



Wickham Public Domain Plan

Date: December 2023

Final Report



City of
Newcastle

Client Information and Credits

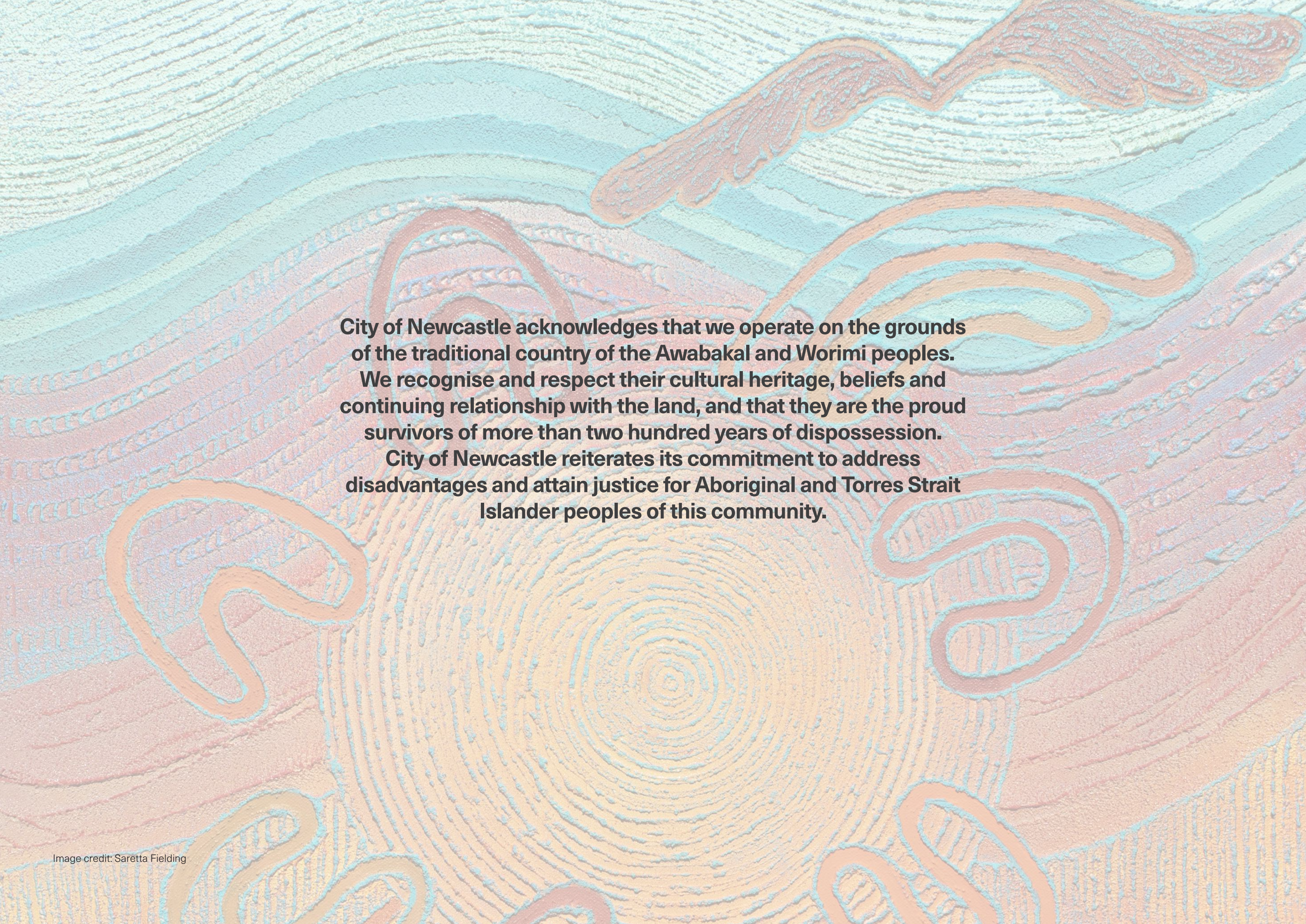
This Public Domain Plan Report forms part of the deliverables for the Wickham Public Domain Plan. Please refer to the supporting technical reports and engineering reports for further details. This document was prepared by Mott MacDonald, ASPECT Studios, and Bangawarra for Newcastle City Council.

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APPROVED BY	TD



ASPECT Studios

bangawarra



City of Newcastle acknowledges that we operate on the grounds of the traditional country of the Awabakal and Worimi peoples. We recognise and respect their cultural heritage, beliefs and continuing relationship with the land, and that they are the proud survivors of more than two hundred years of dispossession. City of Newcastle reiterates its commitment to address disadvantages and attain justice for Aboriginal and Torres Strait Islander peoples of this community.

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Section 1.0

Introduction

Section 1 – Introduction

1.1 Project Purpose

1.1.1 Introduction

Wickham is changing. Once a semi-industrial area, Wickham is now transforming into a new, mixed-use urban neighbourhood. Building on a master plan produced in 2017, this concept public domain plan sets the groundwork for the delivery of a precinct that is connected, resilient, regenerative, smart and responsive to the needs of the existing and future community.

1.1.2 Project background

Wickham faces both challenges and opportunities. Wickham's opportunities include its location and a number of existing assets. Wickham is adjacent Wickham Transport Interchange and close to Newcastle CBD and the new Honeysuckle development. It stands to benefit from the strategic shift of Newcastle's commercial core from the East End to the west. It boasts an eclectic urban character and the neighbourhood amenities of the waterfront and Wickham Park. Wickham's challenges include Hannell Street (which interrupts active transport connections between Wickham and the water front), exposure to flood events and subsidence, a high car mode share and parking demand, and limited active transport access to the CBD.

Wickham's 2017 Master Plan, prepared in response to the Newcastle Urban Renewal Strategy (first published in 2012, updated in 2014), laid out a vision for the neighbourhood that addresses its challenges and builds upon its opportunities.

This vision for Wickham saw the neighbourhood capitalising on its proximity to the water, the park, and the CBD while prioritising pedestrian safety and active transport, developing a linear 'Village Green' on Union Street, supporting 'smart city' initiatives, and encouraging development that was appropriate for different uses and scale and co-ordinated to best deliver a public domain for the community.

Following stakeholder engagement, the master plan was updated and adopted in 2021. The updated plan identified the opportunities of redevelopment potential and placed renewed focus on greater connectivity, improved public domain amenity, and a built form that reflected a dense and dynamic mix of uses.

1.1.3 Project purpose

Following its monitoring of the implementation of the Wickham Master Plan, the City of Newcastle identified the need to prepare a public domain plan (PDP) that would provide support and guidance to public and private sector organisations involved in designing and implementing public spaces in Wickham, to best realise the vision of the plan.

The stated purposes of the Public Domain Plan are to:

- enable effective integration with private developments to both influence better design outcomes for the streetscape and save money in the long-term;
- outline the value of the public realm and optimise built environment outcomes for the community;
- make Wickham a better and more attractive place in which to live, visit and do business;
- create an improved perception of Newcastle to visitors;
- demonstrate how design principles can be applied to streets and spaces, and;
- better prepare the area for development and changes in the future.

This document, the Public Domain Plan Report, is the fourth in a sequence of deliverables and summarises the overall Wickham Public Domain Plan. It summarises key background documents, collates and synthesises urban analysis, establishes the 'Place Themes' that have been developed across the Country, Place and Landscape team, and distills those findings into a set of Design Strategies. These then inform the frameworks and design elements that have been developed to guide the future design and delivery of the Wickham Public Domain.

1.1.4 Plan delivery

The Wickham Precinct Public Domain Plan (PDP) provides support and guidance to public and private sector organisations involved in designing and implementing public spaces in Wickham. It aims to create better connectivity and experiences of public space within Wickham and surrounding areas.

It is a strategic document that clarifies important requirements for public space and street design to all professionals engaged in the facilitation, design, approvals, and implementation of the public realm.

The PDP has been designed to be a companion document to the City Centre Public Domain Technical Manual which sets out the mandatory technical and documentation requirements for all civil, landscape and infrastructure works occurring in the public realm which will occur throughout future concept and detailed designs.

The PDP is not a final design package, instead it provides a set of achievable aims and objectives to guide future private developer works and identify potential council delivered projects.

Work on the Wickham Precinct will occur in a staged manner as development applications are received in accordance with the zoning within the approved Wickham Masterplan and as council identified infrastructure works are delivered.

This PDP will be followed by concept and detailed designs for each area of staged works. They will be exhibited as a part of statutory planning processes allowing for review and comment by the community.

The aim of the PDP is to provide a framework to achieve the vision of the Wickham Masterplan and allow for the development of future delivery stages.



City of Newcastle Strategic Plans and Policies'

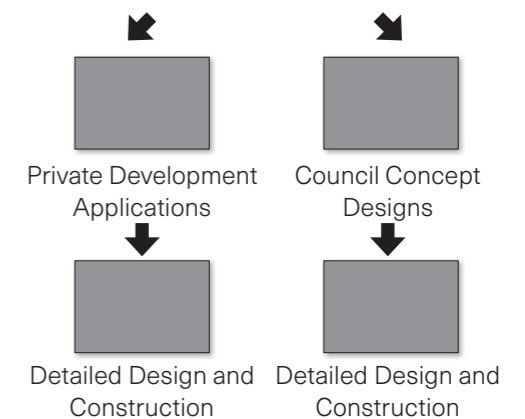
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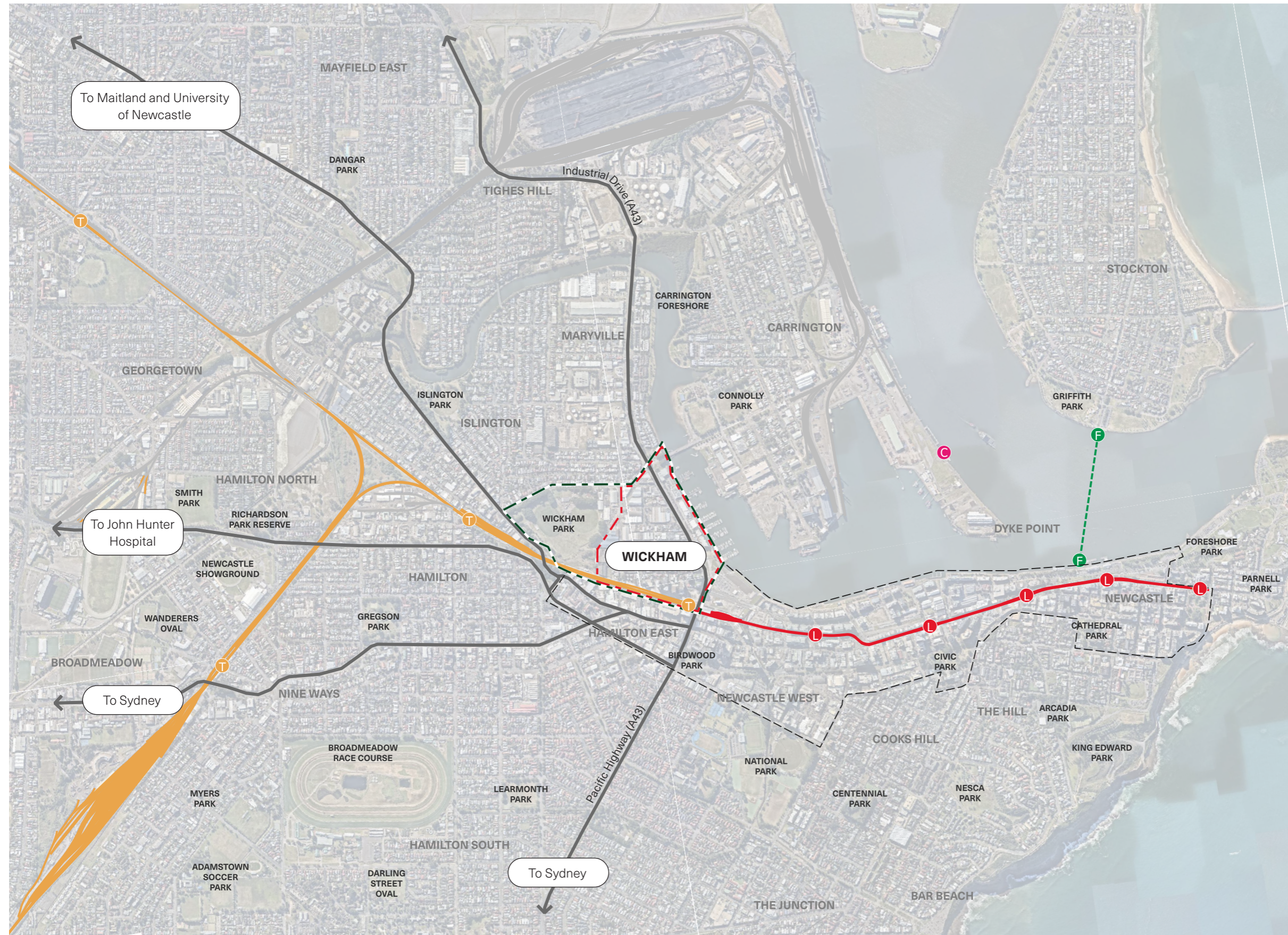
Wickham Masterplan and Local Area Traffic Management Study



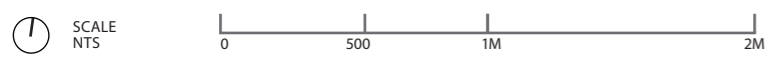
Wickham Public Domain Plan (This document)



1.2 Project location



- KEY**
- Boundaries**
- PDP Focus area
 - Wickham Masterplan area
 - Newcastle City Centre area
- Transport**
- T— Heavy rail stop and alignment
 - L— Light rail stop and alignment
 - Industrial rail alignment
 - F● Ferry wharf
 - C● Channel Berth cruise terminal



Section 1 – Introduction

1.3 Project approach

1.3.1 Country-led

In line with the City of Newcastle and the community's commitment to recognising and building on the rich traditions of the Indigenous Custodians of the land on which the community lives and works, the project has considered Country as a foundational element in the project approach. The Wickham Public Domain Plan aims to recognise key perspectives of Country and use this as a foundation upon which we base subsequent understandings of place.

1.3.2 Integrated

A coordinated engineering, landscape and urban design approach is essential to fulfilling the project purpose. To achieve the outcomes required for this project, no discipline can act in isolation. The integrated design approach has included all disciplines in decision making and key design moves.

This has been critical to the successful delivery of this precinct with integration of not only the internal disciplines but across the relevant City of Newcastle Council departments, Transport for NSW, and the community.

1.3.3 Informed

The Wickham Public Domain Plan has built upon and integrated with the strategic vision and objectives identified in the work that has already been undertaken by the City of Newcastle. The large amount of consultation and planning that has already been done in Wickham and surrounding areas has provided a wealth of community and stakeholder intelligence from the Master Plan.

Previous documents have been reviewed along with broader research, site visits, discussion with City of Newcastle working groups and stakeholder consultation.

1.3.4 Place-based

'Placemaking' is a term used to describe the process of creating meaningful and layered places. As designers of the public realm, our training and design process is focused on bringing together and expressing the essential qualities of place, the landscape, its history, social rituals, and cultural significance into the design of place.

Placemaking is about designing cities that cater to people. It aims to promote human interaction and connection to the street and allow people to participate in their public domain. Our approach creates lively neighbourhoods and inviting public spaces that attract people because they are comfortable, pleasurable, culturally appropriate, and interesting.

1.3.5 Responsive

A responsive approach to the qualities of place that support the renewal of Wickham would:

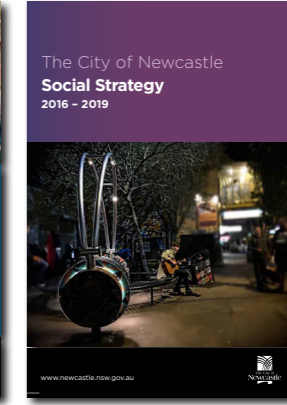
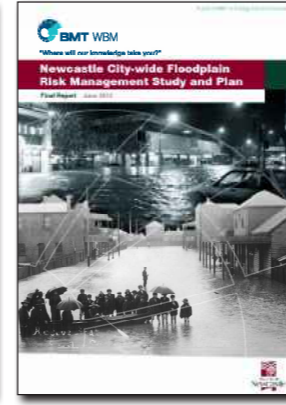
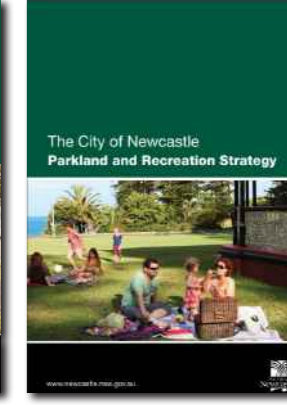
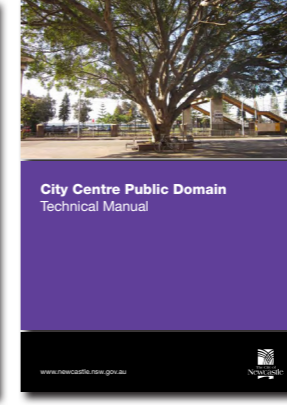
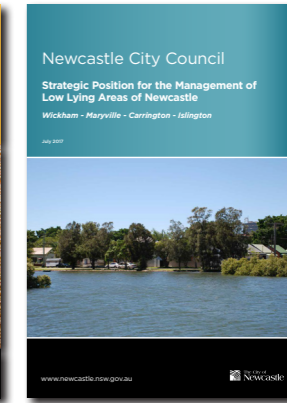
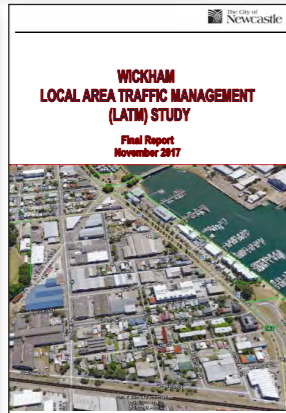
- Address place specific challenges and opportunities.
- Enable transitional change which builds on existing urban structures.
- Improve the perception of place without loss of existing identity.
- Prioritise the retention of aspects of place that people treasure.
- Provide a unique and authentic experience which is distinctively Wickham.
- Provide for the expression of the multiple layers and systems that have shaped the public domain whilst creating more liveable cities.

Section 1 – Introduction

1.4 Background documents

1.4.1 Documents specific to the Wickham context

1.4.2 Documents specific to the broader context of Newcastle



Other relevant documents reviewed include:

- *Newcastle Employment Lands Strategy* - SGS Economics and Planning for City of Newcastle, 2019
- *Local Housing Strategy 2020 [updated 2021]* - City of Newcastle, 2021
- *Hunter Regional Plan 2036* - NSW Department of Planning, 2022
- *Newcastle After Dark (2018-2022)* - City of Newcastle, 2018

1.5 Key Place Themes



1.5.3 Water

Wickham lies on Bitterwater Country, where salty water slowly mixes with fresh. For millennia, this process sustained wetlands and mudflats, populated by mangrove, salt rush, lomandra, paperbark, casuarina and countless others.

Within these close-knit ecologies, Aboriginal people have long been able to thrive. The interstitial zones along river banks and on land above historic flooding limits have provided safe places to connect, share stories, and enact ceremony. The presence of water itself has always taught a lesson on the interconnectedness of all things.

Following colonisation, this presence of water came to mean something else. Newcastle's link with the sea made it a viable satellite of Sydney in the early days of the colony and those who had long lived and cared for its Country were among the first to come into contact with the coloniser. By the middle of the nineteenth century, a steady line of ships plied the river, conveying people, news, coal, and cargo upriver, down the coast, or overseas.

Today, the riverbed has been dredged, the river edge has been made hard by walls and levees, and footpaths and roads have made the ground impermeable. These changes have interrupted the flow of the tides and the mixing of water, and if improperly managed, amplify rather than diminish the risk of flooding. These changes force us to ask: how will we (re)learn the lessons of the water of this Country? How will we acknowledge the interconnectedness of all things?



1.5.4 Movement

The Country on which Wickham lies has long been criss-crossed by the movement of both human and non-human beings. These movements have been shaped by the changing of seasons and the patterns of migration, closely related to the turning of the stars and the passage of the sun and moon.

Many of the paths and tracks of this historic movement would be appropriated following colonisation. But even when a track was eventually established, the fastest way to Sydney was still by water. In 1854, work began on the Great Northern Railway, linking Newcastle to Hexham, though it would be decades before the line was connected with Sydney. During the twentieth century, on the Carrington shore, hundreds of ships came off the slips and entered service.

At the centre of this entanglement of travel lines always lay Wickham. The removal of the mainline tracks parallel to Hunter Street, which had long separated Honeysuckle and the harbour from the rest of Newcastle, has shifted this web of lines again.

Now, Wickham is home to Newcastle Interchange, a front door to the city, where travellers change trains and travel speed. But to recognise the Country on which all of this movement occurs is to recognise the flows and traces that have defined it in the past – and will continue to define it in the future.



1.5.5 Connectivity

The Country surrounding Wickham has always been a site of connections: long before the industrial centre was established there, the first peoples of the region made use of its hard stone and abundant coal, trading with other communities far away. People would have connected with Country itself, through storytelling and gathering, and through the knowledge of Country as a means of providing food and medicine.

The colonial city weighed heavily on Country. The city's extraction, manufacture, and transportation of minerals, its shipbuilding and its agriculture, all contaminated the region's earth, air, and water. This was not a connection to Country but connection in spite of Country.

Yet the complicated history of this extraction also deeply informs its sense of place. For a time, Newcastle was the most productive and important node in Australia's industrial net, a status its inhabitants could boast of. It remains the busiest coal port by volume in the world, even as the world turns slowly from fossil fuel consumption altogether. The sheer volume of the city's output demanded thousands of people, gathered and bound together by industries.

The threads of these connections run throughout Wickham. From the former Bullock Island railway, to the sailor's mission, to the Tree of Knowledge, the connections of the people of Wickham have never been confined to the suburb but stretched far away - to the wider city and world beyond.



1.5.1 Gathering

As in countless other places across Country, people have long gathered around fire. The heart of any gathering, fire has been and will continue to be the centre around which food, ceremony and story can be shared. The *Corroboree at Newcastle* painting by Joseph Lycett c.1818 depicts a large communal gathering of Aboriginal people around many fires. The Corroboree site was within the project area.

Colonisation brought its own kind of fire – the fire of industry – which took the region's abundant resource of coal and began to mine and burn it in a destructive way. Yet, these fires also forged close bonds between the people who came to live and work in the area. These bonds only tightened in the face the economic crisis at the end of the war, the closure of the steel plant, and the dangers of working in the foundries, collieries, and shipyards themselves.

Wickham's popularity as a residential suburb declined following the adoption of private transport and the associated viability of outer city suburbs, along with the wider economic decline of the city. But the area's renewal, now in full swing, stands to reestablish and celebrate places to gather and dwell. In doing so, it will build upon a strong history of community resilience and grit, which persevered both when the city was capital of the world of coal and will continue long after it ceases to be.

Wickham's strong history of community demands the careful protection of its longstanding gathering places, from the pub, to the street, to the backyard. But it also demands the sensitive planning and provision of new places to gather - for Wickham's campfires of the deep future.



1.5.2 Layered stories

All of Wickham's elements, from its water, to its travel networks, to its histories of gathering and making, together represent a multi-layered history. The depth of this history was present before colonisation, informed by memories stretching back through deep-time. To protect and sustain these layered memories, local Aboriginal peoples have always used mnemonic indicators to share and protect their knowledges of geology, hydrology, topography, astronomy and ecology.

But this layering was fundamentally changed by colonisation, a fact to which the earth itself bears witness. While traces of First Nations peoples' manufacture can be found in the fire-reddened sand and the chips of stone axes near hard stone outcrops, rocks from around the world dumped as excess ballast during the nineteenth century can be found in the riverbed. And elevated levels of certain heavy metals – the legacy of the area's industrial use – can still be detected in the sediment of Throsby's Creek.

Today, to celebrate the multi-layered histories and future of Wickham, we must recognise where some traces have been over-written, let Country itself be able to be read, and elevate multiple viewpoints, rather than any one single narrative.

1.6 Consultation: What we Heard

Community engagement on the approaches developed for the Public Domain Plan took place between from 22 February to 22 March via an online survey and online feedback form to allow for written submissions. During the consultation period, there were two drop-in sessions to inform the community about the PDP and encourage feedback via the Have Your Say page.

The overarching design elements of the PDP, and changes to vehicle movement, the pedestrian network and cycleway network, were generally well supported. Positive and constructive feedback was also received on the creation of recreation/open spaces and planting of trees/greenery, including direction of use and how best these spaces could serve the needs of the community. The feedback reinforced the value such new spaces and expanded planting would have for the community.

Below is a summary of the key themes of comments where community offered perspectives on the PDP as presented through the engagement process - and how the PDP has responded to the feedback received:

Proposed traffic changes:

- Comments received requested reconsideration of changes and increased safety and information via signage, speed limits and prioritisation of local traffic

PDP response:

- *Traffic movements, new signs and speed limits, and a range of engineering measures that help prioritise local traffic have all been considered to create holistic improvements across Wickham*

Proposed pedestrian changes:

- Comments were received on accessibility, uniformity and level of detail on footpaths along with improvements in lighting to ensure good pedestrian experience for all users

PDP response:

- *Accessibility consultants have been involved in the PDP and advised on the proposed footpath widths across the suburb. All widths meet their recommendations, except where existing conditions constrained their size.*
- *Details of pedestrian elements and lighting will be developed as part of subsequent works in line with the framework established in the PDP*

Proposed cycleway changes:

- Comments were received on prioritising separation of cyclists where possible, consideration of loss of on street vehicle parking, access to cycle parking and more detailed planning of on street cycling including contra flow

PDP response:

- *Dedicated cycling facilities have been planned to best capture desire paths through and to/from Wickham and dedicated paths have been proposed for major routes.*
- *Traffic calming methods and other traffic changes have been adopted specifically to improve the safety of cyclists*

Stories, landmarks, art, entry points and welcome nodes:

- Comments received clarified key entry/departure locations, the most appropriate elements to include at these locations, and what other histories and objects unique to Wickham that should be celebrated.

PDP response:

- *The PDP has adopted the suggestions of the community in the approach and design of welcome nodes, heritage interpretation and other forms of celebrating Wickham's stories in its public realm*

Urban activation areas:

- A range of suggestions for public uses in the urban activation areas were received.

PDP response:

- *The PDP have proposed concepts for the urban activation zones reflecting the input received and providing a broad range of provisions.*

Lighting

- Comments received in regards to lighting focused on safety, lighting colour and location to improve pedestrian experience and the impact of light spill from the Newcastle Interchange

PDP response:

- *The PDP provides direction for future detailed lighting designs to follow.*

Connectivity:

- Comments noted that Newcastle Interchange needs better connections with bus, train, and ferry terminal nearby and the role of Throsby Street as an emerging area with activation potential should be considered

PDP response:

- *Connections and inter modal movements to and from Newcastle Interchange and multi-modal movements to and from Throsby Street have been considered in the PDP*

Trees and plantings:

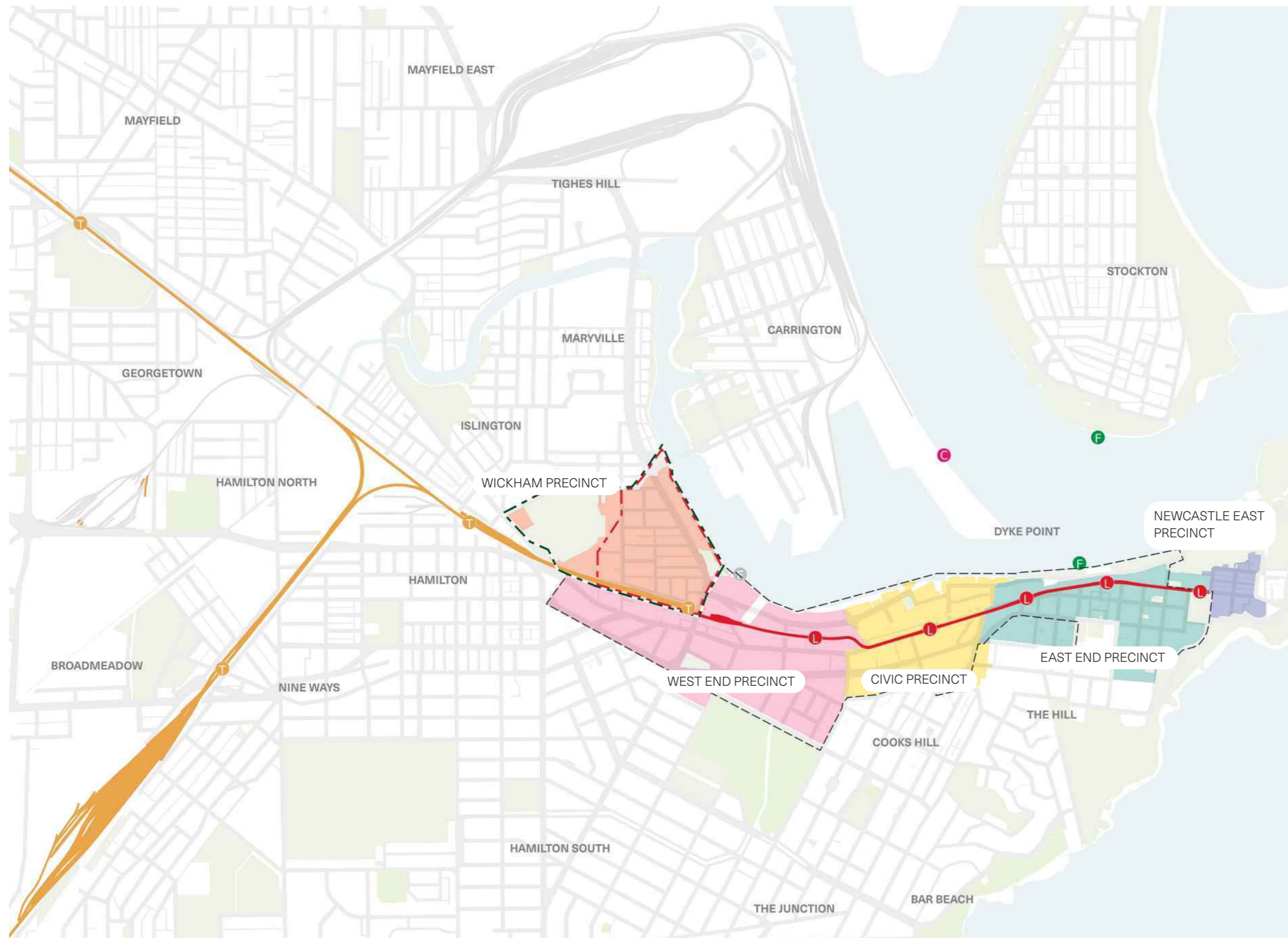
- Comments received noted opportunities to shift garden zones into road corridors to assist in traffic calming and commented on tree selections and placement relative to existing constraints, maintenance impacts of deciduous trees and impacts on sight lines

PDP response:

- *Opportunities to locate new planting between parking bays has been integrated into the design.*
- *The PDP provides guidance for the selection of endemic planting species with a range of tree sizes to allow appropriate selection, with detailed design when consideration of site conditions is undertaken.*

Please refer to the Community Engagement Report prepared by City of Newcastle for further information on comments received in the consultation process.

1.7 Neighbourhood precincts



KEY

Boundaries

- PDP Focus area
- Wickham Masterplan area
- Newcastle City Centre area

Transport

- Heavy rail stop and alignment
- Light rail stop and alignment
- Industrial rail alignment
- Ferry wharf
- Potential future ferry wharf
- Channel Berth cruise terminal

Land cover

- Green space / open space
- Surface and tidal water

1.8 Analysis summaries

Analysis work was undertaken in the initiation phase of the Wickham PDP which captured information from the master plan phase and other relevant documents and data. The analysis was reviewed at both a broader urban scale and at the precinct level and from this work and site visits opportunities and constraints were identified. Below is a high level summary of this analysis work. Further details on the analysis undertaken is included as an appendix to this report.

URBAN ANALYSIS SUMMARY

1.8.1 Precinct context

The Wickham Precinct is strategically located and forms the western end of the Newcastle City Centre area. It lies to the west of Newcastle's West End Precinct and Civic Precinct. Wickham Park forms the western edge of the precinct and to the east the waterfront of Throsby Creek.

1.8.2 Elevation, ecology, and water

Wickham, along with much of the wider waterfront, is very low-lying, with most of its streets only a few metres above sea level. As the historic shorelines of Wickham illustrated in this PDP show, the landscape of Wickham has also been heavily modified over time. All of this makes Wickham subject to flooding and dictates a number of key constraints on its urban form. It also means that it is critical that Wickham's public domain is designed with and for water, to make it as resilient as possible.

Throsby Creek, despite being an important shipping basin, is also an important ecological habitat, qualifying as a Ramsar wetland.

1.8.3 Transport

Wickham is well connected by the light rail, ample bus connections, and the waterfront of Throsby Creek and the Hunter River. It is also home to Newcastle Interchange, Newcastle's "front door", where heavy rail terminates.

Wickham is bounded by a series of arterial roads, including Hannell Street to the north-east and the rails lines to the south. Hannell Street in particular is a major barrier between Wickham and the waterfront.

A modest network on on-road cycleways connect Wickham's periphery to the wider city, especially along Hannell Street and Hunter Street. Upcoming cycleway improvements will further tie Wickham to the rest of the city more safely than ever before.

Former rail infrastructure is also a key spatial element of Wickham, with the Bullock Island Rail Corridor a key feature.

1.8.4 Urban heat

Despite its proximity to the water, Wickham is very vulnerable to the urban heat island effect (UHIE) - the major exception being Wickham Park. It is one of the hottest areas in the broader Newcastle area as a result of the larger extents of hard surfaces on streets and parking lots and limited canopy cover. Addressing this challenge will mean increasing canopy cover and increasing the albedo of the suburb.

PRECINCT ANALYSIS SUMMARY

1.8.5 Streets and open space

Streets are currently generally dominated by cars. There are a number of factors which result in pedestrian and cycling conditions being less than ideal, including a lack of footpaths in some places and other barriers to movement and lack of tree canopy and poor / inactive building frontages. The scale of the road corridors varies significantly and impacts on the actions that can be undertaken to address the issues identified.

Exceptions to these conditions do exist such as Union Street where the finer grain of the built form, characterful features and more extensive and established trees provide a far more pleasant experience for all users.

While Wickham Park is an extensive open green space, there is limited open space within the suburb itself, and few small-scale, green and open public spaces for everyday rest, relaxation, and socialisation.

1.8.6 Tree canopy

Existing levels of tree canopy cover to road corridors is extremely low. Within the local Wickham streets the level of cover is only 10%. The waterfront area and Wickham Park are critical in providing some greater canopy cover.

1.8.7 Parking

The local streets of Wickham have extensive areas of on street parking with the majority unrestricted. Greater levels of parking restrictions exist generally to the south-east in closer proximity to Wickham Interchange and there are also high levels of utilisation within this geographic area.

1.8.8 Non-Aboriginal Heritage

Wickham can boast a rich heritage, being the location of important historic railways, including the Bullock Island Railway, and many historic institutions such as sailor's missions and art schools. These all contribute to the distinctive character of Wickham.

1.8.9 Built form and land use

Wickham's built form is varied and reflects the waves of occupation and land use that have occurred in the area. The built form is in transition as a result of the changes in zoning that have occurred as a result of the City of Newcastle master plan. As part of its analysis, this document has carefully considered Wickham's existing patterns of land ownership and areas of potential change, and considered proposed amendments to controls for built form.

1.8.10 Activity nodes

Wickham is home to a number of distinctive art elements, particularly in the form of murals and some smaller sculptural elements. The waterfront area is a key activity zone with the fish markets, the yacht club, the marina, the waterfront walk along Throsby's Creek and food and beverage offerings. Wickham Park is the other major attractor and this and the waterfront are supported by a range of other food and beverage offerings distributed along Railway Street, the rail corridor, Throsby Street and near the Wickham Interchange.

OPPORTUNITIES AND CONSTRAINTS SUMMARY

Key constraints include the existing utilities, road reserve widths and crossing points on TfNSW controlled roads, significant infrastructure barriers, and flooding.

Key opportunities identified include celebrating the unique features and character areas of Wickham, improved climatic and ecological conditions through increased canopy cover, improved travel experiences for all users and ensuring pedestrians and cyclists have good quality infrastructure to use.

Other key opportunities include unlocking access to Wickham's two great natural assets of the waterfront and Wickham Park, making Wickham an exemplary site of water sensitive urban design (WSUD), and increasing the number of small and medium-scale open and green spaces that can serve the needs of the community.



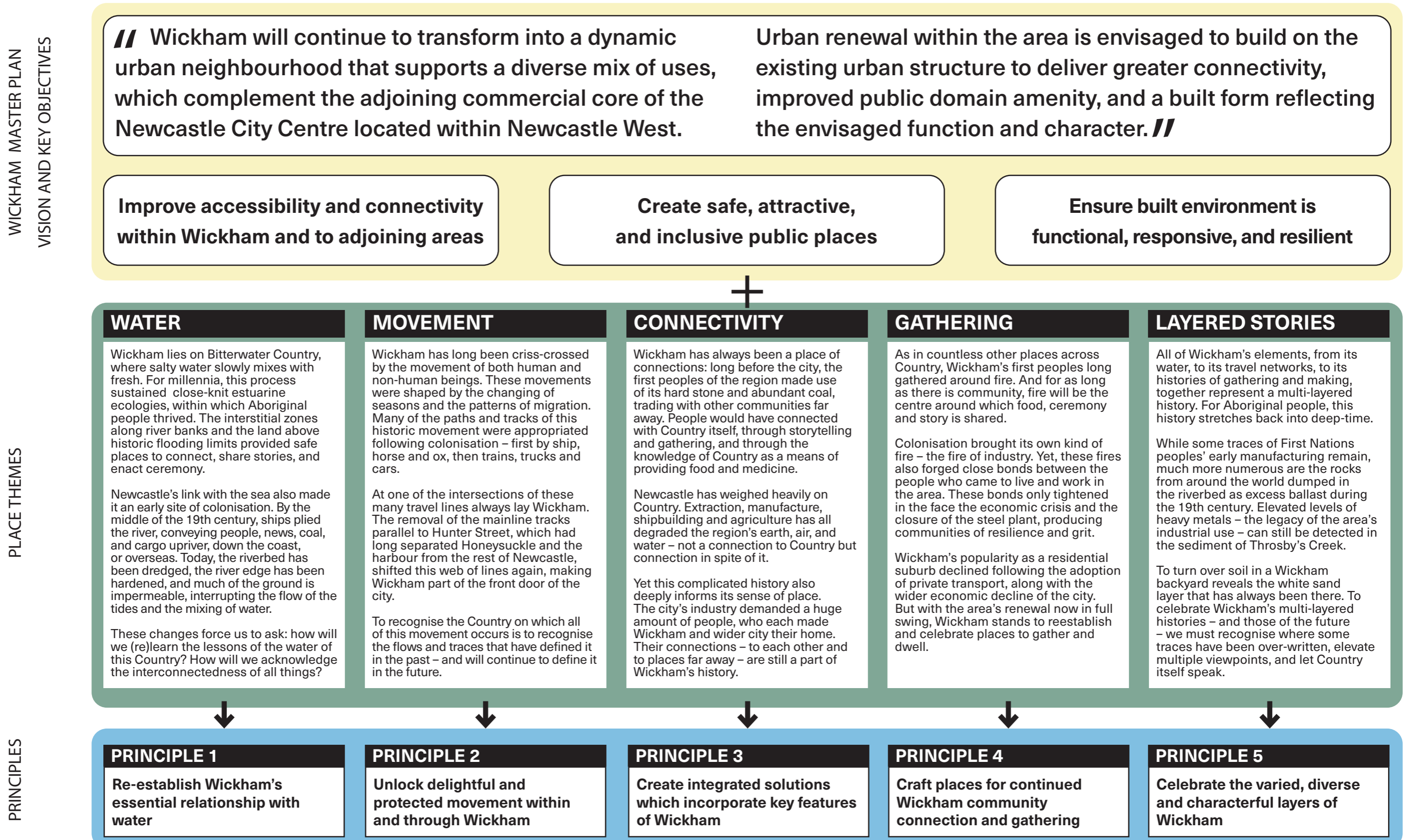
Artist's impression of Church Street once PDP initiatives have been fully implemented.



