



WESTCONNEX NEW M5 PEDESTRIAN
& BICYCLE TRANSPORT NETWORK
REVIEW

Sydney, NSW

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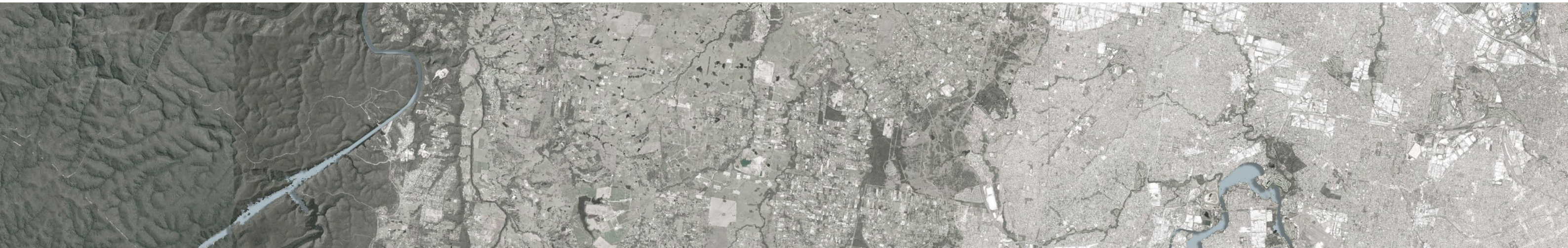
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1.0 Introduction

1.1 PROJECT INTRODUCTION

WestConnex Project

The New M5 tunnel, Stage 2 of WestConnex, is being delivered by Sydney Motorway Corporation (SMC) on behalf of the NSW Government.

The New M5 will run via twin tunnels from the existing M5 East at Kingsgrove to a new interchange at St Peters, more than doubling capacity of the corridor and substantially improving east west corridor access between the Sydney CBD, Port Botany and Sydney Airport precincts and the South West growth areas.

The New M5 will deliver approximately nine kilometres of new tunnels, motorway to motorway connections to the King Georges Road Interchange Upgrade at Beverly Hills, which is currently under construction, and a new interchange at St Peters. This is shown in Figure 1.01.



Figure 1.01 - WestConnex Project



Figure 1.02 - St Peters Interchange Location

What is active transport?

Active transport is non-motorised forms of transport which include physical activity, for example walking or cycling (examples below). An Active Transport Network (ATN) provides infrastructure to enable convenient, pleasant and safe walking and cycling trips.

WestConnex and Active Transport

Inner Sydney and inner western Sydney has had significant increase in active transport and there has been significant growth over the last 10 years in trips undertaken by active transport. This growth has occurred due to a combination of the provision of infrastructure, changing inner Sydney demographics, and in-fill development in the region. A significant barrier to increased active transport is the lack of adequate infrastructure.

Cycle and pedestrian paths form part of the WestConnex project to improve connectivity and safety and contribute to the ATN. The New M5 includes a number of active transport measures including new and improved pedestrian / cycle paths which consists of the following:

- Cycling / pedestrian bridge over Alexandra Canal
- Connection linking Mascot town centre with St Peters and Sydney Park
- A new cycling / pedestrian bridge over Campbell Road connecting Sydney Park with future open space at St Peters Interchange.

This report outlines the investigation of active transport at the St Peters Intersection (SPI) as well as a review of the M5 Linear Park and the M5 East Green Link ATN route from Kingsgrove to St Peters.

Examples of Active Transport Networks in Sydney



Cooks River - Sydney



George Street Cycle Way - Sydney



The Bay Run - Sydney



Sydney Olympic Park - Sydney

1.2 NETWORK REVIEW OBJECTIVES AND METHODOLOGY

This review has been undertaken to address planning condition B50 of the New M5 planning approval. The B50 planning condition requires that the following be undertaken:

The Proponent must undertake a Pedestrian and Cycleway Network Review. The Review must be prepared and approved by the Secretary within six months from the date of this approval (or as otherwise agreed by the Secretary) to identify pedestrian and cycle facilities that are to be provided by the Proponent as part of the SPI. The Review must be prepared by a suitably qualified and experienced person(s) that has been approved by the Secretary. The Review must be undertaken in consultation with the relevant councils and Bicycle NSW and address the matters raised during consultation. The Review must identify (and consider), but not be limited to:

- A. Current and future land use and associated pedestrian and cycle demand and needs;*
- B. Pedestrian and cycle impacts associated with the project;*
- C. The King Street Gateway Project, including potential Princes Highway traffic calming initiatives;*
- D. Alexandria Canal initiatives;*
- E. Regional and local pedestrian and cycling strategies;*
- F. Pedestrian and cycle safety, accessibility and connectivity, including to the public realm;*
- G. Intersection and signal phasing opportunities to reduce waiting and crossing times for pedestrians and cyclists;*
- H. Provision of upgraded cycle and pedestrian facilities within 1,000 metres of the boundary of the SPI, apart from the areas addressed in conditions B62(c) and B64; and*
- I. Concept designs for pedestrian and cycleway infrastructure and implementation timeframes.*

The Review is also to consider the delivery of the ‘M5 East Green Link’ between Kingsgrove and Mascot approved as part of the M5 East Motorway project. The review shall address past constraints to the delivery of this project and options to overcome these constraints.

The Review must not result in a reduced level of cycle and pedestrian infrastructure as identified in the documents referred to in condition A2, unless required by these conditions.

Our approach is to undertake a review of the ATN proposed as part of the New M5. In this review we have identified gaps between the proposed ATN and the existing ATN. The second stage of the project will be to develop a strategy to address the identified gaps. A summary of how the planning conditions have been addressed in this report are shown in Table 1.01

Project Method

Figure 1.01 shows our approach and method in undertaking this review:

Report Structure

The following describes the structure of this report:

Section 2: Analysis

This section of the report provides an overview of the existing ATN in the M5 East Green Link to St Peters corridor including trip generators, and existing and proposed ATN routes and a summary of the outcomes from the stakeholder workshop.

Section 3: Review of St Peters Interchange ATN

This section of the report reviews the ATN at SPI within a 1km boundary to understand and improve connectivity.

Section 4: Review of M5 East Green Link

This section of the report reviews the previous history of the proposed routes and the outcomes of the proposed routes as they where investigated from 1994 to 2004 as part of the M5 East.

Section 5: Review of M5 East Linear Park

This section of the report provides an analysis on the existing ATN around the M5 East Linear Park and its close surroundings.

| | |
|--|-------------------------|
| A. Current and future land use and associated pedestrian and cycle demand and needs | Refer section 2 |
| B. Pedestrian and cycle impacts associated with the project | Refer section 2.8 |
| C. The King Street Gateway Project, including potential Princes Highway traffic calming initiatives | Refer section 2.5 |
| D. Alexandria Canal initiatives | Refer section 2.6 |
| E. Regional and local pedestrian and cycling strategies | Refer Section 2.3 & 2.4 |
| F. Pedestrian and cycle safety, accessibility and connectivity, including to the public realm | Refer Section 2.12 & 3 |
| G. Intersection and signal phasing opportunities to reduce waiting and crossing times for pedestrians and cyclists | Refer Section 2.10 |
| H. Provision of upgraded cycle and pedestrian facilities within 1,000 metres of the boundary of the SPI, apart from the areas addressed in conditions B62(c) and B64 | Refer Section 3.2.1 |
| I. Concept designs for pedestrian and cycleway infrastructure and implementation timeframes | Refer Section 3.3 |
| The Review must not result in a reduced level of cycle and pedestrian infrastructure as identified in the documents referred to in condition A2 unless required by these conditions | Refer Section 6.1 |
| The Review is also to consider the delivery of the ‘M5 East Green Link’ between Kingsgrove and Mascot approved as part of the M5 East Motorway project. The review shall address past constraints to the delivery of this project and options to overcome these constraints. | Refer Section 4 |

Table 1.01 - Planning Conditions Summary
* Safety of the existing and planned network is considered in detail in the safety audits undertaken as part of the B51 report.

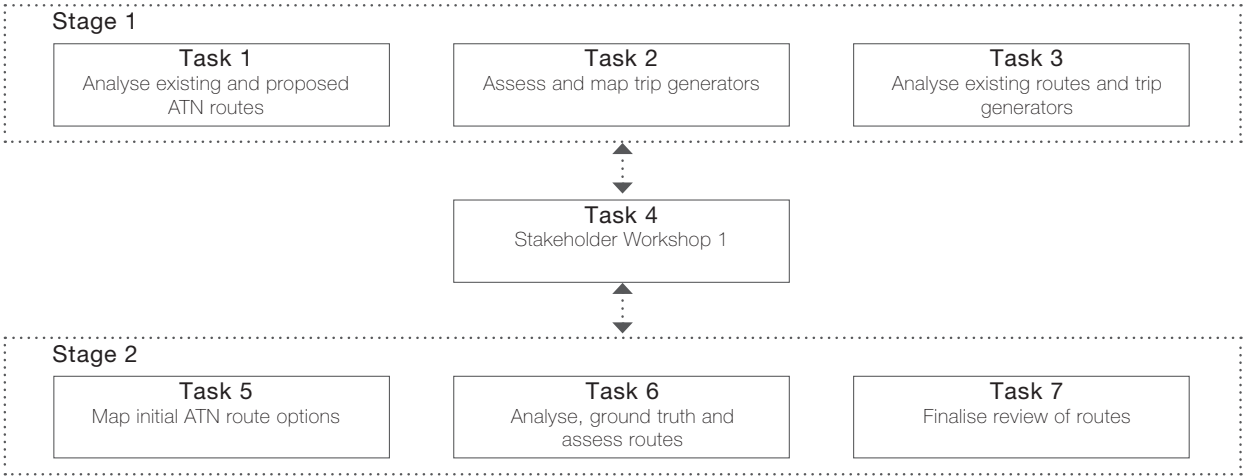


Figure 1.01 - Approach and Method





2.0 Analysis

2.1 TRIP GENERATORS

An analysis of the key trip generators was undertaken within the corridor to understand the key origins and destinations for trips, particularly local trips. A large proportion of trips are local trips.

