

4.1.2 IRON COVE ATN LINK

The active transport link at Iron Cove is shown in Figure 4.5 and is a key connector that would:

- Connect northern suburbs of Drummoyne [and Russell Lea and Five Dock via the Bay Run] to The Bays Precinct and the CBD
- Connect the existing retail centres on Darling Street and Victoria Road as well as local schools and other community services
- Provide a direct route, notwithstanding significant gradient changes, from Iron Cove Bridge towards Darling Street
- Capitalise on the amenity uplifts potentially assisted by forecast traffic volume reductions on Victoria Road
- Connect to ATN routes on local roads
- Link significant open space from the Bay Run, Callan Park and the future open space at Rozelle Rail Yards and foreshore along The Bays Precinct.

The key route requirements are to:

- Provide a separated cycleway and footpath on the southern side of Victoria Road along the extent of M4-M5 Link works
- Provide a template for the treatment of cycleways and footpaths along the remainder of Victoria Road.



Figure 4.5 Victoria Road Iron Cove ATN link

4.1.3 PROJECT INTERFACES

The M4-M5 Link interfaces with the M4 East and New M5 at Haberfield and St Peters respectively. The scope of active transport links Haberfield will be delivered by the M4 East project and the scope for active transport link at St Peters will be delivered by the New M5 project. These links will be delivered in accordance with the conditions of approval for both the M4 East and New M5 projects. The following section is provided for information only.

4.1.3.1 HABERFIELD

Active transport links within the Haberfield area would be provided by the M4 East project.

The Parramatta Road Urban Transformation Strategy includes a key east-west route as part of the Urban Amenity Improvement Program. This route would link Concord in the west to Five Dock in the east by the Gipps, Queen, Patterson road corridor. These works are currently being pursued by Greater Sydney Commission, the agency charged with delivery of the Urban Amenity Improvement Program.

4.1.3.2 ST PETERS

The New M5 includes a number of new and upgraded active transport links as a component of that project. The area around St Peters interchange will include new separated cycleways, shared paths and pedestrian paths. As shown in Figure 4.6, the following active transport links would be provided as part of the New M5 project:

Element	Description	Length
A Campbell Road cycle path	Separated cycle path along Campbell Road between Bourke Street and Urwins Bridge Road	1300m
B Alexandra Canal Bridge	New bridge providing connectivity between Mascot and St Peters and Sydney Park	100m
C Bourke Road separated cycle path	Shared cycleway along Bourke Road between Campbell Road and Church Ave	650m
D Campbell Road land bridge	Improved connectivity into Sydney Park over Campbell Road	20-50m
E SPI shared path	Behind properties 178-310 to Princes Highway	750m
F SPI shared path	Along Canal Road linking to future Sydney Gateway ATN	500m
G Euston Road shared path [subject to further discussion with the City of Sydney]	Shared path along Euston Road between Campbell Road and Sydney Park Road	700m
H Sydney Park Road shared path	Shared path along Sydney Park Road between Mitchell Road and Euston Road	250m
I New signalised intersection	Providing improved connectivity at Euston Road and Campbell Road	N/A
J New signalised intersection replacing two-lane roundabout	Providing improved connectivity at Euston Road and Sydney Park Road	N/A

Table 4.1 St Peters ATN upgrades

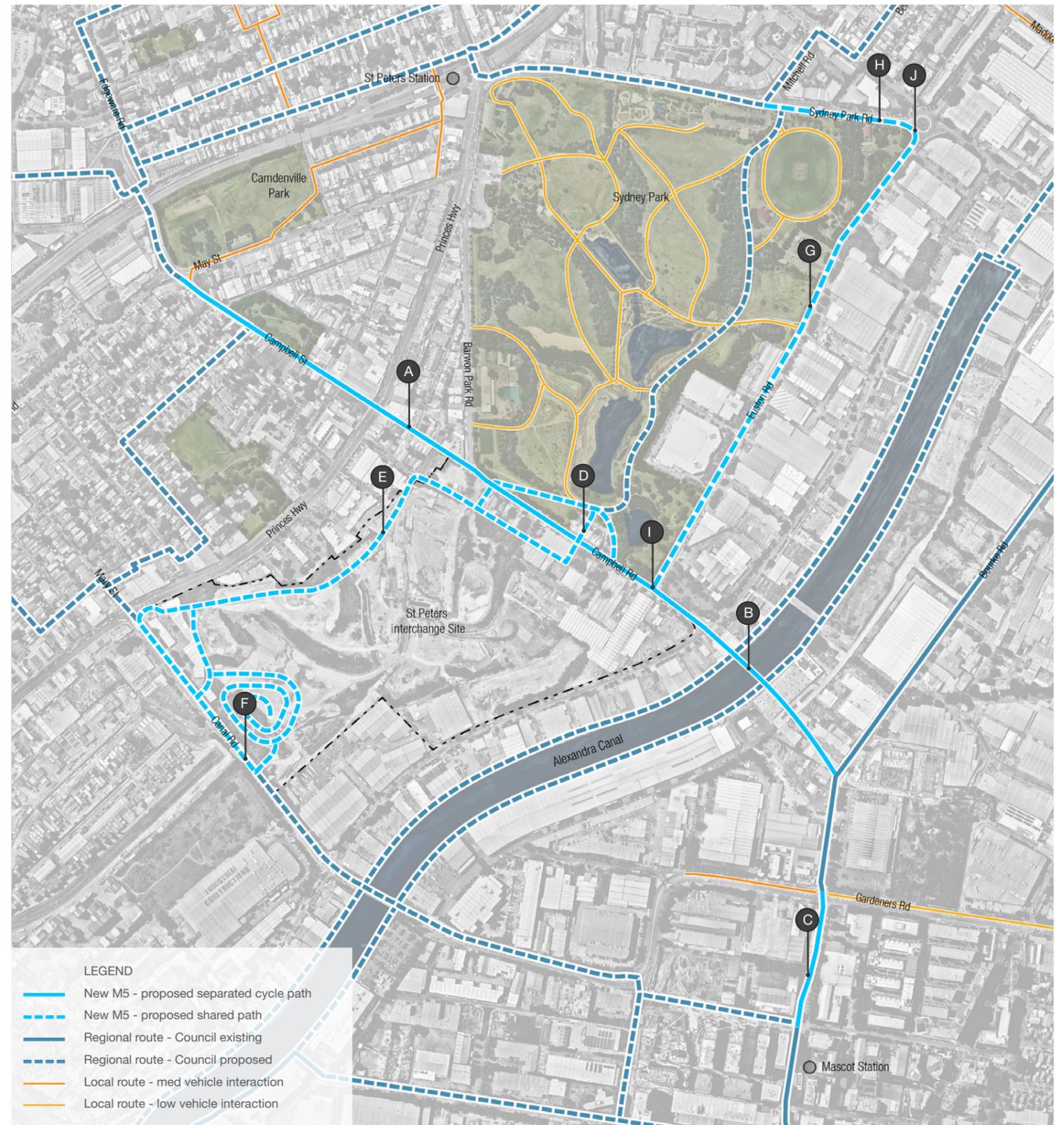


Figure 4.6 St Peters ATN upgrades

New M5 has prepared a pedestrian and bicycle network review in accordance with the project's conditions of approval.

