



Wickham Master Plan

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Foreword



Wickham is changing!

The area's role continues to evolve from a once semi-industrial area at the outer fringe of the Newcastle City Centre into a mixed use urban neighbourhood supporting the emerging commercial core within Newcastle West.

The area is experiencing increased investor interest and new developments, due to its proximity to Newcastle West, Newcastle transport interchange (currently being constructed), the Newcastle harbour, as well as, the availability of larger sites zoned mixed use and an urban structure and topography amenable to pedestrians and cyclists.

The Wickham Master Plan is the result of an extensive program run by Newcastle City Council throughout 2016, which included identification, and assessment of challenges and opportunities through both formal and informal stakeholder consultation and liaison. Stakeholders included landowners, local businesses, community groups, design professionals as well as various State government agencies.

The Wickham Master Plan outlines the envisioned future character of the area and establishes various strategies that build upon the opportunities and challenges identified in order to guide future redevelopment, public domain and infrastructure plans and works.

To achieve the identified vision for the area, the Wickham Master Plan also includes implementation strategies. These strategies were tested and refined having regard to expert market and economic analysis, traffic assessment, 3D modelling and further stakeholder input.

The Wickham Master Plan will ensure efficient access and connectivity, safe, attractive and inclusive public places, and a built environment that is resilient, functional, and responsive to the needs of the existing and future community.

Acknowledgements

Newcastle City Council wishes to thank all individuals and organisations who have contributed their information and opinions into the preparation of the Wickham Master Plan.

The following organisations are particularly acknowledged for freely sharing of information and expertise to provide a more thorough plan than may otherwise have been achieved.

- NSW State Government agencies including:
 - Transport for NSW
 - Roads and Maritime Services
 - Department of Planning and Environment
 - Families and Communities Services
 - Urban Growth NSW
 - Office of the NSW Government Architect
- Architects and design professionals including:
 - CKDS Architecture
 - EJE Architecture
 - Oceania Clarke
 - O'Connell Architecture and Design
 - SHAC (Architects)
 - Shaddock Smith Architects
 - Stewart Architecture
- Community groups including:
 - 'Greater Lifestyles of Wickham' (GLOW)
- Local businesses and land owners including:
 - ADW Johnson and Partners
 - Land Development Solutions
 - Scipio NSW
 - The Kloster's Group

PART A - BACKGROUND STUDY



1. Overview

1.1 Purpose

The Wickham Master Plan provides the blue print for guiding the future redevelopment of land within the north western part of the Newcastle City Centre. The plan also informs Council's four-year delivery plan to ensure implementation of the envisaged outcomes.

1.2 Scope

The Wickham Master Plan is a place-based strategy that aims to influence the following future outcomes:

- land use mix
- connectivity
- public domain
- built form

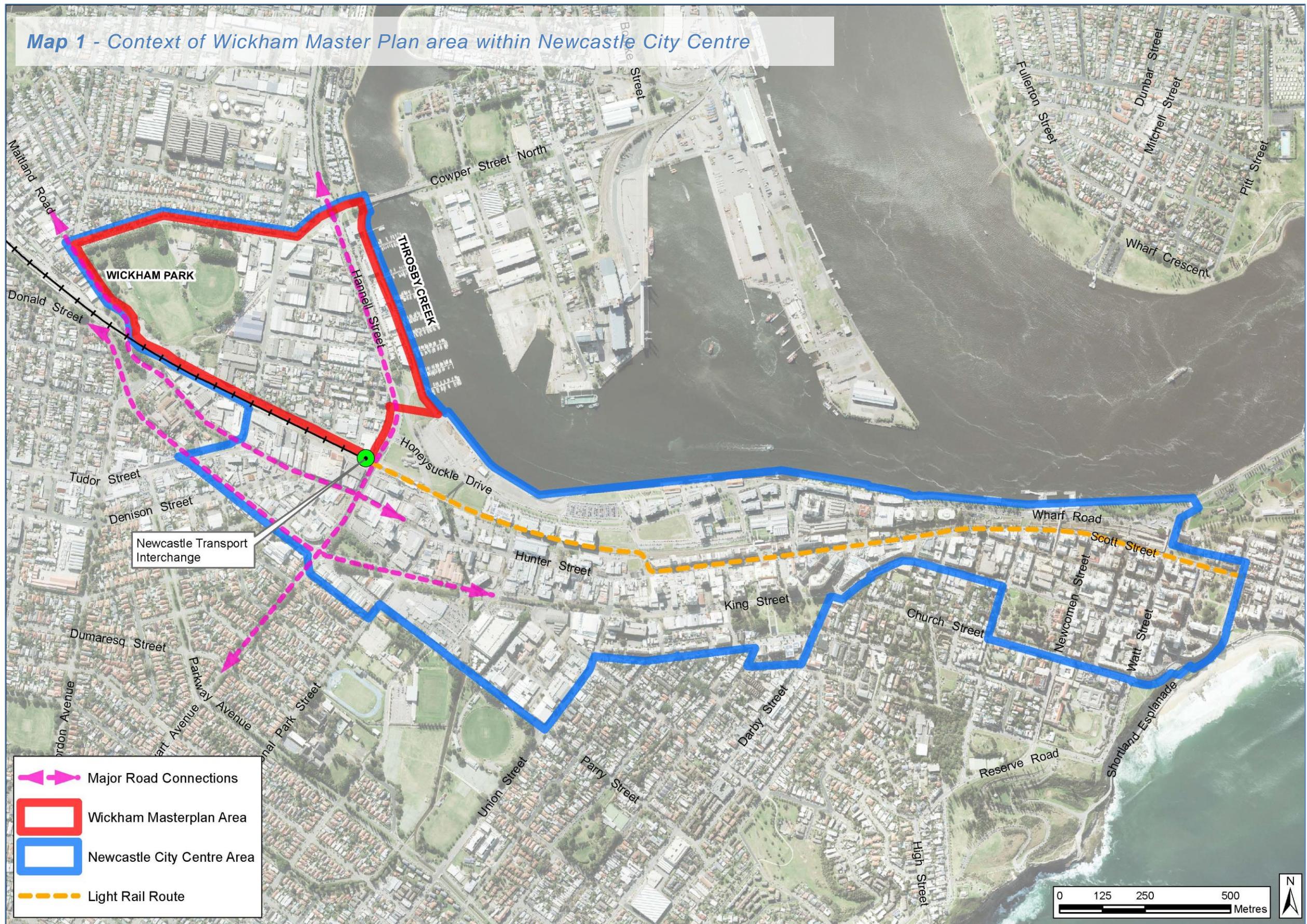
To address the Newcastle 2030 Community Strategic Plan (CSP) vision for "a smart, liveable and sustainable city", as well as local issues, including:

- environmental risk
- economic prosperity
- community wellbeing

The Wickham Master Plan will require a range of subsequent actions in order to be realised. These actions are outlined in 'Section 5 *Implementation*' of this plan.

1.3 Master Plan area

The Wickham Master Plan applies to land bound by the 'Newcastle Transport Interchange' in the south, Throsby Creek along the east (extending from the Wickham 'tree of knowledge' to the Cowper Street Bridge) Albert Street along the north and Maitland Road to the west. This area forms part of the Newcastle City Centre, as shown on Map 1 – *Context of Wickham Master Plan area within Newcastle City Centre*.



1.4 Approach

The approach taken in preparing the Wickham Master Plan reflects the view that “*design seeks to answer how things perform and work, not just how things look. It recognises that design is both a process and an outcome*”, as championed by the NSW Government Architect's draft discussion paper 'Better Placed' - A design led approach: developing an Architecture and Design Policy for New South Wales, 2016.

The process was both people focused and evidence based. It involved a program of extensive stakeholder consultation and feedback, rigorous testing and assessment of options and scenarios.

Stakeholders included:

- land owners
- business operators
- community groups
- design professionals
- state agencies
- council expertise
- independent consultants

Information was collated from a broad range of existing studies, strategies and plans, and by connecting to other projects currently being undertaken by Government and Council.

3D modelling of the Wickham Master Plan area was developed to test building scale and bulk within the context of the Newcastle City Centre as well as analysis of individual streetscapes, solar access, and view sharing. This testing was undertaken in liaison with a range of design professional both internal and external to Council.

Independent consultants were also appointed to provide the following components of the process:

- a. Traffic and transport assessment, undertaken by Bitzios Consulting, which assessed the current capacity of the street network to cater for increases in development, potential traffic management changes, improvements to ensure safety and maintain or improve amenity of the local streets.
- b. Economic and market analysis, undertaken by AEC group, which identified current market position, impediments and or incentives for redevelopment, plus mechanisms or incentives for providing additional community benefits over and above standard developer contributions.
- c. The Hunter Research Foundation carried out facilitation of workshops for community and stakeholder engagement.