The key trip generators included the following groups:

- Employment zones including the CBD, industrial zones, Green Square, Mascot
- Major education institutions including Sydney University, UTS
- Transportation centres including Sydney Airport
- Train stations including Sydenham, Green Square, Mascot, Newtown, St Peters
- Major public open space including Sydney Park, Camdenville Park, Enmore Park and Pool

- Major shopping areas including Marrickville Metro, King Street
- Existing major route destinations including Cooks River, Bourke Rd cycle way
- Major town centres including Newtown, Marrickville, Green Square, Rockdale

The major trip generators are shown in Figure 2.01.



Cooks River Foreshore



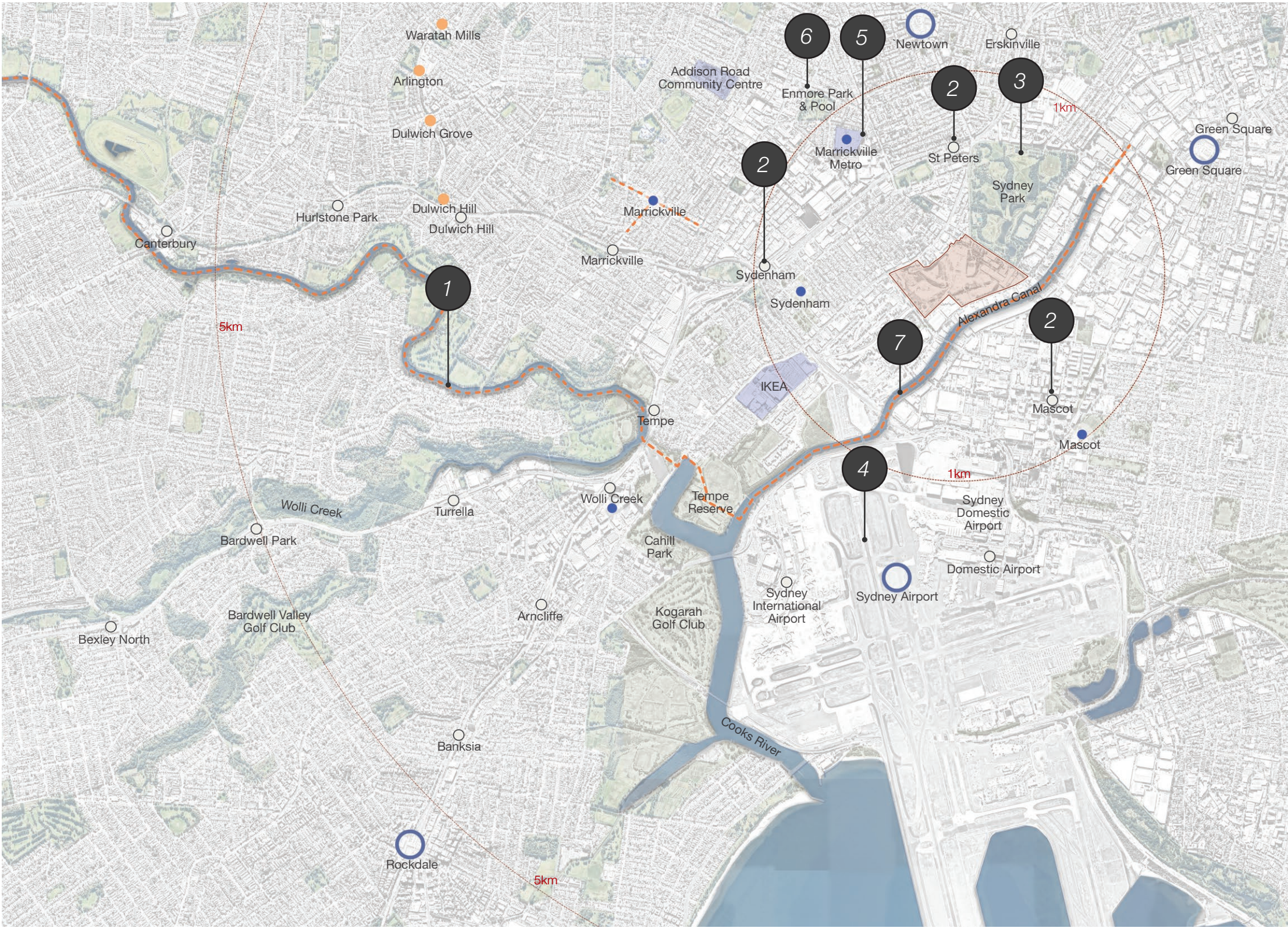
Sydney Railway Stations



Sydney Park - St Peters



Sydney Airport



Legend

- Major Centres
- Minor Centres
- Train Stations
- Light Rail Stations
- Trip Generators
- St Peters Interchange Site
- 1km & 5km Boundary from Interchange
- 1 Cooks River Foreshore
- 2 Sydney Railway Stations (St Peters, Sydenham, Mascot)
- 3 Sydney Park - St Peters
- 4 Sydney Airport
- 5 Marrickville Metro
- 6 Enmore Park & Pool
- 7 Alexandria Canal

Figure 2.01 - Trip Generators

2.2 SURROUNDING NODES

A summary of the trip generators and their connectivity is shown in the Figure 2.02. This shows the desired paths of movement however it is important to note that there are a range of additional destinations that are not shown. Figure 2.02 is a summary of the key drivers for the connectivity required and route selection.

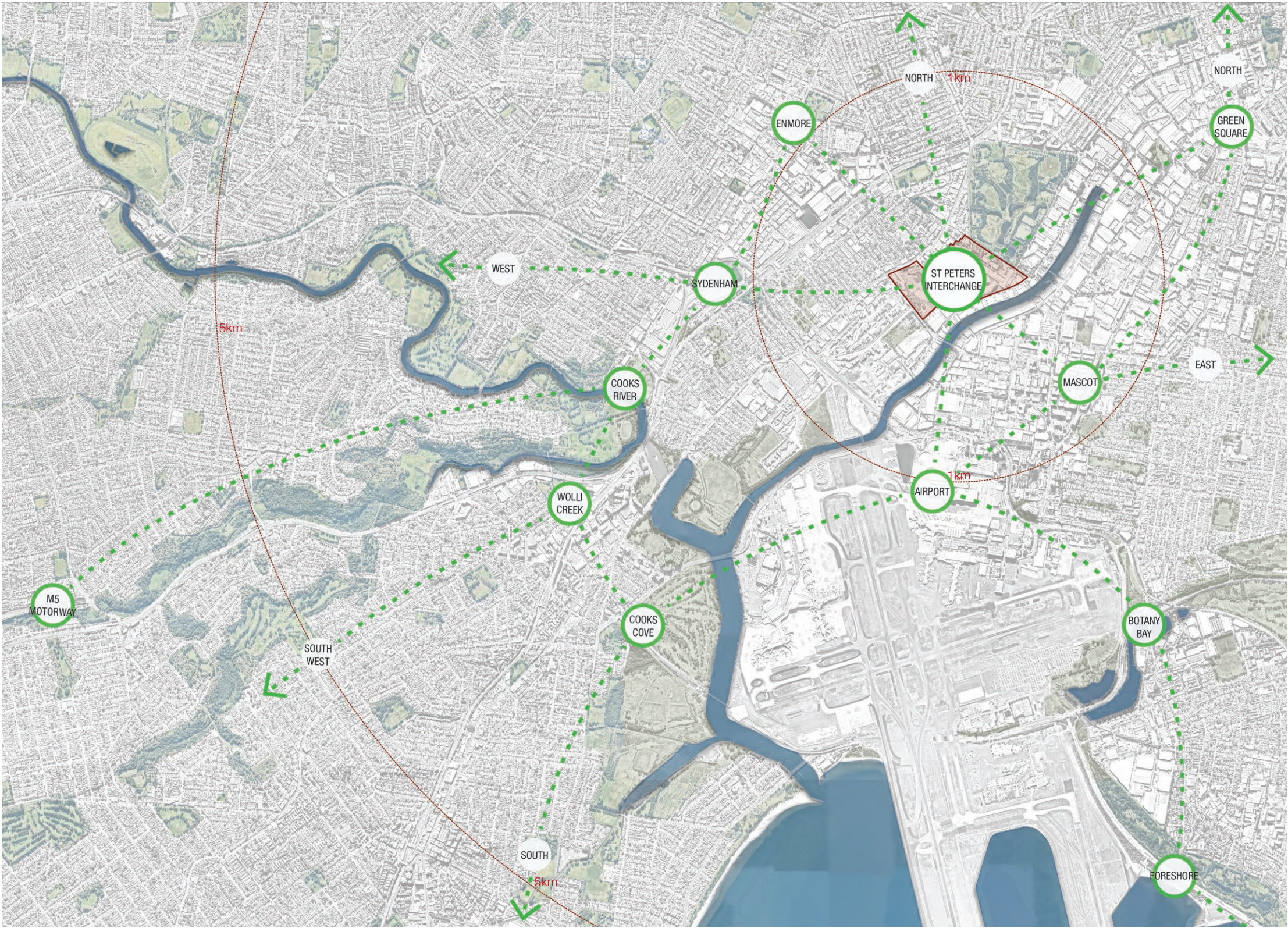


Figure 2.02 - Surrounding Nodes

2.3 INNER CITY REGIONAL ROUTE

The Inner Sydney Regional Bicycle Network is a plan that was developed with a number of councils to identify cross regional cycling links within inner Sydney. The project was undertaken in 2010 and included an economic analysis of the route including a cost/benefit ratio. The network plan has been refined on a number of occasions since its original development.

The plan was developed to ensure a coordinated and connected network was developed for inner Sydney. The network includes 160 kilometres of cycleways which are separated from general traffic and 70 kilometres of upgraded shared paths.

