes Station including high quality shelters and seating for waiting customers.

These options will require further investigation by TfNSW including engineering design and will require significant government funding and approvals.

New Ferry Wharf

The new ferry wharf is proposed to be located within the Leeds Street Foreshore Precinct and will provide ferry users with access from the broader Rhodes Peninsula and train station to Parramatta and Sydney CBD. The NSW Government have committed to the delivery of the Ferry Wharf as part of the Transport Access Program and this is anticipated to be delivered within the next 3-5 years.

RMS and TfNSW will explore several options before finalising the location of a new Ferry Wharf. The location included within the draft Precinct Plan is tentative and will be finalised after adequate engagement with the local community. The precinct planning process provides an opportunity to integrate the wharf into the overall plans for Rhodes East, removing any navigation issues raised.



Source: RobertsDay



Source: RobertsDay

Station to McIlwaine Park Landbridge

As part of Rhodes East Gateway, a new land bridge is proposed which will provide a safe and convenient pedestrian connection between the station (and Rhodes West), the new community, and retail hub, and McIlwaine Park (potentially including a river pool), crossing both Blaxland Road and Concord Road.

Pedestrian rail bridge

A new pedestrian rail bridge is proposed linking Rhodes East to Rhodes West and, combined with the proposed land bridge within the Rhodes East Gateway, will increase connectivity within the peninsula whilst providing safe pedestrian access over major transport routes. Two potential locations (see Figure 13) for the new pedestrian rail bridges include:

- Between Gauthorpe Street on the west and Blaxland Road / Llewelyn Street junction on the east; or
- Between Nina Gray Avenue on the west and Blaxland Road / new street junction on the east.

As part of the consultation on the draft Precinct Plan, input from the local community is sought to determine the final location of a pedestrian bridge.

Parking

To assist in minimising the amount of vehicular traffic generated as a result of the development and to encourage the use of alternative types of transport, maximum off-street car parking rates are proposed at Rhodes East.

These rates are based on the proximity of the development to the train station, the promotion of walking and cycling throughout the precinct and the availability of daily uses, services and facilities within the precinct and the immediate area. The parking rates are proposed to be supplemented by car share car parking provision and increased minimum bicycle parking rates. The plans for Rhodes East can only be achieved with dramatic reduction in the number of cars anticipated on the street network. To achieve this, fundamental changes to car ownership expectations and travel behavioural patterns are required. Zero parking rates have been proposed for development located within 400m of the train station to facilitate the density and yield proposed in the draft Precinct Plan.

In addition, car share rates (1 per 20 dwellings and 1 per 40 dwellings within and outside 400m of the station respectively) and electric vehicle charging stations (1 per 20 dwellings / 1 per 40 dwellings within and outside of 400m of the station respectively) are proposed.

TABLE 7: MINIMUM BICYCLE PARKING RATES				
Land use	Resident/ staff	Visitor		
Residential	2 per dwelling	2 per 10 dwellings		
Commercial	2 per 150m ² GFA	2 per 400m² GFA		
Retail	2 per 250m² GFA	4+2 per 100m² GFA		
Industrial	2 per 10 employees	4+2 per 100m² GFA		

TABLE 8: MAXIMUM CAR PARKING RATES				
Land use	Within 400m of station	Outside 400m of station		
Residential	0 space per dwelling	0.5 space per dwelling		
Visitor	0 space per dwelling	0.1 space per dwelling		
Commercial	l space per 150m² GFA	1 space per 100m ² GFA		
Retail	1 space per 100m ² GFA	1 space per 70m² GFA		
Cafes and restaurants	1 space for every 150m ² GFA or 1 space for every 6 seats (whichever is the lesser)	1 space for every 100m ² GFA or 1 space for every 4 seats (whichever is the lesser)		
Industrial	l space per 150m² GFA	1 space per 120m² GFA		

Road and intersections upgrades

Proposed improvements at key intersections have been identified within the Traffic and Transport Assessment to support the draft Precinct Plan, including;

- Concord Road / Averill Street

 extension of the southbound right hand turn bay, widening of Averill Street, additional left-turn lane on Averill Street and a new pedestrian bridge;
- 2. Cavell Avenue / Averill Street - new single lane roundabout; and
- Cavell Avenue / Leeds Street

 minor widening to the intersection.

The timing of the upgrades will be implemented as development progresses and as agreed with RMS.

FIGURE 14: ROAD AND INTERSECTIONS UPGRADES MAP

Continued growth in travel in and around Rhodes is anticipated regardless of the Rhodes East development. Therefore, in the wider area, the following intersections have been identified as requiring upgrading and improving:

- 4. Devlin Street / Victoria Road
- 5. Church Street / Morrison Road
- 6. Church Street / Junction Road
- 7. Concord Road / Homebush Bay Drive
- 8. Homebush Bay Drive / Rider Boulevard

Further investigation by RMS into the detailed design and funding will be required regarding the above potential intersection upgrades, regardless of the outcome of the Rhodes East draft Precinct Plan.



6.9 Landscape and open space

During previous consultation sessions, community members expressed the view that there is already a reasonable amount of existing open space in the precinct and noted opportunities to improve the connections between this open space and Rhodes East. Feedback suggested that any new open space in Rhodes East should cater to the residents, be of a high quality and connected to open spaces in the surrounding area.

Landscape strategy

The overall landscape strategy, as detailed in the Public Domain Plan (Figure 15 and at Appendix N) aims to:

- Prioritise pedestrians;
- Encourage engagement within the landscape;
- Provide a clear hierarchy of streets through landscape treatment;
- Establish an easy to navigate environment;
- Connect existing and proposed open spaces into a unified and continuous network;
- Provide connections to and along the waterfront; and
- Retain and enhance existing open spaces, trees and landscape features.