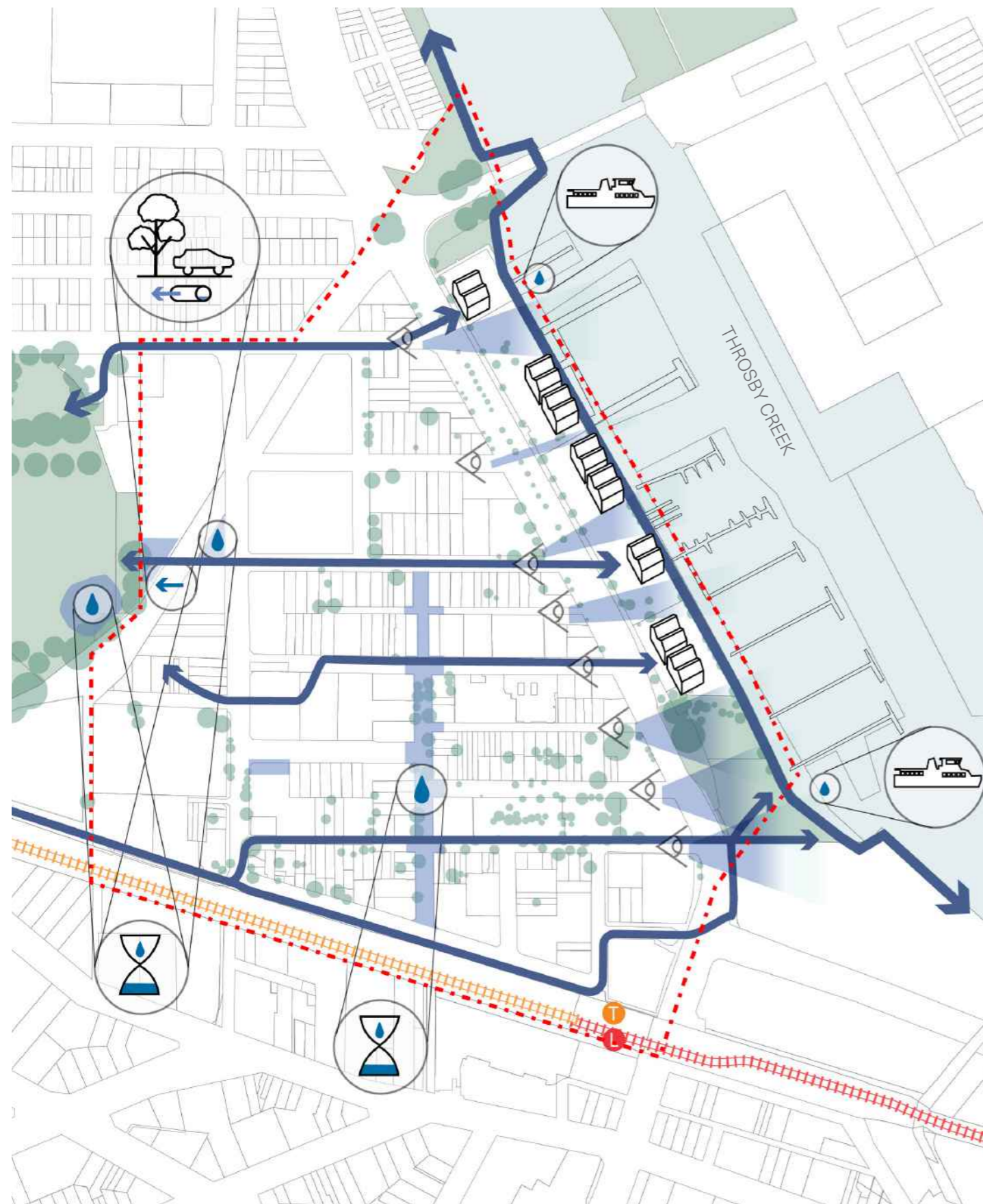
Section 2






Design Strategies

2.1 Design strategies hierarchy



2.2 Principle 1 - Re-establish Wickham's essential relationship with water



-  • Improve access to waterfront / water Country from the broader Wickham precinct (including future consideration of a bridge link over Hannell Street) and connect Wickham Park to Throsby creek
-  • Remove physical and visual barriers between the waterfront and the broader precinct, including the visual barrier of parking along development lots fronting Hannell Street
-  • Broaden the extent and accessibility of public access to the water along the waterfront, including to the potential new ferry stops and public launch
-  • Celebrate water stories and features within proposed urban activation areas
-  • Futureproof the neighbourhood against flooding with the sensitive design of building interfaces with the street

2.3 Principle 2 - Unlock delightful and protected movement within and through Wickham



- Implement people-focused movement solutions
- Prioritise pedestrians and cyclists and create separation where there are risks or amenity impacts



- Implement abundant green planting for shade and a more pleasant experience for people on foot or bikes
- Balance movement and place outcomes for Union Street as the village spine and protect it from non-local traffic



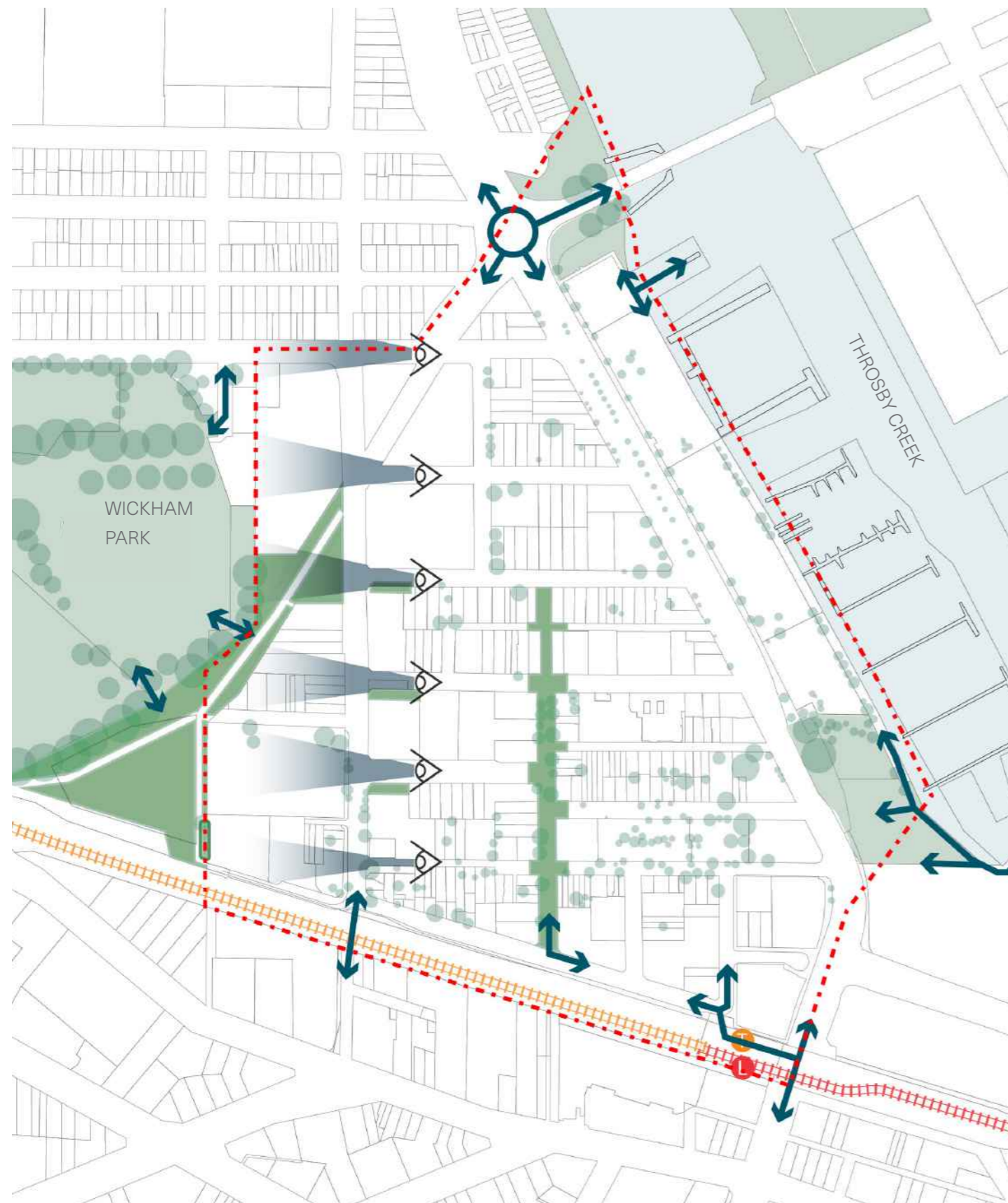
- Support separated cycling connections linking green spaces in Wickham Park and the waterfront










- Create a fine grain network of streets which support walking and cycling
- Creates accessibility throughout the precinct and provide amenity for people whilst moving

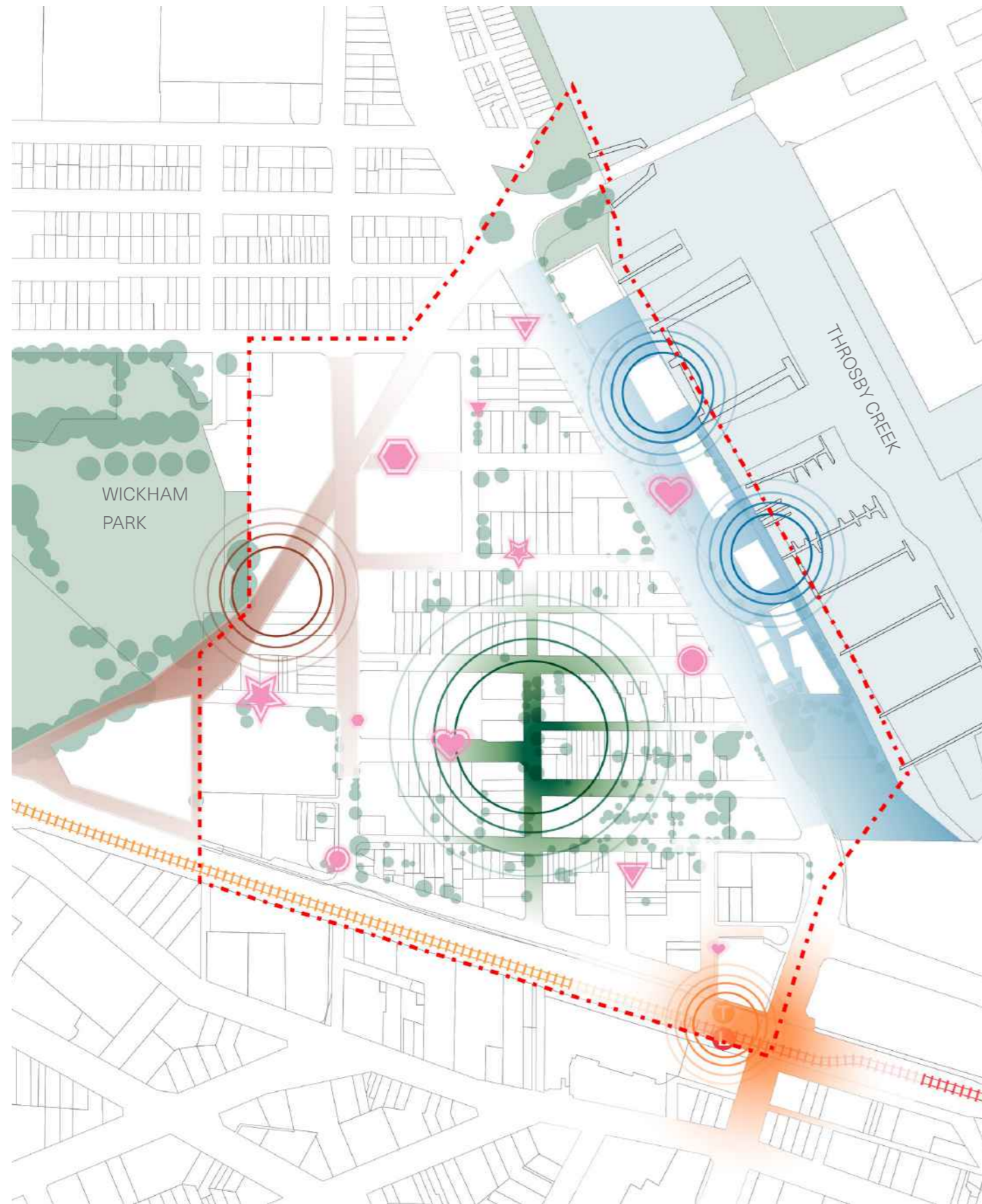
- Address needs of commuters, visitors and locals

2.4 Principle 3 - Create integrated solutions which incorporate key features of Wickham



- 
 • Ensure places are multi-functional and bring together public and place features
- 
 • Consider interface to buildings with considered transitions required in levels and from public to private conditions
- 
 • Bring together engineering and design solutions into cohesive and place-responsive solutions which unlock access to features of Country
- 
 • Support connectivity and the communities' experiences of public space as they transition between Wickham and other parts of the city with consideration of gateway points and features
- 
 • Unlocking the edges of Wickham Park particularly along the former rail corridor and integrating to it so that this significant open space supports the community.
- 
 • Increase shade and reduce heat impact through generous and careful planting of trees
- 
 • Integrate urban activation zones and park edge and consider visual links between Wickham and park

2.5 Principle 4 - Craft places for continued Wickham community connection and gathering



- Create a safe and vibrant heart to the 'Village Hub'
- Reinforce Union Street as the 'Village Spine' with places to stay, meet and play

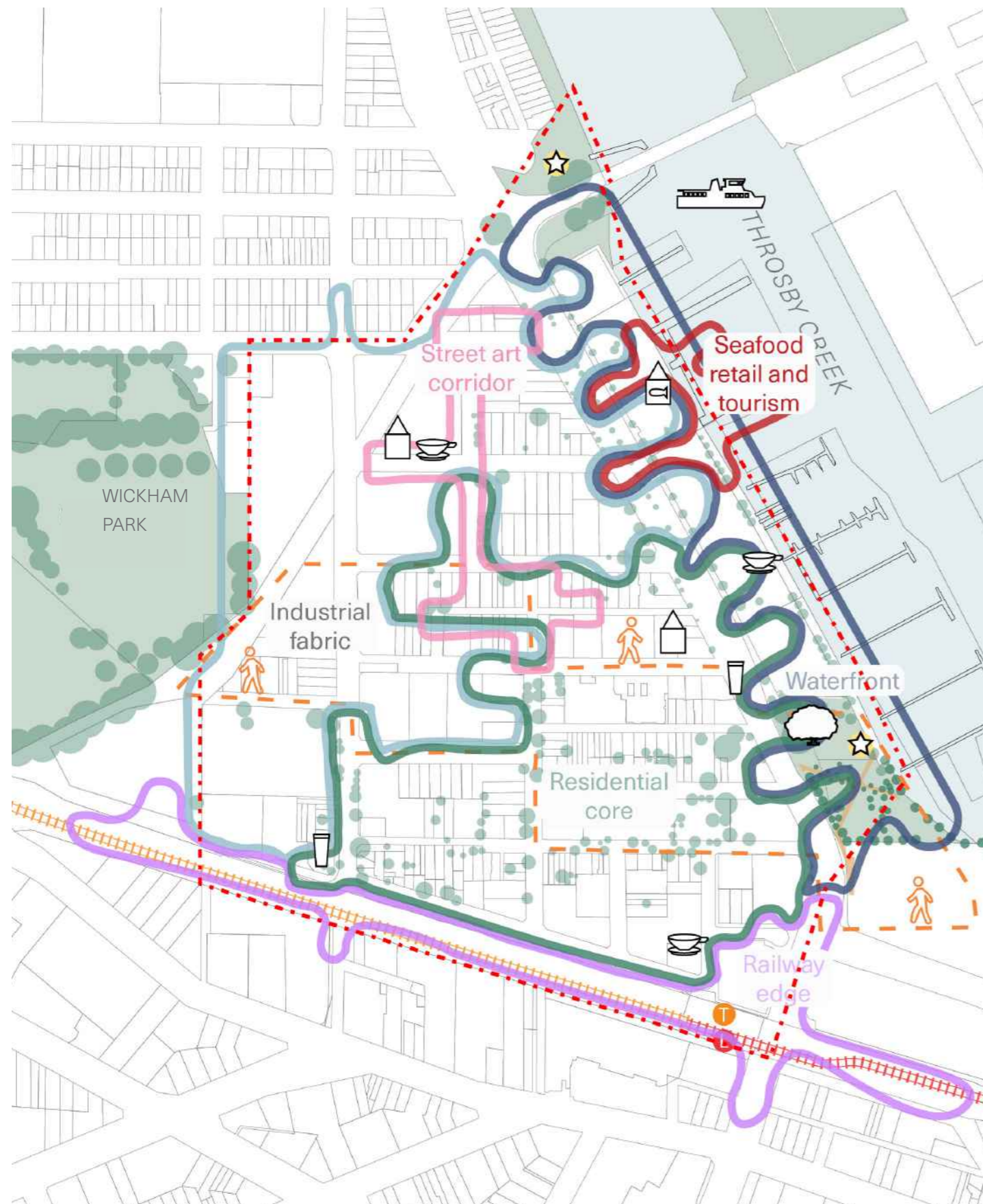


- Establish a hierarchy of scales and uses for other urban activation areas to provide diversity in public space provision
- Enable clear lines of sight to public spaces with planting provisions to support sense of safety
- Ensure high levels of community amenity within new public spaces
- Distribute set of small delightful found elements to be discovered across the precinct



- Continue character as incubator for artistic expression
- Reintegrate with County with a landscape that is both regenerative and biophilic.

2.6 Principle 5 - Celebrate the varied, diverse, and characterful layers of Wickham



- Reveal traces stories of Wickham across the millennia within the public domain spaces in a layered rather than singular way.



- Undo the over-writing and let layers be read in response to Country
- Public spaces to respond to varied precinct character and recognise natural expansion of character areas as appropriate beyond boundaries given layered nature of evolution of Wickham

- Create opportunities for wandering and material exchange across interpretation across Country and Heritage interpretation proposals, including a foraging trail.



- Retain and celebrate the gritty and quirky character as part of the layering
- Respond to established amenities and existing landmarks, including mature trees



Section 3

Plan & Frameworks

Section 3 – Plan & Frameworks

3.1 Strategic Direction

The strategic directions of the Wickham PDP have been informed by the Principles. These directions represent a multifaceted, cross-disciplinary approach that ensures Wickham is connected, resilient, regenerative, and smart and responds to the needs of its existing and future community.

If carefully implemented, these directions will provide Wickham with a complete pedestrian environment - one in which people travelling on foot or bike or other forms of active travel feel safe, at ease, and prioritised.

Such an outcome will do two things at once. It will provide the best setting for a community to feel comfortable and at home in the street and its adjoining network of public places, driving growth and improving the local and wider economies. This will also best place Wickham's streetscape to adapt to the challenges of the future, including climate change and the associated increases in risk from the urban heat island effect, extreme precipitation events, and biodiversity loss.

3.1.1 Character & Growth

Country

In line with the City of Newcastle and the community's commitment to recognising and building on the rich traditions of the Indigenous Custodians of the land on which the community lives and works, the project has considered Country as a foundational element in the project approach. The Wickham Public Domain Plan aims to recognise key perspectives of Country and use this as a foundation upon which we base subsequent understandings of place.

Elements of Place

Wickham's places have unique and layered meaning to those who call the area home. They are the product of long and deep histories as well as day-to-day activities, rituals, and inhabitation. This PDP has therefore centred the retention of the character of Wickham's places while enabling the wider evolution of the area and the provision of new places.

Provision has been made for the future integration of public art and interpretation of both Aboriginal living culture and European heritage. Special consideration has been given to the existing uses of Wickham's places while new places will address the needs of the community.

Changes to traffic access, parking provisions, and increased greening will also result in significantly improved amenity for locals and visitors alike.

Densification

The urban fabric of Wickham is changing in line with the adopted Wickham Master Plan. This change includes an increase in housing density and a proportionate reduction in backyard sizes and private landscapes. This PDP therefore places emphasis on the provision of high quality, publicly available open spaces, which together will form a coherent, suburb-wide network. This network of open space will include new urban activation zones, improvements and upgrades to the greenery and accessibility of streets, and better provision and improvement of existing amenities.

Economy

Careful planning will make sure improvements to Wickham's public realm also translate into an economic boost. Well designed streets facilitate and encourage movement of pedestrians, cyclists and vehicles, while weather-protected, attractive places encourages people to stay, dwell, and engage with the street. This engagement contributes to the local economy, as cafes and restaurants, retailers, and other vendors see an uptick in traffic.

3.1.2 People-focused Movement

Pedestrian priority

Driving the design outcomes of this PDP is the prioritisation of pedestrian movement. This will be achieved through changes to the street, including kerb build-outs and continuous footpath treatments (CFTs), more wombat crossings, and changes to traffic patterns. Provisions for increases in tree canopy throughout this PDP will also encourage movement by foot, by ensuring the streets stay cool and shaded during hot days.

Wider connections and cycling and public transport

Wickham is very well-connected, through both light and heavy rail networks running out of the Interchange, by bus, and by bike. In addition to reducing carbon emissions, a shift to these modes of transport improves the environment for people moving by foot through Wickham as well. Careful thought has therefore been given to people-focused journeys in and out of Wickham.

This includes dedicated provision for people on bikes, especially through the former Bullock Island Railway corridor, and rationalised and upgraded footpaths to make journeys across the suburb to its key points of arrival and departure safer and more accessible

Accessibility

This PDP has focused on delivering a more accessible Wickham. Accessibility has been reviewed to ensure the best possible outcomes for people of all abilities. This includes balancing footpath widths with vegetation and carefully considering materiality choices and street furniture locations.

3.1.3 Resilience and Sustainability

Climate Change Adaptation

This PDP places great importance on the development of strategies to adapt to climate change. Climate change will continue to present a number of challenges, including increases in extreme weather such as drought, wild fires, storms, and flooding, as well as higher average temperatures. These effects can be exacerbated by poor planning and poor public realm design.

At the same time, cities must undertake measures that directly address the root causes of climate change. This includes a just transition from a carbon-intensive economy. City of Newcastle leads in this space, having already committed to the goals of the Paris Climate Agreement and a wide range of initiatives. This PDP

builds on this momentum, not least by improving Wickham's walkability and encouraging less reliance on vehicles and by embracing green infrastructure.

Urban Heat Island Effect

The urban heat island effect (UHIE) is the result of low levels of greenery and increased heat-absorbing materials causing higher ambient temperatures. This increased temperature puts pressure on building cooling systems, which can increase energy use as well as dump further hot air into the street. UHIE is detrimental to human comfort and can expedite the degradation of infrastructure such as roads and footpaths.

High albedo paving can mitigate the UHI effect by reflecting more heat than low albedo equivalents. Trees and plants also help by cooling through evapotranspiration and through shade. Accordingly, this PDP has carefully chosen materials for their solar properties and provides for the wide introduction of trees and planting throughout the Wickham streetscape.

Biodiversity

As the climate changes, and urban areas expand, it is increasingly important to protect and re-establish biodiversity both in and out of cities. Through the careful design of streets, native flora and fauna can be allowed to thrive - something that is important for Wickham as well as the wider ecological networks of which it is a part. This PDP seeks to maximise planting to best promote biodiversity, not just for the good of Wickham's human residents but its non-human ones too.

Infrastructure

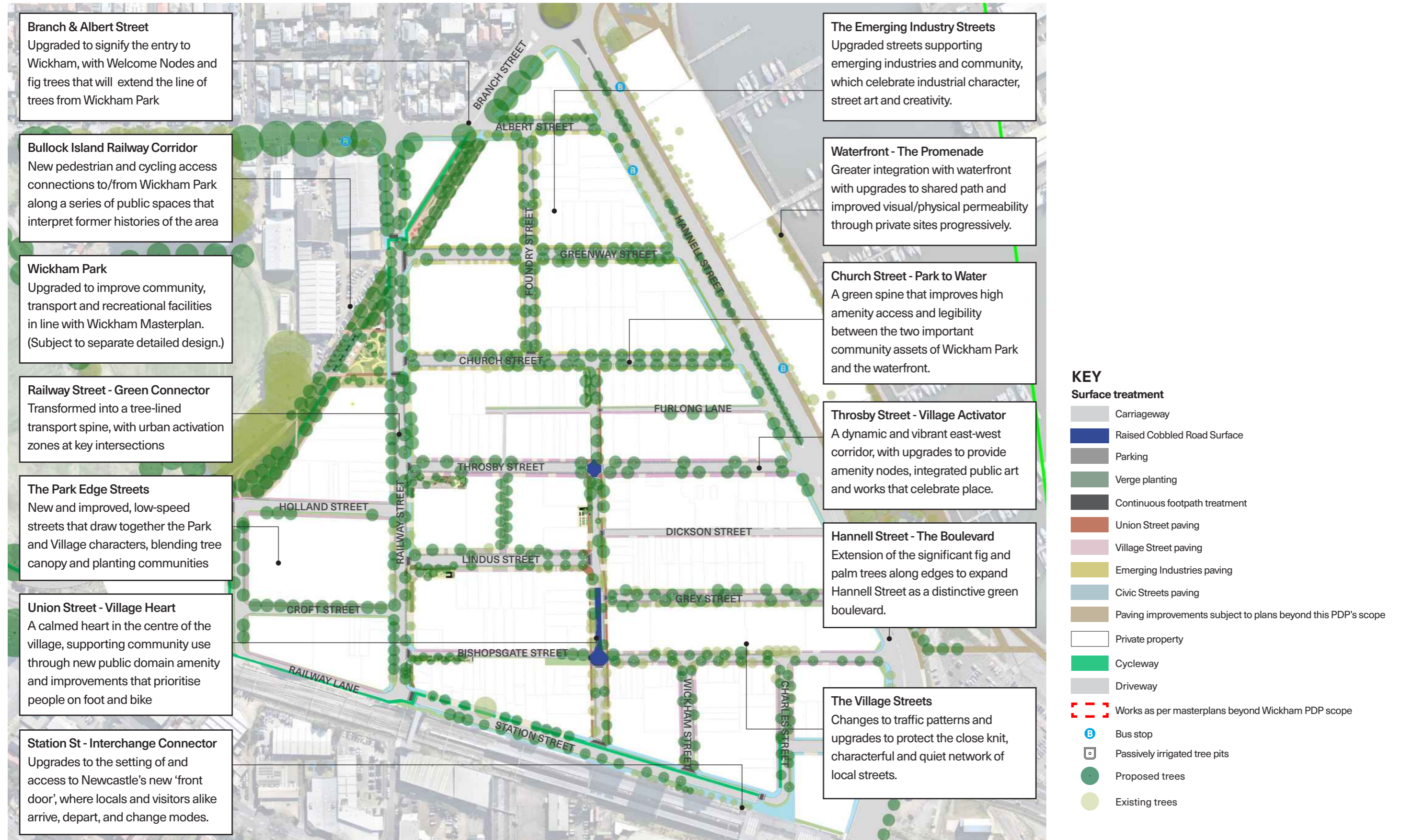
Essential services infrastructure including water, power, sewer, stormwater, gas and telecommunications run underneath many of Wickham's streets. This PDP has paid particular attention to the locations of these underground services, especially in the placement of new street trees and water sensitive urban design elements.

Planting as water detention benefits

In addition to all of the benefits listed above, increased planting can have an important role in managing water. Plants can detain water during precipitation events, slowing down or absorbing surface water. If these plants are properly set within the public realm, they can be passively irrigated, which also lowers overall maintenance costs and improves the health of the plant.

3.1 Strategic direction

3.1.4 Overview of Public Domain Plan



Branch & Albert Street
Upgraded to signify the entry to Wickham, with Welcome Nodes and fig trees that will extend the line of trees from Wickham Park

Bullock Island Railway Corridor
New pedestrian and cycling access connections to/from Wickham Park along a series of public spaces that interpret former histories of the area

Wickham Park
Upgraded to improve community, transport and recreational facilities in line with Wickham Masterplan. (Subject to separate detailed design.)

Railway Street - Green Connector
Transformed into a tree-lined transport spine, with urban activation zones at key intersections

The Park Edge Streets
New and improved, low-speed streets that draw together the Park and Village characters, blending tree canopy and planting communities

Union Street - Village Heart
A calmed heart in the centre of the village, supporting community use through new public domain amenity and improvements that prioritise people on foot and bike

Station St - Interchange Connector
Upgrades to the setting of and access to Newcastle's new 'front door', where locals and visitors alike arrive, depart, and change modes.

The Emerging Industry Streets
Upgraded streets supporting emerging industries and community, which celebrate industrial character, street art and creativity.

Waterfront - The Promenade
Greater integration with waterfront with upgrades to shared path and improved visual/physical permeability through private sites progressively.

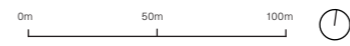
Church Street - Park to Water
A green spine that improves high amenity access and legibility between the two important community assets of Wickham Park and the waterfront.

Throsby Street - Village Activator
A dynamic and vibrant east-west corridor, with upgrades to provide amenity nodes, integrated public art and works that celebrate place.

Hannell Street - The Boulevard
Extension of the significant fig and palm trees along edges to expand Hannell Street as a distinctive green boulevard.

The Village Streets
Changes to traffic patterns and upgrades to protect the close knit, characterful and quiet network of local streets.

- KEY**
- Surface treatment**
- Carriageway
 - Raised Cobbled Road Surface
 - Parking
 - Verge planting
 - Continuous footpath treatment
 - Union Street paving
 - Village Street paving
 - Emerging Industries paving
 - Civic Streets paving
 - Paving improvements subject to plans beyond this PDP's scope
 - Private property
 - Cycleway
 - Driveway
 - Works as per masterplans beyond Wickham PDP scope
 - B Bus stop
 - Passively irrigated tree pits
 - Proposed trees
 - Existing trees



3.2 Access & Movement Framework

3.2.1 Transport solutions: summary

The design of the transportation elements within the public domain plan has been informed by the Wickham Masterplan (2017 and 2021 Update), along with input from the Local Area Traffic Management Study (2017) and the Wickham Area Parking Study (2019). Additionally, community consultation has been undertaken by the City of Newcastle Council on the proposed Public Domain Plan.

3.2.2 Pedestrian movement

A key focus of this public domain plan is to enhance pedestrian mobility in and around Wickham. Improving connectivity and accessibility within Wickham plays a pivotal role in realising the City of Newcastle's envisioned transformation of the area. This is an opportunity to enable the activation of the region and the establishment of inviting spaces for the community. This includes introducing 'self-explaining' low speed zones across Wickham, achieved through improvements including:

- Continuous footpath treatments and wombat crossings. These types of crossings calm traffic and ensure pedestrians have priority. They ensure crossing is more accessible for those using wheelchairs or strollers.
- Kerb build outs at intersections. These reduce the crossing distance for pedestrians across side streets and force vehicles to reduce their speed when turning.
- Raised/slow street treatments on Union Street. These treatments act as traffic calming measures and prioritise pedestrian movement in the 'village heart'.
- Improved provision of footpaths and improvements to footpath conditions at locations with high pedestrian activity.

These measures recognise the fundamental role that transport can play in creating pleasant and vibrant urban spaces; ones where people want to spend time in rather than just pass through.

3.2.3 Cycling movement

Wickham's flat topography and its proximity to the waterfront area, the city centre and the Newcastle Transport Interchange makes it an ideal location to promote cycling. The City of Newcastle's On our Bike Plan (2021-2030) states that the majority of car journeys are within 10km, with around 37% covering less than 2km. A cycling trip that replaces a car trip would have positive impacts on level of congestion, emissions, physical activity and transport affordability.

Another key focus of this public domain plan is to facilitate movement in and around Wickham by bike. This will also be achieved through low speed zones, which make cycling a safer and more pleasant experience. Other improvements will include:

- A new separated and bidirectional cycleway along the former Bullock Island Railway Corridor between the Cowper Street/Branch Street roundabout and southern end of Wickham Park.

- A new separated and bidirectional cycleway along the north side of Station Street with wombat crossings (including separated bicycle lanes) providing cycling access to the Newcastle Interchange and connected to the wider Newcastle cycle network by quietways and shared paths.
- An on-street cycleway on the southern side of Railway Lane to connect the Station Street cycleway to Wickham Park and the Bullock Island Railway Corridor.
- A separated and bidirectional cycleway along the southern end of Charles Street connecting the cycleway on Station Street to a new quietway on Dangar Street.

3.2.4 Vehicle movement

Another key focus of this public domain plan is to encourage vehicle movement in and around Wickham in ways that make the area safer, quieter, and with more space for people who are walking or riding bikes. This will be achieved through changes to parking and to vehicle circulation.

Where studies have shown that on-street parking is consistently under-utilised, there is an opportunity to introduce wider footpaths, which will enhance the pedestrian environment and increase space for trees. Changes to vehicle circulation in Wickham are also proposed. These include changes to Union Street in order to prevent it from being used as a northbound through-route by vehicles dropping off or picking up passengers at Newcastle Interchange. Reducing the volume of traffic of Union Street will enhance its role as a safe and green heart of the village.

Some of the general principles for the proposed vehicle circulation changes that has been considered in Wickham include:

- Converting Station Street to two-way between Wickham Street and Railway Street.
- Introducing a one-way eastbound link that connects Maitland Road with Holland Street.
- Introducing a one-way link from Throsby Street into Furlong Lane.
- Providing a new one-way northbound street link between Railway Lane and Holland Street.
- Introducing a one-way westbound traffic link that connects Croft Street to the proposed street link between Railway Lane and Holland Street.
- Operating Railway Lane as one-way westbound.

3.2.5 Union Street

This PDP additionally provides a number of specific measures for Union Street, the key village spine of Wickham. These measures will convert it to a one-way northbound link, and include:

- Changing the current two-way section of Union Street between Bishopsgate Street and Throsby Street to a one-way northbound link.

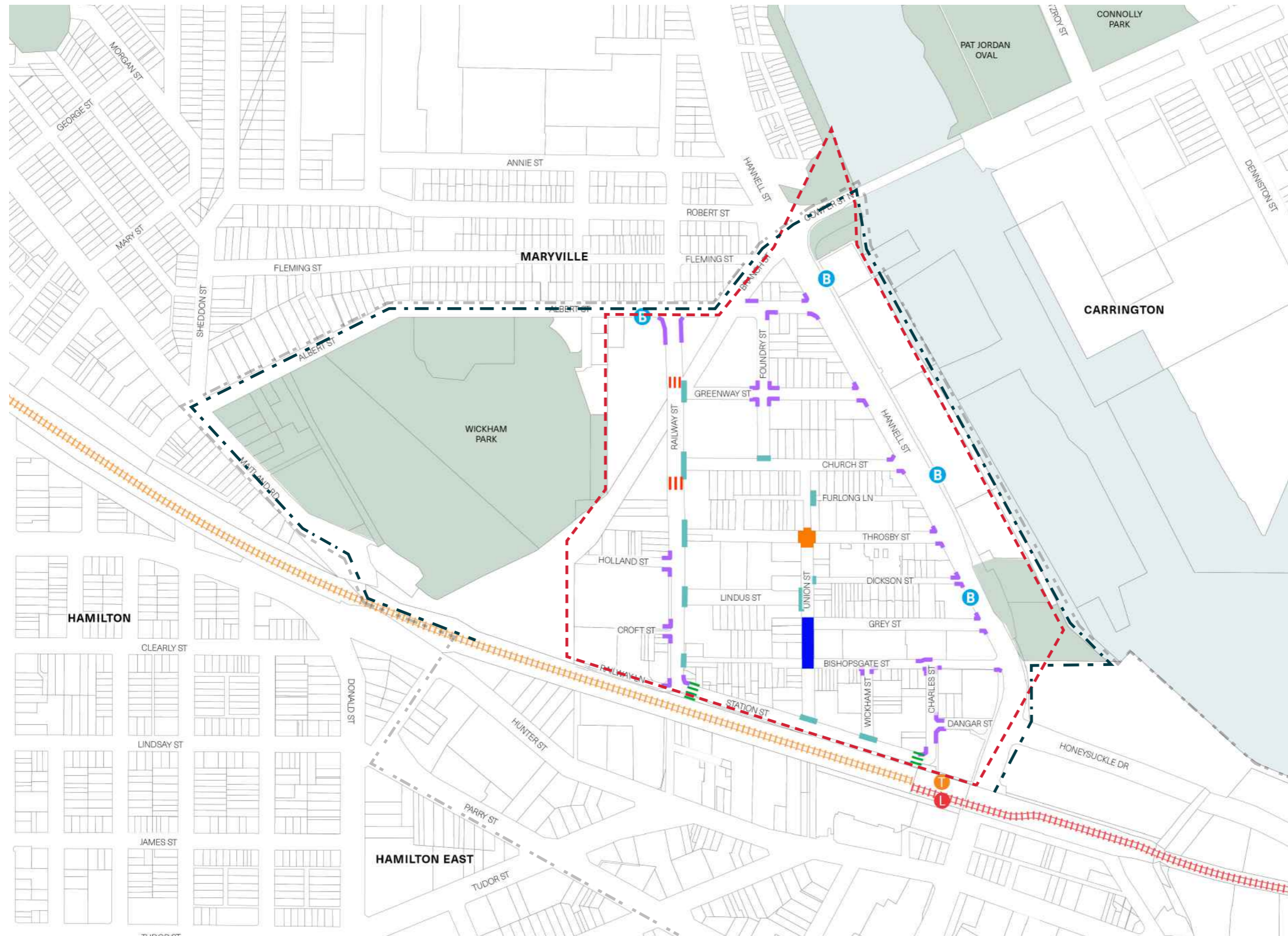
- Converting the section of Union Street between Throsby Street and Church Street from one-way southbound to one-way northbound.
These routing changes would be done alongside the following additional measures:
- Providing a raised road treatment between Bishopsgate Street and Grey Street to facilitate traffic calming and improve east-west connectivity for pedestrians.
- Reducing the width of Union Street north of Lindus Street into a one-way network for local vehicle movements only.
- Converting the very narrow section of Bishopsgate Street between Railway Street and Union Street into a one-way westbound link with parking on the northern side.



Artist's impression of Station Street once PDP initiatives have been fully implemented.

3.2 Access & Movement Framework

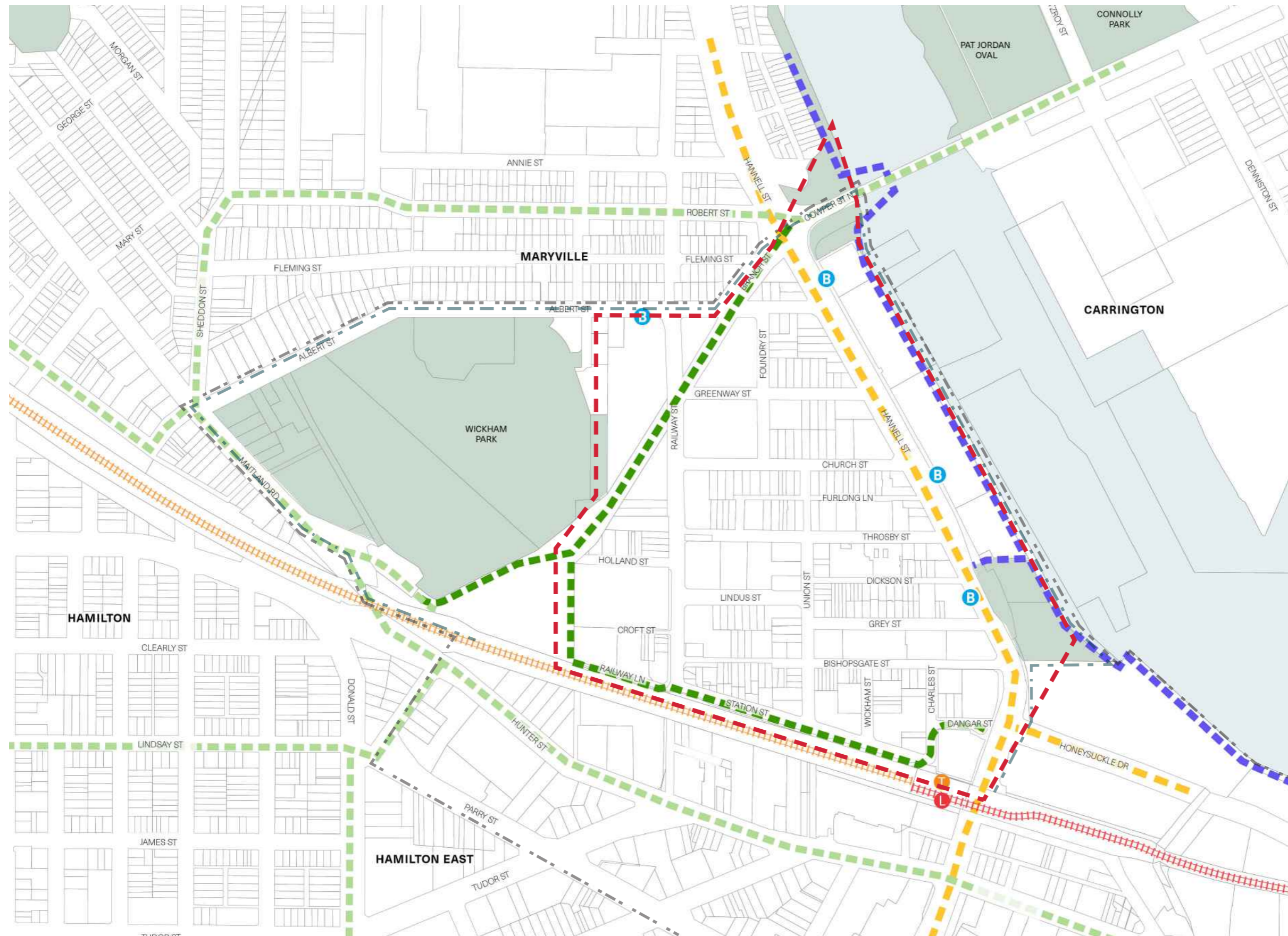
3.2.6 Pedestrian Movement



KEY	
Land cover	
	Green space / open space
	Surface and tidal water
Traffic management	
	Kerb extension
	Continuous footpath treatments (CFT)
	Raised road platform
	Raised intersection
	Wombat crossing delivered as part of Stage 1
	At-grade crossing delivered as part of Stage 1 and wombat crossing delivered during Stage 2
Transport	
	Heavy rail stop and alignment
	Light rail stop and alignment
	Bus stops
Boundaries	
	Newcastle City Centre area
	Wickham Masterplan area
	PDP Focus area

3.2 Access & Movement Framework

3.2.7 Proposed bicycle infrastructure



KEY

Land cover

- Green space / open space
- Surface and tidal water

Bicycle infrastructure

- Active transport connection proposed in 2021 Wickham masterplan
- Existing shared user path
- Existing on-road cycle lane
- Proposed routes of Newcastle Cycling Plan

Transport

- Heavy rail stop and alignment
- Light rail stop and alignment
- Bus stops

Boundaries

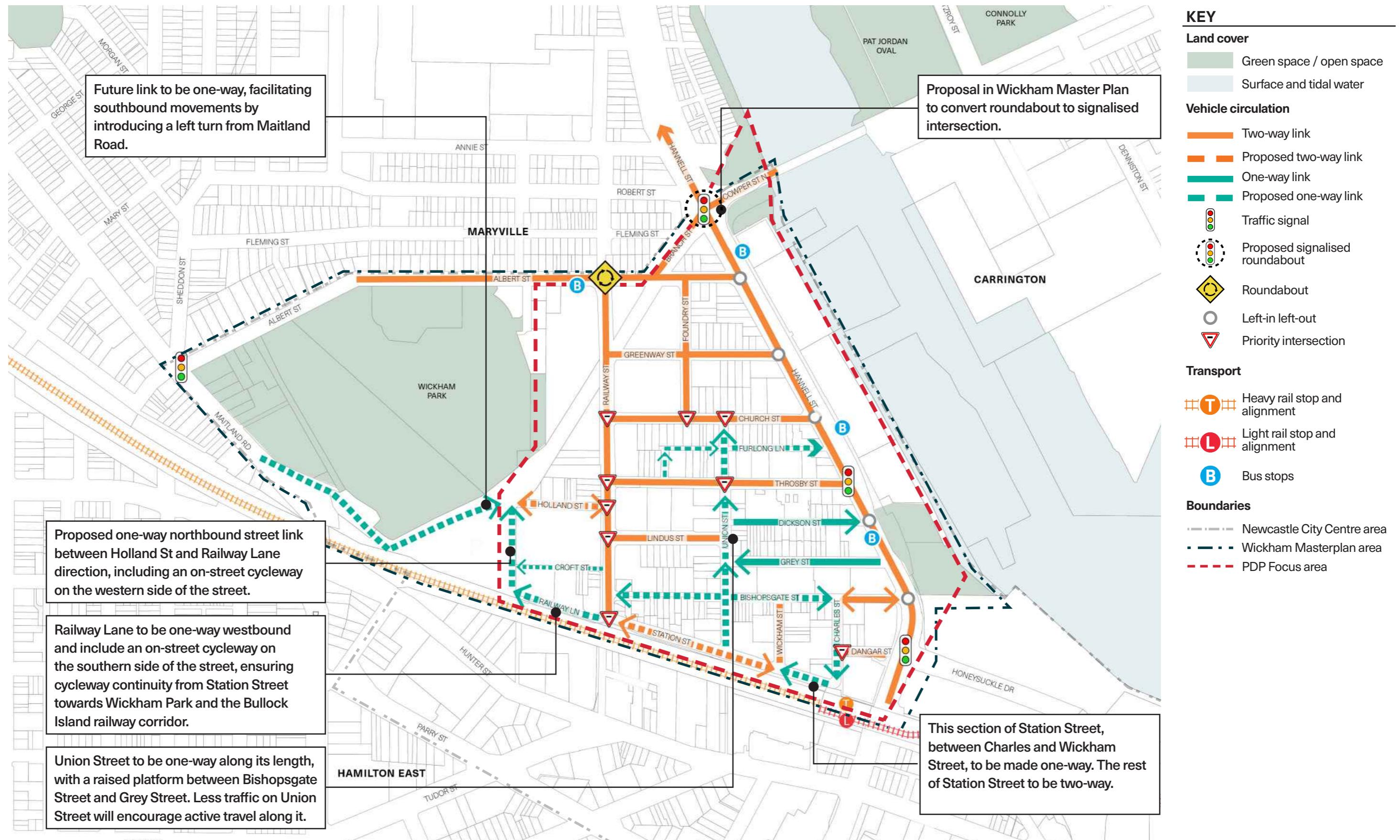
- Newcastle City Centre area
- Wickham Masterplan area
- PDP Focus area

Note: Explore network of quietway designation to all local streets with requirements;

- Bikes travel in the centre of the traffic lane
- Speed is under 30 km/h
- Road width is under 3m per lane

3.2 Access & Movement Framework

3.2.8 Proposed vehicle circulation



3.3 Street approach

3.3.1 Street approach overview

This PDP has developed a comprehensive approach for an integrated and carefully designed street network. This approach starts by considering the existing scale and use of each street, then classifies that street's place potential within the Movement and Place framework, before finally assigning each street to a broader "character area". These character areas govern paving treatment and other design work to best ensure a coherent and structured public domain.

3.3.2 Existing scale

Wickham is a residential suburb bound by the major traffic artery of Hannell Street on the east and Albert Street to the north. Major roads within Wickham itself include Railway Street, which runs north-south and divides most of Wickham from Wickham Park further west, and Station Street, which runs parallel to the heavy rail corridor approaching the Interchange, defining Wickham's southern edge.

Wickham's streets can be classified by scale, including 20-metre-wide collector streets (Railway Street, Albert Street, and Branch Street), 15-metre-wide collector streets (Throsby Street and Church Street), local streets between 10 and 15 metres wide, local streets narrower than 10 metres, and laneways.

3.3.3 Movement and place

While important, road type and scale are just one aspect of design for place. Therefore, this PDP has carefully considered the Movement and Place framework, a cross-government framework for planning, designing and managing NSW's transport networks to best deliver benefits for the people and places they serve.

This PDP has identified how Wickham's streets could be classified according to this framework's guidance once the recommended upgrades and improvements of the plan have been undertaken. These classifications are as follows:

Main streets

- Station Street, Railway Street, Branch Street, and Albert Street

Civic spaces

- Union Street

Main roads

- Hannell Street

Local streets

- All other streets

3.3.4 Character areas

In order to provide guidance on how best to realise the place potential of each of Wickham's streets, this PDP has considered the character of each street and the wider urban context in which it sits. These character areas directly respond to guidance issued in the Wickham Master Plan.

The result is a number of character areas that build on the Movement and Place framework but also consider the wider context and connections of each street. These character areas are defined by features and characteristics the streets have common - or by the qualities that make some of Wickham's street unique.

These character areas are:

- Union Street
- Throsby Street
- The Village Streets
- The Emerging Industries Streets
- The Park Edge Streets
- The Civic Streets

3.3.5 Union Street

Running through the centre of Wickham is Union Street, a green, linear "heart" with important community functions and a unique character, including heritage paving and sculptures. As the village heart, special attention has been paid to Union Street, and many of its improvements reflect the ambition of the PDP as a whole, from a new urban activation zone, to traffic calming and measures to limit traffic to just local traffic, to improved and upgraded footpaths that celebrate its existing character while increasing its accessibility for all.

3.3.6 Throsby Street

With its intersection with Union Street at the very centre of Wickham, Throsby is an important high street. This PDP provides for a full width pavement, in line with its role for heavier traffic, supporting retail as well as residential.

3.3.7 The Villages Streets

This collection of streets form the fine-grained, residential fabric of Wickham. They tend to be quieter, narrower, and shaded, with a street canopy that merges with that of private front yards and back yards.

3.3.8 The Emerging Industries Streets

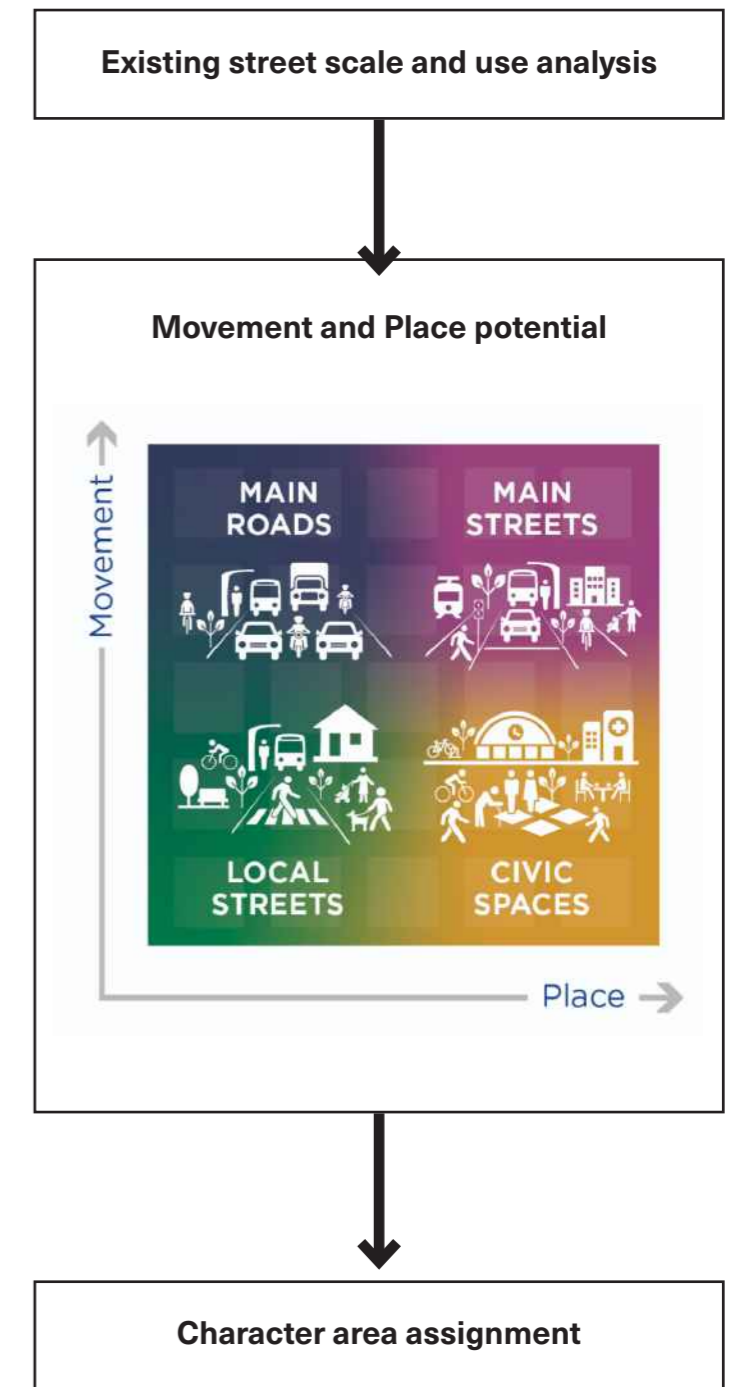
These are the streets in the north of Wickham, whose character is derived from its historic industrial fabric and street art and the emerging creative practices now taking up residence within them.

3.3.9 The Park Edge Streets

These are the streets between Wickham Park and Railway Street, and include new streets that will unlock this portion of Wickham. Their role is to convey people between Wickham's village heart and its most important green asset, Wickham Park. Taking advantage of their newness, these streets will have generous water sensitive urban design provision, further blending the mature greenery of the park with wider Wickham.

