

5.2 IRON COVE LINK

The following sections outline existing conditions of the Iron Cove Link site and provides key findings for each criteria. It stipulates the strategic responses implemented in the urban design outcome, which correlate to the principles in section 3. Finally, this section contains a proposed concept plan for the Iron Cove Link site which maximises the opportunities derived from the key findings and combines the strategic responses.



5.2.1 EXISTING CONDITIONS

Access and movement

The Iron Cove Link site and surroundings are dominated by the major regional link of Victoria Road, which connects Iron Cove Bridge to the north-west with City West Link and the Anzac Bridge to the CBD. While a major regional connection, Victoria Road also carries local and neighbourhood traffic from Darling Street to Iron Cove. Access to public transport is



Traffic along Victoria Road.



Dog walker walking down Victoria Road, which links into the parks along the water's edge.



Poor pedestrian and cycle amenity along Victoria Road.



Iron Cove foreshore walk.



Pedestrian and cycle infrastructure along Iron Cove Bridge.

available via bus stops that are located along Victoria Road. These movements are intermingled, creating congestion and an unclear hierarchy of movement. Shared footpaths are constricted and immediately adjacent to high volumes of traffic. The footpaths also form local connections between the Bay Run for pedestrians and cyclists. Despite the link to

Iron Cove, the surrounding neighbourhoods are impacted by the regional road traffic on Victoria Road, which effectively separates Rozelle and Balmain. As such major points of local amenity, such as Callan Park and Iron Cove Bay, while visible, are not easily accessed from surrounding neighbourhoods.

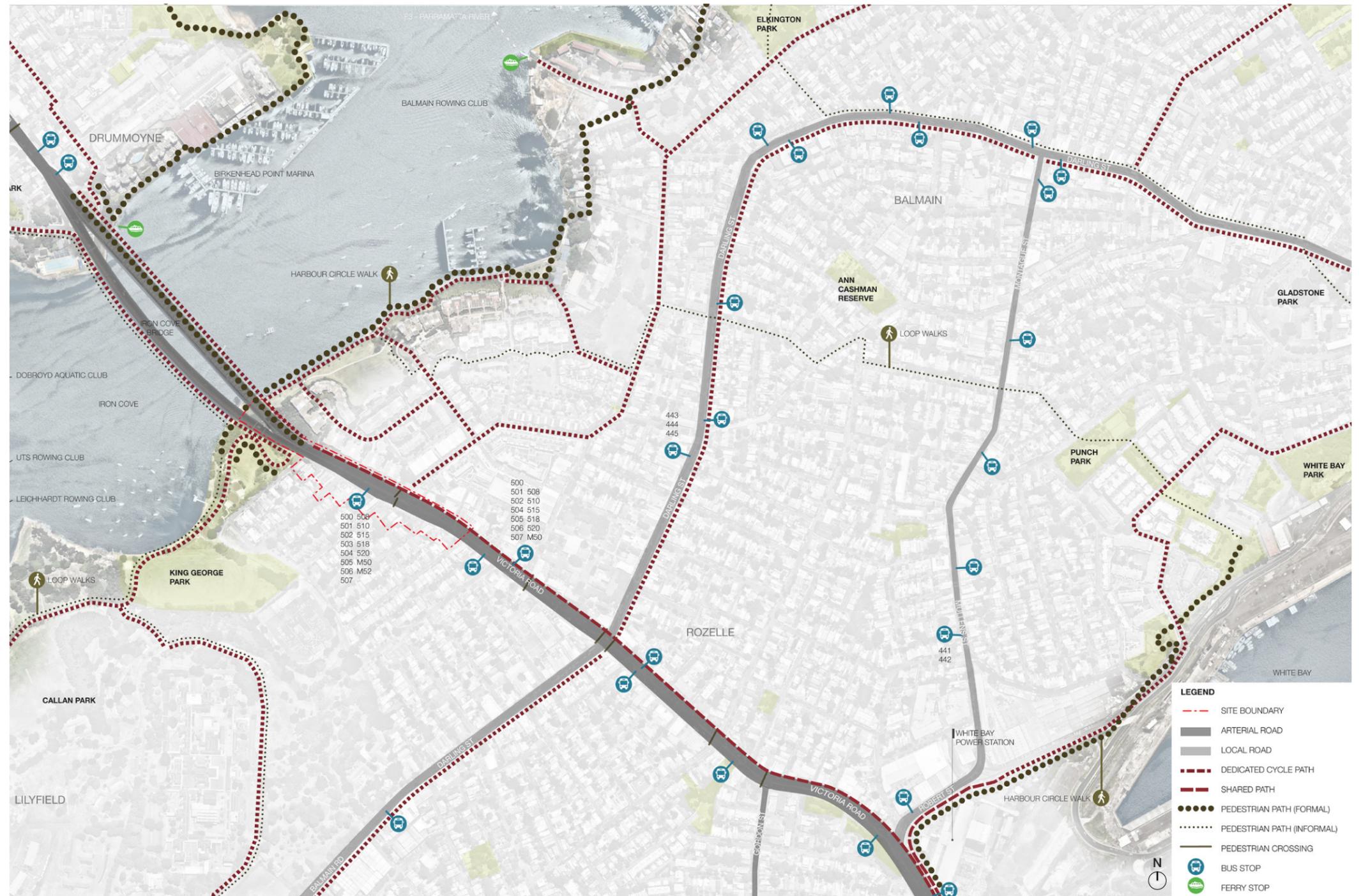


Figure 5.19: Access and movement

Culture

The harbour and its foreshore have been a strong cultural influence on Iron Cove. A history of industrial maritime activity in Iron Cove and the ongoing recreational boating activities produce a maritime landscape that attracts residents and visitors.