The relevant sections of the network plan is shown in Figure 2.03.



Figure 2.03 - Inner City Regional Routes

2.4 CITY OF SYDNEY AND INNER WEST COUNCIL REGIONAL ROUTES

In addition to the inner Sydney Regional Bicycle Network, Inner Sydney Councils including the former Leichhardt Council, former Marrickville Council, Rockdale, Botany Bay, Canterbury and the City of Sydney have developed cycle strategies. These strategies identify a number of regional routes and local routes which supplement and support the Inner Sydney Regional Bicycle Network.

The City of Sydney has also developed a Liveable Green Network which includes a pedestrian network in addition to the cycle network. The routes in the network are designed to encourage walking to local destinations and include footpath widening, lower speed limits and improved crossings as well as facilities such as seating and bubblers.

These regional active transport networks are shown in the Figure 2.04.

There are a number of local strategy documents that are relevant to this report and these are outlined below.

The NSW Government's Long Term Transport Master Plan (2012) sets the framework for the NSW Government to deliver an integrated, modern transport system. The final version sets out short, medium and long term actions to integrate and manage the transport network across NSW. The Master Plan contains a specific target to double the number of bicycle trips in Metropolitan Sydney by 2016, with further growth in cycling for all trips in NSW by 2031, particularly in urban centres.

The NSW Government's Sydney's Cycling Future (2013) develops a strategy for bicycle infrastructure planning in metropolitan Sydney. The focus of the strategy is people who would like to ride more often if cycling was made safer and more convenient. The strategy aims to prioritise investment on projects that have the greatest potential to get the most people to shift transport trips to bicycle. The priority is to invest in routes within 5 kilometres of major centres and public transport interchanges. It proposes a three-tier hierarchy of safe cycleways to major centres and seeks to invest in state priority corridors to safely link with inner Sydney.

The CBD, Sydney Airport and Green Square are the most relevant trip generators for this project that have been identified in the strategy.

The key objectives of the City of Sydney's Cycle Strategy and Action Plan (2007) are

"The City aims to making cycling an equal transport choice for residents, workers and visitors by 2017. Specific aims of the Strategy are:

- Creating and maintaining a comfortable and bicycle friendly environment in Sydney to encourage more residents, visitors and workers onto bicycles;
- Improving cycling safety.
- Promoting the benefits of cycling; and
- Increasing the number of trips made by bicycle in Sydney"

The key objectives of the former Marrickville Council's Marrickville Bicycle Strategy (2007) is to:

- Develop a coherent bicycle network plan
- Bicycle parking plan
- Develop better integration with public transport
- Bicycle friendly streets neighbourhoods

The key objectives of the (former) Canterbury City Council's Bike Plan (Draft, 2016) is

"integration with other transport modes and connections to surrounding LGAs...to create cycling environments that engage people who otherwise would not regularly ride and reduce the reliance on private car use to help achieve a more efficient transport network."

The former Councils of Hurstville and Rockdale Council have cycle network maps. The former Botany Council is currently developing a cycle strategy.

This report objectives are consistent with the regional strategies and aims to:

- Increase the number of trips made active transport and providing a network to encourage more people to use active transport
- Develop a safe, coordinated bicycle network
- Integrate with key destinations including public transport including Sydney Airport, the CBD and Green Square and other main centres



NOTE: 'Regional Route - Council' include both existing and planned routes

2.5 KING STREET GATEWAY

Project Overview

Roads and Maritime Services (RMS) is developing a concept design for the King Street Gateway project. The concept design will provide positive public domain outcomes for the vibrant and diverse community of Newtown and St Peters.

The project will provide an opportunity to tackle the significant issues surrounding vehicular, bicycle and pedestrian traffic while reinstating the streets and creating dynamic pubic spaces. The concept design will also look to revitalize the existing amenity at Sydney Park and improve the landscape and urban design outcomes for this area.

The project is being developed in consultation with both City of Sydney and Inner West Council. The site is on the boundary of these two local government areas. Princess Highway and Barwon Park Road form part of the Inner West Council while Sydney Park and Sydney Park Road fall into the City of Sydney local government area.

Project Location

The project is located at the southern end of King Street beginning at the Princes Highway, ends with Campbell Street intersection, Barwon Park Road and extending to the intersection of Sydney Park Road and Euston Road as shown in the Figure 2.05.

South King Street, St Peters Triangle and Sydney Park have been included as part of the study area.

At each end of the site the project will be integrated with WestConnex Stage 2 which is currently being undertaken by the Sydney Motorway Corporation. This project has so far highlighted the need to reconfigure the intersection between Princes Highway, King Street and Sydney Park Road. This site will be significant for the development of the concept design.

The King Street Gateway will function as a transition route as driver’s move from the motorway system back to the local road network. This shift will afford the street to function as a high street with more emphasis upon pedestrian movement and will create further urban design opportunities.

Project Objectives

- The following project objectives have been proposed for King Street Gateway:
- Improve the ‘gateway’ to King Street by changing the area around the entry to St Peters station and the entry to Sydney Park and the movement between these areas to provide a better pedestrian environment.
 - Downgrade of Princes Highway and Sydney Park Road by limiting capacity of Princes Highway north of Campbell Street to achieve a balance for all users.
 - Improve the footpath environment through widening and other measures.
 - Improve the environment for “Active Transport” - cyclists and pedestrians.
 - Reduce lane widths on Princes Highway north of Campbell Street and on Sydney Park Road and increase space for pedestrians and cyclists consistent with proposed road usage and place making.
 - Improve at-grade pedestrian and cyclist access to Sydney Park across the Princes Highway (north of Campbell Street) and across Sydney Park Road, including amendments to ensuring these are single-leg crossings for pedestrians where appropriate. Include new mid-block crossings on Princes Highway and Sydney Park Road aligned to pedestrian and cyclist desire lines.

King Street Gateway completion date (2020) is subject to approval. Works will commence on opening of WestConnex Stage 2 New M5 in 2019.



Legend

Streets investigated as part of King Street Gateway

Figure 2.05 - King Street Gateway Project

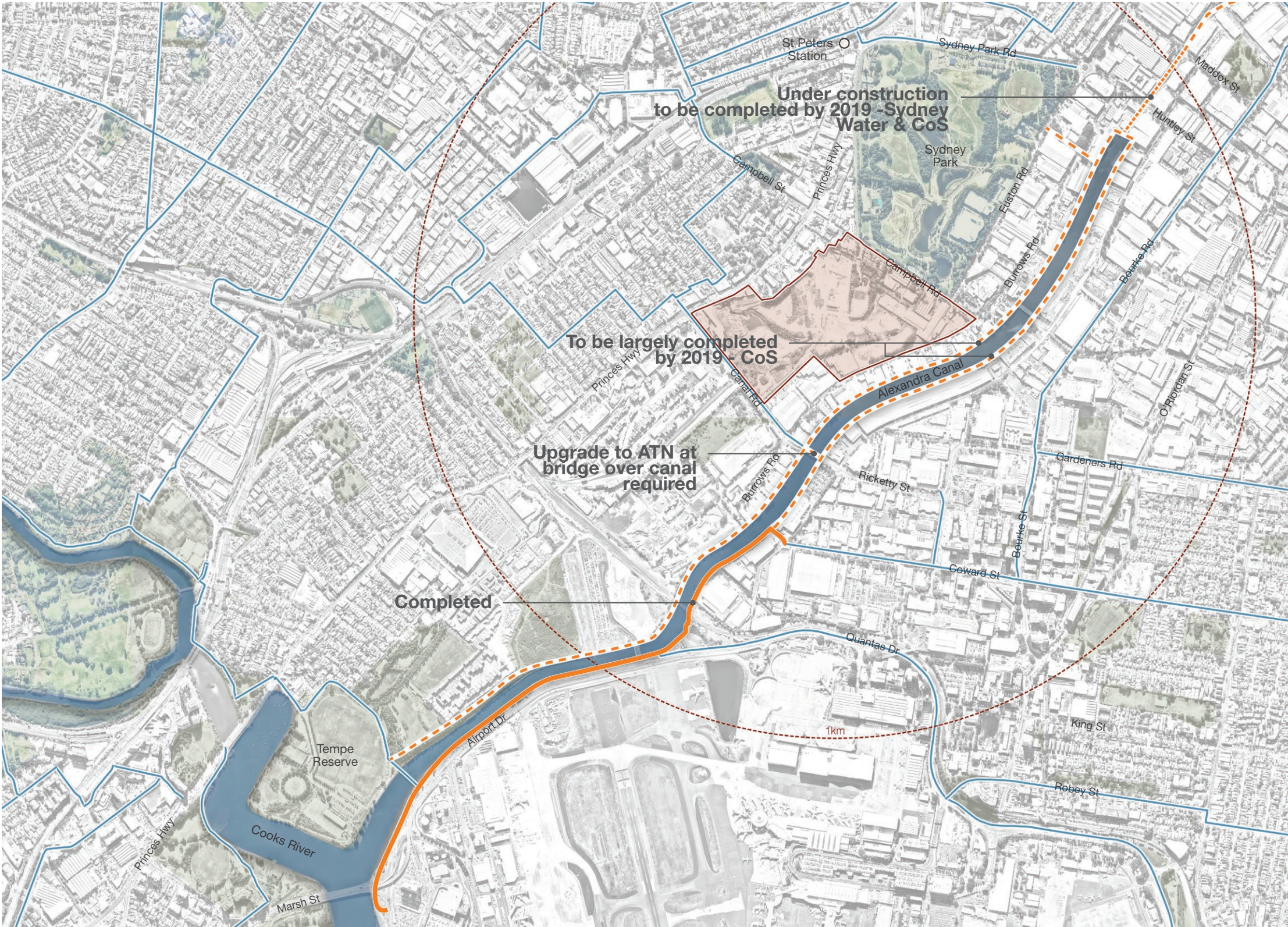
2.6 ALEXANDRA CANAL INITIATIVES

City of Sydney has developed a strategy that promotes Alexandra Canal to be a part of the regional cycle network for the Sydney Region.