The program for preparing the Wickham Master Plan included the following stages and milestones:

Project scoping	To address matters identified in Newcastle Urban Renewal Strategy.	Dec 2016
Review previous work	To gain understanding of potential issues and implications as well as Council's previous strategic decisions.	Jan 2016
Themed stakeholder consultation	To gain insight of local issues and relevant projects by internal and external stakeholders.	Feb 2016
Collect and collate field data	To gain insight into land use mix, condition of building stock, streets, parks and infrastructure.	Mar 2016
Review and analyse	To identify trends and influences impacting on Wickham based on information available and that collected.	Mar 2016
Prepare discussion report	To identify potential challenges and opportunities for Wickham based on findings and analysis.	Apr 2016
Landowner workshop	To confirm initial findings and interpretation of these with local landowners and business stakeholders and to identify options for addressing these.	27 Apr 2016
Technical workshop	To further develop options and solutions confirmed by the local landowner and business workshop together with Council's and NSW State Government agencies' technical experts.	18 May 2016
Formulate potential outcomes	To document options identified in workshops, stakeholder liaison and expert advice, by mapping and 3d modelling these.	June to Aug 2016
Independent economic and market analysis	To ensure the economic viability of the proposed strategies, and a suitable means of delivering the envisaged community.	Sept-Dec 2016
Traffic modelling and testing	To determine the capacity of the urban structure to accommodate increased densities, and manage impacts on local traffic, pedestrian accessibility and amenity, and car parking.	Oct -Dec 2016
Prepare draft Wickham Master Plan document	To compile the preferred options and document the proposed vision and strategies for Wickham.	Jan -Feb 2017
Reporting draft Wickham Master Plan	To seek initial endorsement to carry out formal public exhibition.	Mar 2017
Public exhibition	To provide community with a formal opportunity to voice their support and identify any outstanding issues.	April 2017
Reporting results	To report public exhibition to council with any recommended changes to the final Wickham Master Plan.	May 2017
Adoption of Wickham Master Plan	To endorse the Wickham Master Plan as the means of guiding future decisions and works by Council.	Jun 2017
Commence actions	To ensure the vision of the Wickham Master Plan is implemented as identified.	Jul 2017



2. Context

2.1 History

2.1.1 Wickham Urban Village

Wickham was first subdivided in the mid-1800s and by the 1900s was Newcastle's most popular suburb for workers with a population of 7,000 residents. Much of the current urban structure reflects the original pattern of development.



Figure 1 – Wickham Panorama Circa 1906 (source: www.coalriver.wordpress.com)

Part of Wickham, was undermined in the late 1800s by The Maryville Colliery Company Limited, and still poses a subsidence risk. Furthermore, the railway connection to the Wickham and Bullock Island Colliery in Carrington is still a prominent element in the existing urban structure.

While a range of land uses were already dispersed throughout Wickham, its popularity as a residential suburb declined by the 1950s, resulting from increased private motor vehicle ownership allowing people to travel further out of the city and a desire for residential suburbs to develop away from the working harbour and associated industrial areas. At this time, the Northumberland County Council also imposed a greater degree of separation between land uses through the introduction of zoning under the 1960 Northumberland County District Planning Scheme. As a result, Wickham was zoned for light industrial uses to service the nearby harbour and other heavier industry, including the BHP steel works.

Much of Wickham is still characterised by an eclectic and contrasting mix of larger industrial structures and smaller residential dwellings.

Decline in local manufacturing in Newcastle in the 1970s and 1980s reflecting trends experienced in many Australian cities saw a re-emerging popularity for inner city areas close to facilities and services. However, returning residents had different expectations (i.e. car parking and residential amenity similar to outer suburbs), creating new challenges.

Council intervened by targeting Wickham for revitalisation through the Federal Government's 'Building Better Cities Program', resulting in the 'Wickham Urban Village, A Concept Strategy and Study' (1996) and subsequent introduction of mixed use zoning and preparing a 'Wickham Urban Village urban design guidelines' (2006) later adapted as a locality specific section within Newcastle Development Control Plan 2005.



2.1.2 Newcastle City Centre Urban Renewal Program

In 2012, the NSW State government introduced the Newcastle Urban Renewal Strategy (NURS). This strategy was updated in 2014 and advocates a strategic shift of the commercial core of the Newcastle City Centre from Newcastle East to Newcastle West.

The NURS also identified the need for Council to identify appropriate building envelopes, land use and public domain planning for the Wickham area; hence, Council has prepared this master plan.

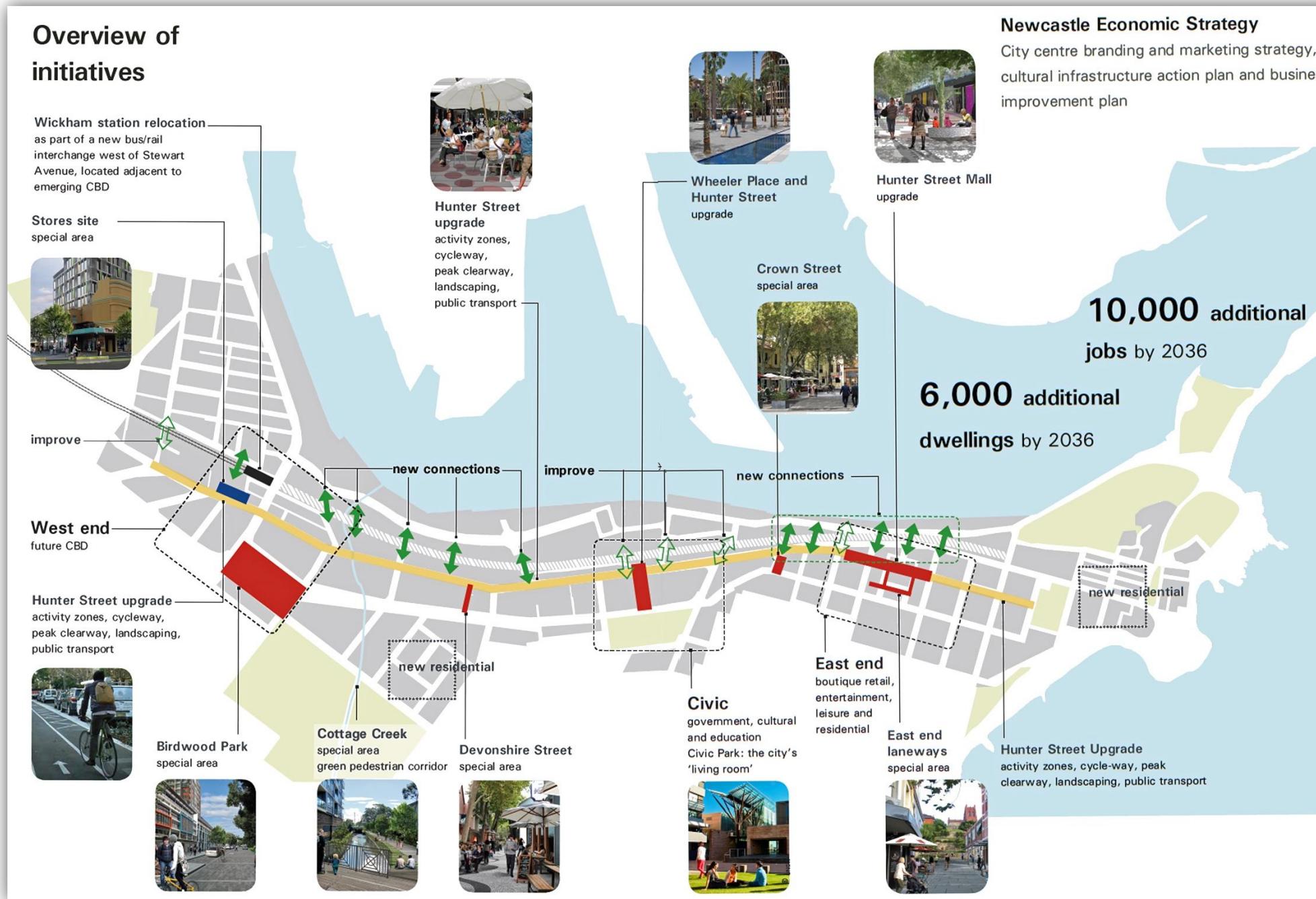


Figure 2 Newcastle Urban Renewal Strategy: overview of initiatives (source: NURS 2012)

2.2 Core strategies

2.2.1 The Newcastle 2030: Community Strategic Plan

The Newcastle 2030: Community Strategic Plan (CSP) is Council's overarching strategy that was prepared in consultation with the community to set the agenda for Council's programs and plans in achieving a common vision for the city.