Under the bridge, Iron Cove.



Iron Cove rowing clubs.



Open green space and foreshore walks, King George Park.



Rozelle Markets on Darling Street.



The Bay Run.

The extensive foreshore walk supports a broad range of cultural activities including cycling, dog walking, running events, and sight-seeing.

The main pedestrian connection between Blackwattle Bay and Iron Cove is Victoria Road. The current form of Victoria Road discourages pedestrian activity and cultural pursuits. The Iron Cove Link site stands as a potential location for expanding existing cultural activities such as dog walking, cycling, as well as local residents' daily needs.



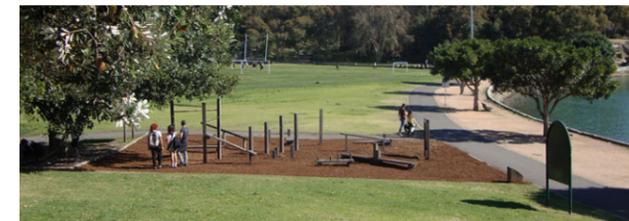
Figure 5.20: Culture

Natural environment

The combination of open water and ample tree cover along parts of the Iron Cove foreshore creates a riparian edge, attracting and supporting a variety of terrestrial and aquatic species. Stands of mature trees within Callan Park tie into the foreshore walk and harbour ecology. Birds and bats use the dense canopies as nesting and foraging grounds, and the mature fig trees serve as an important food source for the area's flying-fox population.



Footpath along Victoria Road.



Open green links, King George Park.



Dense tree canopies along the foreshore.



Oyster beds along the Iron Cove foreshore.



Storm water run-off into Iron Cove.

While the foreshore exists as a major green linkage around Iron Cove, few other green links are present in the area. The lack of northwest-southeast green links poses a challenge for terrestrial animals that might seek to migrate between Iron Cove and Rozelle Bay, and options for pedestrians who wish to traverse the area via a green corridor are limited.

The Iron Cove foreshore exists as a threshold space of vegetation, land, and water, serving to attract and support local wildlife. There is an absence of a wildlife corridor for fauna. As such the changes to Victoria Road serve as an opportunity to create a green link along Victoria Road.



Figure 5.21: Natural environment

Built form and landscape

The site is situated upon a northwest-southeast slope descending from the juncture of Victoria Road and Darling Street to the Iron Cove foreshore. Southwest of the site the terrain falls steeply into King George Park and Callan Park, while to the northeast the slope is more gradual until it meets the water.



Iron Cove Bridge viewed from all stretches of the foreshore walk.



View up Victoria Road.



View north east from Iron Cove Bridge.



Urban decay on Victoria Road.



Iron Cove Bridge.

The slope from Darling Street to Iron Cove provides views from the top of Victoria Road across Iron Cove. The amenity of these views are impeded by the high volume of traffic on the road and the poor quality of the public domain.

The built form consists of residential fabric which flanks Victoria Road on either side and some light industrial/commercial uses along the road. Due to these conditions, Victoria Road exists as a barrier between the Rozelle and Balmain neighbourhoods. Along Victoria Road, from Darling Street to the foreshore some of the buildings stand vacant and are deteriorating in their appearance, discouraging pedestrian activity.

Opportunities exist to improve visual connections across the site as well as views towards Iron Cove. Views in Figure 5.22 have been taken from preliminary site analysis. Detailed landscape and view analysis is contained in EIS Appendix O [Technical working paper: Landscape and visual impact].



Figure 5.22: Built form and landscape

History and heritage

Victoria Road has historically served as a major connector between Sydney, Balmain, and beyond. The expansion of Victoria Road in 1959 supported growing vehicular traffic to Sydney. This transformed Victoria Road from a high street supporting community activities to a regional road dividing the neighbourhoods of Rozelle and Balmain.



Kirkbride Callan Park.



Iron Cove Bridge, 1885.



King George Park and Iron Cove Bridge, 1910.



Plaque commemorating the H.M.S Birkenhead.



Urban decay on Victoria Road.

Since then, traffic has increased along Victoria Road, decreasing pedestrian amenity due to the vehicle-focused landscape. The surrounding area contains a conservation zone to the north of Victoria Road and heritage items and green space subject to State heritage listing, to the south. There may be opportunity to draw on the rich heritage of the area and interpret this within the public domain.