The route begins at the north of Alexandra Canal at Maddox Street as a part of the ‘Green Square Trunk Drain Project.’ Sydney Water is providing a shared cycle and pedestrian path as a part of these works.

City of Sydney is currently developing concept designs for the remaining sections (both east and west sides of the canal).

Updates on the Alexandra Canal staging of works are shown in the Figure 2.06.



NOTE: 'Regional Route - Council' include both existing and planned routes

Figure 2.06 - Alexandra Canal Initiatives

2.7 DEVELOPMENT SITES

Property development offers a significant opportunity to develop ATN, including:

- New connectivity for pedestrians and cyclists with new roads, lanes, pedestrian and cyclist links, particularly in former industrial areas which have large lot sizes
- New infrastructure including dedicated on road and off road ATNs
- Increased demands for ATN as households which are located close to work are increasingly carless households
- New areas which attract people as an end destination such as new retail centres, new transport nodes, etc.

In the vicinity of the SPI there is a major transformation of the former industrial lands into high density residential and mixed use development. SPI will transform significantly both in the short and long term in areas such as:

- Green Square Town Centre
- St Peters Triangle,
- Ashmore Estate
- Industrial land adjacent to Sydney Park
- Sydenham Victoria Rd Precinct
- Mascot town centre
- Wolli Creek

SPI will also include significant redevelopment in the longer term with redevelopment

likely to occur in the following areas:

- Greater Green Square
- Southern employment lands including Rosebery North
- Cooks Cove
- Sydney Airport lands

SPI is strategically located between the airport and the CBD with close links to the Eastern suburbs and Inner West. This is a dynamic area with major opportunities for ATN infrastructure.



Mascot Town Centre, Mascot



Green Square Cycle Way, Zetland

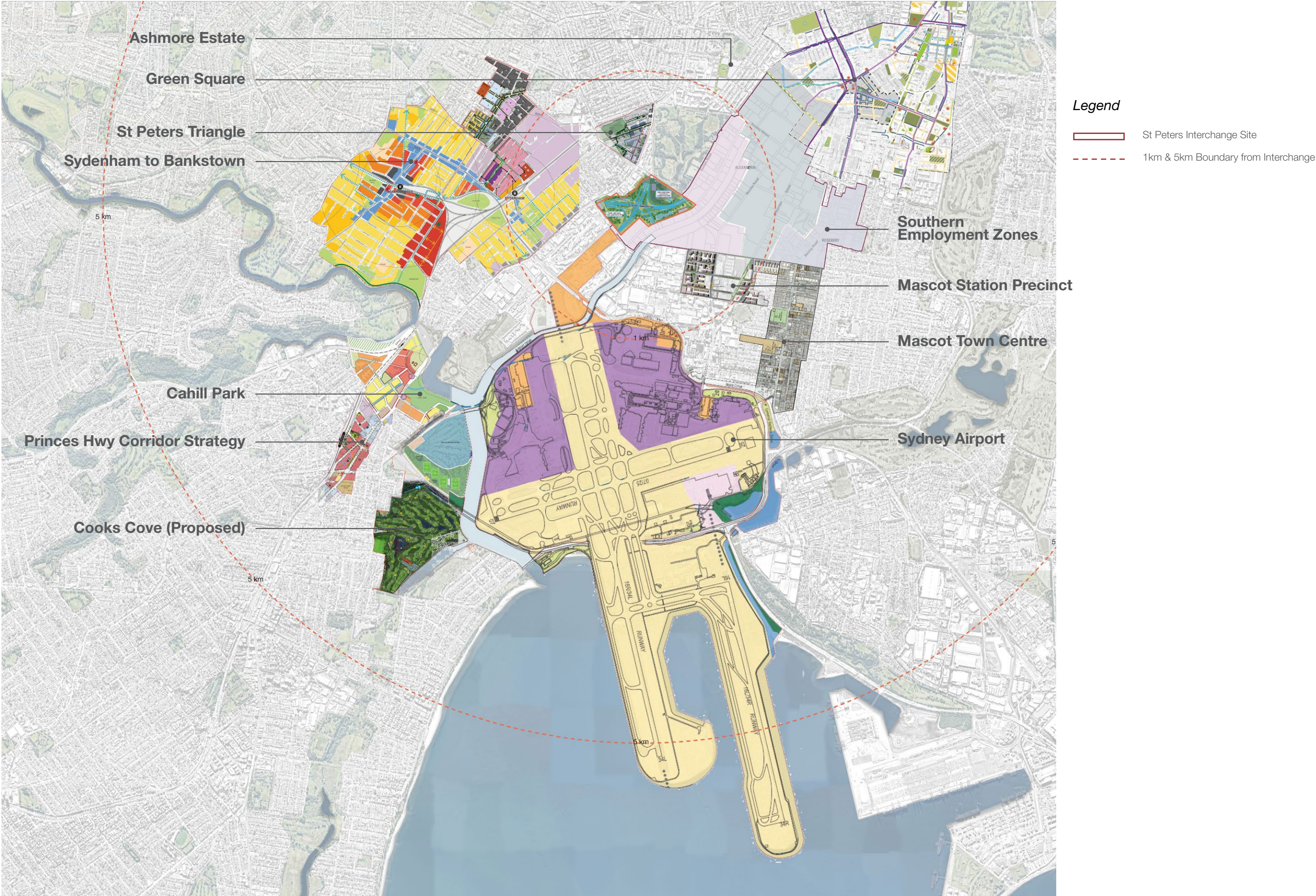


Figure 2.07 - Development Sites

2.8 CONSTRUCTION IMPACTS

During construction on the M5 East Motorway, existing shared pedestrian and cycle paths will be impacted.

As a part of construction management, access to properties will be maintained, traffic control will be ensured and residents will receive 5 days’ notice prior to the closure of any footpaths.

The construction of SPI will impact surrounding local roads, however there are no existing pedestrian or cycle paths within the SPI area to be impacted by construction of the SPI. The local roads construction works on Campbell Rd and Euston Rd will have construction impacts, however Campbell Rd and Euston Rd are not existing identified bicycle routes and Sydney Park shared pathways will remain open to allow safe connections through this area.

There are temporary removals of the shared paths within the M5 Linear Park related to the construction works for the New M5 tunnel portals. In all cases temporary safe diversions have been provided to ensure uninterrupted access for pedestrians and cyclists along the M5 corridor. Figure 2.08 below provides a copy of communications provided to the public identifying the temporary diversions in the M5 Linear Park. The temporary closures around the King Georges Rd intersection have now been removed.

In the vicinity of the SPI there are no existing shared paths or cycle paths which are impacted by construction works due to the SPI. The roads in the vicinity of the SPI are very low volume cycle traffic due to the lack of dedicated infrastructure, use of routes by heavy vehicles and relatively narrow roads. With the exception of Campbell St they are also relatively low pedestrian traffic due to the industrial nature of the adjacent development and absence of retail or commercial development.

There will be temporary impacts to a number of pedestrian paths during construction including the following pedestrian paths:

- Temporary closures of footpaths on Euston Rd due to road widening and footpath re-construction works
- Temporary impacts to the footpath on Sydney Park Rd due to footpath re-construction works
- Temporary impacts to the footpath on Campbell Rd due to road widening and footpath re-construction works
- Temporary impacts to the footpath on Canal Rd due to road widening and footpath re-construction works
- Temporary impacts to the footpath on Canal Rd due to road widening and footpath re-construction works

In all cases pedestrian access will be provided through the diversion of pedestrians onto a footpath on the opposite side of the road to the road works, or alternative temporary access will be provided along the road through the use of temporary barriers or equivalent. In all cases the footpaths will be reinstated and detour routes for cyclists and pedestrians will be adequately sign posted. Refer to B51 report for full details of reinstatement of footpath/shared path/separated cycle path details.

Refer appendix 3 for copies of notifications that have been issued via the WestConnex website detailing changes to roads, paths, cycleways, during construction of the SPI local road upgrades. Additional similar notifications will continue to be issued as the work progresses.