The CSP identifies a vision for "*Newcastle to be a smart, liveable and sustainable city*", which is supported by seven strategic directions:

1. Connected city
2. Protected and enhanced environment
3. Vibrant and activated public places
4. Caring and inclusive community
5. Liveable and distinctive built environment
6. Smart and innovative city
7. Open and collaborative leadership

2.2.2 Other Related Strategies

Council has adopted specific strategies to guide its service areas. The Wickham Master Plan provides a means of implementing the following at a local level:

- Smart City Strategy (currently being prepared)
- Newcastle Low Lying Lands Study (currently being prepared)
- Disability Access and Inclusion Plan (2016)
- Local Planning Strategy (2015)
- Newcastle Economic Development Strategy (2015)
- Cultural Strategy (2015)
- Social Strategy (2015)
- Parkland and Recreation Strategy (2014)
- Citywide Transport Strategy (2014)
- Heritage Strategy (2014 - 2017)
- Newcastle Environmental Management Strategy (2013)
- Newcastle City-wide Floodplain Risk Management Study and Plan (2012)

2.3 Trends and Influences

2.3.1 Newcastle urban transformation and transport program

The Newcastle Urban Transformation and Transport Program aims to strengthen connections between the city and the waterfront, create new jobs, provide more public space and amenity and deliver better transport to revitalise Newcastle's City Centre.

The core influences on Wickham result from

- a. The strategic shift of the commercial core of the city centre to Newcastle West, as identified within the Newcastle Urban Renewal Strategy (NURS).
- b. The development of a 'Newcastle Transport Interchange' at Wickham that incorporates the Sydney to Newcastle heavy rail terminus, light rail connection to Newcastle East and bus connection to other centres and suburbs within the Greater Newcastle Metropolitan Area.



Figure 3- Wickham Interchange Visualisation

(source: <http://ourtransport.revitalisingnewcastle.com.au/wickham-interchange>)

2.3.2 Changing demographics

Demand for inner city residential apartments is predicted to continue, given the following universal trends:

- a. Decreasing household size and a large proportion of people living alone or in shared household arrangements, rather than traditional families.
- b. Aging population with the 'baby boomer' generation retiring but living longer, resulting in increased proportion of population choosing lower maintenance dwellings with less land.
- c. Rising land values resulting in the need for increased densities to maintain housing costs at tolerable levels for market acceptance.
- d. The increasing cost of fuel and travel expenses resulting in a change of focus to 'affordable living' where homes are within walking distance of public transport, employment, and/or local retail and services.

2.3.3 Economics and employment

Local employment and businesses continue to shift from those that are industrial driven (such as manufacturing) to ones that are population driven and services based.

The main exception to this trend are opportunities for economic and employment generating uses within the emerging 'smart technologies' as promoted under Council's smart city program. Potential uses within the technology sector within Wickham include shared work spaces for start-up businesses, 'makerspaces' for low impact electronic component manufacturer, 3D printing , and flexible spaces to accommodate changing business models over time.

Increased demand for redevelopment within Newcastle West and the Wickham Master Plan area to higher profit yielding land uses, such as residential apartments, has resulted in uplift in local land values. While this is beneficial to existing landowners and investors exiting the local market, it is less desirable for new businesses that require considerable floor area, as were traditionally attracted to Wickham. Such businesses are likely to locate further from the city centre where start-up costs are more feasible.

Furthermore, redevelopment expectation also influences unimproved land values. Therefore, it is important that expectations be managed through density controls to avoid over inflation of unimproved land values that would result in the sterilising of land from redevelopment.



Figure 4 Employment space need to be flexible to respond to changing business models and employment
Source: <http://rockfordmaker.space/examples/>

3 Considerations

3.1 Challenges to address

The key challenges for the local area were identified through stakeholder consultation and included within the Wickham Master Plan Discussion Report (April 2016). These were further confirmed and refined through the facilitated stakeholder workshop held in April and May of 2016.

The challenges for the Wickham Master Plan to consider and address include:

3.1.1 Accessibility and connectivity

Lack of connections between the urban areas and Wickham Park due to physical barrier formed by the fenced off Bullock Island railway corridor.

Inadequacy of existing footpaths to provide continuous universal access for pedestrians due to age and/or condition of existing pavement, narrow footpaths impeded by street trees, electrical poles, signs and driveway crossings.

Physical isolation from Newcastle West due to removal of level crossing at the southern end of Railway Street.

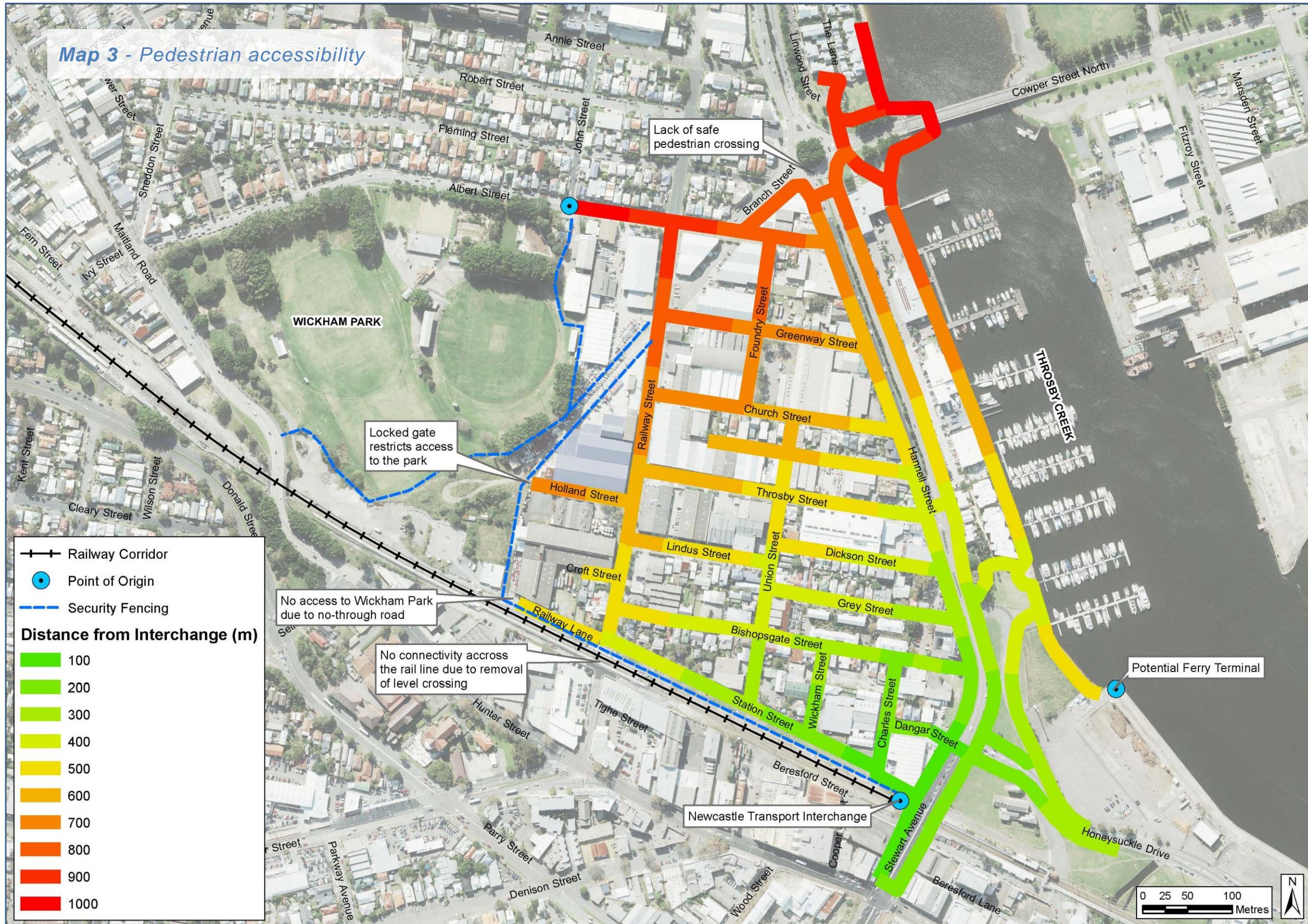
Barrier for pedestrian and cycling connectivity to Throsby Creek due to high volumes of traffic along Hannell Street.

Impacts of through traffic along Hannell Street on local intersection.

Potential conflict between traffic generated by the 'Newcastle Transport Interchange' and local users.



Figures 5 to 7 Barriers to accessibility due to dead-end laneways, gates and fencing between urban area and Wickham Park, and limited crossings along Hannell Street



3.1.2 Increased demand for car parking

- a. Loss of existing temporary car parking within Honeysuckle adding demand in surrounding areas including Wickham.
- b. Increase in construction workers' vehicles due to increase development.
- c. Commuters driving to the 'Newcastle Transport Interchange' if cheaper and/or more convenient than transferring from other modes of public transport accessible from their point of origin (e.g. home).
- d. Increase in workforce accessing Newcastle West.