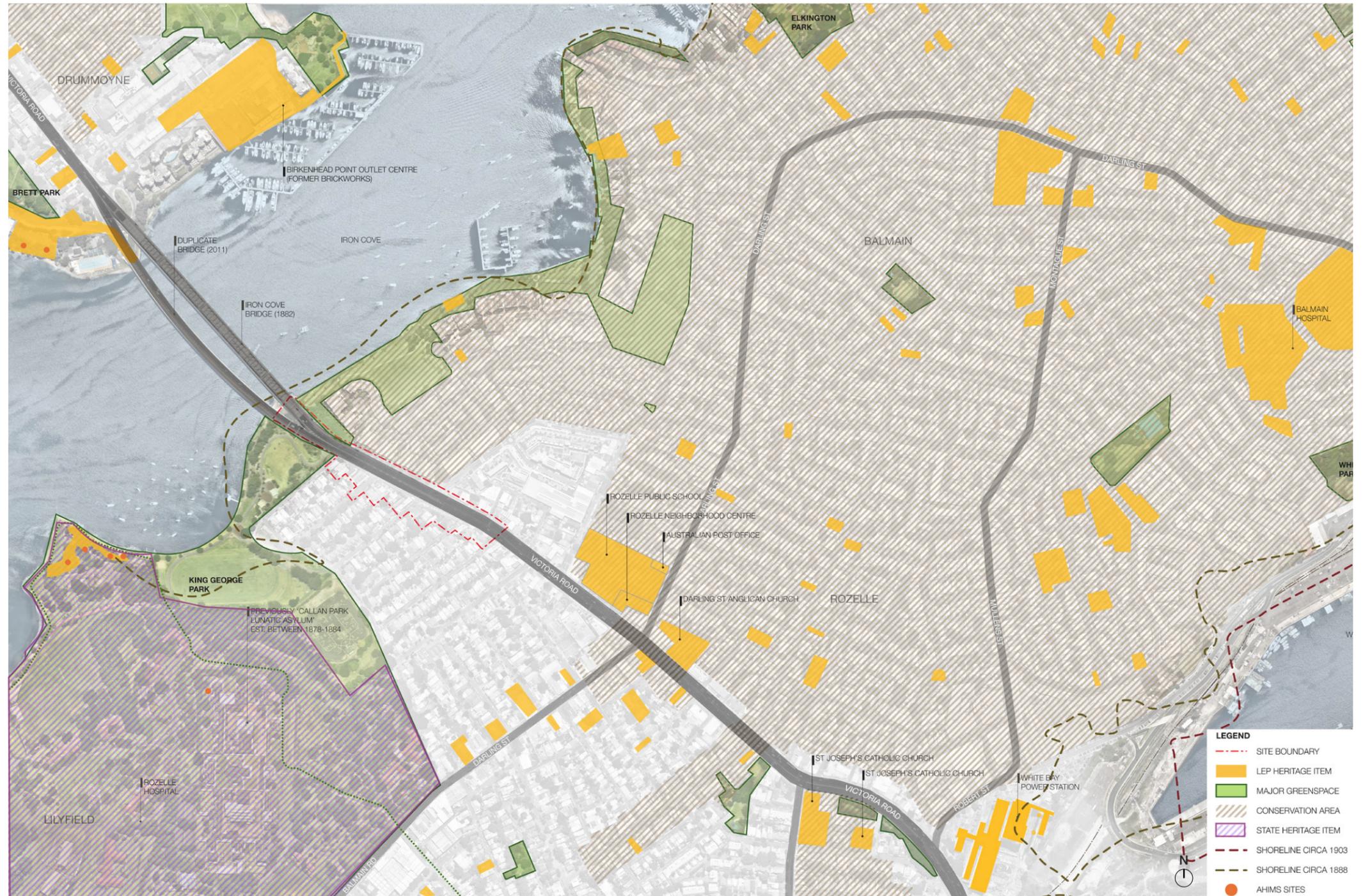


Figure 5.23: History and heritage

5.2.2 KEY FINDINGS

Access and movement

With only one signalled crossing of Victoria Road between Darling Street and Terry Street there is an opportunity to improve the quality of connectivity. While the foreshore supports active pedestrian and cycling activity, movement across and along Victoria Road is disrupted by poor connectivity and amenity.

Culture

The Iron Cove Link site stands as a potential location for enhancing existing cultural pursuits including walking, dog walking, running, cycling, drawing the energy of the Bay Run towards Darling Street.

Natural environment

The Iron Cove foreshore exists as a threshold space of trees, land and water, serving to attract and support local wildlife, while green links within the wider area are restricted to street tree cover and backyard vegetation. The changes to Victoria Road serve as an opportunity to create a green link along Victoria Road, connecting to King George Park and the Iron Cove foreshore.