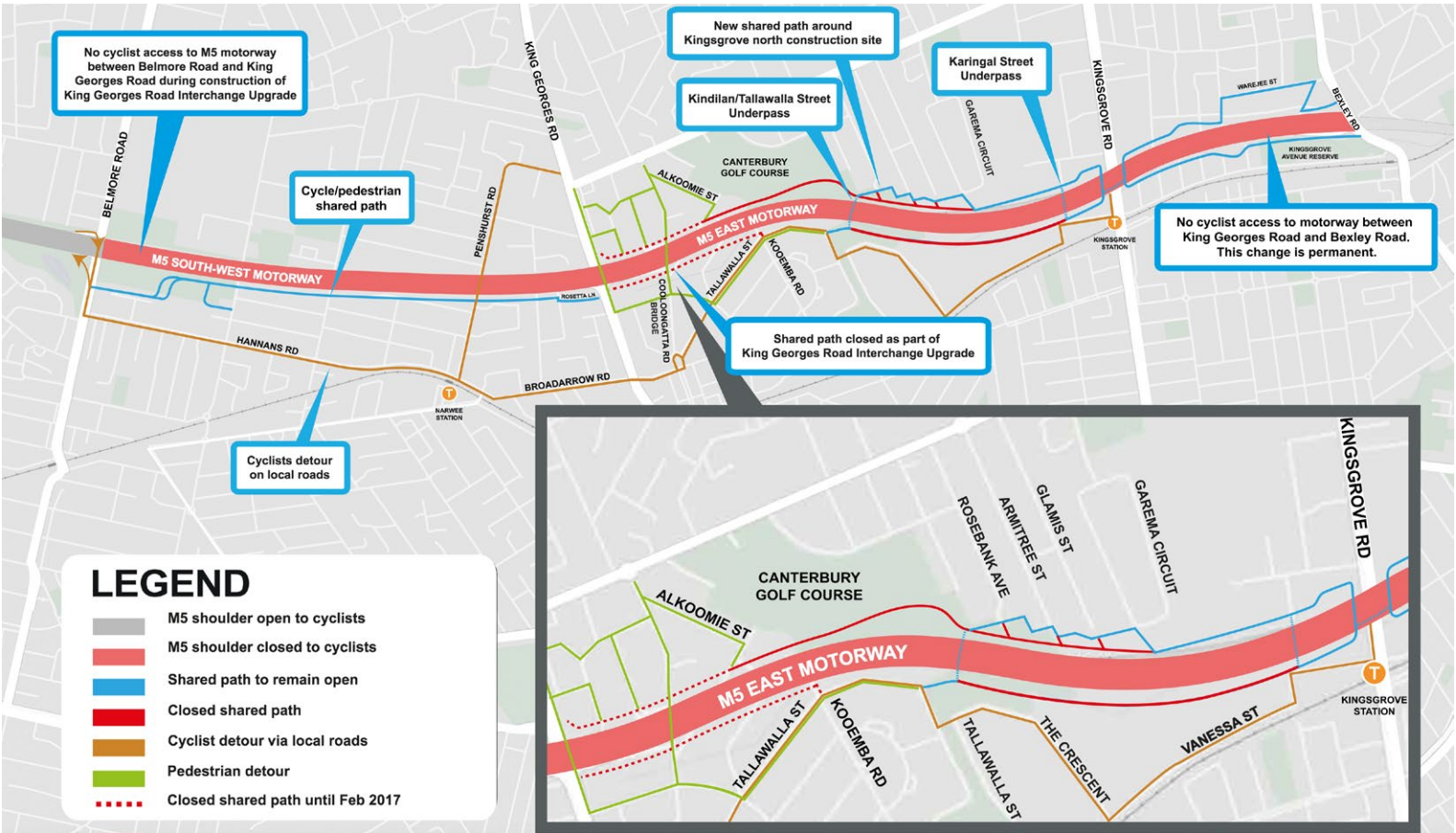


Figure 2.08 - Changes to shared pedestrian and cyclist paths between Bexley Road and Belmore Road as part of WestConnex New M5 - WestConnex

2.9 INTERSECTION UPGRADES

Intersection upgrades create a number of opportunities to reduce waiting and crossing times for pedestrians and cyclists. The intersections are categorised into four upgrade types:

New Signalised Intersections:

Campbell Road - Bourke Road

The intersection of Bourke Road and Campbell Road is proposed to be signalised with the provision of three pedestrian crossings. Cyclists have the opportunity to use a shared path on the northern side of the new Campbell Road Bridge.

Upgrade to Signalised Intersections:

Sydney Park Road - Euston Road

Adequate pedestrian connectivity is maintained through the upgrade of the intersection of Euston Road with Sydney Park Road from a round-a-bout to a signalised intersection.

Campbell Street - St Peters Street

The intersection of St Peters Street and Campbell Street will be upgraded to a

signalised intersection with two pedestrian crossings providing pedestrian access between the northern and southern side of side of Campbell Street.

Campbell Street - Albert Street

An at grade pedestrian crossing at the signalised intersection proposed at Albert Street.

Realignment and Upgrade of Intersections:

Campbell Street - Unwins Bridge Road

Adequate pedestrian connectivity is maintained through the realignment and upgrade of the intersection. As with the existing intersection of Unwins Bridge Road with Campbell Street four pedestrian crossings have been provided.

Major Intersection Upgrade and tie-in Works to New M5 Ramps

Campbell Road - Euston Road

Adequate pedestrian connectivity is maintained through the upgrade of the intersection. Signalised pedestrian and cyclist crossings have been provided across Campbell Road and Euston Road.

| Location | Crossing Configuration | Cycle Times |
|---|---|---|
| Campbell St / May St / Unwins Bridge Rd | Equivalent access. Fourth leg of pedestrian crossing added. | Improved. Single crossing of Campbell St. Traffic island removed. Additional crossing of Campbell St added. |
| Campbell St / Hutchinson St | Equivalent access | Improved. Dedicated cycle crossing. Raised threshold |
| Campbell St / Brown St | Equivalent access | No change |
| Campbell St / Florence St | Equivalent access | No change |
| Campbell St / St Peters St | Equivalent access | Improved. New signalised pedestrian crossing s on two legs of intersection |
| Campbell St / Church St | Equivalent access | No change |
| Campbell St / Princes Hwy | Equivalent access. Fourth leg of pedestrian crossing added. | Improved. Additional crossing of Princes Highway added. Campbell Road wider than previous. |
| Campbell St / Crown St | No change | Improved. Dedicated cycle crossing. Raised threshold. |
| Campbell St / Barwon Park Rd | No change | Improved. Dedicated cycle crossing. Raised threshold. Reduced crossing length. |
| Campbell St / Harber St | No change | Improved. Dedicated cycle crossing. Raised threshold. |
| Campbell Rd / Euston Rd | New 4 way intersection crossings to 3 sides of intersection | Slower crossing due to size of intersection. Includes dedicated cycle crossing on north side |
| Campbell Rd / Burrows Rd | New 4 way intersection crossings of Burrows only | Improved. Slower crossing due to size of intersection. Includes dedicated cycle crossing on north side and pedestrian crossing on south side. |
| Euston Rd / Sydney Park entries | New single leg pedestrian crossings of Euston Rd added | Improved. New signalised crossing of Euston Rd at Park entry points. |
| Euston Rd / Sydney Park Rd / Huntley St | Removal of round about. Full 4 way signalised intersection including pedestrian crossings | Improved. Wider intersection but signalised pedestrian crossing on all 4 links |
| Gardeners Rd / Kent Rd | No change | Widened intersection with signalised crossings |
| Gardeners Rd / Bourke Rd | No change | Widened intersection with signalised crossings |
| Campbell Rd / Bourke | New intersection | Widened intersection with signalised crossings and dedicated cycle crossing |
| M5 / King Georges Road | Pedestrian crossing added to north side King Georges Road | Improved. Reduced crossing time due to added pedestrian crossing |
| Princes Hwy / Canal Rd | No change | No change. Identified for improvement under Condition B51 |

Figure 2.09 - Impacted Intersections

2.10 STAKEHOLDER WORKSHOP

A stakeholder workshop was held 18th November 2016. The stakeholder workshop included representatives from Roads and Maritime Service, City of Sydney, Inner West Council, Bicycle NSW, Bayside Council and Canterbury Bankstown Council.

The workshop was undertaken to identify the following:

- Gaps in the mapping analysis of existing and proposed routes and trip generators that had been undertaken to date
- Current infrastructure works that were being undertaken or where currently being planned or designed
- Issues with the current network and required improvement upgrades
- Significant projects and opportunities in the existing ATN which would provide significant gains in the regional network

The key outcomes of the workshop were as follows (see appendix for meeting minutes and presentation):

St Peters Interchange

- All routes as proposed at the SPI where considered desirable including the proposed shared path between the SPI and behind the properties identified as 178 to 310 Princes Hwy, St Peters.
- The shared path behind the properties at 178 to 310 Princes Highways was seen as an important addition to the ATN as it provides an alternate route to Princes Highway and link between the suburbs of St Peters and Sydenham to the south and Sydney Park and the city to the north.
- It was noted that the shared path needed to be safe and meet Crime

Prevention Through Environmental Design (CPTED) principles. Work is being undertaken by the nominated contractor to address safety concerns including ensuring sight lines, lighting, CCTV and other safety design principles.

- It has been identified that proposed connectivity at either end of the proposed route through the western side of SPI is inadequate and requires attention.
- Works focused on the safety of these routes have been undertaken by the nominated contractor (straight lines lighting, CCTV)

M5 East Green Link

- The M5 East Green Link was supported as a future initiative
- The M5 East Green Link was considered a regional route and the infrastructure needed to reflect that of a regional route
- There was a general preference for an off road route, despite the reduced connection to local routes that an off road route would require due to the physical geography of Wolli Creek

M5 East Linear Park

- Connectivity at a number of the proposed locations need better connection to integrate with the surrounding ATN
- Improve connections west across King Georges Road
- Discussion about whether the existing ATN met the current design standard

| | Attendees | Apologies |
|--|---|-----------------------------------|
| RMS | – Grant Sutton – Bob McCulloch – Wayde Hazelton | – Leon Paap |
| City of Sydney | – Bryony Cooper | – Fiona Campbell |
| Inner West Council | – Simon Lowe – Kendall Banfield | |
| Bicycle NSW | – Ray Rice | |
| Georges River Council | | – Shereny Selim |
| Bayside Council | – Michael Lee | – Colin Mable |
| Canterbury Bankstown Council | – Rene Chau | – Peter Lay |
| McGregor Coxall | – David Knights – Logan Pennington | |
| Department of Planning and Environment | | – Swati Sharma – Jacqui Mcleod |

Table 2.10.1 Stakeholder Workshop Attendees

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2.11 SITES OF INTEREST

The structure of the report has been divided into the following sections (also seen in Figure 2.11)

- St Peters (refer section 3)
- M5 East Green Way (refer section 4)
- M5 Linear Park (refer section 5)

These sites are discussed in further detail in the following sections.