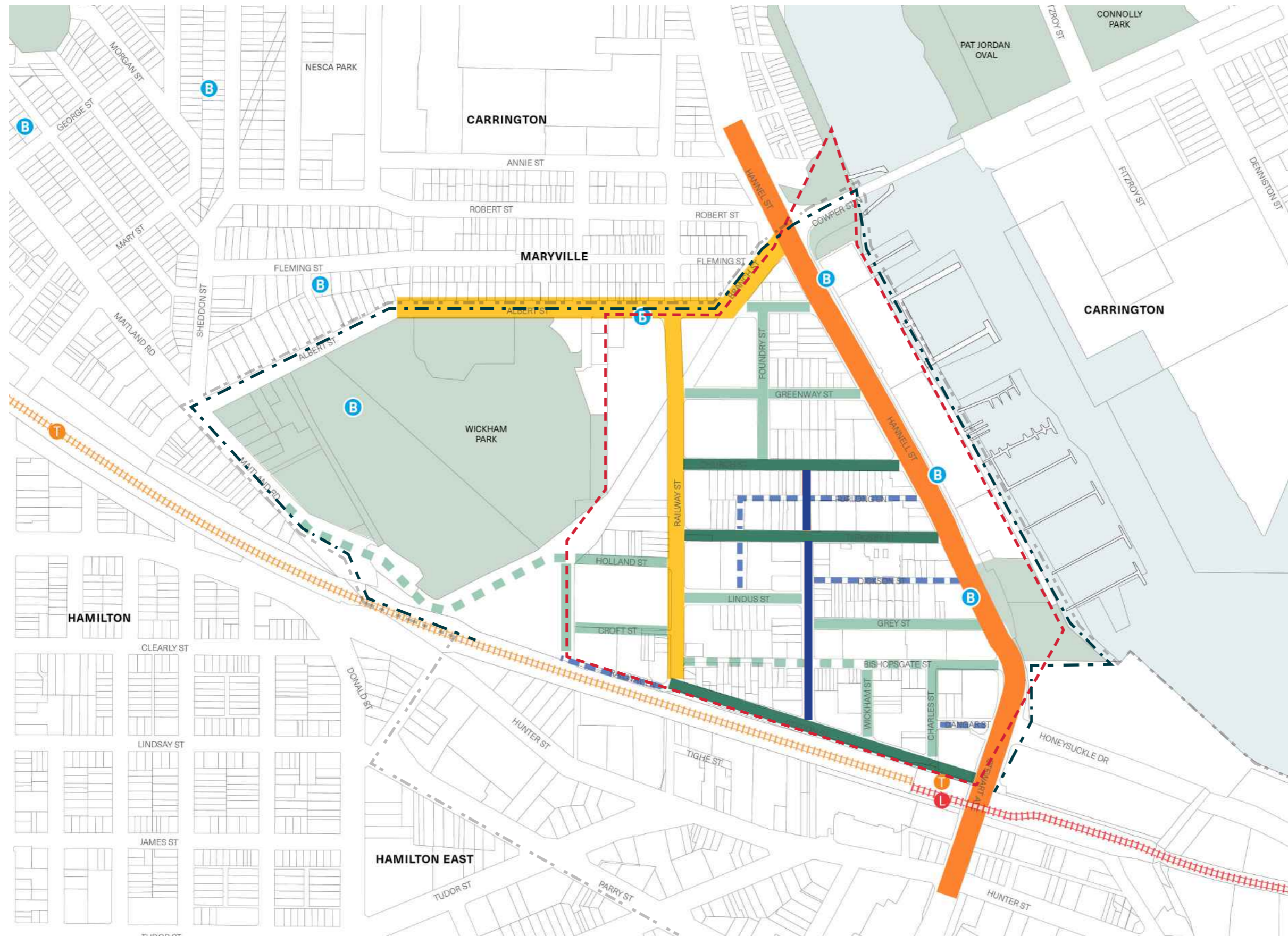
3.3.10 The Civic Streets

The Civic Streets are the primary streets of Wickham: Railway Street, Dangar Street, Charles Street, Albert Street, Branch Street, and Station Street. These are the busiest routes for both people on foot, on bike, and in cars, and serve as major connectors in, out, and across Wickham. Accordingly, these streets have the widest footpaths and a paving palette that is consistent with Newcastle's other major civic thoroughfares, such as Hunter Street.



3.3 Street typologies

3.3.11 Street Scales



KEY

Land cover

- Green space / open space
- Surface and tidal water

Scales

- Hannel Street (+30m)**
- Collector street 20m**
 - Railway Street
 - Albert Street
 - Branch Street
- Collector street 15m**
 - Throsby Street
 - Church Street
 - Station Street
- Union street 10-15m**
- Local street 10-15m**
 - Greenway Street
 - Foundry Street
 - Lindus Street
 - Holland Street + Ext
 - Grey Street
 - Bishopsgate Street East
 - Wickham Street
 - Charles Street
- Local street <10m**
 - Bishopsgate Street
- Laneway**
 - Furlong Lane
 - Railway Lane
 - Dickson Street

Transport

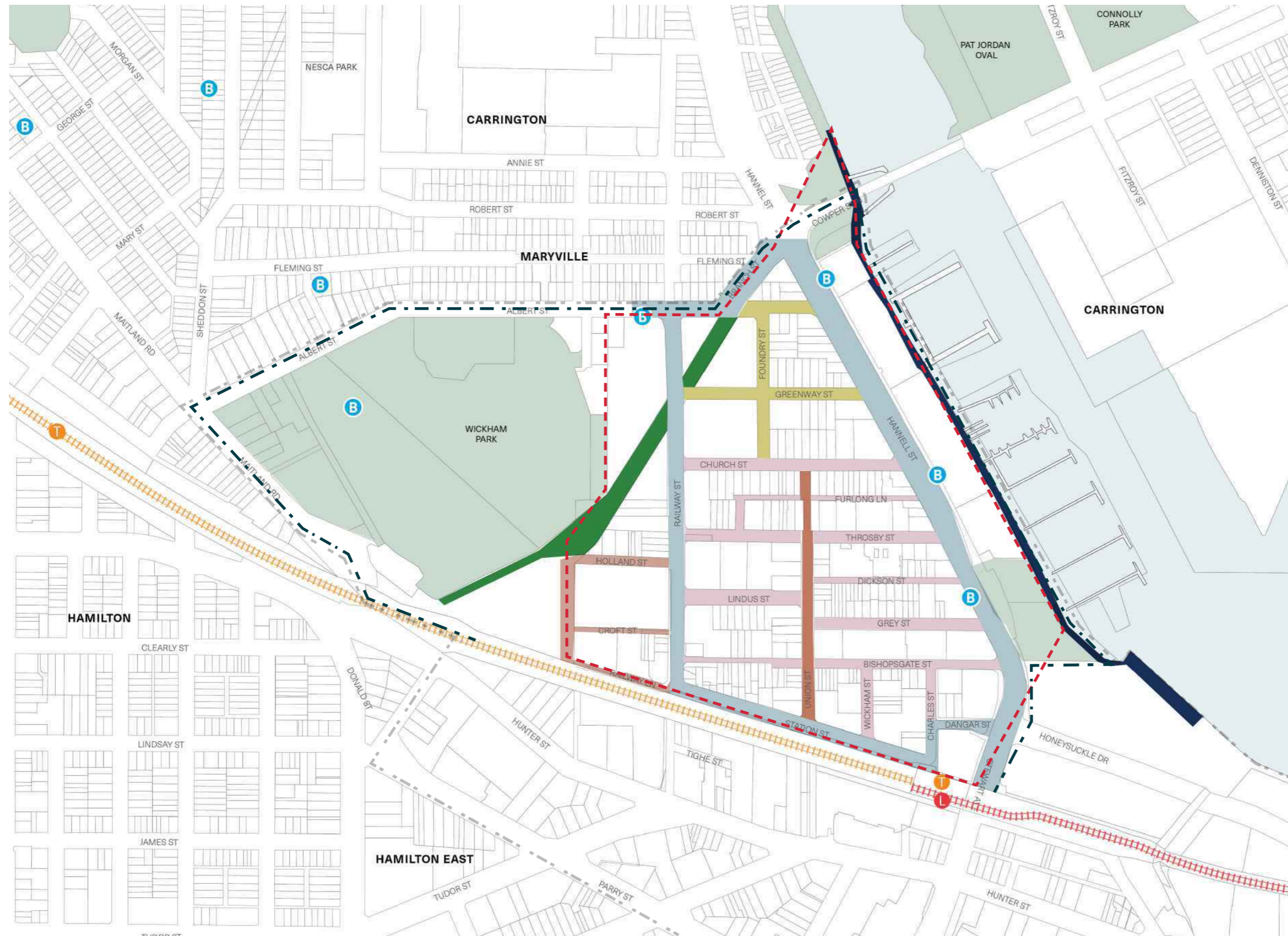
- Heavy rail stop and alignment
- Light rail stop and alignment
- Bus stops

Boundaries

- Newcastle City Centre area
- Wickham Masterplan area
- PDP Focus area

3.3 Street typologies

3.3.12 Street character by area



KEY

Land cover

- Green space / open space
- Surface and tidal water

Scales

Typologies

- Village Heart
- Emerging Industries
- Union Street
- Civic Streets
- Park Edge Streets
- Waterfront
- Railway Corridor

Transport

- Heavy rail stop and alignment
- Light rail stop and alignment
- Bus stops

Boundaries

- Newcastle City Centre area
- Wickham Masterplan area
- PDP Focus area

3.3 Street typologies

3.3.13 Union Street south (Village Heart)

A calmed heart in the centre of the Village, supporting community use through new public domain amenity, greening, and traffic changes that prioritise people on foot and bike and restrict car traffic to locals only.

Key Moves:

- Create a green heritage spine
- Improve health of established trees
- Create spaces for rest, dwelling, socialising and play
- Raised section between Bishopsgate St and Grey St
- Enhance setting of existing heritage pavers and bollards



KEY

Surface treatment

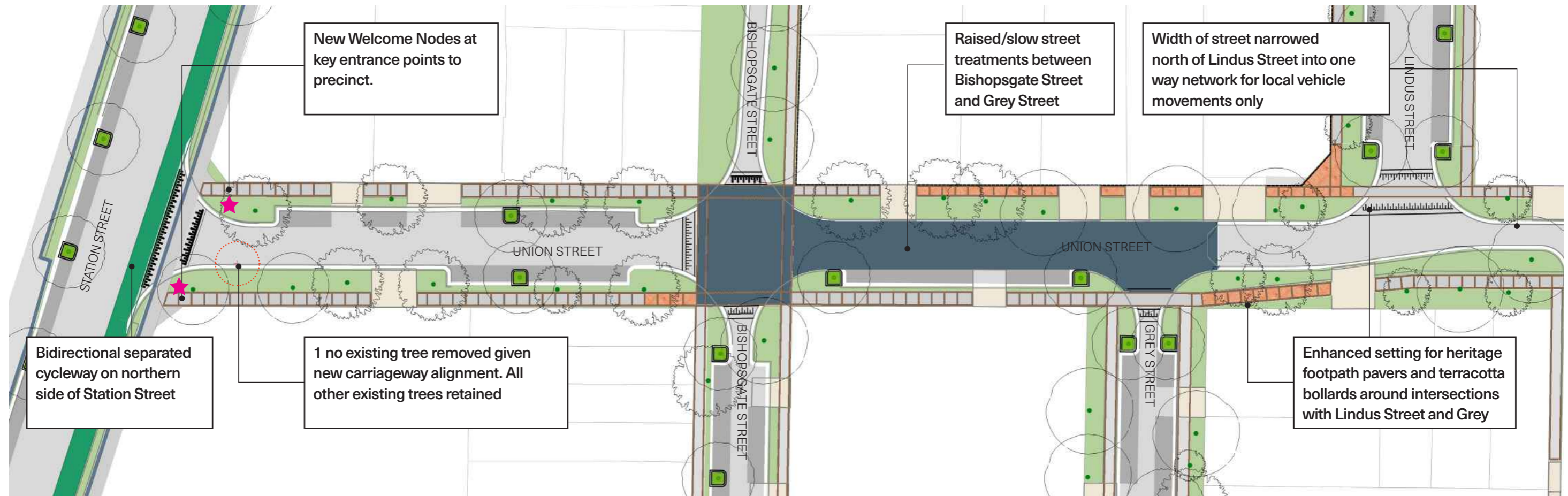
- Carriageway
- Parking
- Verge planting
- Raised intersection paving
- Union Street heritage brick paving
- Union Street standard paving
- Other paving typology with concrete infill and trim material as per paving typology
- Driveway
- Cycleway
- Shared zone
- Private property

Street furniture

- Interpretation Node

Trees and associated elements

- Tree grate
- Passively irrigated tree pits
- Existing small tree
- Existing medium tree
- Proposed small tree
- Proposed medium tree



SCALE 1:500@A3 0m 12.5m 25m

DATE 11.12.2023

3.3 Street typologies

3.3.14 Union Street north (Village Heart)

A calmed heart in the centre of the Village, supporting community use through new public domain amenity, greening, and traffic changes that prioritise people on foot and bike and restrict car traffic to locals only.

Key Moves:

- Create a green heritage spine
- Improve health of established trees
- Create spaces for rest, dwelling, socialising and play
- Primary footpath on east side, with open green space between Furlong Lane and Church Street
- Enhanced setting of existing heritage pavers and bollards
- Raised crossing at intersection of Union Street and Throsby Street



KEY

Surface treatment

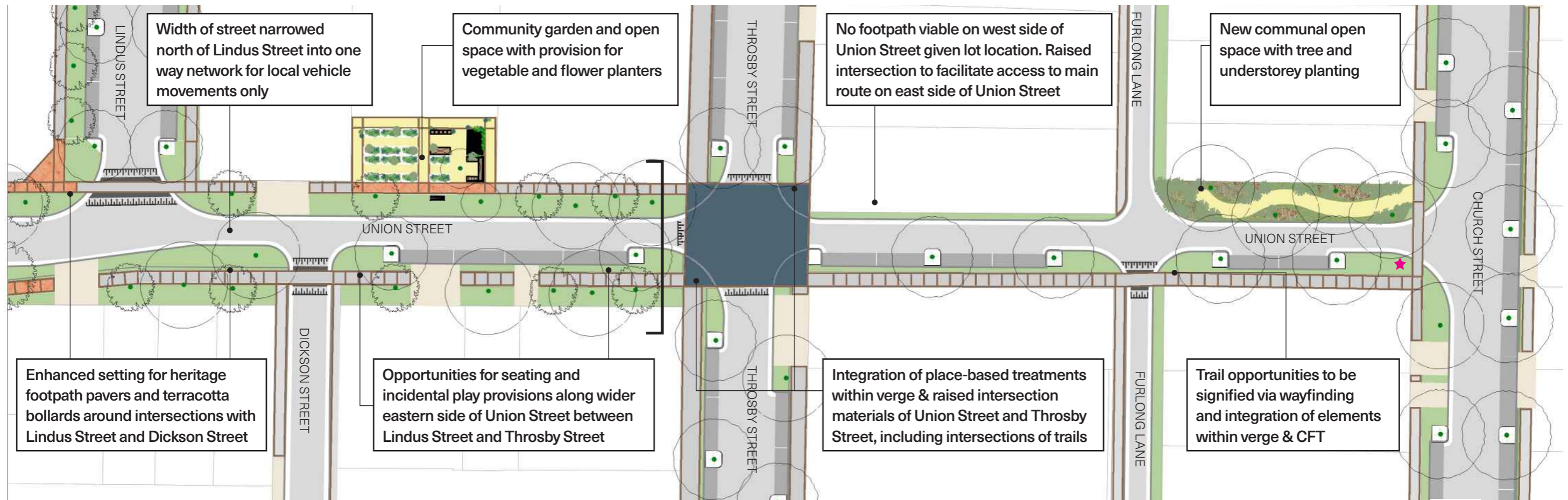
- Carriageway
- Parking
- Verge planting
- Raised intersection paving
- Union Street heritage brick paving
- Union Street standard paving
- Other paving typology with concrete infill and trim material as per paving typology
- Driveway
- Deconstructed granite path
- Cycleway
- Shared zone
- Private property

Street furniture

- Interpretation Node
- Public bench

Trees and associated elements

- Tree grate
- Passively irrigated tree pits
- Existing small tree
- Existing medium tree
- Proposed small tree
- Proposed medium tree



SCALE 1:500@A3
0m 12.5m 25m

DATE 11.12.2023

3.3 Street typologies

3.3.15 Union Street section



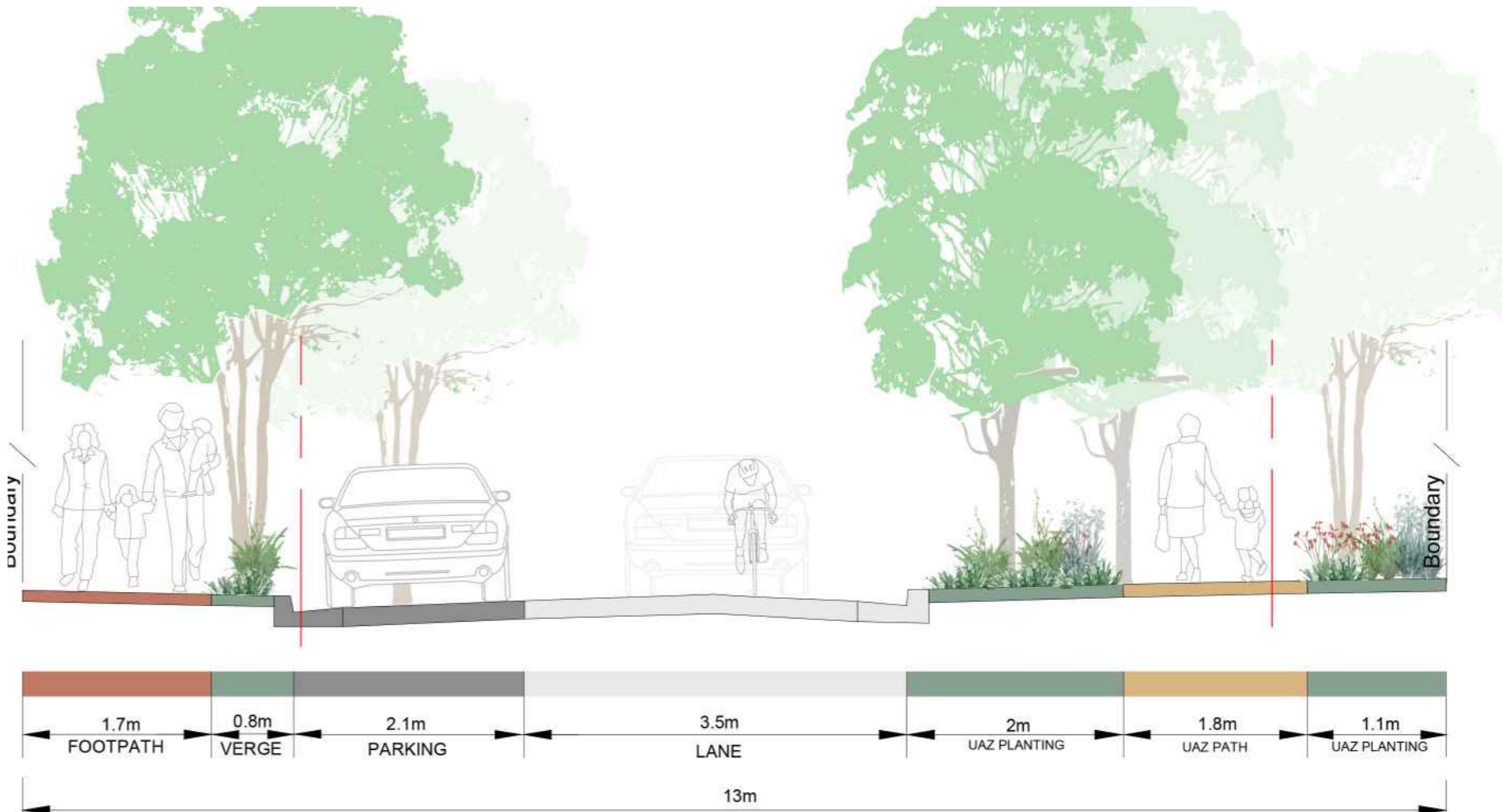
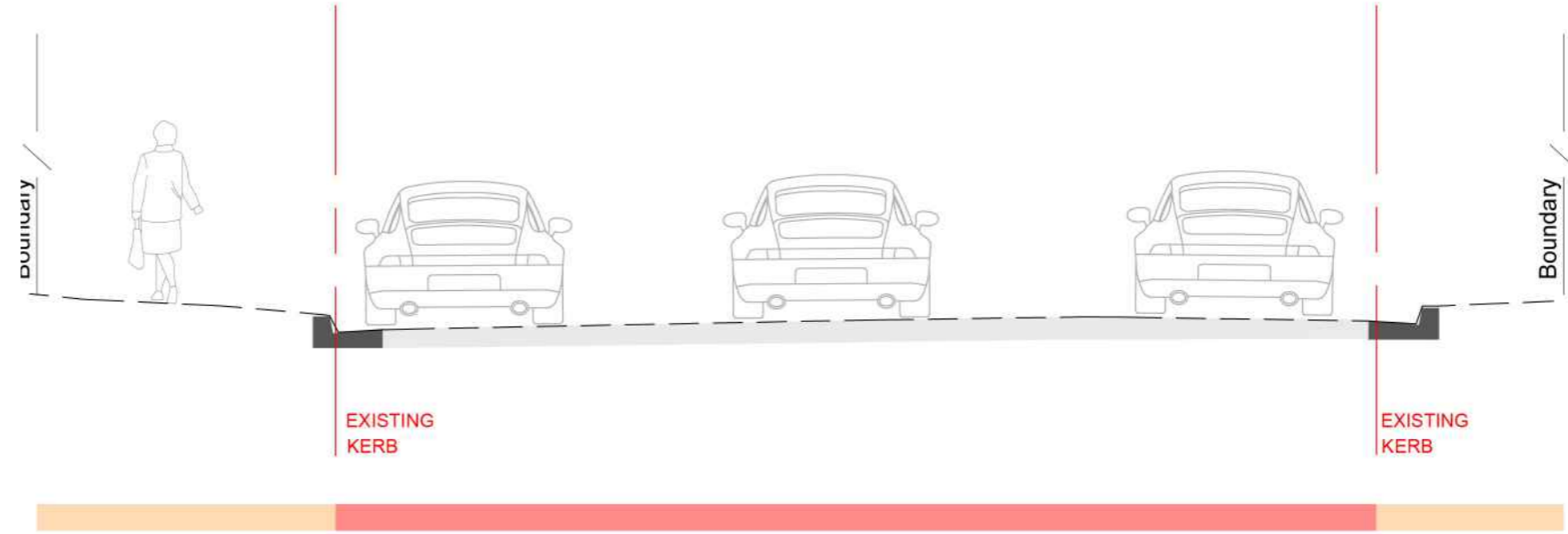
Key map



Existing



Precedent



3.3 Street typologies

3.3.16 Station Street (Interchange Connector)

Upgrades to the setting and access of Newcastle's new 'front door', where locals and visitors alike arrive, depart, and change modes.

Key Moves:

- Dedicated two-way cycleway along north side on Station
- New planted verge along south side of Station
- Onward cycle connections on Charles St in east and Railway Lane in west
- Accessible parking by station maintained



KEY

Surface treatment

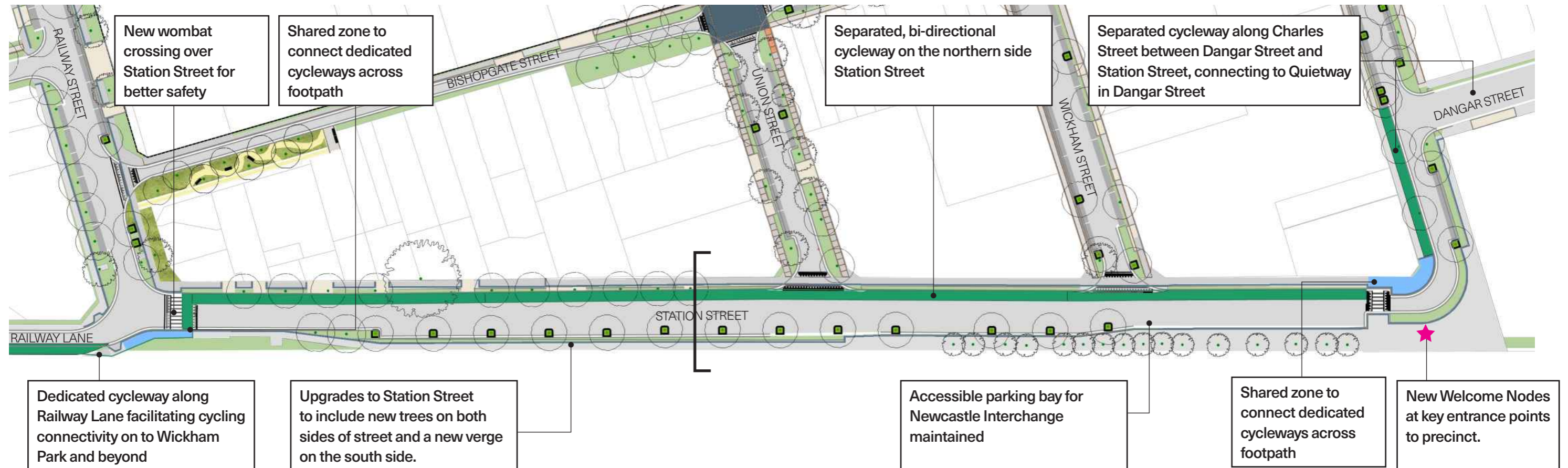
- Carriageway
- Parking
- Verge planting
- Raised intersection paving
- Union Street heritage brick paving
- Union Street standard paving
- Other paving typology with concrete infill and trim material as per paving typology
- Driveway
- Deconstructed granite path
- Cycleway
- Shared zone
- Private property

Street furniture

- Interpretation Node

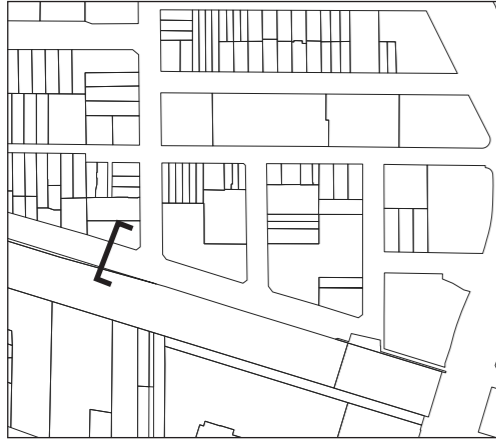
Trees and associated elements

- Tree grate
- Passively irrigated tree pits
- Existing small tree
- Existing medium tree
- Proposed small tree
- Proposed medium tree

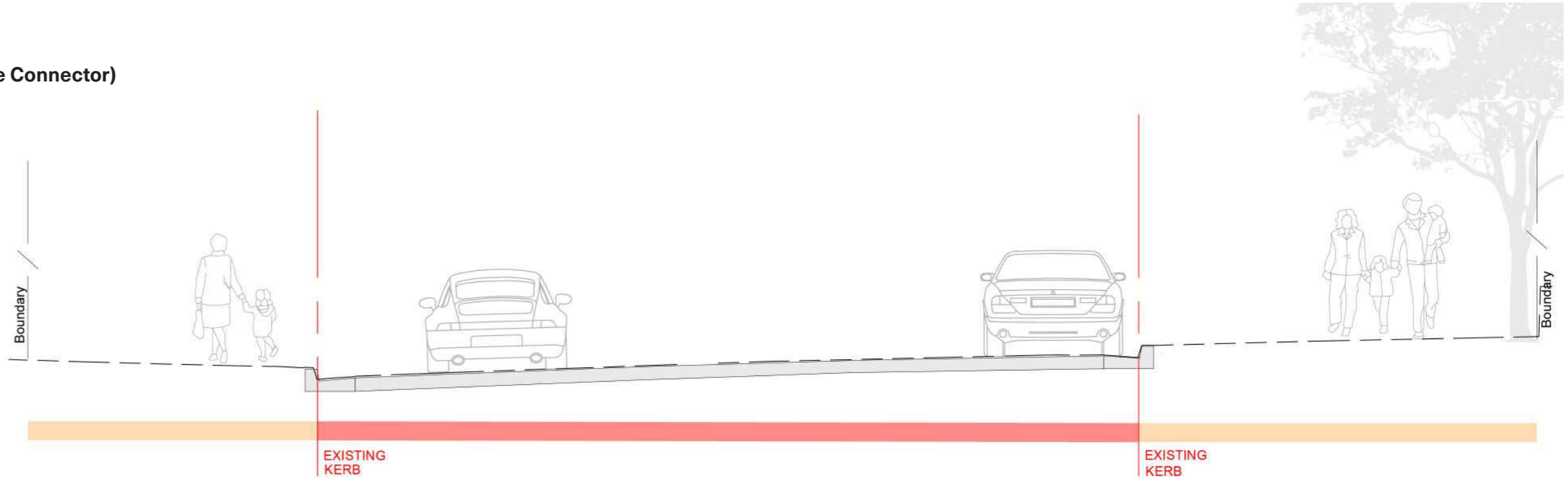


3.3 Street typologies

3.3.17 Station Street (Interchange Connector)



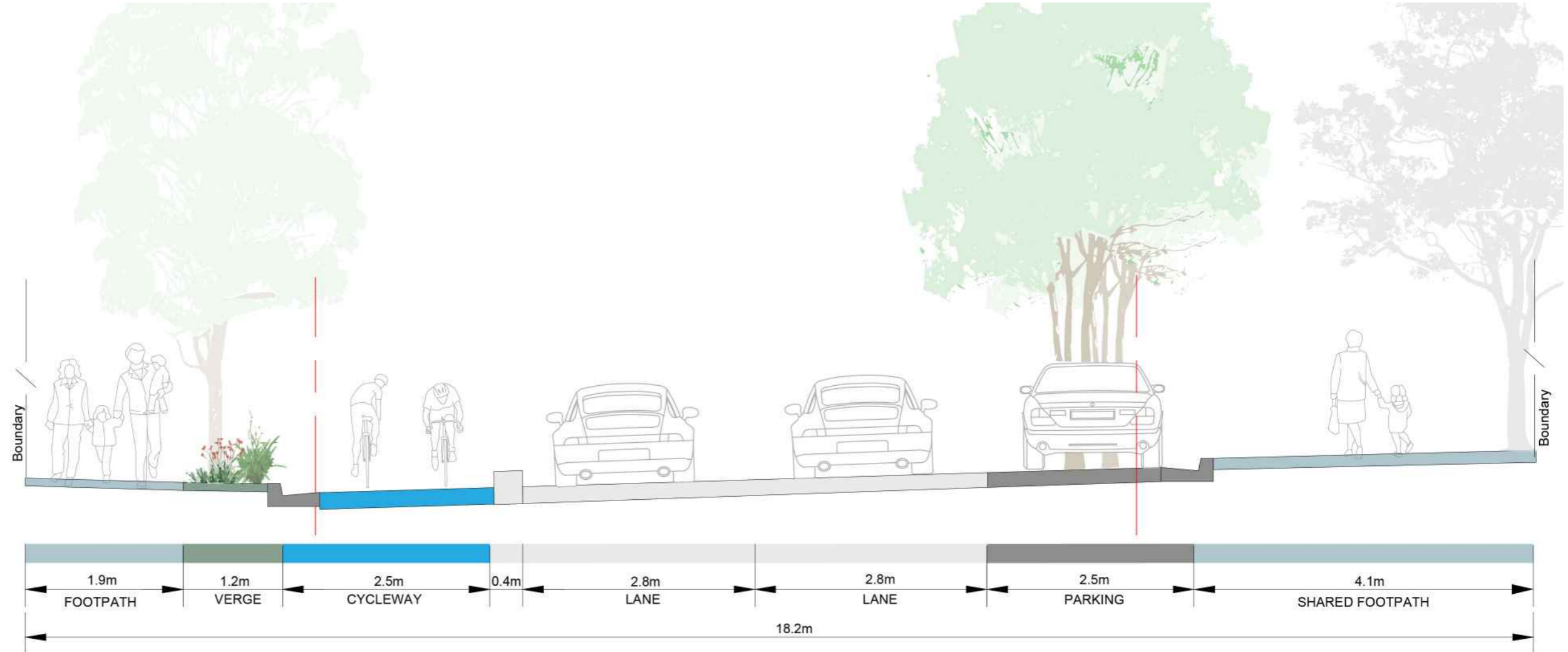
Key map



Existing



Precedent



3.3 Street typologies

3.3.18 Wide Collector Streets - Railway Street (Green Connector)

Transformed into a green street and key transport spine of Wickham, providing quality multi-modal movements

Key Moves:

- New public spaces at the corners of Throsby Street and Lindus street plus a new urban wetland and active recreation spaces at the intersection of the former railway corridor
- Traffic calming and CFTs at intersections to ensure a safe and quiet environment



KEY

Surface treatment

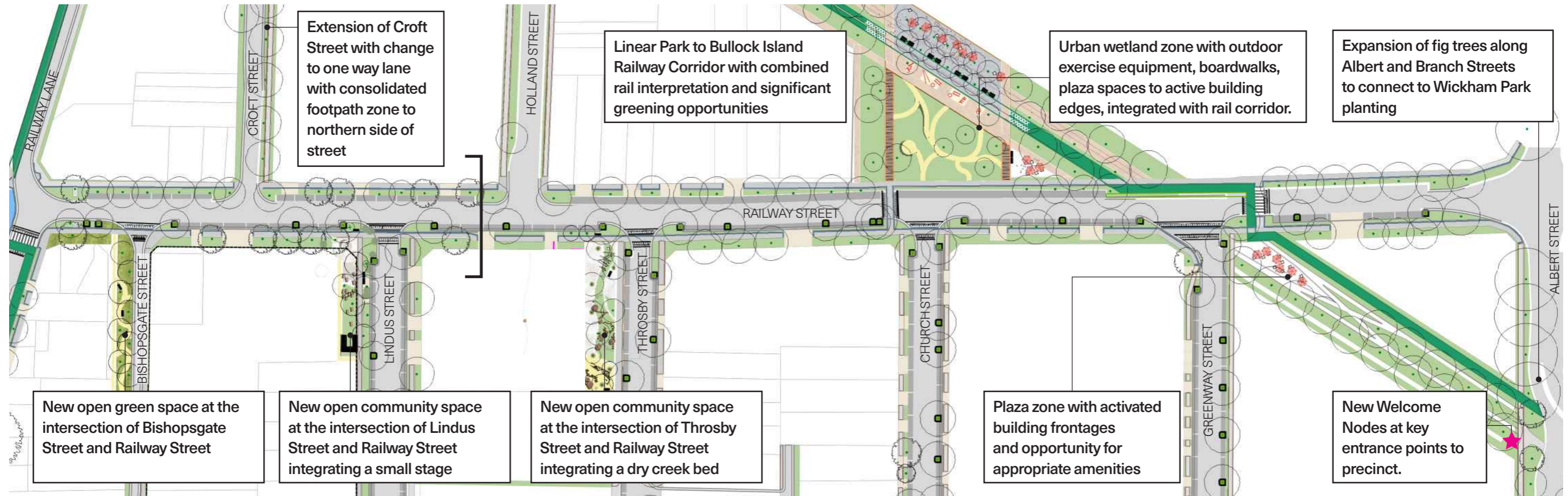
- Carriageway
- Parking
- Verge planting
- Union Street heritage brick paving
- Union Street standard paving
- Other paving typology with concrete infill and trim material as per paving typology
- Driveway
- Deconstructed granite path
- Cycleway
- Shared zone
- Private property

Street furniture

- Interpretation Node

Trees and associated elements

- Tree grate
- Passively irrigated tree pits
- Existing small tree
- Existing medium tree
- Proposed small tree
- Proposed medium tree

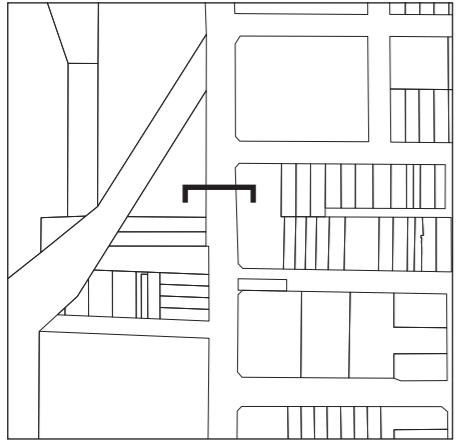


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DATE 11.12.2023

3.3 Street typologies

3.3.19 Wide Collector Streets - Railway Street (Green Connector)



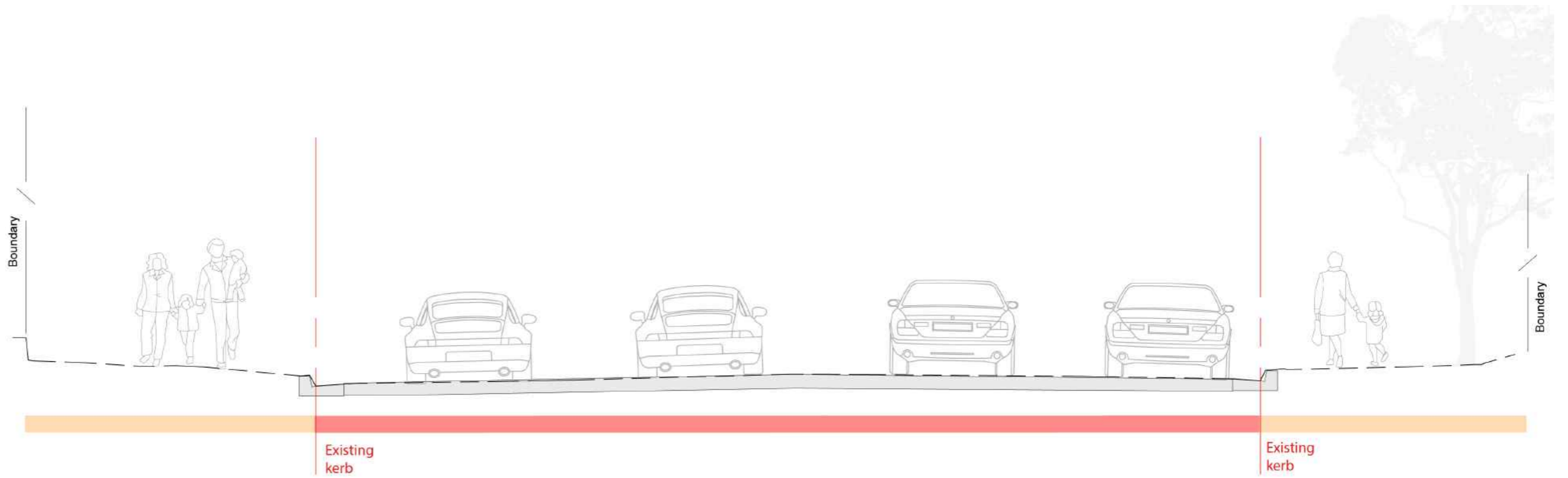
Key map



Existing



Precedent



3.3 Street typologies

3.3.20 Local Collector Streets - Throsby Street (Village Activator)

Overview

A dynamic and vibrant east-west corridor, with upgrades to provide amenity nodes, integrated public art and interpretation that celebrate place features.

Key Moves:

- Brick trim with standard concrete infill panels
- Full width footpaths in line with Throsby's important and vibrant role as Village Activator
- Raised intersection with Union Street at Wickham's very centre
- New urban activation zone integrating a dry creek and wild play elements at the intersection with Railway Street



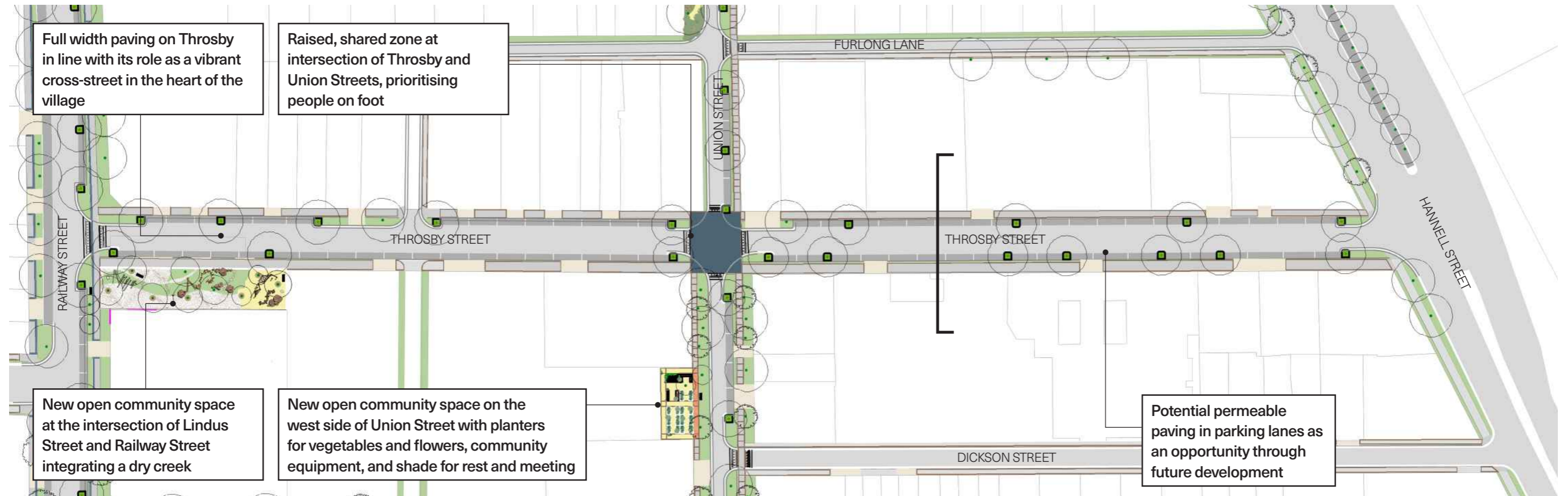
KEY

Surface treatment

- Carriageway
- Parking
- Verge planting
- Raised intersection paving
- Union Street heritage brick paving
- Union Street standard paving
- Other paving typology with concrete infill and trim material as per paving typology
- Driveway
- Deconstructed granite path
- Cycleway
- Shared zone
- Private property

Trees and associated elements

- Tree grate
- Passively irrigated tree pits
- Existing small tree
- Existing medium tree
- Proposed small tree
- Proposed medium tree



Full width paving on Throsby in line with its role as a vibrant cross-street in the heart of the village

Raised, shared zone at intersection of Throsby and Union Streets, prioritising people on foot

New open community space at the intersection of Lindus Street and Railway Street integrating a dry creek

New open community space on the west side of Union Street with planters for vegetables and flowers, community equipment, and shade for rest and meeting

Potential permeable paving in parking lanes as an opportunity through future development

SCALE 1:1000@A3 0m 25m 50m

DATE 11.12.2023

3.3 Street typologies

3.3.21 Local Collector Streets - Throbsy Street (Village Activator)



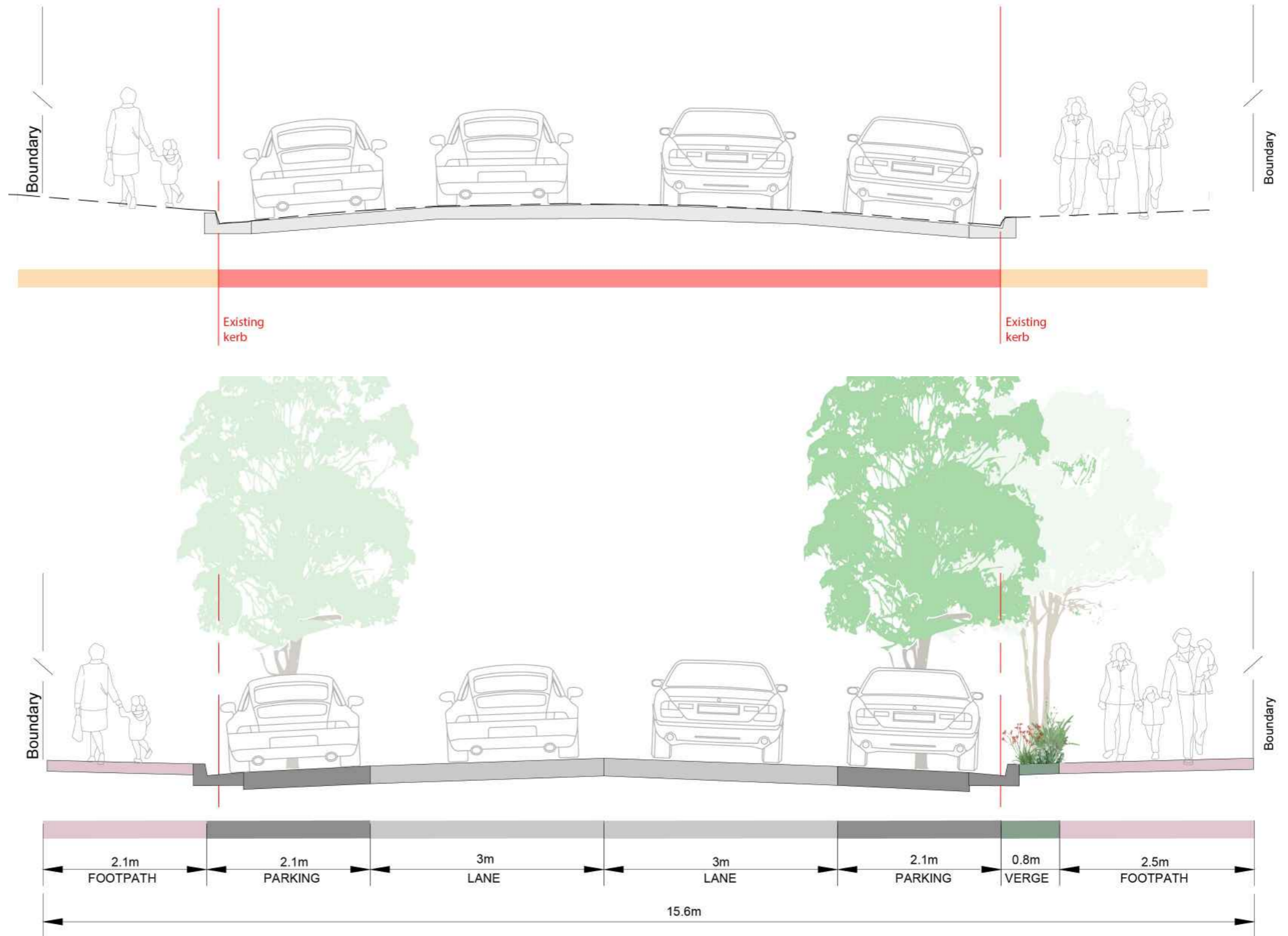
Key map



Existing



Precedent



3.3 Street typologies

3.3.22 Local Streets and Lanes - One-way

Key Moves:

- Changes to traffic patterns and upgrades to protect the closeknit, characterful and quiet network of local streets
- Careful balance between footpath width, existing constraints, and verge planting

Applicable streets:

- Furlong Lane & Extension
- Dickson Street
- Grey Street
- Bishopsgate Street between Railway Street and Charles Street
- Charles Street
- Railway Lane
- Maitland Road Extension
- New Street between Railway Lane and Holland Street



KEY

Surface treatment

- Carriageway
- Parking (Permeable Paving)
- Verge planting
- Raised intersection paving
- Union Street heritage brick paving
- Union Street standard paving
- Other paving typology with concrete infill and trim material as per paving typology
- Driveway
- Cycleway
- Shared zone
- Private property

Street furniture

- Interpretation Node

Trees and associated elements

- Tree grate
- Passively irrigated tree pits
- Existing small tree
- Existing medium tree
- Proposed small tree
- Proposed medium tree