Built form and landscape

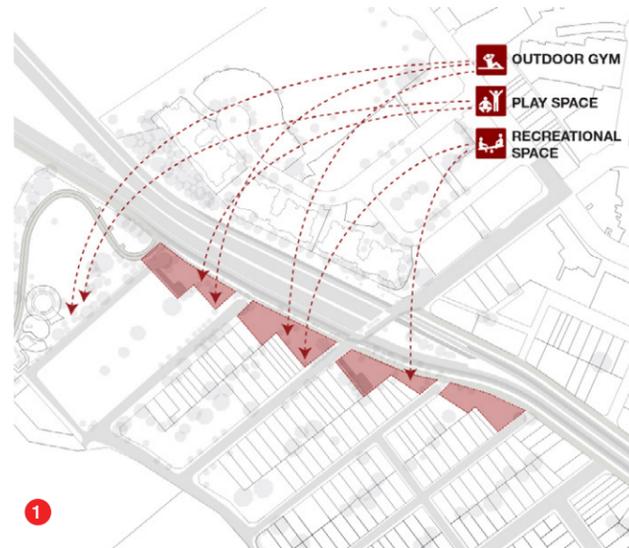
Traffic reductions and streetscape improvements along Victoria Road would provide the opportunity to enhance the built form and landscape. There are opportunities to provide new contiguous, functional areas of public realm along Victoria Road.

History and heritage

The surrounding area contains a heritage conservation zone to the north of Victoria Road, heritage items and green space subject to State and local heritage status. There may be opportunity to draw on the rich heritage of the area and interpret it within the public domain.

5.2.3 IRON COVE STRATEGIES

The contextual analysis has led to key strategies for the Iron Cove area. These strategies have been applied to a concept plan [Figure 5.24] for the site that demonstrates an option for the future form of this site.



Connect and provide for communities

Bring locals back to Victoria Road through activation of remaining project land and integrate community facilities such as bike hubs, play space and recreational space subject to community consultation.

The Iron Cove concept plan would integrate the exit and entry portals with a realigned Victoria Road. Remaining project land present the opportunity to create a series of new open spaces for the community, which connect with King George Park to the west and the local street network.



Enhance green links

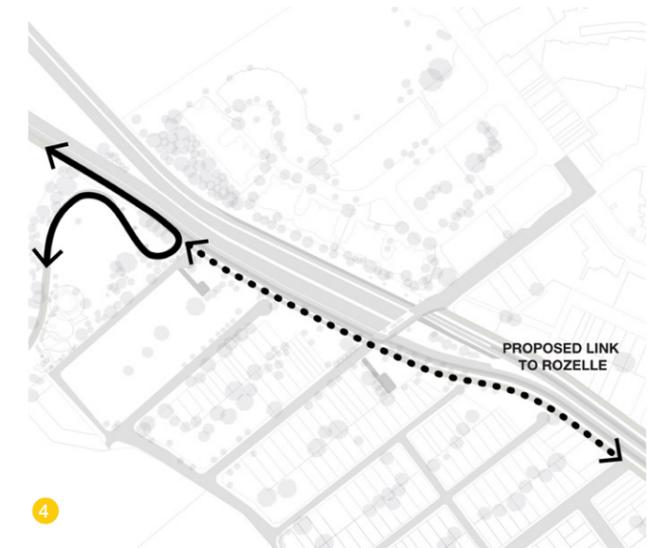
Connect green spaces and canopy along Victoria Road and the remaining project land with King George Park and Callan Park.

The concept plan seeks to identify opportunities and provides a template that could be used for the remainder of Victoria Road through to Roberts Street and transform Victoria Road to 'Victoria Street' [see section 6.2 for further details].



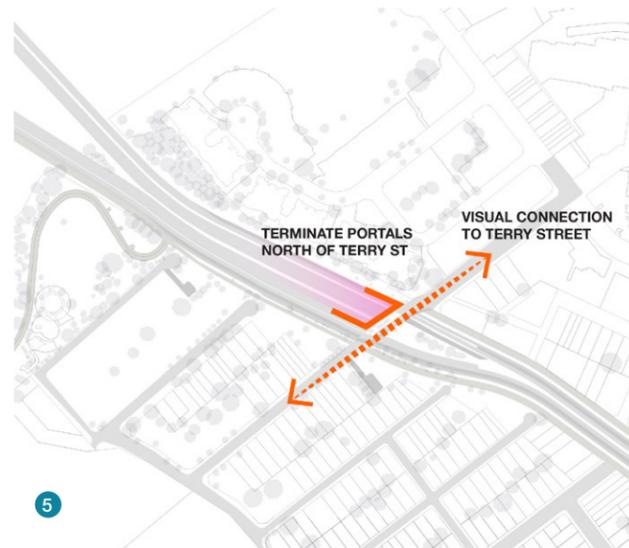
Integrate WSUD

Make use of the topography along Victoria Road and the remaining project land in the harvesting and polishing water run-off.



Integrate active transport links

Integrate Iron Cove Active Transport Network with the southern edge of Victoria Road to link to Rozelle and the wider network.



Integrate the motorway

Terminate the portals north of the Terry Street alignment to have visual connection across Victoria Road.



Respond to the local character

Scale any proposed built form to respect the existing fine grain character with materiality that is sympathetic to the quality of the local area.



