

NEW

PARRAMATTA

RD

Parramatta Road Urban Amenity Improvement Plan

September 2015





COX

OCULUS

CM⁺

While every effort has been made to ensure that this document is correct at the time of printing, UrbanGrowth NSW (including its agents and employees) makes no warranties as to the accuracy or completeness of the information in the document. Not all concepts considered in these papers reflect government policy or are under active consideration.

UrbanGrowth NSW disclaims any and all liability to any person in connection with anything done or committed to be done in reliance upon the whole or any part of the document.

Contents

1.0	Introduction	04	Appendices	27
1.1	The Urban Amenities Improvement Program Overview	05	Kit of Parts	27
1.2	Urban Amenity Improvement Works as a Catalyst for Urban Transformation	05	Regional Cycleway Concept Plans	33
1.3	Project Identification and Selection Criteria	05		
1.4	Process So Far	05		
1.5	Next Steps and Delivery	06		
1.6	About the Urban Transformation Program	06		
1.7	How to Read the Urban Amenities Improvement Program	06		
1.8	A Final Note about this Program	06		
2.0	Urban Amenity Improvements	07		
2.1	Granville	08		
2.2	Auburn	10		
2.3	Homebush	12		
2.4	Burwood	14		
2.5	Kings Bay	16		
2.6	Taverners Hill	18		
2.7	Leichhardt	20		
2.8	Camperdown	22		
2.9	Regional Cycleway	24		



1

INTRODUCTION

1.0 Introduction

1.1 Overview

The Urban Amenities Improvement Program ('the Program') is a \$200 million initiative under the draft New Parramatta Road Urban Transformation Strategy to stimulate the transformation of the Parramatta Road Corridor ('the Corridor').

The Program identifies a suite of early local amenity improvement works to help realise the vision for the Corridor. This vision is for a high quality multi-use corridor with improved transport choices, better amenity and balanced growth of housing and jobs.

The Program recognises that communities along the Corridor must respond to population growth and change. It also recognises that some existing infrastructure is ageing or unable to respond to the needs of communities as they grow and change. Local amenity infrastructure is therefore required to be delivered quickly to achieve positive social and economic outcomes.

This document is a key deliverable of the Program. UrbanGrowth NSW has jointly prepared this Program with the collaborating councils along the Corridor: the City of Sydney, Marrickville Council, Ashfield Council, City of Canada Bay Council, Burwood City Council, Strathfield Council, Auburn City Council, Parramatta City Council and Holroyd City Council.

1.2 Urban Amenity Improvement Works as a Catalyst for Urban Transformation

Amenity improvements have been identified as a critical factor to achieving urban renewal within the Corridor. At present, the Corridor is synonymous with urban decay, partly attributed to the high traffic volumes along Parramatta Road, but also to the lack of a coherent corridor planning and delivery strategy. This decay contrasts with the many established suburbs along the Corridor, where one or two blocks back from Parramatta Road, vibrant and pleasant residential communities exist.

In order to rectify the decay, UrbanGrowth NSW has identified a suite of amenity improvement works that will stimulate urban transformation. Typically, the works are those that local government authorities and the development industry find difficult to achieve as they cross boundaries and are not directly attributable to one particular land holding.

Utilising the Westconnex project as a catalyst for renewal, this Program supports the draft New Parramatta Road Urban Transformation Strategy. The works outlined in this Program are considered to offer the greatest opportunity to ameliorate urban decay and encourage urban transformation in an expeditious manner.

1.3 Project Identification and Selection Criteria

The works proposed by the Program fall into three categories:

- **Streetscape upgrades to Parramatta Road and other streets** including tree planting, multi purpose lighting, new pavements and north-south pedestrian and cycle crossings.
- **Creation of new or improved open spaces, urban plazas and town squares**, which are important in a high density environment, particularly if there is a current shortfall of local open space.
- **New walking and cycling links** to key transport nodes and open spaces, building on regional and local networks.

The works will result in tangible public benefits, including the delivery of liveable communities and neighbourhoods, stimulate development and assist to rectify the "market failure" that currently occurs along parts of the Corridor. The proposed works have also been selected based on the following set of criteria:

- location in area of population growth;
- link to other State or local Government infrastructure priorities;
- improvement to street amenity and safety;
- improvement to active transport links (walking and cycling);
- response to community feedback;
- not being destroyed as development proceeds;
- consistency with the open space principles of the Draft Strategy;
- provision of a district/regional benefit;
- achievement within a short to medium timeframe; and
- value for money.

1.4 Process So Far

The works have been developed through an iterative process with local councils along the Corridor and aim to build on the strengths of existing neighbourhoods.

UrbanGrowth NSW has had each of the works conceptually designed and preliminary costings have been prepared to obtain an indicative budget. Following adoption of the draft New Parramatta Road Urban Transformation Strategy, each of the proposed works will need to be further designed and relevant planning approvals obtained by the relevant delivery authority.

The process undertaken to prepare the Program and determine the proposed suite of works is summarised in Figure 1.

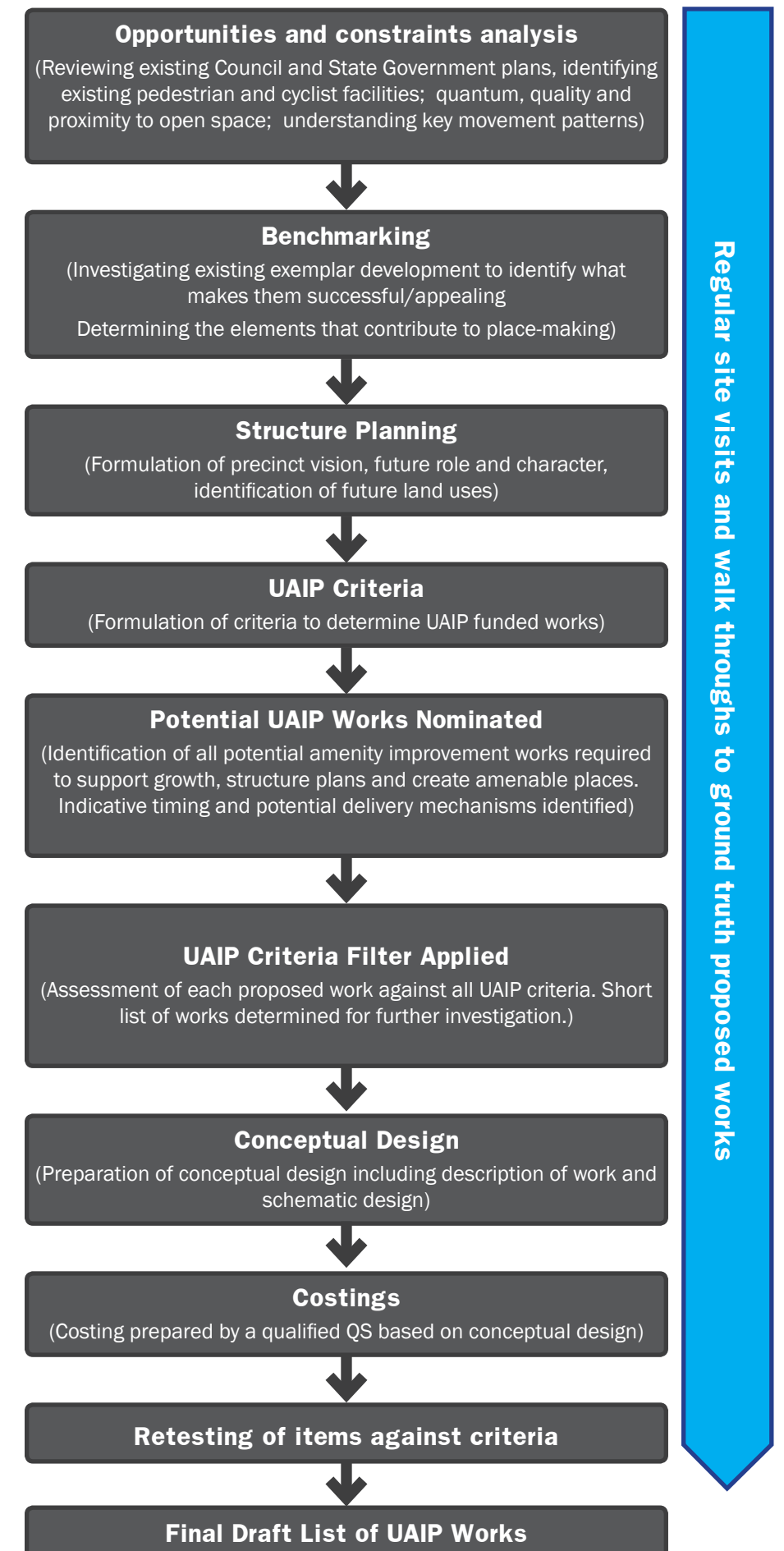


Figure 1

1.5 Next Steps and Delivery

Council and community feedback will be sought on the Program and particularly the location and scope of proposed urban amenity works, as part of the exhibition of the draft New Parramatta Road Urban Transformation Strategy. UrbanGrowth NSW will review all feedback and consider suggestions for revised location or works. Conceptual designs and costings will be prepared for any new or revised works. The works will be (re)assessed against the UAIP Selection Criteria, however the Selection Criteria will remain unchanged.

The approach to public domain differs across the 10 LGAs that this Program applies to. Many councils have public domain guidelines for their LGAs but these vary significantly between councils and are not specifically focussed on the Corridor. This Program is therefore accompanied by a 'Kit of Parts' which identifies the potential materials and finishes that could be used to undertake the proposed suite of urban amenity improvements. A key next step will be to further develop this Kit into a more detailed set of public domain guidelines for the Corridor, focussing on the specific precincts and final suite of works.

Following adoption of the Program, the NSW State Government will be responsible for overseeing the timing, funding and delivery of works. Works proposed on a State owned asset will be undertaken by the relevant Government agency. Works proposed on a local road or council asset will be undertaken by the relevant council. A tied grant program is proposed, where funding to an upper limit for a defined scope of work is provided. Councils will be required to design, tender and manage the works, support the contracts, and provide formal updates and audited statements to UrbanGrowth NSW at the close of the contracts. This system is similar to that used by Infrastructure NSW in the "Restart Program" and the Commonwealth Government in the "Community Infrastructure Program."

The planning and delivery process is outlined in Figure 2 below.

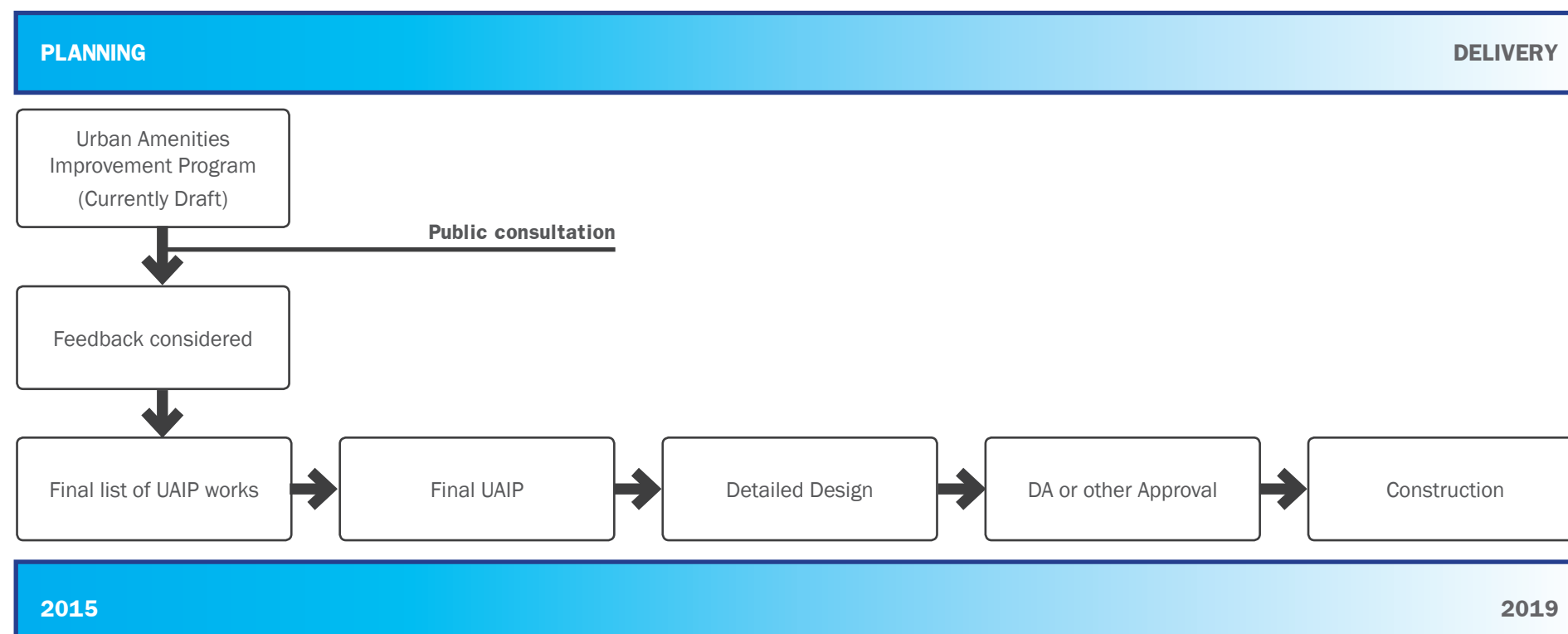


Figure 2

1.6 About the Urban Transformation Program

The Parramatta Road Urban Transformation Program is led by UrbanGrowth NSW, the NSW Government's urban transformation delivery organisation. UrbanGrowth NSW's ambition is to transform city living so that it is more vibrant, connected and healthy for all.

UrbanGrowth NSW leads an Integrated Project Team (IPT) that includes the Department of Planning and Environment, Transport for NSW, Roads and Maritime Services and the WestConnex Delivery Authority. The Integrated Project Team is collaborating with councils along the corridor: the City of Sydney, Marrickville Council, Leichhardt Council, Ashfield Council, City of Canada Bay Council, Burwood City Council, Strathfield Council, Auburn City Council, Parramatta City Council and Holroyd City Council.

Under the Program, UrbanGrowth NSW has prepared the draft New Parramatta Road Urban Transformation Strategy, which establishes the long-term vision for how the Parramatta Road Corridor will grow and develop to 2050. It integrates land use and built form with transport initiatives and public domain improvements to meet the Corridor's future population, housing and employment needs.

The full urban transformation of Parramatta Road will deliver far-reaching benefits for Sydney:

- well located diverse and affordable housing;
- a total development value in the order of \$28 billion to the State arising from new residential development over the next 20 years;
- a productive business environment supporting a range of viable and prosperous businesses and a variety of employment opportunities;
- more efficient and reliable public transport connecting people and places from east to west and from north to south;
- a series of well-serviced and well-connected communities where people will want to live and visit; and
- diverse spaces, places and links for people to visit, connect with and enjoy.

1.7 How to Read the Urban Amenities Improvement Program

The Program is one of a suite of technical documents prepared as part of Parramatta Road Urban Transformation Program. This Program should therefore be read in the context of the following documents:

- Draft Parramatta Road Urban Transformation Strategy;
- Infrastructure and Open Space Schedule; and
- Urban Design Guidelines.

This Program provides the following information for each Precinct:

- Precinct Vision and Structure Plan;
- Urban Amenities Improvement Program illustrating location of works;
- List of proposed works and indicative timing (short, medium or long term); and
- Conceptual design of proposed works.