Public Domain

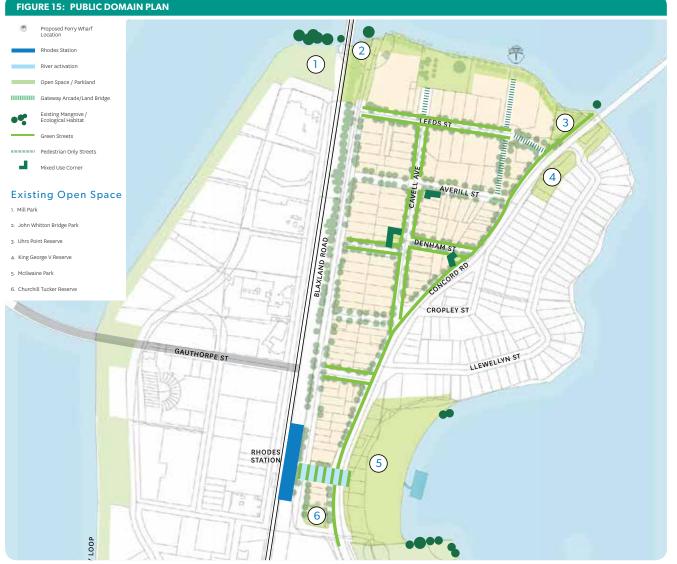
Rhodes East Gateway Plaza and Land bridge

As part of the Rhodes East Gateway, a retail frontage on part of the landbridge is proposed, co-located with the proposed primary school, retail, residential and community uses, close to the station. The proposed plaza would also provide part of the connection between Rhodes West, via the station concourse, and McIlwaine Park across the proposed land bridge, providing approximately 3,000m² of public space.

Leeds Street Foreshore

A variety of open spaces are proposed along the foreshore within the Leeds Street Foreshore Precinct including:

- Waterfront promenade connecting to Rhodes West and to the east under Concord Road;
- Village green / plaza area totalling 4,500m²;
- Multi use paved space for sports and events;
- Pedestrian connection to the new Ferry Wharf;
- Access to the existing boat ramp and jetty; and
- Terraced landscape to the water edge.



Source: TURF

SECTION 6: DRAFT PRECINCT PLAN

Corner Plazas with mixed use opportunity

Three corner plazas are proposed, within the 'mixed use corners', to provide activity and spill out space, and small areas for seating.

Upgrades to Existing Parks

In addition to the new areas of open space, upgrades are proposed to Blaxland Road terminus area, Uhrs Reserve and McIlwaine Park. These upgrades include:

Blaxland Road terminus area (northern end) – an area within the Leeds Street Foreshore Precinct to be resurfaced, new planting, recreation facilities and new on-site rain water detention / retention facilities.

Uhrs Point Reserve – upgrades to the open space area, new planting, launch ramp and on-site rain water detention / retention facilities. (Note: any upgrades to the existing building facilities is the responsibility of the Sea Scouts and Crown Lands).

Mcllwaine Park – new planting and potential to reconfigure the existing car park as a result of the proposed landbridge landing.

River activation

The Parramatta River foreshore is a key asset to the Rhodes Peninsula and increased access to the foreshore was identified as an important need for existing residents as part of previous community consultation. It is therefore proposed to activate the river within Brays Bay (adjacent to McIlwaine Park) with upgraded planting, increased access and the potential for a river pool.

A preliminary assessment of the feasibility of a river pool at Rhodes East was undertaken by ARUP (Appendix O) to scope the likelihood of the suitability of a pool within the site constraints. The report also provided a number of pool design options and water treatment methods.

Should the river quality be tested to be suitable for swimming, a natural swim site is the preferred option. Otherwise, the next preferred river pool design is an enclosed baths on pylons with an impermeable basin. In the longer term the basin could be removed to enable the use of natural river water as and when it is deemed that the river water is swimmable. The design includes an 8-lane, 25m long lap pool and a 50m² pool for children.

City of Canada Bay Council is a member and supporter of the 'Our Living River', is an initiative delivered by the Parramatta River Catchment Group which aims to improve the quality of the Parramatta River, ultimately with the aim to improve the water quality to a level which will allow recreational activities such as swimming to take place.

Further investigations into the detailed design of the river activation, including the potential river pool, will be undertaken by Council.

Public art

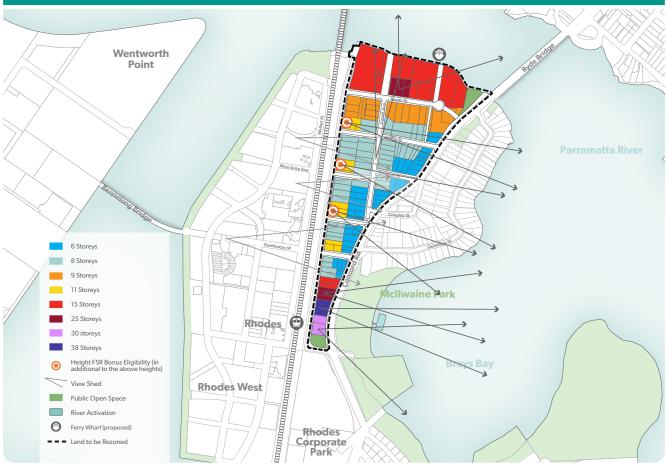
The City of Canada Bay Rhodes Peninsula Art Plan was developed in consultation with the community in 2013. It outlines the public art principles, themes and opportunities within the peninsula.

In accordance with the Art Plan, permanent public art could be integrated into the landscape as part of the Leeds Street Foreshore Precinct, in the corner plazas, along pedestrian links, within existing parks and reserves, and may include sculptural art, lighting, typography and/or graphic in paving and interactive art.



