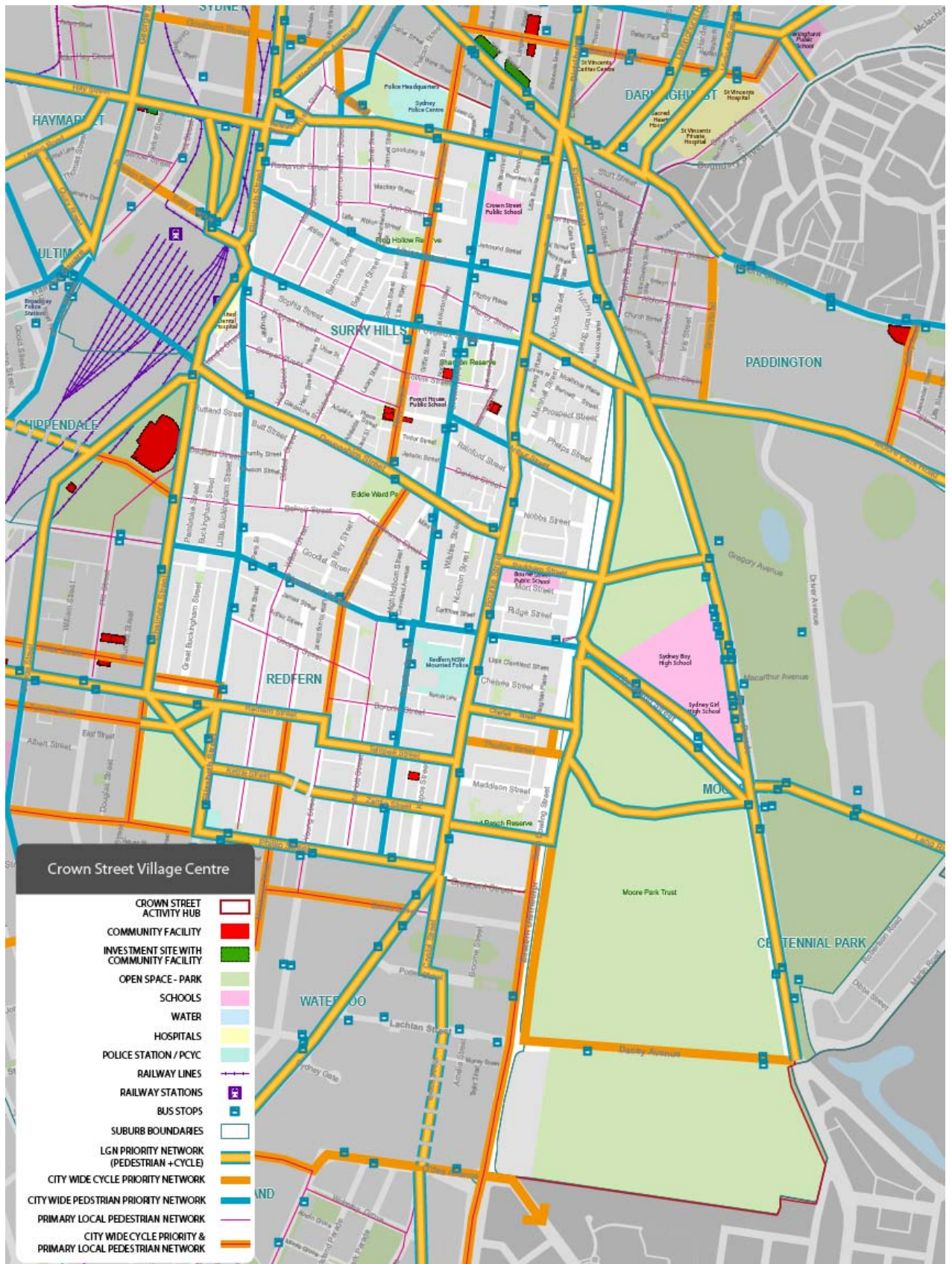


1.0 Crown Street Village Centre		
Description 	<p>Area includes Surry Hills and East Redfern.</p> <p>Land uses include a mix of commercial, retail, business, office, entertainment uses (restaurants and hotels) as well as residential and educational uses. The Surry Hills area adjoins the Oxford Street strip entertainment area. Centennial Parklands are located on the eastern edge.</p> <p>Built consist of 2 storey terraces, 4-5 storey commercial and warehouses, higher scale Department of Housing estates and recent medium density residential developments.</p> <p>Retail activity is concentrated along Crown Street and the northern end of Bourke Street. Activity is also centred around the Cleveland Street and Devonshire Street and Elizabeth Street from Foveaux to Devonshire Street. The Surry Hills Shopping Centre is also a node of retail activity.</p> <p>Streets in Surry Hills East generally have mature street trees, and pocket parks at road closures are characteristic of the area</p> <p>The area has a fine grain street network with streets and laneways that provide many options for route choices.</p>	
	Key Streets Crown Street Devonshire Street Telopea Street Elizabeth Street Zamia Street	Albion Street Chalmers Street Bourke Street Foveaux Street Phillip Street
Key Attractors/ Destinations	Central Station Prince Alfred Park (Pool and Tennis) Shannon Reserve (Surry Hills Markets) Surry Hills Shopping Centre Schools – Bourke Street PS, Crown Street PS, Sydney Boys and Girls High School, Forest House PS. <u>Galleries/ Exhibition Spaces incl Brett Whitely Studio.</u>	Crown street Commercial Surry Hills Library Child Care and Community Centre Redfern Park Moore Park Devonshire Street Commercial/ retail Elizabeth Street Cleveland Street restaurants; <u>Theatres – incl Belvoir Street;</u> <u>Ron Williams Over 55's Centre</u>
Public Transport	Central Station Elizabeth street Buses Cleveland Street Buses	Crown Street/ Bourke Street Buses Baptist Street Buses

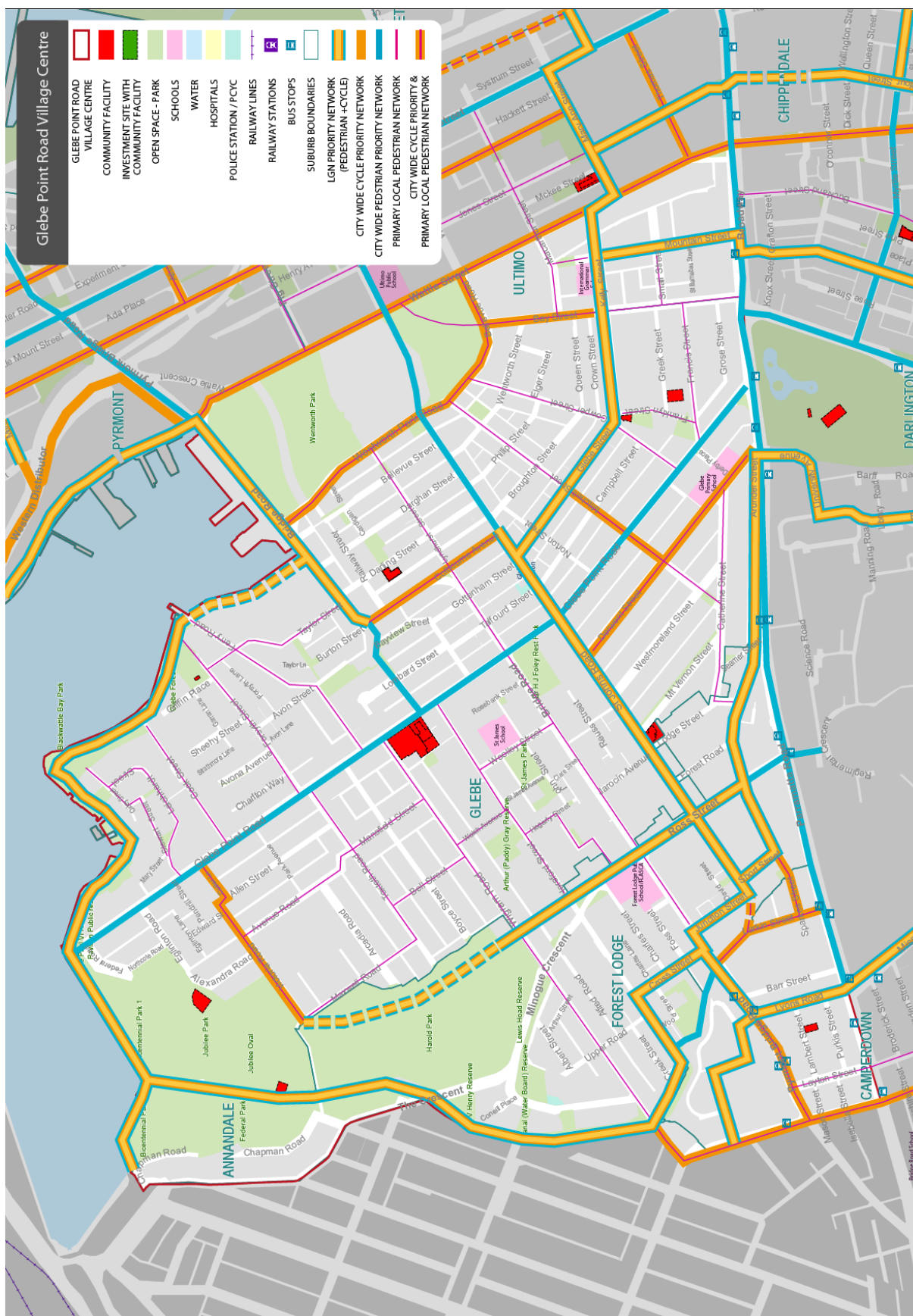
ATTACHMENT A




Note: Detailed planning may result in some re-alignment to route selections.

2.0 Glebe Point Road Village Centre		
Description	<p>Includes Glebe, Forest Lodge, northern section of Camperdown and section of Ultimo around Mountain Street.</p> <p>The established areas of Glebe / Forest Lodge are mostly residential. Buildings include heritage terrace housing mixed with a number of walk-up apartments and residential blocks.</p> <p>Strip retail and small scale commercial provide a focus of pedestrian activity along Glebe Point Road and Ross Street. Broadway Shopping Centre precinct also generates significant pedestrian activity. The close proximity to Sydney University brings significant pedestrian flow from the campus to Glebe Point Road/ Broadway to access services and public transport.</p> <p>Upgrade of Glebe foreshore parklands provides a continuous foreshore access from Chapman Road to Glebe Rowing Club at Ferry Road with off street pathway connections to Orphan School Creek.</p> <p>The Harold Park site is currently subject to planning study for future zoning to residential and commercial use for which pedestrian and cycle connections need to be considered. Ross Street should be considered as a future priority pedestrian and cycle link between Glebe Foreshore Parklands, Harold Park and Sydney University.</p> <p>Small, regular blocks may with rear lane access offer many movement choices. Connectivity of the street and lane pattern supports pedestrian activity. However the major roads Parramatta Road Minogue Crescent and Ross Street, Bridge Road, Wigram Road limit connections to the dedicated crossings.</p> <p>Escarpments along Minogue Crescent and along the east side of the Harold Park site also limit connectivity</p>	
Key Pedestrian Streets	Glebe Point Road St Johnson Road Bridge Road	Mountain Street Ross Street Bay Street
Key Attractors/ Destinations	Glebe Street Glebe Markets Broadway Shopping Centre Glebe Primary School Forest Lodge Primary International Grammar School Peter Forsyth Auditorium Sydney Secondary College. Booler Community Centre	St Scholastica Victoria Park Glebe Parklands Wentworth Park. Glebe Library and Customer Service Centre. PCYC Glebe /Leichhardt Galleries/ Exhibitions Spaces
Public Transport	Glebe Point Road Buses Parramatta Road buses Light Rail – Stations at Wentworth Park, Glebe, Jubilee Park	