The Kit of Parts, provided at Appendix A, is indicative only at this stage and will be refined.

1.8 A Final Note about this Program

It should be noted that the works identified by this Program are not an exhaustive list of all amenity improvements required along the Corridor to support urban transformation. Much more amenity improvement or local infrastructure will be needed over time, funded from local government contributions systems or other funding programs.

The proposed suite of works identified in this Program are considered to provide high value public benefit and are those considered most difficult to achieve for councils under existing regimes. Through their implementation, the works will address immediate and difficult works that will act as a catalyst for further development activity, which will in turn bring further amenity benefits. In addition, the works identified by this Program will lessen the financial burden on councils and provide the opportunity for councils to revise and update their existing contributions plans or further funding streams.

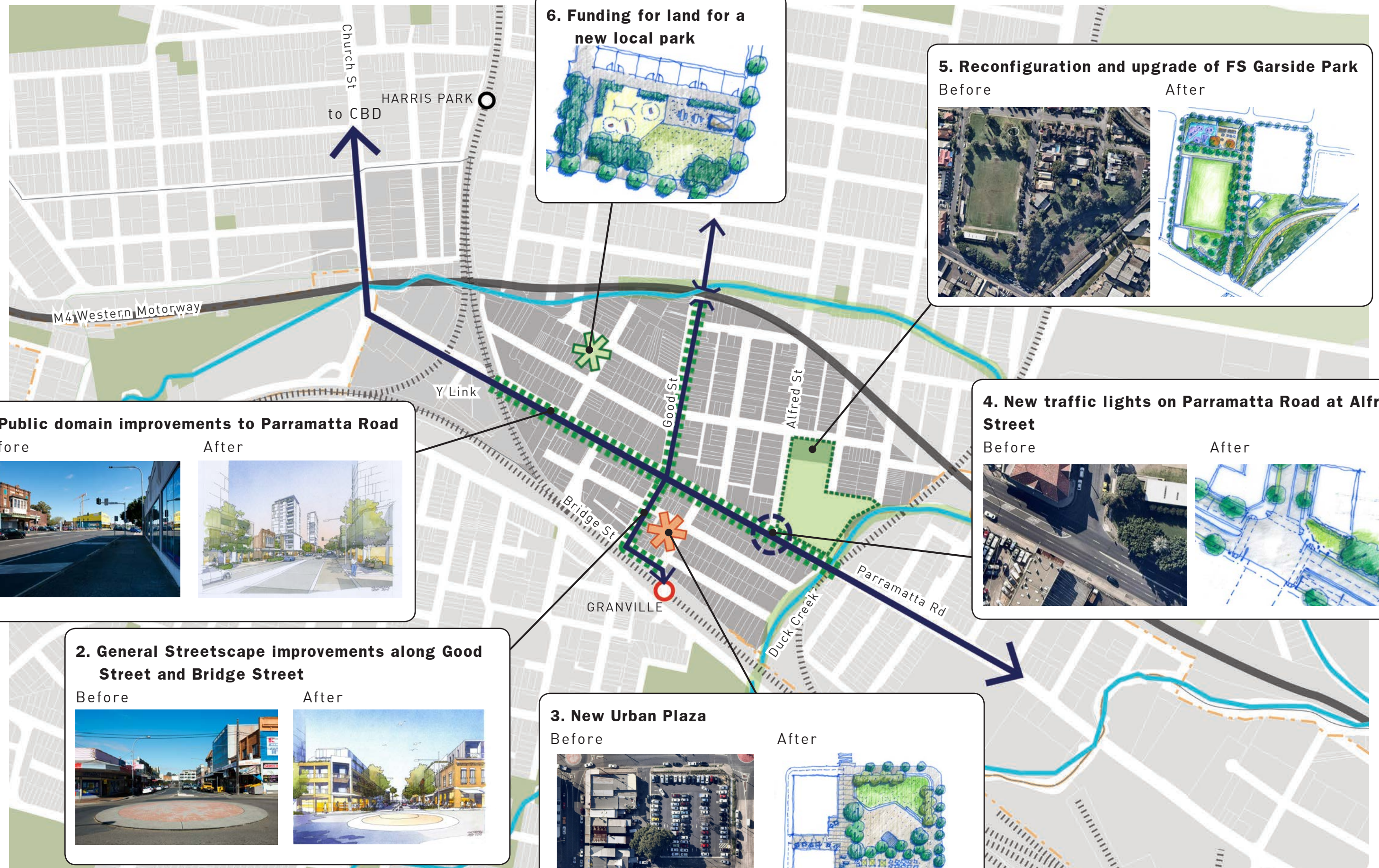


2

URBAN AMENITY IMPROVEMENTS

2.0 Urban Amenity Improvements

2.1 Granville Urban Amenity Improvements



Granville Urban Amenity Improvements

DESCRIPTION	BENEFITS	DETAILS
<p>1. Public domain improvements to Parramatta Road including new street tree planting and public domain improvements from Y-Link to Duck Creek</p>	<p>At present the streetscape of Parramatta Road within the Granville Precinct is degraded and hostile. This improvement aims to create a more amenable environment for pedestrians through planting of trees to create shade and act as a visual barrier between vehicles and pedestrians. The tree canopy will soften the appearance of the road and together with verge planting will better define delineation between built form, public footpath and road carriageway.</p> <p>The footpath paving will be relaid from its existing cracked and broken form. This will provide a safer surface for walking and also engender a sense of pride in the appearance of the public domain, making it appear as a place that is cared for.</p>	<ul style="list-style-type: none"> • 200lt street tree planting at 15m centres • Mass planting to verge • New insitu concrete footpath pavement • New bench seating, bins, bike racks • New pedestrian light poles • Road length = 820m
<p>2. General streetscape improvements along Good Street and Bridge Street to Granville Station to connect to Parramatta River and Parramatta CBD</p>	<p>The proposal to upgrade Good Street between Granville Rail Station and Parramatta Road follows a design developed by Parramatta City Council. Once completed these works will provide a streetscape akin to South Street south of the train station. It is anticipated that Parramatta City Council could contribute funding of around \$300,000 through its Better Neighbourhoods Program for these works and it is proposed that the UAIP program funds the remainder.</p> <p>The upgrade will include new street tree planting within blistered kerbs which will help define vehicular parking, the pedestrian, footpath and road carriageway. New footpaths will feature brick banded pavements denoting a high street character. New pram ramps will enable greater accessibility in crossing streets, and street furniture including benches and bins will improve the overall appearance of Good Street. Street tree planting and pedestrian works are proposed on both sides of the street north of Parramatta Road to the M4 (ie: the Precinct boundary).</p> <p>The catalytic effects of the Good Street upgrade include creation of an activity centre for the suburb north of the train station. With an increased population through further development, the Good Street upgrade will provide a foundation for further regeneration within this Precinct allowing vacant shops to be leased and generating a sense of life on the street. North of Parramatta Road, the proposed works will improve the streetscape and reinforce the north-south connection towards the M4 and Harris Park.</p>	<ul style="list-style-type: none"> • 200lt street tree planting • New footpath blisters for tree planting every 2 parking bays • Mass planting to footpath blisters • New insitu concrete footpath pavement with brick banding • New bench seating, bins, bike racks • New pedestrian smart pole lighting • Paramatta Road to Railway Station = 260m • Paramatta Road to M4 viaduct = 450m
<p>3. New Urban Plaza north of the railway station centrally located near Rowell and Cowper Street Intersection</p>	<p>A new urban plaza is to be created on the site of the existing commuter car park at the corner of Rowell and Cowper Streets. This plaza will provide a community gathering space within the (northern) town centre of Granville. With seating, planting and turf areas, the plaza will provide a place for the community to meet and interact. The proposed works include undergrounding of the existing car spaces into a basement car park.</p> <p>The design of the plaza allows for a flexibility of uses and could host small markets, community based events or simple passive recreation space.</p>	<p>0.34 hectares</p> <ul style="list-style-type: none"> • Paved plaza area • Feature trees and mass planting • Fixed umbrellas and tables and seats • New street trees and footpath upgrades • Raised timber and steel stage • Pole mounted and feature lighting • Concrete seating walls • Relocation of car park into basement
<p>4. New traffic lights on Parramatta Road at Alfred Street to provide north-south pedestrian access</p>	<p>The Granville Precinct Plan provides for a new north-south road connection between East Street and Parramatta Road. This improvement aims to further enhance the connectivity of the Precinct by providing a new signalised intersection at Parramatta Road. As a four-way intersection this will provide greater pedestrian accessibility within the Precinct for both east-west and north-south movements.</p>	<ul style="list-style-type: none"> • New pedestrian ramps to intersection • New line marking to intersection • Supply and install new signalised intersection with pedestrian lights
<p>5. Reconfiguration and upgrade of FS Garside Park</p>	<p>This improvement aims to increase accessibility to open space for new and existing residents within the Granville precinct.</p> <p>The proposal includes revegetation and reconfiguration of the existing sports field to provide an accessible place for local communities to engage in active recreation.</p>	<p>0.3 Ha</p> <ul style="list-style-type: none"> • New broom finished concrete footpath pavement • Exercise stations adjacent to paths • Reconfigure existing soccer facility • Playground equipment (fenced) • Picnic shelter and fixed tables, seats and BBQ • Pole mounted lighting • Permeable paving to existing parking area • Open Lawn • Street trees at 10m centres • Feature trees and mass planting
<p>6. Funding for land for a new local park to the north of Parramatta Road between Good and Victoria Street</p>	<p>A new local park will be created north of Parramatta Road between Good Street and Victoria Street. The park will have a local character and could include turfed areas, play equipment and seating (subject to further design by Parramatta City Council). The park's purpose will be to cater for local activities including gathering, child's play and informal active recreation opportunities.</p> <p>Funding allocation has been based on site purchase only, with Council funding and implementing the creation of the park.</p>	<p>0.17 Ha</p> <ul style="list-style-type: none"> • Purchase of land

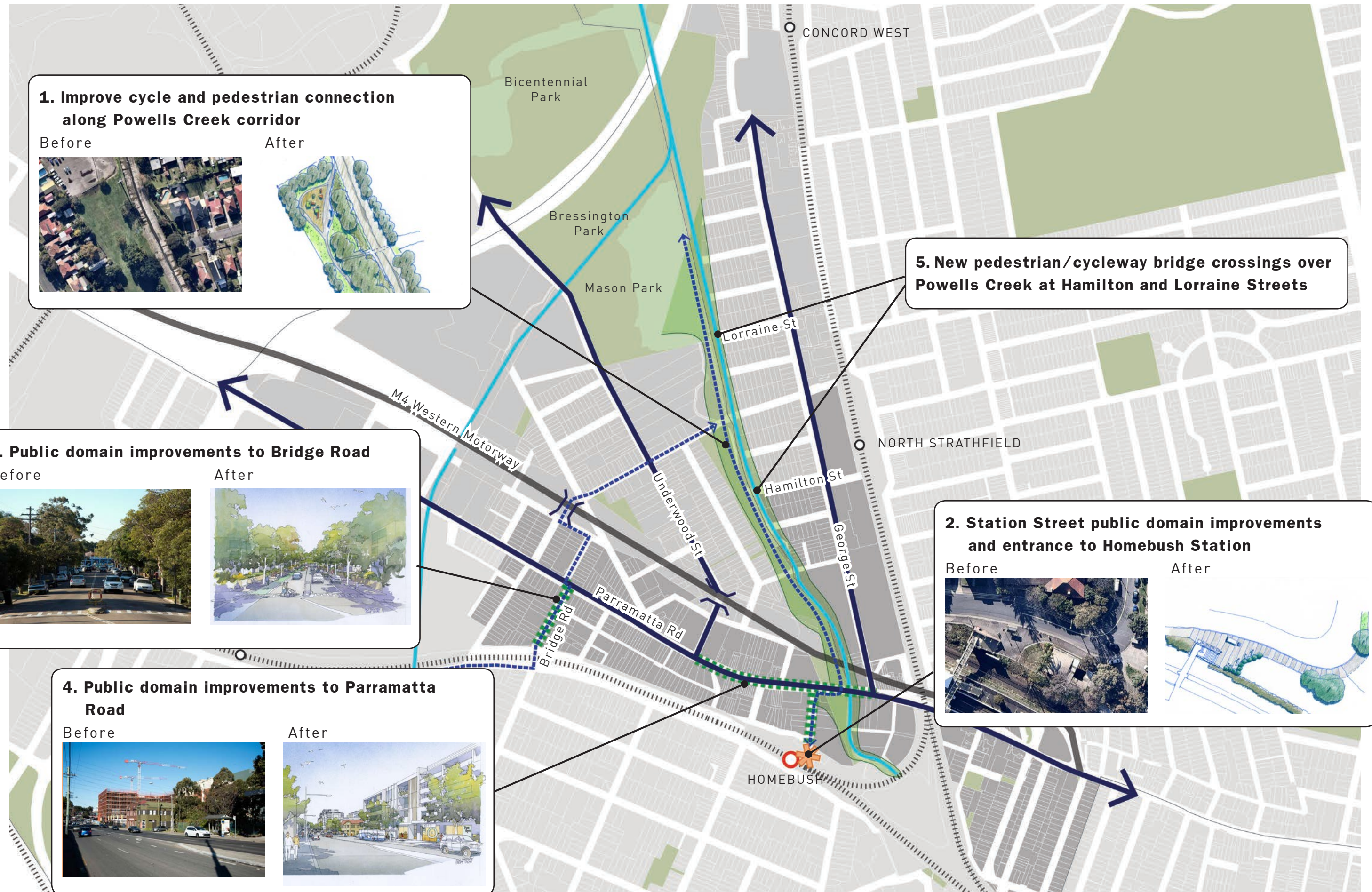
2.2 Auburn Urban Amenity Improvements



Auburn Urban Amenity Improvements

DESCRIPTION	BENEFITS	DETAILS
<p>1. Public domain improvements to Parramatta Road including new street planting and public domain improvements from Braemar Avenue to Station Street</p>	<p>At present the streetscape of Parramatta Road within the Auburn Precinct is degraded and hostile. This improvement aims to create a more amenable environment for pedestrians through planting of trees to create shade and act as a visual barrier between vehicles and pedestrians. The tree canopy will soften the appearance of the road and together with verge planting will better define delineation between built form, public footpath and road carriageway.</p> <p>The footpath paving will be relaid from its existing cracked and broken form. This will provide a safer surface for walking and also engender a sense of pride in the appearance of the public domain, making it appear as a place that is cared for.</p>	<ul style="list-style-type: none"> • 200lt street tree planting at 15m centres • Mass planting to verge • New insitu concrete footpath pavement • New bench seating, bins, bike racks • New pedestrian light poles • Street length = 480m
<p>2. Melton Street pedestrian/cycleway connection to M4 overpass upgrade</p>	<p>Melton Street overpass forms an important pedestrian and cycle connection between Auburn in the south and Silverwater in the north. It also provides an important connection for students to access Auburn North Public School and Auburn Girls High School. Currently the overpass has some major issues with safety particularly where the ramps terminate at the street edges. It is proposed to install blisters to both sides of Adderley Street West to calm traffic at the pedestrian crossing at Melton Street South and provide improved access to the Public School as well as the overpass to Parramatta Road.</p> <p>Blisters are also proposed on Deakin Street with a new pedestrian crossing at the northern ramp to the M4 overpass with vandal proof pedestrian lighting installed to improve safety at night.</p>	<ul style="list-style-type: none"> • Landscaped blisters to both sides of Adderley Street West including widened footpath at the southern end of the overpass ramp • Landscaped blisters to both sides of Deakin Street and new pedestrian crossing • Potential repainting of steelwork to the overpass to improve visual quality and additional pedestrian lighting to both ends and the overpass