SCALE 1:500@A3 0m 12.5m 25m

DATE 11.12.2023

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3.3 Street typologies

3.3.23 Local Streets and Lanes - One-way



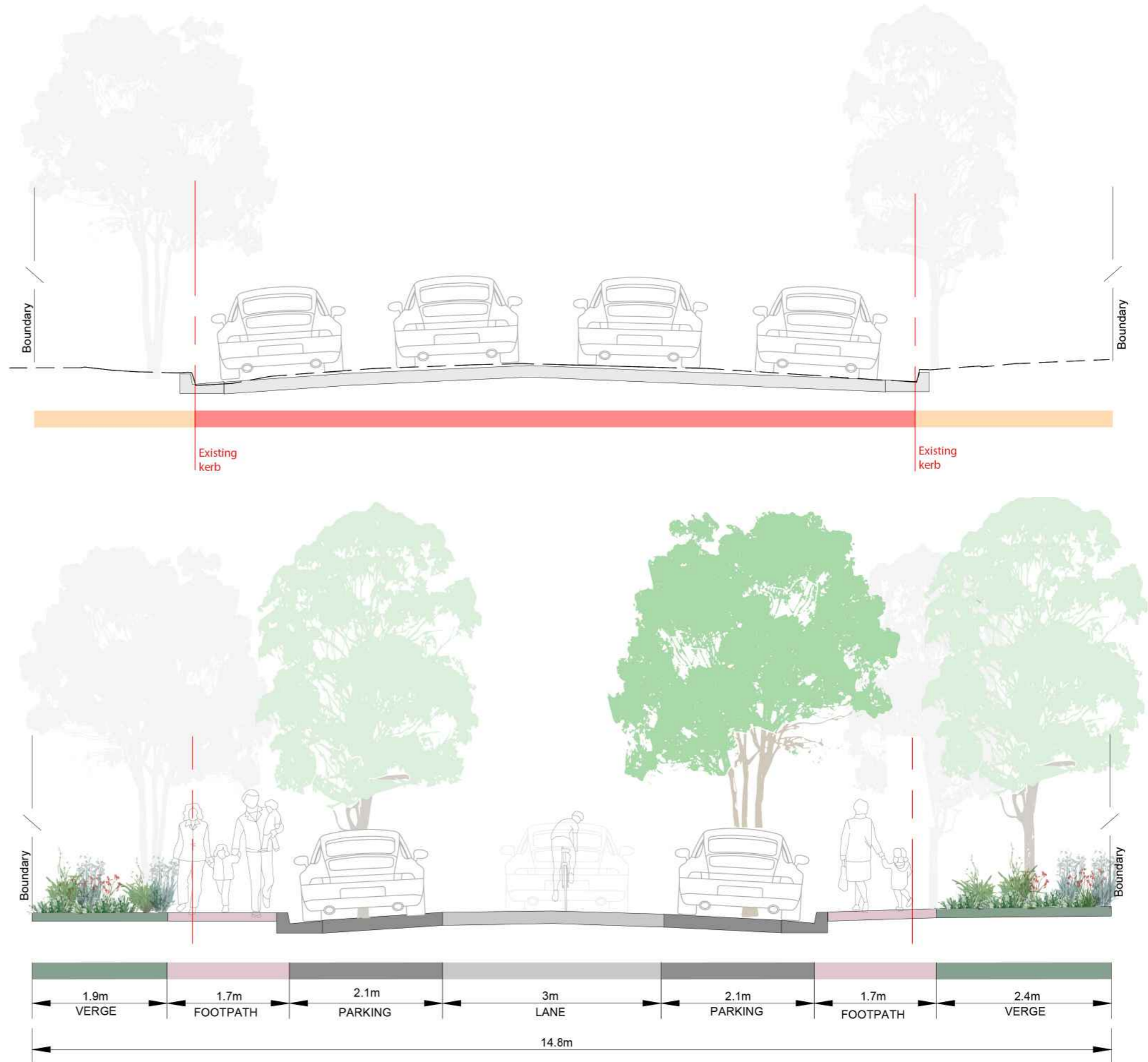
Key map



Existing

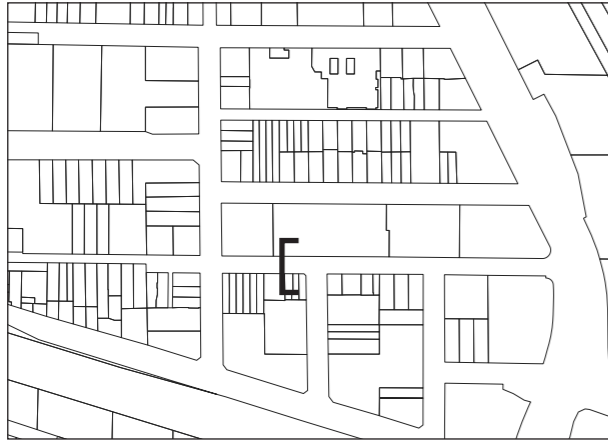


Precedent



3.3 Street typologies

3.3.24 Local Streets and Lanes - One-way



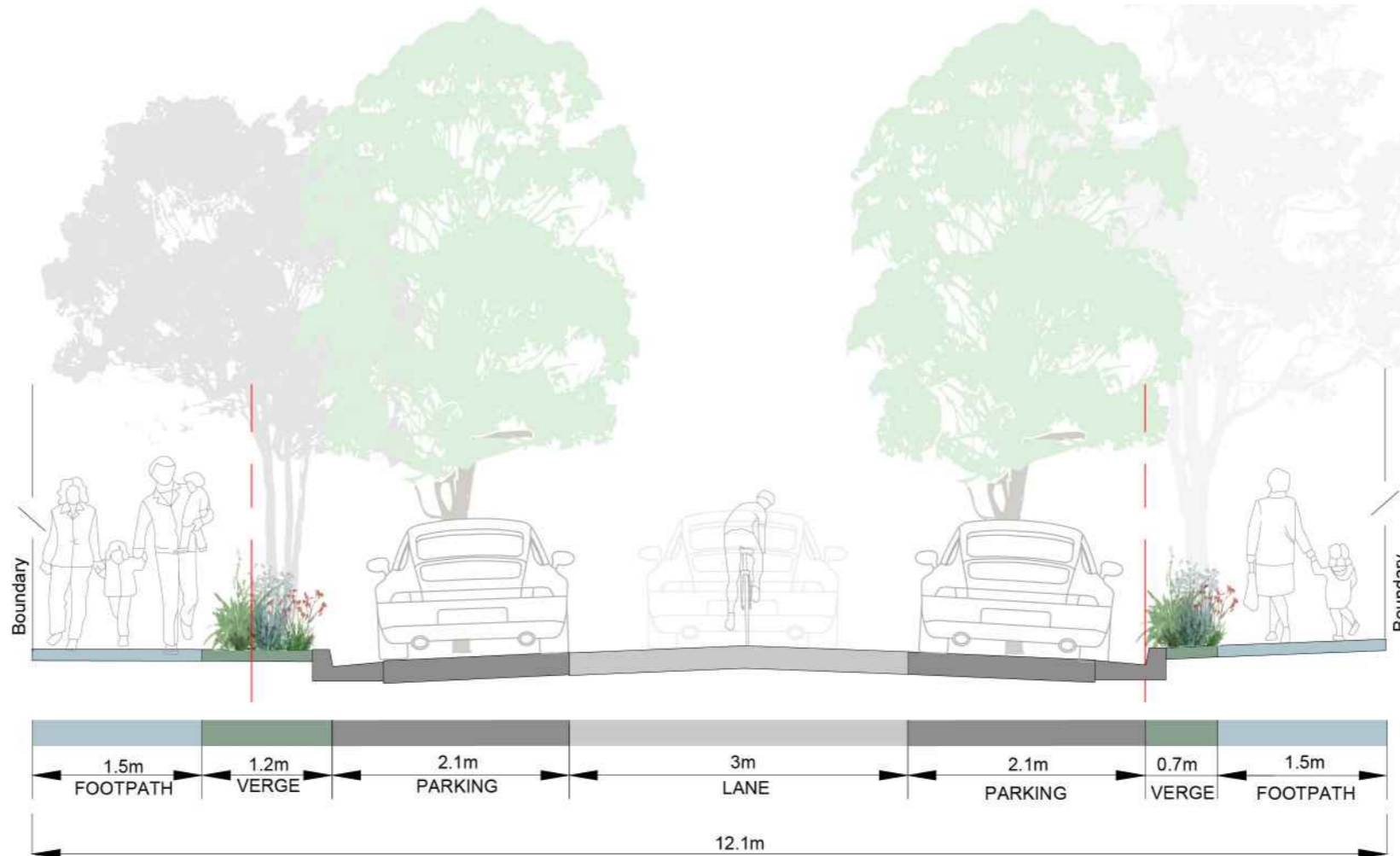
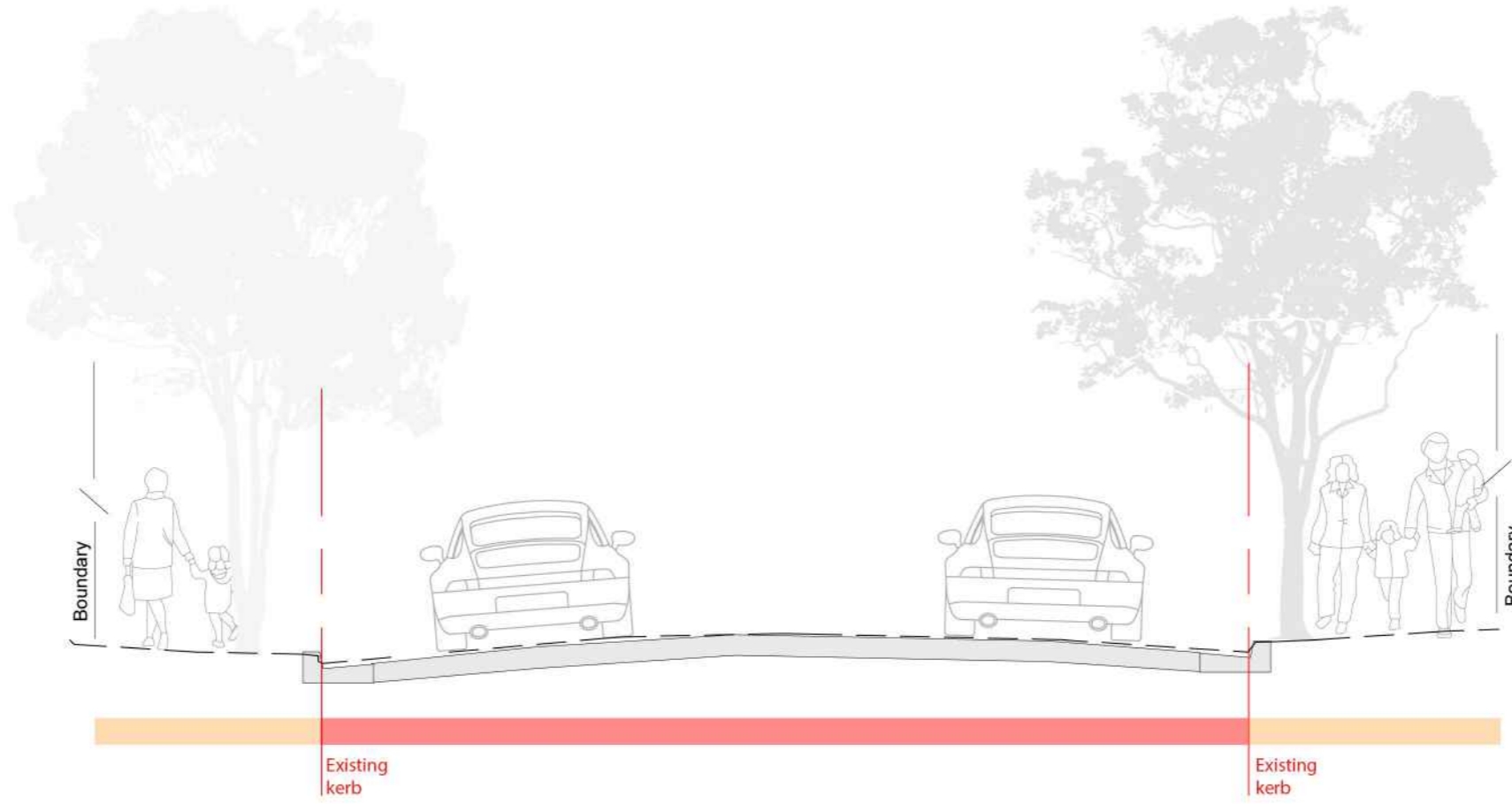
Key map



Existing



Precedent



3.3 Street typologies

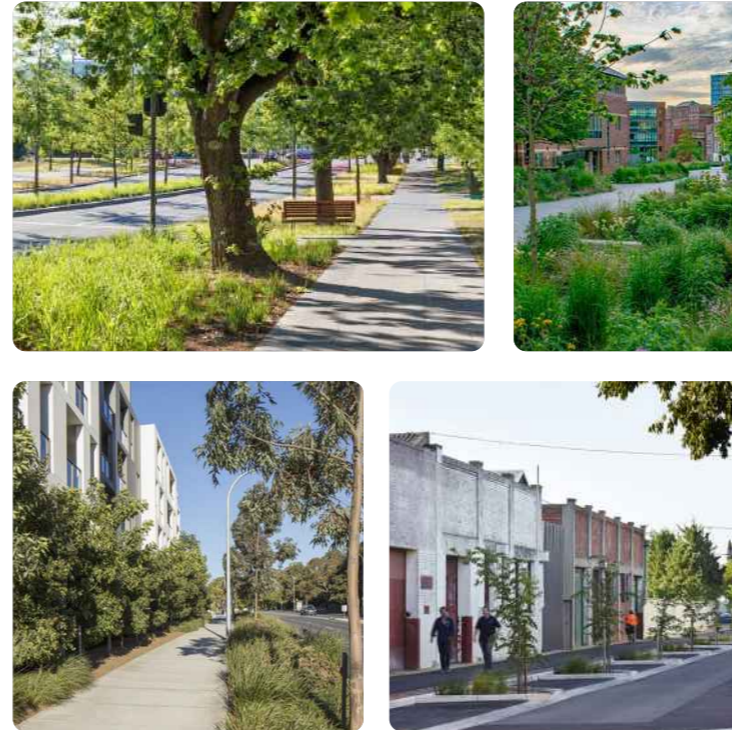
3.3.25 Local Streets and Lanes - Two-way

Key Moves:

- Changes to traffic patterns and upgrades to protect the closeknit, characterful and quiet network of local streets
- Careful balance between footpath width, existing constraints, and verge planting

Applicable streets:

- Lindus Street
- Greenway Street
- Church Street
- Foundary Street
- Wickham Street
- Bishopsgate Street (east of Charles Street)
- Holland Street
- Albert Street (east of Branch Street)



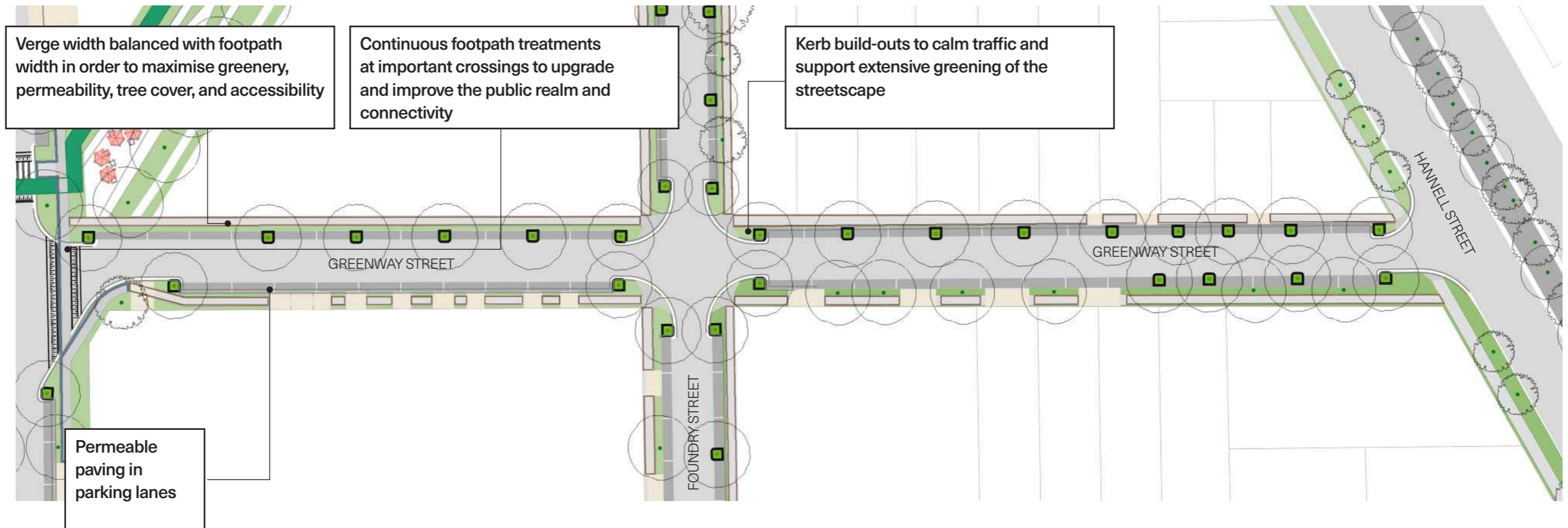
KEY

Surface treatment

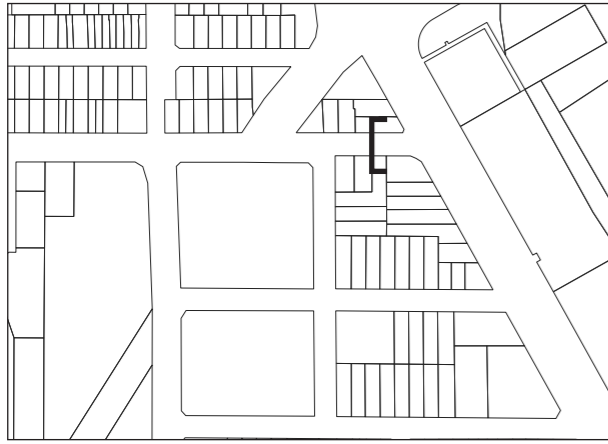
- Carriageway
- Parking (Permeable Paving)
- Verge planting
- Raised intersection paving
- Union Street heritage brick paving
- Union Street standard paving
- Other paving typology with concrete infill and trim material as per paving typology
- Driveway
- Cycleway
- Shared zone
- Private property

Trees and associated elements

- Tree grate
- Passively irrigated tree pits
- Existing small tree
- Existing medium tree
- Proposed small tree
- Proposed medium tree



3.3 Street typologies



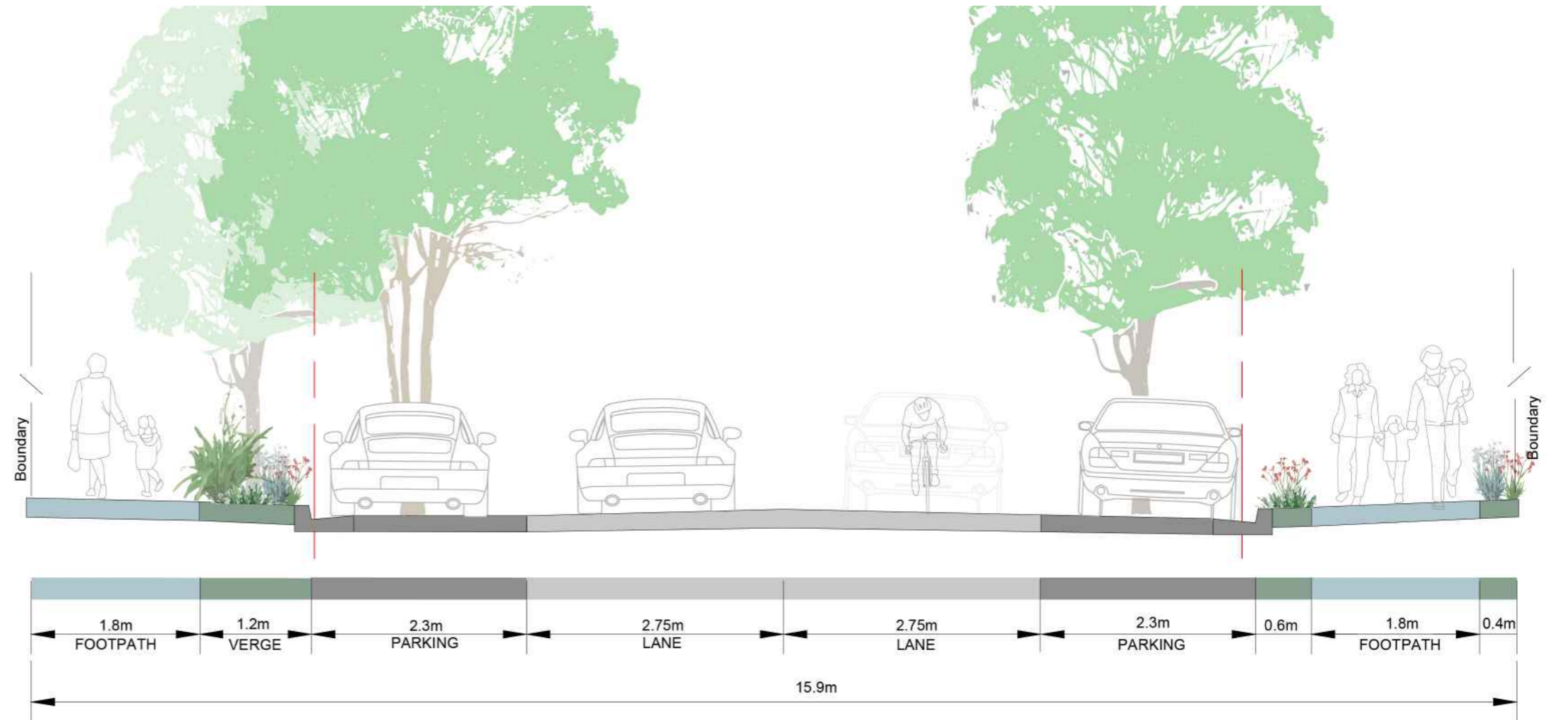
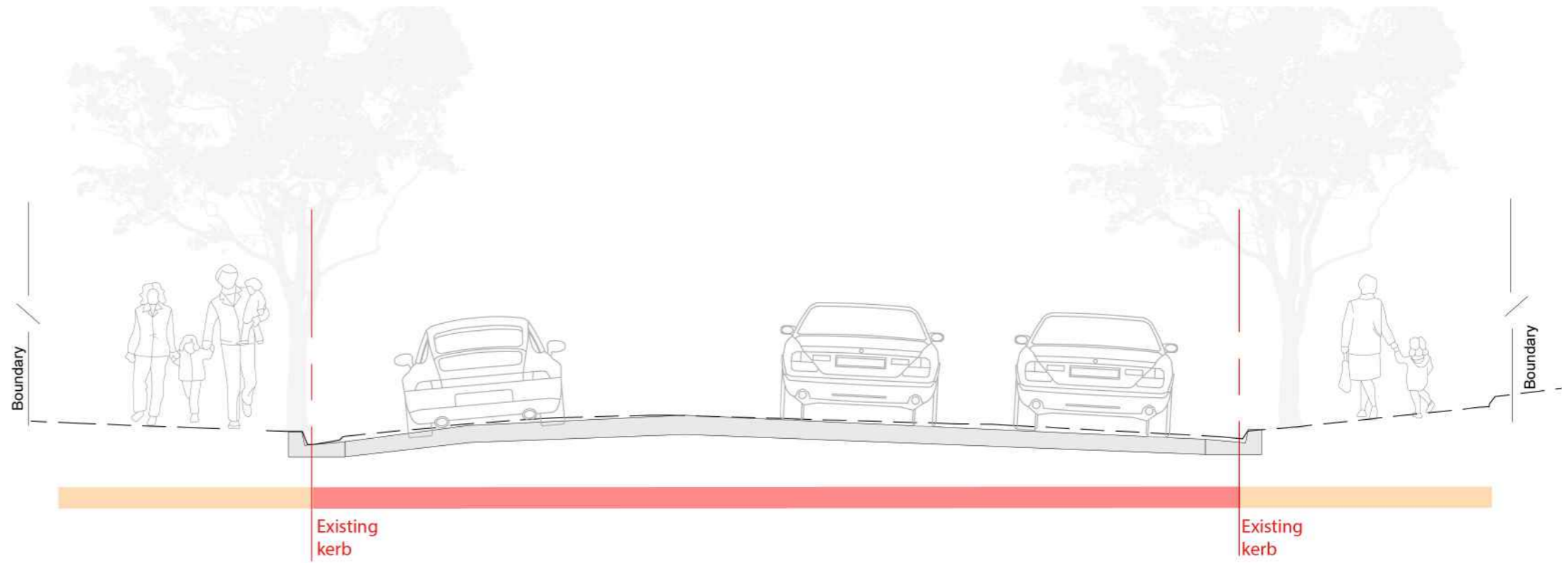
Key map



Existing



Precedent



3.4 Key Public Domain Spaces

This PDP provides for the concept design of a number of key public domain spaces. These concept designs are driven by the Principles we have developed to best respond to the Wickham Master Plan and our guiding Place Themes. While individually unique, these spaces have been considered as parts of whole, working to deliver for all of Wickham.

These spaces will:

- Provide amenity for the community, including play, outdoor recreation and exercise, places for rest, gathering, and socialising
- Contribute to the greening strategy, increasing canopy cover and reducing the UHI effect
- Provide opportunities for WSUD
- Provide opportunities to celebrate both Aboriginal living culture and European heritage
- Celebrate the stories that make Wickham special

3.4.1 Former Bullock Island Railway corridor

This space will be major new green corridor set within the historic former Bullock Island Railway corridor - an heritage-listed with an important part in the history of the suburb.

This PDP's concept design for the corridor provides for an active transport link between Wickham's north and southwest, as well as from east-west journeys via Church street. It imagines an improved and sympathetic setting for the heritage railway and an enhanced connection to Wickham Park.

3.4.2 The Wetland

Attached to the former railway corridor is a new urban wetland and outdoor exercise and recreation facilities. This space provides an ecological habitat that recalls the historic wetlands of the area and offers water detention, which can mitigate the effects of surface flooding. Saltmarsh planting is interwoven by winding paths, while broader boardwalks cross the wetland to the north and south, providing more direct connections through the former railway corridor.

Outside exercise equipment is arranged in a series of linear green spaces to the west of the wetlands, providing free and easy access to healthy activity in a rich and green setting.

3.4.3 Corridor North

Where the former railway corridor continues towards Branch Street on the east side of Railway Street, this space can continue the interpretation of the former railway

lines. At the south-west corner of this space, there is an opportunity for a plaza that would face the urban activation zones on the opposite corner, providing a vibrant and holistic urban environment.

3.4.4 Bishopsgate Green

This is a new, open green space at the intersection of Railway and Bishopsgate. The space provides for new trees and understorey planting, weaved together by a simple winding path, as well as a turf area and seating - a place that is amenable to all the community and dog-friendly.

3.4.5 Throsby Green

This new space at the intersection of Railway Street and Throsby provides for play, rest, and shade integrating an ephemeral creek. Play equipment is interwoven with the creek bed itself, as well as in a dedicated area to the east of the site, away from the busyness of Railway.

3.4.6 Lindus Green

This new space at the intersection of Lindus Street and Railway Street, provides for play, rest, and shade. The space features a small, permanent stage for impromptu performances, formal and informal, while a mixed surface of brick paving and turf underlies movable public deckchairs and ample permanent seating.

3.4.7 Wickham Waterfront

Water is key to the life of Wickham and is a guiding Principle of this PDP. Accordingly, the waterfront promenade is an key public domain space. This PDP provides for the upgrade of the waterfront's materiality to continue the works undertaken by the HCCDC at Honeysuckle to the south.

3.4.8 Union Street Green

At the northern end of Union Street, existing conditions make an accessible footpath on the north-westernmost block unviable. This PDP therefore includes a concept design for a new green space full of trees and understorey planting that is dog-friendly and contributes to the cooling, green cover of Wickham's green spine.

3.4.9 Union Street community garden

Midway along Union Street is a new community garden. This garden features ample raised planters for vegetables and flowers, storage for communal equipment, bins for composting and mulch, bee hives, and seating.

The specifics of each space are detailed in the following pages.

3.4 Key Public Domain Spaces



This overview map represents the locations of the urban activation zones of the PDP. These concept designs are driven by the Principles we have developed to best respond to the Wickham Master Plan and our guiding Place Themes. While individually unique, these spaces have been considered as parts of whole, working to deliver for all of Wickham.

Upgrades to Wickham Park are part of a separate master plan to be undertaken by City of Newcastle. Upgrades to Tree of Knowledge Park are being undertaken by the Honeysuckle Development Corporate and fall outside the scope of the Wickham PDP.

- KEY**
- Surface treatment**
- Carriageway
 - Raised Cobbled Road Surface
 - Parking (Permeable Paving)
 - Verge planting
 - Continuous footpath treatment
 - Union Street paving
 - Village Street paving
 - Emerging Industries paving
 - Civic Streets paving
 - Park edge paving
 - Paving improvements subject to plans beyond this PDP's scope
 - Private property
 - Cycleway
 - Driveway
 - Works as per masterplans beyond Wickham PDP scope
 - Bus stop
 - Passively irrigated tree pits
 - Proposed trees
 - Existing trees

1:3000@A3 0m 75m 150m

0m 50m 100m

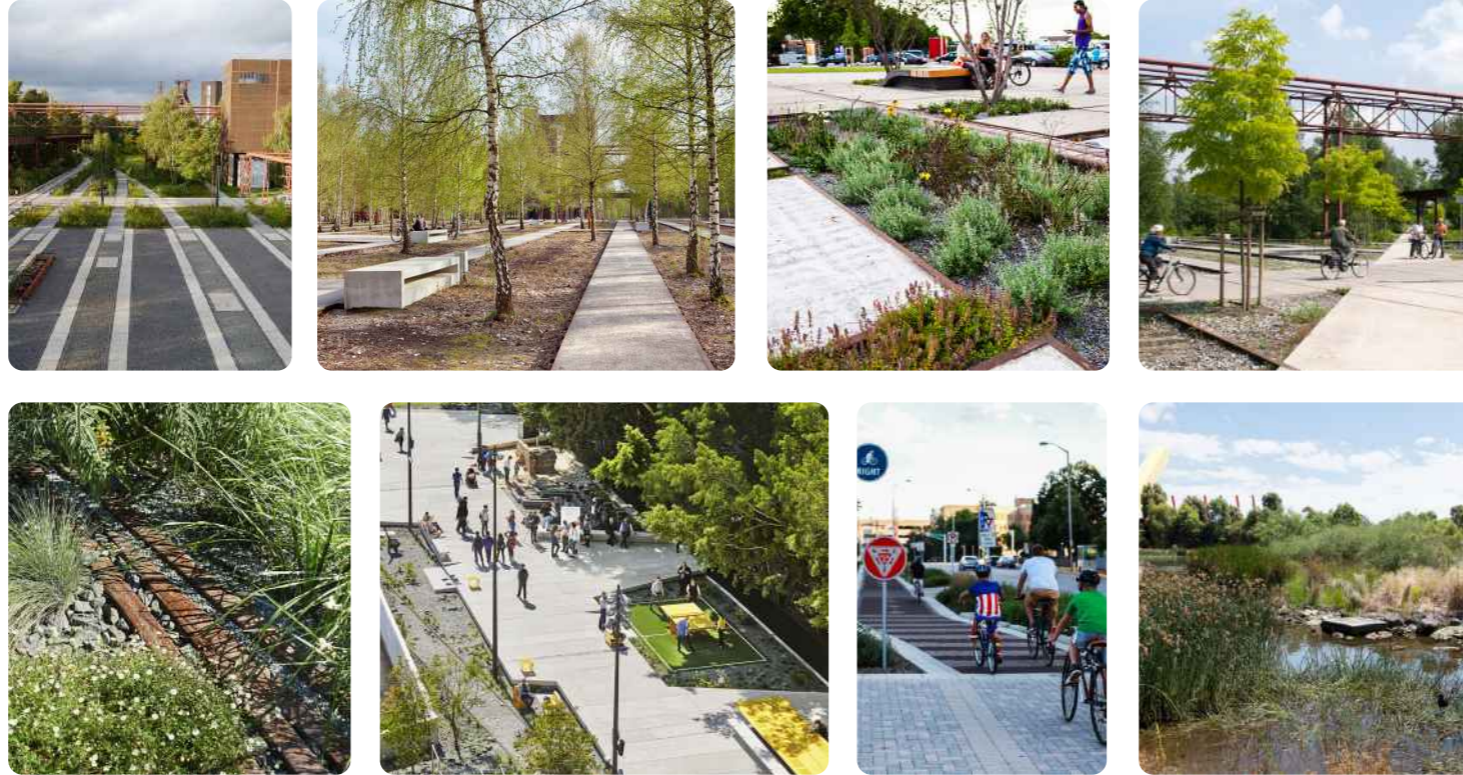
3.4 Key Public Domain Spaces

3.4.10 Bullock Island Railway Corridor

A major new green corridor, providing an active transport link between Wickham's north and southwest, as well as from east-west journeys via Church street, an improved and sympathetic setting for the heritage railway, and an enhanced connection to Wickham Park.

Key Moves:

- A new urban wetland at the junction of the corridor and Railway Street
- Equipment for outdoor recreation and exercise
- Celebration of railway heritage by revealing and enhancing the setting of the old rail tracks and using them to structure paths
- Separated bi-directional cycleway



KEY

Surface treatment

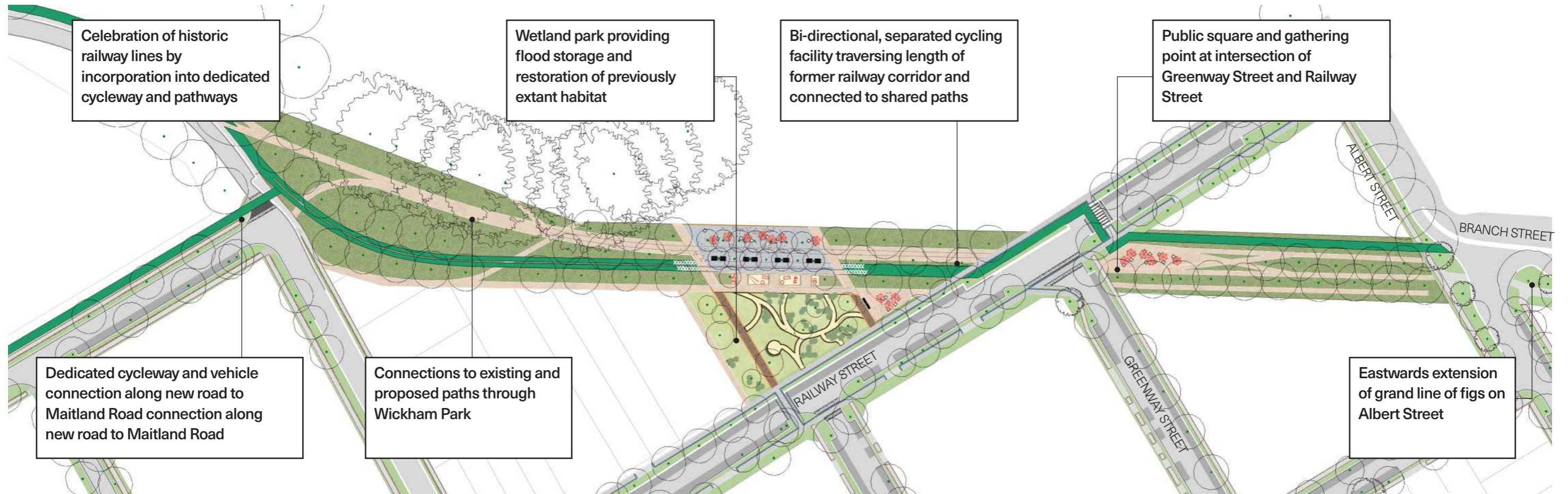
- Carriageway
- Parking
- Verge planting
- Raised intersection paving
- Union Street heritage brick paving
- Union Street standard paving
- Other paving typology with concrete infill and trim material as per paving typology
- Driveway
- Deconstructed granite path
- Cycleway
- Shared zone
- Private property

Street furniture

- Interpretation Node

Trees and associated elements

- Tree grate
- Passively irrigated tree pits
- Existing medium tree
- Existing large tree
- Proposed medium tree
- Proposed large tree



SCALE 1:1250@A3 0m 25m 50m

DATE 11.12.2023

3.4 Key Public Domain Spaces

3.4.11 Bullock Island Railway Corridor - urban wetland

Overview

A new urban wetland park and promenade that acts as the interface between the upgraded and enhanced former Bullock Island Railway Corridor, Wickham Park, new developments on the west, and the public realm of Railway Street. This space will provide outdoor exercise equipment in a well planted and carefully designed setting that strengthens biodiversity and detains water.

Key moves

- Urban wetland criss-crossed by paths and boardwalks
- Outdoor exercise equipment
- Large shared zone between urban wetland and interface of develop on west
- Bi-directional separated cycle path set in historic railway tracks
- Extensive tree planting that connects and expands existing canopy of Wickham Park



Ample spill-out space for retail and outdoor eating and drinking

Outdoor exercise equipment areas running parallel to corridor promenades

Wide, wooden boardwalk connecting Church Street to railway corridor across the wetland

Decorative paths winding through the wetland

Urban wetland with capacity for detaining stormwater during rain events

Shared zone with heritage rails indicating cycleway embedded in surface

Public plaza to the north of urban wetland, with permanent seating

Bi-directional cycling facility running along the length of the former railway corridor

RAILWAY STREET

SCALE 1:500@A3 0m 12.5m 25m

DATE 11.12.2023

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Artist's impression of Railway Street once PDP initiatives have been fully implemented.

3.4 Key Public Domain Spaces

3.4.12 52 Throsby Street (Corner of Railway and Throsby Street)

Overview

A new public space at the intersection of Throsby Street and Railway Street, with provision for play, rest, and shade integrating an ephemeral creek

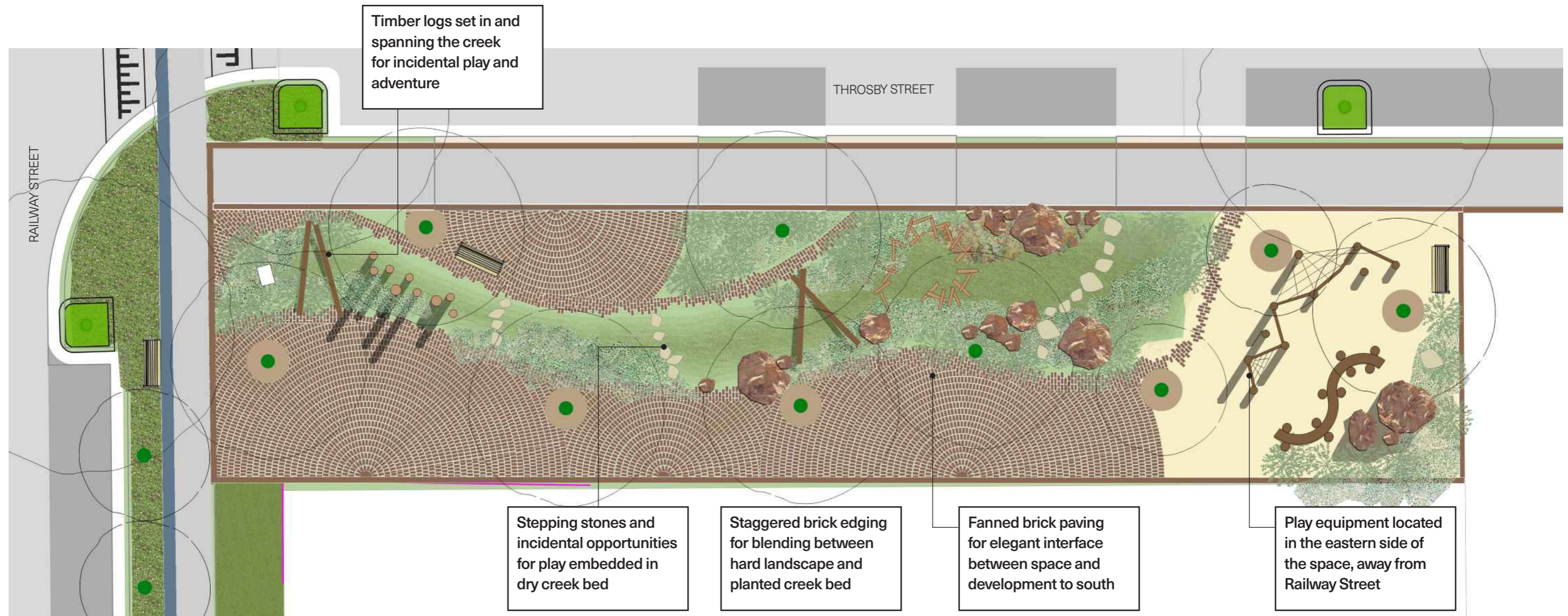
Masterplan vision for this space:

- Category: Public domain activation
- Approx area: 440m²

Key moves

- Ephemeral creek bed integrated into water sensitive urban design elements

- Incidental, natural play in the creek bed as well as in a dedicated space in the east, away from the main road
- Stepping stones and boulders
- Staggered brick trim facing the creek, providing coherence and continuity of public domain look and feel
- Brick paving along the interface with future development for ease of integration



SCALE 1:150@A3 0m 5m 10m

DATE 11.12.2023

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3.4 Key Public Domain Spaces

3.4.13 “Wickham Green” 29 Bishopsgate Street (Corner of Railway and Lindus Street)

Overview

A new public space at the intersection of Lindus Street and Railway Street, with provision for play, rest, and shade integrating a small stage for performances

Masterplan vision for this space:

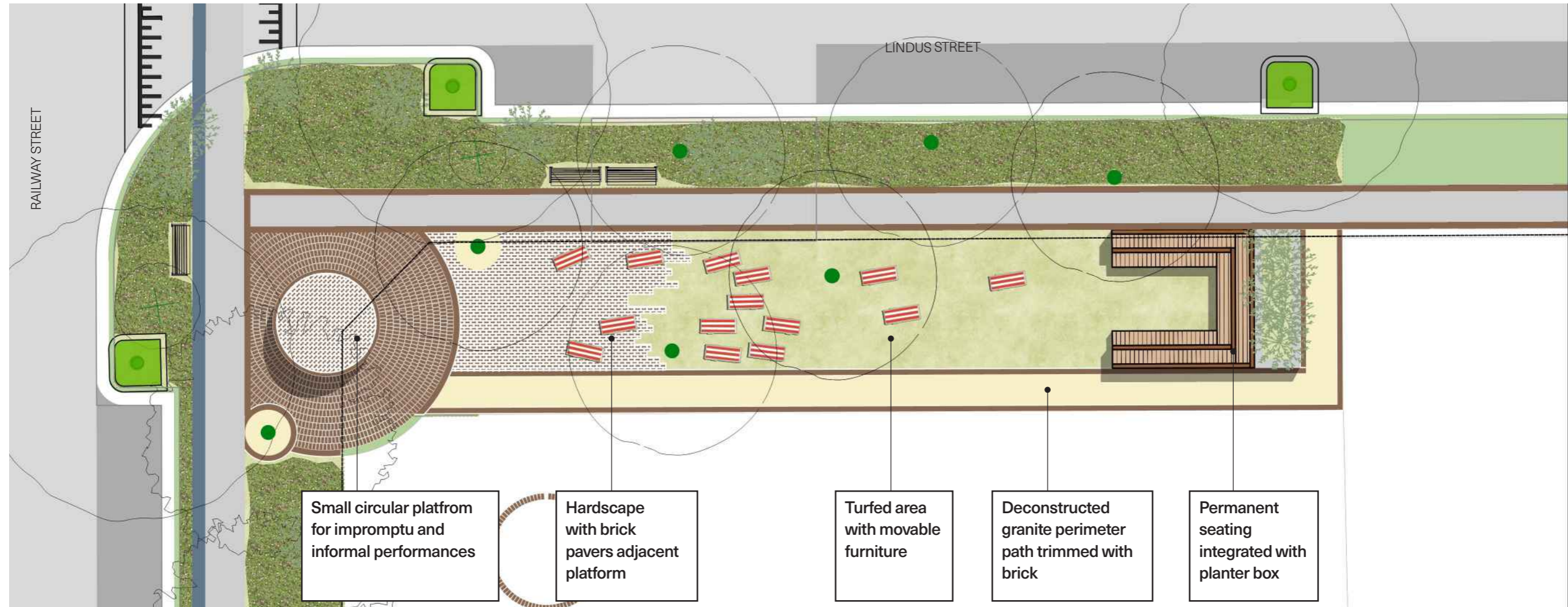
- Approx area: 210m²

Key moves

- Paved, rased podium on corner, signposting the area and maximising visibility across public realm
- Moveable and robust outdoor furniture such as

deckchairs that allow the the space to work in a variety to configurations

- Ample integrated seating on the eastern side for a quieter and calm space of rest, relaxation and dwelling
- Brick trim for coherence and continuity with wider PDP spaces
- Shaded turfed area for play, recreation, and gathering
- Landscaping integrated with verge planting for maximum biodiversity and health of the Wickham-wide plant community



SCALE 1:150@A3
0m 5m 10m

DATE 11.12.2023

3.4 Key Public Domain Spaces

3.4.14 “Project 11”

Bishopsgate Street (Corner of Railway and Bishopsgate Street)

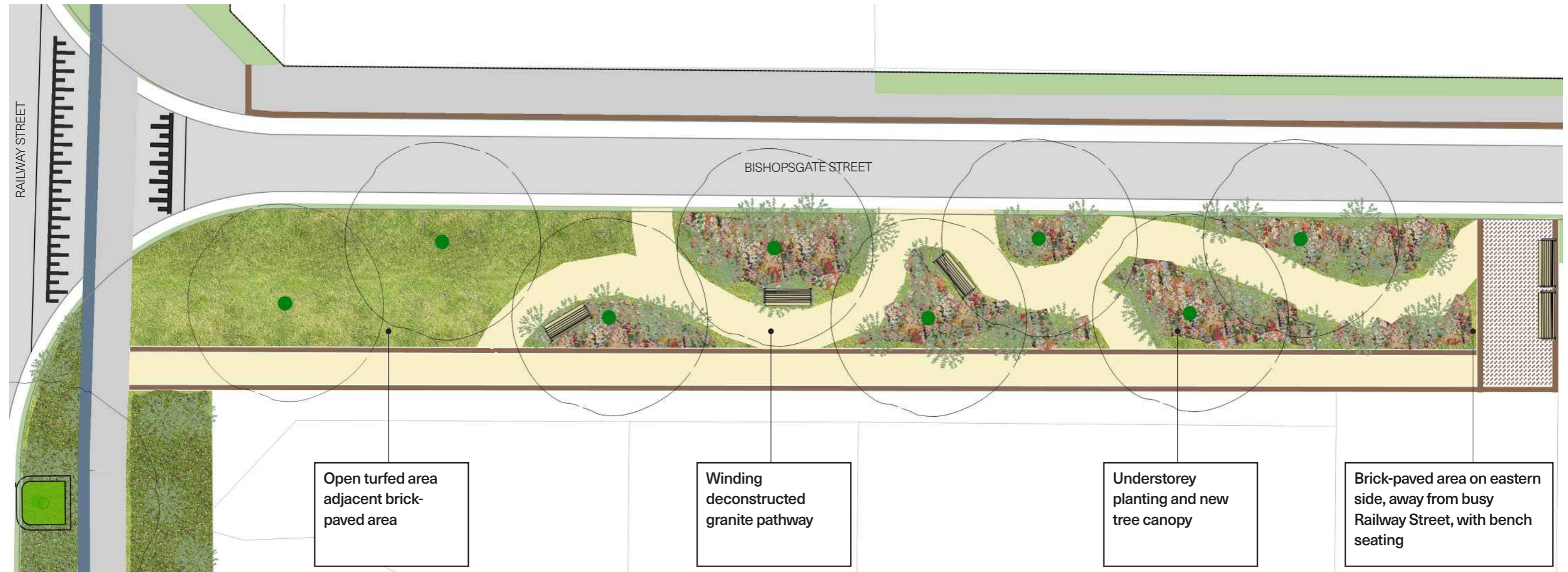
Overview

A new open public space at the intersection of Bishopsgate Street and Railway Street, a dog friendly turfed area and a winding path through lush understorey planting beneath trees.

