

ATTACHMENT G

## **ATTACHMENT G**

**DRAFT LACHLAN  
PUBLIC DOMAIN STRATEGY  
DATED OCTOBER 2014**



# Lachlan

## Public Domain

### Strategy



## City Design

Revision	Date	Description	Printed
A	October 2014	Draft for Council Adoption	17/10/2014

# Contents

<b>1.0</b>	<b>Introduction</b>	<b>02</b>
<b>2.0</b>	<b>Strategic Context</b>	<b>04</b>
<b>3.0</b>	<b>Urban Framework</b>	<b>06</b>
	3.1 Active Frontages.....	08
	3.2 Built Form and Heights .....	09
	3.3 Street Typology .....	10
	3.4 Heritage and Public Art.....	11
	3.5 Pedestrian Movements .....	12
	3.6 Public Transport and Cycleways.....	13
<b>4.0</b>	<b>Public Domain Design Overlays</b>	<b>14</b>
	4.1 Street Geometry.....	16
	4.2 Pavement and Kerb Types .....	18
	4.3 Public Domain Furniture and Lighting.....	20
	4.4 Street Trees and Planting.....	22
	4.5 Water Management and Water Sensitive Urban Design.....	24
<b>5.0</b>	<b>Defining the Public Domain</b>	<b>27</b>
	5.1 Key Spaces Precinct Plan.....	28
	5.2 Archibald Avenue.....	30
	5.3 Gadigal Avenue .....	32
	5.4 Dyuralya Square .....	34
	5.5 The Rope Walk.....	36
	5.6 Wulaba Park.....	38
	5.7 Street Sections and Materials Palette Applications.....	40
	5.7.1 Street Sections- Location Map	5.7.8 Section G- Reed Street
	5.7.2 Section A- Gadigal Avenue South	5.7.9 Section H- Hatbox Place
	5.7.3 Section B- Gadigal Avenue North	5.7.10 Section I- Tung Hop Street
	5.7.4 Section C- Archibald Avenue East	5.7.11 Section J- Lachlan Place South
	5.7.5 Section D- Archibald Avenue West	5.7.12 Section K- Hatter Lane
	5.7.6 Section E- Sam Sing Street North	5.7.13 Section L- Lachlan Place North
	5.7.7 Section F- Sam Sing Street South	5.7.14 Section M- O'Dea Avenue (Northern Setback and Footpath)

## **Appendices** **54**

Appendix A

Drawing LPDS01- Public Domain Concept Design Landscape Plan

Appendix B

Drawing LPDS02- Public Domain Concept Design B99 Vehicle Swept Paths

Appendix C

Drawing LPDS03- Public Domain Concept Design 9.9m Service Vehicle Swept Paths



1.0

# Introduction



Sydney Harbour

Pyrmont

Sydney Central Business District

Potts Point

Glebe

Ultimo

Darlinghurst

Central Railway Station

Paddington

University of Sydney

Chippendale

Surry Hills

Redfern

Newtown

Waterloo

Erskineville

Alexandria

Green Square Town Centre

St Peters

Zetland

Kensington

Mascot

Rosebery

University of NSW

Sydney Airport Railway Station

Key



Train Station



Green Square Urban Renewal Area



Lachlan Precinct



0 500m 1000m

Botany Bay

## Background

The Lachlan precinct is located within the north-east of the Green Square Urban Renewal Area, in the suburb of Waterloo and is positioned four kilometres south of Sydney Central Business District. The close proximity of major roads including the Eastern Distributor and Bourke Street, which run north-south along each side of the site, ensure good access and connectivity to Sydney's metropolitan region.

Incorporating the suburbs of Zetland and Beaconsfield and parts of Roseberry, Alexandria and Waterloo, the Green Square Urban Renewal Area is located within the most important economic corridor in the country. Sitting between Sydney's City Centre and Kingsford Smith International Airport, Green Square covers 278 hectares of Australia's oldest industrial area and has long been considered one of the largest and most important renewal projects in Australia.

Lachlan precinct has a total site area of approximately 10 hectares and is characterised by a range of irregular allotments which substantially range in size. It is highly urbanised, with industrial development being the dominant land use. Since the 1990's, much of the neighbouring urban renewal areas of Crown Square, Victoria Park and Mary O'Brian have transitioned from older industrial buildings to residential and mixed use developments.