ATTACHMENT A



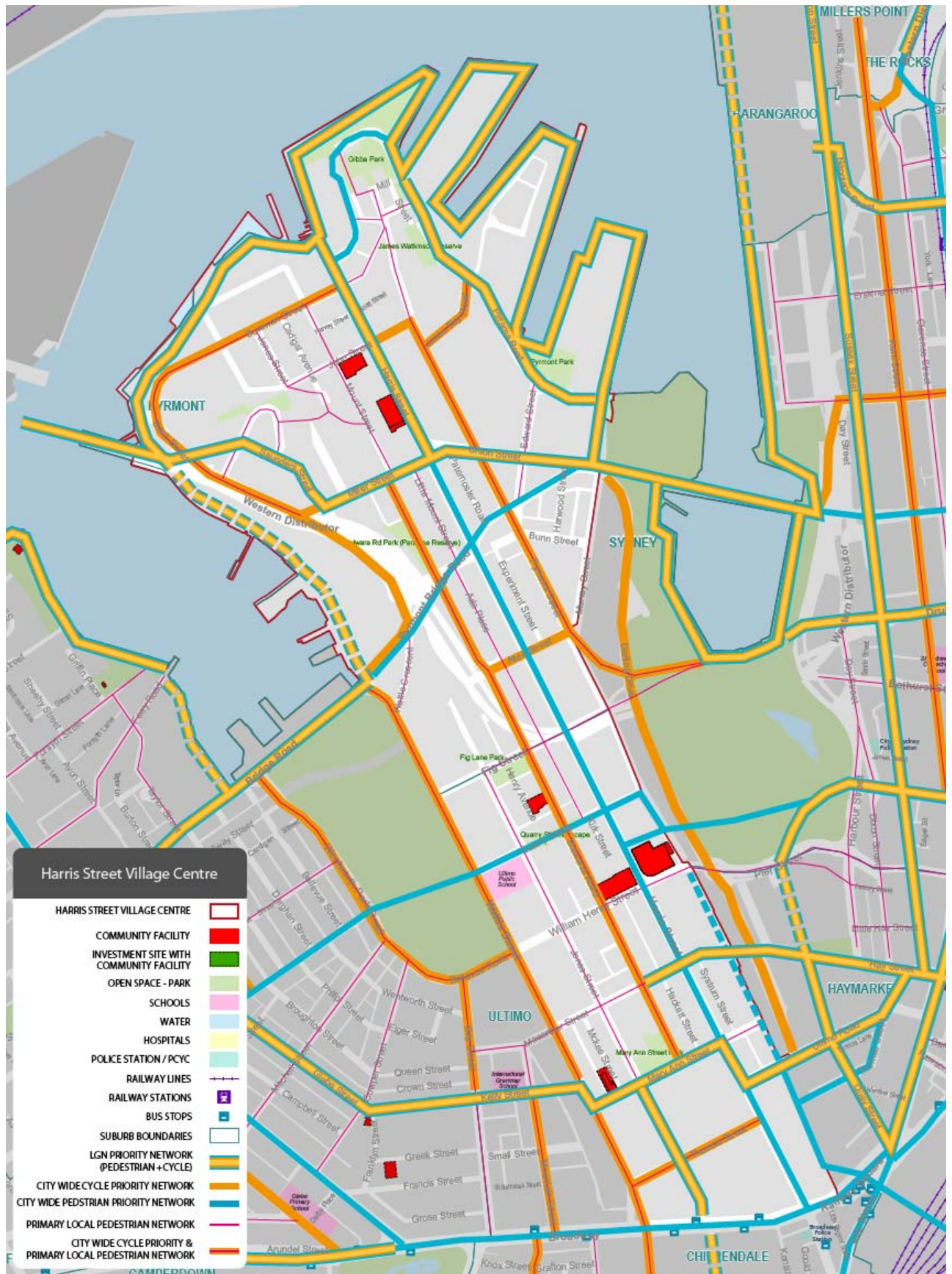
Note: Detailed planning may result in some re-alignment to route selections.

3.0 Green Square Village Centre		
Description 	<p>Includes the areas of Rosebery, Beaconsfield, Waterloo (part of) and East Alexandra.</p> <p>This area is the focus of significant current and future urban renewal from industrial to residential and commercial development. The Green Square Town Centre will form the nucleus of a new activity village centre for southern part of the LGA.</p> <p>Area has a Coarser street grid than northern sections of LGA with large street blocks with medium to large lot sizes which reduce pedestrian connectivity. Urban renewal will provide additional north south and east west streets and through site links to improve access to the existing street network.</p> <p>Buildings range from new residential developments, established residential areas, and mixed commercial / warehouse buildings. In Rosebery single detached residential houses on large allotments is an unique characteristic of the area.</p> <p>Alexandra Canal is a significant feature of the landscape within the Southern Industrial Area that provides the opportunity for improved access and connectivity.</p> <p>The topography is generally low lying and flat with some rises in the south part of Beaconsfield and around Dalmeny Ave/ Kimberly Grove, Rosebery.</p> <p>Views towards the Central Sydney skyline are available from streets in Beaconsfield, along the Botany Road corridor.</p>	
	<p>Medium density Residential Employment areas Educational – Taylor College South Sydney Corporate Park Big Box Retail South Sydney Markets (Sundays) Waterloo Oval (Youth Facility and Skate park) Gardeners Road Public School Green Square Library/Customer Service Centre; Perry Park / Basketball Facility</p>	<p>Mt Camel School Alexandra Park Cleveland High Public School Gardeners Road Rosebery Commercial/ Retail Turruwal Park Beaconsfield Park/ Tennis Danks Street In the future the Green Square Town Centre will be a focus of commercial and retail services with surrounding residential development</p>
Key Pedestrian Streets	<p>Botany Road Dalmeny Ave Dunning Avenue Doody Street Bourke Street</p>	<p>Alexandra Canal Elizabeth Street</p>
Public Transport	<p>Green Square Station Mascot Station (Botany Council LGA) Botany Road Buses – 309, 310 , M20 Joynton Ave Buses - Metro 20 Elizabeth Street Buses - 343 Bourke Street Buses – 301, M20</p>	



Note: Detailed planning may result in some re-alignment to route selections.

4.0 Harris Street Village Centre		
Description	<p>The Ultimo-Pyrmont topography is characterised by a central ridge along Bulwara Road and Harris Street. The excavated cliff faces form dramatic features at Pyrmont Point, Distillery Hill, along the railway corridor through Pyrmont and along parts of the Ultimo ridgeline.</p> <p>The area is characterised by a mix of recent residential development especially on Pyrmont peninsula, large scale woolstores, warehouses, fine grain, low scale residential and mixed use and buildings large commercial and educational buildings of South Ultimo.</p> <p>Foreshore parkland and wharves provide harbour foreshore access from Pyrmont Bridge to Anzac Bridge.</p> <p>The Glebe Island Arterial, Western Distributor and viaducts dominate part of the western landscape of Pyrmont and Ultimo, including the foreshore areas of Blackwattle Bay</p> <p>The close proximity to the City and quality of the pedestrian network within the peninsula are reflected in a study that shows more than 35% of Pyrmont residents who work choose walking as their preferred mode of transport for trips to and from work.</p> <p>Connectivity with the city is provided at Pyrmont Bridge and other locations as either at grade facilities through Darling Harbour or as part of the elevated road systems.</p> <p>Major areas of employment and attractions such as Star City generate pedestrian activity particularly at the access point across Pyrmont Bridge.</p> <p>The University precinct generates heavy pedestrian volumes across Harris Street between the campus areas.</p> <p>Steps and lifts provide connections across the escarpments and improves the permeability and access around the area.</p> <p>The main north-south streets such as; Harris, Wattle, Pyrmont and Jones terminate to the north with water views.</p> <p>East west streets such as Quarry, William Henry provide views to Glebe and City Centre from the ridgeline.</p>	
Key Pedestrian Streets	Harris Street Pyrmont Bridge Road Miller Street Union Street Saunders Street	Miller Street Edward Street Quarry Street Jones Street / Bulwarra Road Harbour Foreshore
Key Attractors/ Destinations	UTS Sydney TAFE Star City/ Lyric Theatre Employment areas – Darling Island (e.g. Google, Fairfax) Foreshore Parks Sydney Fish Market	Residential Ian Thorpe Aquatic Centre Ultimo Community Centre Ultimo Public School Pyrmont Community Centre Maybanke Centre International Grammar School
Public Transport	Harris Street Buses Sydney Ferries Light Rail	Sydney Metro (Future) Broadway Buses



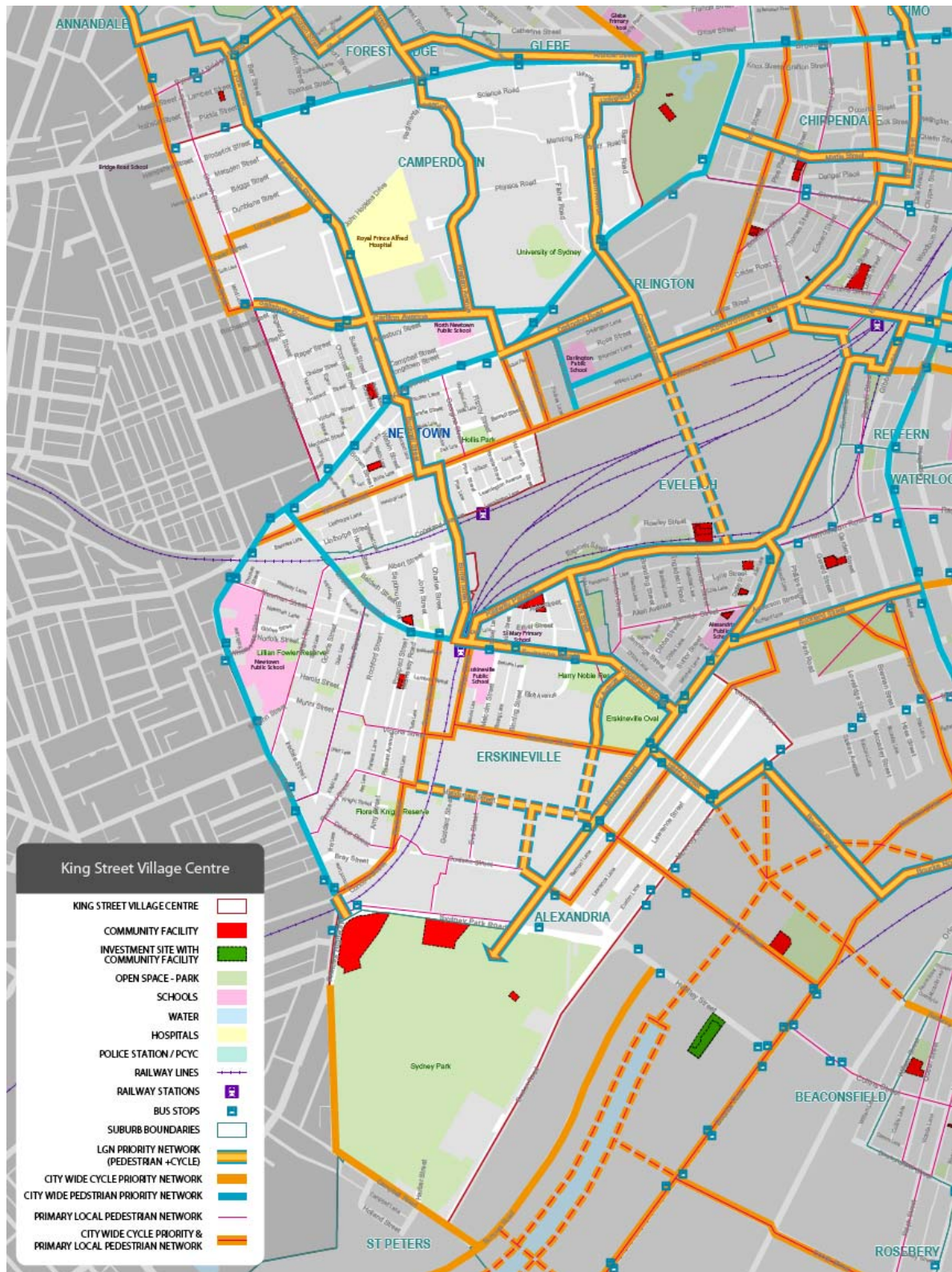
Note: Detailed planning may result in some re-alignment to route selections.