3.1.3 Maintaining land for employment

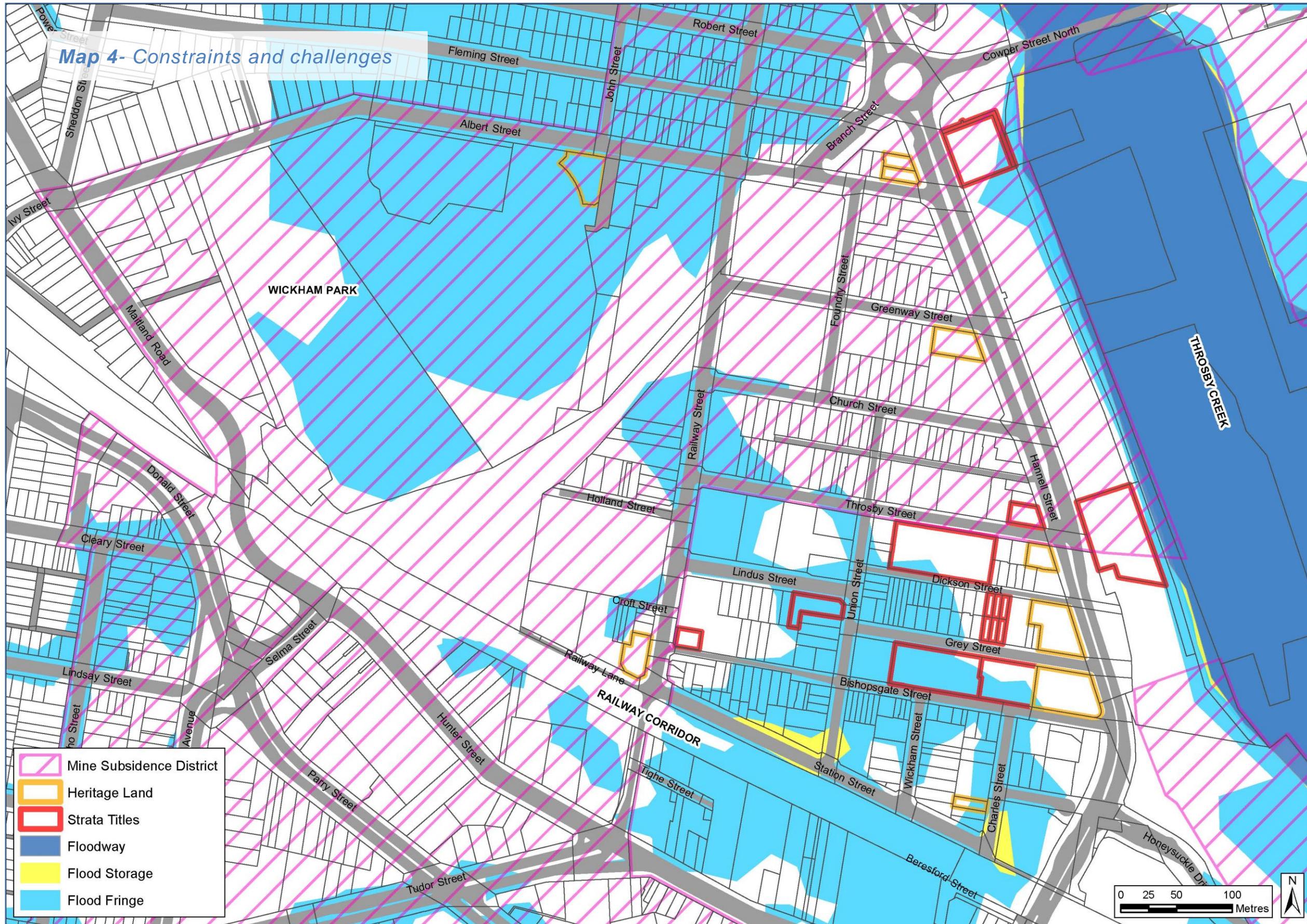
- a. Seek to provide a mix of compatible land uses within new development (not just residential).
- b. Ensuring that existing and potential new businesses are not priced out of the area due to inflated land values or rents.
- c. Ensure planning framework supports compatible employment generating uses.
- d. Provide necessary infrastructure to facilitate new clean and high tech industries in line with Council's Smart City Strategy.

3.1.4 Safety and amenity

- a. Perceived excessive vehicular speeds along local streets.
- b. Poor amenity of the public domain for pedestrians.
- c. Lack of natural surveillance of laneways.
- d. Lack of natural surveillance to Wickham Park.

3.1.5 Physical limitations

- a. The area is subject to the 1:100 year flood events within the Hunter River, which poses requirements for minimum floor heights of habitable areas and for underground parking entries.
- b. Parts of Wickham are identified as low-lying land with respect to tidal and groundwater influences, which will pose future challenges as sea levels rise in the medium to long-term future.
- c. Whilst mine subsidence does not affect much of the project area, according to Mine Subsidence Board mapping, other areas will require assessment and potential remediation to enable redevelopment.
- d. Previous and current industrial uses may potentially result in contamination of soil and/or groundwater, which will require remediation prior to redevelopment.



3.2 Opportunities to build upon

Key opportunities for the local area were identified by stakeholder consultation and included in the Wickham Master Plan Discussion Report (April 2016).

These were further confirmed and refined through a facilitated workshop held in April 2016, attended by landowners, business operators, and members of the local community. A further workshop was facilitated in May of 2016, to obtain the expertise of technical staff from both Council and various State Government agencies.

Opportunities identified for the Wickham Master Plan area include:

3.2.1 Location

- a. Adjacent to new central business district of Newcastle City Centre.
- b. Adjoins public transport interchange, hence accessible to various destinations.
 - a. Located on Throsby Creek within Newcastle Harbour.

3.2.2 Wickham Park

- a. Inner city parkland to meet recreational and social needs of local community.
- b. Major events space close to public transport.
- c. Potential for expansion and improvement of sporting facilities.
- d. Integrate community facilities.
- e. Provide pedestrian and cycling links from Maitland Road to Newcastle Harbour.
- f. Activate park edge.
- g. Formalise car parking.

3.2.3 Physical attributes

- a. Level topography ideal for cycling and walking.
- b. View sharing to Newcastle Harbour or Wickham Park.
- c. Access to existing infrastructure.
- d. Substantial part of area not constrained by mine subsidence.

3.2.4 Eclectic urban character

- a. Historical influences evident throughout existing urban structure and remnant built form.
- b. Varied building types, scale and styles.
- c. Wide-ranging mix of land uses.
- d. Well maintained heritage items.
- e. Vibrant examples of community place making and public art.

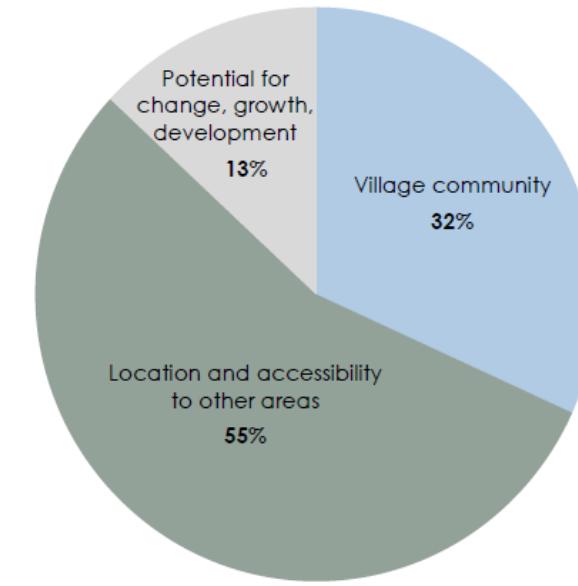


Figure 8 What attendees of the landowner workshop like best about Wickham

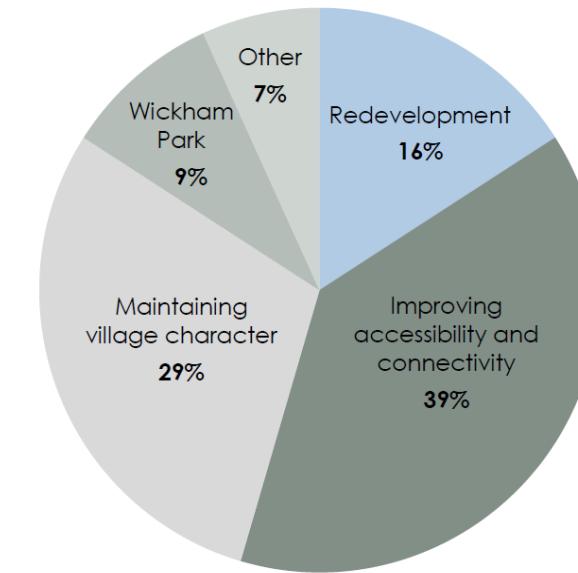


Figure 9 Opportunities identified for Wickham by attendees of the landowner workshop

3.3 Redevelopment potential

3.3.1 Land availability

According to the economic and market analysis carried out by AEC Group in preparation of the Wickham Master Plan, assembly of development sites through consolidation of multiple individually owned sites is usually the key challenge to delivering urban renewal, particularly in areas envisaged for increased development densities. While this applies in pockets of Wickham, for the most part the Wickham Master Plan area contains a readily available supply of larger former industrial sites that, although potentially requiring decontamination, lend themselves to supporting substantial development. [Map 5 - Property ownership pattern](#) illustrates land parcels amalgamated or under common ownership.