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 St Peters interchange. 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 outlined five key areas of further investigation for the pedestrian and cycle network around St Peters interchange outlined in Table 4.2

The results of these further investigations will be included in a Pedestrian and Bicycle Implementation Strategy to be developed as a further condition of approval to New M5. A copy of the New M5 Pedestrian and Bicycle Network Review is included at Annexure 2.

Option	Description	Next Steps
A Sydenham Connection	Connecting St Peters interchange to the residents of Sydenham across Princes Highway	Develop concept as part of the New M5 project
B Airport Link	Connectivity to future Sydney Gateway	Develop concept as part of Sydney Gateway and Canal Road investigated as part of the New M5 project
C Sydenham and Cooks River Link	Connecting end of Campbell Street, across railway and south-west towards Cooks River	Develop concept as part of the New M5 project
D King Street Gateway	King Street Gateway and Newtown Link	Roads and Maritime to develop concept
E Alexandria to Moore Park Potential Connector	Connecting Sydney Park Road to the beginning of the Alexandria to Moore Park upgrade	Develop concept as part of the New M5 project

Table 4.2 Projects for further investigation

5.0 Summary of Future Links

Rozelle Rail Yards link

The Rozelle Rail Yards link would be provided by the project and link with the Lilyfield Road cycleway currently being planned by Inner West Council in the western reaches of the Rozelle Rail Yards site. There remains a future potential project that will continue this link west through the light rail reservation. Realisation of this link will require further work by Inner West Council, Transport for NSW and Roads and Maritime.

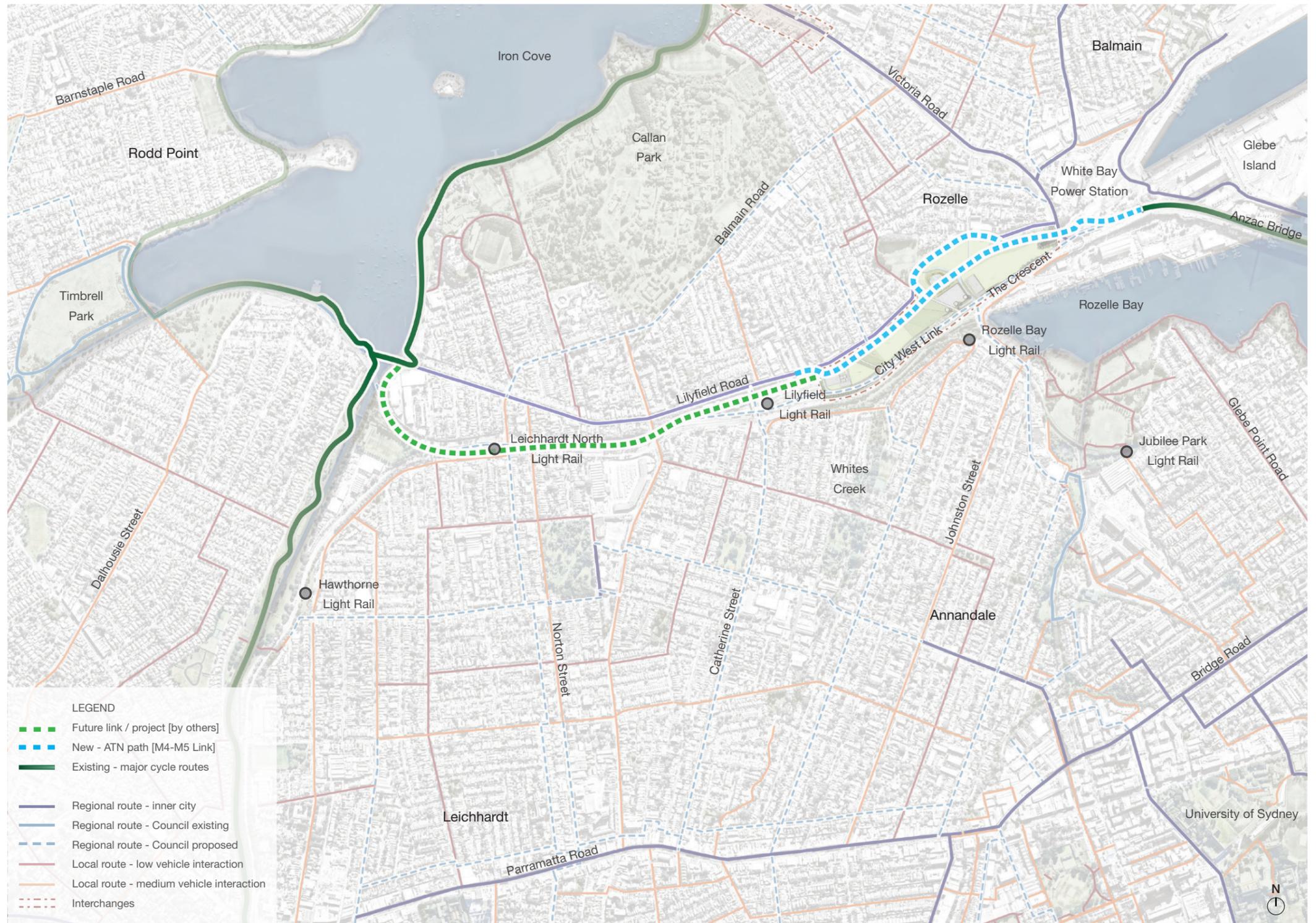


Figure 5.1 Rozelle Rail Yards future link

Whites Creeks link

A new pedestrian and cycle bridge would be provided by the project over City West Link at the northern extent of Whites Creek. There will remain future opportunities for Council and/or Roads and Maritime to formalise a shared path further south of the pedestrian and cycle bridge linking to existing shared paths that are already in place further south along Whites Creek.