5.0 Kings Cross Village Centre		
Description	<p>Includes the villages of East Sydney, Woolloomooloo, Potts Point, Elizabeth Bay, Rushcutters Bay and Darlinghurst (north of Oxford Street).</p> <p>The land uses include commercial and entertainment areas mixed with residential. The residential areas include high density areas around Potts Point, Elizabeth Bay and Kings Cross and medium density residential areas in parts of Darlinghurst and Woolloomooloo.</p> <p>The buildings include low scale terraces / warehouse buildings with taller buildings along and near William Street. The 'Horizons' apartment tower in the north-west and 'Top of the Town' in the north are iconic landmark buildings that break dramatically from the surrounding building heights.</p> <p>Darlinghurst Road and Bayswater Road are the main commercial streets with a strong, pedestrian-focused public domain. The area hosts a wide variety of dining, shopping and entertainment options with a vibrant nightlife.</p> <p>Woolloomooloo consists of predominantly two to three storey residential of terraces built in the mid to late 1800's and their reinterpretation to public housing in the 1970's.</p> <p>The local centre at Cowper Wharf Road and Forbes Street Plaza provides a entertainment and dining precinct for tourists and visitors from surrounding urban areas</p> <p>East – west Connectivity disrupted by sandstone escarpments that define the Woolloomooloo valley and Potts Point.</p> <p>The sandstone escarpments and steep gradients from the ridgelines on the north south streets to Woolloomooloo approach William Street exceed 1:14 gradient</p> <p>Steep gradient streets include Wyde Street, Greenknowe Avenue, Clement Street, and sections of Brougham and McElhone Street.</p>	
Key Pedestrian Streets	William Street Darlinghurst Road Victoria Street Top of the Cross Macleay Street	Cathedral Street Roslyn Street Cowper Wharf Road Orwell Street
Key Attractors/ Destinations	Kings Cross entertainment precinct Kings Cross Library and NSC Kings Cross railway Station Garden Island Naval Facility St Lukes Hospital SCEGGS St Vincent's College Juanita Nielsen Centre Mary McDonald Centre	Plunkett Street Primary Sydney District Education High School Cowper Wharf Road Rushcutters Bay Park City of Sydney PCYC Galleries/ Exhibition Space incl Art Gallery of NSW. Rex Community Centre Reg Murphy Centre. Theatres
Public Transport	Kings Cross Railway Station – Eastern Suburbs Line William Street buses Darlinghurst Road/ Macleay Street buses;	Cowper Wharf Road buses; Elizabeth Bay Road buses;



Note: Detailed planning may result in some re-alignment to route selections.

6.0 King Street Village Centre		
Description	<p>The area comprises Newtown, Alexandria, Camperdown, and north Alexandria.</p> <p>The two main activity streets are King Street and Erskineville Road have a mix of institutional and civic buildings, traditional retail strip and businesses massed up along the ridgelines.</p> <p>Major employment and land uses that generate significant pedestrian activity are Sydney University and Prince Alfred Hospital.</p> <p>There are mostly fine grain street grids, many with rear lanes. Buildings are cohesive in scale and character that consisting mainly of residential use with 1-2 storey terraces and cottages, a range of converted old warehouse buildings, and contemporary apartments.</p> <p>There are new residential medium density development / warehouse conversions near Sydney Park and along south end of King Street.</p> <p>Erskineville has been subject to previous traffic calming schemes that have influenced its street character with landscaped street closures and pocket parks.</p> <p>Ashmore Estate in Erskineville is a significant urban renewal site that will bring new residential/ commercial development with and new streets to improved north south and east west connections.</p> <p>The existing barriers to connectivity include the railway corridors.</p> <p>The area overall provides easy and comfortable gradients. Only sections of Fitzroy Street, Queen Street and Bucknell and Thomas Street exceed 1:14 gradient.</p>	
Key Pedestrian Streets	<p>King Street Erskineville Road Missenden Road adjacent Royal Prince Alfred Hospital.</p>	
Key Attractors/ Destinations	<p>Sydney University Prince Alfred Hospital King Street Retail / Entertainment Erskineville Road Commercial Erskineville Oval Victoria Park Sydney Park/CARES facility; Erskineville Town Hall Joseph Sargent Centre Theatres incl Enmore, PACT Theatre Alexandra /Erskineville Bowls Club.</p>	<p>Hollis Park Schools: Newtown Library and Womens Library; Newtown Primary, Newtown High School (Performing Arts), Newtown North Primary Erskineville Primary School. Alexandra Park Community School St Marys Primary School</p>
Public Transport	<p>King Street/ City Road buses Parramatta Road/ Broadway buses King Street Railway Station St Peters Railway Station</p>	<p>Erskineville Railway Station MacDonaltdown Railway Station</p>




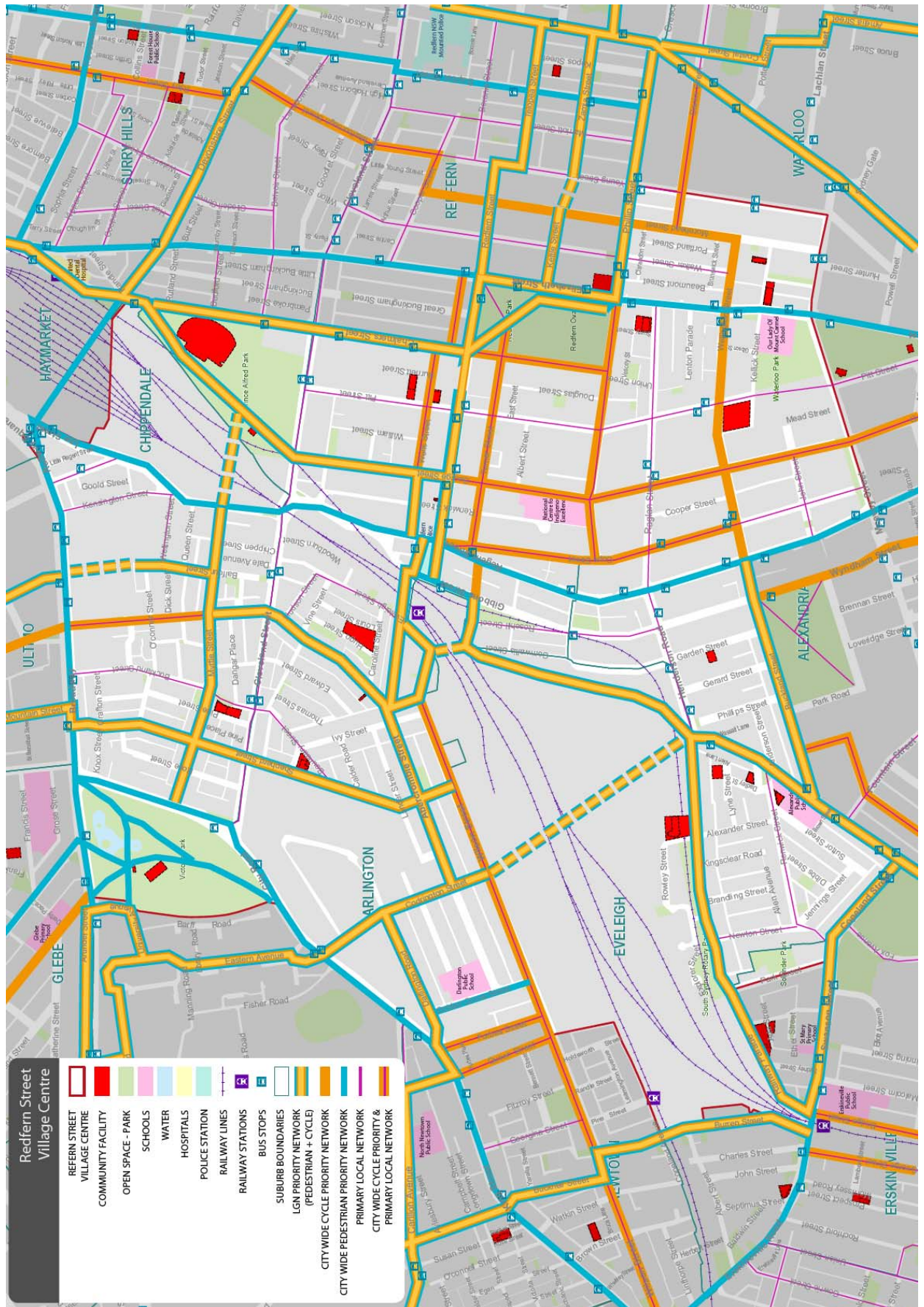
Note: Detailed planning may result in some re-alignment to route selections.

7.0 Oxford Street Village Centre		
Description	<p>Area includes East Sydney, Darlinghurst (south of William Street), Paddington, and Centennial Park.</p> <p>Oxford Street is the main focus and connector of this area that has predominantly retail , commercial, entertainment and tourism uses.</p> <p>Commercial / activity streets that generate pedestrian activity day and night include Oxford Street, Stanley Street, Victoria Street, and Darlinghurst Road.</p> <p>St Vincent's Hospital, Sydney Institute, COFA Courthouse and Centennial Moore Park and Showground precincts are main destinations in the area.</p> <p>Building character varies from two to three storey street wall buildings along Oxford Street built to the street alignment and traditional terrace housing with infill medium density and warehouses and adaptive reuse residential developments.</p> <p>The Centennial Park area is characterised by single detached houses larger blocks with landscaped front gardens. Robertson Road contrasts with attached building forms of the area.</p> <p>Taylor Square is situated at a local highpoint and provides a break from the street wall pattern of Oxford Street with a plaza area created from past road resumptions.</p> <p>The Entertainment Quarter includes night time activities. However this is separated from the public street network in the area.</p> <p>Pedestrian volumes in the area are very high during major events at Sydney Cricket Ground and Sydney Football Stadium.</p>	
Key Pedestrian Streets	Oxford Street Stanley Street Crown Street Oatley Road Victoria Street	Darlinghurst Road William Street
Key Attractors/ Destinations	<p>Oxford Street retail and entertainment strips. Stanley Street restaurants Victoria Street cafes</p> <p>Paddington commercial strip Centennial and Moore Park College of Fine Arts Sydney Institute Darlinghurst courthouse St Vincents Hospital Sydney Art College Galleries/ Exhibition Spaces Heffron Hall/ Albert Sloss Reserve</p>	<p>Sydney Cricket Ground and Sydney Football Stadium The Entertainment Quarter, Fox Studios Centennial Park, Moore Park Victoria Barracks Paddington Town Hall, library and cinemas Paddington Markets Paddington Gardens Reservoir Schools - Sydney Grammar School, Darlinghurst Primary , SCEGGS, St Francis of Assisi</p>
Public Transport	Oxford Street buses - Flinders Street/ Anzac Parade buses	St James Railway Station



Note: Detailed planning may result in some re-alignment to route selections.

8.0 Redfern Street Village Centre		
Description 	<p>The Redfern Street Village Centre boundary includes Redfern, Waterloo, Darlington, Chippendale and northern section of Alexandra.</p>	
	<p>Major pedestrian generators include Redfern Station, Sydney University and ATP site, North Eveleigh Carriageworks. Pedestrian access to the City Centre is along City Road/ Broadway, through ATP site and Regent Street, George Street/ Prince Alfred Park.</p>	
	<p>The area is predominantly residential, with major areas of retail /commercial focus along Redfern street, Regent Street and Broadway and smaller commercial hubs along Elizabeth Street, Waterloo and Abercrombie Street, Darlington.</p>	
	<p>The Dank Street galleries, cafes and providores, at the edge of the neighbourhood, are establishing a cultural / neighbourhood hub being supported by new, high quality residential development.</p>	
	<p>Buildings include rows of two storey terraces, four to five storey commercial and warehouses, higher scale Department of Housing estates and high quality residential buildings and open spaces in the east Redfern and Waterloo area. The railway corridor, ATP/ Eveleigh site and Sydney University campus are the major contrasts to the overall built form. Significant urban renewal will take place with the redevelopment of the CUB site and RWA renewal sites.</p> <p>Devonshire Street tunnel carries large pedestrian volumes under the railway reserve to connect Broadway with Surry Hills.</p>	
Key Pedestrian Streets	Redfern Street/ Regent Street Chalmers Street Lawson Square Elizabeth Street Marian Street Phillip Street Pitt Street Wilson Street Shepherd Street	Abercrombie Street, Buckland Street Shepherd Street and the East/West routes of Broadway, Myrtle And Meagher Streets. Regent Street George Street Little Eveleigh Street Ivy Street.
Key Attractors/ Destinations	Prince Alfred Park/Pool/ <u>Tennis/Coronation Centre</u> Victoria Park/Pool Redfern/ Regent Commercial strip. Redfern Station Redfern Community Centre Central Station Redfern Park South Sydney Leagues Club Waterloo Park/ Skate facility Mt Carmel Primary School <u>Theatres/ Galleries/ Exhibition Spaces</u>	Sydney University ATP GCA College (TNT Tower building) Eveleigh Precinct University of Sydney Eveleigh/ Carriage Works Darlington Public School <u>Waterloo Town Hall/Library</u> <u>Pine Street Creative Arts Centre</u> <u>Ron Williams Over 55s Centre</u> <u>Cliff Noble Activity Club.</u> <u>National Centre of Indigenous Excellence</u> <u>Cleveland Street Intensive English School</u>
Public Transport	Redfern Station Central Station Botany Road / Redfern Street buses	Broadway Buses Elizabeth Street/ Chalmers Street buses



Note: Detailed planning may result in some re-alignment to route selections.