Source: RobertsDay





Source: RobertsDay

6.10 Built form

The built form strategy for Rhodes East has been designed to ensure that an increase in residential density will not adversely impact the amenity of existing and surrounding residential areas whilst creating a human scale environment. Consideration has been given to providing a transition in height and scale to adjoining areas, providing appropriate setbacks to existing roads and retaining key view lines to the water and the Sydney CBD skyline.

Building heights

As already identified, the proposed building height and FSR controls have been derived from the development feasibility test of 'base case' typologies to inform an understanding of the minimum scale of development required to provide commercially acceptable returns, minimise traffic and transport impacts, contribute to the infrastructure necessary to support the expanded community and complement the existing identified character areas.

Proposed maximum building heights, with the exception of bonus heights for the delivery of new local roads, are shown on the Building Heights Plan (Figure 16). Taller buildings are carefully located close to key community services and facilities, near the train station and along the rail line before stepping down towards Concord Road. Building form and scale contribute to the physical definition of the street network and the hierarchy of public spaces. The proposal includes a range of building heights across Rhodes East to encourage variety, diversity and different architectural styles whilst ensuring the creation of low to mid-rise, high density development.

The proposed FSR controls ensure that maximum heights cannot be achieved across an entire block but deliver a 'high low model' of built form. Taller built form elements can be located within each block without overshadowing adjoining development whilst seeking to achieve a high quality, pedestrian friendly public realm and the provision of a range of building typologies and housing choice.

Where the three new roads are proposed, height and FSR bonuses are identified to incentivise developers to construct them.

Exception to Height of Buildings and Exception to FSR clauses will be inserted into the LEP that clearly link the additional height and FSR to the delivery of the new roads. In addition, the LEP will clearly identify the maximum height and FSR increase that can be achieved through infrastructure delivery and where these bonuses can be achieved.

Development that occurs under the above clauses will be required to demonstrate design excellence as outlined in the LEP.

FIGURE 17: VIEW SHARING PLAN



Views

Key views have been identified from, across and within Rhodes East. These have been taken into account as part of the development of the draft Precinct Plan.

Overall, the draft Precinct Plan has been designed to:

- Celebrate the existing view axis to McIlwaine Park and the Parramatta River;
- Create a northern water/foreshore view through a pedestrian extension of Cavell Avenue and new pedestrian connection leading to the proposed Ferry Wharf and a view setback south of Averill Street;
- Establish height limits within the identified view sheds that will ensure views from The High Point and centre of the area are preserved; and
- Respectfully consider the Rhodes West view impacts.
 Whilst the urban redevelopment of Rhodes East will change the built form landscape, a sensitive design response will facilitate view sharing through combined bulk, scale, height and view controls, in particular:
 - Fine- grain: smaller building footprints enable view corridors between upper levels to be maintained whilst also reducing overshadowing,
 - Human scale: diverse building forms that provide medium density lifestyle choice in non-tower forms,
 - Maximum heights: maximum floor space and heights have been proposed to ensure transparency in the planning approach.

Visual Assessment

A Visual Assessment of the draft Precinct Plan has been undertaken (Appendix P) and assesses the impact that future development at Rhodes East may have on the visual landscape from the surrounding and publicly accessible areas. Key vantage points with the most prevalent views of the proposed land to be rezoned were identified and utilised to access the impact of the proposals.

In summary, the Visual Assessment identifies that the draft Precinct Plan would have a moderate visual impact on the surrounding context.

Whilst the generally mid rise buildings proposed in the Leeds Street Foreshore Precinct will significantly alter the riverine landscape as seen from the northern banks of the Parramatta River, this is consistent with redevelopment already occurring on the northern foreshore. In addition, the change of land use from light industrial development to mixed use, supported by high quality landscape and open space visible from the water will considerably enhance this area.

The taller towers proposed within the Rhodes East Gateway will be visible from the southern approach to the peninsula along Concord Road and from Brays Bay Reserve. However, narrower towers, or small floorplate towers, are used to minimise overshadowing impacts and the maximum heights proposed remain lower than the existing development on the western side of the station. Additionally, the Visual Assessment considered the potential impact on views from private apartments located in Rhodes West. The narrower towers proposed, careful placement of permissible landmark heights and relative lower heights limit the impact on views from Rhodes West towards the Sydney CBD skyline.

Heritage

A number of local heritage items are located within the precinct and, based on recommendations contained within the Heritage Assessment (Appendix G), specific design controls have been developed for their adaptive reuse and / or proposed adjacent development, as shown in Table 9.

Whilst not heritage listed, the Coptic Church on Cavell Avenue has a strong historical association with the community and is to be retained in situ.

The design controls have been incorporated in the draft Precinct Plan and through proposed development controls such as setbacks.

TABLE 9: HERITAGE ITEMS DESIGN CONTROLS			
Listed Heritage Item	Design Control		
	Existing Federation period house to remain in situ and retained as residential or incorporate a complimentary change of use.		
59 Blaxland Road and 35 Cavell Avenue	Existing front lawn presentation and trees to be retained and / or upgraded. New development to be setback by 2m from common boundary and limited to 2 storeys.		
	Additional setback of 4m required for medium rise (5-8 storeys) or 6m for high rise (above 8 storeys).		
	Front setbacks for new development adjacent to be consistent with existing front setbacks.		
63 Blaxland Road	Existing historic school building should be retained in situ and incorporated into any redevelopment. The large trees, particularly to the north, should be retained.		
4a Cavell Avenue (indigenous trees only)	Existing heritage trees should be retained and incorporated into any redevelopment of the remainder of the site.		
14 Cavell Avenue	Existing face brick of the industrial building to be retained and incorporated into any new development at the rear or on adjoining sites. New development at the rear can be hard against the rear of the brick section.		
	Adjoining sites may be redeveloped with zero lot boundary separations but retain the prevailing setback from the front boundaries.		
Cavell Avenue street trees	Palm trees must be retained and protected. Where trees are missing from the established planting rhythm or in poor health, they should be replanted to create a substantial streetscape character and public benefit.		
Uhrs Point Reserve	Where trees are missing from the established planting rhythm or in poor health, they should be replanted to create a substantial streetscape character and public benefit.		
McIlwaine Park	The indigenous planting in McIlwaine Park must be retained and protected. Where trees are missing from the established planting rhythm or in poor health, they should be replanted to create a substantial streetscape character and public benefit.		