The City's public domain framework includes a number of strategic plans, planning controls, policy codes and technical specifications that together form a holistic vision for the City (refer Figure 1). The family of Design Codes, provide key design guidelines and principles for all parts of the public domain.

In accordance with the Sydney Street Code 2013 aims to develop site-specific public domain strategies for urban renewal areas across the city. This strategy has been prepared to guide and define the public domain design for the Lachlan precinct.

## Structure

The remainder of the strategy is structured as per the following sections:

- **Part 2** sets the strategic and planning objectives for the precinct;
- **Part 3** summarises the key overarching urban framework and design principles for the precinct;
- **Part 4** details the design overlays, urban elements and materials palettes necessary to develop a consistent high quality public domain; and
- **Part 5** provides project ideas, illustrative designs, concept plans and technical requirements for key public spaces and streets that underpin the public domain delivery of the Lachlan precinct.

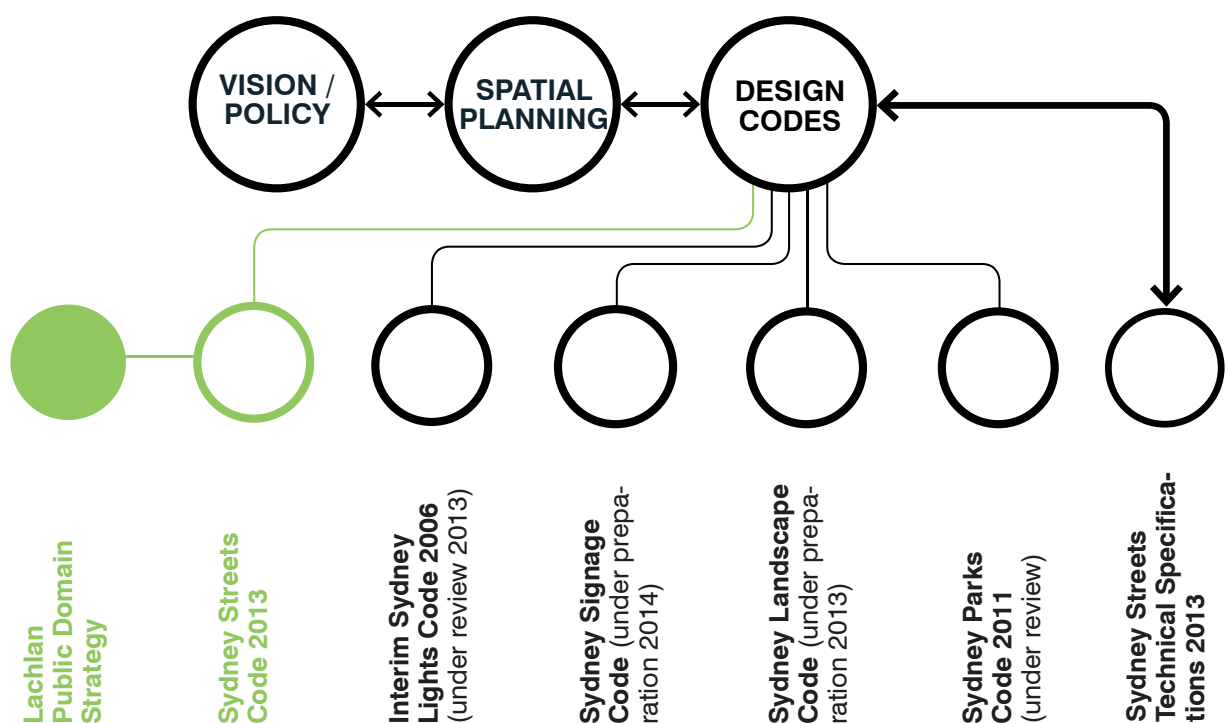


Figure 1: Lachlan Public Domain Framework



# 2.0

# Strategic Context



Victoria Park

Prince Alfred Park

Eddie Ward Park

Redfern Park

Redfern Oval

Edmund Resch Reserve

Moore Park

Alexandria Park

Waterloo Park & Oval

Crystal Park

Crown Park

Corning Park

Watchful Harry Square

Moore Park

Harry Noble Reserve

Erskineville Park & Oval

Lachlan

The Rope Walk

Dyuralya Square

Wulaba Park

Green Square Railway Station

Library & Plaza

The Drying Green

Town Centre

Woolwash Park

Nuffield Park

Epsom Park

Matron Ruby Grant Park

Gunyama Park

Zetland Avenue Park

Perry Park

Beaconsfield Park

Epsom Road

South Dowling Street

Golf Course

Turruwul Park

Bourke Road

O'Riordan Street

Bolony Road

Epsom Road

O'Dea Avenue

Joynon Avenue

Joynon Avenue

Dehies Avenue

Bolony Road

Bourke Street

Lachlan Street

McEroy Street

Bourke Road

The Sustainable Sydney 2030 vision identified Green Square as a new growth area with the potential to provide new housing and mixed use zones in close proximity to public infrastructure and open space networks. The vision sought to develop principles and actions to greatly improve the social, economic and environmental performance of the City as a whole.

The Green Square Urban Renewal Area provides an exciting opportunity to adopt the 'fine grain' character of traditional street patterns into the southern part of the City, with the centre serviced by an underground rail station connecting Green Square to the Airport and the City Centre, and a large future workforce and residential population proposed to be within walking distance of the Town Centre and future light rail corridor (ETC). This provides the basis for a pedestrian-oriented, ecologically sustainable development with a strong community focus, encouraging a reduction in car travel and a higher degree of mass transit usage.

The City's Sydney Development Control Plan 2012 and Design Codes outline the following overarching public domain objectives for the Lachlan precinct:

- Provide a range of local facilities and programs to provide retail and business opportunities to support the existing and new population;
  - Foster community participation and understanding of the local environment, including influences from past occupants of the site, natural history and landforms, past uses, location and climate;
  - Establish a centrally located north-south public transport corridor to provide short term priority bus services and future light rail connections to the City Centre, Green Square Town Centre and the suburb of Rosebery;
  - Provide a balanced traffic environment where high considerations are given to public transport, cycling infrastructure, pedestrian movements and public activities;
  - Ensure streets are well-connected, safe and universally accessible;
  - Create public spaces with high levels of amenity, including design considerations such as function, safety, recreational opportunities, micro climates, circulation and selection of materials;
  - Achieve well integrated interpretive water elements, ecological sustainable design and public art to create an engaging and culturally diverse public domain;
  - Recognise the importance of green corridors in supporting diverse and abundant ecosystems in an urban environment;
- Establish street tree canopies and understorey planting that will reinforce the visual and physical hierarchy of the street network, creating visual patterns and rhythm appropriate to specific urban and climatic conditions; and
  - Contribute to the integrated Water Sensitive Urban Design treatment of urban stormwater and meet best practise water quality objectives for reuse and/or discharge.



# 3.0

# Urban Framework



“The area around Green Square has the potential to have the vibrancy and diversity of other City Villages, via a linked network of open spaces, including a revitalised Alexandria Canal.”

Sustainable Sydney 2030 Vision

Lachlan precinct lies adjacent to South Dowling Street and at the junction of significant collector roads including Bourke and Lachlan Streets and O'Dea Avenue.

The precinct sits at a point of urban transformation, where large open spaces (Moore Park and Golf Course) and urban infrastructure (M5 Motorway/Eastern Distributor) east of the site, dominate the physical character of the precinct. The landform at the north-eastern corner of the site changes from higher level land and quickly drops to the low lying valley floors of O'Dea and Joyton Avenues.

Historically, Lachlan precinct and significant areas of Green Square have been prone to flooding. Incremental trunk and local drainage upgrades from Kensington to Alexandra Canal will be developed to address flooding issues and provide opportunities to improve water quality targets for the whole region of South Sydney.

Currently, the precinct contains a number of landholdings, including large industrial warehouses, storage facilities as well as recent residential strata developments. It is expected that the redevelopment of the industrial land holdings will occur in a staged manner, with the majority of

individual land parcels redeveloping separately.

The proposed land use objectives for Lachlan is to provide a predominantly residential precinct within a mix of open spaces, ground floor retail, offices, shops and generally compatible commercial development.