Key moves

- Open green space for the community
- Shaded, turfed area on the western edge for dogs

- Permanent seating on the eastern side for a quieter and calm space of rest away from the busier streetscape of Railway Street
- Winding deconstructed granite paths
- Brick trim achieving palette continuity with wider PDP spaces
- Understorey planting across space integrated verge planting for maximum biodiversity and health of the Wickham-wide plant community



SCALE 1:150@A3 0m 5m 10m

DATE 11.12.2023

3.4 Key Public Domain Spaces

3.4.15 46 Union Street

Overview

A new community garden on Union Street, with planters for vegetables and flowers, communal equipment and bee hives, and seating

- Approx area: 145m²

Key moves

- Raised, irrigated planters for community veggie and herb patches
- A shed for tool and equipment storage
- Native trees for shade and fruit

- Communal beehives
- Open paved area for rest and relaxation leading off the main footpath
- Rich and layered planting along the verge providing habitat for pollinators
- Deconstructed sandstone paths trimmed with brick
- Compost and mulch bins
- Benches and tables for gathering, teaching, eating, and relaxing



3.5 Green & Blue Infrastructure

3.4.16 A Green Streets approach

This PDP adopts a “Green Streets” approach. This means that it considers Wickham’s streets as one of the most important elements in the public realm of both Wickham and the wider urban context of Newcastle.

Adopting a Green Streets approach in Wickham means prioritising the public realm experience of a street over one purely focused on traffic movement and infrastructure management. It emphasises the contribution good street design can make to the broader livability and sustainability of Newcastle, including providing pedestrian amenity, the activating of commercial and retail spaces, and locking in long-term climate change resilience.

A Green Street includes trees, low plantings and rain gardens where space allows, and prioritises pedestrian and cyclist movement over vehicles where practical and sensible. A Green Street can be considered one part of a larger ecosystem and a broader civic tree canopy.

Benefits

The benefits of a Green Streets approach include:

- The promotion of walking and cycling, which can encourage healthier habits and lifestyles
- Improved safety for pedestrians and children, through the reduction of traffic-related risk)
- The provision of shade for amenity, respite and human comfort
- Integrated storm water management (connecting into other Green Infrastructure approaches)
- Improved urban biodiversity (with appropriate species selections)
- Reinforcement and definition of the unique urban character of the city
- Assistance with navigation and wayfinding

Growing Environments

The success of a Green Streets approach lies primarily in the planning, design and implementation and maintenance of a healthy growing environment for trees and plants. This must be done within the often congested and contested spaces between property title boundaries and with the specific needs of different species of trees. Accordingly, this PDP has been the outcome of the careful observation of Wickham’s existing constraints, cadastral boundaries, and public domain assets.

The success and longevity of Green Streets in Wickham will depend on healthy soils, an adequate growing environment and oxygen supply, appropriate species selection, an understanding and optimisation of microclimate, and the provision of an adequate water supply. The healthy

establishment and maturation of trees also rely directly on the provision of adequate soil volumes – this fact has directly dictated the proposed locations of trees across the PDP.

Passive Irrigation

A Green Streets approach also champions passive drainage systems, which involve less-constructed in-ground works, at all stages and locations where possible. This part of Green Streets marks a distinction between ‘hard’ and ‘soft’ engineering approaches to storm water management. A ‘soft’ approach has potential capital cost savings with the avoidance of underground pits, pipes and other drainage infrastructure. It also provides ‘add on’ benefits over and above the core storm water management function including increased related asset lifespan. For example, adjacent pavements are less likely to be lifted by tree roots as they won’t rise to the surface looking for water. Wickham’s low-lying elevation can make this a challenge – but where possible, and appropriate, passive irrigation has been proposed.

Maintenance

As with all infrastructure systems, Green Streets require a level of maintenance (such as occasional removal of sediment build up in raingardens). However, if a system is well planned and designed, the maintenance level can be similar to a more typical grey infrastructure approach.

Planning, Placement and Character

Street trees are one of the most important organising elements of a streetscape. They help create defining zones of movement, assist with traffic calming, and provide shade for footpaths. They also tell stories and define the character of a place. In Wickham, this especially true of the Tree of Knowledge, a landmark tree – but the many existing trees across Wickham are part of its longer history as well. For all of these reasons, a Green Streets approach has therefore been made an foundational aspect of this PDP.

3.4.17 Water Sensitive Urban Design

Understanding Wickham’s relationship to water is paramount to the success of this PDP and why it is a guiding Principle of the report. In doing so, the PDP builds upon water management policy work done by City of Newcastle to date, including:

- *Newcastle 2020 Carbon and Water Management Action Plan* (2011)
- *Strategic Position for the Management of Low Lying Areas of Newcastle* (2017)
- *Newcastle City-wide Floodplain Risk Management Study and Plan* (2012).

The PDP also reflects the ambition of the Newcastle Climate Action Plan 2021-2025 to “develop and implement strategies and initiatives to tackle climate change head on”.

Accordingly, this PDP has considered water throughout its development, and provides for best practices in water conservation, the protection of water quality and ecosystem health, and integrated water resource management based across Wickham.

Wickham lies entirely within a low-lying, coastal area. While works are underway to protect the area from coastal inundation, stormwater drainage will be an ongoing challenge. It is of great strategic importance therefore that as much stormwater water as possible is intercepted, detained, and re-used before entering the stormwater system.

This PDP seeks to maximise wastewater and stormwater reuse through water-sensitive urban design (WSUD). WSUD strategies adopted as part of this PDP include:

- rain gardens and urban wetlands
- passive irrigation of trees
- careful management of water flow following upgrades to the public realm, e.g. continuous footpath treatments

Complementing this WSUD strategy is the PDP’s ambition to maximise tree and plant cover, which has the following water management benefits:

- the minimisation of impermeable surfaces across Wickham (decreasing surface water run-off)
- cooler ambient temperatures through evapotranspiration, shading, and the creation of microclimates.
- self-irrigation of trees, reducing total potable water use and increasing the health of the trees themselves

These strategies have been considered and applied to each street of Wickham per its own particular requirements and characteristics while contributing to a holistic scheme that results in a more robust and resilient system.

3.5 Green & Blue Infrastructure

3.5.1 Green & Blue Infrastructure Plan



KEY

Green Infrastructure Initiatives

- Proposed and Existing Trees
- Proposed Open Spaces
- Existing Open Spaces

Blue Infrastructure Initiatives

- Wetland
- Passively integrated tree pits

Transport

- ⓑ Bus stops



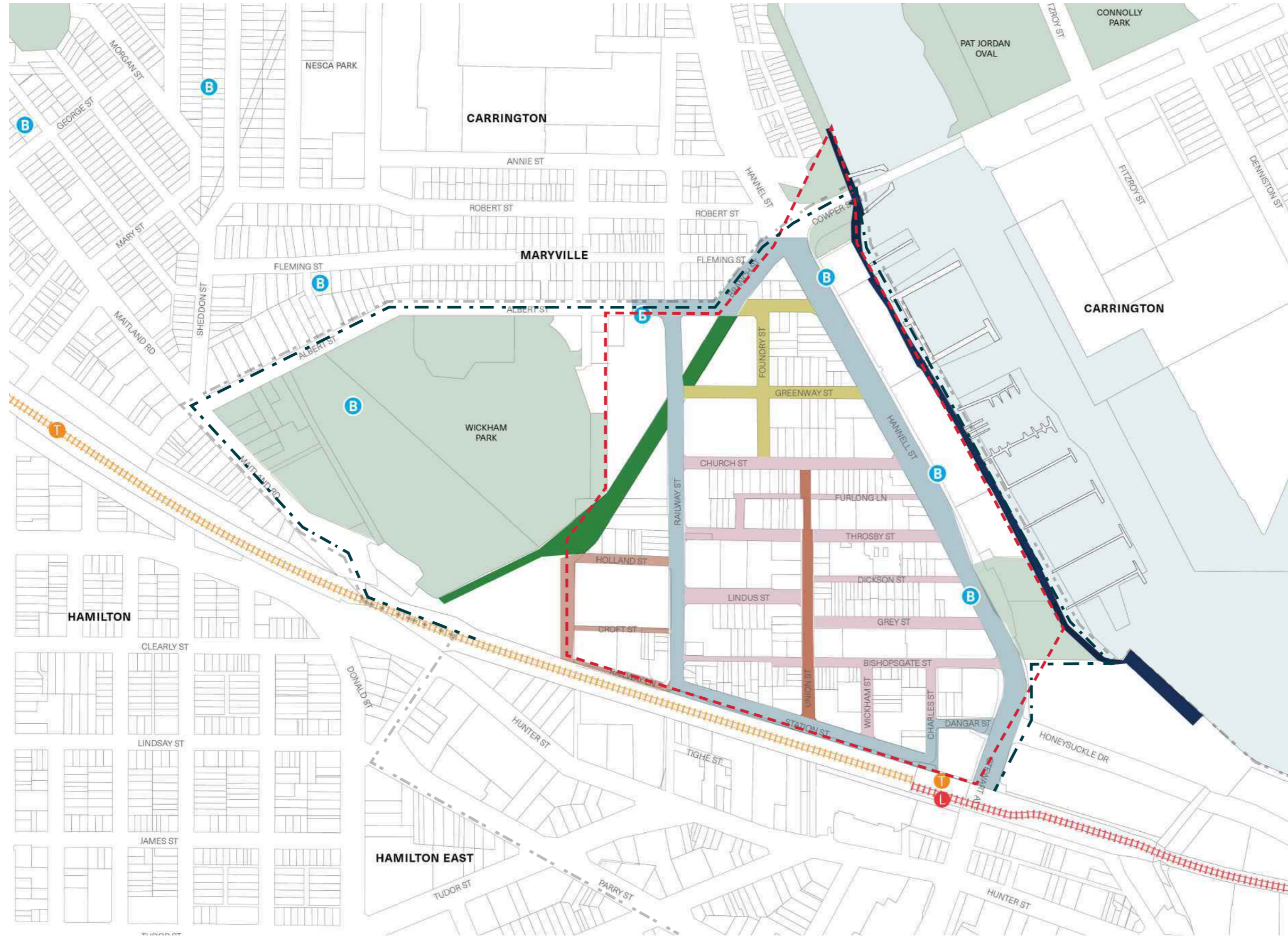
Artist's impression of Union Street once PDP initiatives have been fully implemented.

Design Elements



4.1 Materiality

4.1.1 Paving Typologies Plan



KEY

Land cover

- Green space / open space
- Surface and tidal water

Scales

Typologies

- Village Heart paving
- Emerging Industries paving
- Union Street paving
- Civic Streets paving
- Waterfront paving
- Railway Corridor paving
- Park Edge paving

Transport

- Heavy rail stop and alignment
- Light rail stop and alignment
- Bus stops

Boundaries

- Newcastle City Centre area
- Wickham Masterplan area
- PDP Focus area

Section 4 – Design Elements

4.1 Materiality

4.1.2 Paving Typology Overview

The proposed paving materials selected within the Wickham Public Domain Plan have been informed by the various features and character areas of Wickham as proposed in the Wickham Master Plan. A paving strategy is proposed which also reinforces the hierarchy of the streets within the city and the selections have had reference to the general city centre technical manual parameters. This approach offers a refined approach to bring consistency whilst allowing for some change in materials to suit the local character.

Design Approach

- Materiality to reflect character zone of the street.
- Colour and materiality to complement the palette of Wickham
- Utilise local materials where possible.

Delivery Approach

- Ensure material and design elements meet with Council standards.

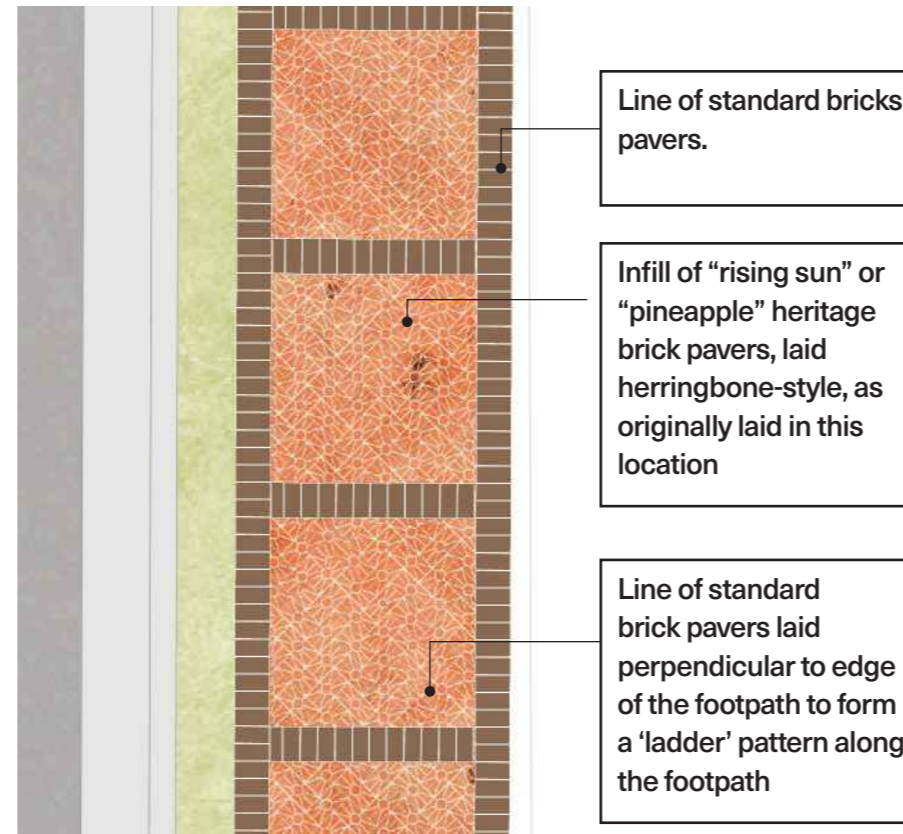
Historic bricks

An important part of Wickham's unique and historic character is the presence at certain locations of heritage brick pavers, either using the "pineapple" or "rising sun" pattern. These bricks are mostly concentrated on Union Street, but can be found in other locations across the suburb.

Union Street therefore has two varieties of paving scheme: one variety to make use of and honour the existing heritage brick pavers, especially around the intersections of Lindus Street and Grey Street, and one more standard scheme for the rest of its length. Where the bricks are found elsewhere, the heritage bricks are integrated into a variation of that paving typology.

These heritage schemes retain the heritage brick pavers in the location in which they are currently found, while enhancing their setting with a new standard brick trim.

4.1.3 Union Street Heritage Pavers

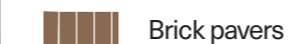


DESIGN FEATURES:

- The heritage scheme retains the heritage brick pavers in the location in which they are currently found, while enhancing their setting with a new standard brick trim, set in a 'ladder' pattern
- The ladder pattern follows the sizing and segmentation for the other paving treatments across Wickham, providing a sense of continuity and consistency throughout the suburb

COMPONENTS:

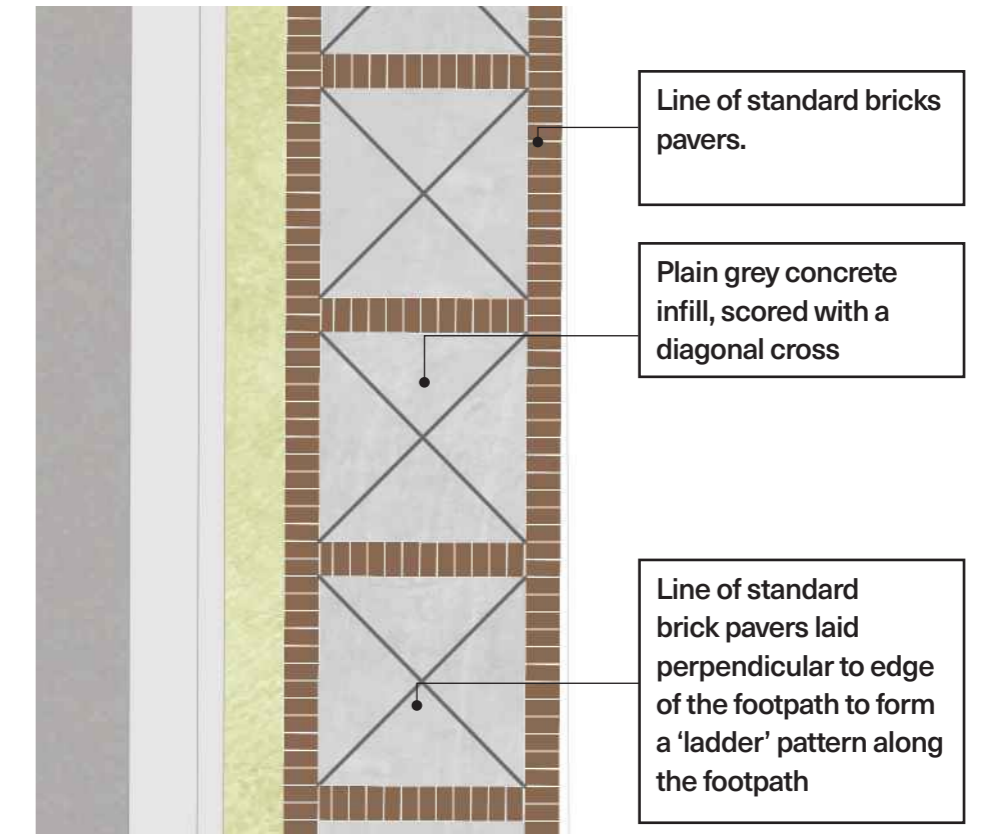
Edges



Footpath



4.1.4 Union Street Non Heritage Pavers



DESIGN FEATURES:

- The non-heritage scheme makes use of the standard brick pavers set in a 'ladder' pattern, infilled with plain grey concrete
- The concrete infill panels could be scored in a diagonal cross, recalling the pattern of the 'rising sun' style heritage pavers that can be found along Union Street
- The ladder pattern follows the sizing and segmentation of other paving treatments across Wickham, providing a sense of continuity and consistency throughout the suburb.

COMPONENTS:

Edges

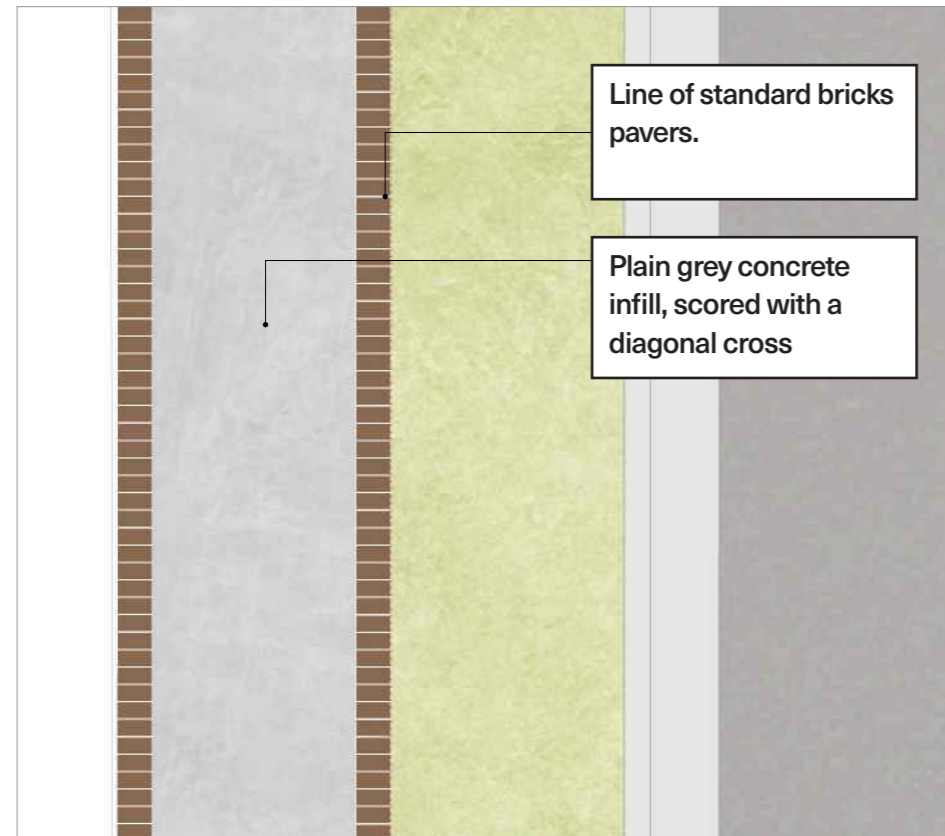


Footpath

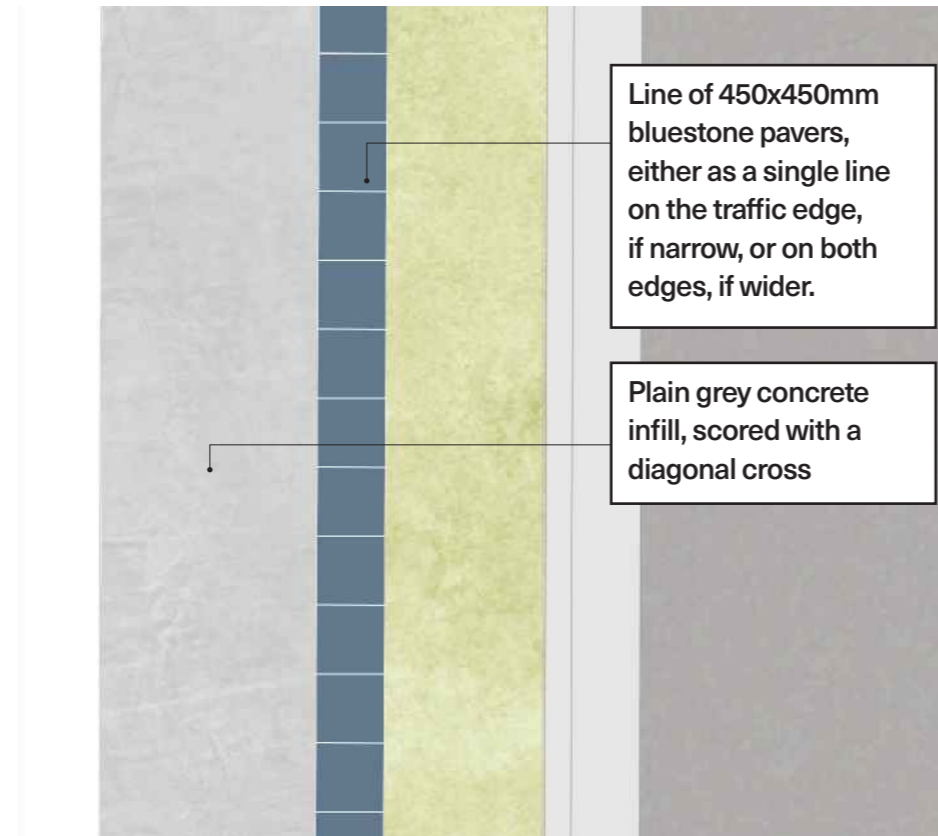


4.1 Materiality

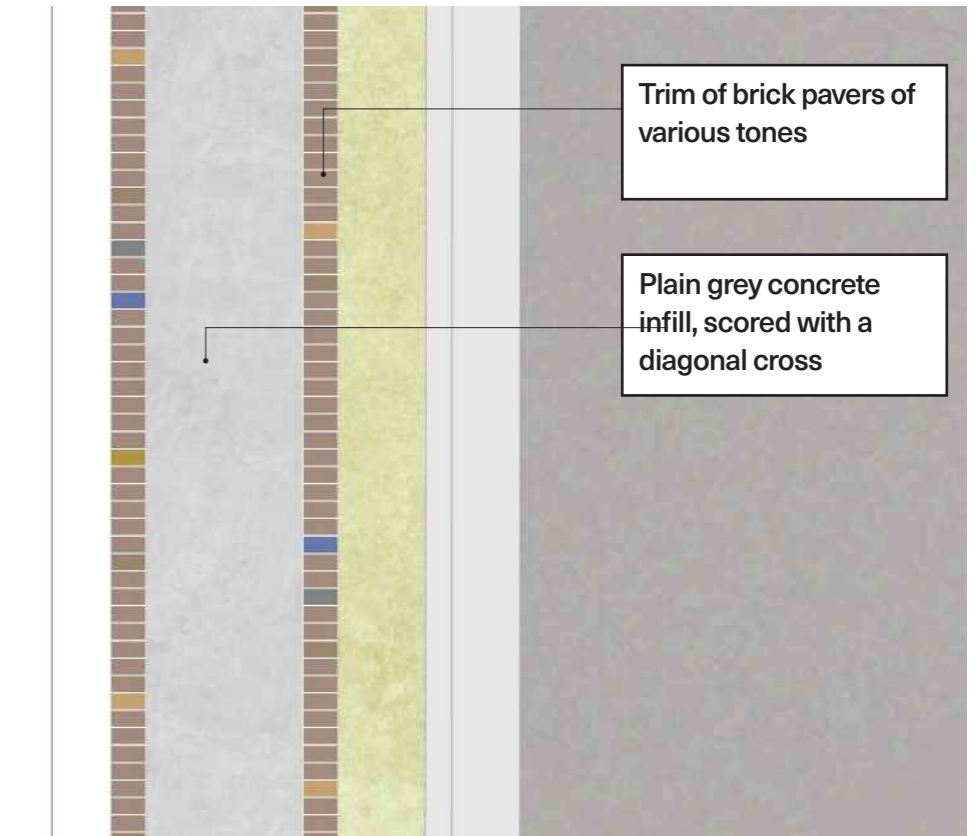
4.1.5 Village and Park Edge Street Paving Typology



4.1.6 Civic Streets Paving Typology



4.1.7 Emerging Industry Street Paving Typology



Standard brick pavers with light brick paver trim (Bolton Street)



Standard brick pavers and concrete (Bishopsgate Street, Wickham)



Standard brick pavers forming a panel with herringbone-laid standard bricks (Grey Street, Wickham)

DESIGN FEATURES:

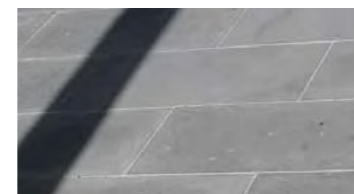
- This scheme is a simple combination of standard brick paver trim infilled with plain grey concrete
- The standard brick paver trim provides a sense of continuity and consistency within the Village Heart of the suburb. This brick trim is consistent with the Union Street trim.

COMPONENTS:

Edges



Footpath



Pavement type 3 (PT3) stone and concrete



Pavement type 3 (PT3) stone and concrete with just one line of bluestone pavers



Pavement type 3 (PT3) stone and concrete

DESIGN FEATURES:

- Makes use of the City of Newcastle's existing pavement type 3 (PT3), a combination of 450x450mm bluestone pavers and concrete infill
- Hard-wearing and ties Wickham's major streets closely into the wider city's civic thoroughfare
- Scheme is adaptable to street and footpath widths

COMPONENTS:

Edges



Footpath



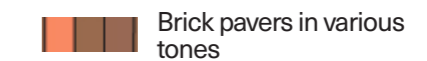
Varied brick tones

DESIGN FEATURES:

- Celebrates the creative and industrial spirit of the streets of Wickham north of Church Street
- Scheme makes use of the brick paver trim set infilled with plain grey concrete
- Brick pavers are varied in tone and include 'specials' i.e occasional bricks that feature brighter or patterned clays, recycled aggregate or artistic glazing. There is also the opportunity to make use of reclaimed bricks.

COMPONENTS:

Edges

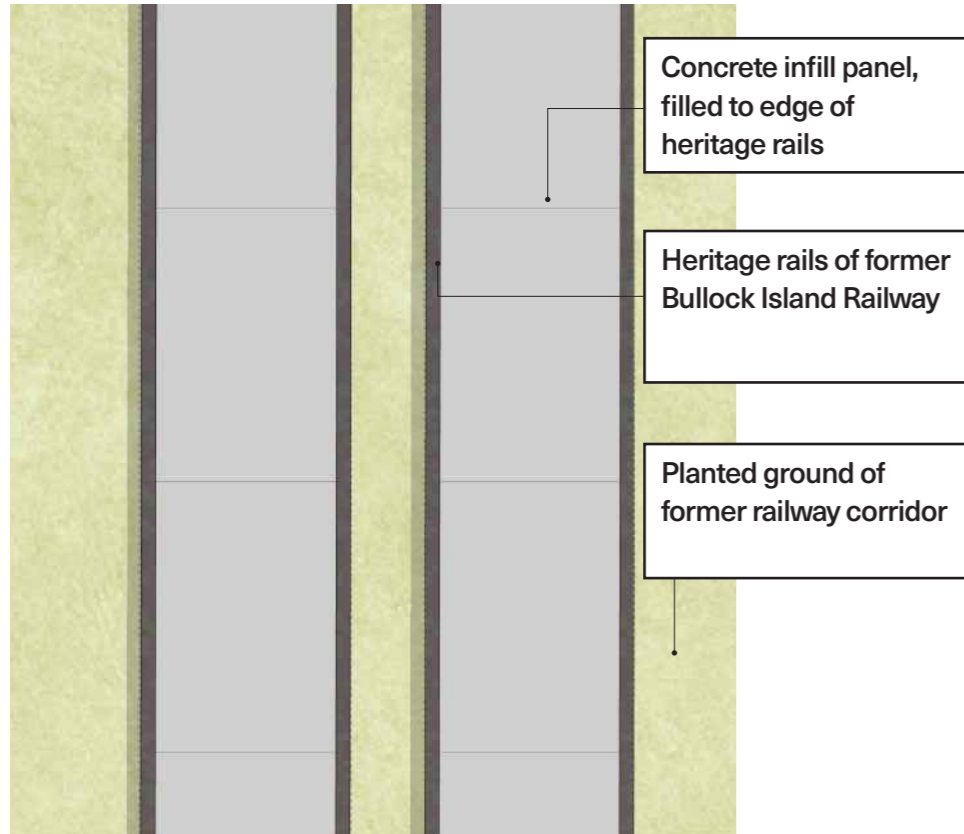


Footpath



4.1 Materiality

4.1.8 Railway Corridor Paving Typology



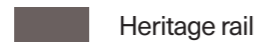
DESIGN FEATURES:

- Wide central promenade that enhances and celebrates the former Bullock Island Railway corridor's industrial heritage
- Historic rails set flush into promenade surface



COMPONENTS:

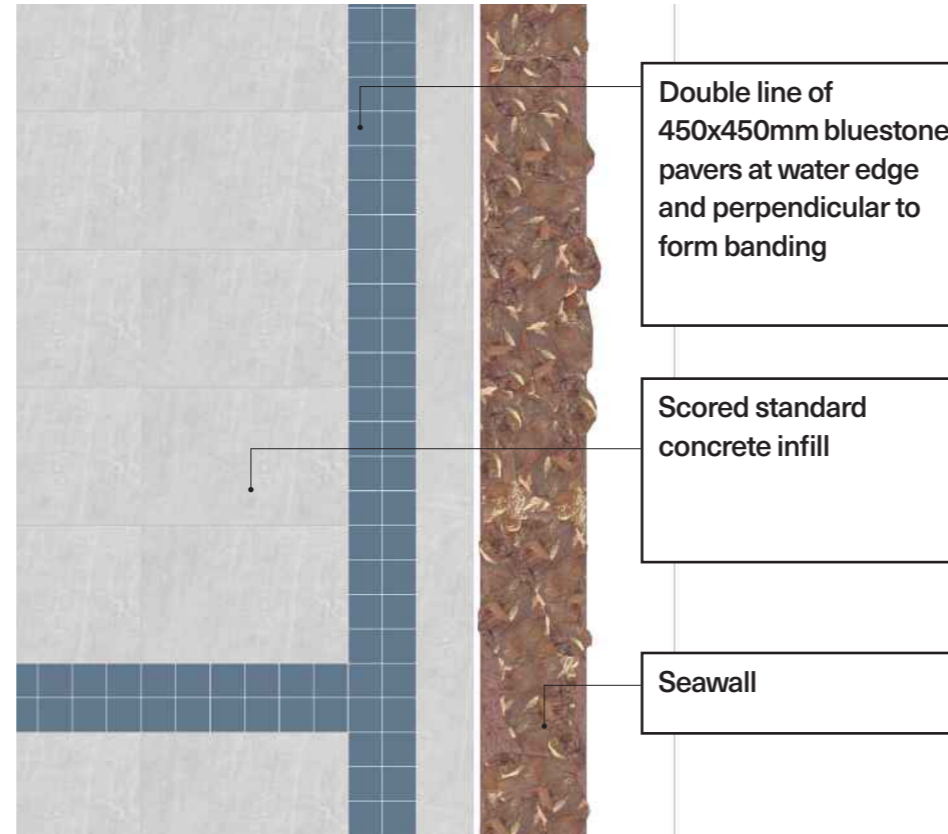
Edges



Footpath



4.1.9 Waterfront



DESIGN FEATURES:

- This paving typology is the existing condition along the waterfront; this PDP proposes the extension of the typology to new spaces in the waterfront character area for maximum consistency
- A broad, civic palette, this typology makes use of bluestone pavers laid two-deep for a bold, large-scale pattern
- Standard concrete panels infill this banding



COMPONENTS:

Edges



Footpath



Section 4 – Design Elements

4.1 Materiality

4.1.10 Materiality strategy guidelines overview

The following are guidelines for the establishment of a coherent and structured materiality strategy.

4.1.11 Hierarchy

The PDP paving typologies should be considered according to the following hierarchy. A higher place in the hierarchy means that this typology takes precedence at any intersection across Wickham. Note that Emerging Industries and Village Heart do not interface with each other and are considered equal third place. Note that Park Edge shares the same detail as Village Heart.

1. Civic Streets
2. Union Street
3. Emerging Industries, Village Heart/Park Edge
4. Railway Corridor

4.1.12 Interfaces

T-junction interfaces.

Where typologies interface in a t-junction, the second-order typology must terminate at the outer trim of the first-order typology.

If there is no trim, such as might be the case for the Civic Streets typology, which in some places has only bluestone trim on the carriageway-side, the second-order typology should terminate with a perpendicular line of its own trim material.

At corners with kerb ramps

Where typologies interface at a narrow and contested corner with kerb ramps, the paving of both typologies should terminate at a natural seam, for example, the corner of a property boundary. This seam should be demarcated by a line of brick trim. Concrete infill to the kerbs and kerb ramps should then interface the two typologies beyond this seam.

At raised platforms

At raised intersections, such as at the intersection of Throsby Street with Union Street, the line of trim opposite the carriageway on the approaching road should continue across, forming a square. This square should be infilled by the same material of the whole raised intersection.

4.1.13 Crossings

At continuous footpath treatments, the materiality of the footpath should continue across the carriageway at grade with the footpath.

At wombat crossings, the typology must terminate at the kerb, with the typology's trim following the perimeter of the kerb of any kerb ramp build out.

4.1.14 Driveways

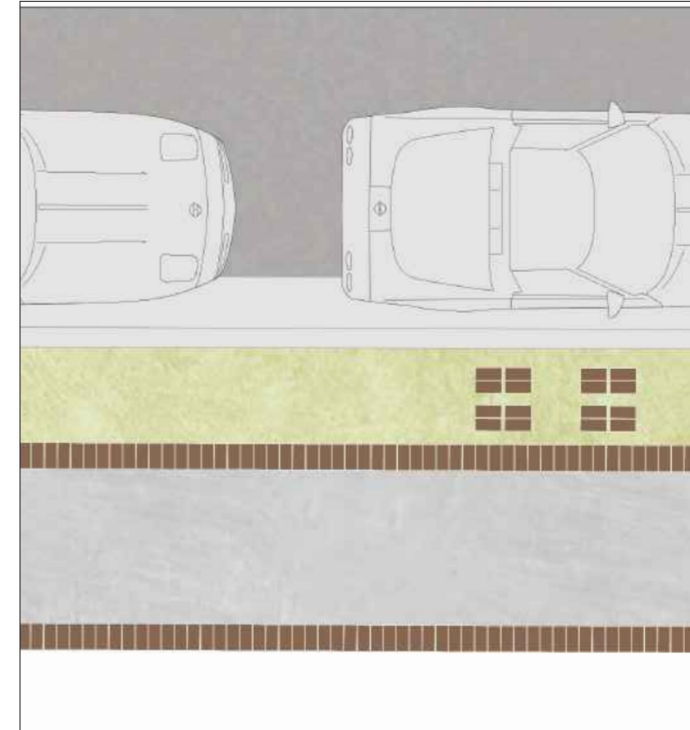
Where a typology meets a driveway, the trim should terminate the footpath neatly and perpendicular to the driveway edge. In the case of typologies with only trim on the carriageway side, such as such stretches of Civic Streets paving, the trim should follow the driveway edge and terminate perpendicular to the property edge or verge.

4.1.15 Step stones

Where a verge lies between the footpath and a parking lane, access through the verge planting should be provided through stepping stones laid in the same material as the trim of that typology.

These stepping stones will allow crossing of the verge while also balancing the needs of the verge planting. They should be laid at rational intervals relative to the verge width to allow easy access to the footpath for passengers exiting a car.

These step stones would be set within a gravel bed to minimise vegetation growth over the steps and maintain visibility and accessibility.



4.1.16 Typical access to parking through verge

4.2 Planting

4.2.1 Street Tree Plan



KEY

Proposed Planting

- As *Acmena smithii* (Lilly Pilly)
- Ah *Araucaria heterophylla* (Norfolk Island Pine)
- ▨ Ba *Brachychiton acerifolius* (Illawarra Flame Tree)
- Bp *Brachychiton populneus* (Kurrajong)
- ▨ Bc *Buckinghamia celsissima*
Ivory Curl Tree
- Cm *Corymbia maculata* (Spotted Gum)
- Ca *Cupaniopsis anacardioides* (Tuckeroo)
- Er *Elaeocarpus reticulatus* (Blueberry Ash)
- Fm *Ficus microcarpa hillii* (Hills Weeping Fig)
- Fa *Flindersia australis* (Crow's Ash)
- Hp *Harpullia pendula* (Tulipwood)
- Ht *Hibiscus tiliaceus* (Sea Hibiscus)
- Lc *Lophostemon confertus* (Brush Box)
- ▨ Pe *Podocarpus elatus* (Plum Pine)
- ▨ Ss *Stenocarpus sinuatus* (Firewheel Tree)
- TL *Tristaniopsis 'Luscious'* (Water Gum)
- Wf *Waterhousia floribunda* (Weeping Lilly Pilly)

Connection to Country - Bush Tucker

- ▨ *Backhousia anisata* (Aniseed Myrtle)
- ▨ *Backhousia citriodora* (Lemon Myrtle)
- ▨ *Macadamia integrifolia* (Macadamia)
- ▨ *Podocarpus elatus* (Plum Pine)

Park Edge

- *Corymbia maculata* (Spotted Gum)
- *Corymbia eximia* (Yellow Bloodwood)
- *Banksia integrifolia* (Coastal Banksia)
- *Geijera parviflora* (Wilga)

Section 4 – Design Elements

4.2 Planting

4.2.2 Planting overview

Street trees and mass planting form a significant part of the Urban Forest network for Wickham where trees provide numerous environmental, social, and economic benefits. The Wickham Street Tree Plan provides a masterplan of street tree planting which reflects the hierarchy of streets and character of the unique precincts within the suburb.

4.2.3 Design Considerations

Existing Environment

Site appropriate selection of tree species is critical to providing a healthy asset. Plant species must be able to cope with extended dry periods and the existing site conditions and coastal environment.

Species selection

A Street Tree Plan has been developed from the retention of existing streets, street upgrades and new streets. Tree species have been selected tolerating urban conditions and a wide range of verge widths.

Many streets within Wickham feature quality existing trees which provide a good level of existing landscape amenity to the suburb and reinforce street character. Wherever possible, existing quality street trees have been retained, where additional species of the same species or complementary species are proposed. Existing tree species for retention include Araucarias, Tuckeroos, Lilly Pillies, Spotted Gums and Hills Figs. Where there are whole-scale street updates or where new trees are required to replace removed trees due to poor health or other reasons, new tree species should be in accordance with the Wickham Street Tree Plan.

A 100% native tree palette has been developed with a variety of species which provide seasonal interest throughout the year. Connection to Country is referenced in appropriate locations for bush tucker education and use, which align with segments of the Connection to Country Trail through Wickham.

The size of selected street trees must consider available soil volumes, above ground space available, including the presence of overhead powerlines and underground service locations. The potential for root impact on adjoining pavements should also be considered.

Tree selection has also been informed by the Newcastle Street Tree Selection Manual where specific tree palettes have considered the character and identity of the Wickham precincts, as well as providing amenity and biodiversity features. These include Union Street, Emerging Industry, Civic Streets, Village Street and Park Edge.

Access

Street trees should be located and maintained to ensure suitable clearances for pedestrian, bike and cyclist movement where required.

Services

Services coordination and management will need to be given to underground and overhead services and how these can be accommodated in the tree pits design, or located in a suitable services zone adjacent to the tree pit.

Passive irrigation


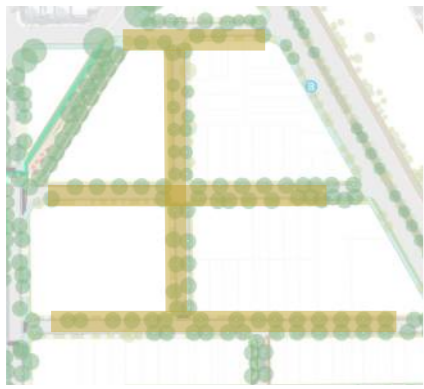


Opportunity for passive irrigation should be considered for tree and understory planting to reduce water consumption and reliance on irrigation systems. Using passive irrigation to maximise the availability of water to the tree root zone will ensure that the street tree will establish more quickly and be more resilient in the long term.

Maintenance Considerations



As with trees in the natural environments, trees within passively irrigated tree pits will need to be monitored for health and vigour. Due to the increased fluctuations in the moisture conditions of the sites, it is important that any factors that adversely impact the tree are picked up early and adjustments made.