Source: Department of Planning and Environment



Source: Department of Planning and Environment

Setbacks

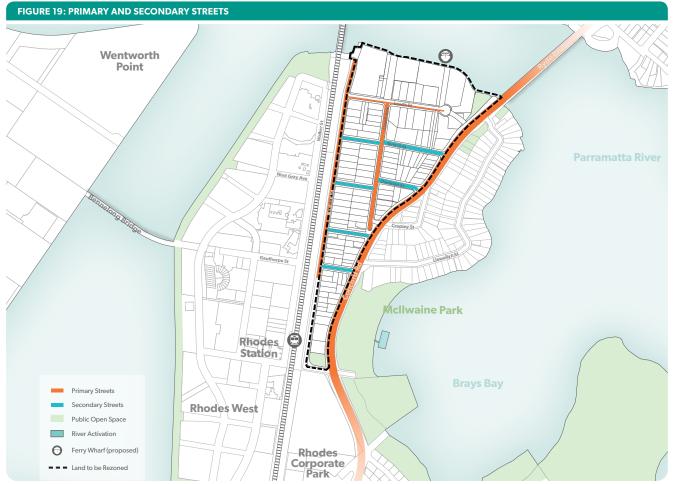
As Rhodes East is an existing community, including a number of heritage items, a range of front setbacks are proposed that respect the existing building alignment, whilst also considering the future land use, function and intended character. These are detailed and shown on the Setbacks Plan (Figure 18).

TABLE 10: PROPOSED SETBACKS

Character area	Street	Existing	Proposed
Rhodes East Gateway	Blaxland Road	0-1.5m	1-2m
Leeds Street	Leeds Street	7m	1-2m
Foreshore Precinct	Blaxland Road	5m	1-2m & 2-4m
Concord Road Corridor	Concord Road		Street Greening – 6m
	Averill Street	5-6m	2-4m
The High Point	Denham Street	5m	lm
	New Streets	_	1m & 2-4m
North/South Axis	Blaxland Road	5m	2-4m
(across Character Areas)	Cavell Avenue	5-7m	0.6-1m

The setback distances, along with the requirement for terrace buildings to front the streets, encourages community interaction and a streetscape that is friendly for walking and cycling.





Source: RobertsDay

Active Frontages

A public domain that supports and encourages pedestrian movement can be achieved through a fine grain block pattern, activated streets and human scaled development fronting onto a defined hierarchy of streets.

Primary and Secondary Streets are proposed within the draft Precinct Plan; Primary Streets are principal pedestrian access roads whereas Secondary Streets provide vehicular access points.

Figure 19 shows which streets are designated as Primary and Secondary (buildings north of Leeds Street and within the Rhodes East Gateway are exempt from the proposed active frontages control in order to enable large floorplate non-residential uses).

These streets will be required, via the LEP, to contain terrace building forms on at least;

- 85% of any Primary Street frontage; and
- 60% of any Secondary Street frontage.

Minimum and maximum Frontages

Minimum and maximum lot frontages are proposed in accordance with the intent of the specific Character Areas to create a fine grain, activated and visually interesting built form and streetscape outcome. Together these controls will minimise the visual impact of new development on neighbouring properties and the public domain by limiting the bulk and scale of development.

To encourage efficient development of site for multi-storey development, a minimum lot frontage of 25m is proposed for all development sites within Rhodes East.

Maximum lot sizes and frontages are proposed for Rhodes East Gateway and the Leeds Street Foreshore Precinct.

TABLE 11: MAXIMUM LOT FRONTAGES				
Location	Maximum lot size (m²)	Maximum lot frontage (m)		
Rhodes East Gateway	4,000	50		
Concord Road Corridor	4,000	60		

6.11 Sustainability

The Sustainability Assessment (Appendix H) outlines how the key vision of Rhodes East of a high level of sustainability could be achieved and tested to prioritise walking, cycling and the use of public transport ahead of private vehicles. The City of Canada Bay is also committed to higher levels of sustainability and as part of the Rhodes East investigation, the Council has undertaken further study into precinct wide sustainable infrastructure options.

In order to achieve this, the following elements are an integral part of the draft Precinct Plan;

Improving walkability and cyclability through a connected network of pedestrian friendly streets, and new connections, particularly to key destinations; additional land uses within walking / cycling distance; and reduced parking standards and increased bicycle parking facilities.

Implementation of precinct-wide sustainability initiatives

such as a recycled water network and private electrical network. These precinct wide initiatives are to be accompanied by pipe networks, easement spaces within buildings, and locations within developments to operate utilities.

Increased sustainability targets - the Building Sustainability Index (BASIX) is a scheme that regulates the energy efficiency and water consumption of residential buildings. As it is the primary mechanism by which sustainability is implemented in residential buildings, enhanced targets have been investigated and a resultant likely payback timing calculated. Targets are based on a reduction in water consumption and greenhouse gas emissions from pre-BASIX (2004) buildings. It is proposed that any new development will be required to demonstrate and achieve the following higher water and energy saving targets via the SEPP BASIX online tool;

- 50% for water consumption
- 40% for energy consumption

Flood planning - due to Rhodes East's location on the Parramatta River, it is important to ensure that future development on land that is subject to flooding is identified and performance requirements considered in the assessment of any development application. A new clause is proposed to be included in the LEP to ensure that future development on flood prone land meets a specific set of criteria.