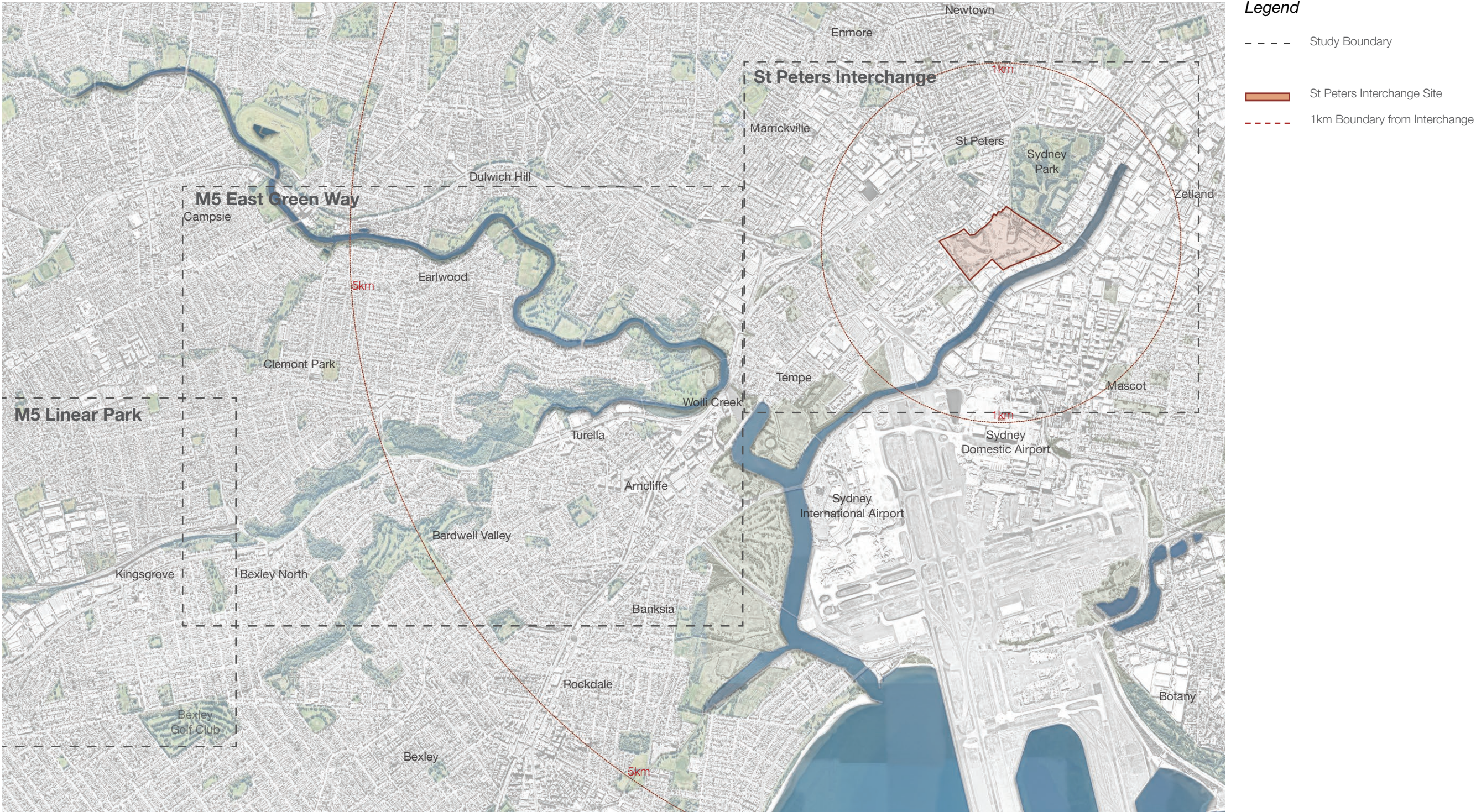


Figure 2.11 - Sites of Interest

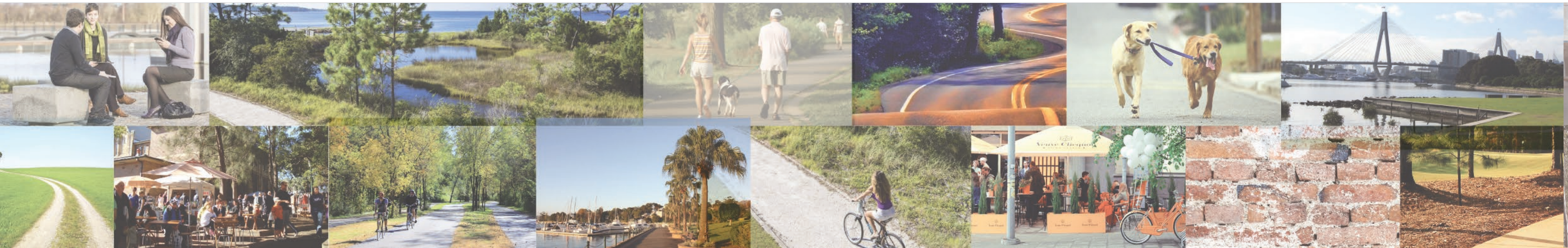
2.12 ST PETERS SAFETY AUDIT

A safety Audit was undertaken of the selected local routes surrounding the SPI. These local routes consisted of the following 4 sites as follows:

- Mitchell Road: Mitchell Road between the intersection of Mitchell Road and Sydney Park Road and Belmont Street
- Campbell Street: The intersection of Campbell Street and May Street including Bedwin Road Bridge and the entrance to Camdenville Park from May Street
- Princes Hwy Intersection: The intersection of Princes Hwy and Canal Road
- Canal Road: Canal Road between Princes Hwy and Ricketty Street

The audit results can be found in appendix 04.

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3.0 St Peters Review

3.1 ST PETERS OVERVIEW

St Peters and the surrounding area incorporates the suburbs of Newtown, Erskineville, Sydenham, Tempe and Mascot.

The area includes industrial land uses to the south and east, including supporting facilities for Port Botany and the Airport, and residential land uses to the west. The residential areas include former industrial areas currently undergoing transformation to multi-dwelling residential including Ashmore Estate. There is limited open space in the industrial areas to the south and east of the interchange.

The area is also significantly influenced by Sydney Park, a large regional open space immediately to the north of the interchange.

The area has a number of distinct characteristics. The industrial areas are dominated by heavy vehicle movements, poor streetscapes and limited pedestrian and cycle

movement. The residential areas to the north are undergoing transformation to high density apartments buildings and the areas to the west are dominated by single dwelling residential areas.

The area also includes the significant and highly valued ATN including the Cooks River shared path as well as the proposed Alexandra Canal cycleway and Bourke Street cycleway.

Currently there is poor connectivity between these regional links. In particular the industrial areas act as a significant barrier east to west as well as from north to south. The road network within the residential areas to the established residential suburbs to the west are also relatively narrow, and there is limited off street parking.



Princess Highway



Sydney Park Chimneys



Alexandra Canal



Sydney Airport



Figure 3.01 - Existing Network Plan

3.2 ST PETERS INTERCHANGE ATN - PLANNED

As part of the SPI works for the New M5, a number of initiatives are being planned and are proposed to be constructed by WestConnex. These works include the following:

1. An off-road shared path running on the western side of the interchange
2. An off-road shared path running on the northern side of the interchange (subject to modification of Ministers Condition of Approval B67 to enable public access along this route).
3. A separated cycleway along the eastern edge of Campbell Street from Unwins Bridge Road to Bourke Street
4. A bridge into Sydney Park from the SPI over Campbell Road
5. CoS council proposal to direct cyclists through Sydney Park via Mitchell Road and Harber Street has been considered by RMS as an alternate to the Euston Road shared path.
6. Cycleway along Bourke Road from Campbell Street. Ongoing discussions to determine type of cyclepath at this location.

These routes are shown in Figure 3.02. Note that the exact configuration and design for some of these routes are still being finalised.