7.0 DELIVERING THE LIVEABLE GREEN NETWORK

7.1 Sustainable Sydney 2030 Targets

Sustainable Sydney 2030 includes ten targets. The Liveable Green Network will contribute to the delivery of targets 7, 8 and 9.

TARGET 7 *By 2030, at least 10 per cent of City trips will be made by bicycle and 50 per cent by pedestrian movement.*

Current Situation

The current mode share for pedestrian and cycle use is almost 50% of all trips by residents made by walking and cycling. 92% of these walking and cycling trips are less than 2km however this drops to 25% for trips 2-5km. This provides the potential to increase the proportion of these longer trips by providing a safe and connected network.

Of this mode share the City has the highest use of bicycles for work trips. (1.7 per cent compared with 0.8 per cent average for the Sydney Region) *Cycling in Sydney, Transport Data Centre, 2005*. The Cycle Plan aims to increase the number of bicycle trips made in the City of Sydney LG A, as a percentage of total trips to 5 per cent by 2011, and to 10 per cent by 2016.

The Sydney City Subregion has the highest level of subregional self-containment for employment, with almost 60 per cent of the subregion's workforce living and working in the subregion. It has also the highest proportion of short trips—with 72 per cent of trips by residents being less than 5 kilometres long.

Contribution of Liveable Green Network to Achieve Target 7

One of the strengths of inner city living is the availability of facilities and activities within a short distance of people's homes.

The Liveable Green Network will increase mode share for walking and cycling by encouraging use as an easy active transport option for all types of trips across the City through the provision of a safe and connected pedestrian and bicycle network.

In addition, as the City is home to the greatest concentration of jobs in the metropolitan area the inner Sydney cycling network will provide a viable transport option for City workers living within 10 kilometres of the City Centre.

The Liveable Green Network also ensures that residents in the new redevelopment areas such as Green Square have similar levels of connectivity and amenity as residents throughout the rest of the City.

TARGET 8 *By 2030, every resident will be within a 10 minute (800m) walk to fresh food markets, childcare, health services and leisure, social, learning and cultural infrastructure.*

Current Situation

Sustainable Sydney 2030 proposes a network of Village Centres that will provide local retail, business, community and recreation /entertainment facilities within walking distance of the surrounding residential population. This will build on the liveability of the City's existing dense mixed use neighbourhoods that provide good access to range of facilities and employment including the City Centre.

The Village Centre planning work currently undertaken by the City aims at providing and facilitating infrastructure programs and initiatives to keep pace with the shifting demands of a growing population. This includes a focus on the new and emerging Villages Centres at Green Square and Harbour North where significant additional future residential population is anticipated.

Contribution of Liveable Green Network to Achieve Target 8

Although the Liveable Green Network is not focussed on providing the desired mix of services and facilities at each Village Centre it will deliver convenient bicycling and pedestrian connections to and between the Village Centres to facilitate local access to these amenities.

TARGET 9 *By 2030, every resident in the City of Sydney will be within a three minute walk (250m) of continuous green links that connect to the Harbour Foreshore, Harbour Parklands, Moore or Centennial or Sydney Parks.*

Current Situation

Convenient and safe access to the City's major parks and Harbour Foreshore is sometimes diminished by busy roads, poor crossing opportunities, lack of directional information and network gaps caused by private property.

Improvements are currently underway with the Bourke Street cycleway providing a north south link from Alexandra to the Harbour foreshore Woolloomooloo with numerous connections into the Centennial Parklands.

Contribution of Liveable Green Network to Achieve Target 9

Target 9 is spatially focussed in aiming for all City of Sydney residents to be within three minute walk or 250m to continuous green links that connect to major parklands and the Harbour Foreshore.

The Liveable Green Network master plan provides a hierarchy of route types ranging from city wide pedestrian and cycle priority routes to village Centre primary local pedestrian network. Collectively these routes are defined as "continuous green links" for the purposes of Target 9.

Figure 8 depicts basic 250m catchment mapping to ascertain the proximity Liveable Green Network priority routes to City residents. Additional GIS Pedestrian Permeability Analyses to evaluate walkable access to the network will further refine and inform the delivery of this target.

Figure 8 shows that over 90% of the local government area is within 250m proximity to the City wide network. Gaps in the Glebe, Alexandra and Zetland areas are addressed when the Village Centre local pedestrian network routes are taken into account which provides links to City-wide network.



Figure 8 250m Catchment – City-wide Priority Network

7.1.1 Measuring Successful Achievement of Targets

Measuring the success of the Liveable Green Network and Sustainable Sydney 2030 Targets will require gathering data to develop baseline measures of levels of walking and cycling in order to track progress over time.

Potential data sources include:

- Australian Bureau of Statistics Census data – journey to work
- Collecting qualitative data about pedestrian activity
- utilising GIS Pedestrian Permeability Analyses to evaluate walkable access to activity centres, community facilities, schools and transport stops
- undertaking pedestrian counts in targeted locations.

7.2 Project Governance Framework

Delivering the Liveable Green Network will involve a **cross divisional approach** of City of Sydney departments as outlined in the Table below.

Cross Divisional Approach			
City Strategy and Design	City Infrastructure/ Parks	City Projects	City Engagement
City Plan	Implementation PCTC plans	Major Projects Delivery	Promotion of network
Public Domain Planning	Footpath reconstruction Program	Streetscapes	Key messages
Traffic / Parking management	Footpath asset inspections/ audits	Parks	Management City Website
Public Transport Planning	Greening Sydney Plan	Cycleways	
Cycle Planning			
PCTC Plans			

Project scoping, development and implementation will be directed by the City's **Project Management Governance Framework** (Figure 9) which will provide active direction and reviews to ensure achievement of planned outcomes. The Framework will facilitate strategic management of issues, resources and decisions across a portfolio of projects and City divisions.

The Framework includes the formation of an **Initiation Review Group** which will provide an oversight and review role to ensure projects are appropriately developed, scoped, analysed and considered in terms of their impact on the Long Term Financial Plan, the Workforce Plan and the Asset Management Strategy. The Chief Operating Officer will chair the Initiation Review Group.

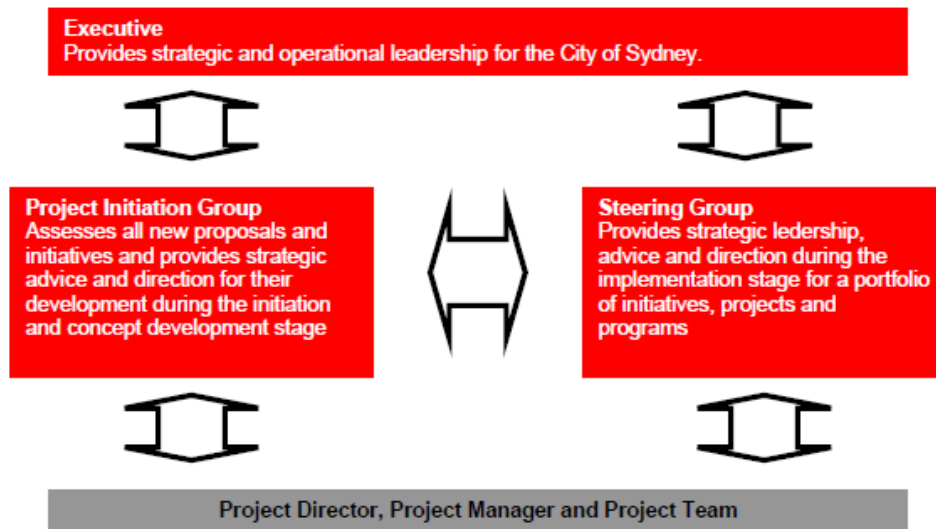


Figure 9 – Project Governance Framework

7.2.2 Setting Project Priorities

Setting project priorities will require additional assessment and planning particularly for the pedestrian network.

The following criteria should be considered in assessing project priorities.

- Consistent with the strategic directions and targets as set out in Sustainable Sydney 2030, the Cycle Strategy 2007-2017 and the Liveable Green Network masterplan;
- Connects to a Village, Main Activity Street, or an existing or future Village Centre;
- Connect to or complement existing and future active and public transport nodes and routes;
- Connect to an employment or retail centre, an urban renewal area or an educational site;
- Connect to the NSW government's Regional Cycling Network and/or Regional Recreation Trails;
- Connect to major park or recreation facilities or Harbour Foreshore.
- Provide for the construction of a 'missing link' in a priority corridor or section of the network.

7.3 Network Gaps

The Network Assessment detailed in **Volume 2** has identified various pedestrian network gaps that are mapped in Figure 10.

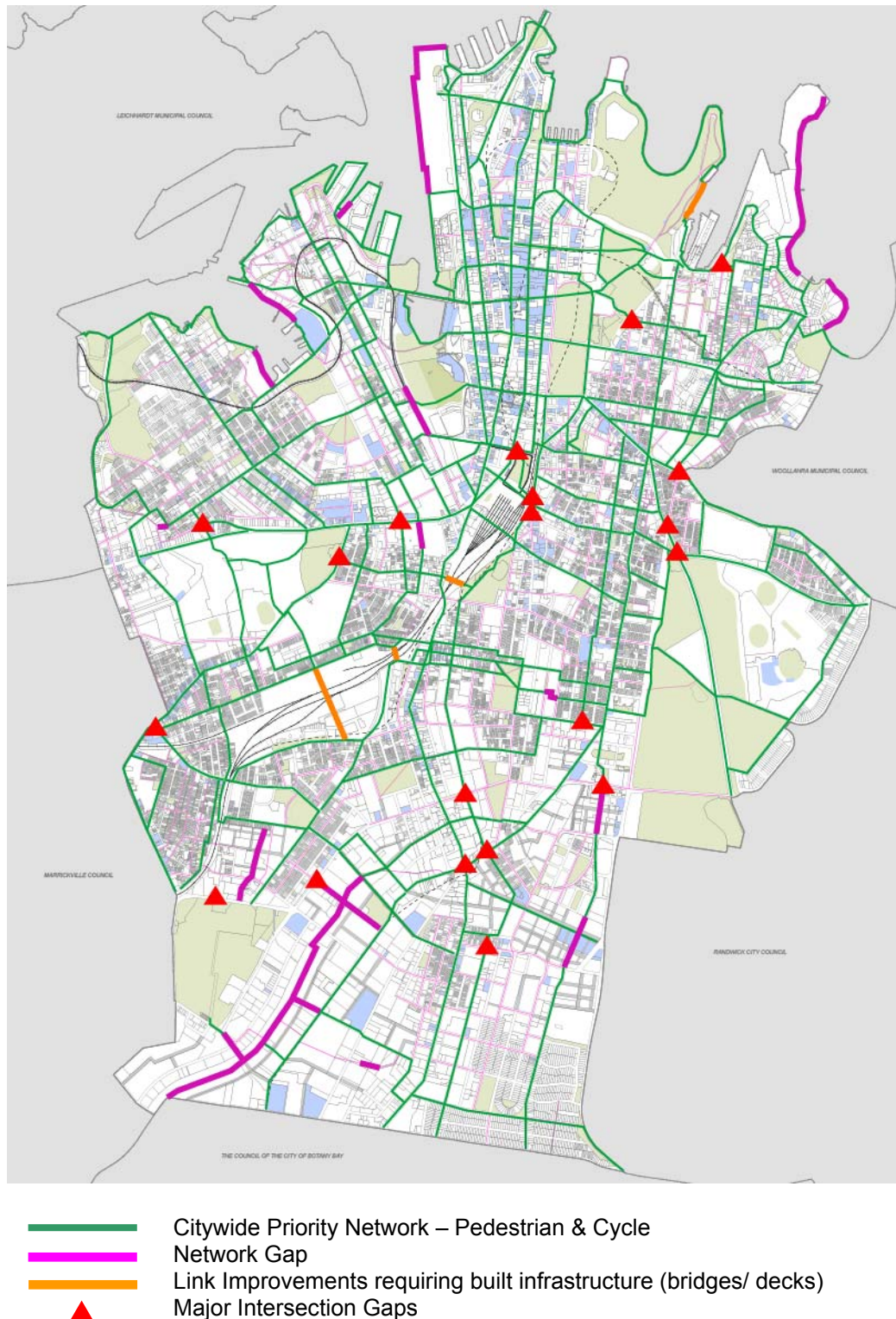


Figure 10 Network Gaps

Details of network gaps are provided in the **Volume 2** City-wide network assessments.