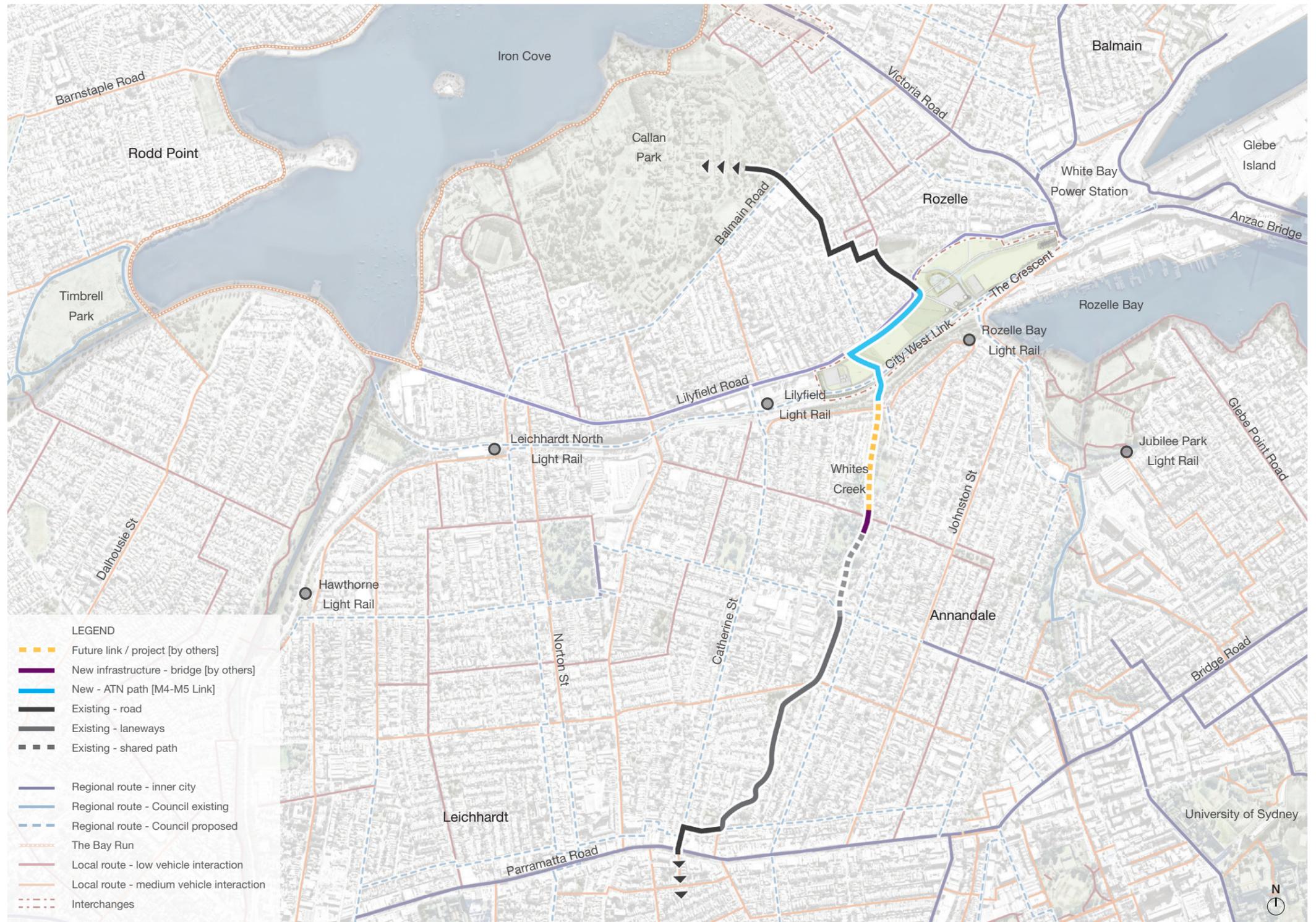


Figure 5.2 Whites Creek future link

Victoria Road

The project would create a pedestrian and cycle path along the western side of Victoria Road where the project would have a surface intervention. A future project would be possible along the remainder of Victoria Road between Springside Street and Robert Street for a new pedestrian and cycleway. This link would be contingent upon revisions to the Victoria Road carriageway that would be made possible due to the anticipated traffic reductions as a result of the Iron Cove Link.



Figure 5.3 Victoria Road Iron Cove ATN link

Johnstons Creek Valley link

This proposed link is a key regional connector route that would:

- Extend the existing Johnstons Creek pathway to Parramatta Road
- Extend the existing Johnstons Creek pathway to connect into the Rozelle Rail Yards via the Rozelle Rail Yards land bridge
- Link Glebe Foreshore and parklands to the Rozelle Rail Yards and Parramatta Road and The Bays Precinct
- Link Glebe to Lilyfield and Rozelle
- Be a predominantly off-road ATN link along Johnstons Creek
- Provide connectivity and links to an existing and proposed network of off-road ATN routes
- Provide a relatively flat, at-grade ATN along the Johnstons Creek section of the route
- Link significant open space to new development areas, including Harold Park redevelopment and The Bays Precinct.

This link would complement the works proposed to Pyrmont Bridge Road under the UrbanGrowth NSW Parramatta Road Urban Transformation Strategy, Urban Amenity Improvement Program. The key route requirements are to:

- Address connectivity from Johnstons Creek to the Rozelle Rail Yards
- Provide as flat a route as possible from the interchange to Parramatta Road
- Ensure suitable connectivity along Johnstons Creek ensuring minimal conflict between park users and cyclists
- Transform the Johnstons Creek easement and laneway into a safe and accessible active transport link

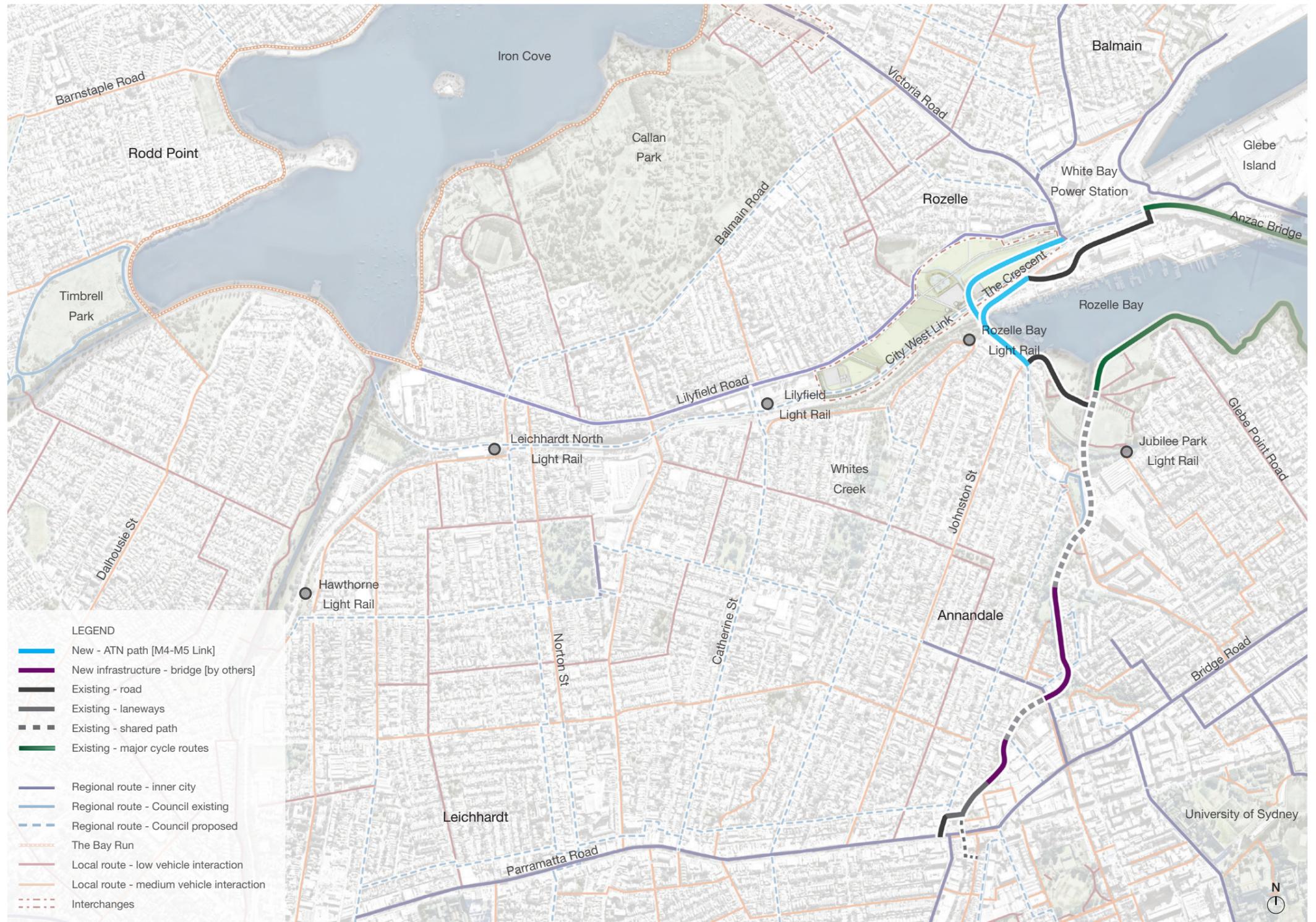


Figure 5.4 Johnstons Creek Valley link

Johnston Street link

The Johnston Street ATN link is a key connector that would:

- Link the inner western suburbs to the Glebe Foreshore and Rozelle Rail Yards
- Link into the existing retail centres of Annandale and Parramatta Road as well as local schools and other community services
- Provide space for a separated cycleway, owing to the width of the road
- Link to ATN routes on local roads
- Provide a relatively flat route
- Link significant open space to new development areas including Harold Park redevelopment and The Bays Precinct
- Take advantage of the street not being used by buses.

The key issues for this link that need to be further investigated include:

- Potential impacts on street parking and street trees
- Resolve movement through intersections, including intersections with traffic lights at Booth Street and Collins Street
- Connectivity through the intersection at Parramatta Road
- Connectivity through the intersection at The Crescent.

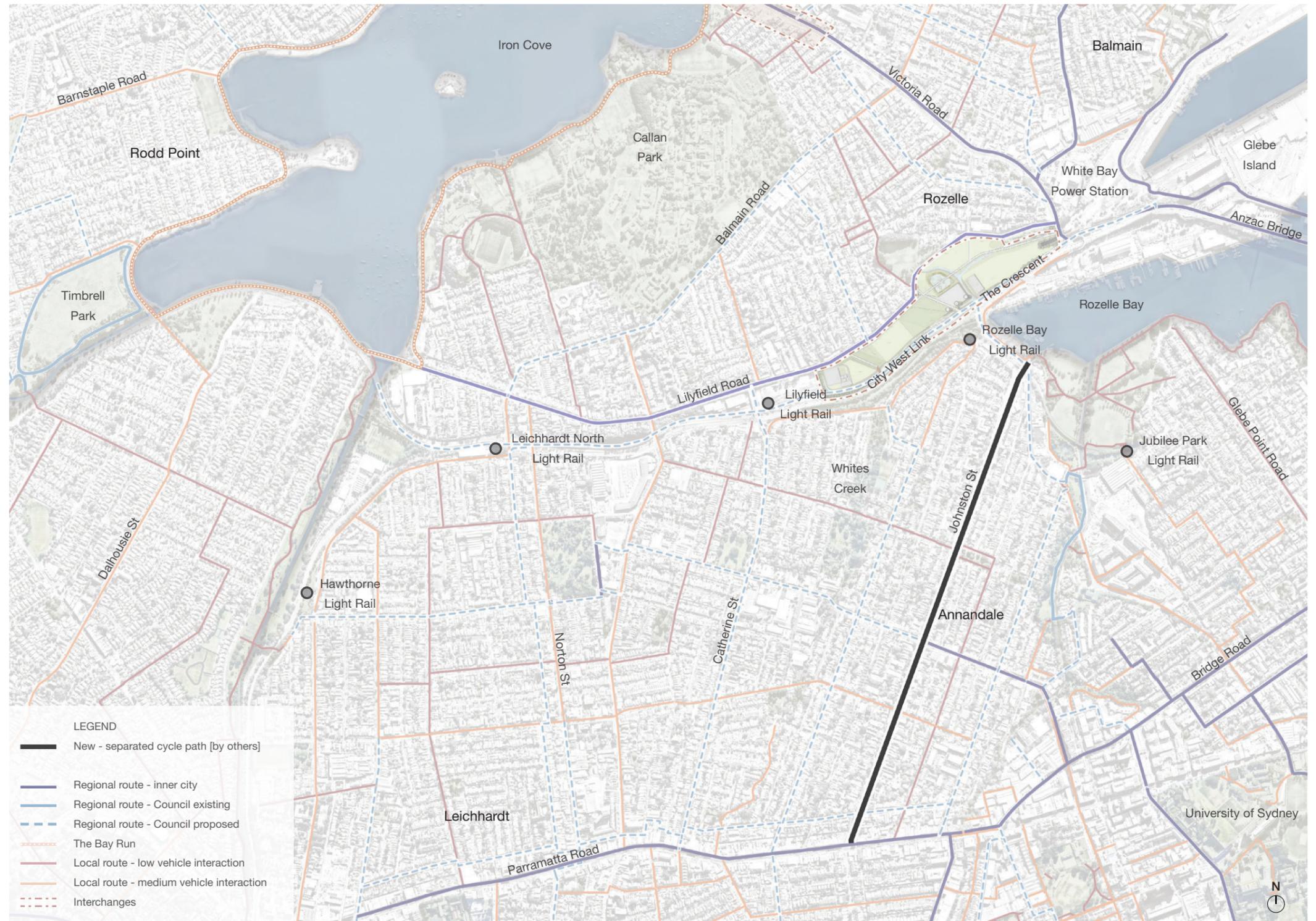


Figure 5.5 Johnstons Street link

Whites Creek to Marrickville link

This proposed link is a key regional connector route that would:

- Link a number of inner west destinations including train stations at Petersham, Stanmore, and Marrickville, as well as local town centres
- Link to other major cycleway routes including the regional route along the main Western rail line, Cooks River cycle path, and the proposed Sydenham to Bankstown path
- Form part of a key local north south route from Rozelle to the Cooks River
- Be an on-road ATN using cycle paths on predominantly quiet local streets
- Provide connectivity and links to an existing network of on-road ATN routes
- Require a connection along Crystal Street to cross the rail line.

The route is located on local and regional roads. The streets are typically narrow and the majority of the streets consists of two travel lanes and two parking lanes. Further investigations would need to assess safety implications of vehicle and pedestrian/cyclist interaction and the potential loss of street parking and street trees.



Figure 5.6 Whites Creek to Marrickville link

Johnstons Creek to St Peters link

This link is a key proposed regional connector route which would:

- Use a relatively direct route from Johnstons Creek to the St Peters interchange through Enmore
- Be an on-road ATN using separated cycle paths on regional roads and quiet local streets
- Provide connectivity and links to an existing and proposed network of on-road ATN routes, such as Wilson Street and the inner west railway regional route
- Link to significant proposed ATN at St Peters along Campbell Road and through to Bourke Street
- Require the construction of a separated cycleway along Edgeware Road as a key connection
- Link inner western suburbs of Enmore, St Peters and Stanmore to Rozelle and the Balmain Peninsula
- Provide a relatively flat at-grade ATN for most of the route.

The route is located on local and regional roads. The streets are typically narrow and typically consist of the following configurations:

- Two travel lanes and two parking lanes on regional roads such as Edgeware Road, Bedwin Road, Enmore Road and Liberty Street
- Two travel lanes and two parking lanes on local roads such as Cardigan Street, London Street and Cambridge Street.