6.12 Design Review Panel

Recently Council put forward and adopted the motion to set up a formal Design Review Panel to review proposals for developments over 4 storeys. This is likely to also include commercial and multi dwelling development.

The panel will be set up in the next 6 months and comprise independent urban design and architectural professionals, as well as other representatives.

It is therefore envisaged that future development in Rhodes East over 4 storeys will be subject to a Design Review Panel process.

6.13 Proposed planning controls

The Minister can amend the City of Canada Bay Local Environmental Plan (LEP) 2013 through a State Environmental Planning Policy (SEPP) under Section 37 of the EPA Act.

In accordance with Section 38 of the EPA Act, an Explanation of Intended Effect of the proposed amendment has been prepared (Appendix A).

The proposed draft LEP amendments seek to achieve the following:

- Rezoning to predominantly 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 with heights of 20m and to 20m-31m in the central spine and towards Blaxland Road. Spot heights of 35m are proposed along Blaxland Road with up to 79m in the Leeds Street Foreshore Precinct and 119m 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 local roads will be provided via a new bonus height and FSR provision.
- New Active Street Frontages are 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.
- Establishment of new built form controls including setbacks to achieve improved outcomes adjacent to or near heritage 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 Mcllwaine Park.
- Mandating dual reticulation piping to provide separate reticulation for both potable and non-potable water.

ARTIST'S IMPRESSION OF BUILT FORM



Source: RobertsDay

• Flood planning areas mapped and a new clause setting out the criteria against which development applications are to be assessed in these area.

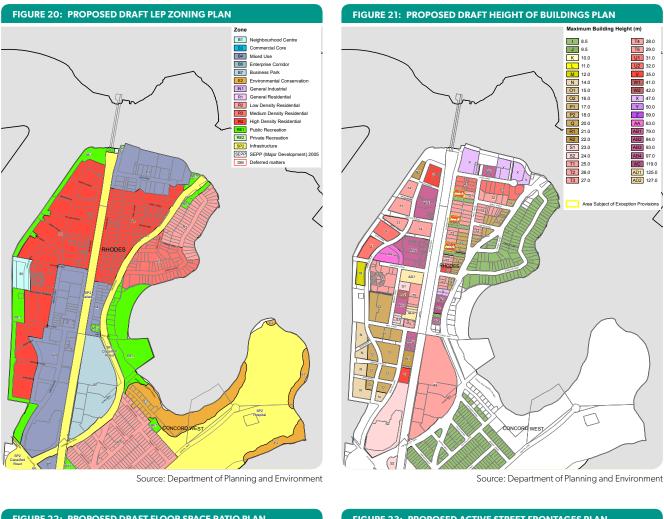
Other key elements of the draft Precinct Plan include:

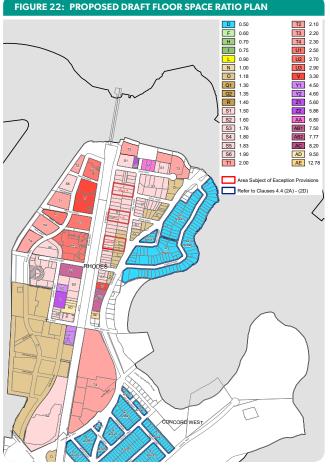
- A targeted provision of 5% Affordable Housing through new development to assist key workers and lower income earners to live within the Rhodes East area; and
- Upgrading of the sustainability credentials of development at Rhodes East to achieve new higher water and energy savings targets under the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

Amendments to the existing LEP maps are required to achieve the above, along with the need for new maps. These are outlined in Table 12 and a selection shown in Figures 20-23 and Appendix B.

TABLE 12: AMENDMENTS PROPOSED TO LEP MAPS			
LEP Maps	Action		
Land Zoning Map	Zones to be amended to reflect the draft Precinct Plan		
Height of Buildings Map	Building heights to be amended to reflect the draft Precinct Plan New exception to building height areas		
	to be included		
Floor Space Ratio Map	FSRs to be amended to reflect the draft Precinct Plan		
	New exception to FSR areas to be included		
Lot Size Map	Amended to remove the minimum lot sizes and add maximum lot sizes within the precinct		
Active Street Frontages Map	New map tile to be added to include new active street frontages		
Flooding Planning Map	New map		
Local Provisions Map 1	New map to identify maximum retail floorspace, mixed use corners and adaptable floor space		
Local Provisions Map 2	New map identifying parking restrictions		
Local Provisions Map 3	New map to identify minimum and maximum lot frontages		

SECTION 6: DRAFT PRECINCT PLAN





Source: Department of Planning and Environment



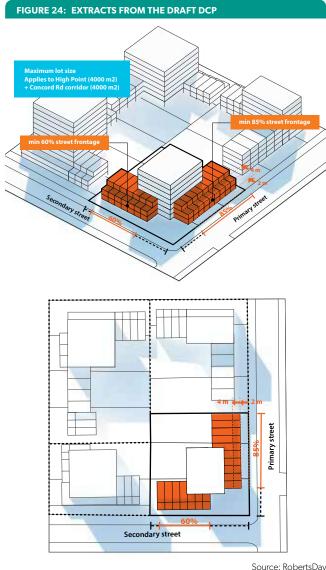
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6.14 Rhodes East Development Control Plan

Site specific development controls for Rhodes East will be included within a Rhodes East Development Control Plan (DCP) (Appendix Q) and will support the Canada Bay Local Environmental Plan provisions for the precinct.

The draft Rhodes East DCP includes the vision, objectives and controls for the public domain and built form.

The DCP also provides detailed development and design guidance to achieve the intended built form and urban design outcomes. The DCP supports design at a block by block level and provide guidelines to inform the treatment of the public and private domain, bonus heights associated with infrastructure provision, access and parking and a suite of important controls to achieve a desirable outcome for the precinct.