[Map 6- Wickham redevelopment potential](#) identifies land that is 'likely to redevelop' or 'have the potential to redevelop' within the life of the Wickham Master Plan (20 years). This land includes:

Former Bullock Island rail corridor, which is a key site for activating Wickham Park, improving connectivity and natural surveillance, and provision of public car parking.

Land with an active development consent

Land parcels with an area greater than 1000 square metres particularly where:

- i. Torrens titled, or
- ii. under single (or majority) ownership, and
- iii. vacant land, or
- iv. consisting buildings at the end of their lifecycle or where feasibility of potential redevelopment is greater than retention value.

Inversely sites identified as being 'unlikely to be redeveloped' includes land:

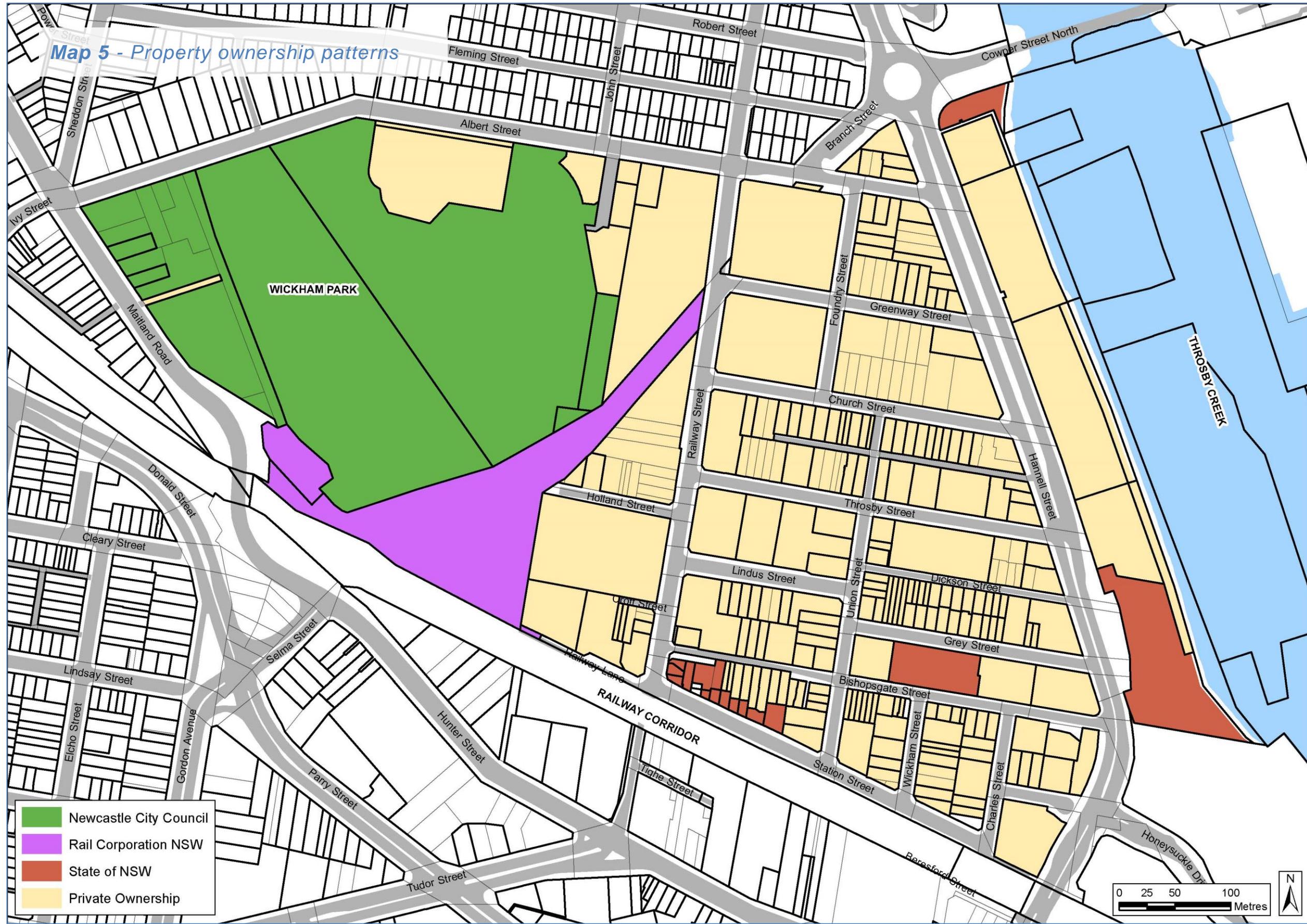
- a. Containing a heritage item, except for potential adaptive reuse that supports conservation value.
- b. Recently or currently being redeveloped.
- c. Containing existing development of value, quality and size that renders the site unfeasible for redevelopment within the life of the Wickham Master Plan.
- d. Strata titled for residential uses (e.g. apartments), given the additional challenge of requiring agreement by the majority of owners to sell and/or redevelop.

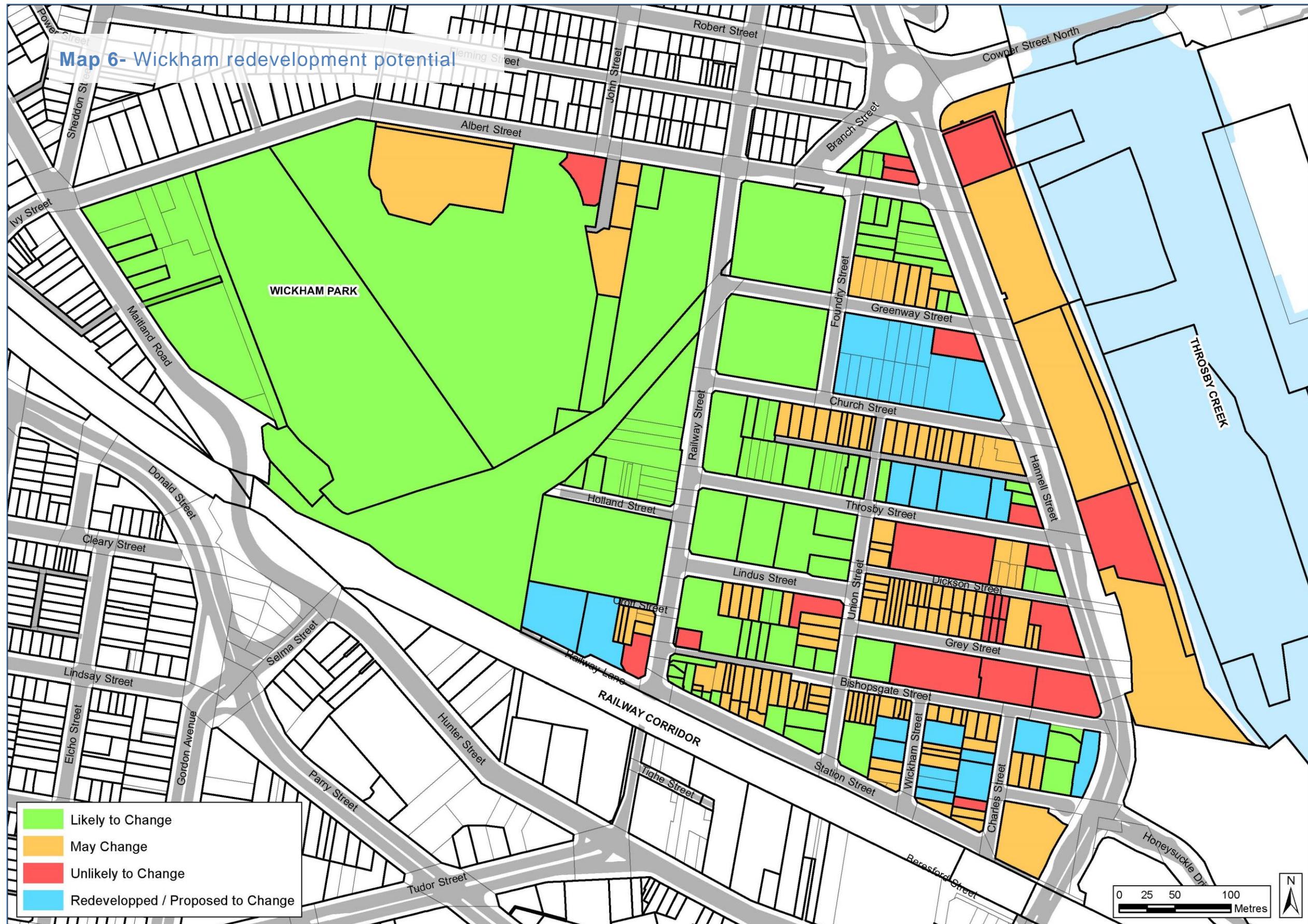
Whilst redevelopment is not necessarily impossible on these sites, the masterplan considers that densities (i.e. maximum building heights and maximum floor space ratios) will remain for the life of the plan.



Figure 10 Buildings at the end of their lifecycle identified as likely for future redevelopment.