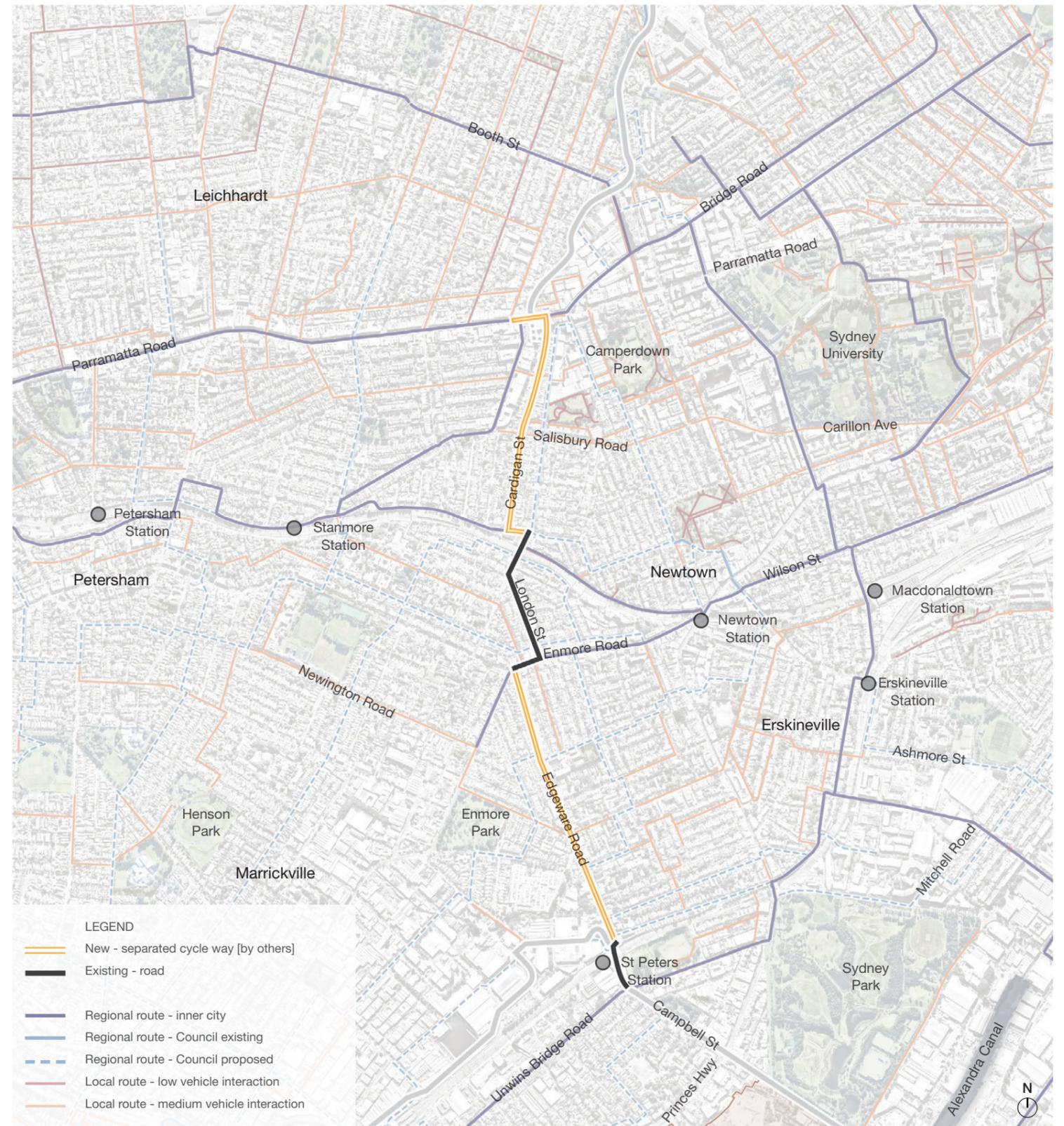


Figure 5.7 Johnstons Creek to St Peters link

Orphan School Creek to Sydney Park link

This link is a key proposed regional connector route that would:

- Link key inner west destinations such as Sydney University, King Street Newtown, Carriageworks and Eveleigh, and Erskineville village
- Be an on-road ATN using separated cycle paths on regional roads and quiet local streets
- Provide connectivity and links to an existing network of on-road ATN routes
- Link to other major cycleway routes including routes through Sydney University and Wilson Street, which link to the CBD as well as routes through Erskineville including Concord Street and Flora Street
- Require the construction of a separated cycleway along Lyons Road and Missenden Road
- Provide potential future linkages to development in North Eveleigh, Australian Technology Park and Ashmore Estate as well as connections east to Green Square.

The route is located on local and regional roads. The streets are typically narrow and typically consist of the following configurations:

- Two travel lanes and two parking lanes [Missenden Road, Lyons Road, Burren Road, Alexandra Drive, Bridge Street]
- One travel lane and one parking lane [eg Bucknell Road, Wilson Street, Flora Street]
- Mini plazas at King Street and Erskineville Road, Ashmore Estate.