The draft Precinct Plan includes potential for a new public swimming pool in the Parramatta River, adjacent to McIlwaine Park in Brays Bay. Amendments are therefore proposed to the SREP to permit public swimming pools in W1 and W2 zones with consent.

6.16 State Environmental Planning Policy 70 - Affordable Housing (SEPP 70)

It is proposed to amend State Environmental Planning Policy 70 – Affordable Housing (SEPP 70) to identify that there is a need for affordable housing in the City of Canada Bay and enable Council to impose an affordable housing levy.

It is therefore proposed to amend Clause 9 of SEPP 70 to identify that there is a need for affordable housing in the City of Canada Bay. This will enable Council to levy an affordable housing contribution which will be implemented through a clause in the LEP.

ARTIST'S IMPRESSION OF THE HIGH POINT



Source: RobertsDay

6.15 Sydney Regional Environmental Plan (SREP)

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 (Harbour REP) (SREP) covers all the waterways of the Harbour, the foreshores and entire catchment. It establishes a set of planning principles and also zones the waterways to suit the differing environmental characteristics and land uses of the harbour.

The waterways adjacent to Rhodes East are zoned W1 - Maritime Waters and W2 - Environmental Protection as shown in Figure 24. Within both zones swimming enclosures and swimming pools are currently prohibited.

Rhodes East Priority Precinct Investigation Area



One of the critical elements of the draft Precinct Plan is to identify the infrastructure required to support any proposed growth at Rhodes East. This includes upgrades to the State, regional and local infrastructure.

7.1 Infrastructure schedule

The tables below provide a summary of the infrastructure items which are required to support the proposed development of the precinct, including local and regional traffic improvements, public transport improvements and community infrastructure. The infrastructure items will be funded by a range of sources as highlighted in the tables. The identification of the items, cost estimate, delivery and timing has been informed by the variety of technical studies undertaken as part of the Priority Precinct Investigation process.

TABLE 13: CURRENT AND COMMITTED PROJECTS			
ltem	Delivery	Status	
Ferry wharf	NSW Government	Committed as part of the Transport Access Program.	
		Further investigations into the detailed design of the new ferry wharf to be undertaken by RMS and, once completed, a date for construction advised but it is anticipated to be delivered within the next 3-5 years.	
Rail services	Transport for NSW	Timetable upgrades are proposed in 2018 which will provide an extra four limited stop suburban services per hour in the morning peak from Hornsby to Central stopping at Rhodes.	
Rail corridors	Transport for NSW	Investigation into the potential for new rail corridors has commenced and due to be completed by early 2017.	

TABLE 14: INFRASTRUCTURE SCHEDULE				
Measure	Cost Estimate	Responsibility	Delivery	Assumptions
Roads				
R1 Concord Road upgrade (existing street)	\$ 3,700,000	State Government	To be funded by SIC.	Upgrades required to create a Greenway Boulevard including surface treatments, in ground service works, pavements, planting, rain gardens and street furniture.
R2 Concord Road / Averill Street intersection upgrade	\$14,600,000	State Government	To be funded by SIC.	New left turn lane, extension of right turn bay and new pedestrian footbridge.
R3 Cavell Avenue upgrade (existing street)	\$ 5,050,000	Council	To be funded by Section 94 Contributions.	Upgrades required to create a Community Spine including surface treatments, in ground service works, pavements, planting, rain gardens and street furniture.
R4 Leeds Street upgrade (existing street)	\$ 4,410,000	Council	To be funded by Section 94 Contributions.	Upgrades required to create a Destination Street including surface treatments, in ground service works, pavements, planting, rain gardens and street furniture.
R5 Local Streets upgrades (remainder of existing streets)	\$6,550,000	Council	To be funded by Section 94 Contributions.	Upgrades required to Local Streets including surface treatments, in ground service works, pavements, planting, rain gardens and street furniture.

SECTION 7: INFRASTRUCTURE AND FUNDING

Measure	Cost Estimate	Responsibility	Delivery	Assumptions
R6 New road embellishment Blaxland Road to Cavell Avenue (south)	\$ 2,200,000	Council	To be funded by Section 94 Contributions. Land to be provided by proponent with bonus FSR / height transfer.	New local road recommended to improve connectivity. Costs include demolition, surfacing, planting, rain gardens and street furniture.
R7 New road embellishment Blaxland Road to Cavell Avenue (central)	\$ 2,150,000	Council	To be funded by Section 94 Contributions. Land to be provided by proponent with bonus FSR / height transfer.	New local road recommended to improve connectivity. Costs include demolition, surfacing, planting, rain gardens and street furniture.
R8 New road embellishment Blaxland Road to Cavell Avenue (north)	\$ 2,150,000	Council	To be funded by Section 94 Contributions. Land to be provided by proponent with bonus FSR / height transfer.	New local road recommended to improve connectivity. Costs include demolition, surfacing, planting, rain gardens and street furniture.
R9 Cavell Avenue / Averill Street intersection upgrade	\$ 800,000	Council	To be funded by Section 94 Contributions.	New single lane roundabout.
R10 Cavell Avenue / Leeds Street intersection upgrade	\$1,200,000	Council	To be funded by Section 94 Contributions.	Minor widening of the intersection.
Improvements f	or pedestrians a	nd cyclists		
P1 Blaxland Road upgrade including cyclepath	\$ 5,650,000	State Government	To be funded by SIC.	Upgrades recommended to the regional cycle network and to create a Commuter Street including surface treatments, in ground service works, pavements, planting, rain gardens and street furniture to support anticipated growth.
P2 Railway overpass	\$ 3,500,000	State Government	To be funded by SIC.	New pedestrian bridge recommended to improve connectivity over the railway line based on Pedestrian Bridge Design Standards.
				Potential locations between Llewellyn Street and Gauthorpe Street or Denham Street and Nina Gray Avenue.
P3 Land bridge construction	\$16,400,000	State Government / Proponent	To be funded by SIC and delivered via a Planning Agreement.	Delivery of the land bridge to McIlwaine Park to be linked to the mixed use development within the Rhodes East Gateway.
P4 Land bridge embellishment	\$ 4,000,000	Council	To be funded by Section 94 Contributions.	Public domain works to the land bridge.
P5 Leeds Street connections to foreshore embellishment	\$ 350,000	Council	To be funded by Section 94 Contributions.	New pedestrian access recommended to improve connectivity. Costs include demolition, surfacing, planting and street furniture.
P6 Averill Street to Leeds Street link embellishment	\$ 300,000	Council	To be funded by Section 94 Contributions. Land to be provided as a public access through site link.	New pedestrian access recommended to improve connectivity. Costs include demolition, surfacing, planting and furniture.