Map 5 - Property ownership patterns





3.3.2 Development capacity

The development capacity of land is a measure of the potential redevelopment density able to be accommodated and is determined by both planning capacity and market capacity.

Planning capacity (or theoretical capacity) refers to the physical ability of land to be developed, taking into account permissibility under planning framework, environmental and infrastructure constraints.

The following factors were considered in determining the planning capacity for redevelopment within the Wickham Master Plan area:

- a. Environmental and physical constraints of the land to support development (e.g. flood risk, ground water levels, potential future sea-level rise, geotechnical conditions including mine subsidence, potential site contamination from current or past uses).
- b. Site area available for redevelopment having regard for development controls, design codes and standards (e.g. SEPP 65 - Residential Apartment Design Guide) that identify the provision of open space, landscaping, car parking, building separation to adjoining uses, and infrastructure needs.
- c. Envisaged future urban structure and character as determined through stakeholder consultation and identified further within section '4. VISION'.
- d. Potential impacts on and from adjoining land including the public realm at street level (e.g. overshadowing, loss of solar access, wind tunnelling, loss of privacy, or impacts from noise and/or pollution).
- e. Capacity of the local street network to accommodate traffic generation in addition to that generated by the 'Newcastle Transport Interchange' and future envisaged commuter car parking, as assessed by Bitzios Consulting.

Market capacity refers to issues of commercial viability - whether pricing levels, development costs, etc. make development a commercial proposition (i.e. if development is financially feasible). In order to determine the market capacity of land within the Wickham Master Plan area Council appointed AEC Group to prepare an economic and market analysis having consideration of the following:

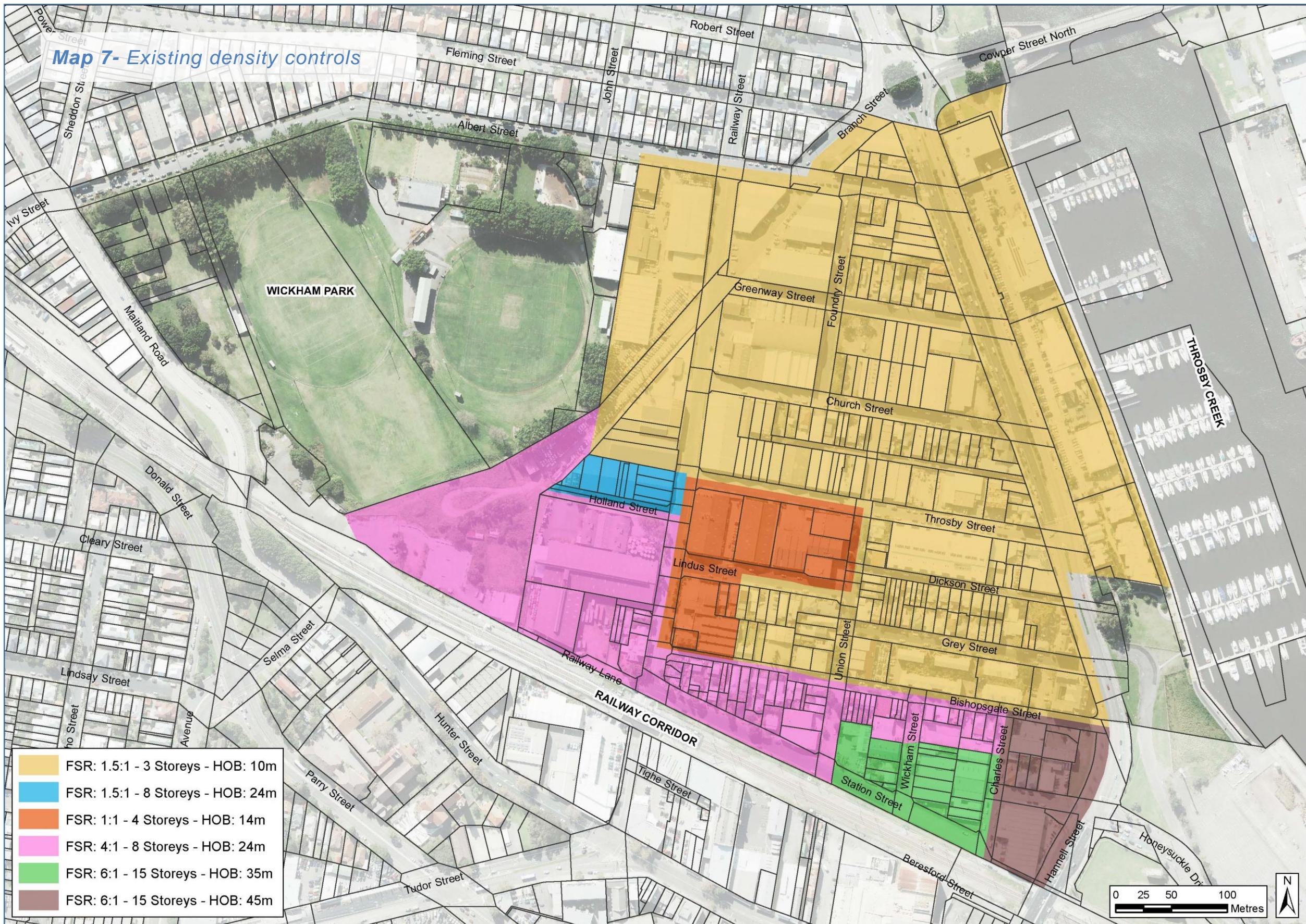
- a. Availability and cost of assembling suitable land for development (influenced by land ownership fragmentation and quality of existing buildings).
- b. Feasibility (ability to develop the land for less than the potential return).
- c. Demands for individual land uses and what price people are willing to pay.

The economic and market analysis demonstrated that whilst the capacity of individual sites may vary; a minimum floor space ratio of 1.5:1 is generally required in order for redevelopment within the Wickham Master Plan area to be determined feasible. However, sites consisting major improvements, such as an existing industrial building, may require a higher floor space ratio (e.g. FSR 2:1) in order to be feasible for redevelopment.

The existing redevelopment capacity within Wickham is delimited by current development standards set within the Newcastle Local Environmental Plan 2012, which include maximum height of buildings (HOB) and maximum floor space ratios (FSR). [Map 7- Existing Density Controls](#) provides a summary of existing density controls applying to the Wickham Master Plan area.

Note: Floor Space Ratio (FSR) is a measure to determine the area of floor space permitted within a development site in comparison to the site area.

FSR is written as a ratio of X : 1, where X represents the proportion of floor space and the site area is always expressed as a factor of one (1). FSR is useful in understanding the potential future development yields or local population projections when determining development feasibility, future infrastructure needs or potential traffic generation.



PART B - WICKHAM MASTER PLAN



4. Vision



Wickham Master Plan area will continue to evolve into a diverse and dynamic mixed-use neighbourhood.

Redevelopment will support increased residential densities as well as economic and employment generating uses that compliment and support the adjoining emerging 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.

For the purposes of describing the envisioned character and function across the Wickham Master Plan area, six interconnecting urban precincts are identified within [*Map 8 - Wickham urban precincts*](#) and described below.



Figure 11 - Envisaged character of Wickham as viewed south from current roundabout at intersection of Hannell and Cowper Streets



4.1 Rail edge precinct

The rail edge precinct provides an interface to the emerging commercial core of the Newcastle City Centre (in Newcastle West) through provision of mixed use development. The precinct capitalises on its location adjacent to the ‘Newcastle Transport Interchange’ and the potential pedestrian trade generated by providing ground level commercial uses along Railway, Union , Wickham, and Charles Streets with neighbourhood level retail and services activating the street corners with Station Street.

Additional development capacity may be achieved for development proposals that enable adequate solar access and view sharing, meet relevant design codes, and also provide a quantifiable benefit to Wickham under a Community Infrastructure Scheme (as described later within the Wickham Master Plan). Community benefits may include such things as additional social housing, identified road widening along Railway Lane and also Bishopsgate Street and/or provide additional car parking (surplus to the requirements of the uses within the development) to cater for commuters, city employees and the adjoining residential area to the north.



Figure 12 - Envisaged rail edge precinct viewed from the south

Subject to the aforementioned qualifications, the height of buildings in this precinct has capacity to increase upwards from a current limit of 24m (8 storeys) to 45m (14 storeys). Land bound by the Wickham Transport Interchange, Stewart Avenue, Danger and Charles Streets has potential to accommodate even greater building height of up to 60m (20 storeys), which is still a considerable transition from the adjoining height limit of 90m (30 storeys) allowed along Hunter Street in Newcastle West.

However, development fronting Bishopsgate Street (adjoining the Village Hub Precinct) retains a lower scale and residential focus, with new buildings reflecting the design elements and rhythm of the traditional terraces located between Union and Wickham Streets, thereby maximising solar access from the north.



Figure 13 - Envisaged rail edge precinct viewed from the north

4.2 Village hub

The village hub incorporates much of the original residential subdivision patterns established in the late 1800s, which is also characterised by narrow streets and a mix of lower scale residential building typologies.