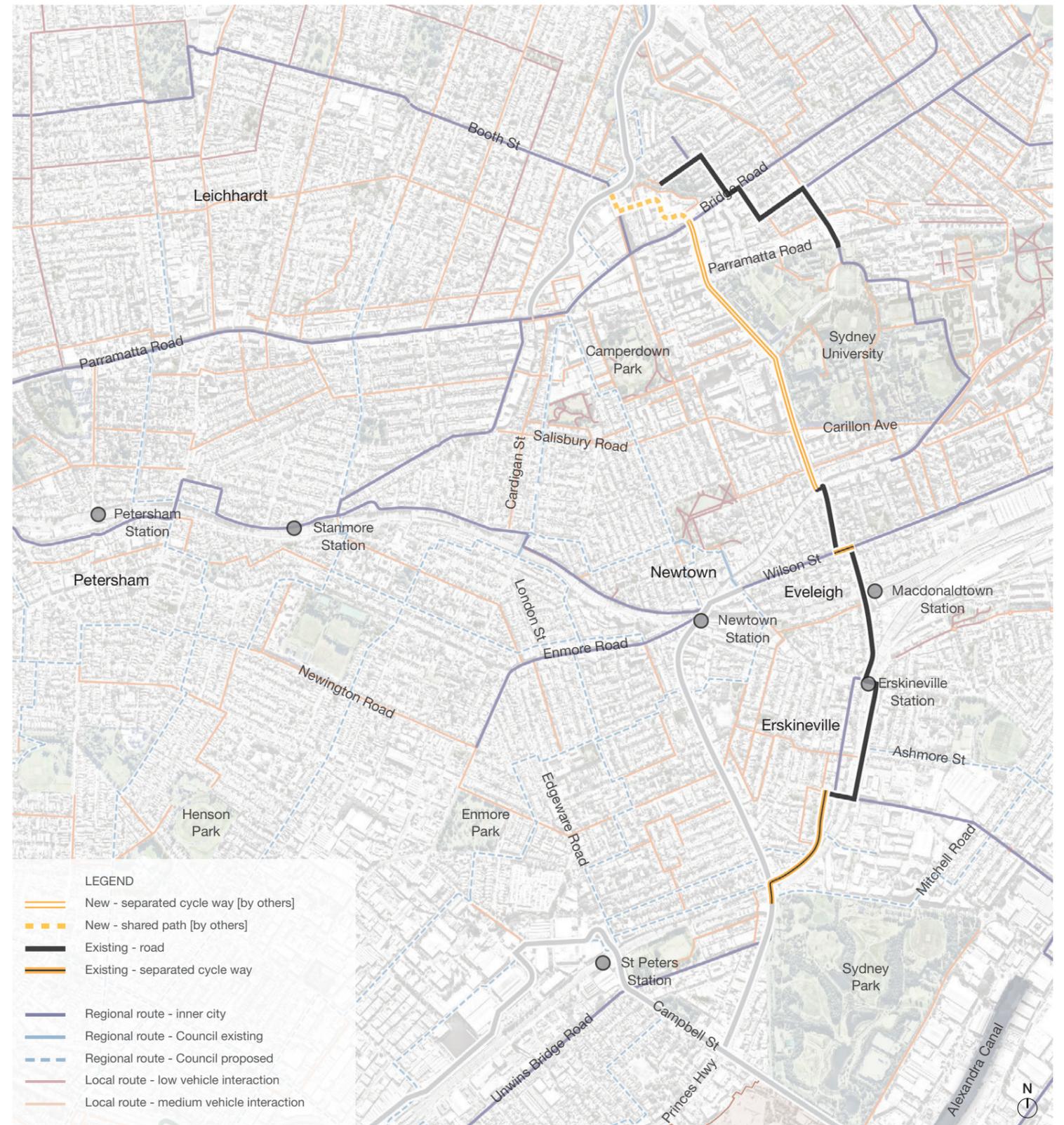


Figure 5.8 Orphan School Creek to Sydney Park link

6.0 Future Consultation

The proposed active transport routes provided in this report outline a possible future form for the ATN within and around the M4-M5 Link corridor. To realise the routes proposed, further consultation would be carried out with local councils, Transport for NSW, bicycle user groups, the community and adjacent land holders and developers.

The routes identified as being delivered by M4-M5 Link [see section 4.1] would be developed further in the UDLPs to be prepared for the project. The UDLPs would cover detail including:

- Path width
- Path delineation [eg separated cycleways and pedestrian paths, shared paths]
- Path connections to the existing network.

See images on this page for examples of typologies.

The above would be developed in accordance with:

- Austroads Guidelines
- NSW Bicycle Guidelines
- Planning Guidelines for Walking and Cycling.

The routes identified as potential future projects [section 5] would be made available for incorporation into the Roads and Maritime Principle Bicycle Network. This would enable these routes to be developed by either Roads and Maritime or local councils following further consultation with landowners and the community.

Principles for wayfinding would be considered in the development of these routes [see Annexure 4].



Cooks River



George Street Cycle Way



The Bay Run



Sydney Olympic Park



Kent Street Cycle Way



Bourke Street Cycle Way



Cycle Way - Vancouver, Canada

7.0 Summary

The M4-M5 Link would deliver a significant addition to the ATN within the project corridor. The following table summarises the delivery of active transport routes as contained within this report. The routes are illustrated in Figure 7.1. Those that would be delivered by the project are shown in bold text.

Route	Rationale	Type	Approx. Length	Delivery
A Rozelle Rail Yards link				
<i>Links the Bay Run, The Bays Precinct and the GreenWay in the west to Anzac Bridge and the CBD in the east</i>	1. Links Anzac Bridge through The Bays Precinct to Lilyfield Road at the western end of the Rozelle Rail Yards	Separated cycle path	250m	M4-M5 Link and UrbanGrowth NSW
	2. Provides the junction connecting Rozelle Rail Yards and Victoria Road to The Bays Precinct	Underpass	150m	M4-M5 Link
	3. Provides the link between Victoria Road and the CSELR Rozelle Maintenance Depot	Separated cycle path	1000m	M4-M5 Link
	4. Connecting the CSELR Rozelle Maintenance Depot to Charles Street and Canal Road linking onto the Bay Run	Separated cycle path	1800m	Inner West Council/Roads and Maritime/Transport for NSW
B Johnstons Street link				
<i>Links the inner western suburbs to the Glebe Foreshores and the Rozelle Rail Yards</i>	1. Connecting Parramatta Road to The Crescent	Separated Cycle Way	1800m	Inner West Council and Roads and Maritime
C Victoria Road - Iron Cove link				
<i>Links the northern suburbs of Drummoyne and Russell Lea and Chiswick to The Bays Precinct and the CBD</i>	1. Connecting the eastern side of the Rozelle Rail Yards along Victoria Road to the intersection of Robert Street	Separated Cycle Way	250m	M4-M5 Link
	2. Connecting the intersection of Robert Street up and over Victoria Road to the intersection of Springside Street	Separated Cycle Way	900m	Inner West Council
	3. Linking the intersection of Springside Street to the Iron Cove Bridge and the Bay Run	Separated Cycle Way	450m	M4-M5 Link
	4. Connecting Victoria Road to The Crescent over the Rozelle Rail Yards	Bridge	200m	M4-M5 Link
	5. Connecting Victoria Road to The Crescent	Shared Path	400m	M4-M5 Link
	6. Connecting The Crescent to James Craig Road existing ATN	Shared Path	500m	M4-M5 Link
D Whites Creek link				
<i>Links Parramatta Road to the Rozelle Rail Yards and onto Callan Park</i>	1. Linking the intersection of Brennen Street and Railway Parade over or under City West Link connecting to the Rozelle Rail Yards link	Bridge	200m	M4-M5 Link
	2. Links Railway Parade through Cohen Park, Whites Creek Valley Park and connects onto Whites Creek Lane	Shared path	750m	Inner West Council
	3. Following Whites Creek Lane, connecting Whites Creek Valley Park to Macquarie Street and further onto Parramatta Road	Laneway	1000m	Inner West Council
E Johnston Creek Valley link				
<i>Extends the existing Johnston Creek pathway to connect Glebe Foreshore to Parramatta Road</i>	1. Connecting Easton Park to The Crescent through the Rozelle Rail Yards	Bridge/Shared path	300m	M4-M5 Link
	2. Providing a suitable cycling space for the connection along The Crescent, into Jubilee Park and linking to the existing Glebe Foreshore	Shared path	500m	M4-M5 Link
	3. Using the existing pedestrian infrastructure to link the Glebe Foreshore to the north end of Taylor Street along side Johnstons Creek	Existing Shared path	500m	Inner West Council
	4. Following the creek line, continue from the north end of Taylor Street, under the Wigram Road bridge, under the Booth Street bridge and linking onto the Douglas Grant Memorial Park	Bridge over canal	500m	Sydney Water and Inner West Council
	5. Providing the connection through Douglas Grant Memorial Park	Existing Shared path	100m	Sydney Water and Inner West Council
	6. Following the creek line, connect Douglas Grant Memorial Park to the laneway to the east of Susan Street	Bridge over canal	50-100m	Sydney Water and Inner West Council
	7. Connect the north end of the laneway to Cahill Lane then onto Parramatta Road	Shared path	200m	Inner West Council