SECTION 7: INFRASTRUCTURE AND FUNDING

Measure	Cost Estimate	Responsibility	Delivery	Assumptions
Open space and social infrastructure				
OS1 Leeds Street Foreshore embellishment including Blaxland Road terminus (north end) and Leeds Street to foreshore pedestrian connections	\$ 9,100,000	State Government / Proponent	To be funded by SIC and delivered via a Planning Agreement.	New foreshore access and plaza area recommended to create a destination adjacent to the new ferry wharf. Costings include demolition, surfacing, planting, open space facilities and on site rain water detention / retention facilities.
OS2 Uhrs Point Reserve upgrade	\$1,100,000	Council	To be funded by Section 94 Contributions.	Upgrades recommended to open space area, planting, launch ramp and new on-site rain water detention / retention facilities.
				Upgrades to existing building facilities is the responsibility of the Sea Scouts and Crown Lands.
OS3 Mixed use	\$ 800,000	Council / Proponent	To be funded by Section 94 Contributions.	Setback and ground floor commercial provided by proponent.
corner plazas embellishment				Paving, street furniture, way-finding signage and lighting.
OS4 McIlwaine Park upgrade	\$1,650,000	Council	To be funded by Section 94 Contributions.	Upgrade works and sea wall along foreshore plus allowance made to reconfigure existing car park due to new land bridge.
OS5 River Activation	\$ 5,000,000	Council	Further investigations into the detailed design of the river activation project, including the potential for a river pool to be undertaken by Council.	Potential river pool design could be enclosed baths on pylons with impermeable basin and long term option to remove basin to enable use of natural river water recommended design option.
			To be funded by Section 94 Contributions.	
OS7 Community Centre	\$ 6,500,000	Council	Further investigations into the various options for accommodating the additional space will be undertaken by Council.	Additional facilities recommended for Rhodes East, as upgrades to the existing community centre, an alternative site or as part of a mixed use scheme.
			To be funded by Section 94 Contributions.	
Education				
E1 New primary school land and building shell	Primary education contribution: \$15,800,000	State Government / Proponent	To be partially funded by SIC and primary school delivered via a Planning Agreement.	Delivery of the primary school shell to be linked to the mixed use development within the Rhodes East Gateway.
	Secondary education contribution: \$ 5,100,000		To be determined in consultation with the Department of Education.	
E2 New primary school fit out		State Government	To be determined in consultation with the Department of Education.	

7.2 Infrastructure funding

The items identified in Table 14 will be funded through different mechanisms depending upon whether they are state, district or local items.

District infrastructure

District infrastructure is provided by the NSW Government.

The Department recommends the application of a Special Infrastructure Contribution (SIC) to the Precinct to deliver long term State infrastructure needs. The SIC is a financial payment made by the developer during the development process to help fund regional infrastructure, alongside funding by the NSW Government through the Budget process. This combination ensures the cost of infrastructure is shared proportionally between the broader community and new residents.

The Department has investigated and modelled the capacity of future development to pay a SIC contribution in consultation with key infrastructure agencies and stakeholders. A SIC rate will be determined through an analysis of the precinct's growth patterns, infrastructure needs and costs, and development feasibility to ensure any change does not impact on the ability of the development to be delivered.

The finalised infrastructure list and SIC rate will be publicly exhibited at a later date. It is anticipated that the SIC levy will be approximately \$20,000 per new dwelling. Initial testing has confirmed an ability to pay.

NSW Government may part forward fund key infrastructure, following entering into commercial arrangements with the relevant proponent to deliver the infrastructure. It is anticipated this would be by way of planning agreements.

These agreements will be finalised prior to the rezoning of the land and will be publicly notified for a period of 28 days, in accordance with the planning regulations.

Infrastructure items identified in Table 15 represent upgrades that are necessary to be delivered regardless of the outcome of the proposed draft Precinct Plan. These options will require further investigation by TfNSW and RMS, including detailed engineering design and will require significant government funding and approvals.

Local infrastructure

A number of upgrades to local infrastructure have been identified including local road upgrades, provision of and upgrade to existing social infrastructure and open space, and improvements for pedestrians and cyclists.

Local infrastructure is delivered by local councils. It includes infrastructure designed for local communities and is funded under Section 94 of the Environmental Planning and Assessment Act 1979.

City of Canada Bay Council has proposed to amend its Section 94 Development Contributions Plan (2015) to include the local infrastructure items identified and a draft is exhibited alongside this draft Precinct Plan.