Redevelopment and infill development within this precinct includes terrace style housing, shop top housing and smaller residential apartment buildings up to three storeys in height that incorporate design elements complimentary to existing housing stock.

Buildings are setback from the front boundary to provide opportunities for small gardens, landscaping, forecourts or colonnades. Provision of onsite car parking and driveway access are limited to favour pedestrian amenity and safety along footpaths. Union Street provides the main pedestrian connection linking the predominantly residential precinct to the 'Newcastle Transport Interchange' and the commercial core of the Newcastle City Centre.

A dedicated off street cycleway is provided along the northern side of Church Street and extends beyond this precinct to connect between Maitland Road (via Wickham Park and the former Bullock Island rail corridor) and the existing cycleway along Throsby Creek via part of the western side of Hannell Street and the Throsby Street traffic lights.

Union Street acts as the main pedestrian spine for the precinct with generous footpath widths and street trees contributing to a high amenity.

Retail and commercial activity is located in clusters throughout the precinct particularly around community activity and gathering areas.

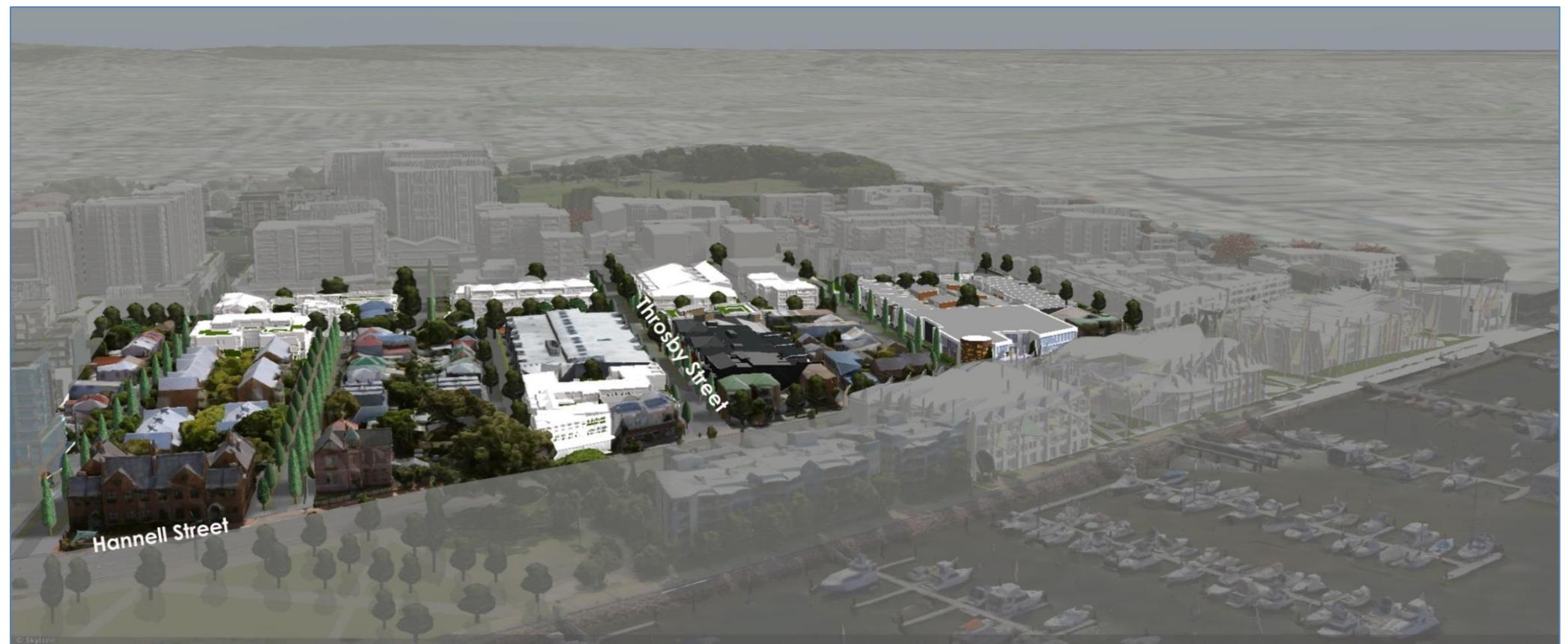


Figures 14 and 15 - Union Street is envisaged to develop as a high amenity pedestrian environment with widened footpath and street tree planting, it will act as the main north south pedestrian route between the transport interchange and the master plan area

Figures 16 - Envisaged village hub viewed from the south



Figure 17 - Envisaged village hub viewed from the east.



4.3 Harbour edge precinct

The Harbour edge precinct builds on the recreational and economic opportunities on offer within this prime waterfront location. While allowing for an intensification of use, the precinct maintains a scale of three storeys and uses, reflecting a maritime character that supports entertainment and tourism activities in favour of residential uses.

The parkland within the southern part of this precinct is further embellished to cater for the launching of small sailing craft and other passive recreational activities. Pedestrian and cycling links between the ‘Newcastle Transport Interchange’ and the foreshore promenade are improved and include public amenities and facilities supporting a potential ferry stop.

An extended ferry service with an additional ferry stop at the northern end of this precinct will provide greater connectivity along the Newcastle harbour between Wickham, Honeysuckle, Newcastle East, Stockton, and the proposed cruise ship terminal.

Publicly accessible land along Throsby Creek enables the incorporation of mitigation measures that protect Wickham from flood events and impacts of predicted sea level rise.



Figure 18 - Envisaged harbour edge precinct viewed from the north east



Figure 19 - Envisaged harbour edge precinct viewed from the south east

4.4 Emerging industry quarter

This precinct's focus is on the provision of a range of employment and business opportunities. The availability of larger development sites and wider streets within this precinct allows redevelopment to be of a larger scale development than within the 'village hub' precinct. However, increased development capacity is only supported where redevelopment provides real opportunities for fostering business and employment generation.

Economic opportunities are likely to continue in service industries, distribution centres, and small scale niche manufacturing, including growth in smart technologies, research and development. The provision of technological infrastructure and piloting of 'smart city' initiatives within proximity to public transport, residential and lifestyle options make this an ideal location for emerging technological and creative industries, characterised by flexible work places that enable collaboration and resource sharing.

The former Bullock Island corridor is envisaged to be incorporated in the future redevelopment as open space and embellished to form an attractive landscape element linking to adjoining parts of the corridor.



Figure 20 - Envisaged emerging industry quarter viewed from the north



Anticlockwise from above, Figure 21 - Envisaged emerging industry quarter viewed from the west, Figure 22 - coworking in new smart industries, Figure 24 and 25 opportunities for incorporating former Bullock Island rail corridor as landscape element into redevelopment



4.5 Park edge precinct

The Park edge precinct provides an active edge and natural surveillance to the eastern side of Wickham Park from residential apartment development and clusters of commercial and retail uses. Buildings within the precinct range in height from six to 14 storeys, with bonus floor space provided where redevelopment delivers public benefits such as road widening or surplus publicly available car parking.

This precinct provides key connections for pedestrians and cyclists through the extension of Holland Street and the opening of the former Bullock Island rail corridor for public access. The precinct also includes the creation of a new development parcel in the former railway lands and the construction of a new one-way street extending along the southern boundary of Wickham Park from Maitland Road to Railway Lane. This new street provides an activated edge to the park and enables access to new formalised car parking areas, which cater for weekend sporting or community events and provides overflow car parking for commuters and/or city workers during week days within proximity to the interchange.