Table 7.1 Rozelle delivery of routes

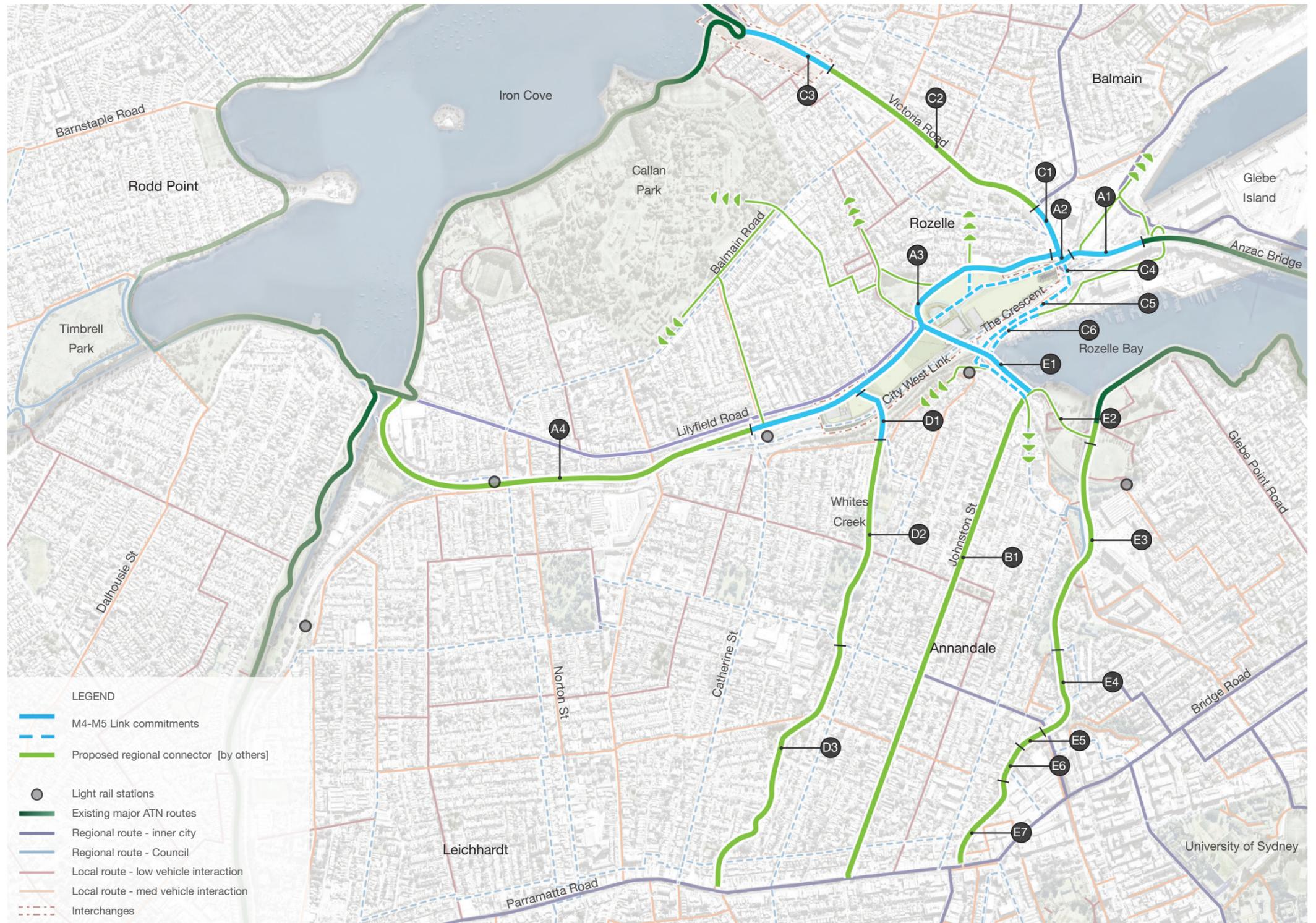


Figure 7.1 Rozelle delivery of routes

8.0 References

The following plans and policies were utilised in development of this report:

- Sydney's Cycling Future, December 2013
- Inner Sydney Regional Bicycle Network, April 2010
- Leichhardt Council Bike Plan, October 2015
- Marrickville Council Bike Plan, August 2007
- City of Sydney Cycle Strategy and Action Plan, February 2007
- City of Sydney Living Green Network, May 2011
- NSW Bicycle Guidelines, July 2005
- NSW Long Term Transport Master Plan, December 2012
- Transformation Plan: The Bays Precinct, Sydney, October 2015
- Parramatta Road Corridor Urban Transformation Strategy, November 2016.

ANNEXURE 1

Analysis of regional connectivity for the M4-M5 Link.

Major development zones

Property development offers a significant opportunity to develop active transport networks, including:

- New connectivity for pedestrian and cyclists with new roads, lanes, pedestrian and cyclist links, particularly in former industrial areas which have large lot sizes
- Opportunities for new ATN infrastructure including dedicated on-road and off-road active transport networks
- 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 and new transport nodes.

In the vicinity of the Rozelle interchange development is dominated by The Bays Precinct which has a number of new development zones adjacent to the Rozelle interchange including:

- White Bay Power Station
- Glebe Island
- Rozelle Bay
- White Bay
- Bays Market District

The Bays Precinct will include significant opportunities for new regional foreshore connectivity and connected active transport networks as well as open space through:

- Foreshore walk- Bays Promenade along White Bay, Rozelle Bay and Blackwattle Bay linking Balmain to the CBD
- Open space upgrades such as Wentworth Park
- New public open space associated with the development precincts

There are also new developments in close proximity to the Rozelle Rail Yards including the Harold Park redevelopment and associated open space upgrades at Johnstons Creek and new trip generators such as the Tramsheds.

In the vicinity of the St Peters interchange there is a major transformation of the former industrial lands into high density residential and mixed use development. The area around the St Peters interchange will transform significantly both in the near and long term. In the short term redevelopment is occurring at areas such as:

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

St Peters interchange will also include significant redevelopment into the longer term with large areas of redevelopment likely to occur in the following areas:

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

The area's strategic location between the airport and the CBD as well as the eastern suburbs and inner western suburbs of Sydney means that this will be a dynamic area of change with major opportunities for new ATN infrastructure as part of the new development.