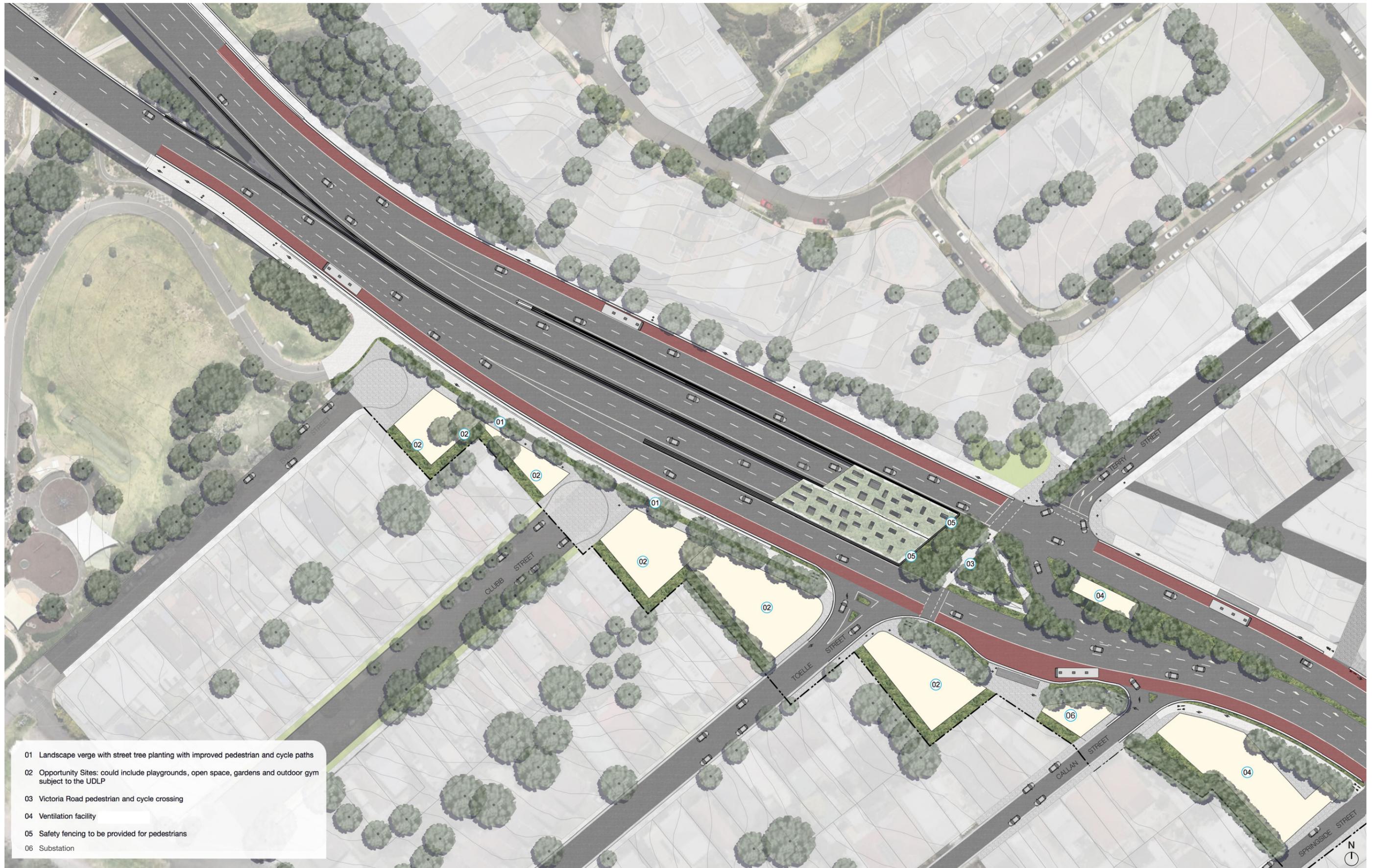
Revitalise streets for equality of mobility

Better connected streets for pedestrians and cyclists that intersect with Victoria Road.



Sensitive economic revitalisation

Investigate opportunities for sensitive growth along Victoria Road south of Terry Street that use remaining project land.



- 01 Landscape verge with street tree planting with improved pedestrian and cycle paths
- 02 Opportunity Sites: could include playgrounds, open space, gardens and outdoor gym subject to the UDLP
- 03 Victoria Road pedestrian and cycle crossing
- 04 Ventilation facility
- 05 Safety fencing to be provided for pedestrians
- 06 Substation

Figure 5.24: Iron Cove concept plan

5.2.4 BUILT FORM

The built form elements of motorway infrastructure at Iron Cove include the tunnel entry and exit portals. These portals would be designed as recessive components within the landscape. The intended composition is for a simple intervention within the road carriageway that is largely not visible from surrounding pedestrian areas. The material choice would reflect the recessive nature of the design. A repetitive shade structure is proposed above both the entry and exit portal lanes to assist in disguising the portals from surrounding pedestrian areas as well as enhance driver comfort in transitioning into and out of the tunnels. This structure would feature landscaping where possible.