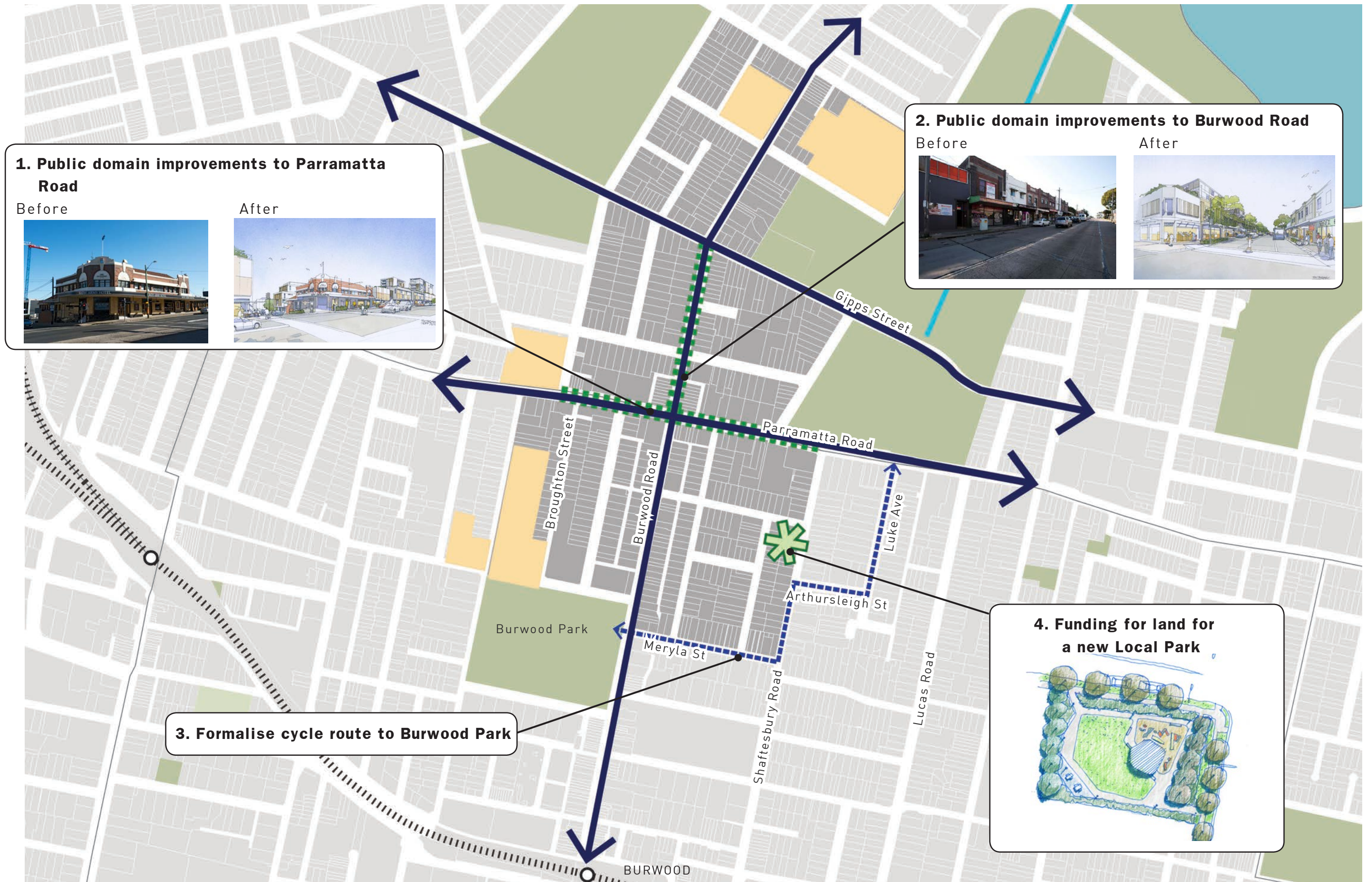
2.3 Homebush Urban Amenity Improvements



Homebush Urban Amenity Improvements

DESCRIPTION	BENEFITS	DETAILS
<p>1. Improve Cycle and Pedestrian Connection along Powells Creek corridor to Bicentennial Park/Sydney Olympic Park</p>	<p>Building on Strathfield Council's upgrade of the Powells Creek corridor to open space, this improvement will provide pedestrian lighting to the extent of the shared path from Parramatta Road to Mason Park.</p> <p>As the central spine of the new Homebush Precinct, this upgrade will provide greater accessibility and safety to transport nodes and recreation spaces within and surrounding the Precinct.</p>	<ul style="list-style-type: none"> • Post top lighting at 15m intervals (to existing and planned pathways) • Trees and mass planting • Fitness trail stations including undersurfacing
<p>2. Station Street public domain improvements and entrance to Homebush Station</p>	<p>The existing station entrance to Homebush Station is not legible or amenable to active transport commuters. This improvement will increase accessibility to the Station and assist in encouraging greater public transport utilisation. Through pedestrian footpath and cycleway upgrades on Station Street, these works will provide a more pleasant and safe environment for pedestrians and cyclists accessing the stations.</p> <p>Street furniture such as bike racks will further promote active transport, and improved way finding signage will further enhance accessibility.</p>	<p>Station Plaza:</p> <ul style="list-style-type: none"> • Concrete unit pavers • Tree grove with seating beneath • Feature mass planting • Shade / weather canopy • Bike parking and bins • Pole mounted lights <p>Station Street upgrade:</p> <ul style="list-style-type: none"> • Concrete shared path • Tree and verge planting
<p>3. Public domain improvements to Bridge Road</p>	<p>Bridge Road forms an important part of the Bay to Bay cycleway which connects Botany Bay in the south with Homebush Bay and on to Macquarie University to the north. Currently this section of the cycleway is heavily used by vehicles and is difficult for cyclists to negotiate. The footpaths are in poor condition and there is limited signage and no crossing other than pedestrian refuges. It is proposed to improve the pedestrian and cycleway environment by installing new pedestrian crossings on the northern side of the railway bridge, with a dedicated separated cycleway.</p>	<ul style="list-style-type: none"> • Upgrade insitu concrete railway bridge footpath • New pedestrian crossings and pedestrian ramps • New coloured concrete pavement • New 400mm concrete islands to delineate cycle path • New line marking and road paint to delineate cycle path • Adjustments to raised thresholds • Street tree planting • Additional wayfinding signage • Street length = 190m • Bridge length = 37m
<p>4. Public Domain Improvements to Parramatta Road including new street planting and public domain improvements from George Street to Underwood Road</p>	<p>At present the streetscape of Parramatta Road within the Homebush Precinct is degraded and hostile. This improvement aims to create a more amenable environment for pedestrians through planting of trees to create shade and act as a visual barrier between vehicles and pedestrians. This improvement builds upon work undertaken by Strathfield Council to improve the amenity along Parramatta Road. At present a number of new and proposed development applications are conditioned to upgrade the road reserve to design standards set by Council.</p> <p>This improvement will complete missing links within the existing provision of upgrades of the road reserve. Works will include planting of trees and repaving of the footpath. The tree canopy will soften the appearance of the road and will better define delineation between built form, public footpath and road carriageway.</p> <p>The footpath paving will be relaid from its existing cracked and broken form. This will provide a safer surface for walking and also engender a sense of pride in the appearance of the public domain.</p>	<ul style="list-style-type: none"> • 200lt street tree planting at 15m centres • Mass planting to verge • New footpath unit paving • New bench seating, bins and bike racks • Bus shelter • New pedestrian light poles • Street length = 500m
<p>5. New pedestrian/cycleway bridge crossings over Powells Creek at Hamilton and Lorraine Streets</p>	<p>The western side of the Powells Creek corridor forms an important part of the Bay to Bay cycleway however it is poorly connected to the eastern side of the creek in North Strathfield and Concord West. New pedestrian cycleway bridge crossings at Hamilton Street and Lorraine Streets over Powells Creek will improve both pedestrian and cycle connectivity and provide better access to Bressington and Mason Parks as well as Ismay Reserve.</p>	<ul style="list-style-type: none"> • Min 3.0 metre wide pedestrian/cycleway bridges • Pedestrian lighting to bridges • Footpath and cycleway connection

2.4 Burwood Urban Amenity Improvements



Burwood Urban Amenity Improvements


DESCRIPTION	BENEFITS	DETAILS
<p>1. Public domain improvements to Parramatta Road including new street planting and public domain improvements from Shaftesbury Road to Broughton Street</p>	<p>At present the streetscape of Parramatta Road within the Burwood Precinct is degraded and hostile. This contrasts to the streetscape only one block back from Parramatta Road where footpaths are well maintained and there is a level of greenery along the streets. This improvement aims to create a more amenable environment for pedestrians.</p> <p>The footpath paving will be relaid from its existing cracked and broken form. This will provide a safer surface for walking and also engender a sense of pride in the appearance of the public domain, making it appear as a place that is cared for. Banner poles will be installed at the approaches to Burwood Road providing a marker and entry to the nearby Town Centre. With a limited verge width, trees in this area are not possible to achieve prior to redevelopment of lots along Parramatta Road. Within the Precinct Plan provision has been made for setbacks to be achieved within new development that will allow provision of a tree canopy along Parramatta Road.</p>	<ul style="list-style-type: none"> • 200lt street tree planting • Mass planting • New insitu concrete footpath pavement • New bench seating, bins and bike racks • Bus shelter • New pedestrian light poles • Street length = 500m
<p>2. Public domain improvements to Burwood Road between Parramatta Road and Gipps Street</p>	<p>Burwood Road to both the north and south of Parramatta Road already exhibits an amenable environment. At the approaches to Parramatta Road this amenity degrades and the pedestrian environment appears more like that of Parramatta Road.</p> <p>This improvement will enhance the pedestrian environment through incorporation of street trees and upgrades to the existing footpath. This will continue the character experienced further north and south of Burwood Road up to Parramatta Road. Together with the upgrades to the Parramatta Road reserve this improvement will assist in marking Burwood Road as the 'cross-roads' and the central activity spine for the new precinct. In effect it will create a pleasant pedestrian environment connecting Burwood town centre to the parklands north of Parramatta Road.</p>	<ul style="list-style-type: none"> • 200lt street tree planting • New footpath blisters for tree planting every 2 parking bays • Banner poles • Mass planting to footpath blisters • New insitu concrete footpath pavement with brick banding • New bench seating, bins and bike racks • New pedestrian smart pole lighting • Street length = 340m
<p>3. Formalise the existing informal cycle route from Luke Avenue and Parramatta Road intersection to Burwood Park (via Arthursleigh Street, Shaftsbury Road and Meryla Street)</p>	<p>This improvement will formalise an existing on-road cycle route connecting Burwood Park to the existing shared path along Parramatta Road. Through provision of line marking, the route will be safer for cyclists. Formalisation of this route will enable future connections to be made north of Parramatta Road to the new regional cycleway along Patterson Street/Gipps Street/Queens Road. This will require a new connection to be created towards the east of Concord Oval.</p>	<ul style="list-style-type: none"> • New line marking and road paint to delineate cycle path
<p>4. Funding for land for a new Local Park centrally located east of Burwood Road and south of Parramatta Road (possible location adjacent heritage items)</p>	<p>A new local park will be created east of Burwood Road and south of Parramatta Road. The park will have a local character and include turfed areas, play equipment and seating (subject to further design by Burwood Council). The park's purpose will be to cater for local activities including gathering, child's play and informal active recreation opportunities.</p> <p>The park will provide an area of respite within the urban form and assist in ameliorating deficiencies in open space provision for new and existing communities.</p> <p>Funding allocation has been based on site purchase only, with Council funding and implementing the creation of the park.</p>	<p>0.42 Ha</p> <ul style="list-style-type: none"> • Playground equipment (fenced) • Open 'kick about' lawn area • Feature trees and mass planting • Picnic shelter and fixed tables and seats • Broom finished concrete paved footpaths • Drinking fountain • Pole mounted lighting