Achieving a **connected cycleway network** is largely dependent on the rollout of the separated cycle facilities from which the City is starting from a low baseline with very few facilities previously built. This shortfall is now addressed with the City's commitment to a 200 kilometre network including 55 kilometres of separated cycleways.

The City however already has an **extensive footpath network** that provides wide access but has the following shortfalls:

Network Gaps created by **property restrictions** will largely be taken care of by the urban renewal process. Sites at Alexandra Canal, Green Square, Barangaroo, the CUB site and Ashmore Estate have planning controls and provisions to provide access through street and pathway connections. Additional Harbour access at **Garden Island** will need support from the Federal Government/ Department of Defence. Additional access around foreshore properties at **Elizabeth/ Rushcutters Bay** will also require complex negotiations between State Government and private land holders. Key infrastructure gaps include **bridge connections** at North Eveleigh, Redfern Station and links between Prince Alfred Park and Chippendale.

Poor intersection treatments. Gaps are created where crossing facilities are sometimes inadequate or non-existent. Many of these are on the State Road network where the balance between vehicle and pedestrian mobility can be more complex. Intersection treatment gaps in the local road network have largely been identified by the Pedestrian Cycling and Traffic Calming (**PCTC**) plans and will be addressed when these plans are put into action.

Narrow Footways that have access further impeded upon by signs, street trees and other elements.

7.4 Current Projects

Fig 11 shows the current distribution of **projects** that will contribute to the delivery of the Liveable Green Network by addressing **network gaps** and improving public domain quality.

Projects that will advance the delivery of the Liveable Green Network include:

- Cycleway implementation;
- Park and Open Space upgrades;
- Streetscape Upgrade Program;
- Public Domain Planning projects;
- Pedestrian Cycle Traffic Calming (PCTC) plan implementation;
- Urban Renewal project planning;

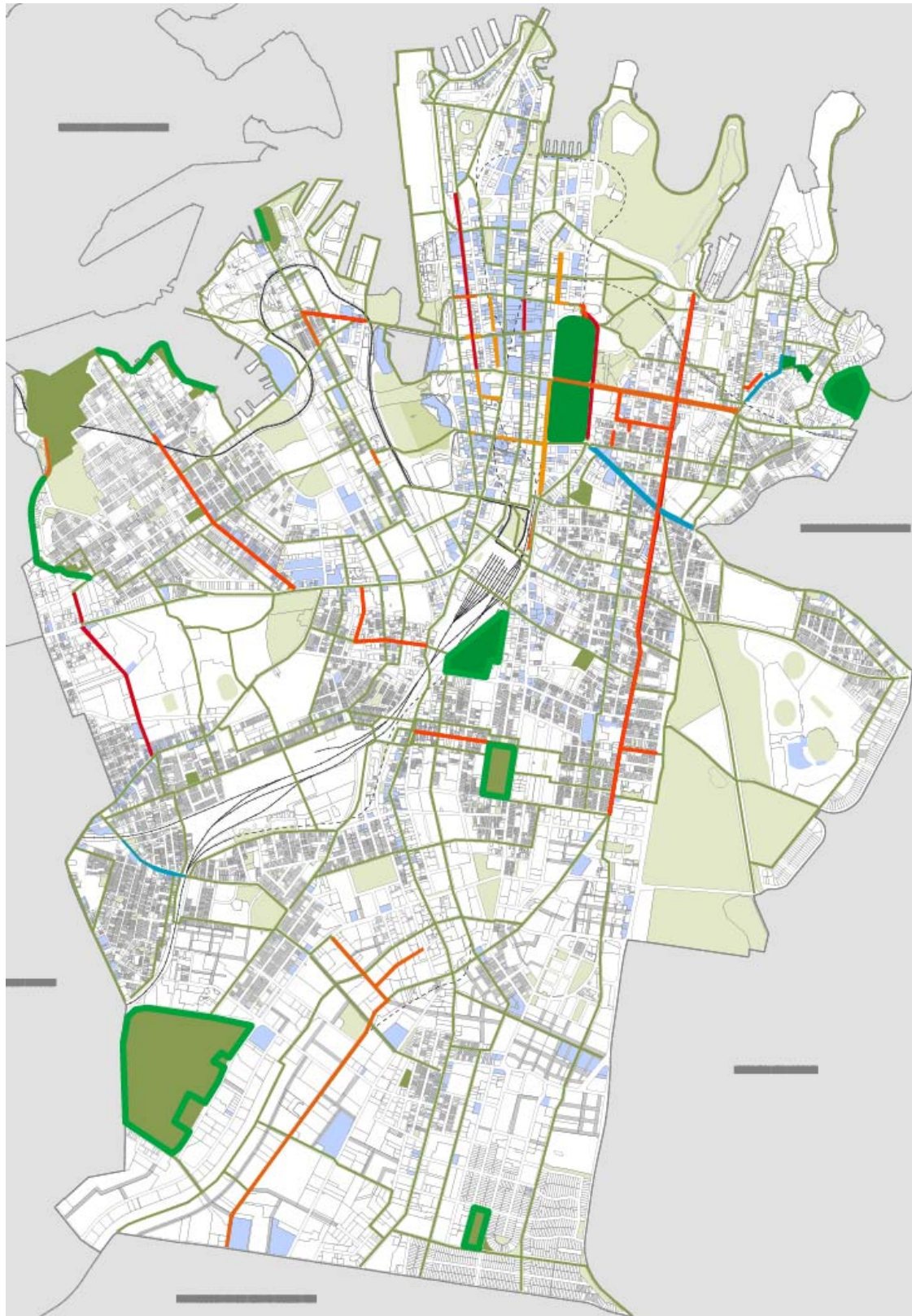






Figure 11– Location of Current Projects that contribute to Delivery of the Liveable Green Network




7.4.1 Cycleway Plan Implementation

The implementation of the City of Sydney Cycle master plan will provide a 200 kilometre network (including 55 kilometres of separated cycle ways).

To build this network the City has allocated \$76 million over the next four years.

Key projects underway include:

King Street Cycleway	<p>The King Street cycleway will link cyclists travelling to and from the inner west, across Pyrmont Bridge, to the rest of the City. Construction of the dedicated, separated cycleway between Sussex and Clarence Streets was completed in early May 2009.</p> <p>It is proposed that this cycleway will be extended across the city centre to link up with the College Street cycleway and create dedicated east-west route for cyclists across the city.</p>	 <p>King Street Cycleway</p>
Bourke Street Cycleway	<p>The Bourke Street Cycleway project will provide an important north-south connection between the Green Square Urban Renewal Area and Sydney Harbour, the CBD and Eastern Suburbs.</p> <p>The project also provides pedestrian benefits including kerb extensions at some intersections, new crossings, and traffic calming measures.</p>	 <p>Bourke Street Cycleway</p>
Bourke Road/ Mandible/ Bowden Street	<p>The Bourke Road section of the cycleway is the key link between the Airport, Green Square and the City was completed in January 2010.</p> <p>Separated cycle ways are also provide along Mandible and Bowden Streets to improve connections to Erskineville and Waterloo.</p>	 <p>Bourke Road Cycleway</p>
Union Street Cycleway	<p>Union Street is an important route for bike riders travelling to the City from Pyrmont and the suburbs of the inner west.</p> <p>The project provides a separated two way cycleway along the northern side of Union Street from the western end of Pyrmont Bridge to Union Square. Widening footpaths in selected areas to provide a safe route for the exclusive use of pedestrians.</p>	 <p>Union Street Cycleway</p>

Missenden Road Cycleway	<p>The cycleway will run from King Street, down Missenden Road, crossing Parramatta Road to Lyons Road, where it will continue to Pyrmont Bridge Road.</p> <p>It will provide route between existing cycle ways on Wilson Street, via Bucknell Street and future cycling facilities to the Glebe Foreshore, from Pyrmont Bridge Road.</p> <p>Pedestrian benefits include Raising the road surface at the entrances to Longdown, Campbell and Aylesbury Streets to calm traffic and increase pedestrian safety and widening the footpath on the western side of Missenden Road at King Street.</p>	 <p>Artist Impression – Missenden Road Cycleway</p>
Kent Street	<p>The Kent Street cycleway will form a vital link in the City's integrated cycleway network.</p> <p>Forming a central spine through the CBD, this cycleway will provide a much needed missing link between the existing cycleway on the Harbour Bridge, King Street and Union Street cycleway in Pyrmont.</p>	 <p>Kent Street Cycleway</p>
College Street	<p>Project provides a dedicated route along College Street as far as the St Mary's Road intersection and then via a shared path onwards to Macquarie Street to connect with the future King Street cycleway link.</p>	 <p>College Street Cycleway</p>

7.4.2 Park/ Open Space Upgrades

The City's Park upgrade program is making substantial improvements to the quality and amenities of the City's open spaces encouraging more people to use parks.



Creating the connections to these parks is now even more important to make it easier to get to them and enjoy them.

As well as being destinations many parks provide convenient short cuts across the street grid. Internal path networks also encourage walking for exercise and enjoyment.

Park upgrade projects that contribute to the Liveable Green Network include:

	<p>Sydney Park, Alexandra</p> <p>This regional park provides an extensive internal pathway network for recreational walking/ cycling as well as through site connections from St Peters Station/ King Street to the work destinations on Euston Road.</p>	
	<p>Redfern Park, Redfern</p> <p>Recent upgrade has provided a more activated and open park that encourages through site access to Redfern Street.</p>	
	<p>Prince Alfred Park</p> <p>The park refurbishment underway will include a new aquatic centre, upgraded paths, seating, lighting and access.</p> <p>Pathway network will provide through site links from George and Pitt Street, Redfern that will link to Central Station entrance at Devonshire Street.</p>	
	<p>Glebe Foreshore Parklands</p> <p>Glebe Foreshore Parklands provide an important contribution to the Harbour Foreshore Walk with access extending from Glebe Rovers to Chapman Road.</p> <p>The pathway network provides links to Orphan School Creek , Forest Lodge.</p>	

	<p>Orphan School Creek, Forest Lodge</p> <p>Provides off street links from Wigram Road to Bridge Road along the Orphan School Creek line. Connections to Lyons/ Missenden Road cycleway will provide access to Newtown and southern areas.</p> <p>Proposed improvements to Johnstons Canal pathways will create a strong link to Jubilee Park and the Glebe foreshore</p>	
	<p>Johnstons Creek</p> <p>Proposed upgrade of an existing disjointed path system from Bicentennial Park to Wigram Road, Forest Lodge will create a more convenient and comfortable link between Orphans School Creek and Glebe Foreshore Parklands.</p>	
	<p>Rushcutters Bay Park, Rushcutters Bay</p> <p>Upgrade includes improvements to pathway network to give better access around the Park and Harbour Foreshore.</p> <p>Restoring the Holdsworth Stairway will improve connections between the Park and Elizabeth Bay.</p>	
	<p>Pirrama Park, Pyrmont</p> <p>Completion of the park has bridged a gap in the Harbour Foreshore Walk. This now allows foreshore access around Pyrmont from Pymont Bridge to the Anzac Bridge.</p>	

	<p>Turruwul Park, Rosebery</p> <p>Park upgrade includes a perimeter pathway network that encourages recreational walking/ cycling as well as convenient access across the street grid.</p>	
	<p>Victoria Park, Chippendale</p> <p>Bounded by Broadway, City Road and Sydney University the park has a great deal of through traffic as people to those destinations. It also attracts people to the pool, playground and the places to relax.</p>	


7.4.3 Streetscape Upgrades

The City's program of Village Centre main street upgrades has improved conditions for pedestrians and made it easier for them to get to the destinations clustered along these streets.