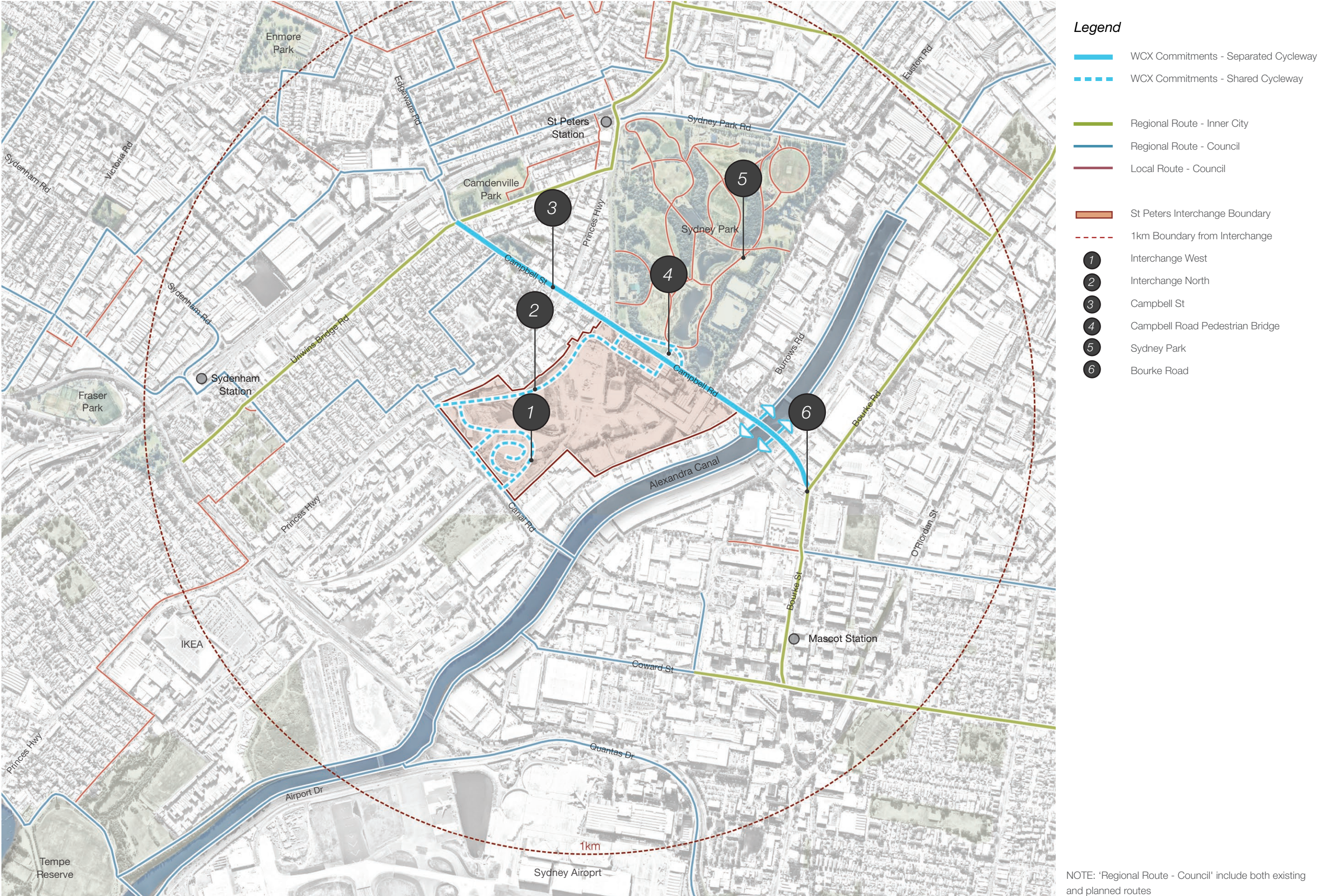


Figure 3.02 - St Peters Interchange ATN Review

NOTE: 'Regional Route - Council' include both existing and planned routes

3.3 ST PETERS INTERCHANGE ATN - REVIEW

Due to the location of the SPI, it plays a significant role in providing connectivity to a number of regional ATN routes. This includes links to the

- Existing regional route along Bourke Street providing connectivity to Green Square, Mascot and the city
- Airport and southern suburbs of Sydney through the Alexandra Canal and Cooks River cycle path
- South west of Sydney through future proposed regional Sydenham to Bankstown route as part of the Sydenham to Bankstown corridor redevelopment
- Proposed regional route through Erskineville and Alexandria connecting to Redfern and the city

Connectivity of ATN's is a key element of a well planned system. Hence, the proposed ATN works, as part of the SPI for the New M5, have been reviewed in terms of their connectivity to existing and planned ATN. This connectivity review has identified the following:

- A. Airport Connection: The connectivity at Canal Road is currently limited as it connects to a narrow footpath with poor connectivity over the bridge over Alexandra Canal. This is a key link to connect to the future Sydney Gateway ATN which provides an important connection to Sydney Airport.
- B. Sydenham Connection: South west connection at Princes Highway has limited connectivity to the surrounding network and is a current gap in the proposed network. Currently the ATN ends at Princes Highway at the footpath a short distance from the intersection with Canal Road.
- C. Enmore/Marrickville Connection: Connectivity to the west is limited at the Western end of Campbell Road. The connection across the Bankstown Rail line is currently poor with limited potential on the existing bridge and narrow lanes over the rail overpass. ATN links along Unwins Bridge Road are also currently poor.

- D. Newtown Connection: There is good potential for future connection to Newtown through the provision of a proposed ATN route along Princes Highway between Campbell Road and Lord Street as part of the King Street Gateway project.
- E. Sydney Park Connection: Access into Sydney Park from Campbell Road is currently limited due to the change in elevation and lack of paths on the southern boundary of Sydney Park. Better access would facilitate movement north and south through Sydney Park to the proposed SPI ATN.
- F. Erskineville Connection: Connection to the north through Erskineville is provided by the route along Euston Road or through Sydney Park and Sydney Park Road. However there is currently poor connectivity along Mitchell Road and Huntley Street. Both roads contain shared paths on existing footpaths which are relatively narrow and are constrained by trees, poles and driveways. There is also a relatively poor crossing at Huntley Street to access Belmont Street.
- G. Alexandria to Moore Park (A2MP) Connection: There is a current gap between the end of the SPI ATN, existing and proposed ATN, and the Alexandria to Moore Park ATN.
- H. Alexandra Canal Connection: WestConnex will enable a connection between the future Alexandra Canal ATN and the Campbell Road bike path.
- I. Mascot Connection: Access to the south east is good with important connections into the existing Bourke St ATN route and surrounding area.

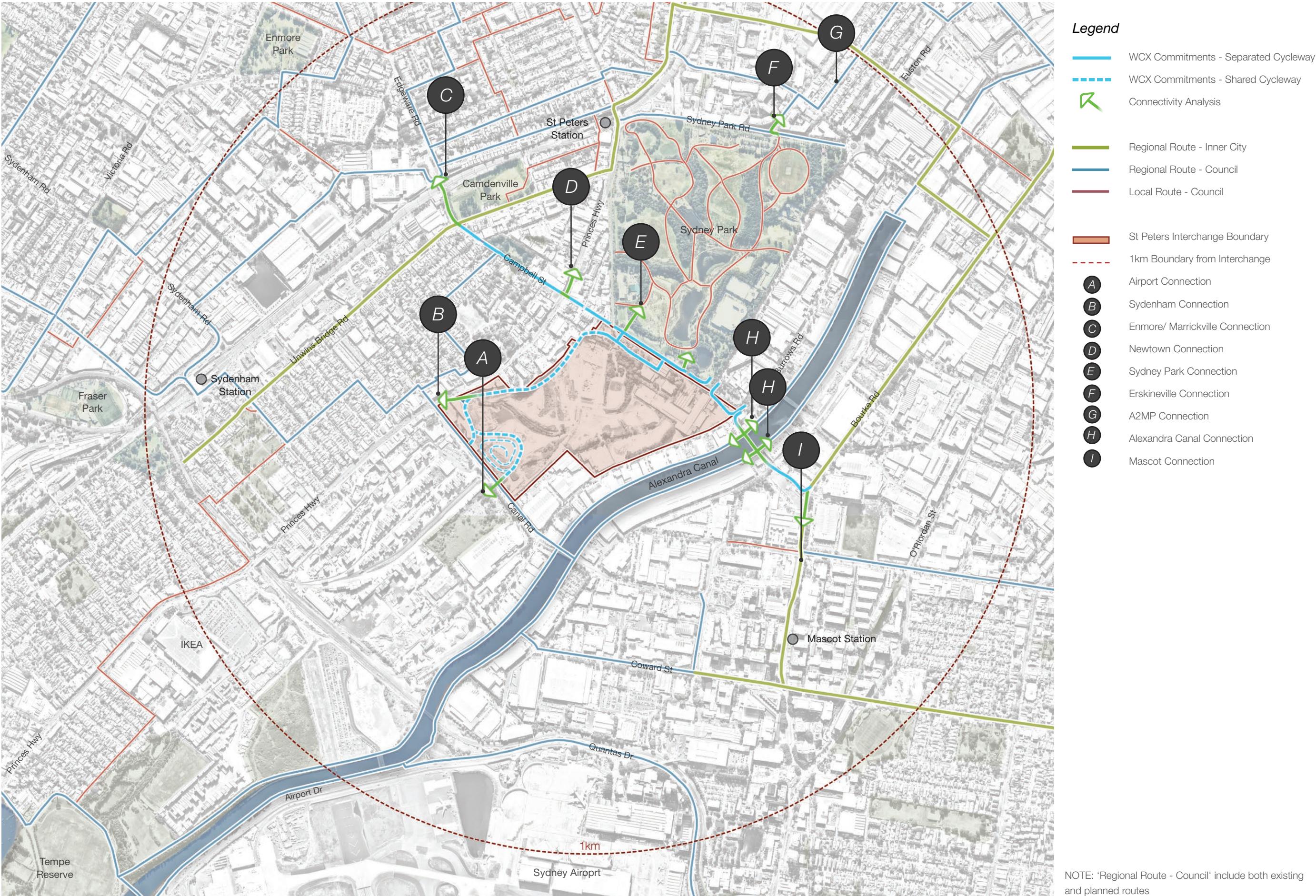
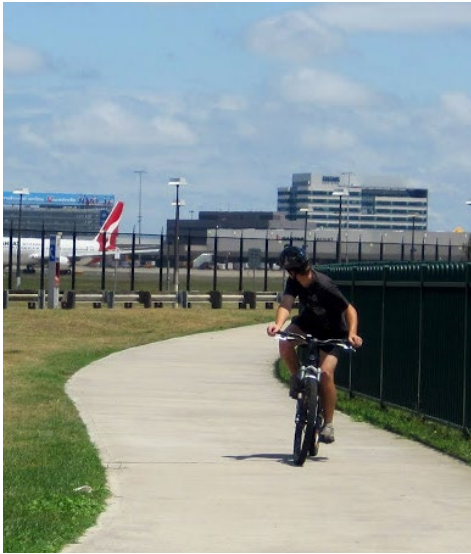


Figure 3.03 - St Peters Interchange ATN Review

3.4 ST PETERS INTERCHANGE ATN - MISSING CONNECTORS

| | Name | Summary | Status | Completion Date | Delivered by |
|---|---------------------------------------|---|---|-----------------|------------------|
| A | Airport Connection/Canal Road | Currently limited connectivity to Airport and along Canal Road | Gap. Being addressed as part of Sydney Gateway project | 2023 | RMS |
| B | Sydenham Connection (Princes Highway) | Currently limited connectivity into Inner West Council ATN to access Sydenham Station | Gap. To be addressed in Condition B51 | 2020 | RMS and Councils |
| C | Enmore/Marrickville Connection | Currently limited connectivity into Inner West Council ATN to access Enmore/Marrickville and Camdenville Park | Gap. To be addressed in Condition B51 | 2020 | RMS and Councils |
| D | Newtown Connection | Currently limited connectivity into Newtown town centre and existing Lord/Concord Street ATN | Gap. To be addressed as part of King St Gateway, which is implemented after opening of WCX New M5 | 2021 | RMS |
| E | Sydney Park Connection | Currently limited connectivity from Campbell Road to Sydney Park | Gap. Being addressed as part of Condition B62 Campbell Rd Bridge | 2020 | RMS |
| F | Erskineville/Alexandra Connection | Connection to the north through Belmont Street regional route Existing shared path to Belmont Street ATN is not adequate. | Gap. To be addressed in Condition B51 | 2020 | RMS |
| G | Alexandria to Moore Park Connection | Currently limited connectivity from Sydney Park Road/Euston Road to planned A2MP ATN | Gap. To be addressed in Condition B51 via Mitchell Road, Harley Street and McEvoy Street | 2020 | RMS |
| H | Alexandra Canal Connection | Facilitating City of Sydney's planned Alexandra Canal cycle path | Planned as part of existing Westconnex works – bridge design does not impact councils proposal | 2020 | WCX |
| I | Mascot connection | Connectivity to Bourke Road ATN and Mascot town centre | Planned as part of existing Westconnex works | 2020 | WCX |