In determining the guiding principles for the public domain the following structure planning overlays have been identified in Section 3.0:

- Active Frontages;
- Building Form and Heights;
- Street Typology;
- Heritage and Public Art;
- Pedestrian Movements; and
- Public Transport and Cycleways.

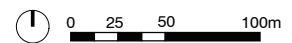
By 2030, it is envisaged that Lachlan Precinct will accommodate:

- a resident population of approximately **6,600**;
- approximately **3,500** new homes including terraces and apartments;
- total open space of approximately **15,000** square metres;
- neighbourhood retail shopfront of up to **2,500** square metres along Archibald Avenue; and
- high quality streetscapes, trees and planting that will enhance habitats for the local wildlife and natural ecosystems.



# 3.1 Active Frontages

The ground floor active retail uses are primarily concentrated around Archibald Avenue, east of The Rope Walk. Opportunities exist to create a new community hub for the Lachlan precinct, including enhanced pedestrian safety and comfort, strong landscape character, good solar access, shopfront retail spaces (cafes, boutique retail, professional studios), outdoor dining areas, and on-street parking. Above the ground levels, building uses consist of mostly residential apartments. Ground floor activation is required on frontages to maximise accessibility and permeability across the precinct, including careful consideration of pedestrian desire lines, passive surveillance, level changes, building entry points and park amenities.



## KEY

- |                      |                     |                        |  |
|----------------------|---------------------|------------------------|--|
| PRECINCT BOUNDARY    | RESIDENTIAL         | OPEN SPACES            | INTEGRATED BASEMENT PARKING WITH SHARED ACCESS |
| RETAIL SHOPFRONTS    | ACTIVE EDGE TO PARK | LANDSCAPE SETBACK      | FUTURE ROAD WIDENING                           |
| NON-RESIDENTIAL USES | SHOWROOM TENANCY    | VEHICULAR ACCESS POINT |  |



# 3.2 Built Form & Heights

Lachlan precinct's residential apartment buildings are predominately 6-8 storeys in height. Taller buildings are located on South Dowling Street or within close proximity to the planned open spaces of The Rope Walk and Wulaba Park. Lower buildings of up to 4 storeys in height are located around the east-west oriented streets of Archibald Avenue and Hatbox Place. These transitional heights have been arranged to maximise solar access to street, enhance visual links and improve environmental amenities for pedestrians. Building heights of 2-4 storeys have also been applied to areas of heritage or contextual value, such as Moore Park View Hotel and the former Crown Crystal Glass Factory (c.1920).



### KEY

- PRECINCT BOUNDARY
- PROPOSED STREET BLOCKS
- OPEN SPACES AND KEY LANDSCAPE SETBACKS

### HEIGHT IN STOREYS

- |     |                       |      |                            |
|-----|-----------------------|------|----------------------------|
| 1-2 | LOW STREET WALL       | 9-10 | TALL BUILDING (TOWER/SLAB) |
| 3-4 | MEDIUM STREET WALL    | 20+  | VERY TALL BUILDING         |
| 5-6 | HIGH STREET WALL      |      | FUTURE ROAD WIDENING       |
| 7-8 | VERY HIGH STREET WALL |      |                            |

# 3.3 Street Typology

Lachlan precinct is bounded by Lachlan Street to the north and O’Dea Avenue to the south. South Dowling Street defines the eastern boundary and Bourke Street the western edge. Gadigal Avenue will form part of the eastern transit corridor (ETC), connecting the suburbs of greater Green Square to the City Centre. In the short term the ETC will be used by buses, eventually converting to a surface light rail corridor. Archibald Avenue will serve to the extend the diverse range of public places, retail offerings and community uses across the precinct and provide an local destination point for the residents of Lachlan. Both Gadigal and Archibald Avenues are characterised by generous footpaths, separated cycleways, ground floor non-residential uses, vegetated verges, bioswales and native street tree planting. Local streets, shared zones and through-site links will facilitate a fine urban grain allowing active residential frontages, clear sight lines, passive surveillance, good permeability, soft landscape and varied public activities.