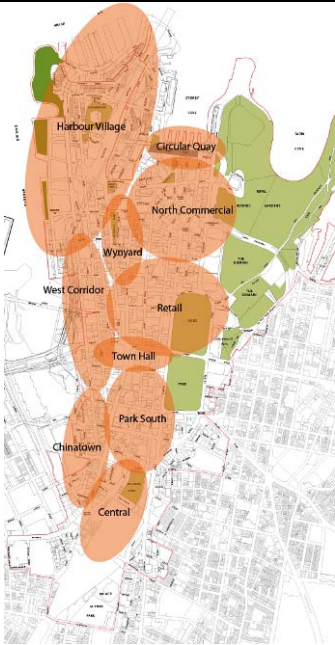
The upgrades emphasise the importance of these streets with special paving, lighting and landscape treatments to make it easier for pedestrians and bike riders to find their way through the Liveable Green Network.



	<p>Redfern Street</p> <p>Redfern Street forms a main link to Redfern Station as well as being the focus of services and shopping for the surrounding area.</p>	
	<p>Glebe Point Road</p> <p>As well as focus for shopping, services and entertainment the street provide a direct link along the ridgeline between Broadway and Glebe Foreshore Parklands.</p>	
	<p>Harris Street</p> <p>The upgrade focussed around the Union Square includes new paving, kerb extensions/ footway widening, lighting, street furniture and landscape treatments</p>	
	<p>Darlinghurst Road</p> <p>Upgrade includes new paving treatment, kerb extensions, raised pedestrian crossings and lighting.</p>	

	<p>Oxford Street</p> <p>The upgrade provided new paving, lighting and tree planting.</p>	
	<p>William Street</p> <p>The upgrade of William Street is associated with the Cross City Tunnel project. Includes footpath widening, seating, and landscape treatments</p> <p>The proposed separated cycleway will create safe cycle access than the current marked lane.</p>	
	<p>Erskineville Road</p> <p>Upgraded by the former South Sydney Council the improvements calm the street traffic with median planting, footpath widening and kerb extensions.</p>	
	<p>City Centre Streetscape Upgrades</p> <p>The City Centre streetscape upgrade program is continuing to improve the public areas of the centre with new granite paving, smart poles, street furniture and more tree planting. Projects have included footpath widening and improved pedestrian ramps.</p>	 <p>York Street</p>

	<p>City Centre Public Spaces</p> <p>The City centre public space program aims to improve the quality and usability of spaces for people to use or pass through.</p> <p>Pitt Street Mall upgrade is under under construction.</p> <p>Concept development of Richard Johnson Square and Gresham Street has been completed.</p> <p>Feasibility and design development of Town Hall Square underway.</p>	 <p>Pitt Street Mall</p>
	<p>City Centre Laneways</p> <p>This program of upgrades to City Centre laneways aims to improve accessibility and pedestrian amenity as well as encouraging more activity.</p>	 <p>Ash Street</p>

7.4.4 Public Domain Planning

	<p>City Centre Public Domain Plan</p> <p>The City Centre Public Domain Plan shows the scope, location and extent of public area improvements over the short, medium and long term.</p> <p>The City Centre has been divided into key precincts for which detailed feasibility and public area improvement proposals will be developed.</p> <p>The Chinatown Public Domain Plan (below) has been completed.</p>	
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<p>Chinatown Public Domain Plan</p> <p>The plan proposes wider footpaths and more inviting street furniture, less street clutter and more open pedestrian spaces, new plantings and lighting art installations.</p> <p>Key improvements to Liveable Green Network Routes include:</p> <p>Sussex Street – To create more pedestrian spaces along Sussex Street</p> <p>Hay Street – Conversion to a ‘mall’ to improve pedestrian connection east west</p> <p>Harbour Street –improve connection between Chinatown and the entertainment centre / Darling Harbour</p> <p>Thomas/ Ultimo Street – Intersection improvements and Create a new meeting and gathering space, increase amount of pedestrian priority space in the south of Chinatown.</p> <p>Quay Street – Create a new boulevard entry into Chinatown and improve connection to Chinatown from Central/Railway Square</p>	  <p>Artist Impression – Thomas Street closure</p>
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7.4.5 Transport Memorandum of Understanding (MoU)

The Transport MoU adopted by the City on 13 September 2010 will support the delivery of the Liveable Green Network. Relevant aspects include:

- implement light rail in the City Centre, with the focus on **George Street**, subject to satisfactory relocation of buses, traffic and parking;
- reduce the **speed limit to 40 km/h** throughout the City Centre by early 2011;
- prepare a **City Centre Access Plan** to identify both short and long term improvements to public and active transport, parking and traffic flows at key locations and other transport initiatives to enhance connectivity into and within the City Centre;
- **improve pedestrian priority** at heavily trafficked intersections and crossings in central Sydney by early 2011, including pedestrian countdown timers;
- approve **shared zones** within four weeks of application by the City, commencing with Wilmot, Central, Cunningham, Little Hay, Valentine, Factory Street and Kimber Lane by the end of 2011.

7.4.5 Pedestrian Cycle and Traffic Calming (PCTC) Plan Implementation

These plans are community-driven to manage and calm traffic on local roads, increase pedestrian, bicycle and public transport access and provide better safety and amenity for local residents.

The extent of these Plans is shown in Figure 12 and 13.

The improvements and recommendations identified in these Plans includes improved crossings, kerb extensions, footpath widening, creation of shared zones, slower traffic speeds as well as accommodating the City's cycle network. These all show good alignment with proposed Liveable Green Network corridor routes.

Figure 13 shows the pedestrian focussed PCTC improvements documented in the various reports.

The list of PCTC projects and alignment with Liveable Green Network routes are in **Volume 2**.

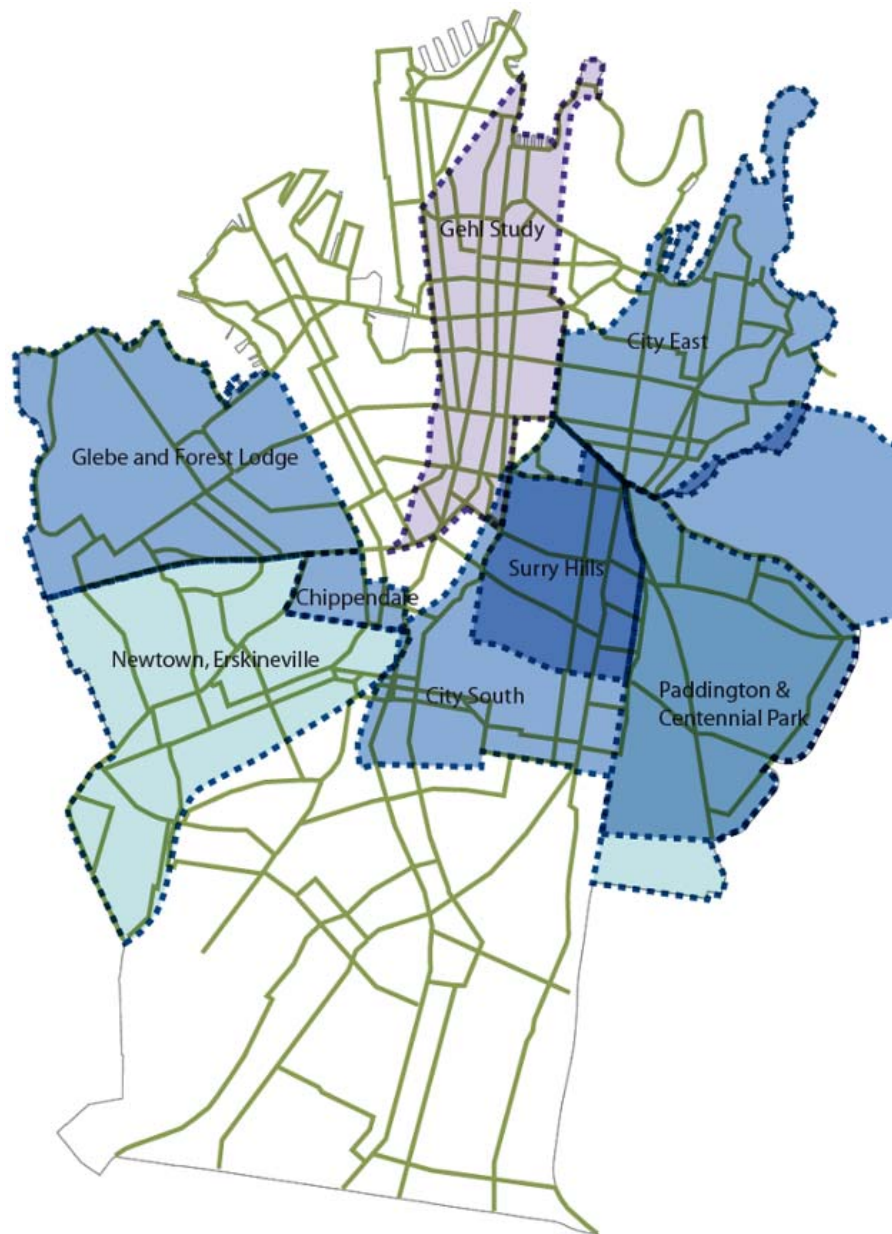


Figure 12 - Extent of Recent PCTC Plans

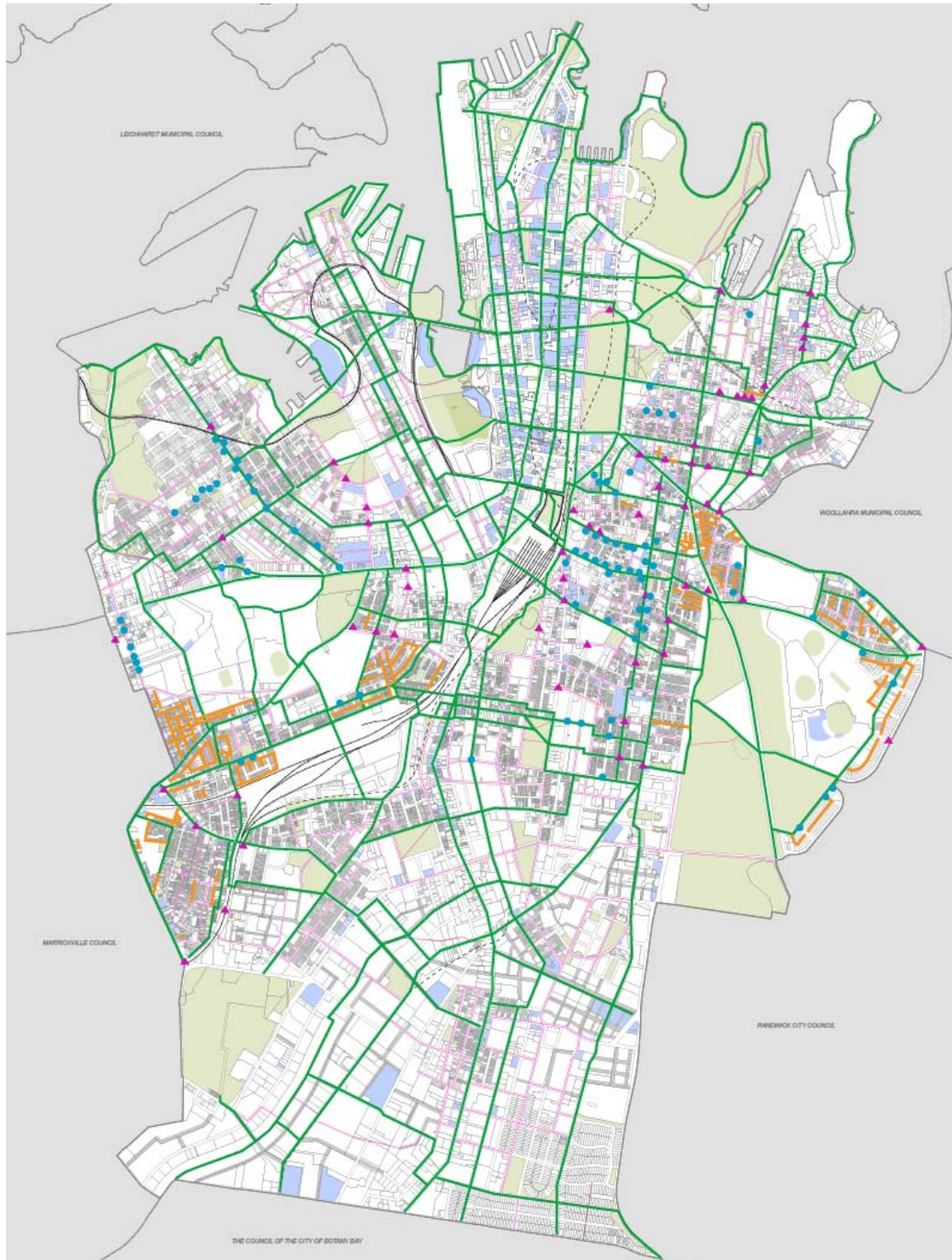












Figure 13 Distribution of PCTC recommended pedestrian improvements

- Citywide Priority Network – Pedestrian & Cycle
- Potential Shared Zone Treatments
- Kerb Extension/ Footpath Improvement
- ▲ Crossing Treatment