A ventilation outlet would be located within the road carriageway. The structure would be around 20 metres above existing ground level and thus form a prominent marker in the landscape. The material composition of the structure would take cues from the surrounding built form and feature a defined base, middle and top. This would reflect the composition of surrounding structures that have a defined base or foundation level, a middle facade and a distinct composition for the top or roof.

The ventilation facility and electricity substation would be designed in a manner that allows them to become recessive elements within the landscape. These structures would feature defined facades to allow them to blend with the surrounding built form.



Figure 5.25: Iron Cove built form

5.2.5 STREETScape AND CONNECTIVITY

The widened Victoria Road carriageway has the ability to exacerbate the separation between the communities of Rozelle and Balmain. The design of the portals in this location would lessen this impact by providing improved pedestrian and cyclist accessibility between Toelle and Terry streets. The portals have been located to allow a direct link between these streets that would provide a crossing over the two northbound lanes to a pedestrian refuge above the portals before another signalised crossing over the two southbound lanes of Victoria Road.

A new pedestrian footpath and separated cycleway would be provided between Springside Street connecting to the Bay Run at Byrnes Street on the southern side of Victoria Road. Sufficient space would be provided for a two-way cycleway as well as a separate footpath that meets required standards.

The streetscape on the southern side of Victoria Road would feature street tree plantings and a vegetated verge that separates the vehicle movements of Victoria Road from the pedestrian and cycle paths. The majority of the westbound Victoria Road carriageway would be at a level below the pedestrian and cycle path, providing further improved amenity.

The area above the portals, including the pedestrian and cycle refuge area would be planted with street trees to provide canopy cover. This would act to improve amenity for pedestrians and cyclists and provide further separation of these movements with the right turn vehicle movements into Terry Street.

A bioretention facility would be constructed within to King George Park adjacent to Manning Street within land currently used for informal car parking. The facility would treat water run-off from adjacent areas. In addition to the facility, the project would also formalise car parking in this location.