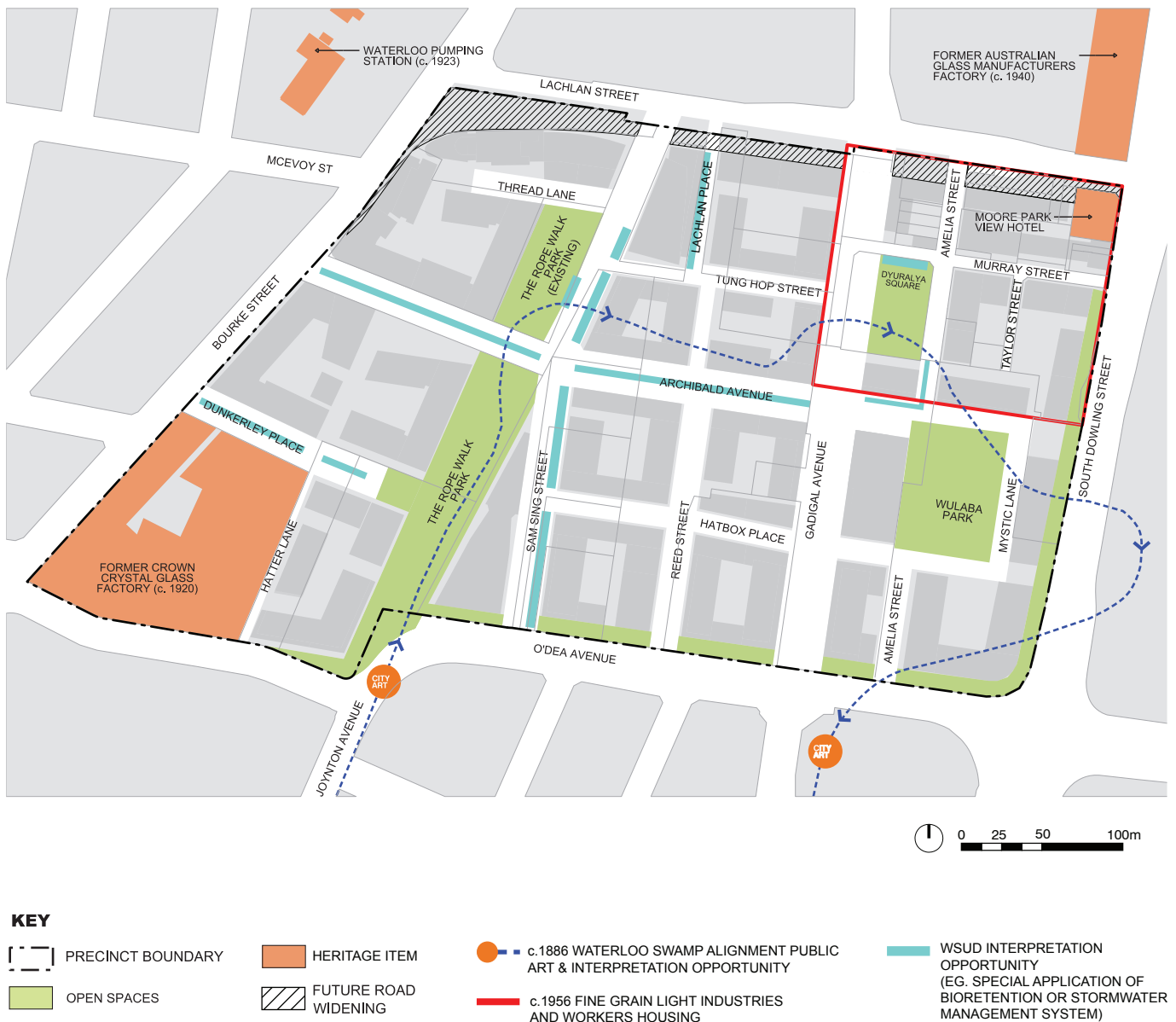


## KEY

- |  |  |   |
|--|--|---|
| PRECINCT BOUNDARY                      | ARTERIAL ROAD  | LOCAL STREET                            |
| FUTURE ROAD WIDENING                   | LOCAL STREET- SPECIAL APPLICATION (EASTERN TRANSIT CORRIDOR)   | VEHICULAR TRAFFIC (DIRECTION OF TRAVEL) |
| SHARED ZONE (SUBJECT TO DETAIL DESIGN) | LOCAL STREET- SPECIAL APPLICATION (NEIGHBOURHOOD RETAIL STRIP) | NO VEHICULAR ENTRY                      |
|  |  | PEDESTRIAN/CYCLE ONLY LINK              |