VERGE WIDTHS			
LARGE	MEDIUM	SMALL / NARROW	PASSIVE IRRIGATION
Includes structure palette and bush foods, low shrubs, grasses and groundcovers with great diversity, foliage interest, texture and colour	Clusters of grasses with groundcover surround	Tough grasses which can tolerate tough and constrained conditions	Tolerant of temporary inundation and water treatment
Westringia 'flat and fruity'	Lomandra verday	Lomandra verday	Lomandra verday
Myoporum yareena	Myoporum yareena	Dianella cerulea	Carex appressa
Westringia 'grey box'	Dianella revolta		Ficinia nodosa
Lomandra verday #	Dianella longifolia		Juncus usitatus
Dianella revoluta	Goodenia ovata 'Gold Cover'		
Imprrata cylindrica			
Carpobrotus aussie rambler#			
Rhagodia 'Aussie flat bush' #			
Plectranthus graveola#			
Bush or oregano dwarf size			
Plectranthus argentatus			
Melaleuca 'Ulladulla Beacon'			
Goodenia ovata 'Gold Cover'			
Westringia fruticosa 'Mundi'			

4.2 Planting

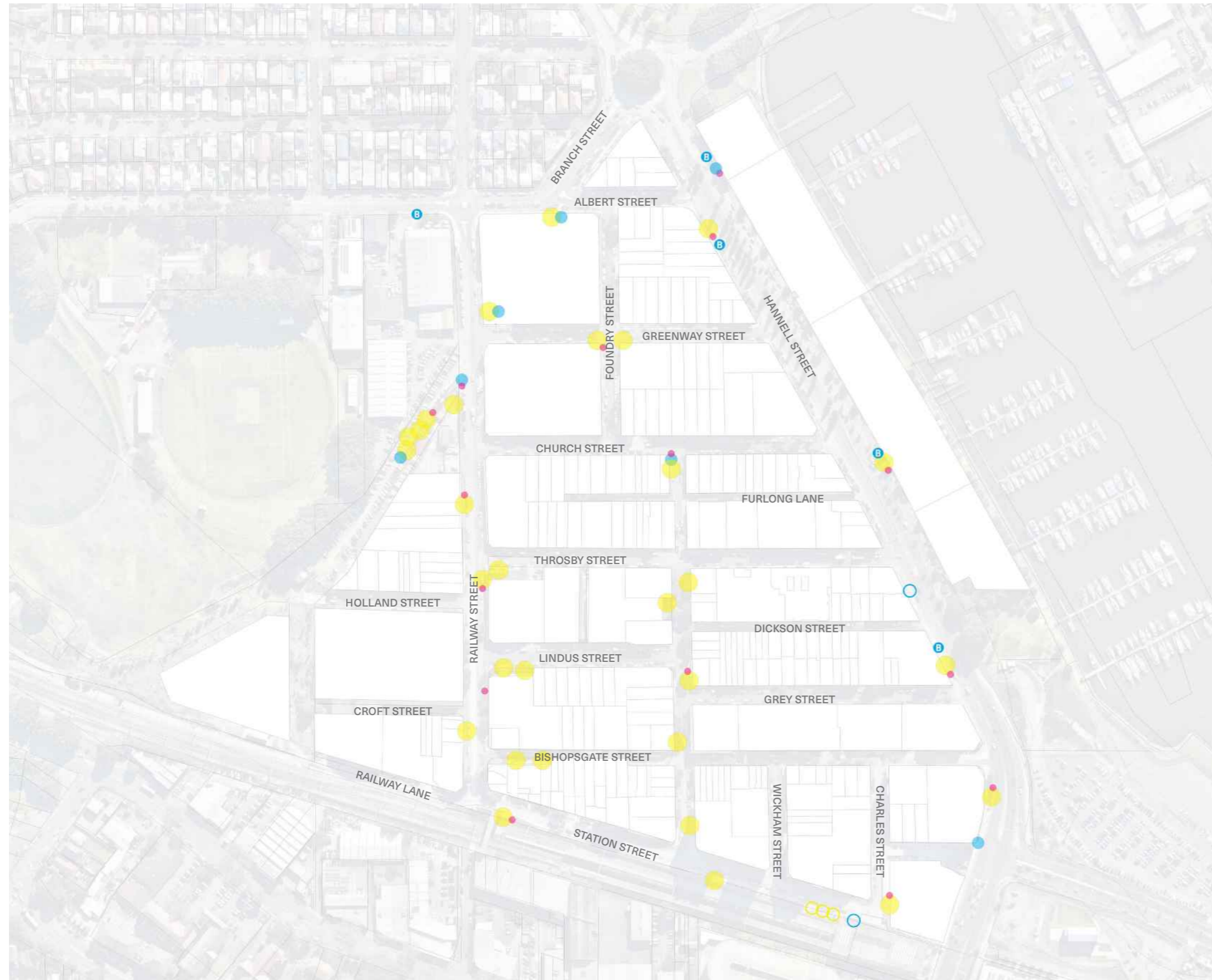
KEY PLAN	CHARACTER AREA	SPECIES BY SCALE		VERGE WIDTHS
	<p>UNION STREET</p> <p>Union Street consists of a feature street with a north to south orientation. Verges range in width from large to medium in size with opportunities for trees in verge and blister plantings. Small and medium trees are proposed for this precinct including the Kurrajong, Lilly Pilly and Firewheel Tree.</p>	<p>Medium Trees</p> <p>Brachychiton populneus</p> <p>Acmena smithii</p> <p>Small Trees</p> <p>Stenocarpus sinuatus</p>		Medium to large
	<p>EMERGING INDUSTRY</p> <p>This precinct features mostly east to west street orientations with medium to narrow verges. There are opportunities for tree plantings in blisters. Small to medium trees are proposed for this precinct including Plum Pine, Water Gum, Tuckeroo, Sea Hibiscus and Tulipwood. Existing Brush Box are proposed to be retained with additional species suitable for blister plantings.</p>	<p>Medium Trees</p> <p>Podocarpus elatus</p> <p>Lophostemon confertus (continue existing)</p> <p>Small Trees</p> <p>Tristaniopsis 'Luscious'</p> <p>Cupaniopsis anacardioides (continue existing)</p> <p>Hibiscus tiliacicus</p> <p>Harpullia pendula</p>		Medium to narrow
	<p>CIVIC STREET</p> <p>This precinct is the perimeter edge to Wickham with various solar orientations. Verge widths vary in size from small to medium however a range of tree sizes are suitable from large, medium and small. Tree species include continuing the existing tree plantings of the Norfolk Island Pine, Spotted Gum, Crow's Ash and Brush Box. Additional new trees include Water Gum and Tuckeroo.</p>	<p>Medium/Large Trees</p> <p>Corymbia maculata (continue existing)</p> <p>Flindersia australis (continue existing)</p> <p>Lophostemon confertus (continue existing)</p> <p>Small Trees</p> <p>Tristaniopsis 'Luscious'</p> <p>Cupaniopsis anacardioides (continue existing)</p>		Medium to narrow
	<p>VILLAGE STREETS</p> <p>This precinct features mostly east to west orientated streets with medium to narrow verges. There are opportunities for blister plantings to allow for larger tree sizes. Tree species include continuing the existing tree plantings of Lilly Pilly. Proposed tree species include the Weeping Lilly Pilly, Brush Box, Water Gum, Tuckeroo and Blueberry Ash.</p> <p>This precinct also features the Wickham Connection to Country trail providing opportunity for tree bush tucker education and use. Tree species include Aniseed Myrtle, Lemon Myrtle, Macadamia and Plum Pine.</p>	<p>Medium/Large Trees</p> <p>Waterhousia floribunda</p> <p>Lophostemon confertus</p> <p>Small and Narrow Trees</p> <p>Tristaniopsis 'Luscious'</p> <p>Cupaniopsis anacardioides (continue existing)</p> <p>Elaeocarpus reticulatus (narrow back lane)</p>	<p>Bush Tucker Trees</p> <p>Bachousia citriodora</p> <p>Podocarpus (female and male for fruit)</p> <p>Backhousia anisata</p> <p>Glochidion fernandi</p>	Medium to large

4.2 Planting

KEY PLAN	CHARACTER AREA	TREE SPECIES	UNDERSTOREY SPECIES	VERGE WIDTHS
	<p>RAILWAY CORRIDOR</p> <p>This precinct features the existing and retained Hills Figs, where planting is proposed to complement the existing trees and public site reuse. A range of tree species for this open space environment include Spotted Gum, Yellow Bloodwood, Coastal Banksia, Wilga, Plum Pine and Lemon Myrtle.</p>	<p>Feature Trees Ficus rubiginosa</p> <p>Native Dry Bushland Trees Corymbia maculata Corymbia eximia Banksia integrifolia Gejiera parvifolia</p> <p>Shady Gully Trees Glochidion fernandi Tristaniopsis 'Luscious' Podocarpus (female and male for fruit) Backhousia citriodora</p>	<p>Shrubs Westringia sp.</p> <p>Grasses Lomandra verday Carex appressa Ficinia nodosa Juncus usitatus Imperata cylindrica Lomandra longifolia</p>	<p>Medium to narrow</p>
	<p>BASIN</p> <p>Attached to the former Bullock Island Railway Corridor is an urban wetland, providing important greenery, outdoor recreation and exercise amenity, and water sensitive urban design.</p> <p>The planting approach builds on the wetland's exploitation of existing topography to detain and hold on to water during precipitation events. This water storage will allow a wetland biome to develop, and recall the ecologies of Wickham before the development of the city.</p> <p>This approach has a number of advantages. It will establish a strong local character through the use of water tolerant native species. It will improve water quality through use of sedges and reeds. And it will create a habitat and food source for native fauna species - to benefit of both the human and non-human residents of Wickham.</p>	<p>Medium/Large Trees Corymbia maculata (continue existing) Flindersia australis (continue existing) Lophostemon confertus (continue existing)</p> <p>Small Trees Tristaniopsis 'Luscious' Cupaniopsis anacardioides (continue existing)</p>	<p>Shrubs Westringia sp. Melaleuca thymifolia 'Pink Lace' Hardebergia 'Meema' Callistemon 'Little John' Plectranthus 'Blue Spires'</p> <p>Grasses Imperata cylindrica Themeda australis Danthonia tenior Lomandra longifolia Themeda 'Mingo' Isolepis nodosa</p> <p>Groundcovers Viola hederacea Dichondra repens Myoporum parvifolium Myoporum 'Yareena' Carpobrotus 'Aussie Rambler' Brachyscome 'Break O Day' Casuarina 'cousin It' Hardenbergia 'Flat White'</p>	<p>Medium to narrow</p>

4.3 Furniture

4.3.1 Furniture Typologies Plan



KEY

Existing Furniture

Benches

Bicycle Parking Racks

Proposed Furniture Zones

Benches

Bin

Bicycle Parking Racks

Bus stops

4.3.2 Street Furniture overview

Street furniture is an integral part of the public realm. This PDP proposes a suite of well designed street furniture that is consistent with the wider urban context of Newcastle.

Proposed furniture is drawn from the City of Newcastle's *City Centre Public Domain Technical Manual*. Additional desktop-based research has been done to confirm furniture selections and siting are consistent with existing provisions. It is noted that bespoke places, where identified, may require alternate treatments such as highlight paving and custom designed street furniture.

City of Newcastle standard drawings apply to any new furniture elements.

4.3.3 Street Furniture selection

It is important that a consistent and coordinated suite of elements extends over the site as a whole to provide a homogenous appearance and also minimise maintenance requirements. Per the technical manual, street furniture in Wickham will be chosen according to consideration of:

- a consistent suite of materials and furniture for the public domain within Newcastle city centre as defined by the LEP 2012 boundary (Refer to City Centre Boundary Figure 1)
- efficiencies in the documentation, procurement and construction of streetscape and public domain works
- sustainability in material selection including life cycle costing and provenance;
- consistency with heritage elements within our city centre;
- sensitivity to the various precincts, activity nodes and distinctive places within our city centre.

Section 4 – Design Elements

4.4 Lighting

4.4.1 Approach

During consultation, the community indicated that information on lighting should be included in the PDP and that it should detail how lighting will be used to provide a safe after-dark environment without being too harshly lit.

Lighting is critical in the development of liveable and active places. This PDP considers lighting a fundamental component of the public realm and adopts a holistic approach. This includes safe and sensitive street lighting for pedestrians, people on bike, and vehicles.

Lighting should be incorporated into future upgrades into the public domain and minimise the impact of obtrusive lighting to residential amenity.

To minimise the impact on street trees and existing infrastructure through additional conduiting, the adoption of Ausgrid-endorsed light poles and fittings should be utilised within road corridors allowing for long term maintenance and management.

Additional light fittings intended for distinctive places and community land will require consultation and approval of the City of Newcastle Asset Management Team.

Section 4 – Design Elements

4.5 Public Art & Interpretation

4.4.2 Art approach

Wickham is home to a number of unique works of varying media, including the clay art “bollards” on Union Street, large-scale public sculptures on the waterfront, and street art, especially to the north of the suburb. It can boast a wealth of European heritage objects in its public realm, including historic steel rails and brick pavers.

This PDP safeguards these items by proposing the improvement of their setting within the public realm - so that they are more visible, accessible, and better part of the ongoing story of Wickham.

During the engagement process, Wickham's residents said that the best ways to welcome others to Wickham at its entrypoints were natural elements (62%) and art elements (also 62%). Of the stories, art, and other elements that should be celebrated, the community pointed to the history of Wickham, Aboriginal living culture and sites of significance, local landmarks such as the Tree of Knowledge, heritage buildings, local art, and the natural landscape.

This PDP's art approach has learned from and built upon these important insights from the community. It recognises the critical role public art can play in the public realm. This PDP therefore provides for how best to celebrate existing works and integrate new works.

4.4.3 Proposals by this PDP

Complementing this strategy for existing elements, this PDP proposes a number of different walking trails that would serve as organising structures for the siting of new public artwork and heritage interpretation.

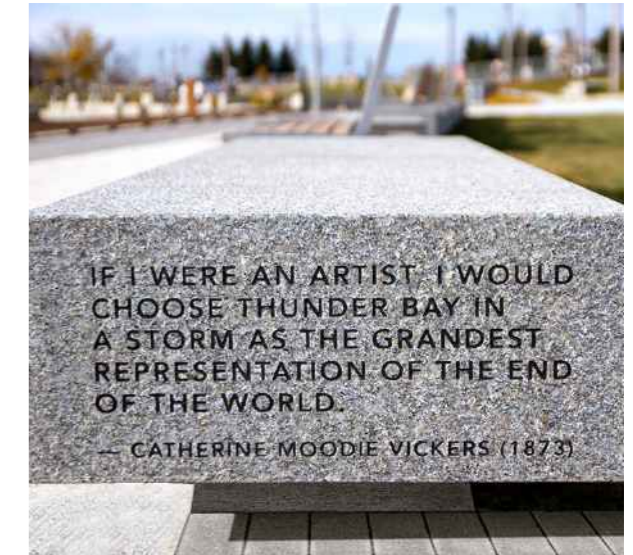
These trails are:

1. The Connecting with Country trail
2. The European Heritage trail
3. The Street Art trail

A detailed map locating the arrangement of these trails and other key heritage landmarks and art objects can be found on the following page.

Note that the commissioning of any new works in subject to further development by City of Newcastle and a separate art procurement process that lies beyond the scope of this PDP.

Any new public art will not pose a risk to the public, be able to withstand vandalism and be long lasting with minimal maintenance requirements.



4.6 Public Art & Interpretation

4.5.1 Public Art & Interpretation Opportunities Plan



4.5.2 The Connecting with Country trail

This trail, developed in close co-ordination with First Nations knowledge holders, would celebrate Aboriginal knowledge of Country. It would loop between the two important sites of Wickham Park and the water front and act to restore and retell histories that have been overwritten since colonisation.

4.5.3 The European heritage trail

This trail would celebrate the stories of people that came to live and work in Wickham following the establishment of the city. It would run along the former railway corridor, take in a number of important heritage buildings, and highlight the heritage brick pavers of Union Street.

4.5.4 The Street Art trail

The street art trail links together existing works of street art, mostly concentrated in the Emerging Industries, and could integrate new works on new developments, ensuring the continuity of this practice even as the suburb changes.

KEY

Land cover

- Green space / open space
- Surface and tidal water

Paving Types

- Connecting with Country trail
- European heritage trail
- Street art trail

- Public sculptures
- Yum Yum Tree (Tree of Knowledge)
- Potential heritage panel, artefact, or artwork at existing European heritage site
- Potential public art, footpath mural or sculpture
- Street art locations
- Welcome nodes
- Art bollards on Union Street
- Bus stops





Appendices





Appendix 1

Urban Context Analysis

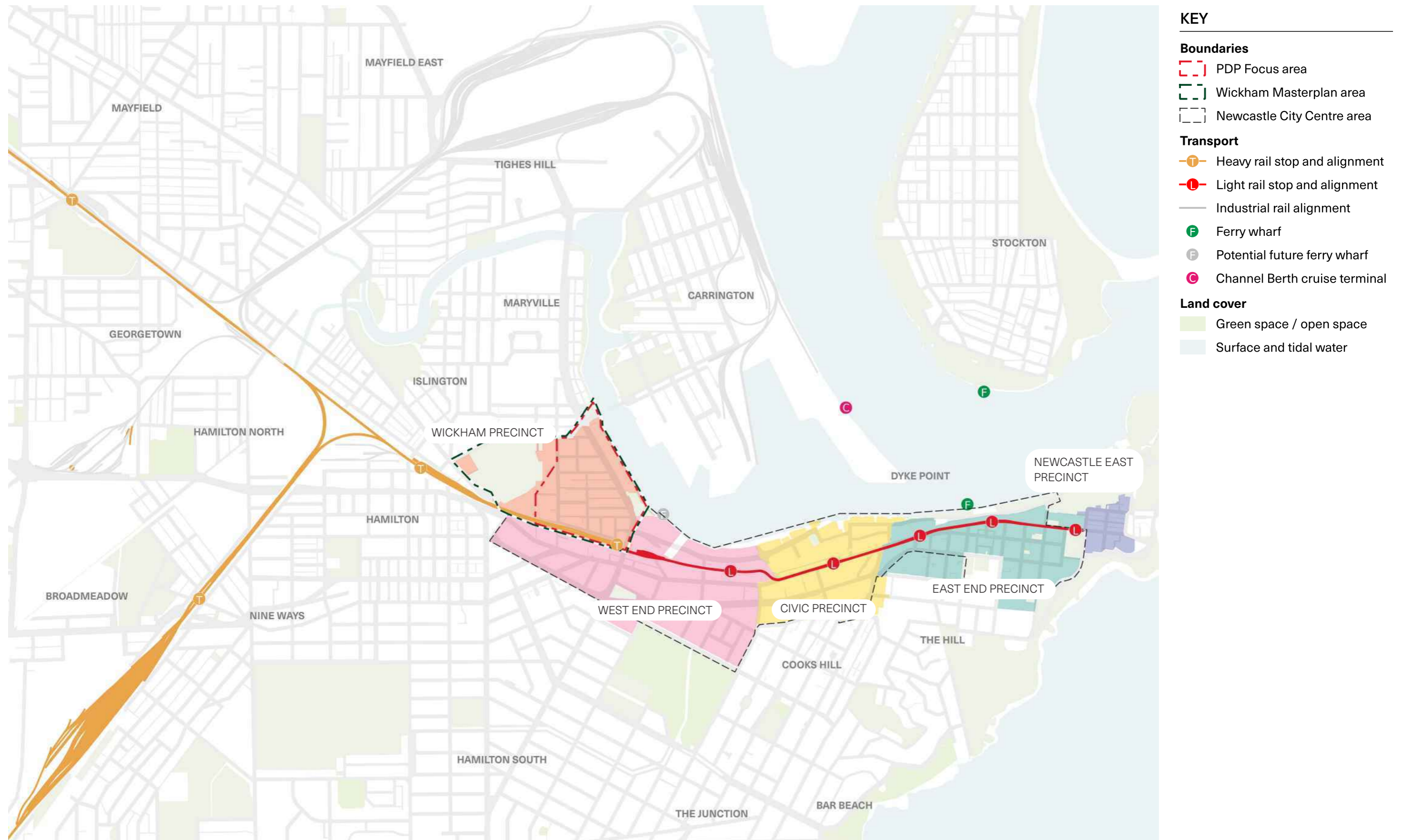
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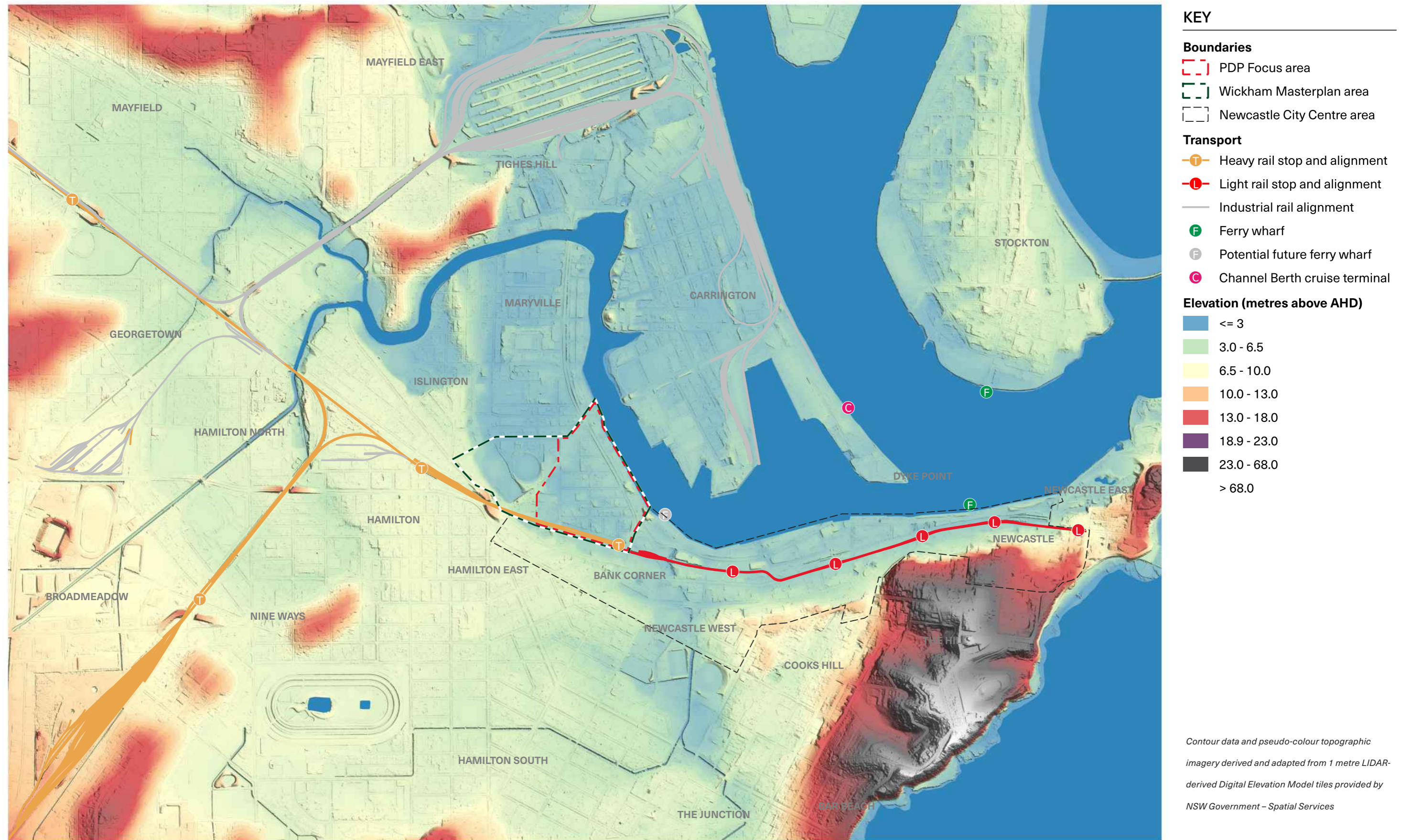
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ASPECT Studios

5.1 Neighbourhood precincts

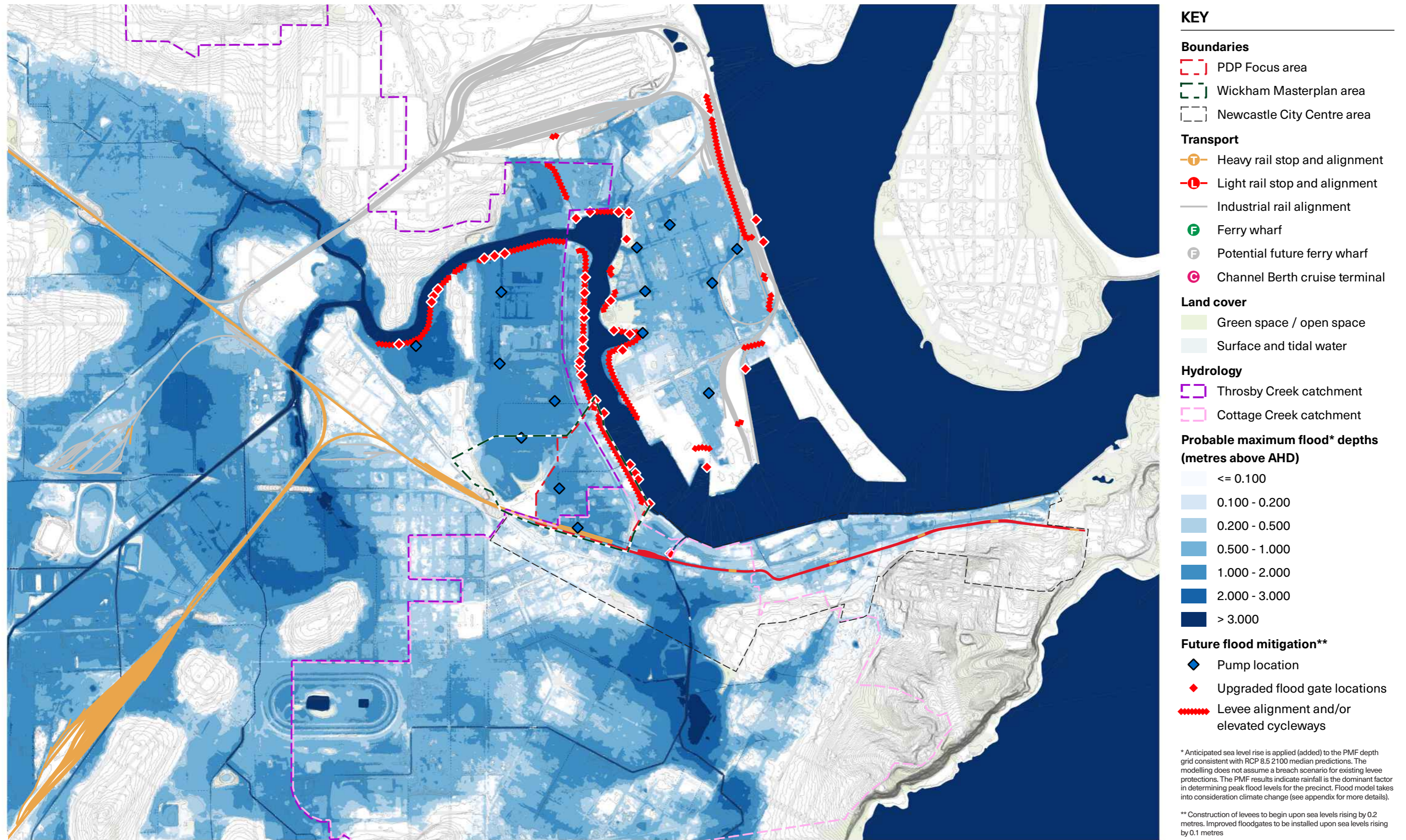


5.2 Elevation

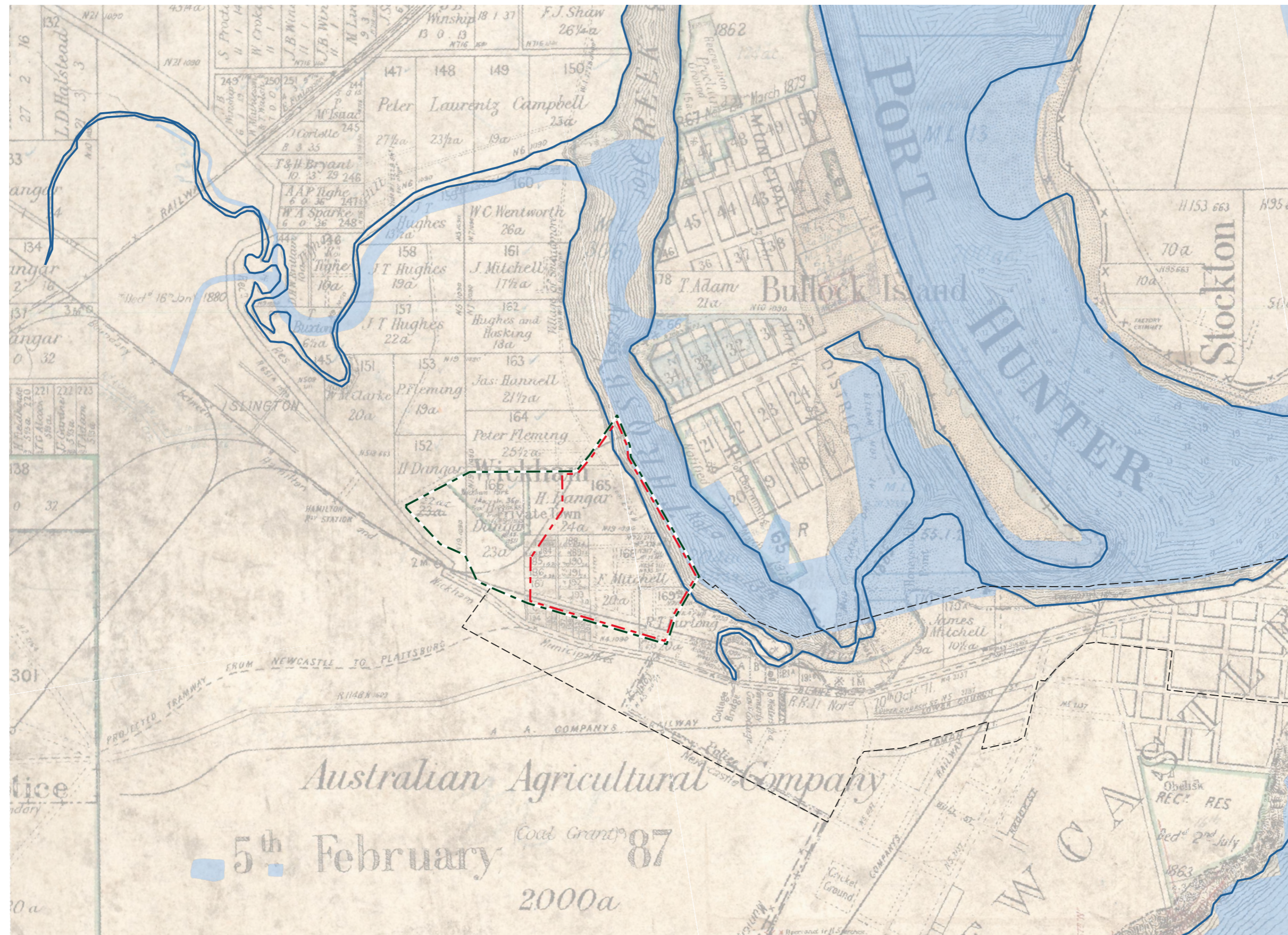


Contour data and pseudo-colour topographic imagery derived and adapted from 1 metre LIDAR-derived Digital Elevation Model tiles provided by NSW Government – Spatial Services

5.3 Hydrology: waterways and flooding - probable maximum flood



5.4 Historic shoreline mapping



KEY

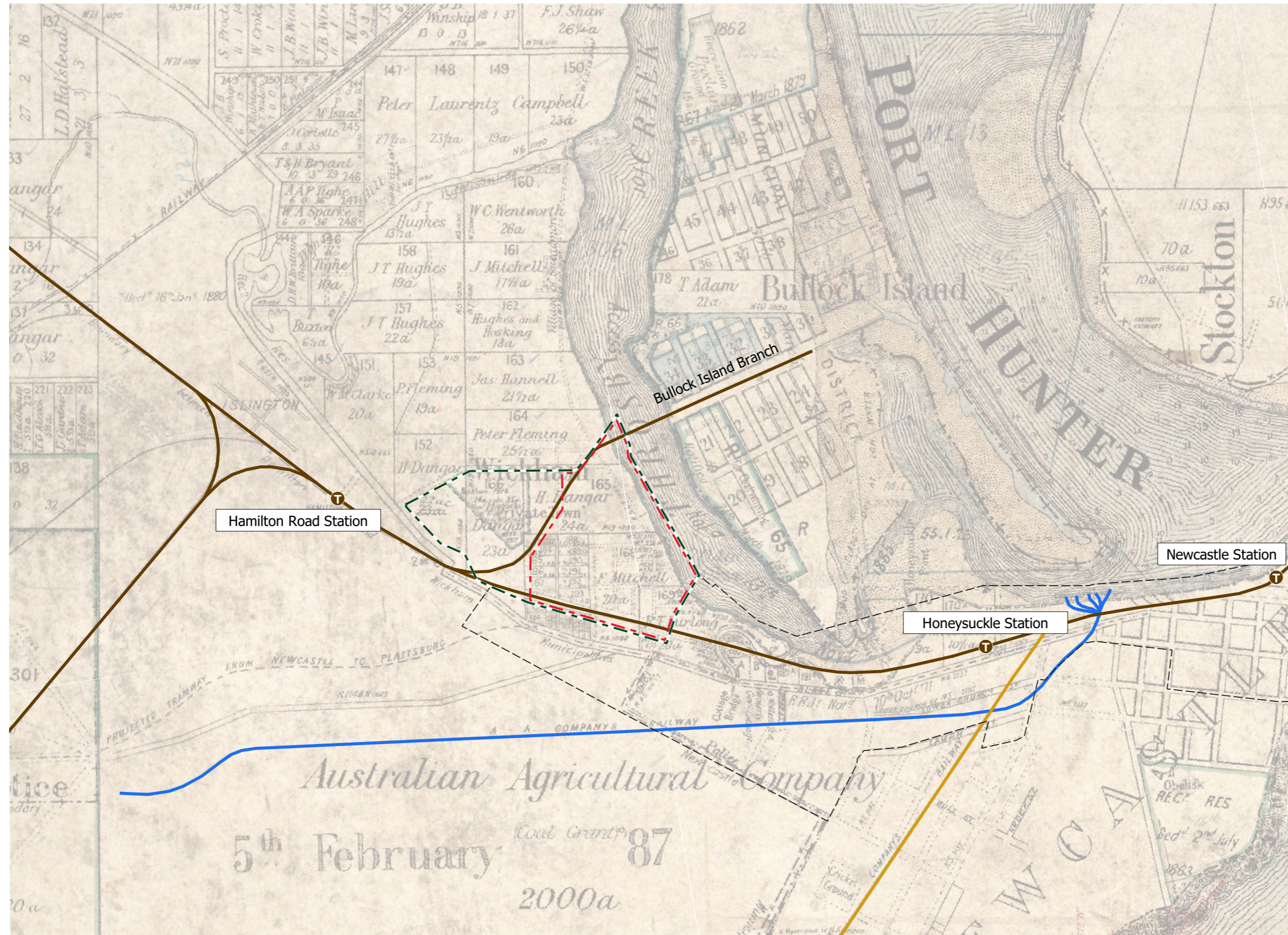
Boundaries

- Project site
- Wickham Masterplan area
- Newcastle City Centre area

Shorelines

- Shoreline February 1887 (indicative)*
- Current shoreline

5.5 Heritage rail mapping



KEY

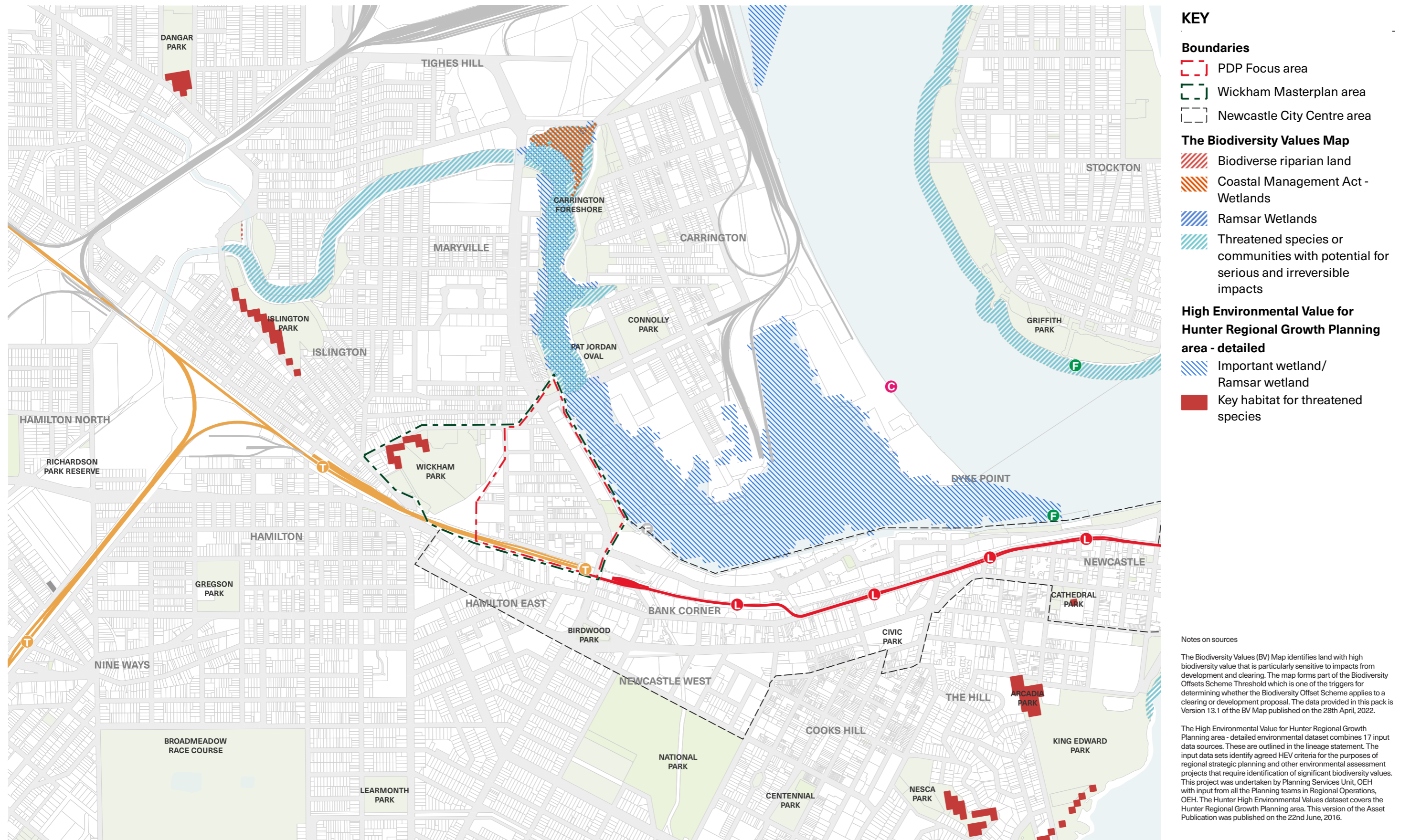
Boundaries

- PDP Focus area
- Wickham Masterplan area
- Newcastle City Centre area

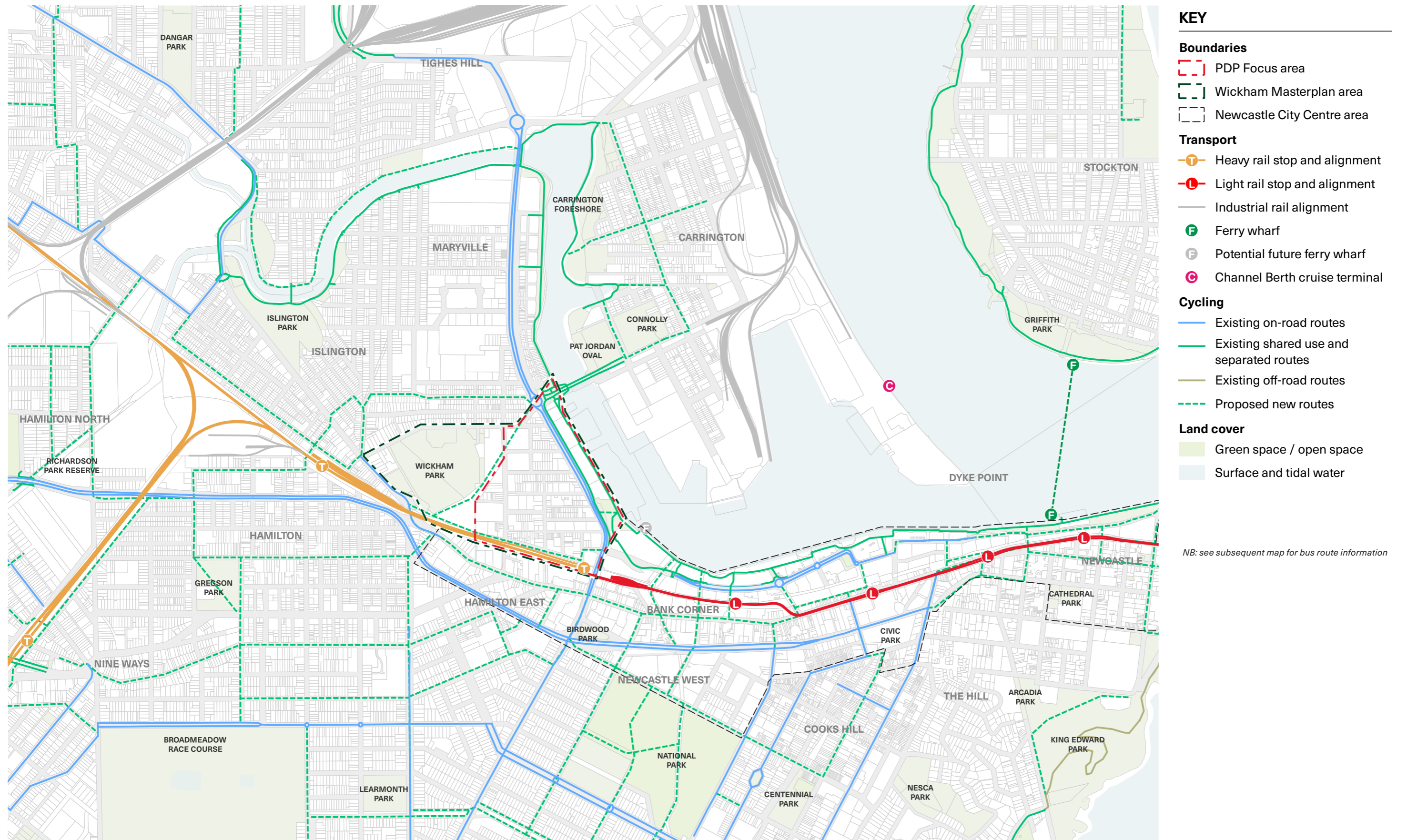
Historic railway

- Australian Agricultural Company's Railway
- Great Northern Railway (NSW Railway)
- Burwood Coal Company Railway