2.5 Kings Bay Urban Amenity Improvements

1. Public domain improvements to Parramatta Road

4. Upgrade Charles Heath Reserve

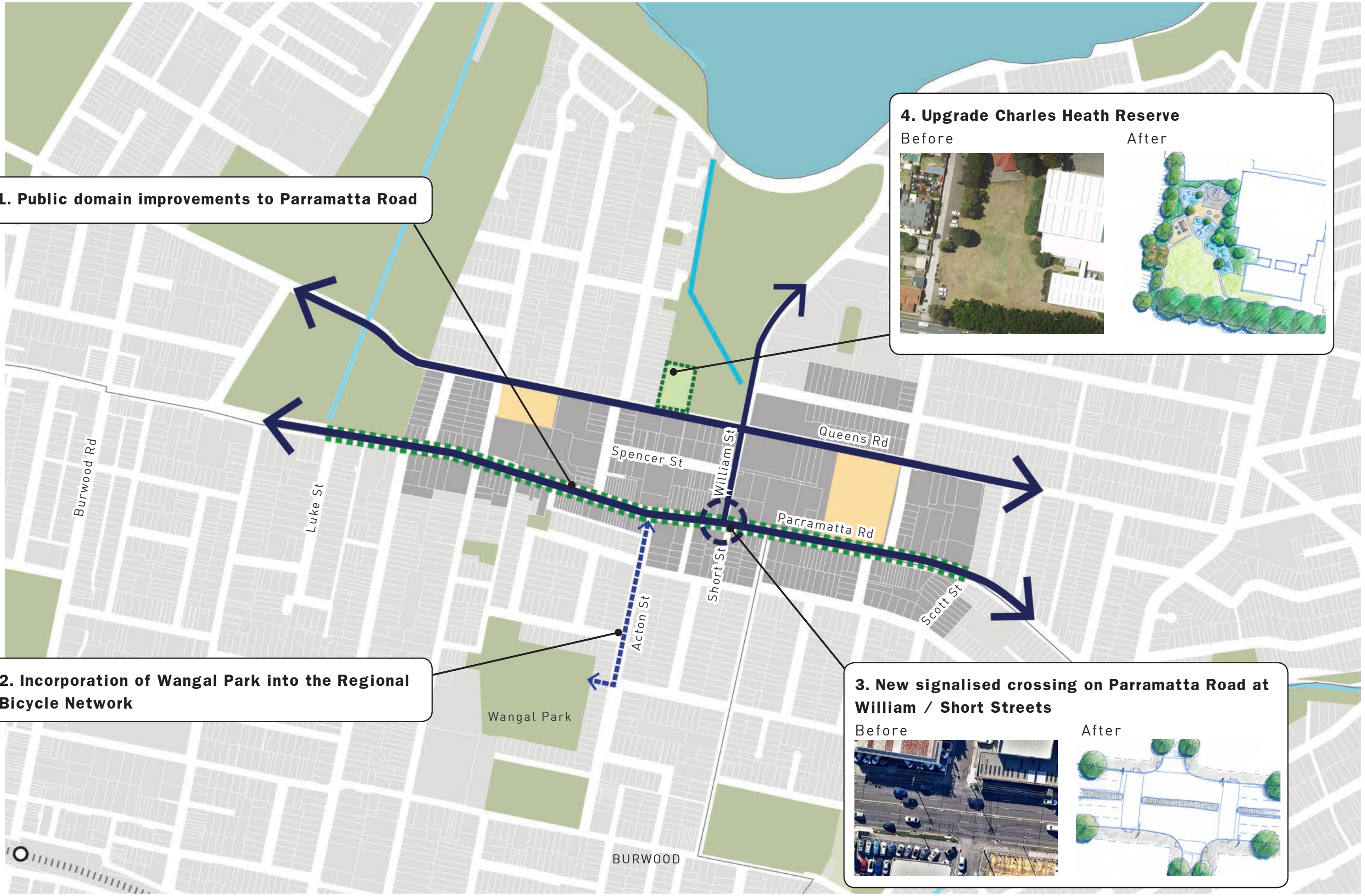
Before After



2. Incorporation of Wangal Park into the Regional Bicycle Network

3. New signalled crossing on Parramatta Road at William / Short Streets

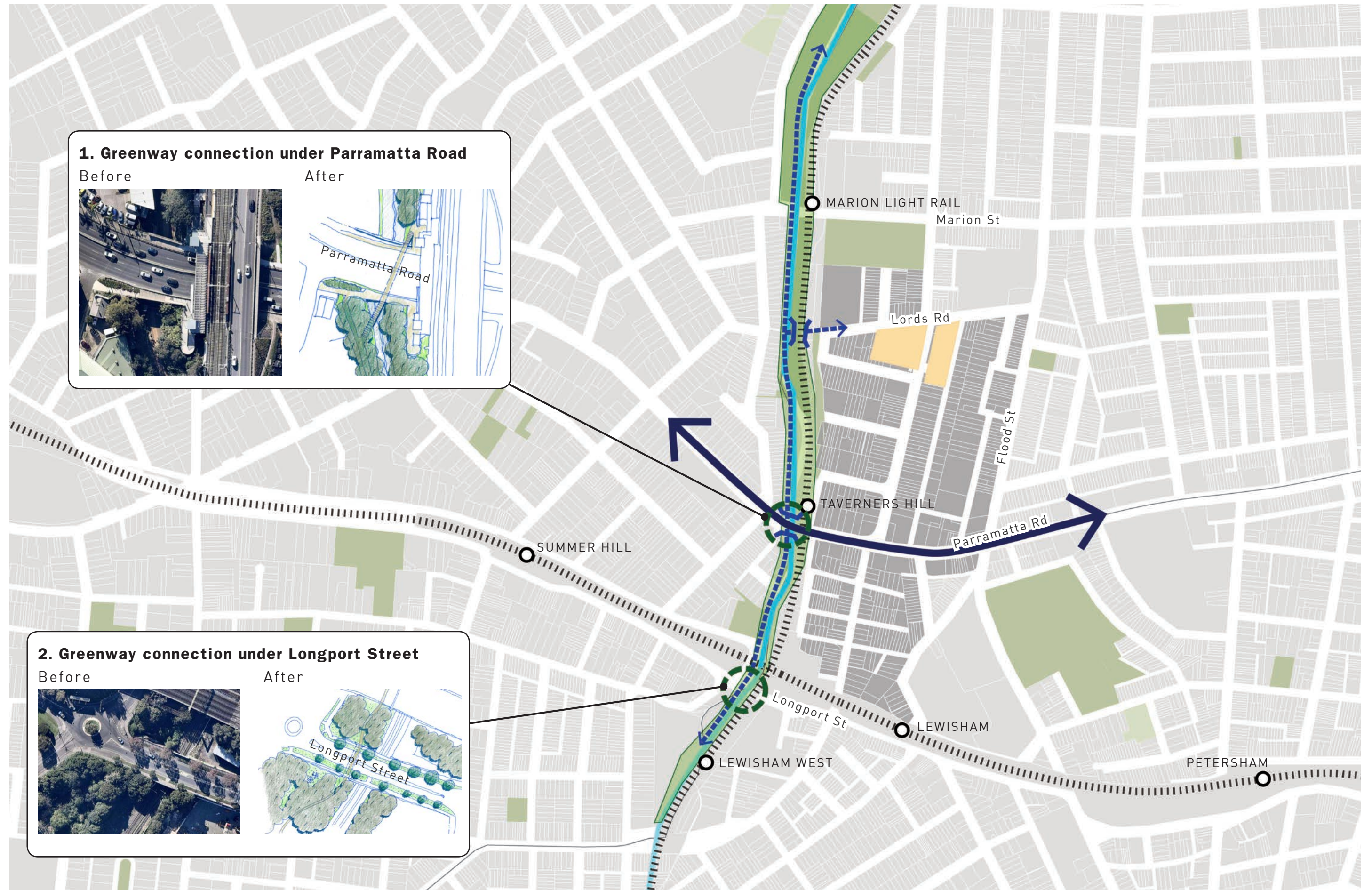
Before After



Kings Bay Urban Amenity Improvements

DESCRIPTION	BENEFITS	DETAILS
<p>1. Public domain improvements to Parramatta Road including new street planting and public domain improvements from Scott Street to Luke Avenue</p>	<p>At present the streetscape of Parramatta Road within the Kings Bay Precinct is degraded and hostile. Parramatta Road will become a key address for this Precinct and must therefore provide an identity. This improvement aims to create a more amenable environment for pedestrians.</p> <p>The footpath paving will be re-laid from its existing cracked and broken form. This will provide a safer surface for walking and also engender a sense of pride in the appearance of the public domain, making it appear as a place that is cared for. Banner poles will be installed at the approaches to William Street providing a signifier of place for the new Precinct and marker of the local centre within the Precinct. With a limited verge width, trees in this area are not possible to achieve prior to redevelopment of lots along Parramatta Road. Within the Precinct Plan provision has been made for setbacks to be achieved within new development that will allow provision of a tree canopy along Parramatta Road.</p>	<ul style="list-style-type: none"> • 200lt street tree planting • Mass planting • New insitu concrete footpath pavement • New bench seating, bins and bike racks • Bus shelter • New pedestrian light poles • Street length = 1250m
<p>2. Incorporation of Wangal Park into the Regional Bicycle Network</p>	<p>This improvement will formalise an on-road cycle route connecting Parramatta Road and Wangal Park. Through provision of line marking the route will be safer for cyclists. Formalisation of this route will enable future connections to be made north of Parramatta Road to the new regional cycleway along Patterson Street/Gipps Street/Queens Road and through to Canada Bay.</p> <p>A through site link between Acton Street and Wangal Park will be required in the future to complete the connection and provide greater connectivity to the park from the surrounding areas.</p>	<ul style="list-style-type: none"> • New line marking and road paint to delineate cycle path • Shared concrete path, trees and planting to the through-site link
<p>3. New signalised crossing on Parramatta Road at William/ Short Streets to improve north-south pedestrian and cycle movement</p>	<p>Kings Bay currently has limited north/south connectivity. In order to create a cohesive precinct, this improvement includes installation of traffic lights at the intersection of Short Street, William Street and Parramatta Road. New pedestrian crossings will provide stronger connectivity for pedestrians and cyclists between Croydon Station in the south and the waters of Kings Bay in the north. It will also provide the opportunity to connect land south of Parramatta Road to the Harbour for the first time in many years.</p>	<ul style="list-style-type: none"> • New pram ramps to intersection • New line marking to intersection • Supply and install new signalised intersection with pedestrian lights
<p>4. Upgrade Charles Heath Reserve</p>	<p>The existing Five Dock Leisure Centre contains a grassed area to its west that is currently underutilised. This improvement will upgrade the space to a local park typology creating a more usable space for existing and new residents.</p> <p>The works will have a local character and could include turfed areas, play equipment and seating. The park's purpose will be to cater for local activities including gathering, child's play and informal active recreation opportunities.</p>	<ul style="list-style-type: none"> • Playground equipment (fenced) • Open 'kick about' lawn area • Feature trees and mass planting • Picnic shelter and fixed tables and seats • Broom finished concrete paved footpaths • Grit blast concrete seating area • New street trees and footpath upgrades • Drinking fountain • Pole mounted lighting

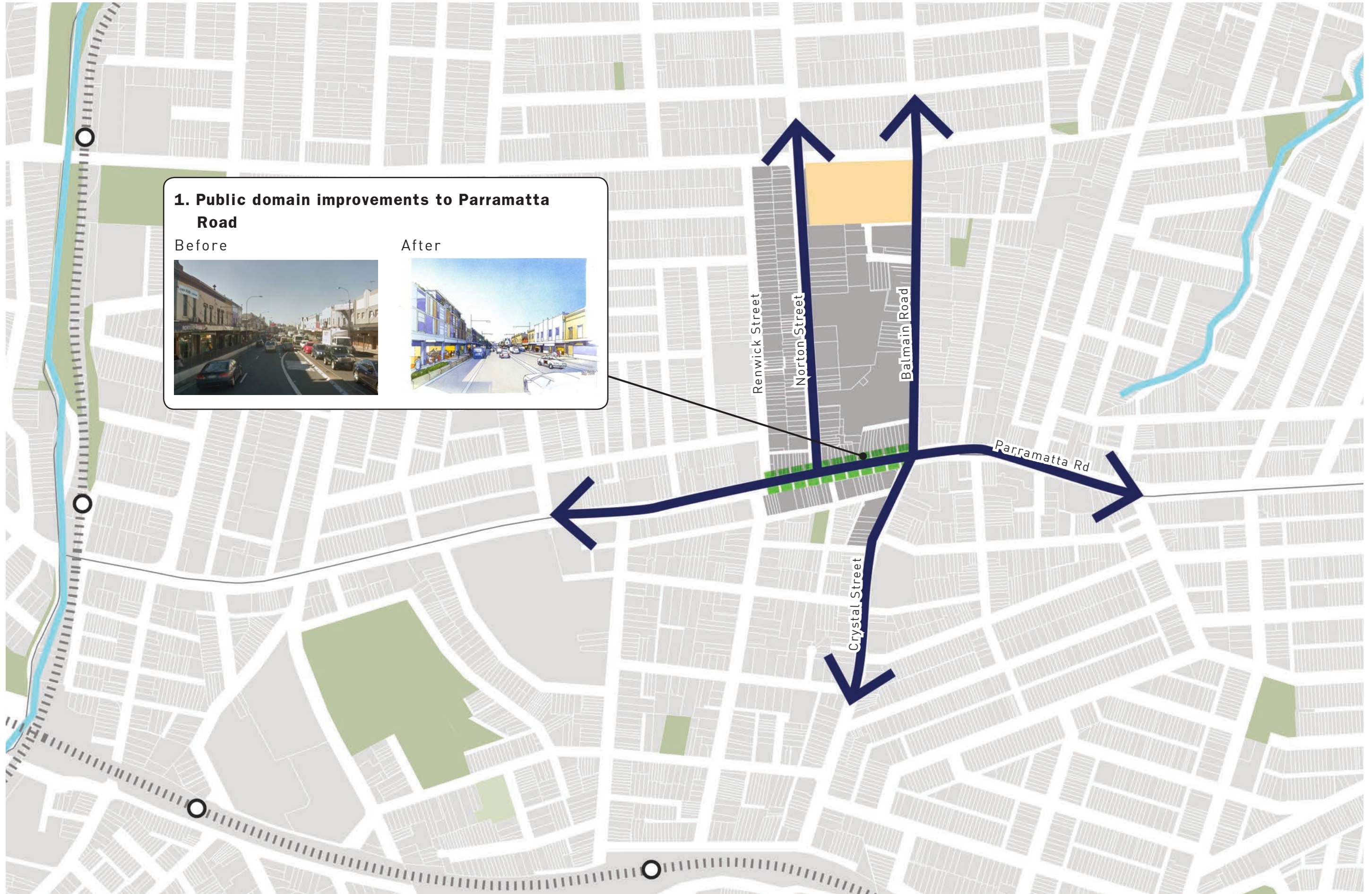
2.6 Taverners Hill Urban Amenity Improvements



Taverners Hill Urban Amenity Improvements

DESCRIPTION	BENEFITS	DETAILS
<p>1. Greenway connection under Parramatta Road</p>	<p>The Greenway is an important active transport connection between the Cooks River and Iron Cove. With a master plan in place, the Greenway is being progressively delivered by local government.</p> <p>This improvement will provide funding that aims to create a seamless north-south connection underneath Parramatta Road. Utilising an existing storm water culvert, a new path will be created that provides a safe and accessible connection ensuring pedestrians and cyclists are separated from the traffic on Parramatta Road. At its completion this work will complete a missing link that has been found difficult to fund to date.</p>	<ul style="list-style-type: none"> • Elevated mesh walkway crossing over the storm water culvert underneath Parramatta Road • New insitu concrete footpath pavement connecting underpass to existing Greenway • New pedestrian lighting fixed to underside of Parramatta Road underpass
<p>2. Greenway connection under Longport Street</p>	<p>The Greenway is an important active transport connection between the Cooks River and Iron Cove. With a master plan in place, the Greenway is being progressively delivered by local government authorities.</p> <p>This improvement will provide funding that aims to create a seamless north-south connection underneath Longport Street. At its completion this work will complete a missing link that has been difficult to fund to date.</p>	<ul style="list-style-type: none"> • New underpass connection below Longport Street to connect existing Greenway to the Lewisham West light rail station • New insitu concrete footpath/cycleway pavement • New pedestrian lighting along to underpass and pedestrian/cycleway connections

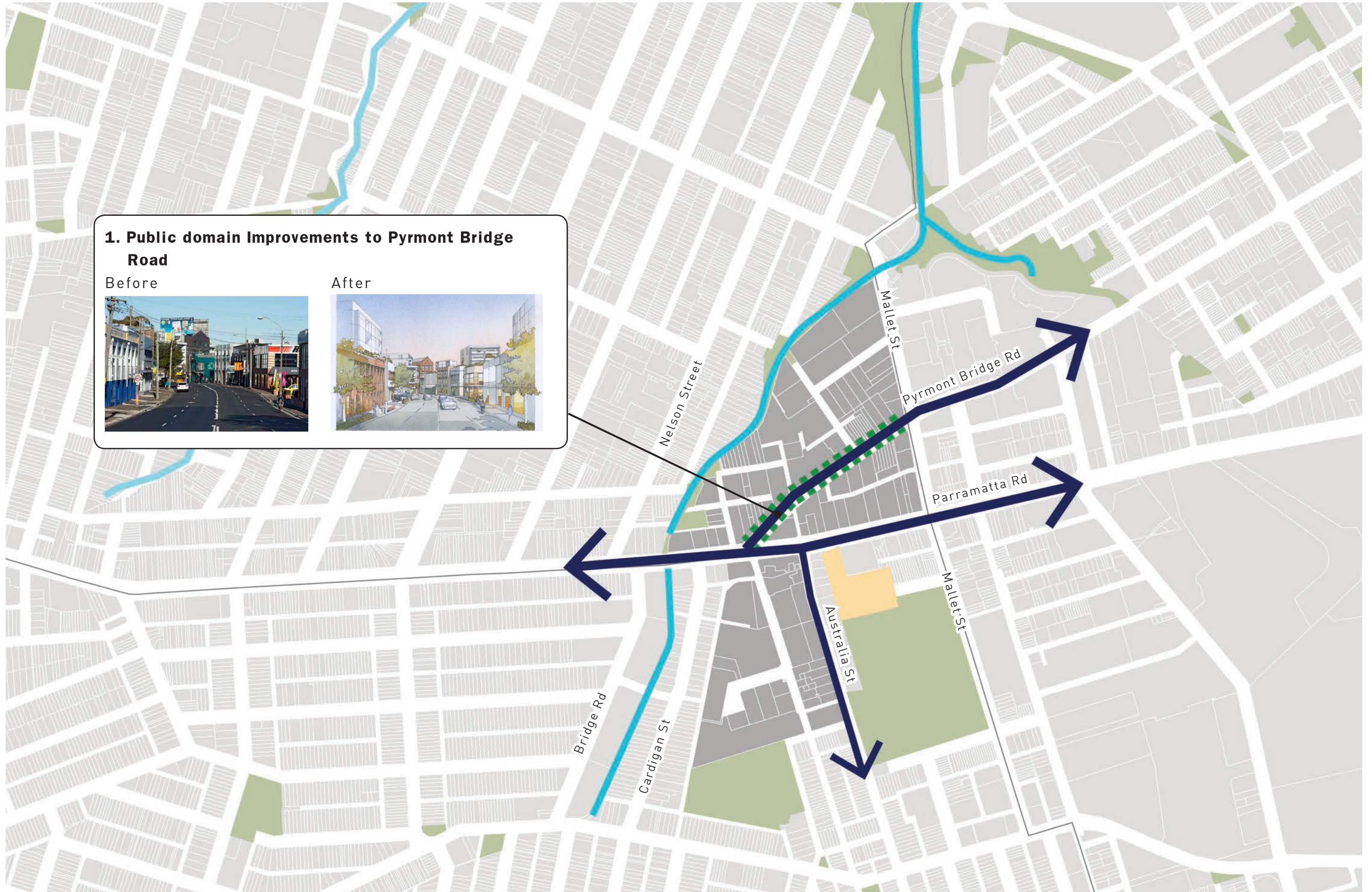
2.7 Leichhardt Urban Amenity Improvements