# 3.4 Heritage & Public Art

Historically Green Square was a series of freshwater swamps, salt marshes and creeks which were dominated by paperbarks. The area was rich in animal life and was a valuable hunting ground for the local Gadigal people of the Eora nation who occupied the area for thousands of years. Due to the supply of fresh water, Lachlan precinct has a rich industrial history and was the site of a number of former manufacturing industries including, Crown Crystal Glass Factory (c.1920), Australian Glass Manufacturers (c.1940) and the Waterloo pumping station. The north eastern corner of the precinct contains a large number of significant items associated with the 1950's workers housing, and community institutions such as the Moore Park View Hotel. The public domain will provide an opportunity to celebrate the heritage of the area through a range of initiatives, such as naming of new streets or open spaces, wayfinding, lighting, bespoke architectural elements, landscape design, water interpretation and public art programs. Public art opportunities may exist along the c.1886 Waterloo swamp alignment and around the key public spaces of The Rope Walk, Wulaba Park and Dyuralya Square.

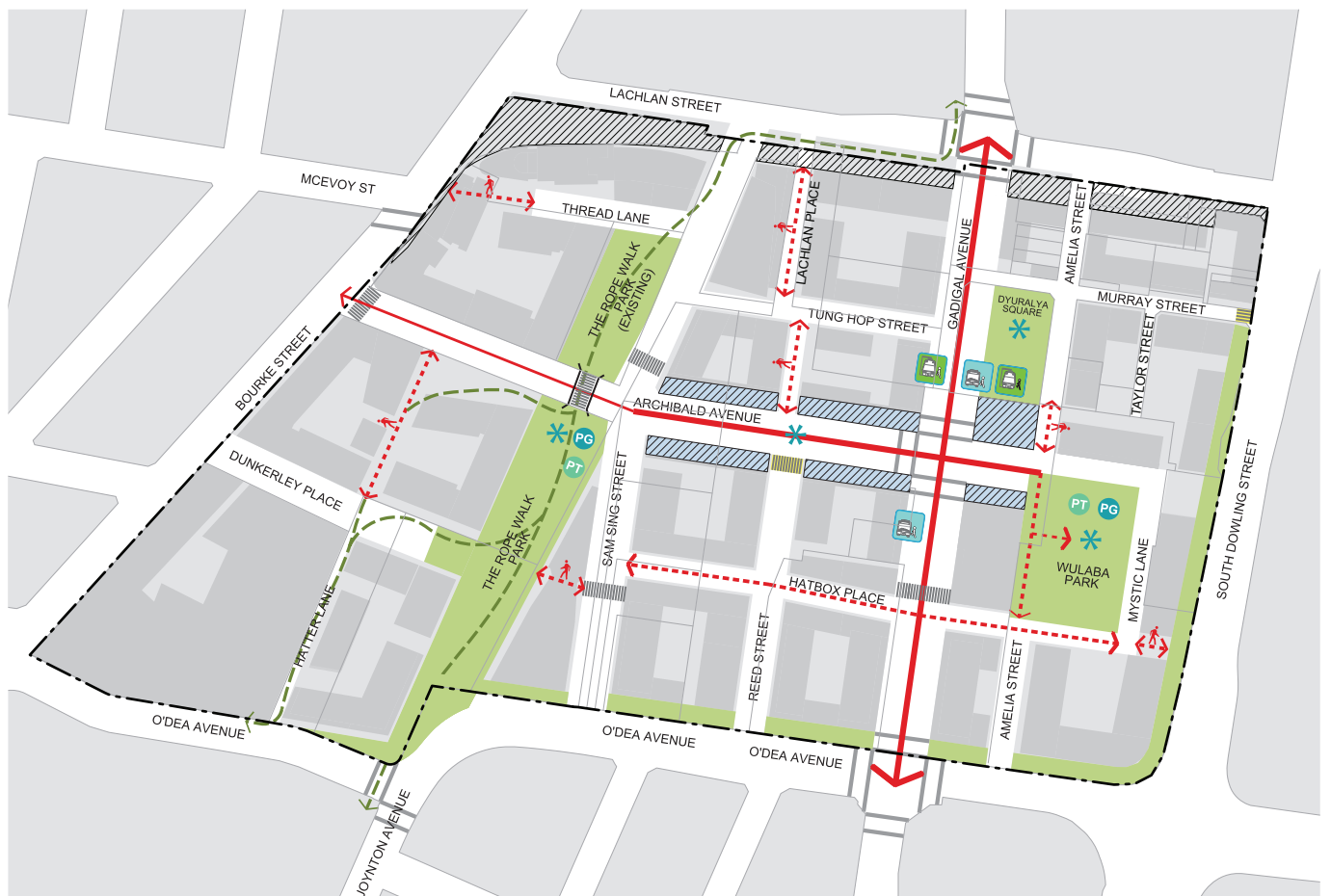


NOTE: FOR DETAIL PUBLIC ART PROVISIONS FOR PUBLIC SPACES AND PARKS REFER TO THE GREEN SQUARE PUBLIC ART STRATEGY 2012 (ADOPTED 25 MARCH 2013)



# 3.5 Pedestrian Movements

Archibald Avenue forms the primary east-west pedestrian route across the Lachlan precinct. It serves to provide a focal point for local services, community events, casual social gatherings, urban activities and pedestrian priority. High pedestrian concentrations are expected to occur around the signalised intersection of Archibald and Gadigal Avenues, adjacent to the short term bus and future light rail stops. Pedestrian crossings are located on Hatbox Place and Sam Sing Street to enhance pedestrian permeability to Bourke and South Dowling Streets. Local streets, through-site links and informal routes will complement the existing fine grain character of the surrounding neighbourhoods and street network.