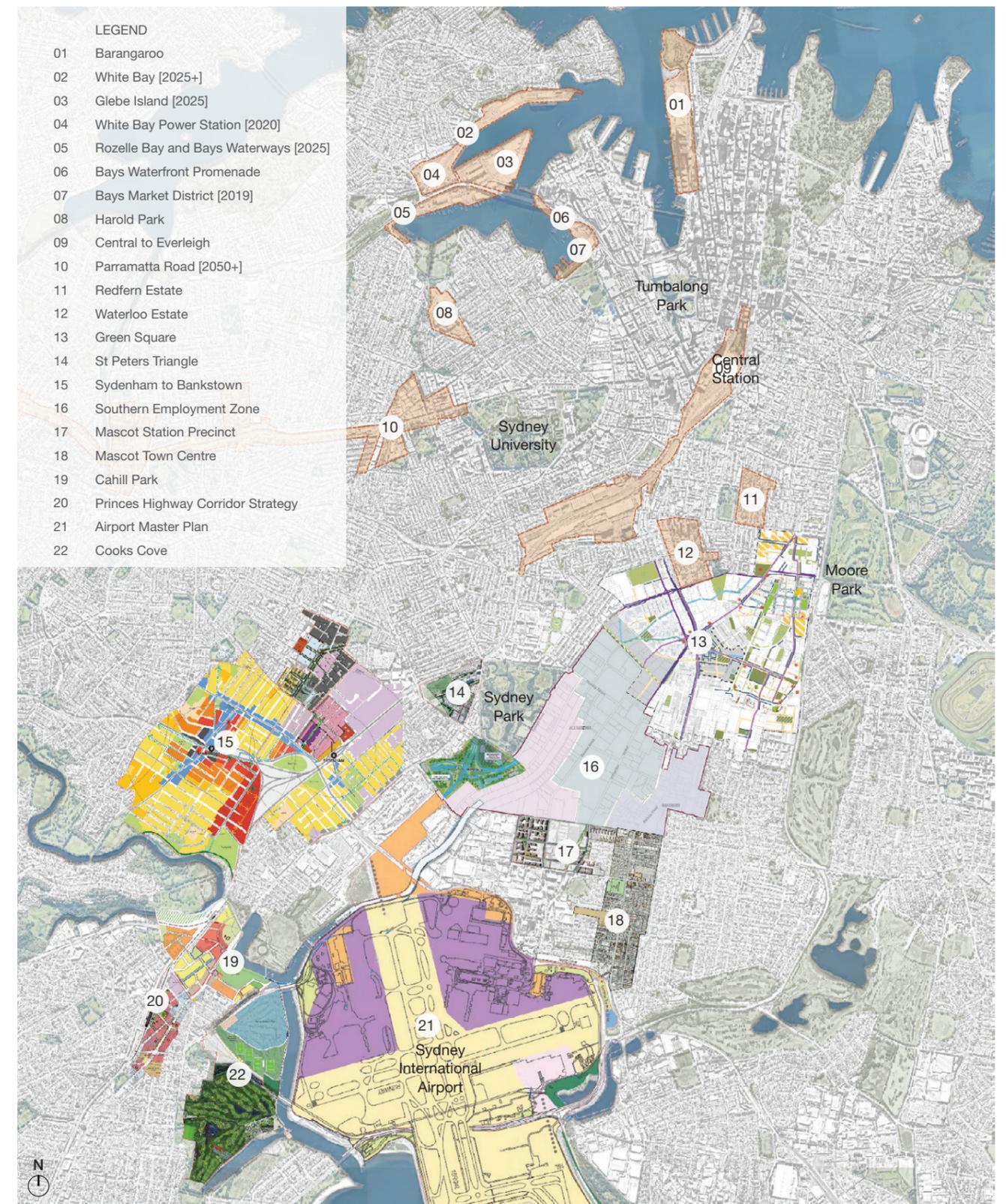


Figure 8.2 Major development zones

Inner City regional routes

The Inner Sydney Regional Bicycle Network is a plan that has been 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 has been refined on a number of occasions since its original development.

The network 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.

This strategy is shown in Figure 8.3.

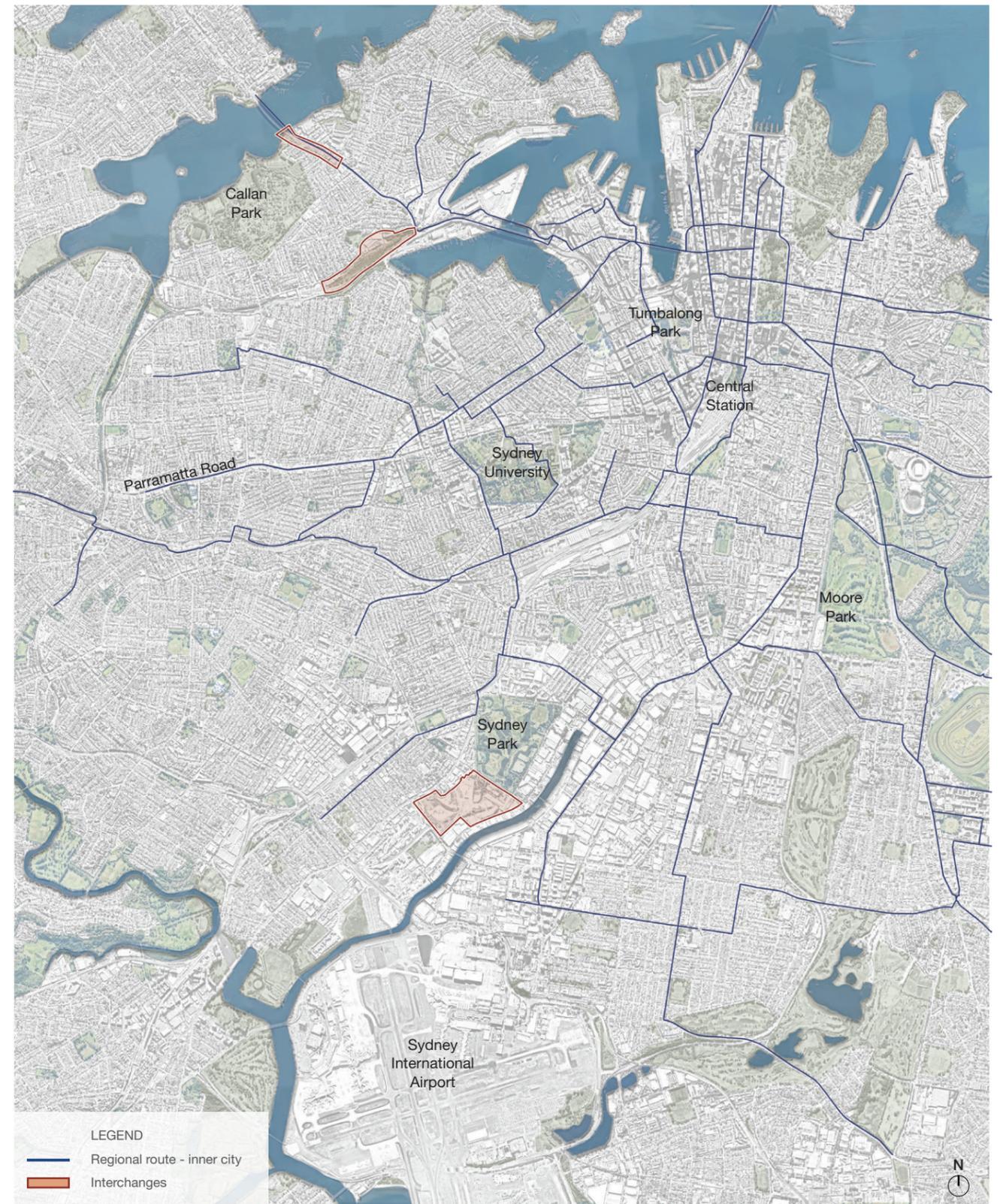


Figure 8.3 Inner city regional routes

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, the former Marrickville Council and the City of Sydney Council have developed cycling 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, local and pedestrian active transport networks were reviewed and mapped and are shown in the Figure 8.4.



Figure 8.4 City of Sydney and Inner West Council regional routes

ANNEXURE 2

New M5 Pedestrian and Bicycle Network Review.