Leichhardt Urban Amenity Improvements

DESCRIPTION	BENEFITS	DETAILS
<p>1. Public domain improvements to Parramatta Road from Renwick Street to Balmain Road</p>	<p>At present the streetscape of Parramatta Road within the Leichhardt Precinct is degraded and hostile.</p> <p>This improvement aims to create a more amenable environment for pedestrians, improve the existing streetscape character and deliver a public domain placemaking works that act as a marker for the Leichhardt Precinct.</p> <p>The footpath paving will be re-laid from its existing cracked and broken form. This will provide a safer surface for walking and also engender a sense of pride in the appearance of the public domain. The existing concrete barriers will be redesigned to improve their appearance. With a limited verge width, trees in this area are not possible however the new barriers will be designed to incorporate planter boxes to assist with the greening of Parramatta Road.</p>	<p>Approx. 4.4 km</p> <ul style="list-style-type: none"> • New insitu concrete footpath pavement • New bench seating, bins and bike racks • New pedestrian light poles • New barriers and planter boxes • Street length = 250m

2.8 Camperdown Urban Amenity Improvements



1. Public domain Improvements to Pymont Bridge Road

Before



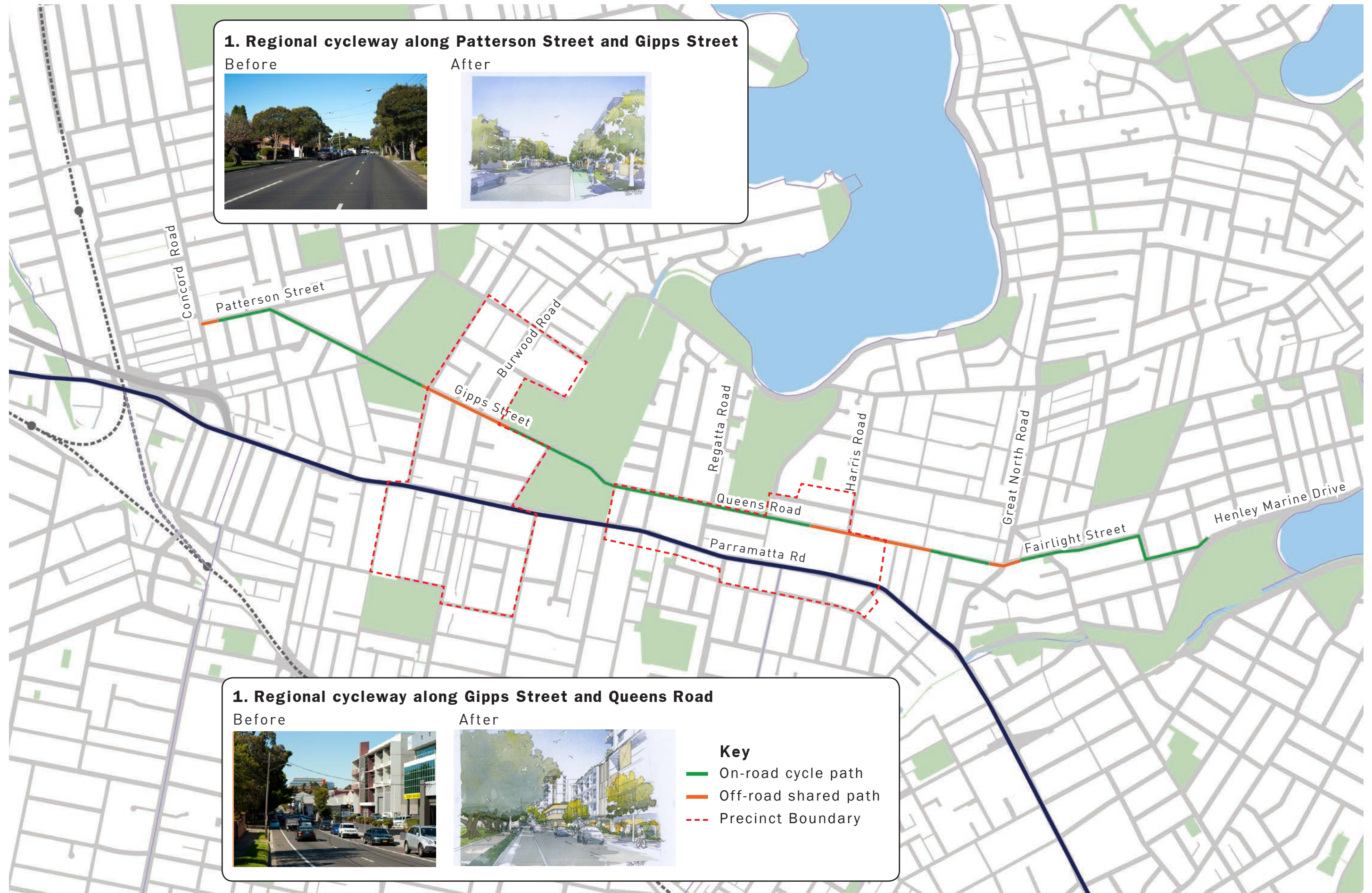
After



Camperdown Urban Amenity Improvements

DESCRIPTION	BENEFITS	DETAILS
<p>1. Public domain improvements to Pyrmont Bridge Road including new street tree planting and public domain improvements between Parramatta Road and Mallet Street</p>	<p>At present the streetscape of Pyrmont Bridge Road within the Camperdown Precinct lacks pedestrian amenity, shade and street furniture. This improvement aims to create a more amenable environment for pedestrians through planting of trees to create shade, mitigate winds and improve visual amenity. The tree canopy will soften the appearance of the road and together with verge planting will better define delineation between built form, public footpath and road carriageway.</p> <p>The footpath paving will be relaid from its existing cracked and broken form to provide a unified and safer surface for walking and also engender a sense of pride in the appearance of the public domain.</p>	<ul style="list-style-type: none">• 200lt street tree planting• New mass planting• New insitu concrete footpath pavement both sides• New bench seating, bins and bike racks• Street length = 330m

2.9 Regional Cycleway Urban Amenity Improvements



1. Regional cycleway along Patterson Street and Gipps Street

Before 

After 

1. Regional cycleway along Gipps Street and Queens Road

Before 

After 

Key

- On-road cycle path
- Off-road shared path
- - - Precinct Boundary

Regional Cycleway Urban Amenity Improvements

DESCRIPTION	BENEFITS	DETAILS
<p>1. Regional cycleway along Patterson Street/Gipps Street and Queens Road between Concord Road and Henley Marine Drive</p>	<p>The regional cycleway is one of two east-west regional cycle routes in Transport for NSW's Sydney's Cycling Future. Implementation of a new cycleway to serve as a regional connector between the existing M4 cycleway and the Iron Cove Bay Run is therefore a significant corridor initiative within the UAIP.</p> <p>At its completion, the regional cycleway will have wide reaching benefits that transcend the Corridor and Precincts within its immediate proximity. With funding not being provided for this link within the next ten years of existing cycleway funding programs, this improvement will provide a significant benefit for the community. Furthermore accessibility will be greatly increased for active transport and this improvement will serve as a spine from which further active transport links can be made.</p>	<ul style="list-style-type: none"> • New coloured concrete pavement • New 400mm concrete islands to delineate cycle path • New line marking and road paint to delineate cycle path • New traffic signal reconfiguration • Relocation of light and power poles • Adjustments to raised thresholds • Street tree planting

Refer to Appendix B - Regional Cycleway Concept Plans for additional information.

this page has been intentionally left blank



APPENDICES



1.0 Public Domain - Kit of Parts

1.1 Footpaths and Paving Materials

Considerations

Currently, much of the footpath paving along Parramatta Road lacks consistency and is in a poor state of repair. In addition to public safety and accessibility issues, this reinforces the perception of a poor quality public domain.

Upgrading pedestrian pavements forms an important part of the Program. It is an achievable, cost-effective and relatively quick means of improving the amenity of the Corridor, increasing the quality of the public domain and improving the pedestrian environment. Footpath upgrades can also be rolled out over time along with new development opportunities. The incorporation of stone paving in special places could be considered if additional funding is sourced outside the Program.

Examples of potential materials that could be included are provided in the following images.

Principles

The following principles have been established for footpaths and paving along the Corridor:

- Widen footpaths along Parramatta Road and in side streets where possible
- Provide additional pedestrian crossings on Parramatta Road
- Footpaths to take precedence over vehicle driveways and crossovers in terms of material and levels, where appropriate
- Proposed footpath upgrades should take account of existing / future built form and setbacks
- Proposed footpath upgrades should take account of existing and future public transport provision along the Corridor
- Paving selection and material for footpaths to be appropriate for an urban environment.

Recommendations

- Ensure accessibility, public safety requirements, sustainability and maintenance requirements are addressed
- Develop a palette that incorporates a hierarchy of paving materials and types
- Paving materials should use subtle variations in finish and type to celebrate distinct places and interpret heritage, where relevant and appropriate
- Special places such as high points, creek lines and heritage areas should incorporate interpretive elements and or distinct, high quality paving materials
- Explore the opportunity of more detail identification and celebration in the village centres with special paving treatments.

FOOTPATHS AND PAVING



Stone Paver



Concrete Unit Paver



Insitu Concrete



Interpretive Inlay



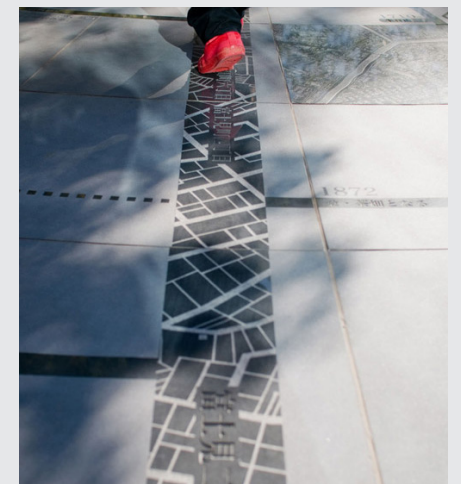
Stone Paver



Concrete Unit Paver



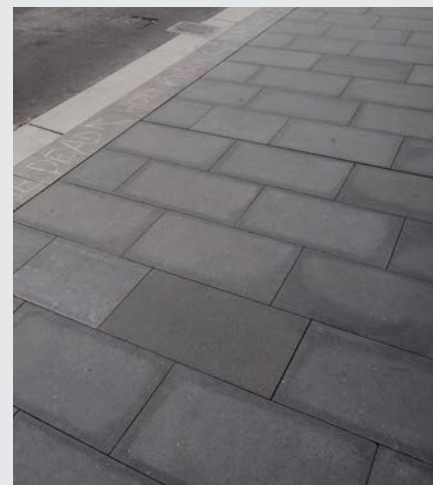
Insitu Concrete



Interpretive Inlay



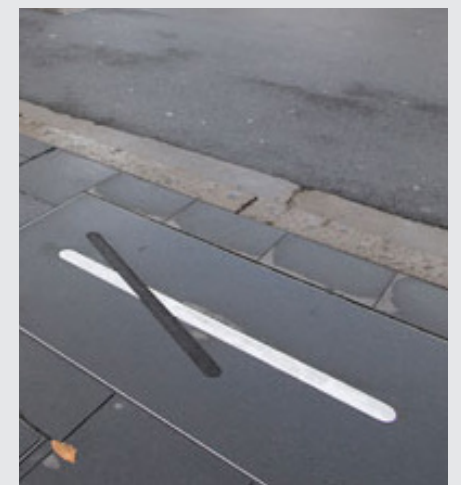
Stone Paver



Concrete Unit Paver



Insitu Concrete



Interpretive Inlay

1.2 Street Planting - trees and other planting

Considerations

Currently, the Corridor lacks mature trees and other planting, particularly within the road reserve itself. The planting of street trees therefore forms a major part of the Urban Amenity Improvement Program as it is seen as an achievable, cost-effective and relatively quick means of improving amenity and increasing the quality of the public domain, improving the pedestrian environment and contributing to land value.

Opportunities for tree planting should be explored along the Corridor as a whole. Existing / future verge and footpath widths and setbacks provide less constraints than in the western portion of the Corridor and are therefore considered a tangible opportunity to significantly improve local amenity. Consideration should be given to the most appropriate tree for its specific location and potential long term and future impacts of tree roots, canopy and suitable available soil mass. In the eastern portion of the Corridor where the footpaths are much narrower, a more urban response is proposed. Built form should address the street, and minimum or no setbacks are encouraged. However, opportunities for planter boxes, hanging plants and other forms of planting should be explored.

Examples of potential materials that could be included are provided in the following images.

Principles

The following principles have been established for street planting along The Corridor:

- Respond to services and footpath widths while ensuring adequate setback from kerbs and pedestrian circulation space
- Respond to built form and awnings to ensure adequate space for the healthy establishment and development
- Be cognisant of placement of planting with respect to existing and future public transport provision along The Corridor eg. public transport stops
- Ensure adequate spacing requirements for their healthy tree development
- Species selection for planting to be appropriate to local conditions, the urban environment, microclimate, soil type and volume

Recommendations

- Develop a palette of tree species that will support the narrative of the Corridor through providing a character transition from west to east.
- Species selection should consider the existing environment and landscape character. Tree species in the west should consist primarily of native and endemic species. A mix of exotic and deciduous species is encouraged to complement the existing tree palette
- Increase density of planting to align with the proposed density within the villages
- Encourage supplementary tree planting in setbacks in west to form a dense green canopy and structure to the road, in appropriate locations
- Constrained areas such as Leichhardt and Camperdown should utilise smaller trees or planter boxes to suit physical conditions of the Corridor
- Special places such as high points, creek lines and heritage areas incorporate distinct, feature tree planting.