## KEY

PRECINCT BOUNDARY

LOCAL OPEN SPACE

RETAIL USES AT GROUND FLOOR

KEY PEDESTRIAN DESTINATION

PEDESTRIAN/CYCLE ONLY THROUGH SITE LINK

PRIMARY, FORMAL ROUTE

SECONDARY, FORMAL ROUTE

SECONDARY, INFORMAL ROUTE

MARKED PEDESTRIAN CROSSING

RAISED THRESHOLD CROSSING

FOOTPATH CONTINUATION OR PEDESTRIAN CROSSING

SIGNALISED PEDESTRIAN CROSSING

PROPOSED BUS STOP

FUTURE LIGHT RAIL STOP

PLAYGROUND

PUBLIC TOILET

FUTURE ROAD WIDENING

# 3.6 Public Transport & Cycleways

The existing bus network and bus stops are located on Bourke Street and O'Dea Avenue. The proposed transport corridor on Gadigal Avenue, will expand the existing network to include transit buses in the short term and surface light rail corridor in the future. The strategic corridor will connect Lachlan precinct the broader public transport network of the greater Green Square Urban Renewal area, Port Botany and the City Centre. Bus and light rail stops are located in close proximity to Dyuralya Square and the Archibald Avenue retail strip. Separated cycleways, pedestrian priority streets and bicycle storage will be provided to promote alternative modes of green transport. Dedicated car share spaces may be provided around the precinct to encourage car sharing and reduce car ownership.



## KEY

- |   |                                   |                                     |
|---|-----------------------------------|-------------------------------------|
| PRECINCT BOUNDARY                           | SEPARATED BI-DIRECTIONAL CYCLEWAY | FUTURE LIGHT RAIL STOP              |
| PUBLIC SPACE ASSOCIATED WITH TRANSPORT STOP | SEPARATED CONTRAFLOW CYCLEWAY     | POTENTIAL IN-LANE BUS STOP LOCATION |
| FUTURE LIGHT RAIL PLATFORM ZONE             | SHARED PEDESTRIAN / CYCLE PATH    | EXISTING IN-LANE BUS STOP LOCATION  |
| EXISTING BUS ROUTE                          | LIGHT RAIL (SHORT TERM BUS ROUTE) | FUTURE ROAD WIDENING                |