Key Liveable Green Network route improvements contained in the **PCTC plans** include:

<p>40km/h Speed Limit</p> <p>For all local streets</p>	
<p>Creation of Shared Traffic Zones</p> <p>The PCTC Plans recommend the majority of local lanes and minor streets be converted to shared traffic zones. This will improve the amenity and choice of local connections as well as contribute to City wide Liveable Green Network links to major destinations. The conversion of Charles Street to a shared zone will provide an improved link from Bourke Street to Moore Park.</p>	 <p>Fitzroy Street – Shared Traffic Zone</p>
<p>Chippendale PCTC</p> <p>Improvements such as kerb extensions, footpath widening, crossing treatments to Meagher/ Myrtle Street and Buckland Street improve both east west and north south access through Chippendale.</p>  <p>Meagher Street</p>	 <p>Buckland Street – Pedestrian Crossing</p>

<p>Surry Hills PCTC</p> <p>The plan provides improvement such as kerb extensions, crossing upgrades, and footpath widening to identified Liveable Green Routes including Crown Street, Elizabeth Street, Foveaux Street, Albion Street, Devonshire Street and East Belmore Park.</p>	 <p>Crown Street</p>
<p>Glebe PCTC</p> <p>The plan provides improvement such as kerb extensions, crossing upgrades, and footpath widening to identified Liveable Green Routes including Glebe Point Road, Wigram Road, Kelly Street, Wentworth Street, St Johns Road.</p>	 <p>Glebe Point Road</p>
<p>City East PCTC</p> <p>The plan provides improvement such as kerb extensions, crossing upgrades, and footpath widening to identified Liveable Green Routes streets that intersect with William Street, Cowper Wharf Road, Earl Street.</p> <p>Current projects include footpath widening at the intersection of Earl Street and Earl Place as well as shared zone treatment of the streets and improvements to Brougham Lane.</p>	 <p>Earl Street</p>
<p>Redfern PCTC</p> <p>The plan provides improvements such as kerb extensions, crossing upgrades, and footpath widening to identified Liveable Green Routes including Phillip Street, Baptist Street, Bourke Street, and Telopea Street.</p>	 <p>Baptist Street</p>



<p>Paddington PCTC</p> <p>The plan provides improvements such as kerb extensions, crossing upgrades, and footpath widening to identified Liveable Green Routes including Moore Park Road intersecting streets and will seek RTA approval to treatments on State Roads such as Drivers Triangle and South Dowling Street.</p>	 <p>Moore Park Road</p>
<p>Newtown/ Erskineville PCTC</p> <p>The plan provides improvements such as kerb extensions, crossing upgrades, and footpath widening to identified Liveable Green Routes including Erskineville Road, Little Eveleigh Street, Abercrombie Street, Bucknell Street and Burren Street.</p>	 <p>Abercrombie Street</p>

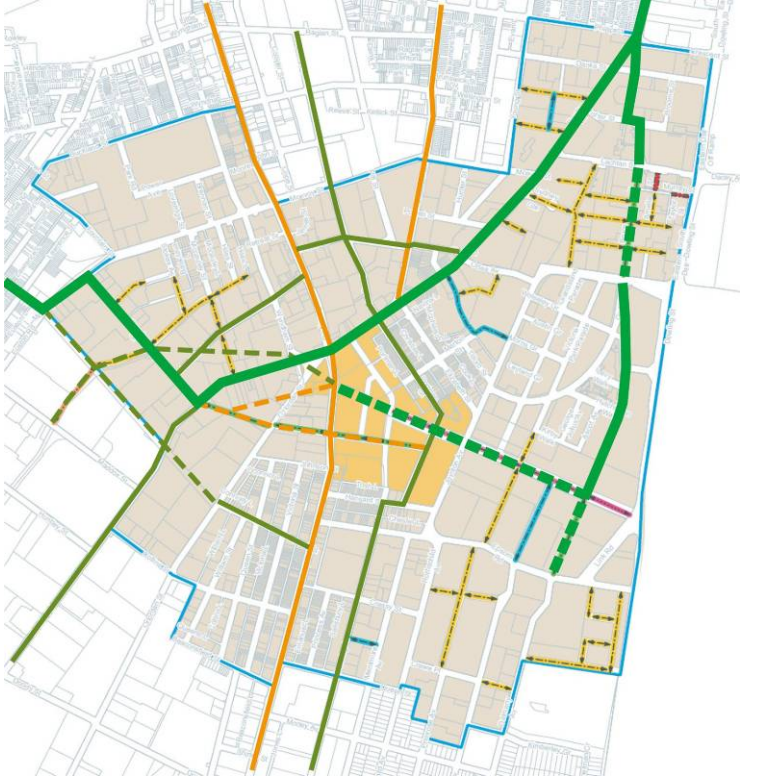


7.4.6 Footpath Reconstruction Program



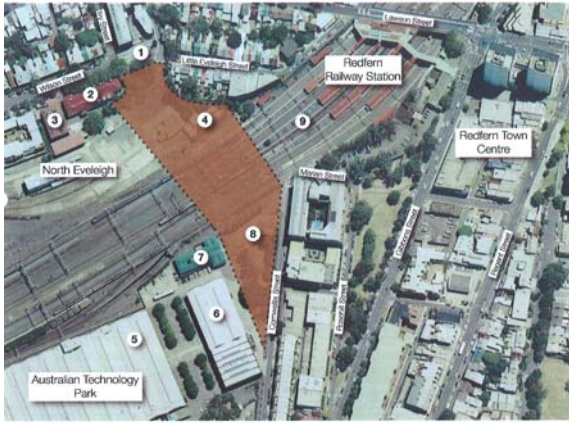
The City Infrastructure group reconstructs and makes improvements to the City's footpaths. About **35,000m²** metres of footpath is reconstructed each year with a budget of \$4.5 million.

7.4.7 Urban Renewal

Urban renewal projects provide opportunities to create **extra street connections** and through site links to improve pedestrian and cycle connectivity. Major sites include:



<p>CUB Site, Chippendale</p> <p>Urban Renewal will provide additional xx residential and commercial/educational uses. Contribution to LGN includes extension of Balfour Street to connect to Broadway as well as upgrade of street links to Regent Street.</p>	
<p>Barangaroo</p> <p>Barangaroo development will create new commercial and residential focus for the western Harbour foreshore of the City Centre.</p> <p>The project will extend foreshore access from King Street wharf to Walsh Bay.</p> <p>East west links need to be developed along Argyle Street, Margaret Street and through Kent Street Underpass</p>	

<p>Green Square</p> <p>The Green Square Urban Renewal areas include establishment of a Town Centre.</p> <p>The DCP provides for new street network to connect into the existing grid. Liveable Green Network routes include the proposed East West Boulevard and a north south connection through the Lachlan and Epsom Precinct to connect Dalmeny Avenue and Bourke Road.</p> <p>The Green Square Town Centre is proposed to become the commercial, retail and cultural hub of the Green Square urban renewal area.</p>	 <p>A map of the Green Square area showing proposed street network and Liveable Green Network routes. The map includes a grid of streets with various colored lines indicating different types of routes: solid green for public open spaces, dashed green for public open spaces, solid orange for roads/commercial podiums, dashed orange for existing heritage buildings, solid blue for existing development, and dashed blue for multi-development. The map also shows the location of the Green Square Town Centre.</p>
<p>Ashmore Estate, Alexandra</p> <p>DCP provides for new street and open space network that provides for east west connections into Harley Street and north south connections from Erskineville Oval through Sydney Park Village through site link to Sydney Park Road.</p>	 <p>A map of the Ashmore Estate in Alexandra showing proposed street and open space network. The map includes a grid of streets with various colored lines indicating different types of routes: solid green for public open spaces, dashed green for public open spaces, solid orange for roads/commercial podiums, dashed orange for existing heritage buildings, solid blue for existing development, and dashed blue for multi-development. The map also shows the location of the Ashmore Estate and its connections to Harley Street and Sydney Park Road.</p>
<p>Alexandra Canal</p> <p>Alexandra Canal Master plan and South Sydney DCP provide for setbacks and activation of the Canal edge to provide off street cycle and pedestrian connections to Green Square and southern locations of Tempe, Cooks River and Botany Bay.</p>	 <p>An illustration of the Alexandra Canal Master plan showing setbacks and activation of the Canal edge. The illustration depicts a wide, paved pedestrian and cycle path along the canal, with trees and a red flag in the background. The path is shown connecting to Green Square and southern locations of Tempe, Cooks River and Botany Bay.</p>

	<p>Harold Park</p> <p>Harold Park Planning study has investigated Liveable Green Network opportunities including connections from Ross Street into the site and connections into Glebe Foreshore Parklands.</p>	
	<p>Redfern Waterloo Authority</p> <p>Redfern Waterloo Authority includes urban renewal sites such as the Australian Technology Park, North Eveleigh, and Department of Housing sites</p> <p>Key proposal includes a pedestrian/cycle link between the railway station and eastern end of North Eveleigh.</p> <p>The development of housing sites will also provide opportunities to improve links at George Street Waterloo and Poets Corner, Redfern.</p>	 <p>Proposed Bridge – Redfern Station</p> <p>Figure 1 Approximate Design Envelope of Eveleigh Pedestrian and Cycle Bridge (as amended)</p> 




7.4.8 Opportunities for Cultural Overlays




The 2030 cultural project ideas of the **Cultural Ribbon** and **Eora Journey** present an opportunity to give special meanings to selected city-wide routes





<p>Cultural Ribbon</p> <p>Sections of the Harbour Foreshore Liveable Green Network route have an added cultural attractions and destinations located along this route that should be emphasised.</p>	
<p>Eora Journey</p> <p>Final route selection has not been identified as yet however opportunity to include added meaning indigenous heritage to identified LGN routes.</p>	





8.0 TOOLBOX DESIGN GUIDELINES





The Toolbox design guidelines provide a range of treatments and ideas that should be considered in developing the Liveable Green Network. **Specific recommendations** for network components are detailed in **Volume 2**.