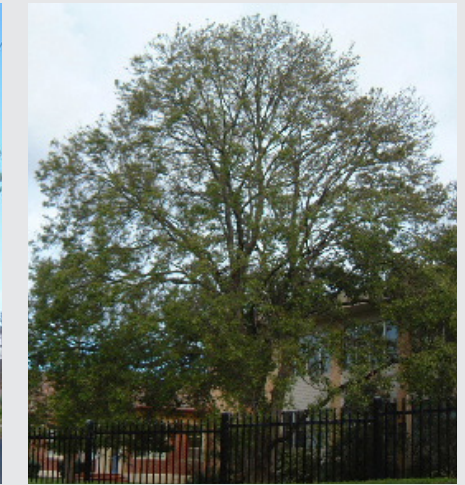
Flindersia australis - Crows Ash



Agathis robusta - Queensland Kauri



Fraxinus pennsylvanica - Green Ash



Waterhousia floribunda - Weeping Lily Pilly



Angophora costata - Smooth Barked Apple



Harpulia pendula - Tulipwood



Acer rubrum - Red Maple



Platanus x acerifolia - London Plane



Murraya paniculata - Orange Jessamine



Pyrus calleryana 'Red Spire' - Callery Pear



Populus simonii - Chinese Poplar



Lagerstromia indica - Crepe Myrtle

1.3 Street Furniture

Considerations

Currently, Parramatta Road lacks adequate street furniture and what is present is often in a poor state of repair. This reinforces the perception of a poor quality public domain, giving pedestrians fewer opportunities to visit or stay in the Corridor.

The provision and upgrade of street furniture should integrate with street tree planting and footpath upgrades to improve the amenity of the Corridor and increase the quality of the public domain.

Examples of potential materials that could be included are provided in the following images.

Principles

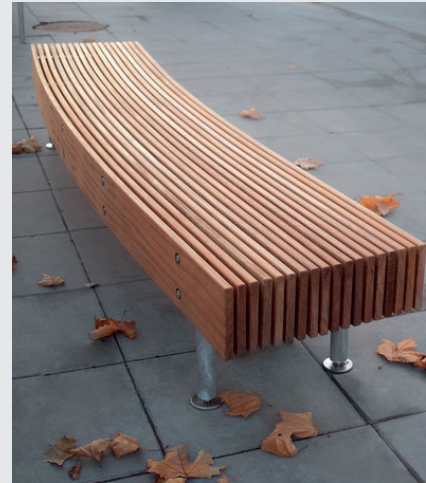
A hierarchy of street furniture elements is suggested as part of the overall public domain design. A mixture of custom designed furniture supplemented with 'off the shelf' elements should be explored. Potential for a consistent approach to the suite of furniture across the entire Corridor should be explored to provide a unifying set of elements for the public domain.

The following principles have been established for street furniture along the Corridor:

- Street furniture provision is to be focused on Parramatta Road and other key pedestrian spaces
- Locate street furniture along kerb line within an 'urban amenity zone' - clear of pedestrian circulation space
- Locate some street furniture elements, particularly seating, bike stands, drinking fountains etc in side streets, and at key public and active transport nodes
- Street furniture selection and materials to be appropriate for the urban environment and to include a 'family' of elements.

Recommendations

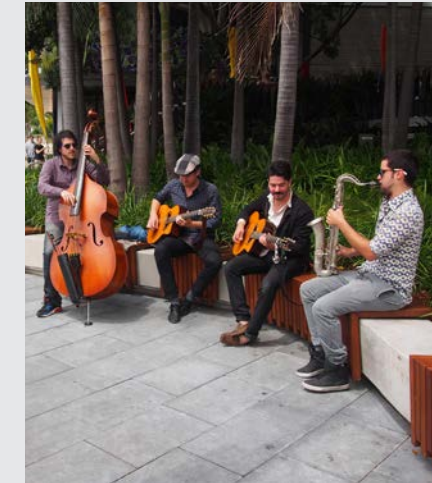
- A single suite or 'family' of street furniture elements should be generally adopted for the Corridor as a whole in order to promote greater unity
- Special places such as villages, activated side streets where appropriate or key crossing points may use their own distinct street furniture, including custom-designed elements
- Street furniture should be robust and fit for purpose



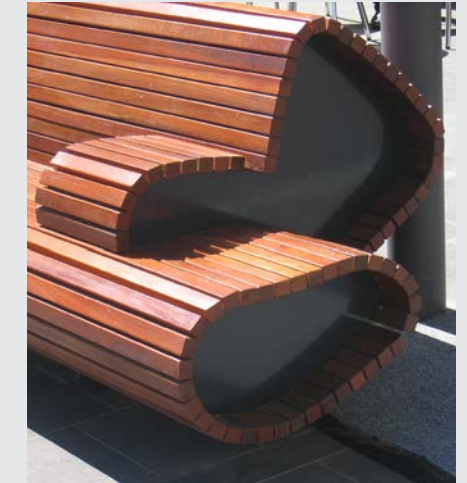
Proprietary Bench Seat



Proprietary Seating



Custom Designed Seating



Custom Designed Seating



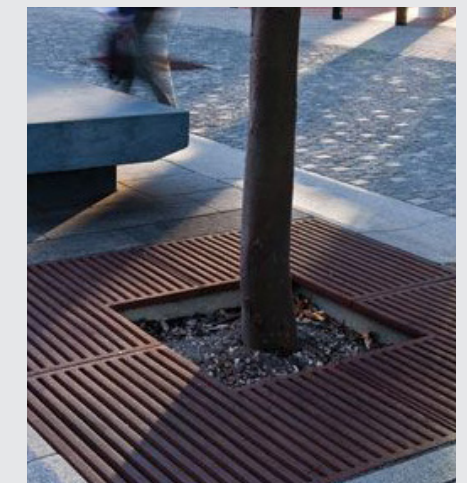
Litter Bin



Accessible Drinking Fountain



Bollards



Tree Grates



Bike Racks - Group



Bike Racks - Multiple



Umbrellas

1.4 Lighting

Considerations

Currently, Parramatta Road is lit by standard pole mounted street lights of a variety of pole and fitting types. The street lighting is focused on the road and vehicles rather than pedestrians. Street lighting upgrades will increase the quality of the public domain and improve the pedestrian environment.

Examples of potential materials that could be included are provided in the following images.

Principles

- Street lighting provision is part of the overall public domain design
- Ensure the provision of pedestrian lighting as well as carriageway lighting for safety and security

Recommendation

- A single suite of street lighting should generally be adopted for the Corridor as a whole in order to promote greater unity
- The provision of feature lighting could be used in certain locations such as the Powells Creek Reserve
- Explore opportunities for lighting in special places for site-specific interpretation or public art
- Street lighting selection and materials should be appropriate for the urban environment and use LED lights.



Pedestrian scale public domain lighting



Catenary Lighting

1.5 Wayfinding

Considerations

A wayfinding system is a critical tool in communicating a place to its users. The strategy must be both powerful and engaging in order to be successful. Strategies need to consider the varying needs of users and adopt the right medium and representation for the specific circumstances. The way finding and signage strategy should be thoroughly integrated into the design of the public domain.

Examples of potential materials that could be included are provided in the following images.

Principles

- A clear message should be conveyed
- A strong sense of arrival and welcome should be provided
- Visitors should be clearly directed to desired locations
- Interesting and memorable experiences should be conveyed through wayfinding
- Explore heritage themes and stories

Recommendations

- Wayfinding devices should appeal and be accessible to a range of users from varied cultural and linguistic backgrounds, and the vision impaired
- Ensure elements tell the story of the place if appropriate
- Promote engagement with surrounding areas to maximise usage



Darling Harbour



Bin Incorporating Signage

1.6 Pedestrian and Cyclist Safety

Considerations

Pedestrian and cyclist safety is paramount in the design of the public domain. Potential accidents arise from pedestrians and cyclists using both designated crossings (signalised and un-signalised), and attempting to cross roads not in designated crossing places. The public domain can play a role in minimising these risks.

Examples of potential materials that could be included are provided in the following images.

Principles

Principles to achieve greater pedestrian and cyclist safety include:

- Create a legible public domain where pedestrian, cyclist and vehicle priorities are clear
- Provide suitable barriers to contain pedestrians and cyclists and direct them to designated crossings, where appropriate

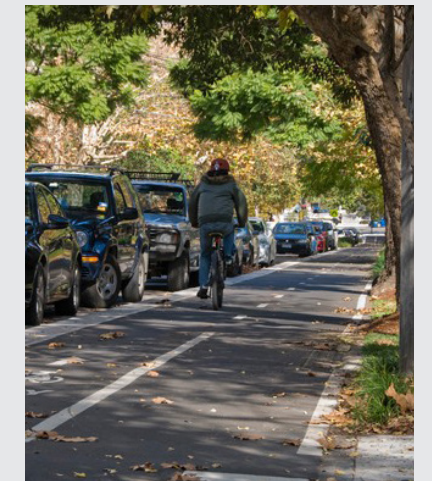
Recommendations

Within the public domain, incorporate:

- Sufficient and well located pedestrian and cyclist crossings
- Adequate footpath widths
- Clear sight lines
- Appropriate lighting
- Crime Prevention Through Environmental Design (CPTED) principles to provide adequate levels of public security
- Passive, pedestrian and cyclist friendly initiatives to mitigate risk. Where appropriate reduce or remove safety fencing and jersey kerbs along roads with more attractive treatments



Pedestrian Crossing - Kings Bay



Separated Cycleway - Surry Hills

1.7 Parklets, Footpath Widening, Plazas and Street Closures

Considerations

Parklets, footpath widening, plazas and street closures are small-scale, interventions which facilitate the conversion of utilitarian and often underused spaces. These spaces repurpose part of the street into public places for people. They are intended as aesthetic enhancements to the streetscape, providing an economical solution to the need for increased public space. Examples of potential materials that could be included are provided in the following images.

Principles

- Spaces should reflect diversity and creativity of the people within the spaces
- They support active transport such as walking and biking by creating engaging spaces with adequate pedestrian amenity
- Catalyse vitality and activity in the village centres and support local business communities by encouraging pedestrians to linger
- Serve as neighbourhood anchors and destination points - providing spaces for community gatherings
- Broaden the potential for the public realm to engage and delight while adding much needed open space
- Celebrate local grass roots initiatives, community building, and sustainable transportation

Recommendations

- Locate parklets, footpath widening, plazas and street closures in areas of the Corridor that are constrained and therefore have limited public domain enhancement opportunities
- Utilise these elements to create feature spaces or nodes along the length of the Corridor.



Road Closure, New Zealand



Parklet

1.8 Active Transport

Considerations

Currently, Parramatta Road lacks strong, well connected and high quality active transport connections from Parramatta to Sydney that are safe and continuous. Active transport includes sustainable travel choices such as walking and cycling that can reduce car dependency, trip lengths and create active walkable communities. A regional approach is therefore important in establishing new walking and cycling links to key transport nodes, open spaces and additions to regional cycle networks. The proposed UAIP works offer the opportunity to provide new or enhanced active transport connections in number of key locations, including the regional cycle way.

Examples of potential materials that could be included are provided in the following images.

Principles

- Active transport should be easily accessible and safe for all users
- Improve north/south active transport connections with a primary focus on connections to open space
- Connect regional active transport corridors, where possible.

Recommendations

- Re-assess on-street car parking to facilitate the new regional cycleway
- Improve north/south active transport connections to major transport nodes such as Parramatta and Burwood
- Create active transport connections between Parramatta Road and the Harbour.

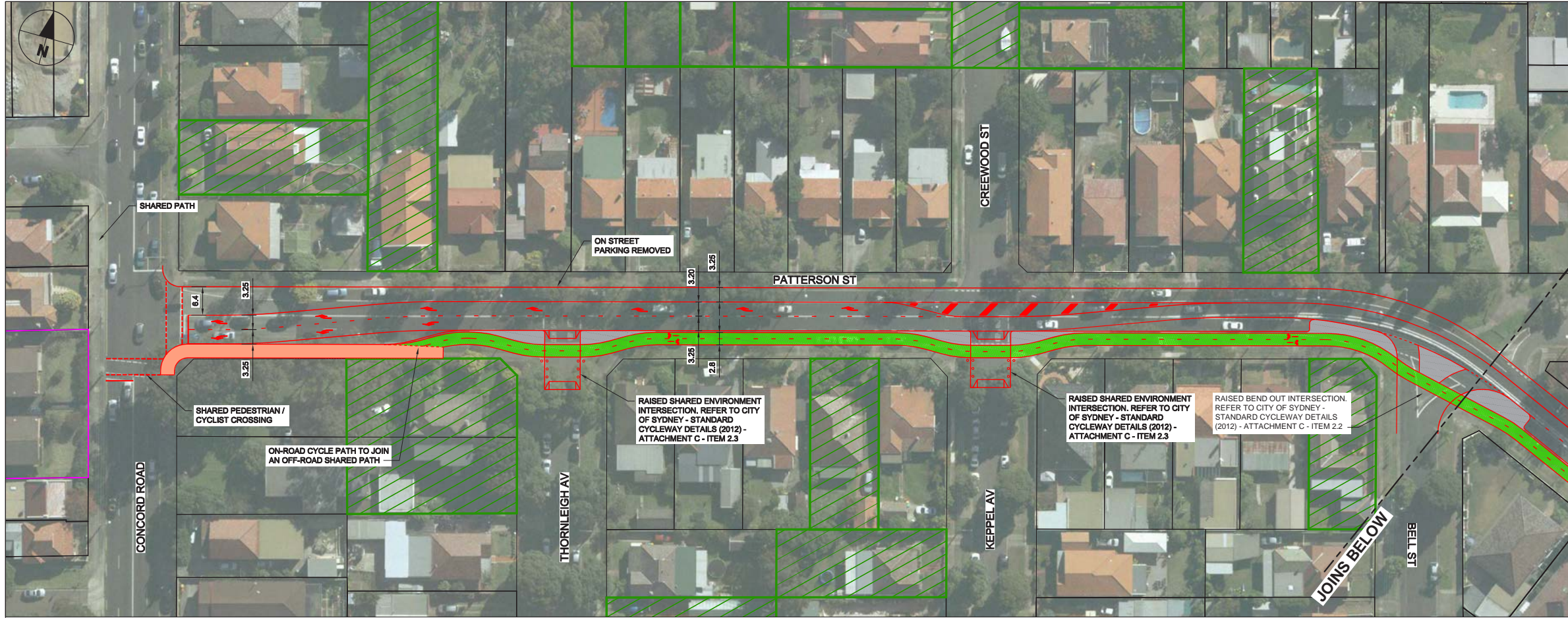


Bourke Street, Woolloomooloo



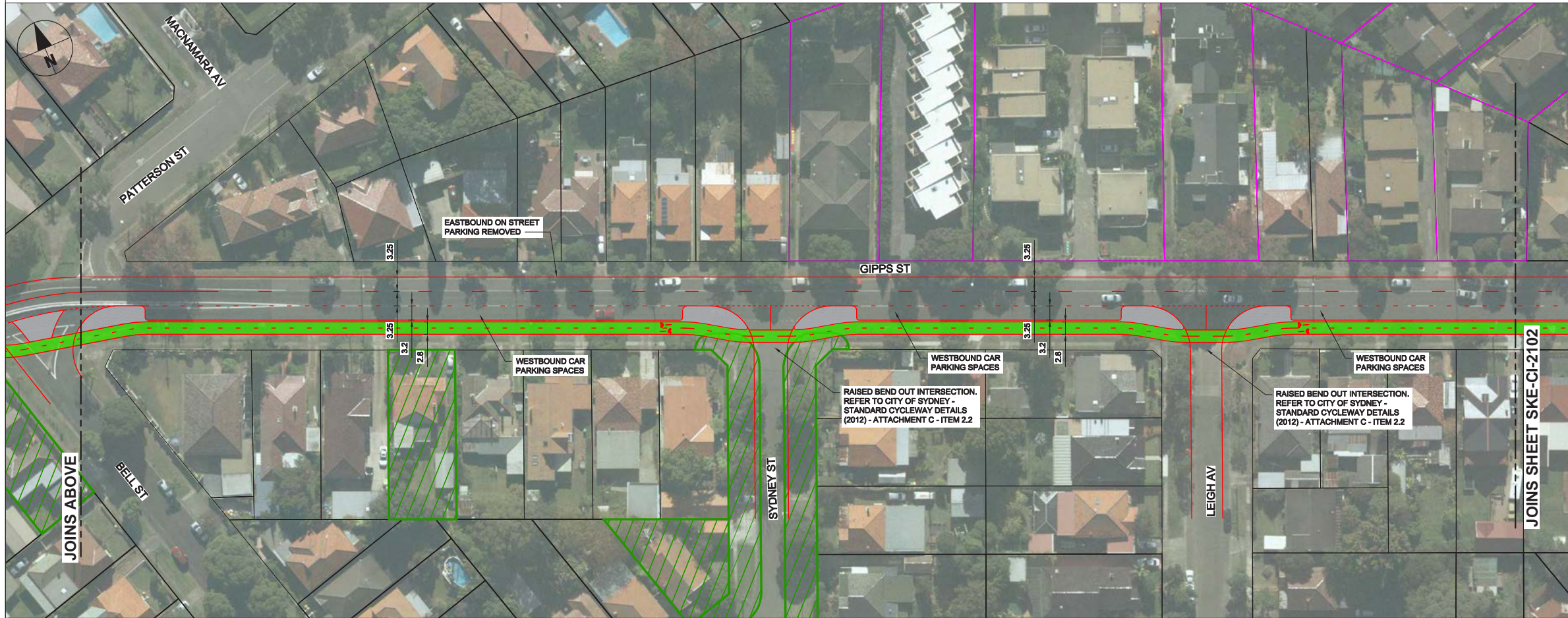
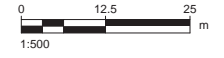
Bourke Street, Surry Hills