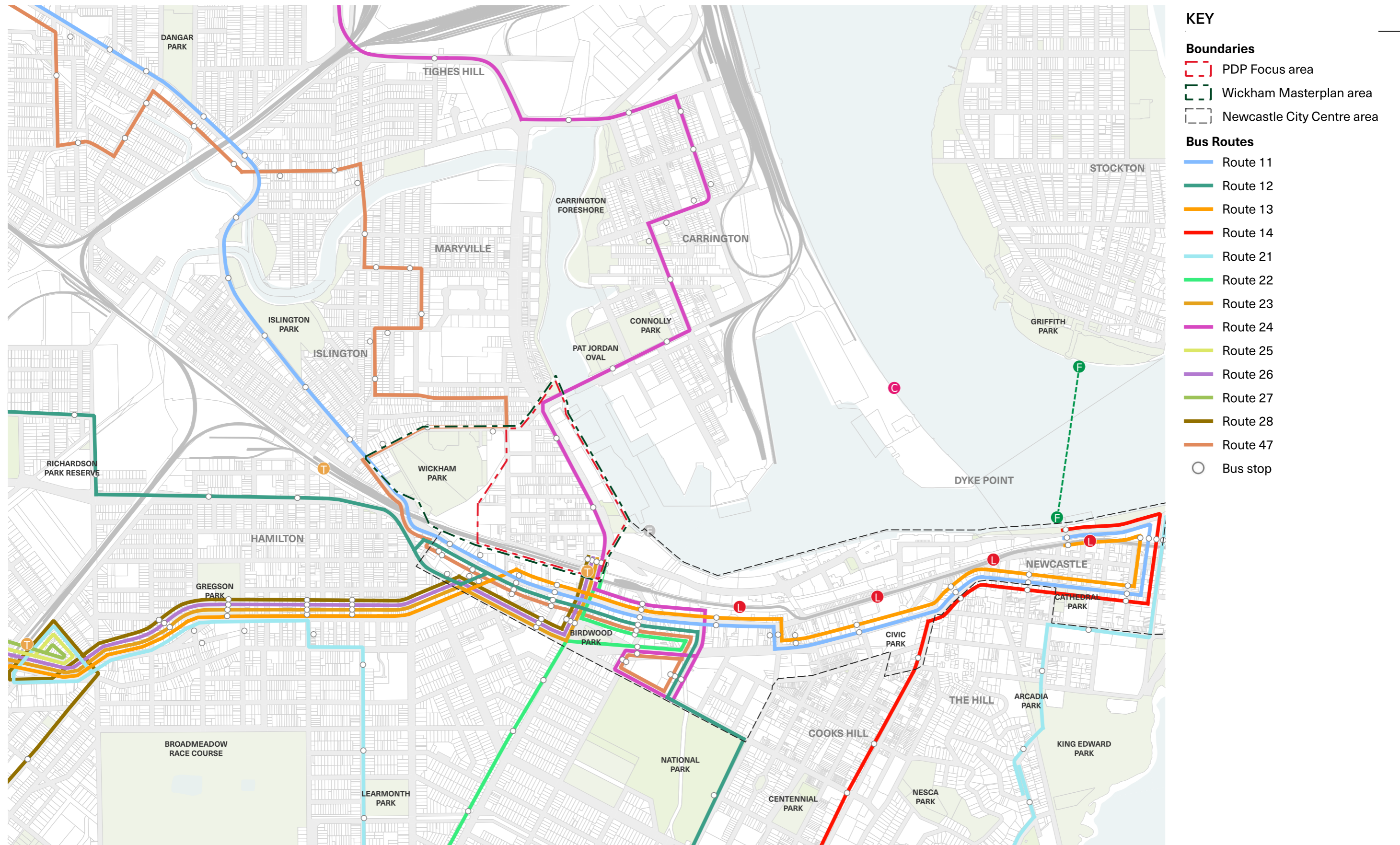
5.6 Ecological communities



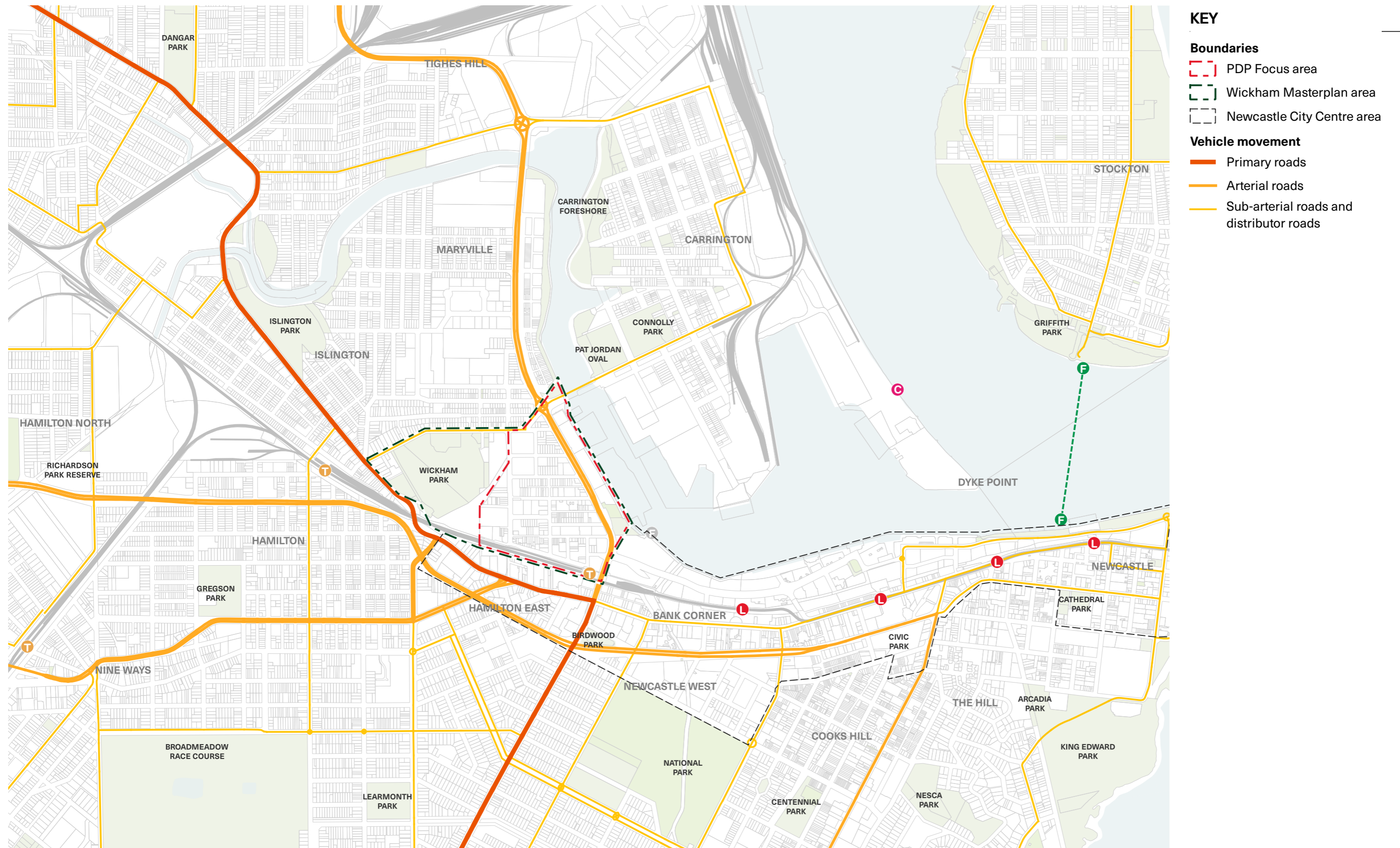
5.7 Active transport



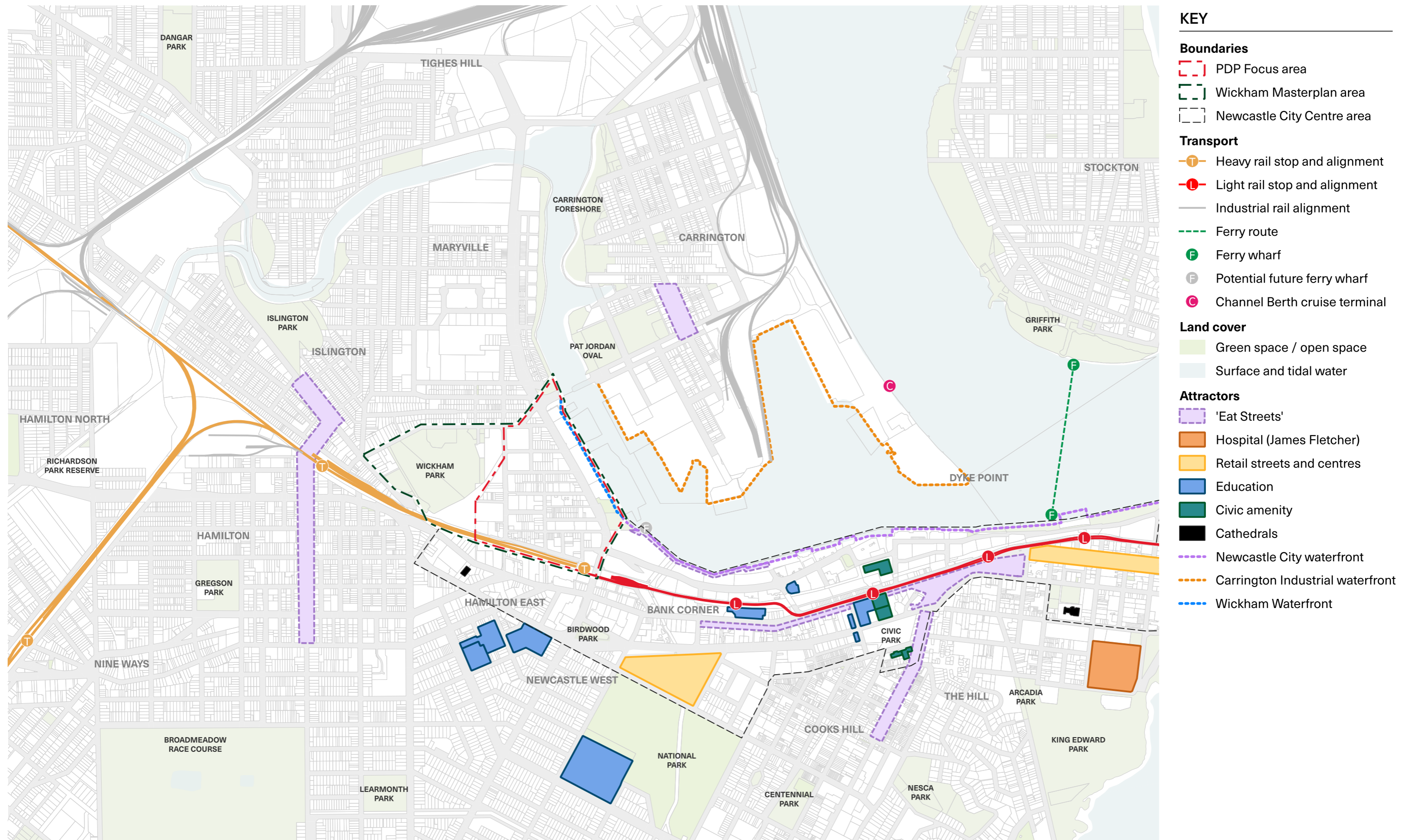
5.8 Public transport



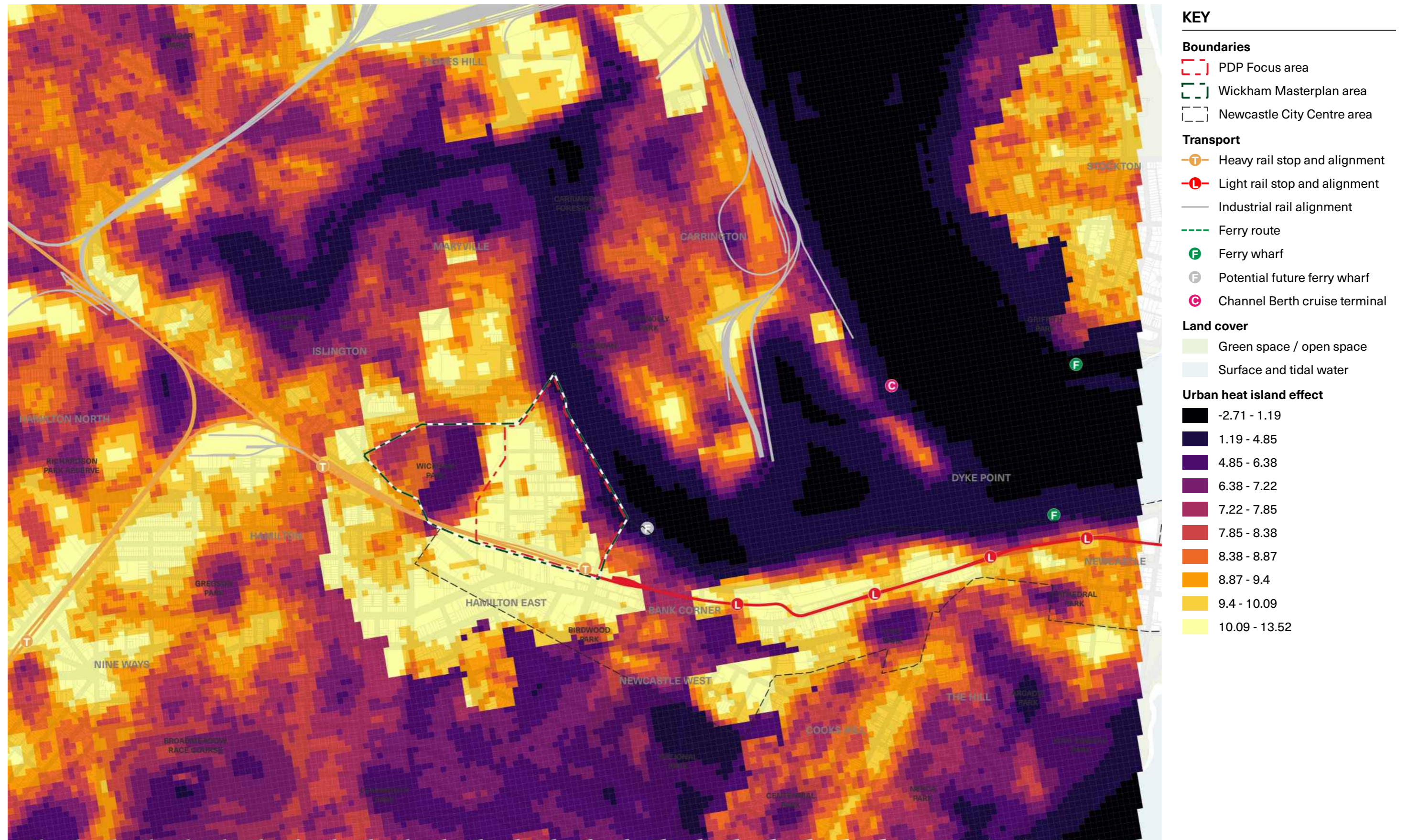
5.9 Vehicle movement



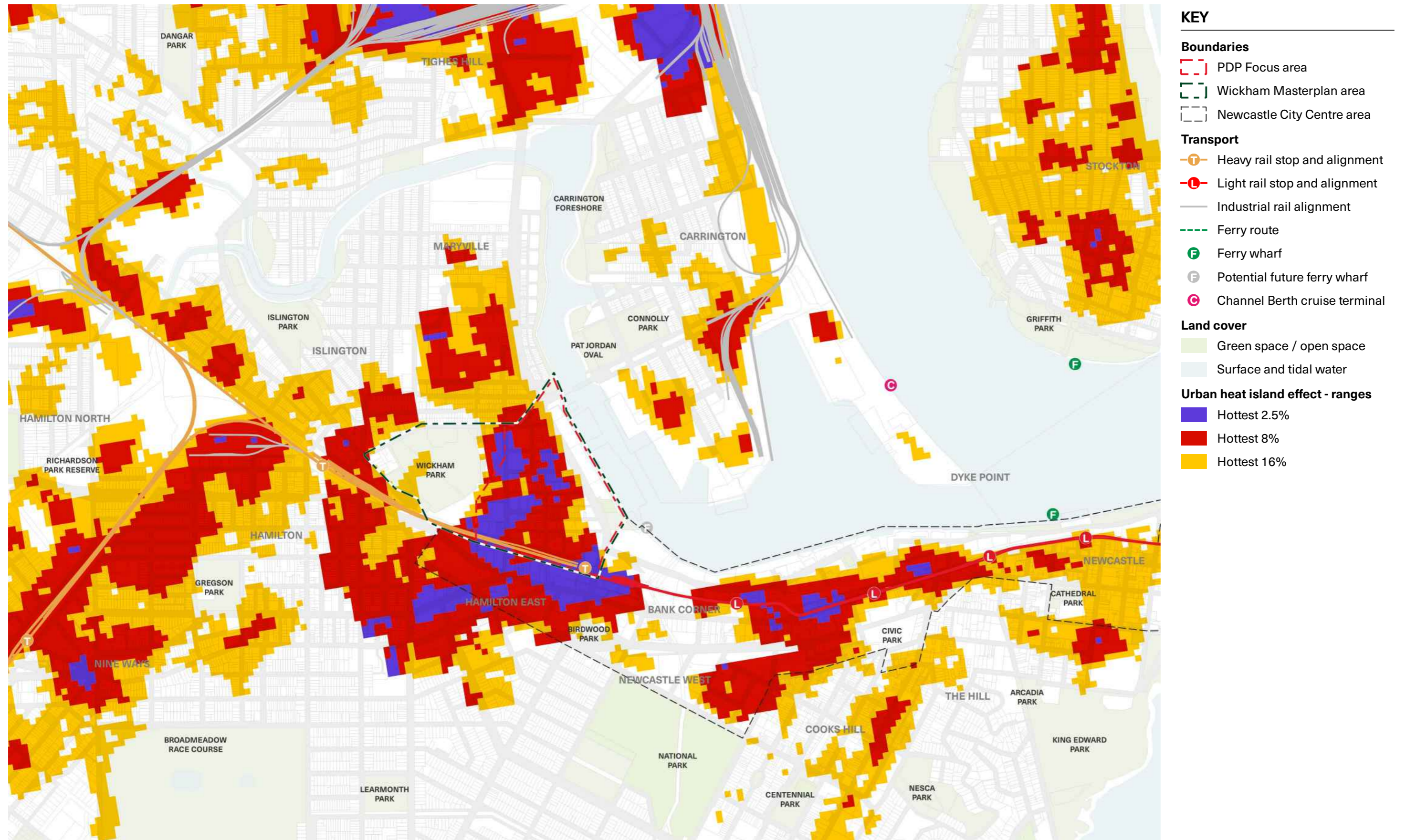
5.10 Activity nodes and attractors



5.11 Urban heat: ranges



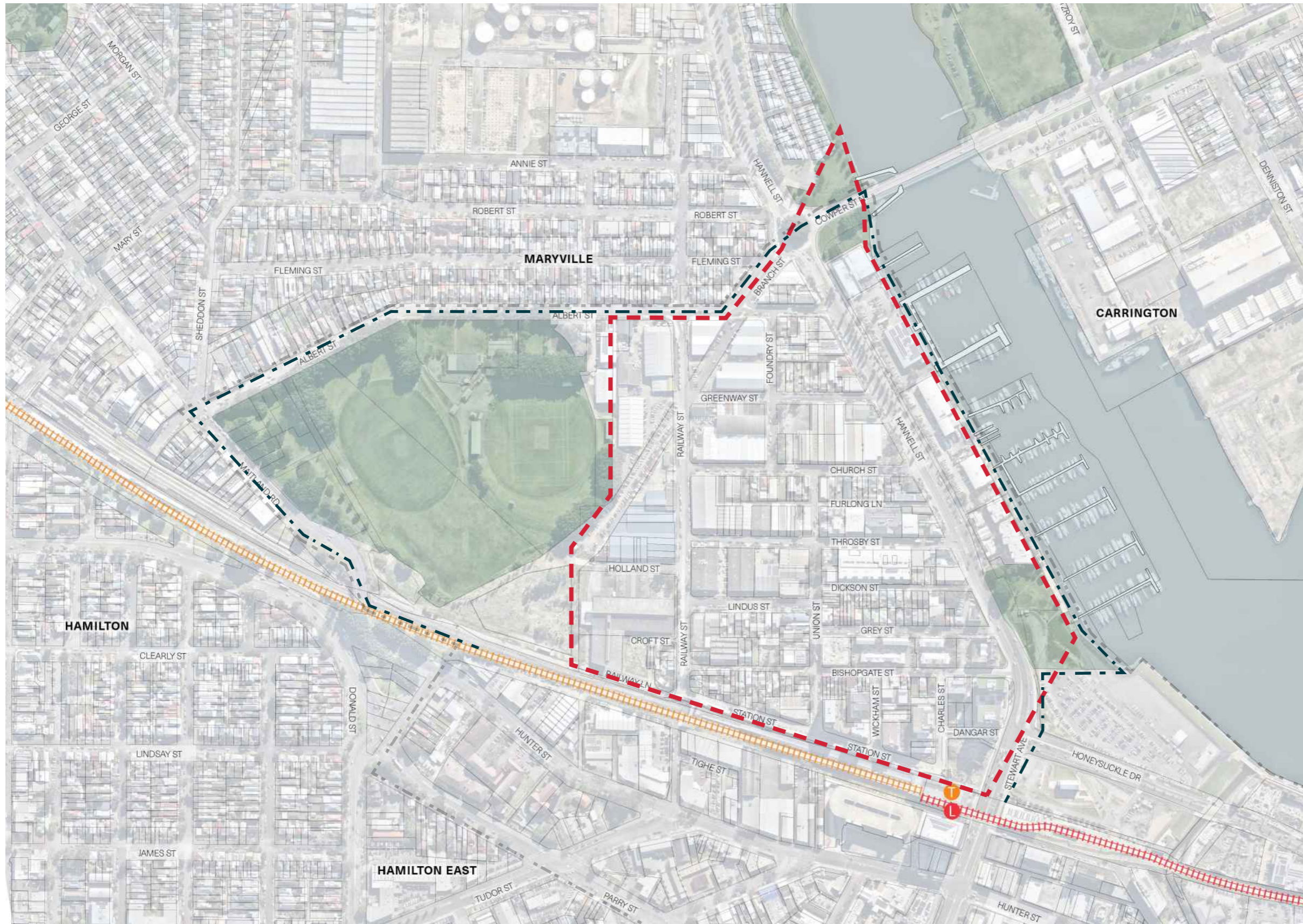
5.12 Urban heat: hottest areas





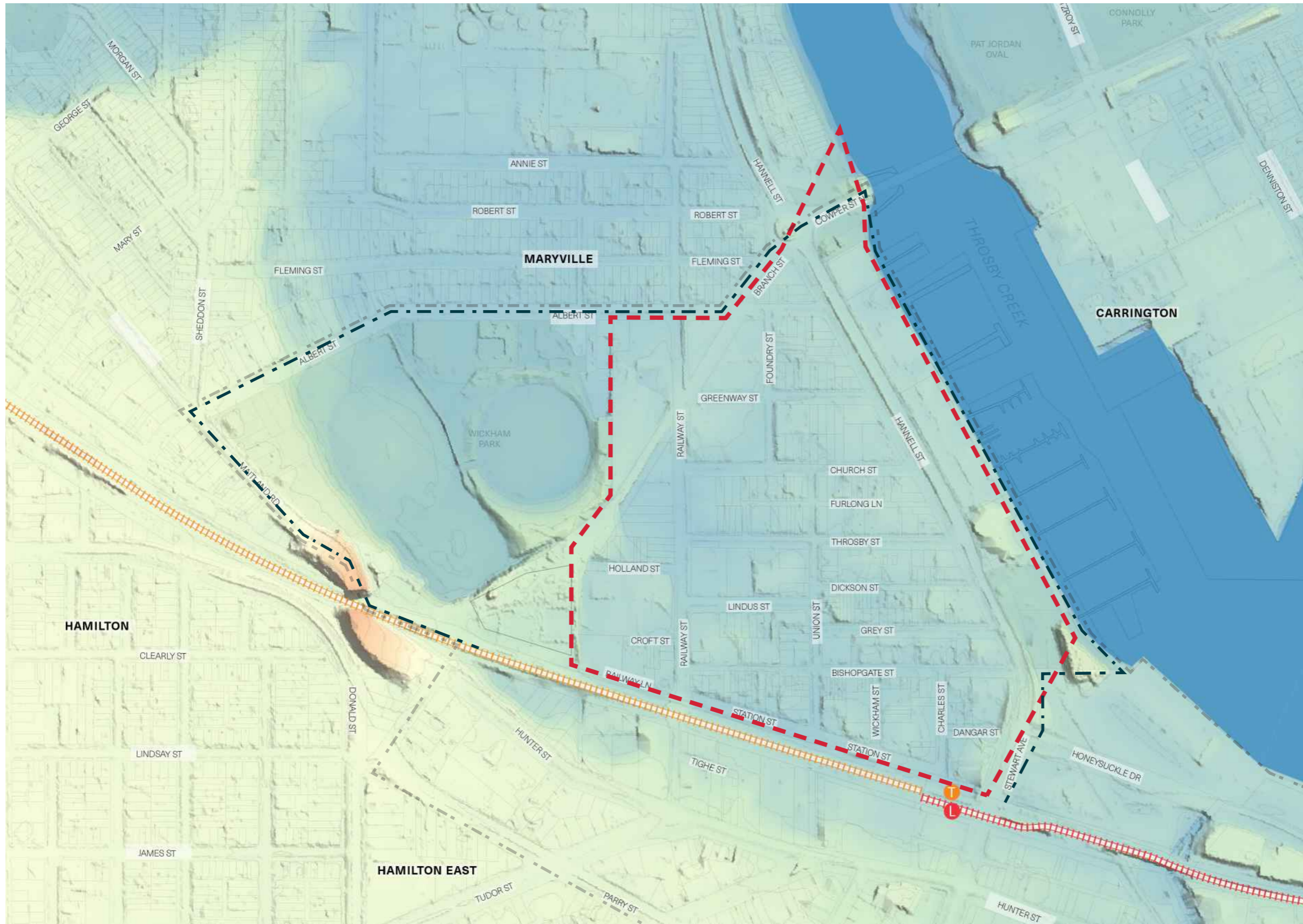
Precinct Analysis

6.1 Project site



- KEY**
- Transport**
- Heavy rail stop and alignment
 - Light rail stop and alignment
- Boundaries**
- Newcastle City Centre area
 - Wickham Masterplan area
 - PDP Focus area

6.2 Topography



KEY

Elevation (metres above AHD)

- ≤ 3
- 3.0 - 6.5
- 6.5 - 10.0
- 10.0 - 13.0
- 13.0 - 18.0
- 18.9 - 23.0
- 23.0 - 68.0
- > 68.0

Transport

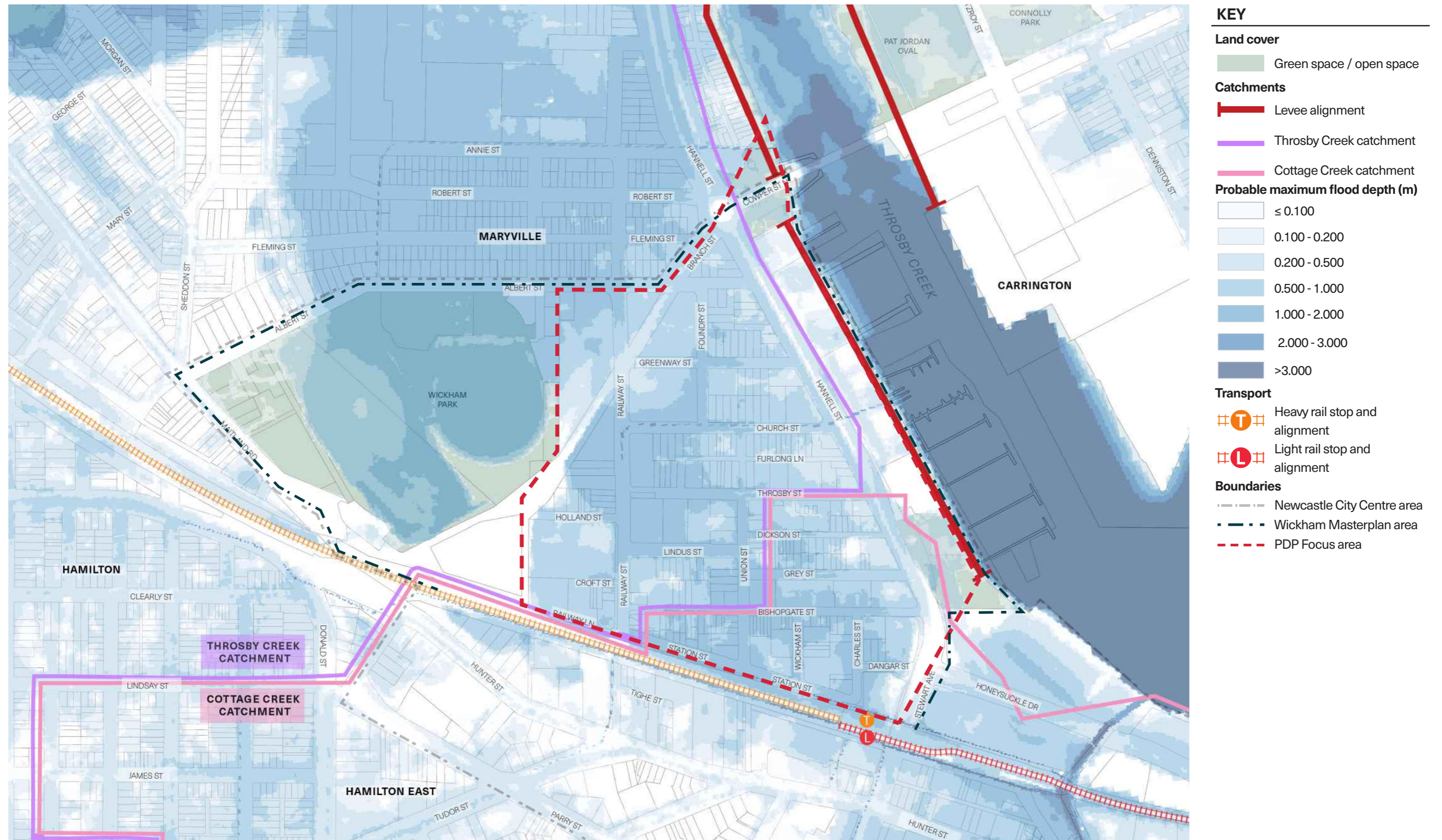
- Heavy rail stop and alignment
- Light rail stop and alignment

Boundaries

- Newcastle City Centre area
- Wickham Masterplan area
- PDP Focus area

Source: xxxxxxxx

6.3 Hydrology: waterways and flooding



Source: xxxxxxxx

6.4 Streets and open Space



Hannell Street



Station Street



Railway Street



Union Street

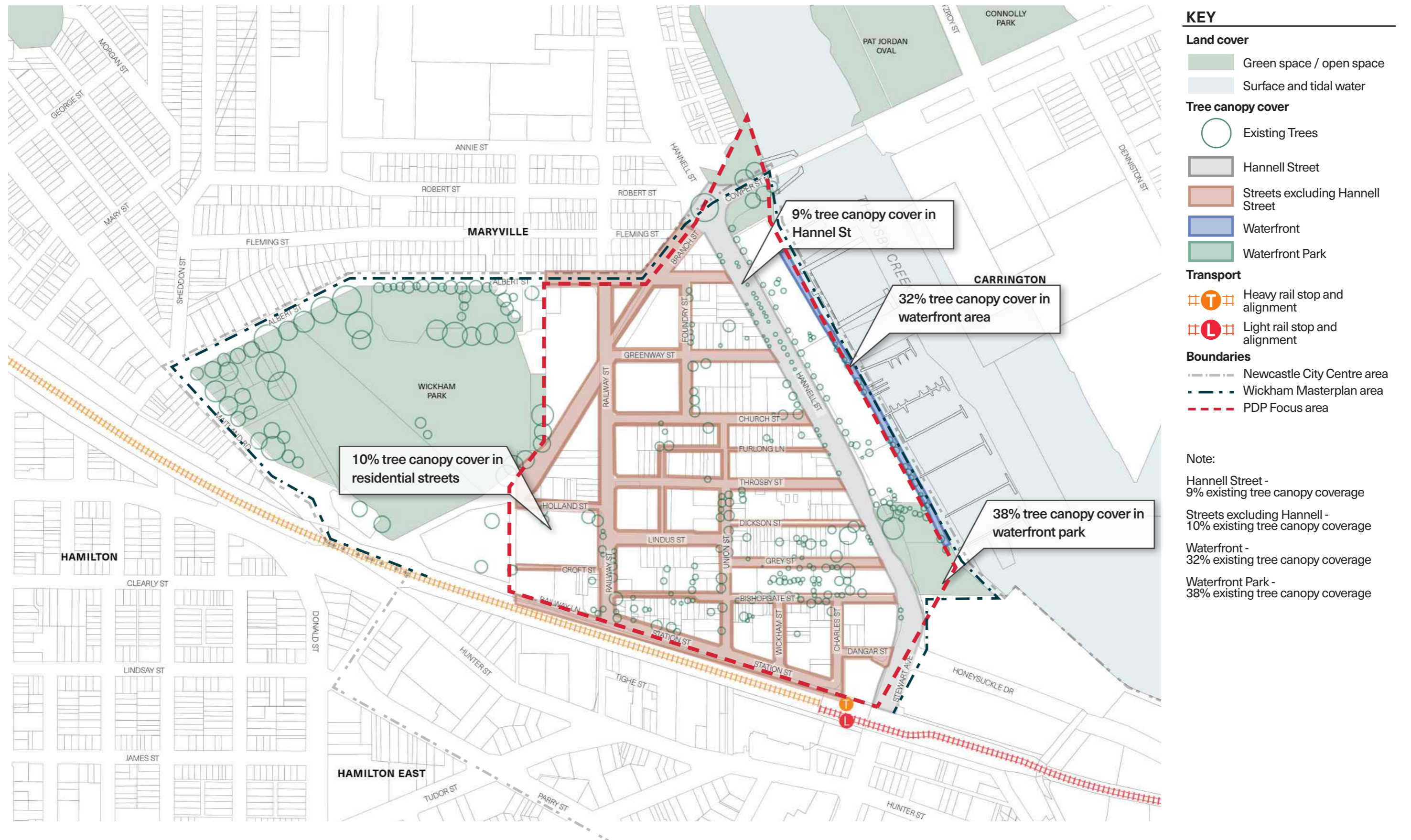


Throsby Street

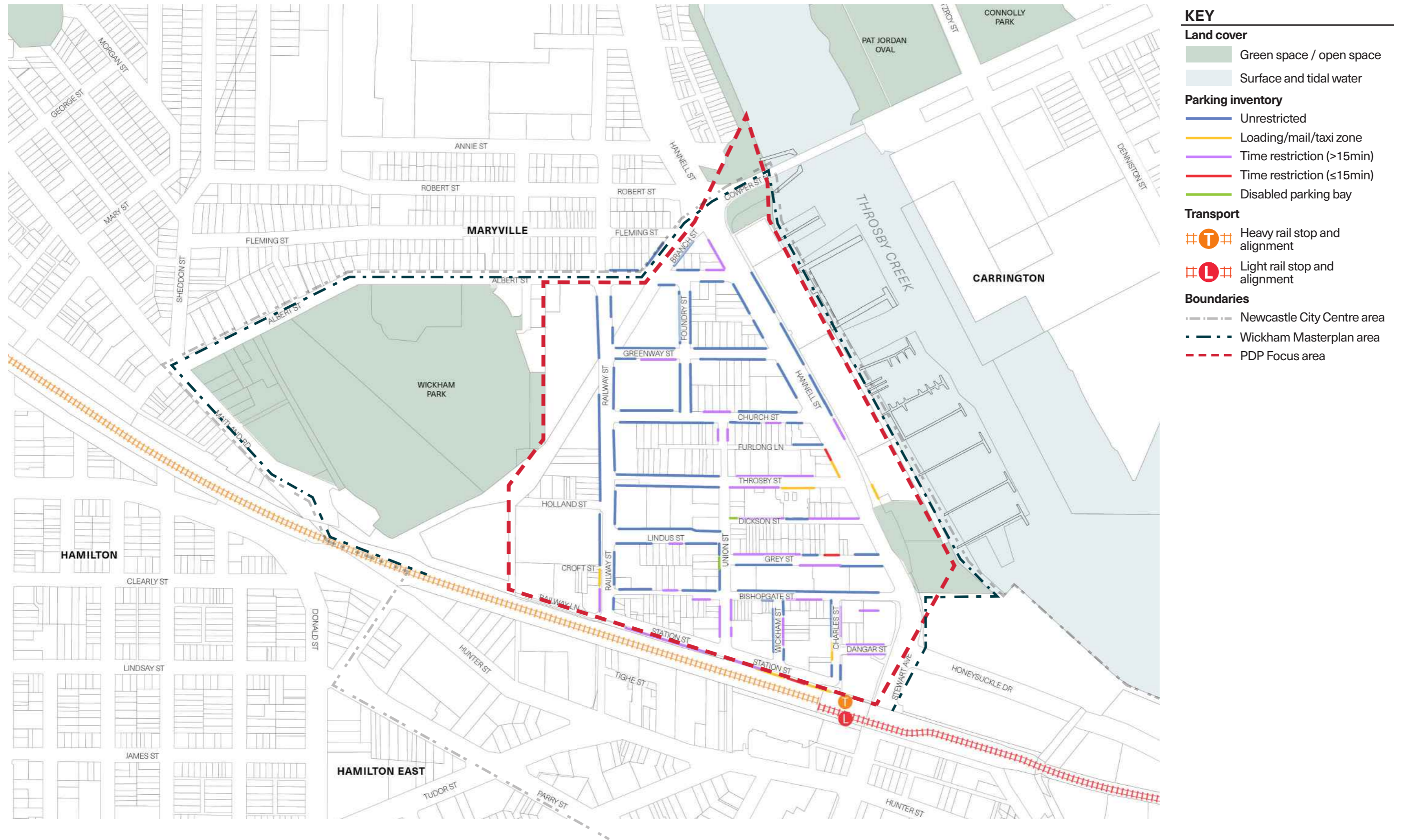


Furlong Lane

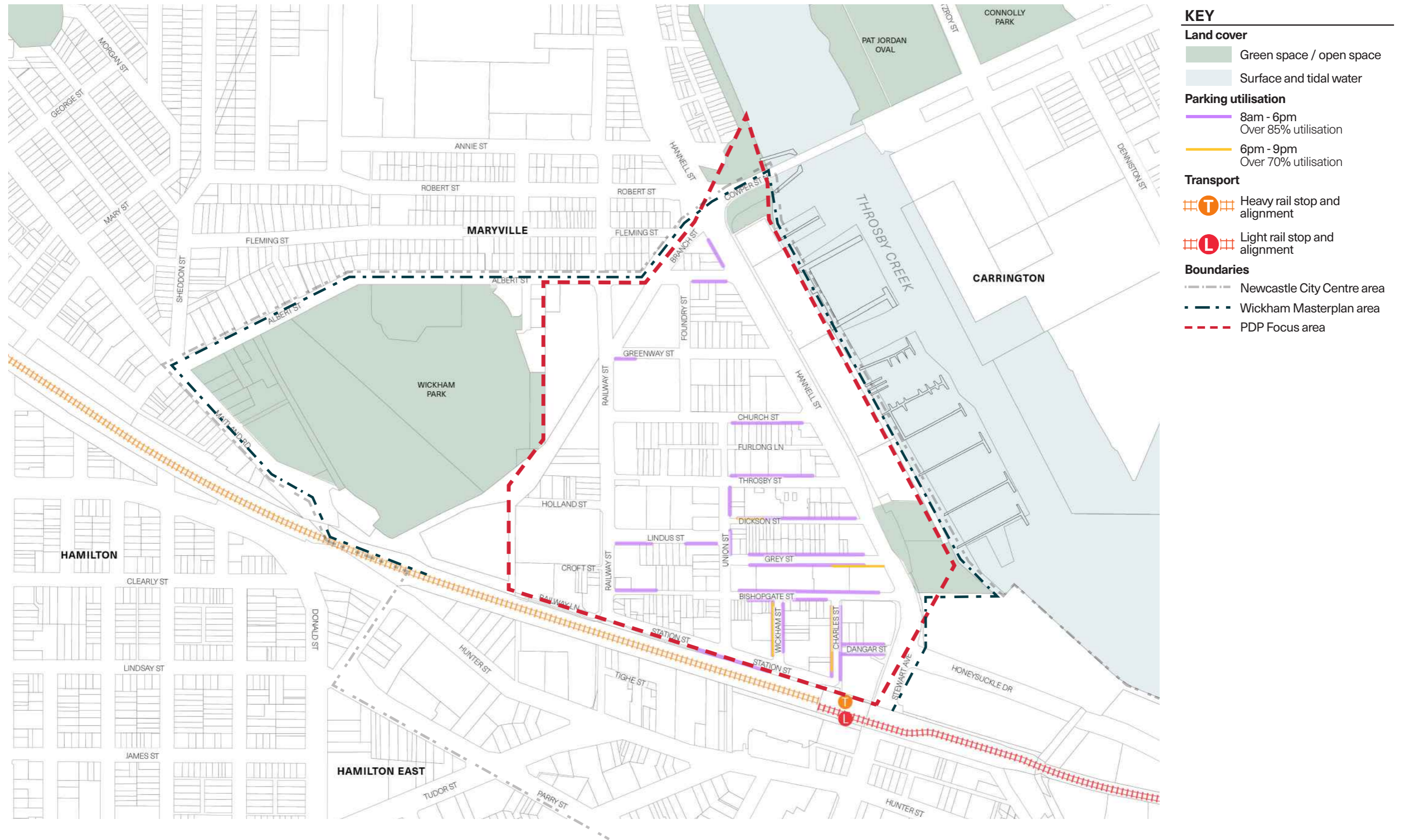
6.5 Tree canopy cover



6.6 Parking inventory



6.7 Parking utilisation



6.8 Non-Aboriginal heritage summary

6.8.1 Historical context

Wickham’s development commenced in the 1840s, with small-scale agriculture and related industries. Residential subdivisions began in 1868 but, by the mid-1870s, coal mining companies had opened shafts at Wickham and on Bullock Island. In 1876, a railway branch line through Wickham to the wharves on Bullock Island was opened and Ritchie Bros completed a large engineering works the following year. By 1900, housing had evolved into clusters of working-class cottages, set amongst these industrial enterprises. A local council and public schools were established but, in the same decade, the collieries all closed and the Bullock Island Branch Line closed in 1908. By the 1920s, the large and heavy industries had relocated out of Wickham, leaving the area as a part light-industrial, part urban-fringe suburb of Newcastle. By the 1950s, Wickham was in decline but the 1980s saw a re-emerging interest in inner city areas and the waterfrontages were redeveloped for residential purposes in the 1990s. In the 21st century, Wickham is a mix of traditional workers housing, public housing, warehouses and small industries, with multi-storey residential buildings on the waterfront.

6.8.2 Heritage items

There are no places of State, National or World Heritage significance. There are twelve recognised Local heritage items within the Wickham Masterplan area (refer Table 1).

6.8.3 Archaeology

The Ritchie & Sons / Hudson Bros Engineering site is identified in the LEP as a potential archaeological site. Other potential archaeological sites include: The Ferndale Colliery; The Wickham/Linwood Colliery; the Water Pumping Station; and the Corroboree Ground.

6.8.4 Pavements

A key issue for the Wickham Masterplan Area is the presence of particular pavements decorated with what are known as ‘Rising Sun’ and ‘Pineapple’ patterns. Sandstone block kerbs and sandstone block gutters also survive within the Masterplan area.

6.8.5 Early twentieth century housing

Wickham’s surviving early twentieth century housing forms a particular character element with the Masterplan area. Most of these are not heritage listed but could be recognised as elements of a dispersed Heritage Conservation Area.

6.8.6 Aboriginal sites and places

There are no Aboriginal Places identified under the NSW Heritage Act located with the Wickham Masterplan Area. There are nine sites registered in the Aboriginal Heritage Information Management System (AHIMS). These are mostly located on the fringes of the railway easements and in the south-east corner of the Wickham Masterplan Area.



Figure 1 – Surviving 19th and early 20th century residential buildings in Wickham



Figures 2 & 3 – Brick footpath pavements (left) and Sandstone kerbs and gutters (right)



Figure 4 – Heritage Items within the Wickham Masterplan Area (blue boundary). General Heritage Items are coloured brown, Landscape items are coloured green and Archaeological sites are coloured yellow. Heritage Conservation Areas are shown with red hatching. (Source: NCC – Heritage Maps 004FA and 004G)

Name	Address	No.
Former Wickham Town Hall and Council Chambers	18A Albert Street	I674
Hawkins Oval	22 Albert Street	I675
Hawkins Oval Memorial	22 Albert Street	I676
Residence	15 Charles Street	I681
Wickham Public School	54 Hannell Street	I685
Former Infants School	64 Hannell Street	I686
Albion Hotel	72 Hannell Street	I687
The Missions to Seamen building	96 Hannell Street	I688
The Salvation Army Men’s Hostel	116–120 Hannell Street	I689
Lass O’Gowrie Hotel	14 Railway Street	I691
Former Wickham and Bullock Island Railway Corridor	Railway Easement	I706

Table 1

6.9 Heritage features



Wickham in the late 19th century with Bullock Island Branch railway



'Tree of Knowledge' / Yum Yum Tree



Significant fig trees, Albert Street (adjacent Wickham Park)



Croatian Club, Albert Street



Former Wickham Public School, Hannell Street

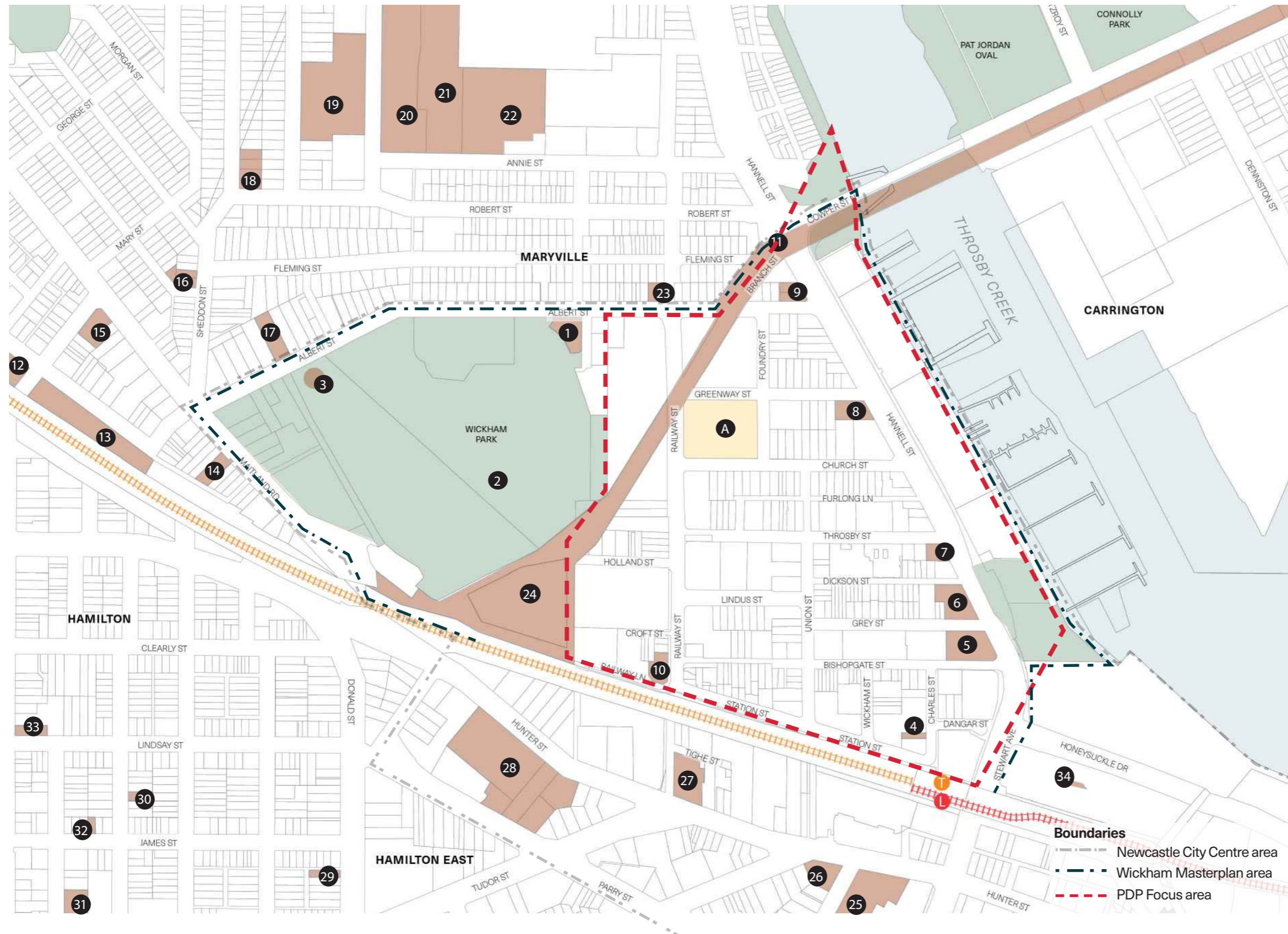


Former Infants School / Awabakal Community Centre, Hannell Street



"Rising Sun" brick pavers

6.10 Heritage



KEY

Land cover

- Green space / open space
- Surface and tidal water

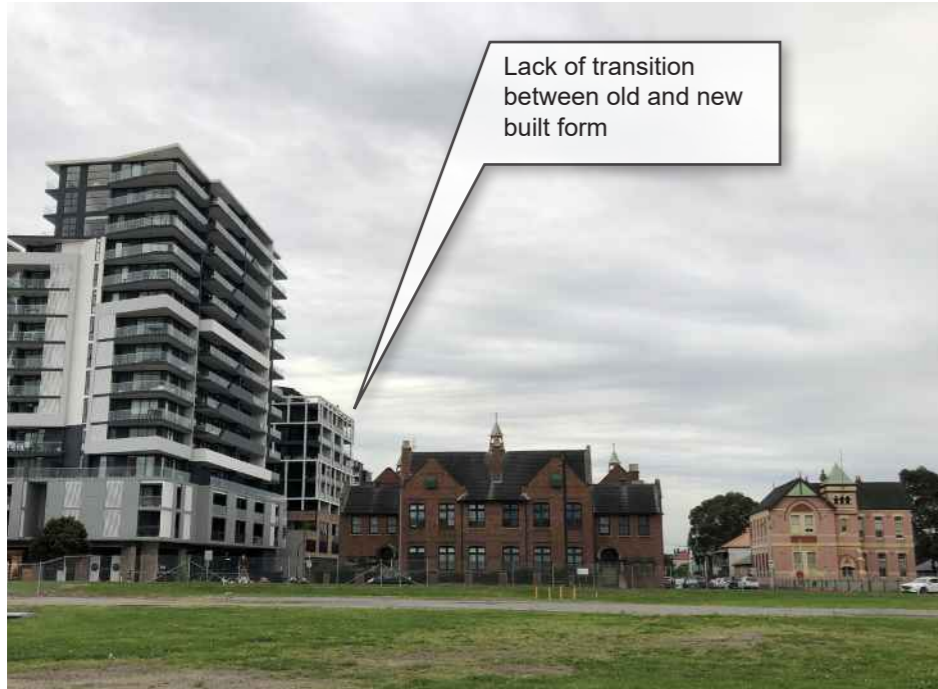
Heritage

- Local heritage site
- Local archeological site
- R A Ritchie & Sons / Hudson Bros Engineering (fmr industrial site)
- Fmr Wickham Town Hall & Council Chambers
- Hawkins Oval
- Hawkins Oval Memorial
- Residence
- Wickham Public School
- Former Infants School
- Albion Hotel
- Missions to Seamen building
- Salvation Army Men's Hostel
- Lass O'Gowrie Hotel
- Fmr Wickham & Bullock Island Railway Corridor
- Hamilton Station Hotel
- Station Buildings & Signal Box
- Residence
- Fmr Regent Picture Theatre
- Kenilworth (Residence)
- Ventetia (Residence)
- St Mark's Anglican Church
- Winchombe Carson Warehouse
- Elder's Warehouse
- Dalgety Warehouse
- Fmrr NZ Loan Co Wool Store
- Fmr Police Lock-Up
- Fmr Wickham & Bullock Island Railway Corridor
- Fmr Castlemaine Brewery
- Former School of Arts
- Dairy Farmer's Building
- St Josephs Convent & Sacred Heart Church & School
- Anona (residence incl front fence)
- Terrace (incl Iron Fence & Gate)
- Scots Kirk Presbyterian Church
- Fmr Hamilton Volunteer Fire Station
- Hamilton Post Office
- Former School of Arts

Boundaries

- Newcastle City Centre area
- Wickham Masterplan area
- PDP Focus area

6.11 Built form



View from Honeysuckle to Wickham



Original timber housing



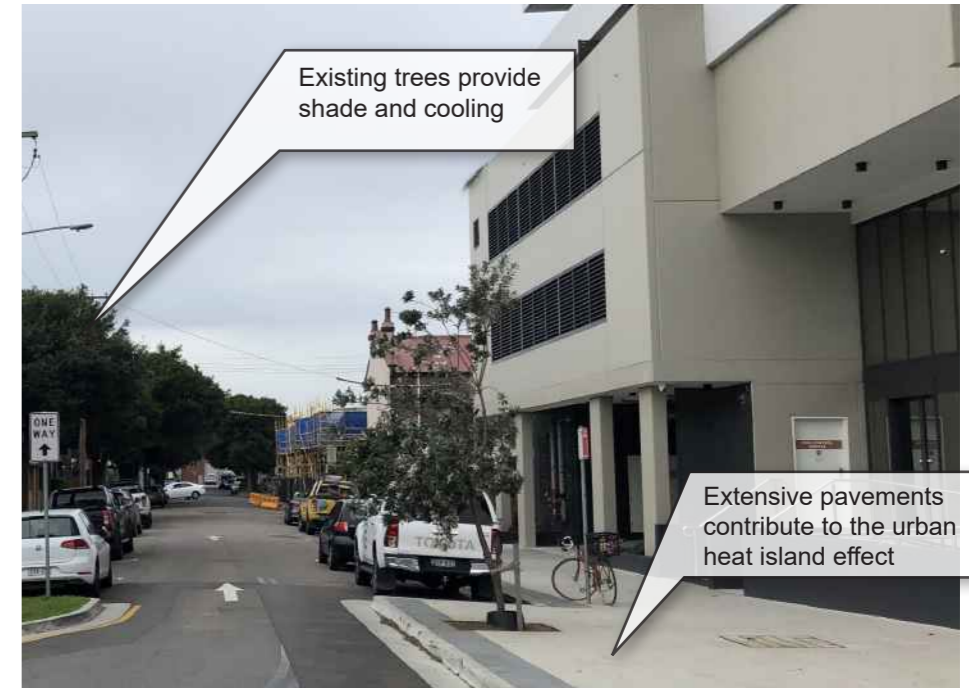
Adaptive reuse of industrial buildings



New housing on Throsby Street / Union Street



Station Street - east



Street interface to Station Street (adjacent Newcastle Interchange)

6.12 Land ownership



KEY

Land cover

- Green space / open space
- Surface and tidal water

Land Ownership

- Newcastle City Council
- Rail Corporation NSW
- State of NSW
- Private Ownership