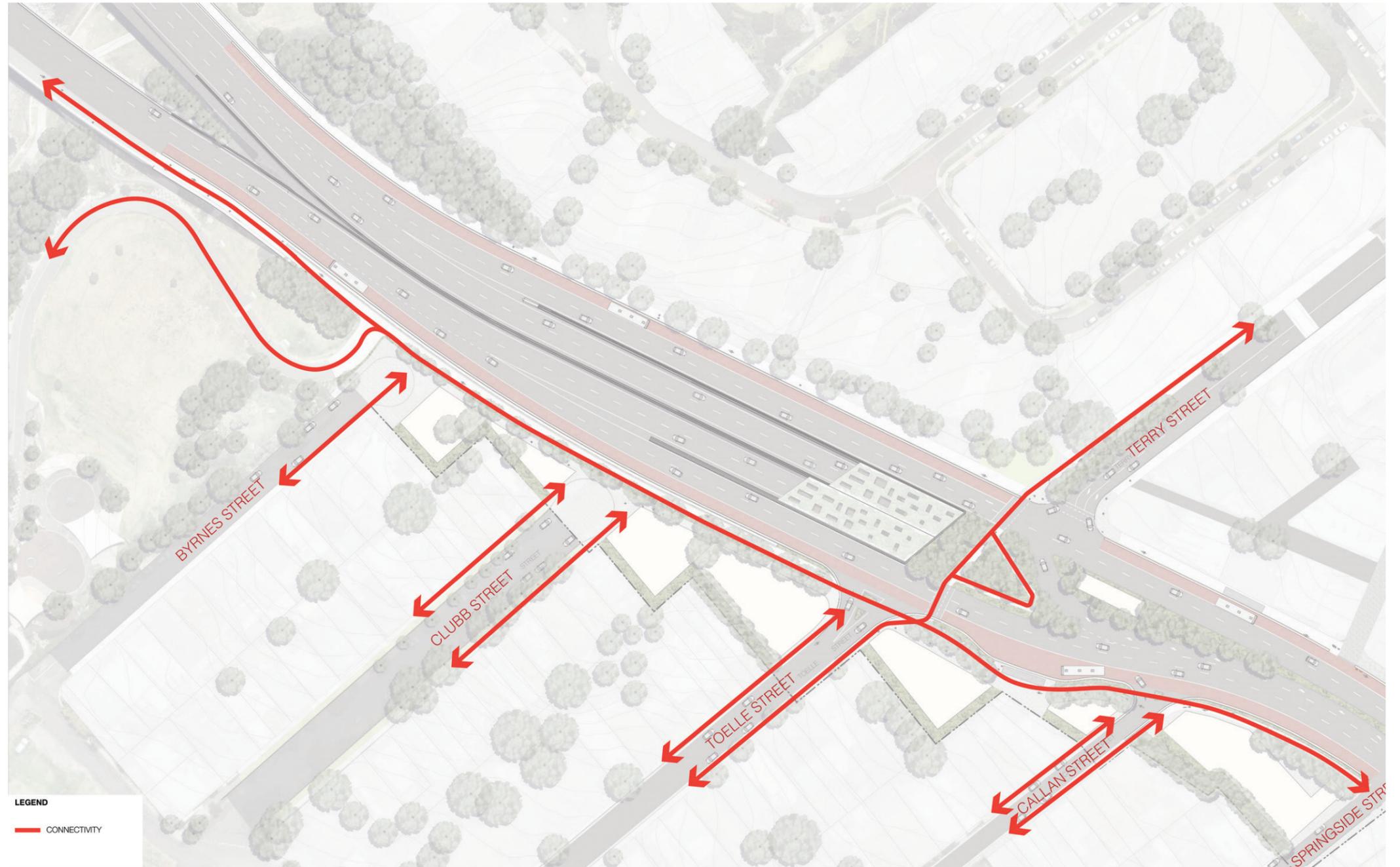


Figure 5.26: Iron Cove streetscape and connectivity

5.2.6 FUTURE USES

The remaining land parcels on the western side of Victoria Road that are not required after completion of the project would provide a buffer between the Victoria Road carriageway and the existing residential houses. There are a number of opportunities for the future use of these spaces that could include:

- Children's play spaces
- Active recreation to complement the Bay Run such as outdoor gyms
- Infill housing development
- Community gardens.

Community input would be central to the ultimate decision on use of their land at Iron Cove. Should uses such as children's play spaces or outdoor gyms be desired, these would be provided by the project. If community gardens or infill development were preferred future uses, this would potentially be delivered by others.

All future uses could be designed in a manner to ensure that the existing amenity of the adjacent residences would be preserved. For example, any infill development would act as a buffer to noise and be designed appropriately for noise insulation of occupants. Play spaces or open spaces could include features such as landscaped mounds or walls for growing of plants that would serve both an open space purpose as well as a noise mitigation measure should it be required. These future uses will be detailed in the UDLP, as outlined in section 7.