1.0	Reduction in Traffic Speed 	<p>Introducing a 40km/h speed limit in city streets excluding RTA roads. Slowing traffic speeds create a safer streets for pedestrian and cyclists.</p> <p>The Transport Memorandum of Understanding (MoU) (section 7.2.6) includes a 40km/hr speed limit for the City Centre by early 2011</p>
2.0	Reduction in Pedestrian waiting Times 	<p>A major impediment and cause of frustration in the City Centre are pedestrian crossing times which can account half a journey time.</p> <p>This can be improved by using count down timers or reprogramming of signals to achieve more balance between vehicle and pedestrian movements.</p> <p>The Transport Memorandum of Understanding (MoU) (section 7.2.6) advocates use of pedestrian timers for busy City Centre pedestrian intersections</p>
3.0	Creating Shared Traffic Zones / Street Closures  <p>Fitzroy Street Shared Way, Surry Hills</p>	<p>Creation of 10km/hr shared traffic zones or closing streets to traffic reinforces pedestrian priority and create opportunities to create public spaces for sitting and landscape amenity.</p> <p>These spaces can be redesigned to change the perception that vehicles have priority. Changes can include special paving , raised thresholds at intersections, tree planting</p>


	 <p>Factory Street- Chinatown</p>	<p>and landscaping.</p> <p>The Transport Memorandum of Understanding (MoU) (section 7.2.6) includes approval of shared zones within four weeks of application by the City, commencing with Wilmot, Central, Cunningham, Little Hay, Valentine, Factory Street and Kimber Lane by the end of 2011.</p>
4.0	<p>Improving Intersections</p> <p>Appropriate intersection redesigns will be crucial to the connectivity and comfort of the network for bike riders and pedestrians.</p> <p>The range of treatments include:</p>	
4.1		<p>Priority crossing treatments at intersections for bike riders and pedestrians.</p>
4.2		<p>Continuous shared zone treatments or footpath extensions across minor intersections.</p> <p>These treatments allow - footpaths to continue without interruptions, reduce vehicle speeds and allow pedestrians to cross the road at the same level as the footpath.</p> <p>Where footpaths are</p>


	 <p>Mullins Lane / York Street</p>	<p>taken across side streets, the pavement needs to be widened. Small oases can be created where a tree and a bench offer a good place to rest.</p> <p>Currently used for dedicated shared traffic zones only. The wider use of these treatments is currently being investigated by the City to ascertain safety and risk issues in order to seek clarification with the RTA.</p>
4.3		<p>Driveways – maintain the continuity of the footpath.</p> <p>Driveways to be minimised and located to reduce conflict with pedestrians.</p> <p>Limit the width of each driveway to a minimum.</p>
5.0	Pedestrian Crossings/ Kerb Extensions	
5.1	 <p>Crown Street and Arthur Street</p>	<p>Raised marked footway crossings with kerb extensions and landscape treatments</p> <p>Safe crossings link both sides of the street physically and visually and are sited where people want to cross.</p>
5.2		<p>For some mid block treatments reduce crossing distances with median islands</p>



5.3	 <p>Albion Street</p>	<p>Kerb Extensions</p> <p>Create shortest possible crossing distance and improve visibility for pedestrians on wide streets. Devices include mid street crossing islands, kerb extensions and using a tight corner radius.</p>
	 <p>Chalmers Street</p>	<p>Kerb Extensions can also provide extra space for outdoor seating whilst still allowing room for passing pedestrians.</p>
5.4	 <p>Redfern Street</p>	<p>Paved Thresholds – using different materials on roadway to visually connect footpath at pedestrian crossings as well as slowing traffic.</p>
5.5	 <p>Darlinghurst Road/ Oxford Street</p>	<p>Reduce slip lanes to allow pedestrian crossing without interruption.</p>


6.0	Inclusive Access Considerations	
		<p>Provide adequate foot path widths;</p> <p>Reduce obstructions to allow pedestrian flow.</p>
6.1	 <p>Lift Access – James Watkinson Reserve, Pyrmont</p>	<p>Use lifts and ramps to provide access in places with steep slopes/ steps and escarpments that have no alternative convenient accessible route.</p>
	 <p>Alternative ramps access - Pyrmont</p>	
6.2	 <p>Telopea/ Young, Redfern</p>	<p>Continuous pathway treatment across minor intersections</p>




6.3		<p>Pedestrian Ramps provide access between the street for wheelchairs/ and prams.</p> <p>People with vision impairments, however, rely on the kerb to identify the transition between footpath and street.</p> <p>Kerb ramps must be designed to benefit all users.</p>
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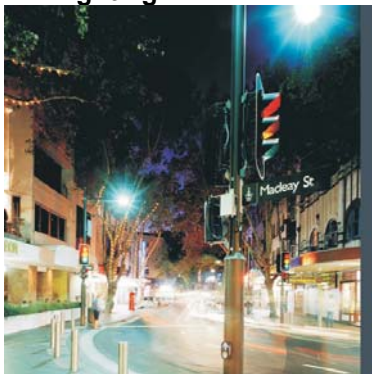
7.0	<p>Bicycle Network</p> <div data-bbox="421 725 954 1120">  </div> <p>Bourke Road</p> <div data-bbox="997 757 1343 1120"> <p>The emphasis in the bike plan is the provision of bi directional separated cycleway facilities. These may vary depending on context and constraints of individual routes.</p> <p>Attention to intersection treatments is also important to achieve a connected network.</p> </div>
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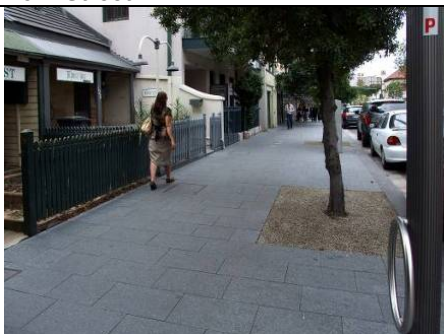


8.0	<p>City Planning</p> <p>Planning Controls that direct and influence buildings relate to the street are a critical component in achieving a high public areas that will encourage pedestrian activity.</p> <p>Considerations include:</p>
8.1	<div data-bbox="421 1503 963 1861">  </div> <div data-bbox="997 1532 1343 1805"> <p>Consider human scale by providing ground floors with many door openings quality materials, texture details, interesting things at eye level to make attractive for pedestrians.</p> <p>Discourage blank walls.</p> </div>





8.2		Mid block connections on long blocks to help pedestrian access.
8.3	 Harris Street	Building styles that define and contain the street.
8.4		Awnings and canopies to provide weather protection and shade.





9.0	Public Art	
	 Glebe Public School	Public art should be integral part of the development of the Liveable Green Network because it provides points of interest for pedestrians that also act as markers to help people find their way around the network.

10.0	Environmental Sustainability Opportunities
	<div data-bbox="422 259 892 568">  <p data-bbox="422 568 639 595">Chippendale PCTC</p> </div> <div data-bbox="422 629 892 972">  <p data-bbox="422 972 632 999">Joynton Avenue</p> </div> <div data-bbox="997 259 1347 501"> <p data-bbox="997 259 1286 320">Water Sensitive Urban Design</p> <p data-bbox="997 351 1347 501">Devices that calm traffic can also be used to reduce the area of hard surfaces as well as treat stormwater, and contribute to landscaping.</p> </div>
11.0	<p data-bbox="422 1070 743 1097">Landscape Treatments</p> <p data-bbox="422 1104 1246 1162">Landscape treatments can help improve the environment, add beauty increase pedestrian comfort and bring visual relief to streets.</p>
	<div data-bbox="422 1193 746 1621">  <p data-bbox="422 1621 592 1648">Redfern Street</p> </div> <div data-bbox="997 1225 1286 1346"> <p data-bbox="997 1225 1286 1346">Maximise opportunity to provide canopy trees including planting in roadways.</p> </div>

	 <p>Redfern Street</p>	<p>Extra details such as flower boxes along main streets reinforce street hierarchy and provide detail and interest for pedestrians.</p>
	 <p>Bourke Street</p>	<p>Verge Planting reduces the area of hard surfaces and provides detail and interest for pedestrians.</p> <p>The pedestrians experience on pavements can be improved with a planting strip or a buffer zone.</p>
	 <p>Myrtle Street</p>	
12.0	<p>Materials Palette</p> <p>The City's Street Design Code that is under development provides directions on a materials palette including paving, street furniture and lighting fixtures. The code uses different materials for different types of street to help users understand the network structure.</p>	
12.1	<p>Lighting</p> 	<p>Pedestrian focussed lighting for paths.</p>

12.2	Paving Materials	
	 <p>York Street</p>	<p>City Centre</p> <p>City Centre paving palette has granite paving. Smaller granite setts will be used for laneways.</p>
	 <p>Redfern Street</p>	<p>Village centres and activity strips</p> <p>Concrete unit pavers.</p>
	 <p>Myrtle Street</p>	<p>Local Streets</p> <p>Brick paving and in-situ concrete paving with landscape verges;</p>
13.0	<p>Amenities</p> <p>The Liveable Green Network routes will be furnished with amenities designed to encourage walking and cycling. These include:</p>	
13.1	 <p>Belmore Park</p>	<p>Seating</p> <p>Seats at regular intervals along routes or at adjacent public spaces will provide rest spots and opportunities for lingering.</p>

	 <p>Victoria Park</p>	<p>Public Toilets</p> <p>Public toilets accessible from the street as well as providing amenities to park users.</p>
	 <p>Erskineville Road</p>	<p>Bubblers</p> <p>Bubblers also comfort and amenity of pedestrians and bike riders and are a further invitation to use the network.</p>
	 <p>Clarence Street</p>	<p>Bike Parking</p> <p>Facilities for locking up bicycles should be provided to encourage use of bikes for day to day transport.</p>
14.0	<p>Signage, Legibility and Communication of the Network.</p> <p>To make sure people are confident of using and finding their way around the network it is important that the routes are clearly defined and easily understood.</p> <p>To avoid street clutter signs should not be the primary means of communication.</p> <p>Other communication strategies include:</p>	
	 <p>Buckland Street, Chippendale</p>	<p>Paving Materials</p> <p>Consistent use of paving materials will clearly identify routes.</p>

	 <p>Under the Freeway</p>	<p>Public Art</p> <p>Public art provides route markers and easily recognisable local landmarks along the network.</p>
	 <p>New York Greenways Logo</p>	<p>Graphics</p> <p>Branding with consistent logos and graphic allow more subtle markers to be used instead of large signs.</p>
	 <p>North Vancouver Greenways Network Plan</p>	<p>Map Bases</p> <p>Clear well designed maps are vital to help people understand the network and how to best use it.</p>
		<p>WiFi/ GPS technology</p> <p>Trip planners can be designed as smartphone apps that can tell users where they are and help them to find the best route.</p>

9.0 NEXT STEPS

The Liveable Green Network Strategy and Master plan will be used to inform and guide future pedestrian and cycle planning, and be a mechanism for allocating resources and priorities for network improvements. Key next steps will be:

9.1 Network Implementation Plan

Develop a Network implementation plan to finalise route selections, determine priorities and assess resource allocation to projects.

9.2 Network Amenities Plan

Develop an amenities plan that scopes the need and locations for bubblers, seats, toilets and other street furniture that will assist future budget and capital works planning.

9.3 Communication of the Network

Develop a wayfinding and legibility framework that considers mapping / graphics, promotion, signage, and use of legibility strategies such as **public art** to assist people finding their way.

9.4 Measuring Success

Measuring the success of the Liveable Green Network and delivery on Sustainable Sydney 2030 targets will require data collection to develop baseline measures of levels of walking and cycling in order to track progress over time.

Potential data sources include:

- Australian Bureau of Statistics Census data – journey to work
- Collecting qualitative data about pedestrian activity
- utilising GIS Pedestrian Permeability Analyses to evaluate walkable access to activity centres, community facilities, schools and transport stops
- undertaking pedestrian counts in targeted locations.

10.0 CONCLUSION

The **Liveable Green Network** Strategy and Master plan maps out pedestrian and bike path routes and links at a **City Wide**, **City Centre** and **Village Centre** level.

The City's current and proposed actions will deliver in most places a well connected pedestrian and cycle network.

There are **gaps** in the proposed network because of land in private ownership. However these gaps will be bridged as urban renewal provides new street connections particularly at sites such as Green Square, Barangaroo, CUB and Ashmore Estate.

The pedestrian network is being improved as the City's footpaths are regularly upgraded and renewed as part of the footway reconstruction program. The problem areas for pedestrians are mostly at intersections, particularly at State Roads where pedestrian crossings are sometimes inadequate or non existent or where there are narrow footpaths.

In the local street network introducing raised crossings, thresholds and kerb extensions at intersections will significantly improve connectivity and ease of use. The PCTC proposed treatments are an important means of delivering these improvements. The conversion of streets and lanes to **Shared Ways** will also significantly change the priority of the street network to favour pedestrians and bike riders.

It is important to raise the level of awareness of the existing network components such as sections of Harbour Foreshore Walk. This can be achieved with a communications framework that includes maps, graphics, signs and promotional materials. Other legibility aids such as public art will help people find their way around the network.

11.0 REFERENCES

A reference list of studies, reports and other sources used in the development of this Liveable Green Network is provided in **Volume 3** of the Report.