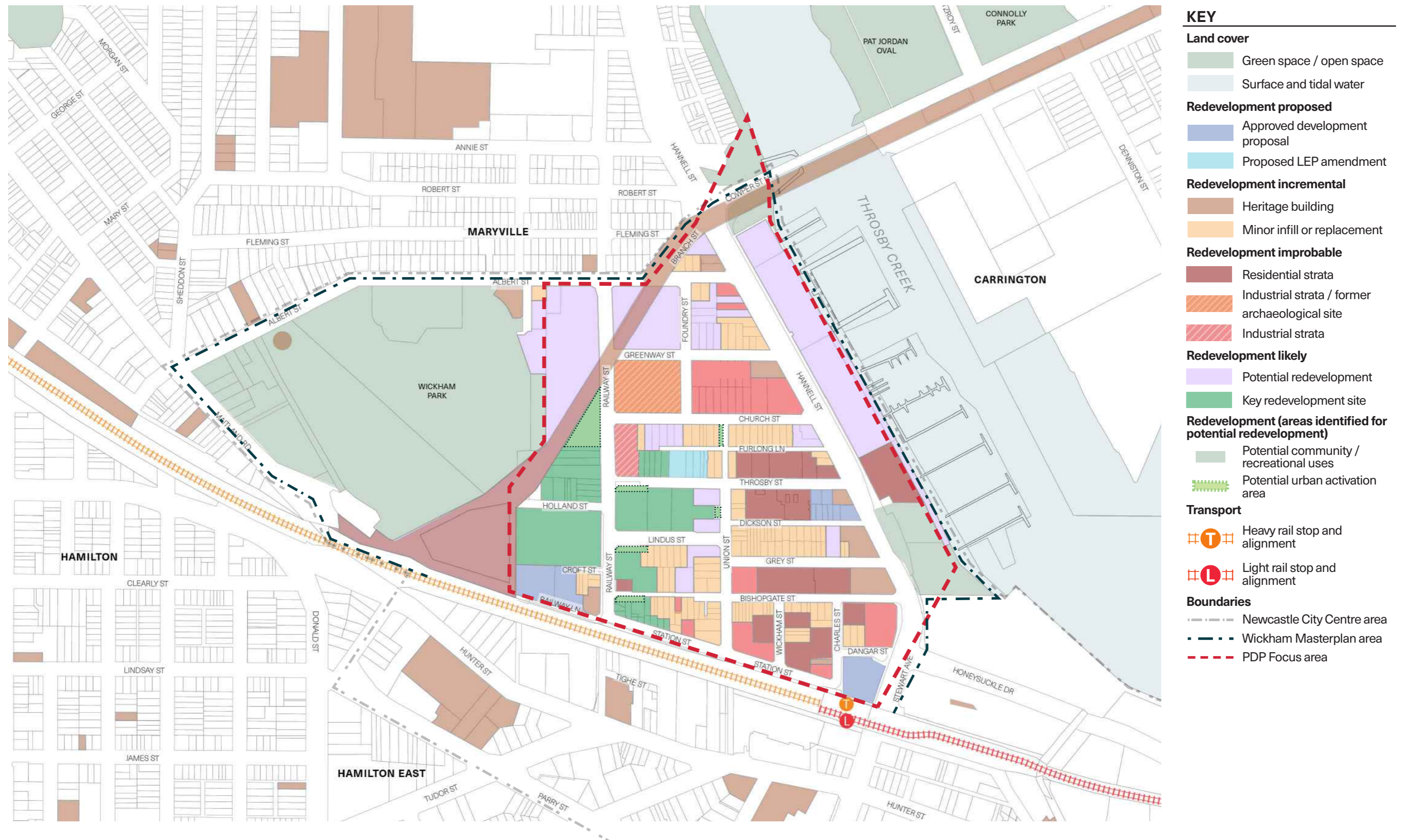
Transport

- Heavy rail stop and alignment
- Light rail stop and alignment

Boundaries

- Newcastle City Centre area
- Wickham Masterplan area
- PDP Focus area

6.13 Potential change of land use



KEY

Land cover

- Green space / open space
- Surface and tidal water

Redevelopment proposed

- Approved development proposal
- Proposed LEP amendment

Redevelopment incremental

- Heritage building
- Minor infill or replacement

Redevelopment improbable

- Residential strata
- Industrial strata / former archaeological site
- Industrial strata

Redevelopment likely

- Potential redevelopment
- Key redevelopment site

Redevelopment (areas identified for potential redevelopment)

- Potential community / recreational uses
- Potential urban activation area

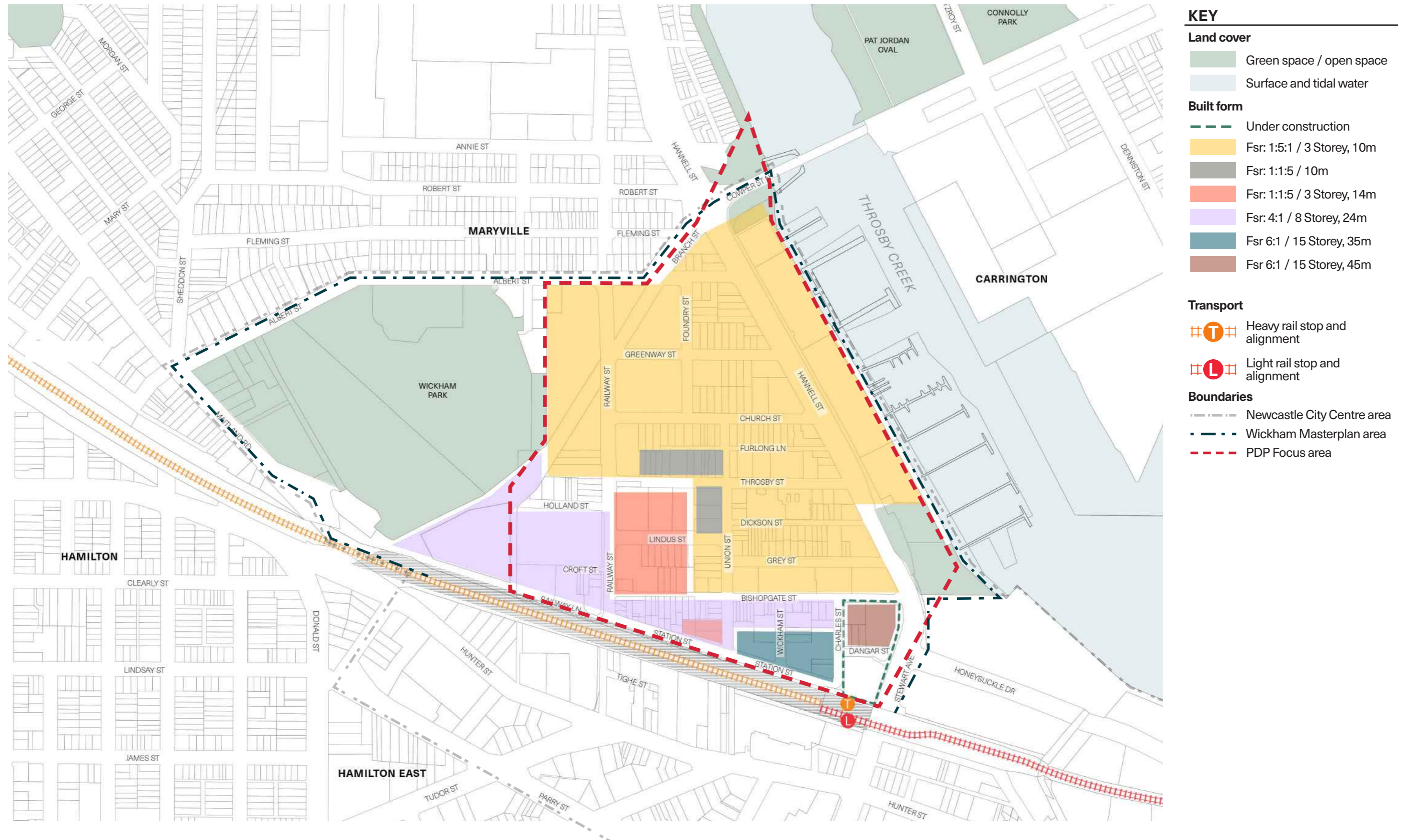
Transport

- Heavy rail stop and alignment
- Light rail stop and alignment

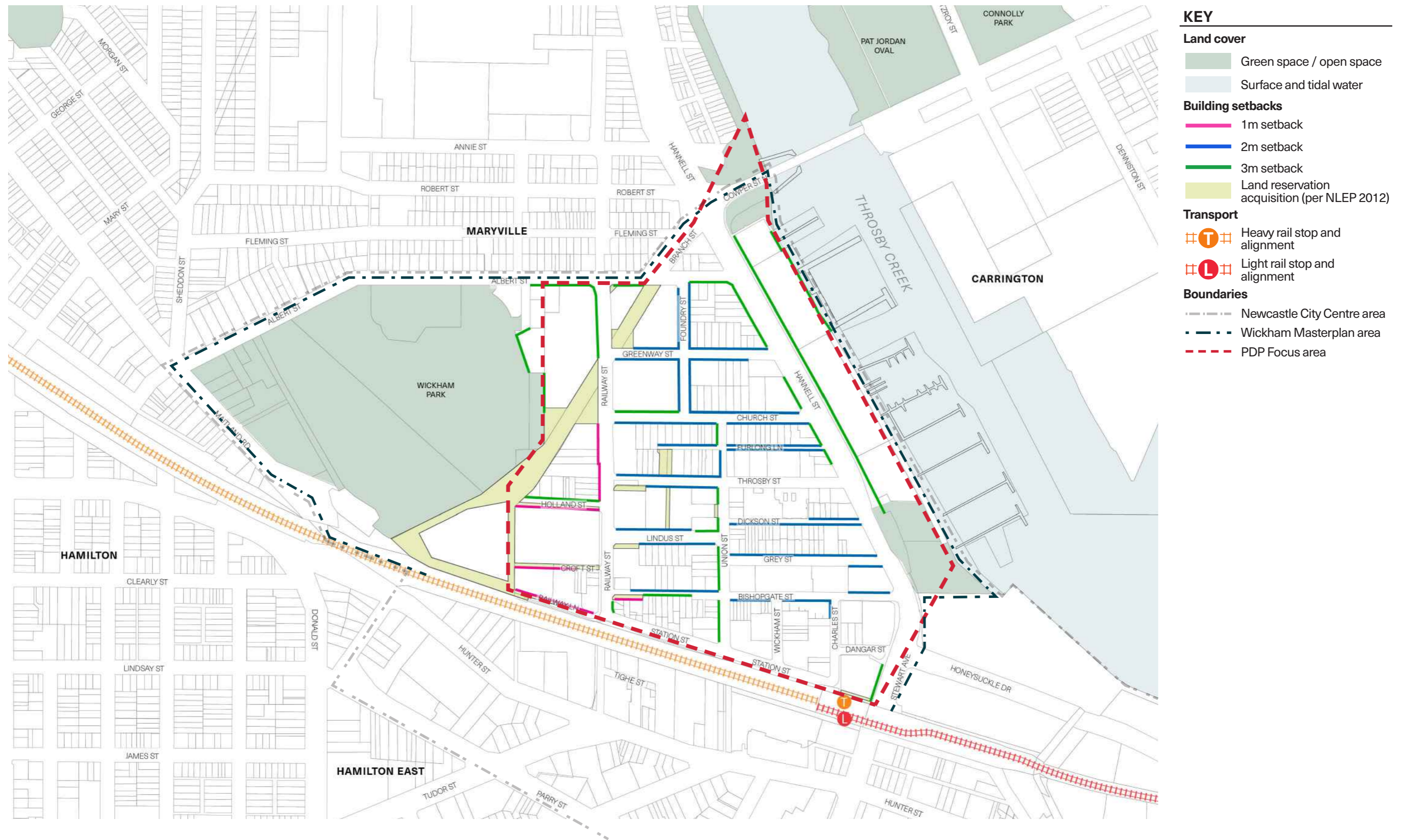
Boundaries

- Newcastle City Centre area
- Wickham Masterplan area
- PDP Focus area

6.14 Built form scale



6.15 Minimum building setbacks



6.16 Activity nodes and attractors: public art

Increase engagement with local Aboriginal community



Enhance Newcastle's public space through public art



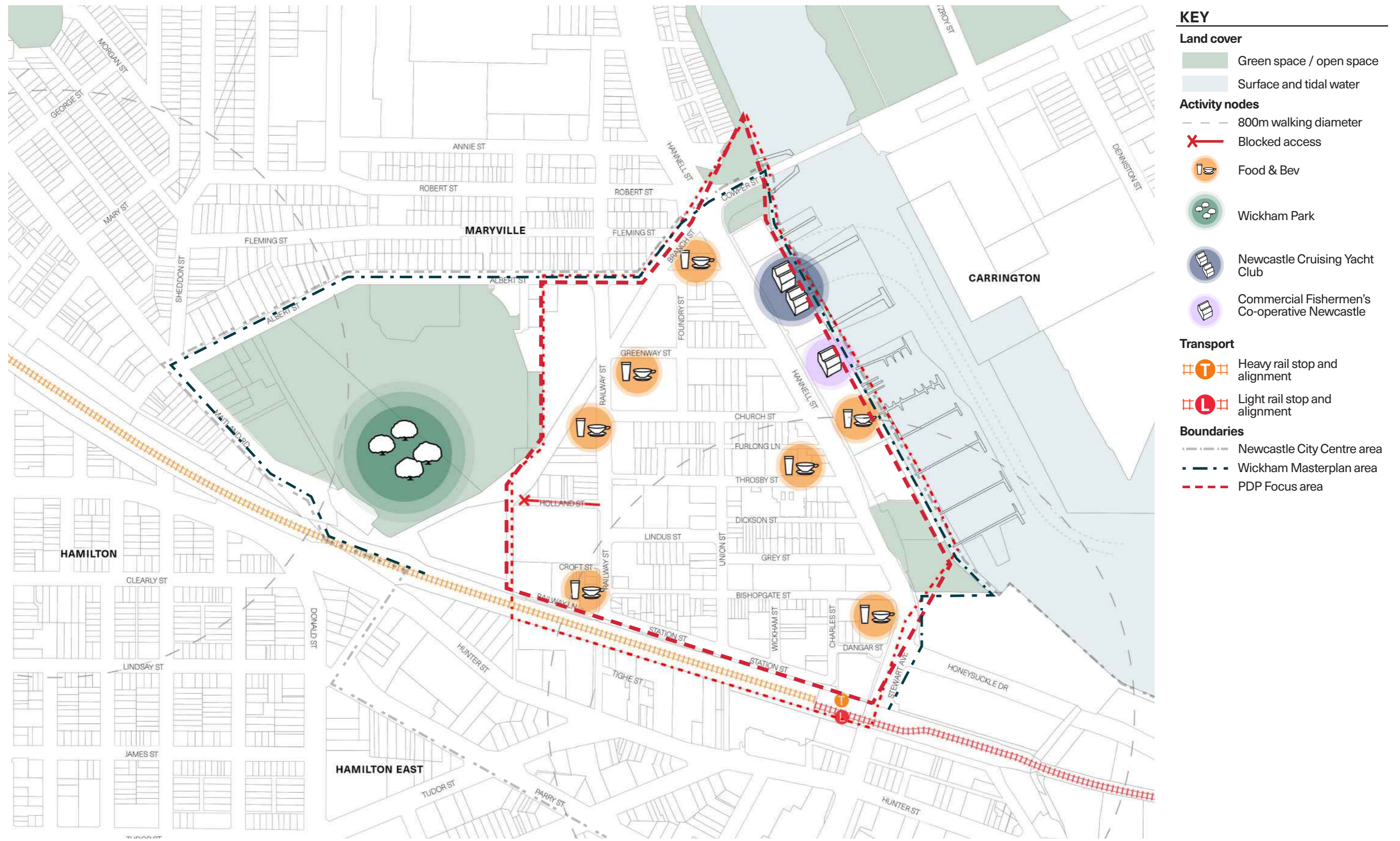
Public art murals

Street artwork

Public art

Celebrate the city and contribute to its identity

6.17 Activity nodes and attractors: wider context



KEY

Land cover

- Green space / open space
- Surface and tidal water

Activity nodes

- 800m walking diameter
- Blocked access
- Food & Bev
- Wickham Park
- Newcastle Cruising Yacht Club
- Commercial Fishermen's Co-operative Newcastle

Transport

- Heavy rail stop and alignment
- Light rail stop and alignment

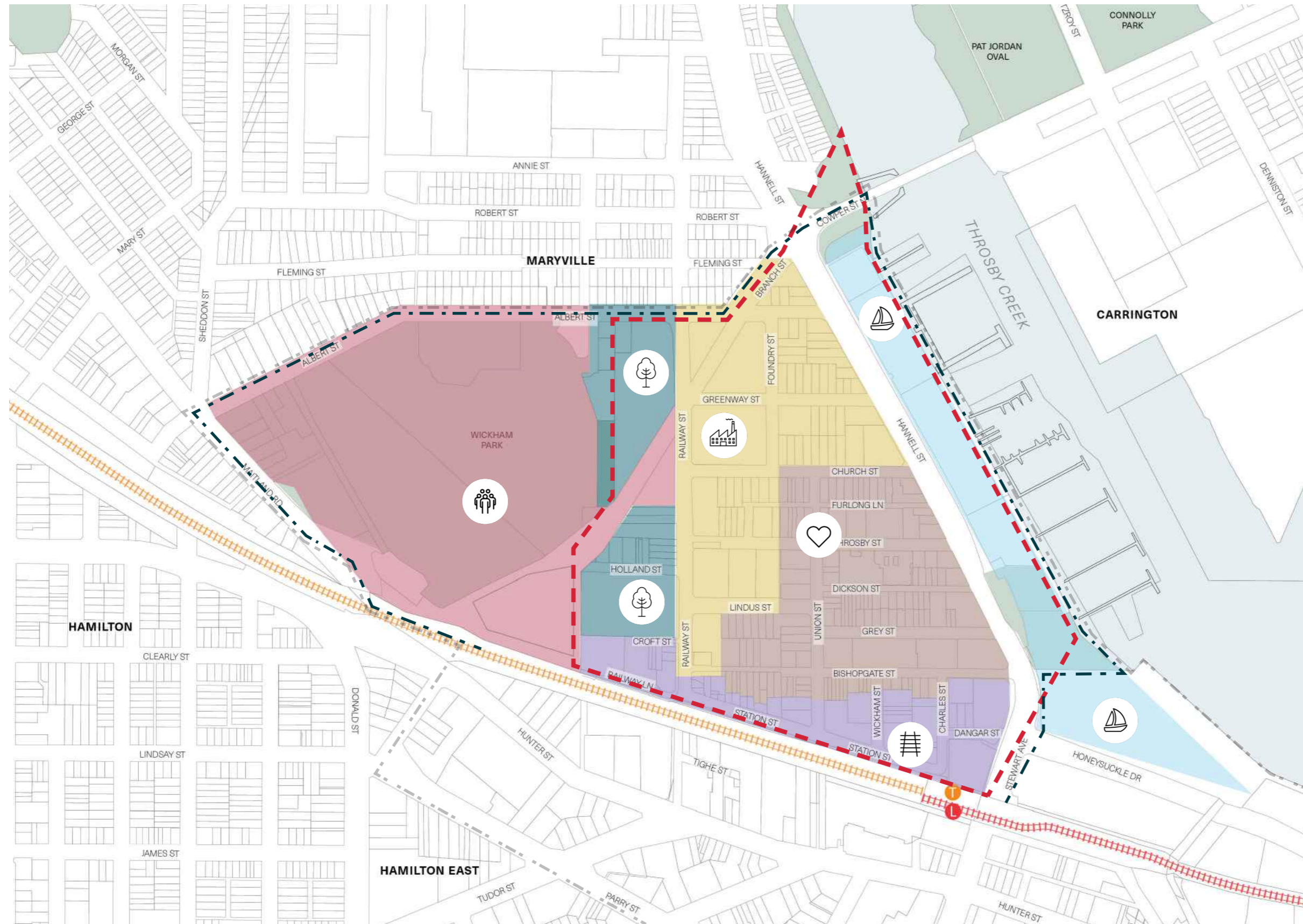
Boundaries

- Newcastle City Centre area
- Wickham Masterplan area
- PDP Focus area



Opportunities and Constraints

7.1 Precinct character



KEY

Land cover

- Green space / open space
- Surface and tidal water

Precinct characters

- Community and recreation
- Emerging industry quarter
- Harbour edge
- Park edge
- Rail edge
- Village hub

Transport

- Heavy rail stop and alignment
- Light rail stop and alignment

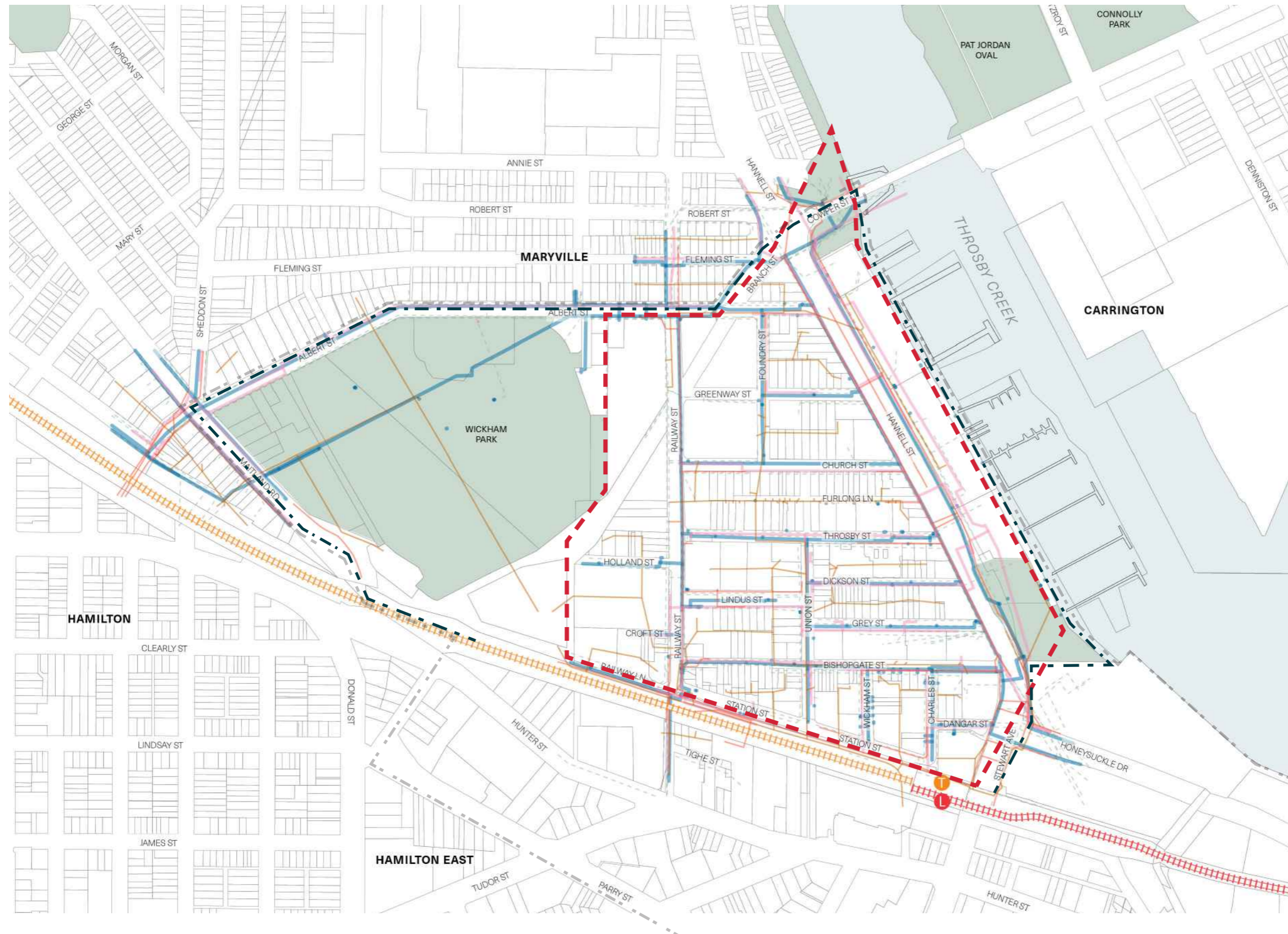
Boundaries

- Newcastle City Centre area
- Wickham Masterplan area
- PDP Focus area

7.2 Open space and tree canopy



7.3 Existing utilities



KEY

Land cover

- Green space / open space
- Surface and tidal water

Services

- Telecom
- Gas
- Electrical
- Water
- Sewer

Transport

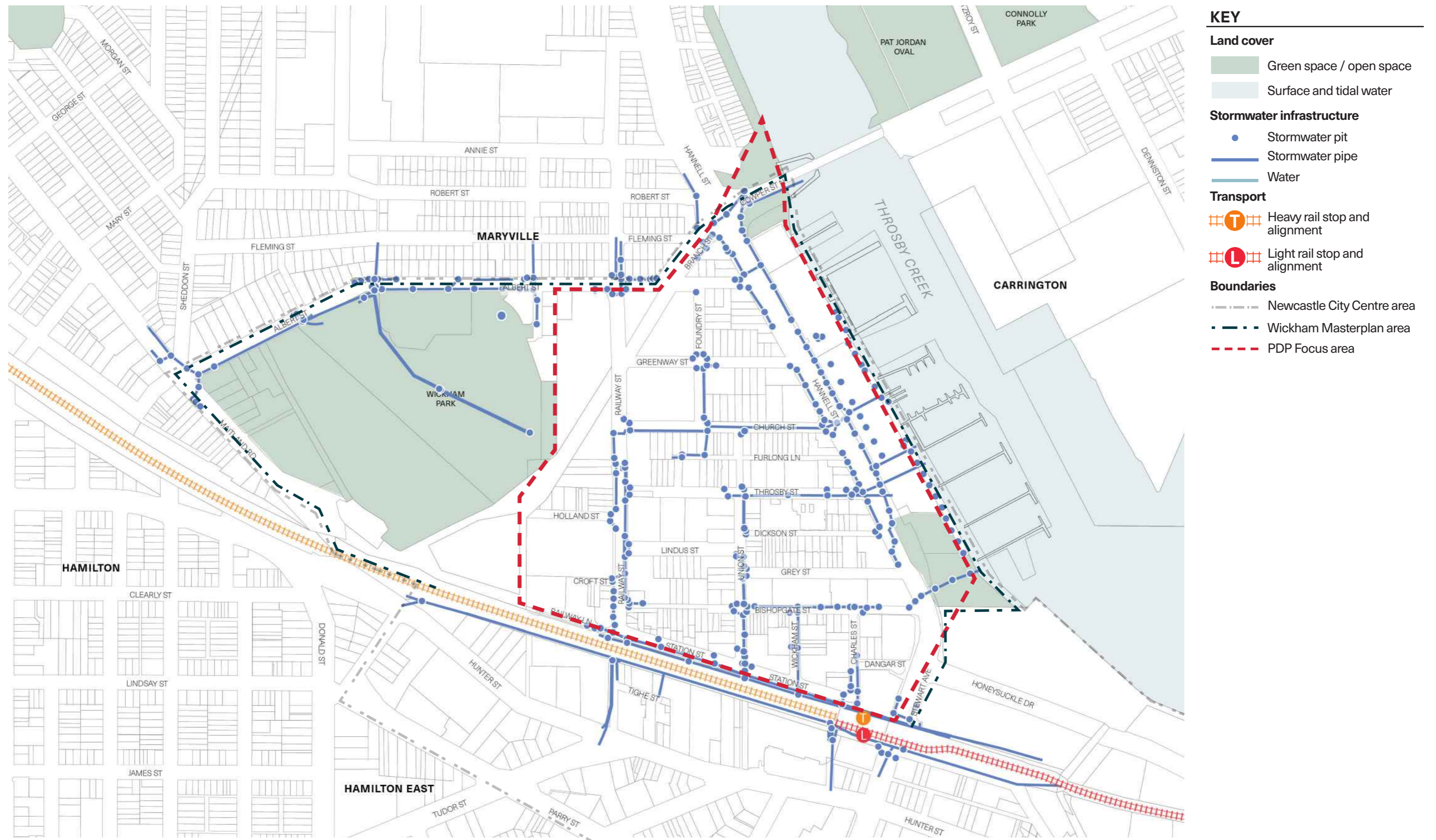
- Heavy rail stop and alignment
- Light rail stop and alignment

Boundaries

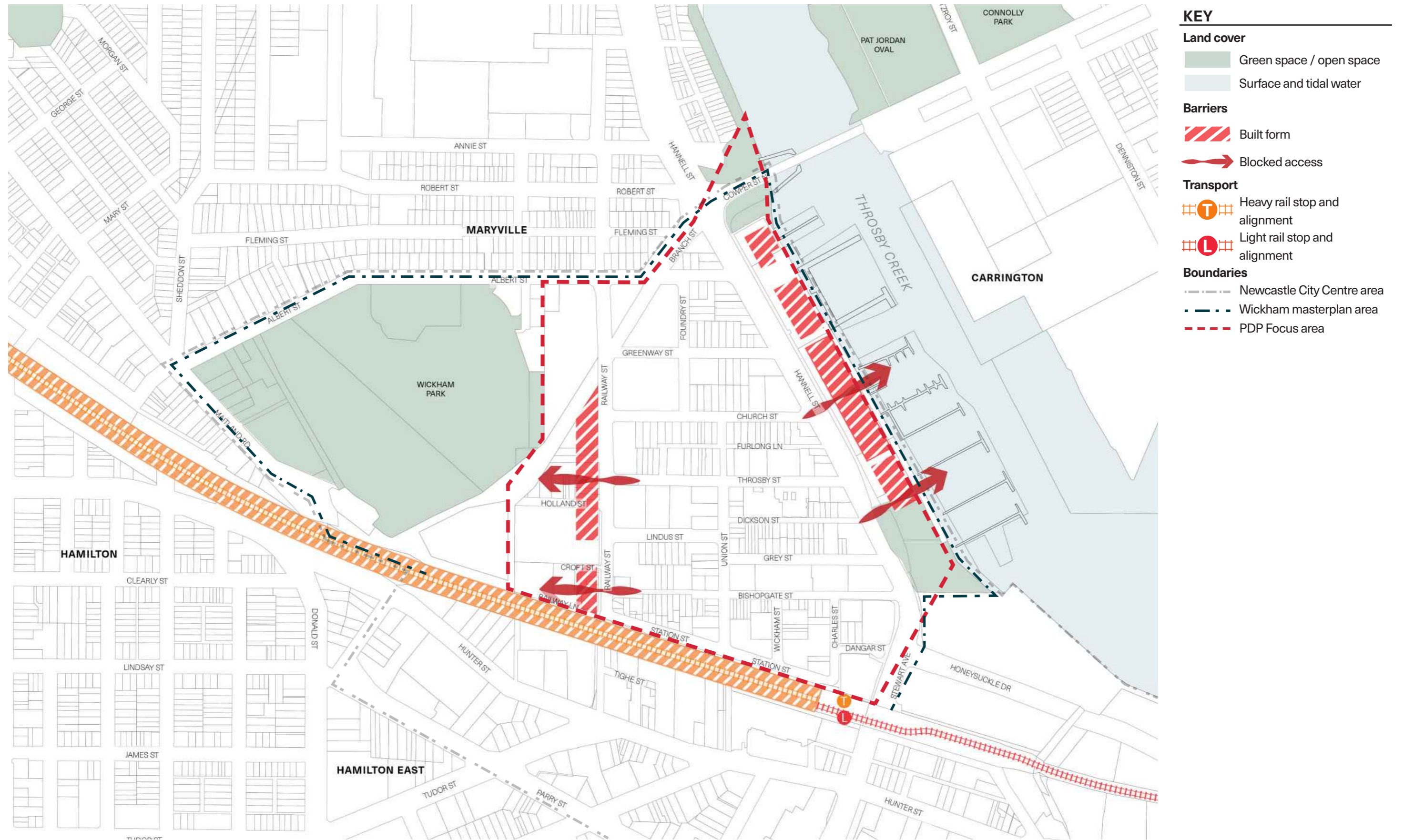
- Newcastle City Centre area
- Wickham Masterplan area
- PDP focus area

- Utility Opportunities & Challenges**
- Opportunity to underground existing Ausgrid overhead powerlines
 - Opportunity to extend telecommunications cabling to any future smart-poles, noting a roll-out is not currently planned within Wickham
 - Opportunity for future Electric Vehicle charges in Wickham Park
 - Congested utilities in footpaths are significant constraint to additional tree planting and may have to be managed through build-outs
 - Significant sewer assets that service the majority of the site run down Union & Station Street and will have to be managed

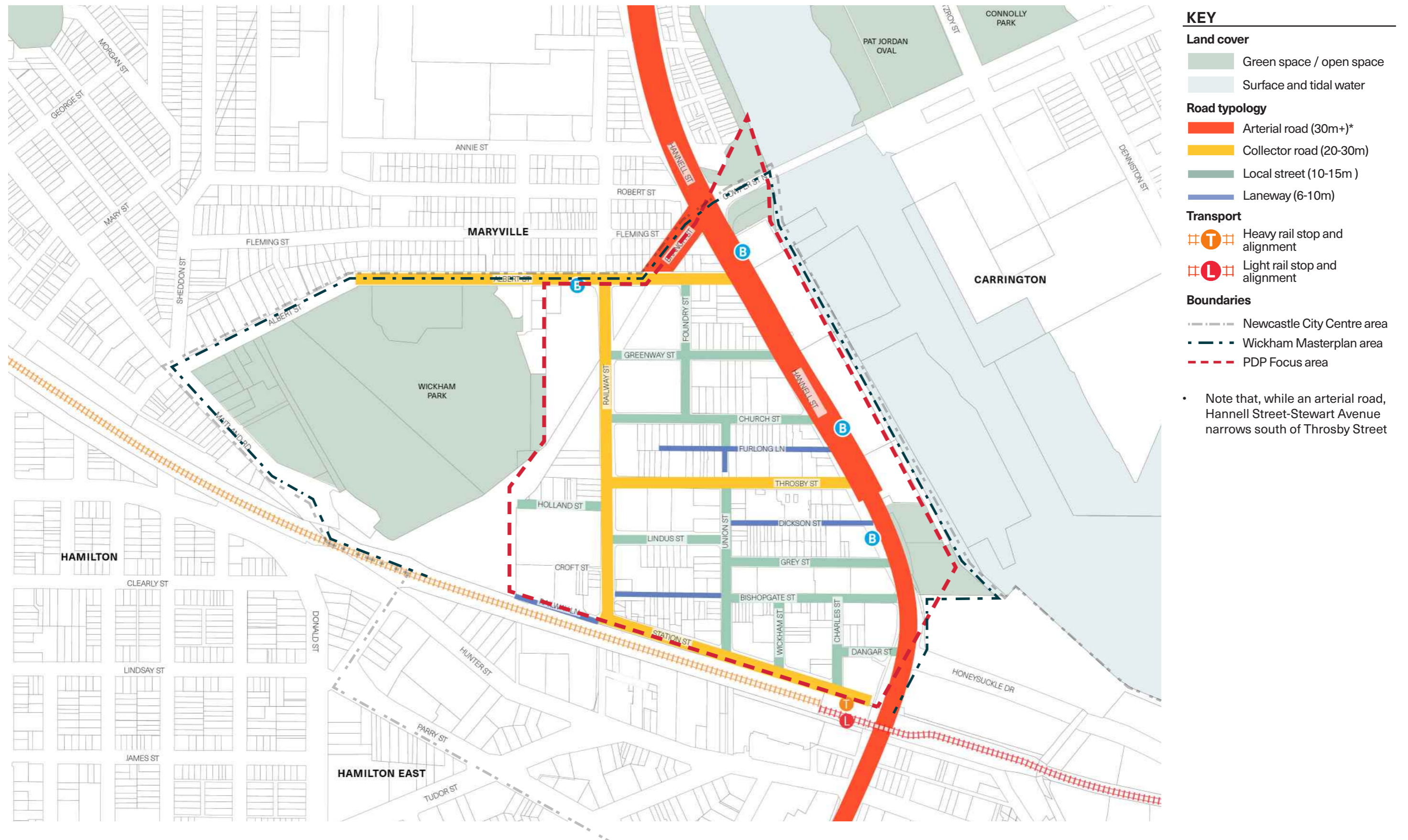
7.4 Stormwater management



7.5 Barriers



7.6 Existing road reserve widths and typology



KEY

Land cover

- Green space / open space
- Surface and tidal water

Road typology

- Arterial road (30m+)*
- Collector road (20-30m)
- Local street (10-15m)
- Laneway (6-10m)

Transport

- Heavy rail stop and alignment
- Light rail stop and alignment

Boundaries

- Newcastle City Centre area
- Wickham Masterplan area
- PDP Focus area

* Note that, while an arterial road, Hannell Street-Stewart Avenue narrows south of Throsby Street

Background documents



Summary of Background Documents

Document	Date/Author	Key findings
Wickham Masterplan (2017)	NCC	<p><i>Vision for Wickham...</i></p> <p>Wickham Urban Village – history</p> <ul style="list-style-type: none"> • First subdivided in mid-1800s • By the 1900s it became Newcastle’s popular suburb for workers; current urban structure reflects original pattern of development • 2012 – NSW Government introduced Newcastle Urban Renewal Strategy; Wickham Masterplan was prepared in response to NURS • 2014 – NURS updated and advocates a strategic shift of the commercial core of the Newcastle City Centre from Newcastle East to Newcastle West • Changing demographic with increased demand for inner city residential apartments • Potential uses within Wickham to support technology sector (e.g. shared work spaces, ‘makerspaces’ etc) • Important that redevelopment expectations be managed through density controls to avoid over inflation of unimproved land values • Challenges to address: <ul style="list-style-type: none"> — Accessibility and connectivity — Increased demand for car parking — Maintaining land for employment — Safety and amenity — Physical limitations particularly flooding • Opportunities to build upon: <ul style="list-style-type: none"> — Location – adjacent to new central business district of Newcastle City centre — Wickham Park – support recreation and social needs of community — Physical attributes – supports walking and cycling, proximity to waterfront and park — Eclectic urban character – varied building types, scale and styles; vibrant examples of community place making and public art; historical remnants; mix of land uses • Vision: <ul style="list-style-type: none"> — Railway edge – interface to the emerging commercial core of Newcastle; mixed use development; adjacent interchange and development capacity — Village hub – incorporates residential subdivision patterns established in mid 1800s; fine-grain character and lower scale built form; prioritises pedestrian amenity and safety; Union Street and main pedestrian spine; retail and commercial; and community activity — Harbour Edge – prime waterfront location; maintain three storey scale; support entertainment and tourism activity; pedestrian and cycle links between Newcastle Interchange and foreshore promenade; potential additional ferry stop would provide greater connectivity for Wickham and the city and surrounding suburbs — Emerging industry quarter – larger development sites and wider streets to support larger scale development; support growth in smart technologies, research and development; support ‘smart city’ initiatives; former Bullock Island corridor as open space — Park edge precinct – residential apartment development and clusters of commercial and retail; provides key east-west connections to Wickham Park — Wickham Park – social and recreation needs of local residents and wider Newcastle community; playing fields, playground, community gardens, market and event space, community facilities and amenities (Note – outside of WPDP project site area) • Implementation <ul style="list-style-type: none"> — Provide connected and accessible pedestrian and cycling routes through the Wickham Master Plan area — Manage traffic within the Wickham Master Plan area to improve amenity and safety within local streets — Manage car parking demands generated both internal and external to the Wickham Master Plan area — Eclectic urban character – varied building types, scale and styles; vibrant examples of community place making and public art; historical remnants; mix of land uses

Appendix 4 – Background documents

Document	Date/Author	Key findings
Wickham Masterplan (2017)	NCC	<ul style="list-style-type: none"> — Create safe, attractive and inclusive public spaces: <ul style="list-style-type: none"> - Improve streetscapes to meet future capacities and current community expectations - Implement opportunities for activation of the public realm - Acquire land required for implementing the Wickham Master Plan — Ensure built environment is functional, responsive and resilient: <ul style="list-style-type: none"> - Redevelopment densities reflect the desired future character of the WMP area and provide opportunities to deliver community benefits - Built form reflects the desired future character of the WMP area
Wickham Masterplan (2021 Update)	NCC	<p>Update reflects construction of Newcastle Interchange, Honeysuckle redevelopment, and key sites in proximity to the site</p> <p>Challenges to realising the long-term Vision for Wickham:</p> <ul style="list-style-type: none"> • Development controls: <ul style="list-style-type: none"> — Street setbacks — Lack of activation along primary street frontages — Not delivering the identified public domain areas — Lack of variety of size or intent of ground floor spaces within larger development sites — Driveway access diminishing pedestrian safety and amenity — Lack of lot amalgamation resulting in residual parcels • Mine subsidence • Opportunities to realising the long-term Vision for Wickham: <ul style="list-style-type: none"> - Redevelopment potential – includes proposed, improbable, incremental, likely redevelopment; consider potential • Key areas of interest by stakeholders during engagement: <ul style="list-style-type: none"> — Access and parking around Wickham Park — Additional housing types within the area other than apartments — Expansion of the Village Hub — Footpaths, cycleways and shared paths — Mine subsidence risk — Traffic movements and carparking • Wickham 2040 <ul style="list-style-type: none"> — “Wickham will continue to transform into a dynamic urban neighbourhood that supports a diverse mix of uses, which complement the adjoining commercial core of the Newcastle City Centre located within Newcastle West. — Urban renewal within the area is envisaged to build on the existing urban structure to deliver greater connectivity, improved public domain amenity, and a built form reflecting the envisaged function and character.”
Newcastle 2040 Community Strategic Plan	NCC	<p>Vision...</p> <p>“We will celebrate our cultural heritage and history, protect our natural environment and support our people to thrive and prosper. As an inclusive community, we will strive for equal rights and access for all. We will face challenges with integrity, innovation and creativity.</p> <p>Support business growth, education and employment opportunities. We will be a leading lifestyle city with vibrant public places and spaces, connected transport networks and unique urbanism. This will be achieved within a framework of open and collaborative leadership.”</p>

Appendix 4 – Background documents

Document	Date/Author	Key findings
Newcastle 2040 Community Strategic Plan	NCC	<p>Vision...</p> <p>2016 – 150,919 people 2036 - population forecast 195,530 Newcastle welcomes 4.1 million visitors each year</p> <p>The population of the LGA will increase and we will play a stronger role as the capital of the region as it's population grows to 1 million in 2036.</p> <ul style="list-style-type: none"> • Guiding Principles: <ul style="list-style-type: none"> — Recognise diverse local community needs and interests — Consider social justice principles of equity, access, participation and rights — Consider long term and cumulative effects of actions on future generations — Consider principles of ecologically sustainable development • Align with International Sustainability Goals: <ul style="list-style-type: none"> — Integrated and accessible transport — Protected environment — Vibrant, safe and active public places — Inclusive community — Liveable built environment — Smart and innovative — Open and collaborative leadership
On Our Bikes Cycling Plan (2021)		<p>On our bikes cycling plan aligns with the Newcastle Transport Strategy and overarching Newcastle 2030 Community Strategic Plan, and NSW Government's Greater Newcastle future Transport Plan }</p> <ul style="list-style-type: none"> — Adopts principles of the Movement and Place framework that aims to achieve 'efficient investment, by thinking about the built environment holistically including the social, environmental and economic context' — Safe System approach – aims to eliminate fatal and serious injury on the road through a holistic view of the road transport system and interactions between elements (users, vehicles, travel speeds) — Reducing speed limits – and aim to separate pedestrians and cyclists when speeds are above 30km/hr <p>Goal: By 2030, City of Newcastle will have a safe, connected cycling network of principal routes and low stress streets. Riding and walking will be the natural choices for short trips, for all members of our community.</p> <ul style="list-style-type: none"> — Improve safety and comfort — Connect and improve the network — Support people to ride — Facilitate active transport in centres <p>Travel patterns and cycling</p> <ul style="list-style-type: none"> — approx. 78% of all weekday trips are by private vehicles (average < 8km) — 1.9% of residents ride to work

Appendix 4 – Background documents

Document	Date/Author	Key findings
Cultural Strateg (2016-2019)		<p>The Cultural Strategy 2016-2019 addresses Council's role and participation with the community in supporting and developing a thriving creative culture</p> <p>The Strategy is a four year framework detailing the priorities for Council's investment in arts and culture in Newcastle. It outlines a 10 year vision and 17 key strategies and actions. The following strategies are relevant to the Wickham Public Domain Plan:</p> <ul style="list-style-type: none"> — Strategy 2: Increase connection between Council's cultural institutions for the benefit of moving and building audiences — Strategy 3: Diversify public programs to support the development of new audiences and new programming experiences — Strategy 5: Increase focus on young people (16-30) — Strategy 6: Expose local stories, both historic and contemporary, through cultural programming and build Newcastle's cultural identity — Strategy 7: Grow the city's identity via its collections of art and artefacts, local history and architecture — Strategy 8: Enhance Newcastle's public space through public art — Strategy 9: Ensure Newcastle audiences have access to a diverse range of exhibitions and works of high quality — Strategy 12: Increase engagement with local Aboriginal community in consultation with Council's Guraki Committee — Strategy 13: Build cultural tourism by presenting events that celebrate the city and contribute to it identity — Strategy 14: Increase outdoor programming and programming in non-traditional spaces — Strategy 15: Advocate to Urban Growth for the inclusion of an arts space in their development plans for the city. — Strategy 16: Increase support for, and engagement with, local artists, innovative thinkers, academic creatives and cultural practitioners
City Centre Public Domain Technical Manual (2014)		<p>The City Centre Public Domain Technical Manual sets guidelines, design coordination and material palettes for all public domain, streetscape and maintenance works in the city centre, and provides a guide for designing streetscapes within Wickham Public Domain Plan.</p>
Smart City Strategy (2017-2021)		<p>Newcastle is the second largest non-capital urban centre, and the second oldest city in Australia. The Newcastle Local Government Area (LGA) is home to 152,948 people (2016 census) and welcomes about 4.1 million visitors each year.</p> <p>Newcastle LGA is expected to continue to grow with an additional 32,000 people anticipated by 2036.</p> <p>Newcastle is the cultural and economic capital of the Hunter - Australia's largest regional economy contributing around 8 percent of the economic activity in NSW, with a regional output of approximately \$44.5 billion in 2017.</p> <p>The Strategy expands on Newcastle 2030 and provides a roadmap for delivering Smart City initiatives. These include a series of strategies under these key areas:</p> <ul style="list-style-type: none"> — Smart Mobility — Smart Governance — Smart Living — Smart Environment — Smart People — Smart Economy

Appendix 4 – Background documents

Document	Date/Author	Key findings
Parkland and Recreation Strategy (2014)		<p>The Parkland and Recreation Strategy guides sustainable provision of parkland and recreation facilities for current and future communities.</p> <p>Key initiatives to address the identified challenges and gaps include:</p> <ul style="list-style-type: none"> • Planning and development of facilities – quality parks, active and passive infrastructure, improved connections to other open space opportunities, upgrade and adaption of existing recreational facilities, adoption of new technologies to increase capacity and opportunities for commercial use and revenue streams, continued provision of pathways, bicycle lanes, fitness equipment, sport fields, bicycle paths to cater for population changes and community demand • Management of facilities – opportunities to effectively manage facilities, investigate opportunities for greater commercial use, activities and revenue streams • Partnership development – formal partnerships with NSW Government, inclusion of key stakeholders in the process, strategic partnerships and financial investment with sporting associations, clubs and key stakeholders • Promotion of facilities and opportunities – promotion and marketing strategies, continued support and attraction of state, national and international events to the city of Newcastle <p>Challenges</p> <ul style="list-style-type: none"> • Financial sustainability • Sustainable facility management and community organisations • Managing community expectations • Biodiversity protection <p>Opportunities</p> <p>Partnerships with education sector</p> <ul style="list-style-type: none"> • Improved capacity of facilities • Reduction of service levels • Disposal o excess parkland • Leasing of parkland and recreation facilities • Increase awareness of facilities • Sponsorship • Community trusts

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