REGIONAL CYCLEWAY CONCEPT PLANS



SAFETY IN DESIGN INFORMATION

ARE THERE ANY ADDITIONAL HAZARDS / RISKS NOT NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING?
 NO
 YES



PROJECT MANAGEMENT INITIALS

T.B.	S.A.	S.A.
DESIGNER	CHECKED	APPROVED

ISSUE/REVISION

NO	DATE	DESCRIPTION
01	07.08.15	STRATEGIC CONCEPT ISSUE

PROJECT NUMBER

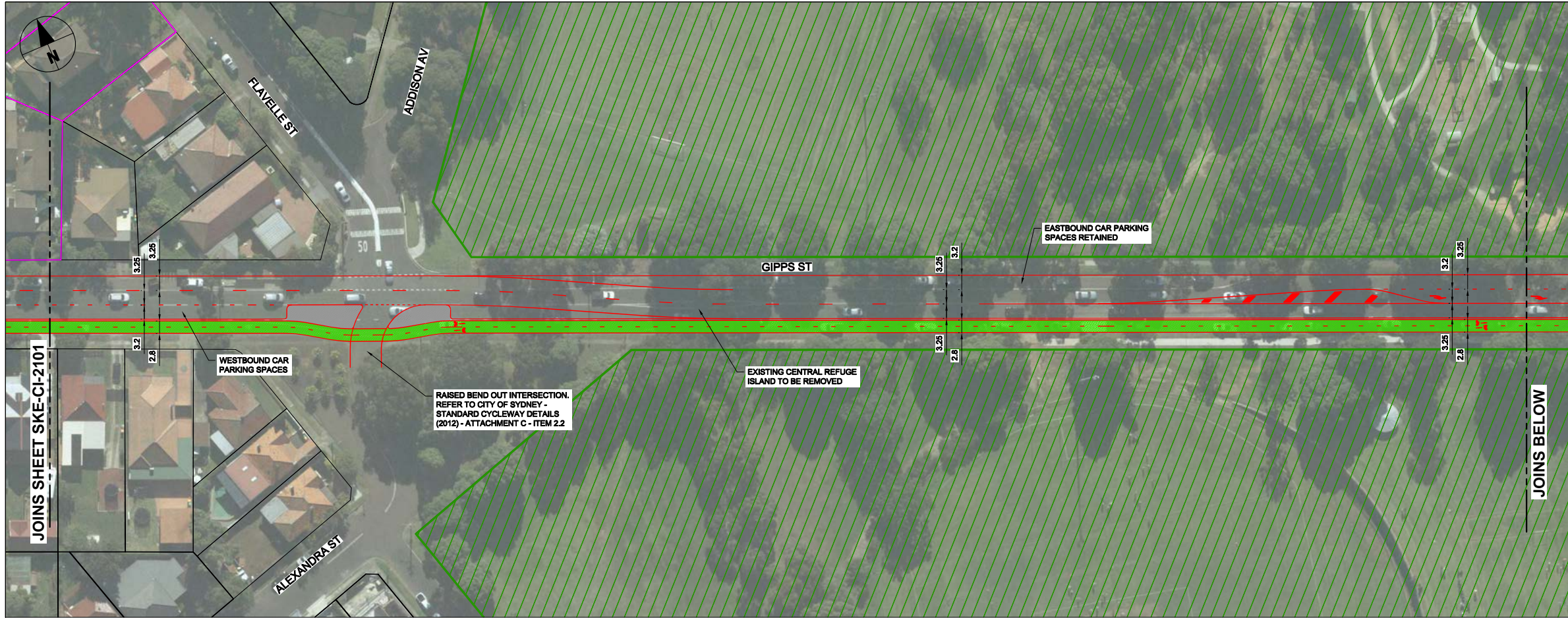
60328798

SHEET TITLE

BI-DIRECTIONAL CYCLE PATH
 PATTERSON, GIPPS, QUEENS
 SHEET 1 OF 7

SHEET NUMBER

60328798-SKE-00-0000-CI-2101

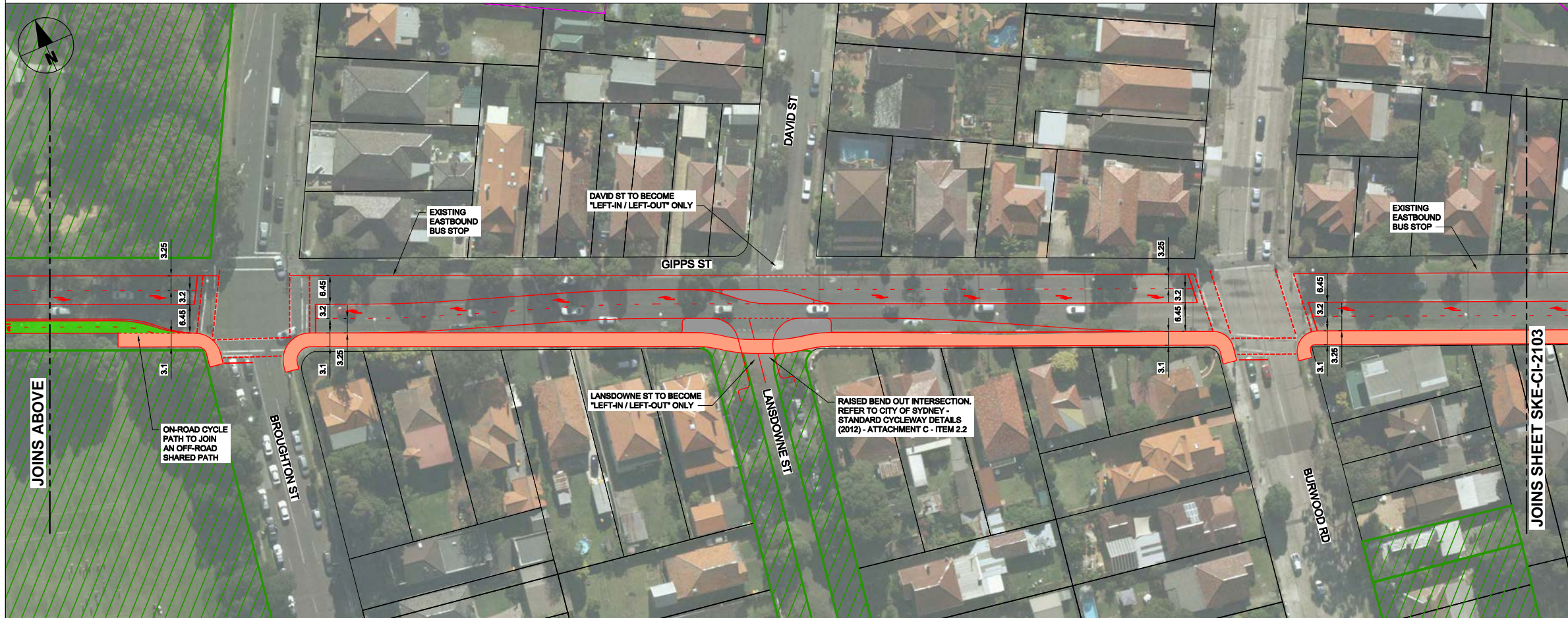
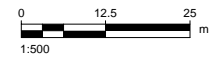


JOINS SHEET SKE-CI-2101

JOINS BELOW

SAFETY IN DESIGN INFORMATION

ARE THERE ANY ADDITIONAL HAZARDS / RISKS NOT NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING?
 NO
 YES



JOINS ABOVE

JOINS SHEET SKE-CI-2103

PROJECT MANAGEMENT INITIALS

T.B.	S.A.	S.A.
DESIGNER	CHECKED	APPROVED

ISSUE/REVISION

IR	DATE	DESCRIPTION
01	07.08.15	STRATEGIC CONCEPT ISSUE

PROJECT NUMBER

60328798

SHEET TITLE

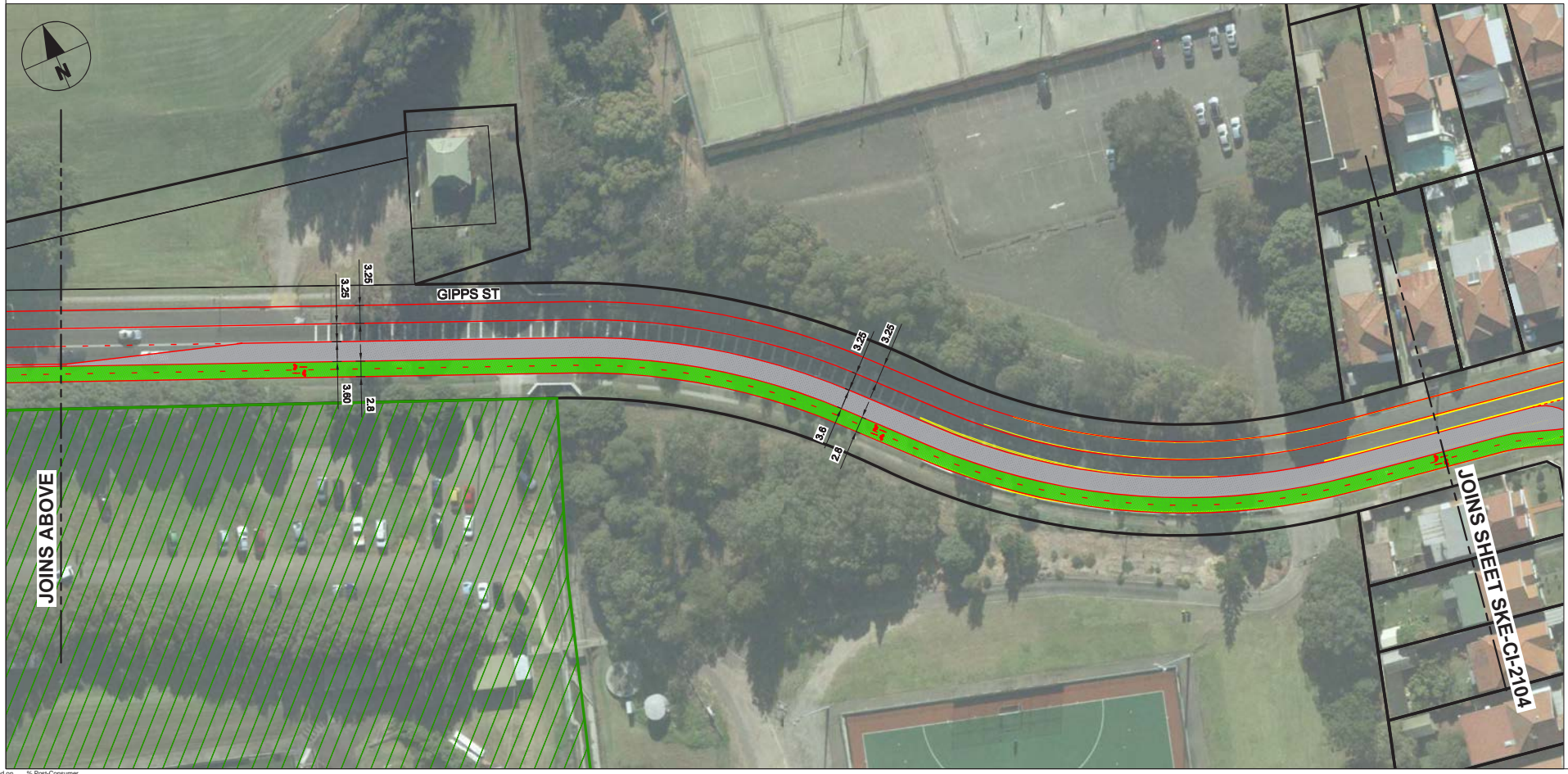
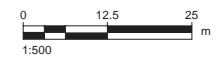
BI-DIRECTIONAL CYCLE PATH
 PATTERSON, GIPPS, QUEENS
 SHEET 2 OF 7

SHEET NUMBER

60328798-SKE-00-0000-CI-2102



SAFETY IN DESIGN INFORMATION
 ARE THERE ANY ADDITIONAL HAZARDS / RISKS NOT NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING?
 NO
 YES