Connecting Inner West suburbs to the Airport via the Sydney Gateway



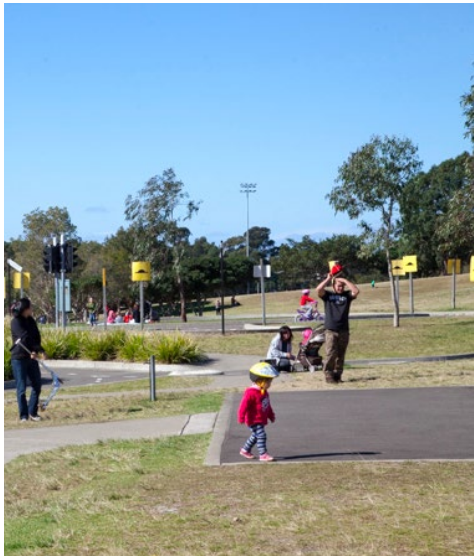
Connecting Princess Highway with Canal Road



Connecting Cooks River to inner west stations via the Sydenham creative industries precinct



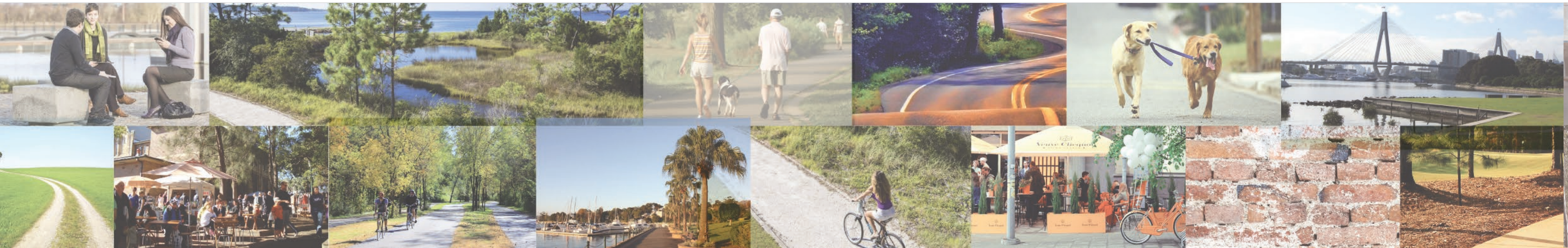
Providing a connection from Sydenham & St Peters to Newtown along the major arterial route of Princes Hwy and King St



Closing the gap between Euston Road to Maddox Street and the A2MP



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4.0 M5 East Green Link

4.1 M5 EAST GREEN LINK OVERVIEW

The M5 East Green Way and the surrounding area includes the suburbs of Kingsgrove, Bexley North, Turrella, Wolli Creek, Bardwell Park and Arncliffe.

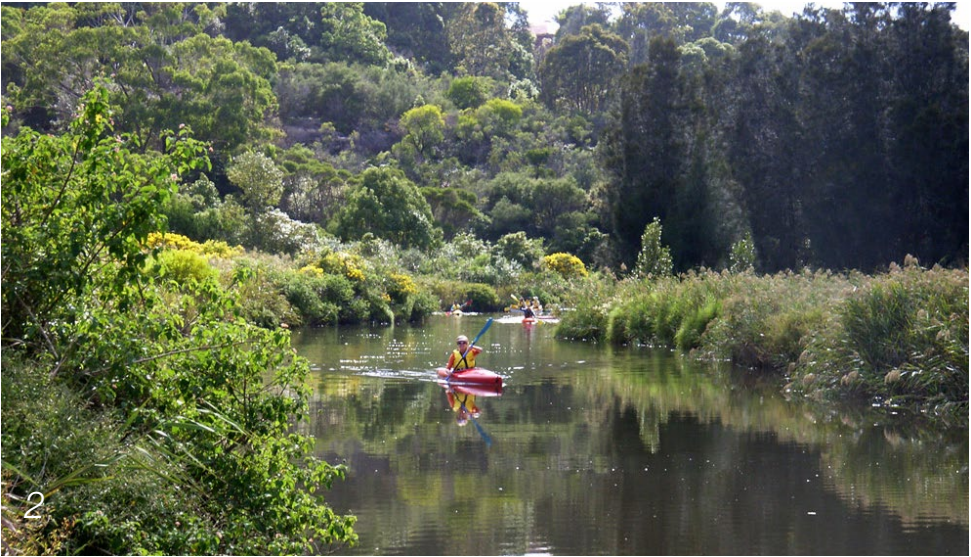
The area includes Wolli Creek Reserve and the adjoining Cooks River with their accompanied qualities. Outside these water systems, residential housing populates the majority of the area with new development to the east, between Arncliffe and Wolli Creek Stations, and a major rail line travelling southwest from Sydney.

At a regional level, currently, there is poor connectivity between frequently used existing routes including the Cools River shared path, the M5 East Linear Park and the Alexandra Canal cycle path. In particular there is a lack of ATN infrastructure linking these routes resulting in poor connectivity.

The following sub sections (4.2 and 4.3) review the history (1994-2016) of previous works towards the implementation of a shared path / cycle way connecting Alexandra Canal to Turrella Station and Bexley North Station.



Bexley Road Pedestrian Bridge



Wolli Creek



Wolli Creek Train Station



Cooks River

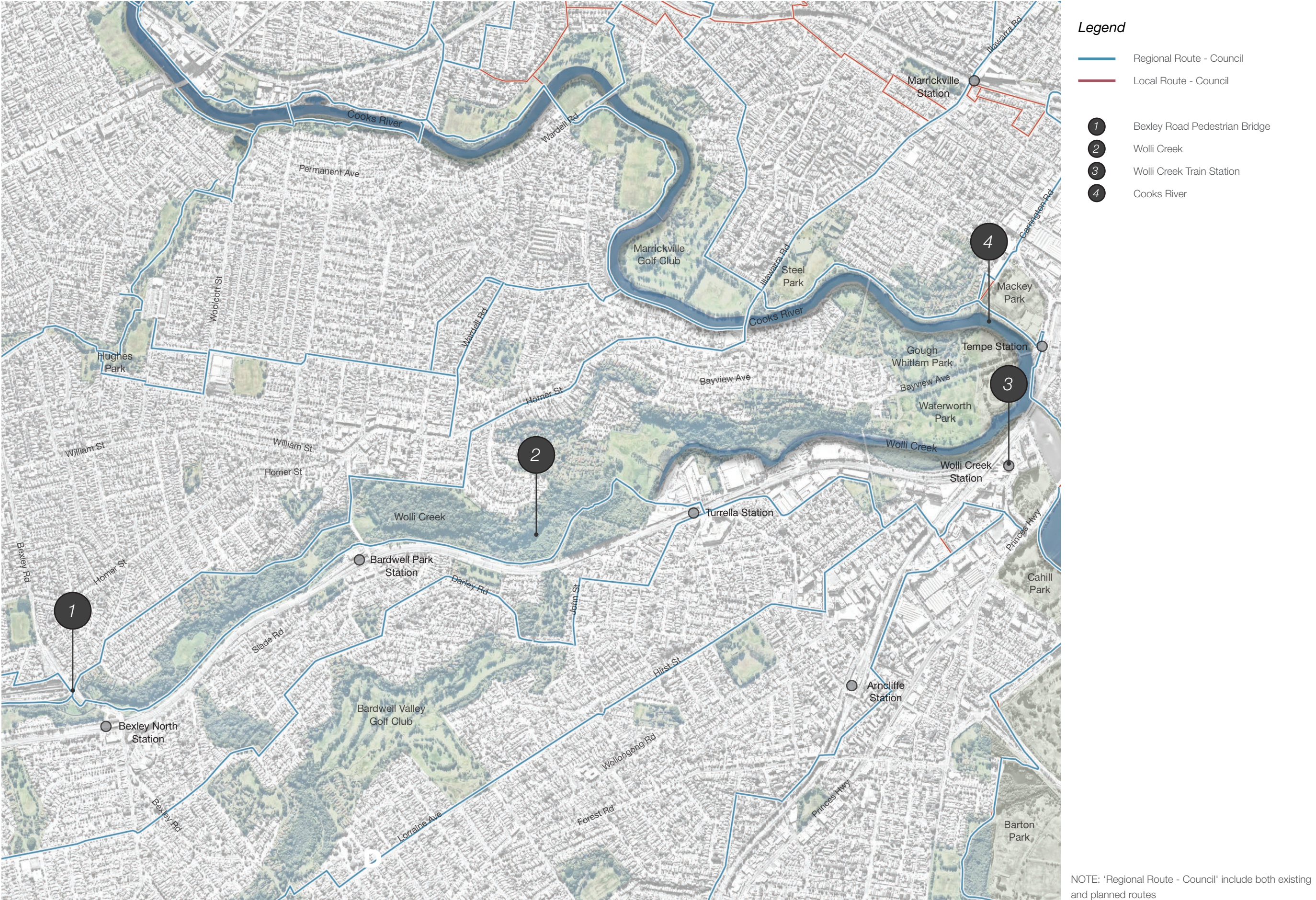


Figure 4.01 - Existing Network Plan