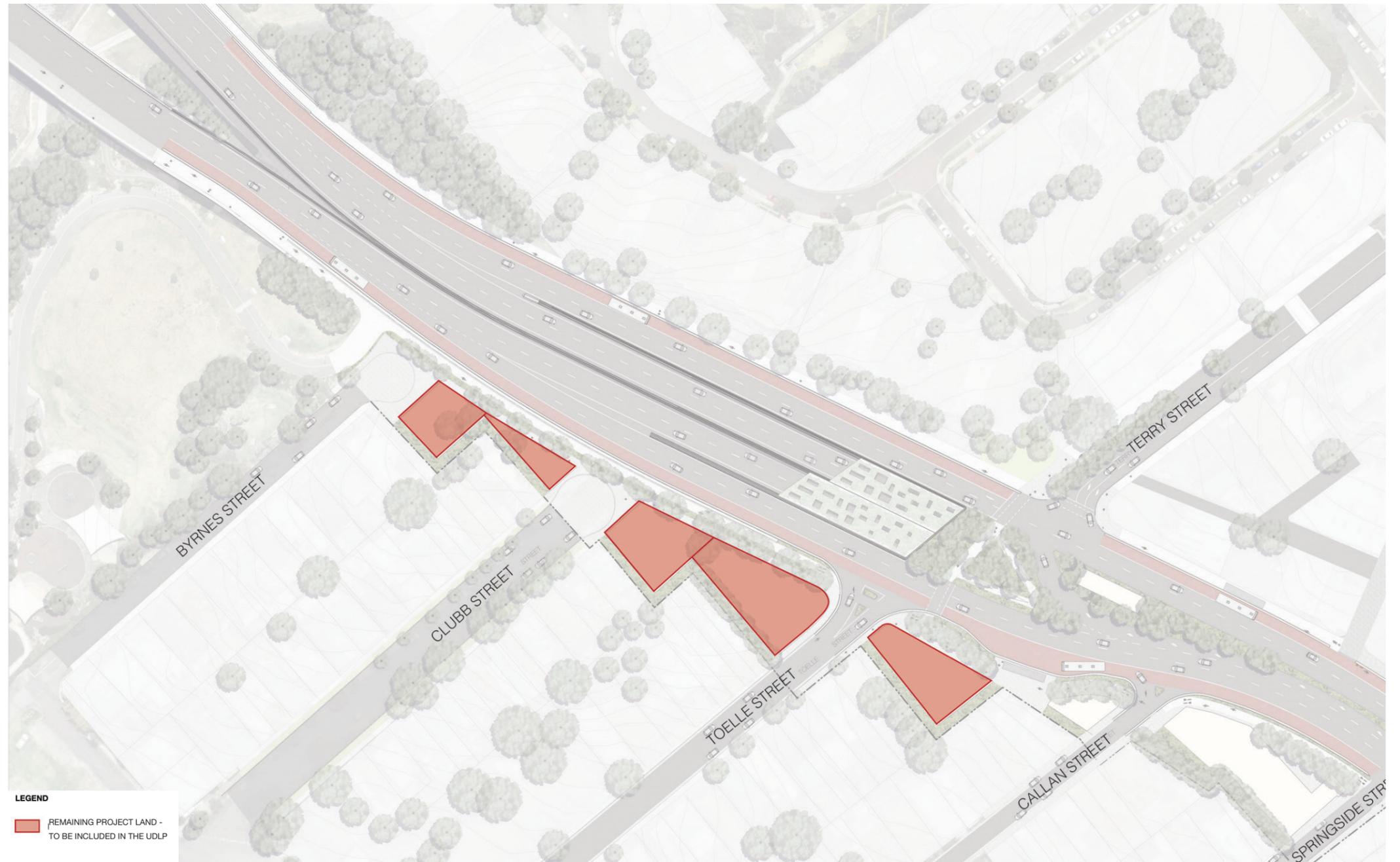


Figure 5.27: Iron Cove future uses

5.3 PROJECT INTERFACES

5.3.1 WATTLE STREET INTERCHANGE

The M4-M5 Link includes an underground connection between the mainline tunnels and the Wattle Street interchange, which is being constructed as part of the M4 East project. At Haberfield, the M4-M5 Link would use land during construction that is currently being used as construction compounds and sites for the M4 East. Once construction of both projects is completed, residual land not required for operational infrastructure or subject to landscaping as part of the M4 East project would be rehabilitated and would be subject to applicable conditions of approval from the M4 East conditions of approval, including a Residual Land Management Plan. This plan is currently being prepared by the M4 East team and would be subject to the consultation requirements and timeframes set out in the conditions of approval for the M4 East project.

A draft UDLP has been prepared as part of the M4 East project that details the landscape design approach at the Wattle Street interchange.

The M4-M5 Link project would not impact on the implementation of these plans, but may impact the timing in which in the plans are carried out.

Figure 5.28 demonstrates the current landscape concept for Haberfield.



Figure 5.28: Haberfield concept plan [draft]

5.3.2 ST PETERS INTERCHANGE

M4-M5 Link works

The M4-M5 Link project would include construction of the Campbell Road motorway operations complex [MOC5] and ventilation facilities within the St Peters interchange, which would be in accordance with urban design principles in this report and subject to detailed design as part of the UDLP for the M4-M5 Link. The facilities would be located above the portals in the north west corner of the site. The ventilation facility has been designed to minimise land-take from the St Peters interchange open space areas.

The ventilation outlets would be around 22 metres above existing ground level and the facility would also include structures to house worker amenities, parking and an electricity substation.

Integration of M4-M5 Link and New M5

The M4-M5 Link ventilation facilities at St Peters have been located to fit within the broader concept for the St Peters interchange being delivered as part of the New M5 project. The New M5 received planning approval in April 2015 that contained a number of conditions of approval relating to the ultimate design of the St Peters interchange. In addition to the open space concept contained in the New M5 EIS, the conditions of consent require the following urban design enhancements:

- Construction of a land bridge to connect Sydney Park to the St Peters interchange open space. Development of an active recreation strategy for land within the St Peters interchange adjacent to Campbell Road
- A review of the pedestrian and cycle network to highlight any additions required to the network within one kilometre of the interchange
- The responsibility for delivering these conditions falls to a number of different parties [see Figure 5.30].

New M5 UDLP

A draft UDLP has been prepared as part of the New M5 project that details the finishes to all local road upgrades as well as the St Peters interchange.

The UDLP includes details of the cycle and pedestrian paths, street tree planting and landscaping along local roads. The work described in the UDLP will be constructed as part of the New M5. The M4-M5 Link project would not impact on the implementation of these plans, but may impact the timing in which in the plans are carried out.

Land bridge

Roads and Maritime, as the proponent for the New M5 project, has responsibility for the design of a land bridge connecting Sydney Park to the St Peters interchange. Delivery of the land bridge would occur upon completion of the M4-M5 Link.

Active recreation strategy

Roads and Maritime have developed an active recreation strategy for the new open space area at the St Peters interchange. The new open space would include:

- A full size multi-purpose field [football, AFL, Rugby]
- Four multi-purpose courts [netball, basketball, hockey].
- Change rooms
- Space for more passive recreation such as outdoor chess
- Walking circuit
- 54 new parking spaces off Albert Street to service the recreation area.

Delivery of the active recreation strategy is currently being determined.

Pedestrian and cycle network

Roads and Maritime identified upgrades to the pedestrian and cycle network in the St Peters area including:

- A new connection from the St Peters interchange to Sydenham
- Improvements to the King Street Gateway pedestrian and cycleway
- A new Cooks River link
- A new connection to the future Alexandria to Moore Park road corridor.

These are shown in Figure 5.29 and Figure 3.30.



Legend

- 1 St Peters Interchange and local road upgrades - (New M5)
- 2 St Peters recreation area (Roads and Maritime)
- 3 King Street Gateway concept (Roads and Maritime)
- 4 M4 - M5 Link ventilation facility (M4 -M5 Link)
- 5 New M5 ventilation (New M5)
- 6 Land bridge (Roads and Maritime)
- 7 City Farm (City of Sydney)
- 8 Camdenville Park BMX Track (New M5)

Figure 5.29: St Peters master plan staging [Draft New M5 UDLP, 2017]



Figure 5.30: St Peters master plan [Draft New M5 UDLP, 2017]