PROJECT MANAGEMENT INITIALS

T.B.	S.A.	S.A.
DESIGNER	CHECKED	APPROVED

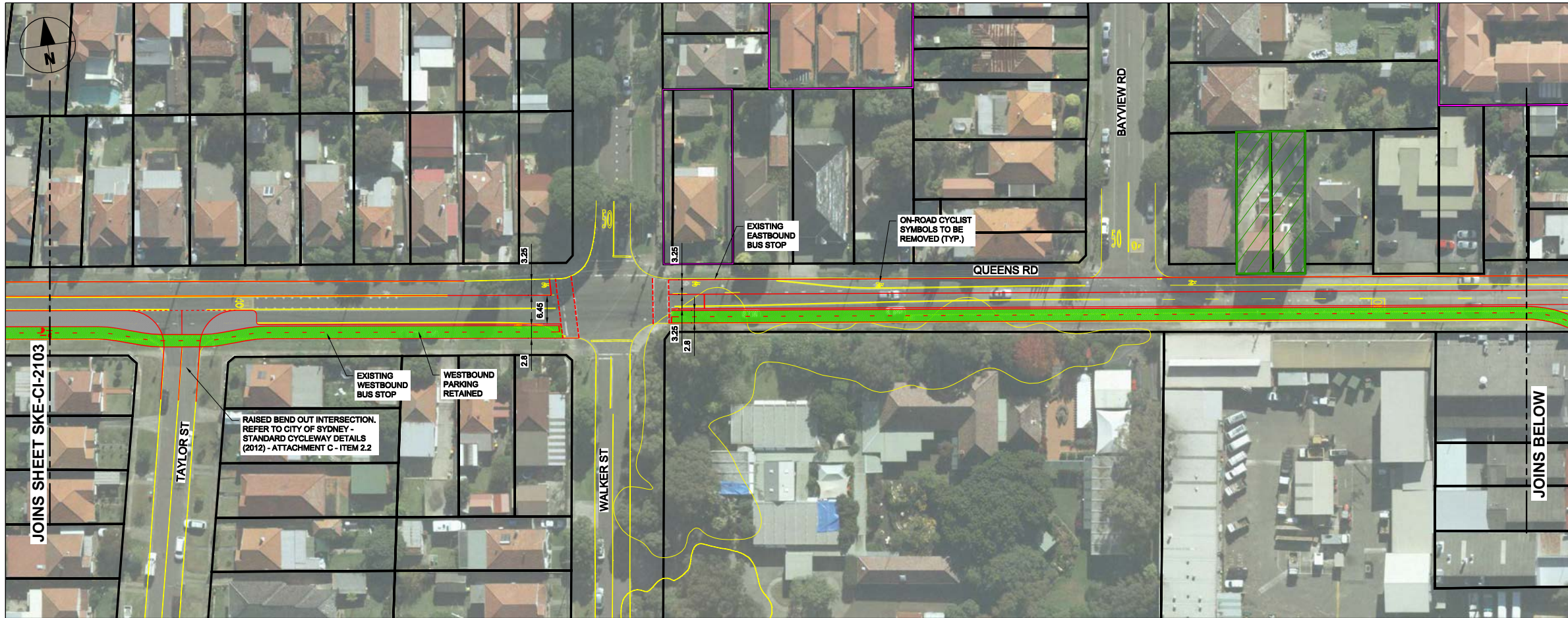
ISSUE/REVISION

IR	DATE	DESCRIPTION
01	07.08.15	STRATEGIC CONCEPT ISSUE

PROJECT NUMBER
60328798

SHEET TITLE
BI-DIRECTIONAL CYCLE PATH
PATTERSON, GIPPS, QUEENS
SHEET 3 OF 7

SHEET NUMBER
60328798-SKE-00-0000-CI-2103



SAFETY IN DESIGN INFORMATION

ARE THERE ANY ADDITIONAL HAZARDS / RISKS NOT NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING?

- NO
- YES



PROJECT MANAGEMENT INITIALS

T.B.	S.A.	S.A.
DESIGNER	CHECKED	APPROVED

ISSUE/REVISION

IR	DATE	DESCRIPTION
01	07.08.15	STRATEGIC CONCEPT ISSUE

PROJECT NUMBER

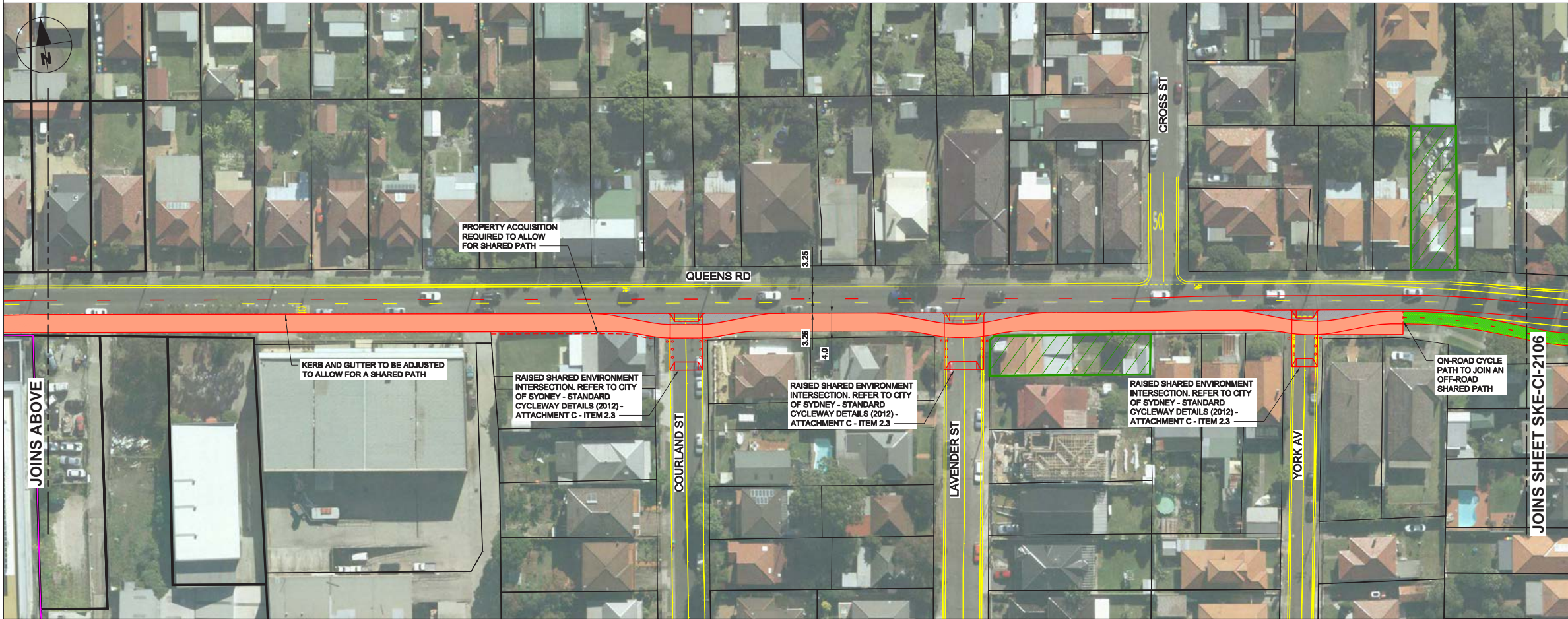
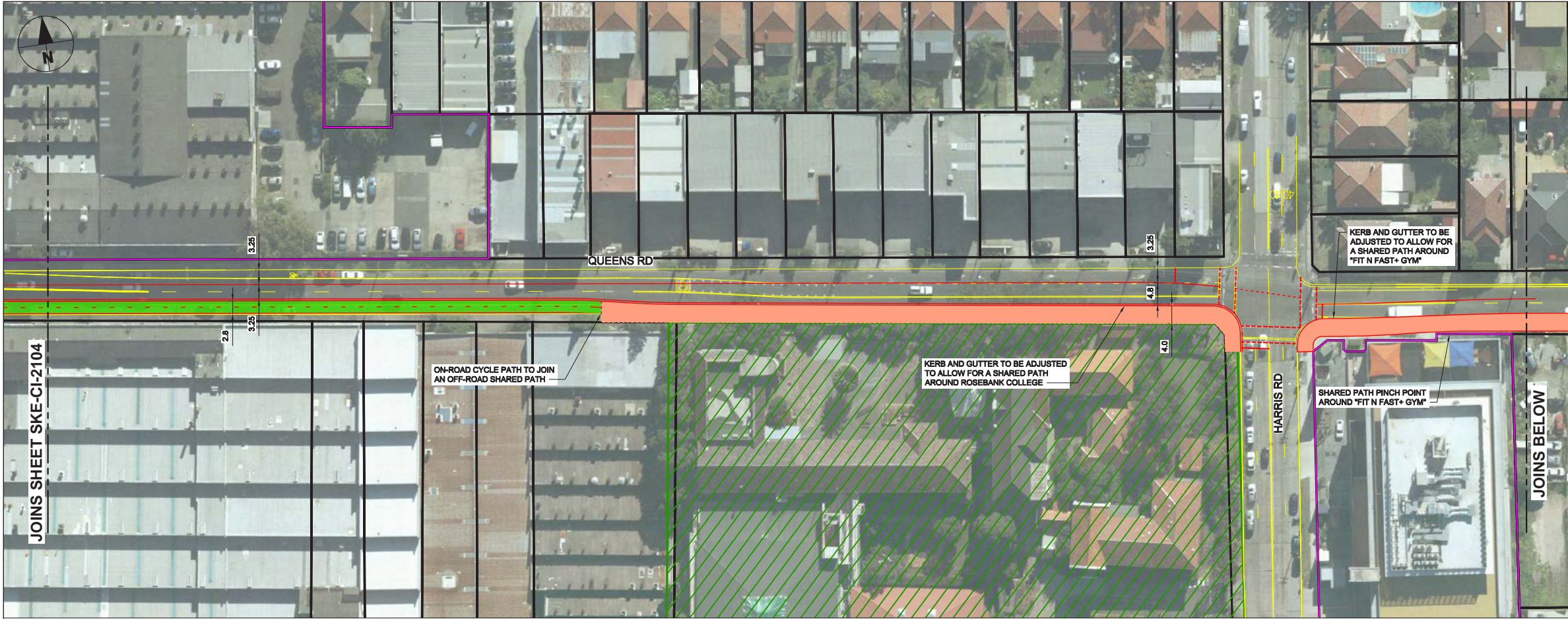
60328798

SHEET TITLE

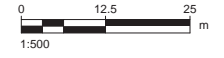
BI-DIRECTIONAL CYCLE PATH
PATTERSON, GIPPS, QUEENS
SHEET 4 OF 7

SHEET NUMBER

60328798-SKE-00-0000-CI-2104



SAFETY IN DESIGN INFORMATION
 ARE THERE ANY ADDITIONAL HAZARDS / RISKS NOT NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING?
 NO
 YES



PROJECT MANAGEMENT INITIALS

T.B.	S.A.	S.A.
DESIGNER	CHECKED	APPROVED

ISSUE/REVISION

NO	DATE	DESCRIPTION
01	07.08.15	STRATEGIC CONCEPT ISSUE

PROJECT NUMBER

60328798

SHEET TITLE

BI-DIRECTIONAL CYCLE PATH
 PATTERSON, GIPPS, QUEENS
 SHEET 5 OF 7

SHEET NUMBER

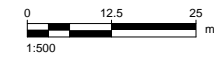
60328798-SKE-00-0000-CI-2105



SAFETY IN DESIGN INFORMATION

ARE THERE ANY ADDITIONAL HAZARDS / RISKS NOT NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING?

- NO
 YES



PROJECT MANAGEMENT INITIALS

T.B.	S.A.	S.A.
DESIGNER	CHECKED	APPROVED

ISSUE/REVISION

IR	DATE	DESCRIPTION
01	07.08.15	STRATEGIC CONCEPT ISSUE

PROJECT NUMBER

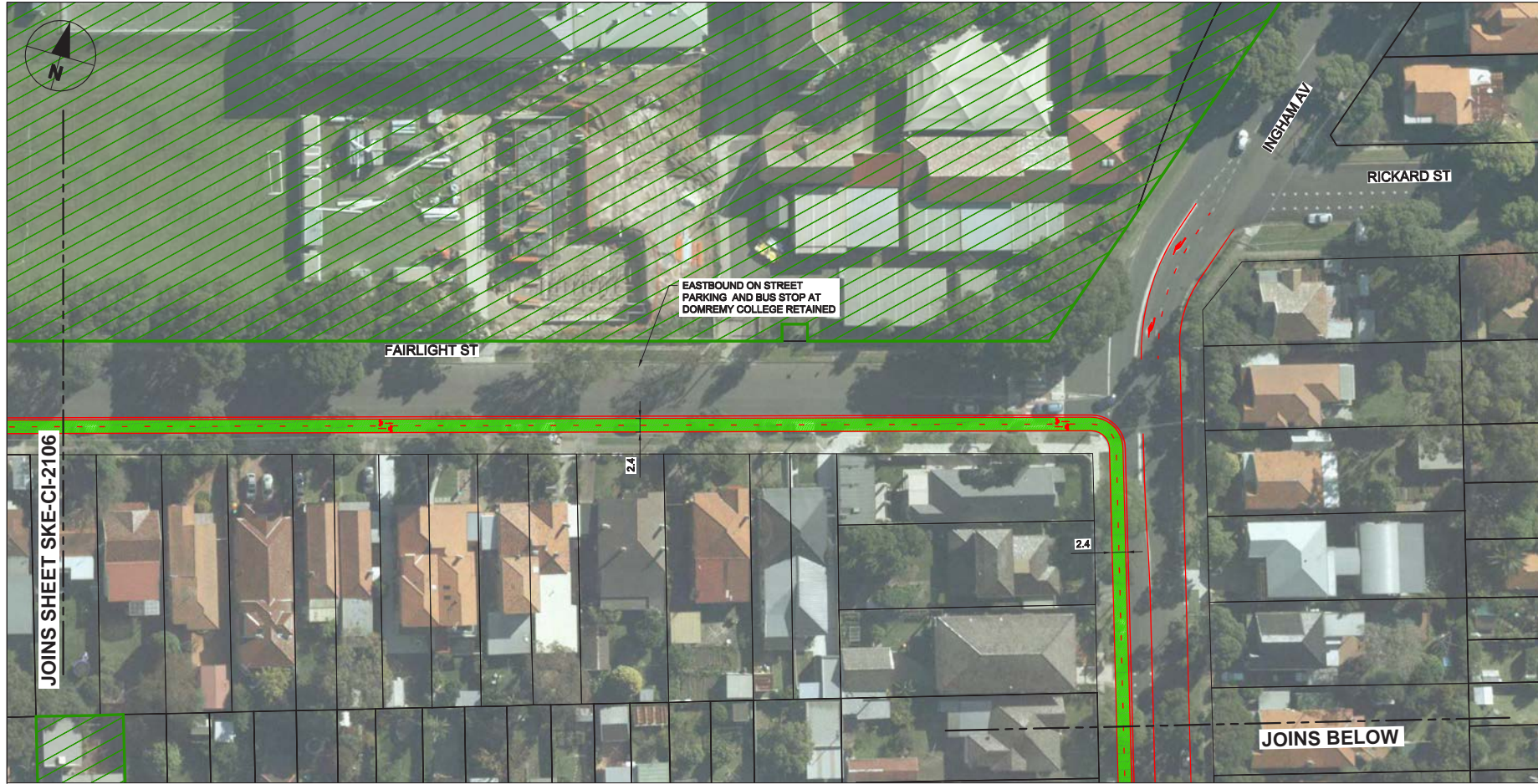
60328798

SHEET TITLE

BI-DIRECTIONAL CYCLE PATH
 PATTERSON, GIPPS, QUEENS
 SHEET 6 OF 7

SHEET NUMBER

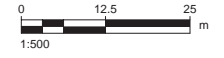
60328798-SKE-00-0000-CI-2106



SAFETY IN DESIGN INFORMATION

ARE THERE ANY ADDITIONAL HAZARDS / RISKS NOT NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING?

NO
 YES



PROJECT MANAGEMENT INITIALS

T.B.	S.A.	S.A.
DESIGNER	CHECKED	APPROVED

ISSUE/REVISION

IR	DATE	DESCRIPTION
01	07.08.15	STRATEGIC CONCEPT ISSUE

PROJECT NUMBER

60328798

SHEET TITLE

BI-DIRECTIONAL CYCLE PATH
 PATTERSON, GIPPS, QUEENS
 SHEET 7 OF 7

SHEET NUMBER

60328798-SKE-00-0000-CI-2107