TABLE 15: POTENTIAL REGIONAL INFRASTRUCTURE UPGRADES IDENTIFIED		
Measure	Responsibility	
Public transport		
Rail – potential upgrades and improvements including:	State Government	
 Timetable adjustments 		
 Quadruplication of the Northern Line 		
 Mass transit introduction 		
Bus – potential upgrades and improvements including:	State Government	
 Increased frequency of existing services 		
 Improved network design 		
 Improved bus stops 		
 Upgraded interchange facilities at Rhodes Station 		
Regional/State road network		
Various intersection upgrades including:	State Government	
 Devlin Street / Victoria Road 		
 Church Street / Morrison Road 		

- Church Street / Junction Road
- Concord Road / Homebush Bay Drive
- Homebush Bay Drive / Rider Boulevard



Source: RobertsDay

Precinct Support Scheme (PSS)

NSW Government has allocated approximately \$5 million to fund local infrastructure upgrades at Rhodes East via the Precinct Support Scheme (PSS). The intention of the funding is to enable Council to provide local infrastructure that will directly benefit the community. The funding is in addition to development contributions (i.e. Section 94 contributions) and could be used by Council, for example, to develop a new local park, upgrade existing open space, improve the local streetscape or provide additional community facilities, amongst other things.

Precinct support scheme projects need to satisfy a number of criteria including:

- Ability to be delivered within a short timeframe;
- Ability to provide direct benefits to the community; and
- Is not already funded by other means.

The precinct planning process and the community consultation will identify a number of projects which could be funded (or partially funding) through this scheme. Potential projects are identified in the draft Precinct Plan and include:

1) Community Centre – additional community facilities that builds upon those provided at The Connection at Rhodes West, to ensure provisions across Rhodes are complementary and meet the needs of the community.

2) River Activation – installation of boardwalk in Brays Bay to enable active uses, with the potential for a filtered water river pool, pending water quality.

3) McIlwaine Park Upgrade – upgrades to the existing park to improve the play area, car park and foreshore access.

The Department is seeking community feedback via an online survey on which of these projects the community would like to see funded through the Precinct Support Scheme.

Following public exhibition, City of Canada Bay Council and the Department will work together to review the shortlisted projects and reach agreement on the recommended project(s) to receive Precinct Support Scheme funding. The Department and Council will then enter into a funding agreement to detail the works to be delivered, the project costs, project completion milestones and payment arrangements.

7.3 Utilities and services

As Rhodes East is already an established area, all utility services are currently available to the precinct. Augmentation (as required) will need to be undertaken as part of the next stage of the planning process.

In relation to the existing water and sewer network, trunk and treatment capacity is available but will need to be monitored in the context of the overall growth of the Greater Parramatta to the Olympic Peninsula. Upgrades are therefore likely.

As outlined in the Hydrology and Flooding Report (Appendix I), further flood modelling and investigations are required to be undertaken at subsequent stages of the development process but the following opportunities have been identified;

- Upgrading stormwater drainage;
- Provision of a flood wall;
- Use of rainwater tanks and on-site detention to improve stormwater quality.

Recycled water is not currently available at Rhodes East therefore proposed amendments to the LEP include the provision to mandate dual piping at Rhodes East.

7.4 Monitoring

To inform service and infrastructure delivery as Rhodes East redevelops over the next 15 years, the Department will monitor and report annually on:

- Number of housing approvals, construction commencements and completions for all housing types;
- Pipeline for additional housing throughout the Central District planning area (of which Rhodes East forms a part);
- Performance of City of Canada Bay Council's development processing times; and
- Population, household and dwelling projections for the City of Canada Bay LGA.



8.1 Finalisation of Precinct Plan

Following exhibition of the Rhodes East draft Priority Precinct Plan, the Department of Planning and Environment, in consultation with Council and key stakeholders, will assess the matters raised in the submissions and, where required, amend the rezoning proposal.

Once finalised, a recommendation on the rezoning proposal will be forwarded to the Minister for Planning for decision. Following any approval, amendments would need to be made to relevant legal planning documents such as the Sydney Regional Environment Plan (SREP) and the City of Canada Bay Local Environmental Plan (LEP).

Approval and publication of the rezoning would enable the lodgement of development applications for individual development proposals with City of Canada Bay Council.

City of Canada Bay Council will also adopt a site-specific Development Control Plan for Rhodes East to support the rezoning.

8.2 Key actions

	Review public	The Department will review submissions and make recommendations to the Minister regarding the rezoning for Rhodes East. Unless substantial changes to this proposal are recommended, the SEPP and SREP Amendment will be gazetted and the LEP updated following any approval by the Minister
	submissions	for Planning.
		If substantial changes are required the proposal may be exhibited again.
	Recommendations to Council	The Department will review submissions and make recommendations to Council about the draft Rhodes East DCP. Council will adopt the DCP following any necessary revision.
	Draft Special Infrastructure Contributions (SIC)	The Department will recommend a Special Infrastructure Contribution (SIC) to be applied to the Precinct. The SIC will assist in funding regional infrastructure upgrades identified to support growth over a 20 year timeframe. The SIC will be placed on exhibition at a later date.
	Planning Agreements	The Department will put in place planning agreements with the relevant landowners for delivery of State and regional infrastructure items
	Precinct Support Scheme (PSS) funded projects	The Department will assist to fund community projects with Rhodes East up to \$5 million as part of the Priority Precinct Support Scheme. The Department, in collaboration with Canada Bay Council, will review the submissions from the online survey to select the projects to be funded and enter into the required funding agreement(s) with Council.
	Council to finalise S94 Contributions Plan	Council will update their S94 Contributions Plan to reflect the infrastructure, services and facilities outlined within this report.
	Additional social infrastructure investigations	Council will undertake further investigations into the various options for accommodating additional community facilities within the precinct.
R	Detailed design of river activation	Council will undertake further investigations into the detailed design of the river activation proposal, including the potential river pool.
	Finalise location of Ferry Wharf	RMS and TfNSW will engage with the community and stakeholders regarding the location of the new Ferry Wharf.
	Finalise timing for rail timetable improvements	TfNSW is currently investigating the potential for new rail corridors and due to be completed in 2017. Timetabled upgrades are proposed in 2018 which will provide additional services through Rhodes.