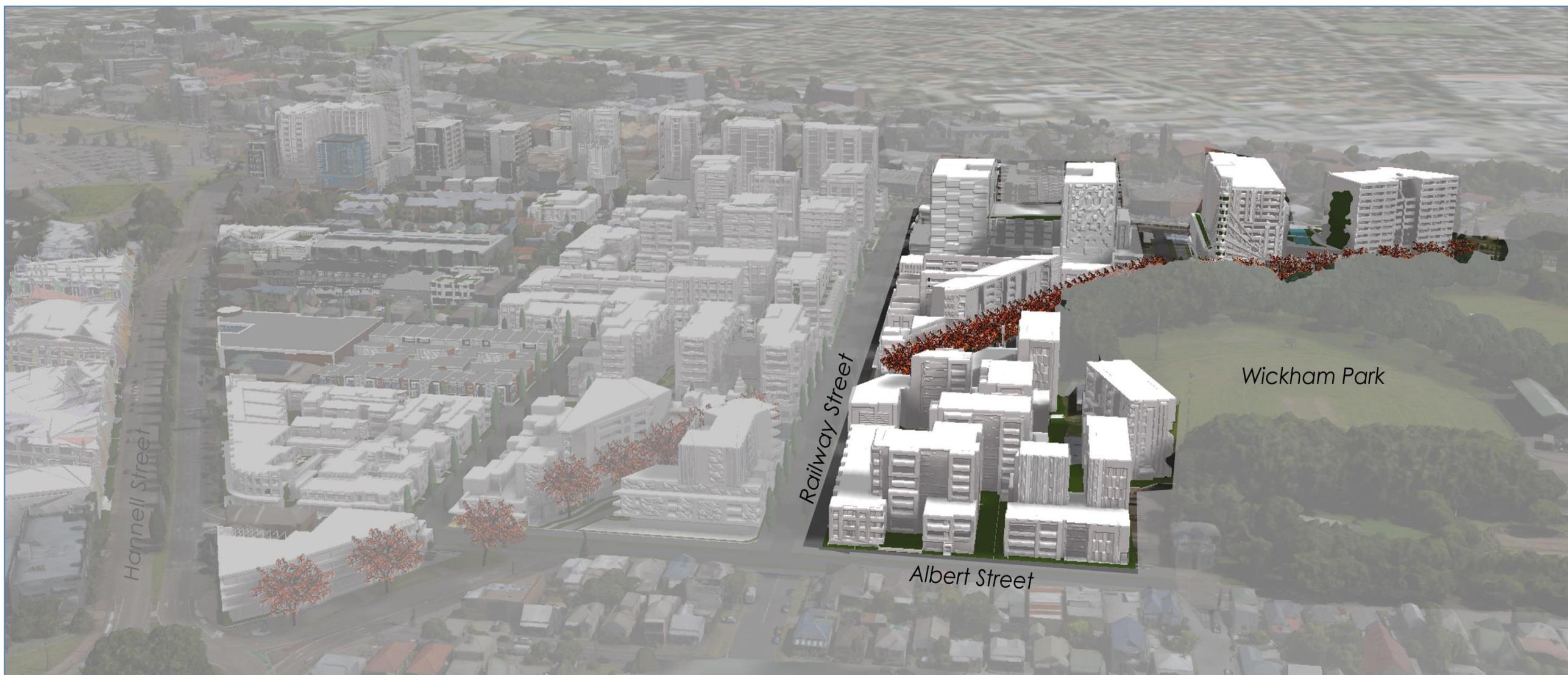


Figure 25 - Envisaged park edge precinct viewed from the north

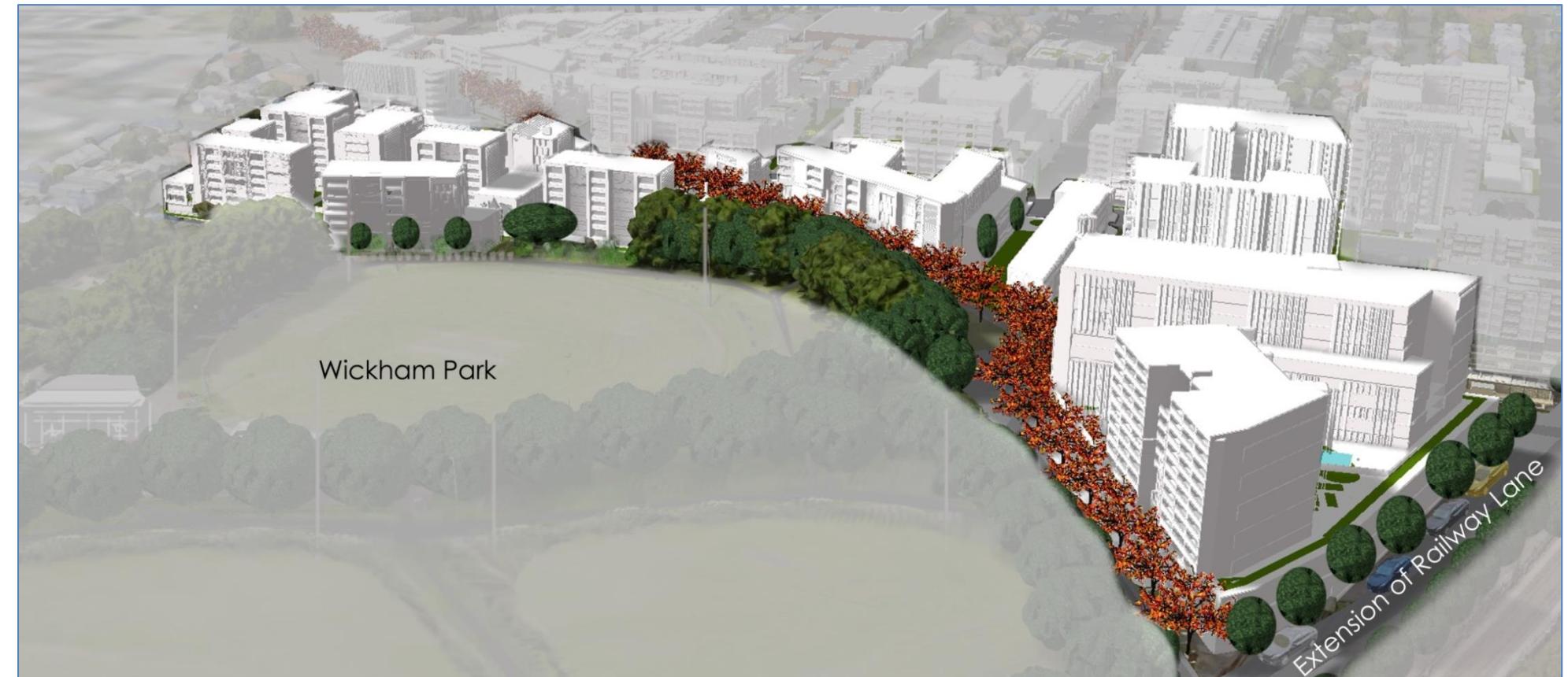


Figure 26 - Envisaged park edge precinct viewed from the west



Figure 27 - Envisaged park edge precinct viewed from the east

4.6 Wickham Park

Wickham Park caters for the social and recreational needs of both local residents and the wider Newcastle community and provides a range of activities and facilities including:

- Playing fields
- Playground and informal nature based play areas
- Community gardens
- Market and event space
- Community facilities and amenities,

Improved integration of the former bowling club site (i.e. The Croatian Wickham Sports Club) with Wickham Park includes opportunities for improvements and extension to the playground area and opportunities to collocate community and/or commercial facilities (e.g. café) in the former clubhouse. The former bowling greens have potential for incorporating hardcourt facilities for various sporting codes. New community gardens may be located and expanded within the south eastern part of the park to utilise year-round solar access for ideal plant growth.

New amenities facilities would best be located in a central location adjacent to the existing grandstand building, where both clearly visible and accessible from most parts of the park. Provision of other smaller facilities within the precinct could open during events.

The entire precinct may be utilised to cater for larger sporting or community events and festivals, which benefit from improved pedestrian and cycle links to public transport and adjoining areas and from construction of a new roadway, which provides access to formalised parking areas. The treed area to the north west of the precinct provides a shaded area for local markets and smaller community events.

Vegetation is maintained to maximise natural surveillance from adjoining uses and to provide a feeling of openness. The precinct also incorporates some of the lowest land within Wickham hence making it ideal for incorporation of stormwater management devices and groundwater pumping facilities within the landscape.

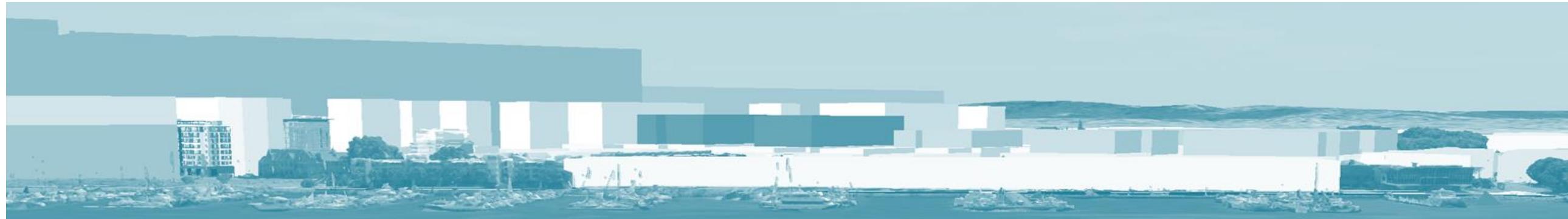


Figure 28 - Wickham Park caters for the social and recreational needs of both local residents and the wider Newcastle community.



Figure 29 - Envisaged redevelopment of Wickham Park

5. Implementation



This section identifies objective, strategies, and actions required to implement the desired vision for Wickham, as outlined in section 4 of this master plan. The three key objectives this master plan seeks to achieve include:

1. Improve accessibility and connectivity within Wickham and to adjoining areas
2. Create safe, attractive and inclusive public places
3. Ensure built environment is functional, responsive and resilient

5.1 Improve accessibility and connectivity within Wickham and to adjoining areas

This objective will be achieved by delivery of strategies addressing:

1. Pedestrians and cycling network
2. Traffic networks
3. Car parking



Figure 30 - Proposed pedestrian connection over railway tracks at Railway Street Wickham

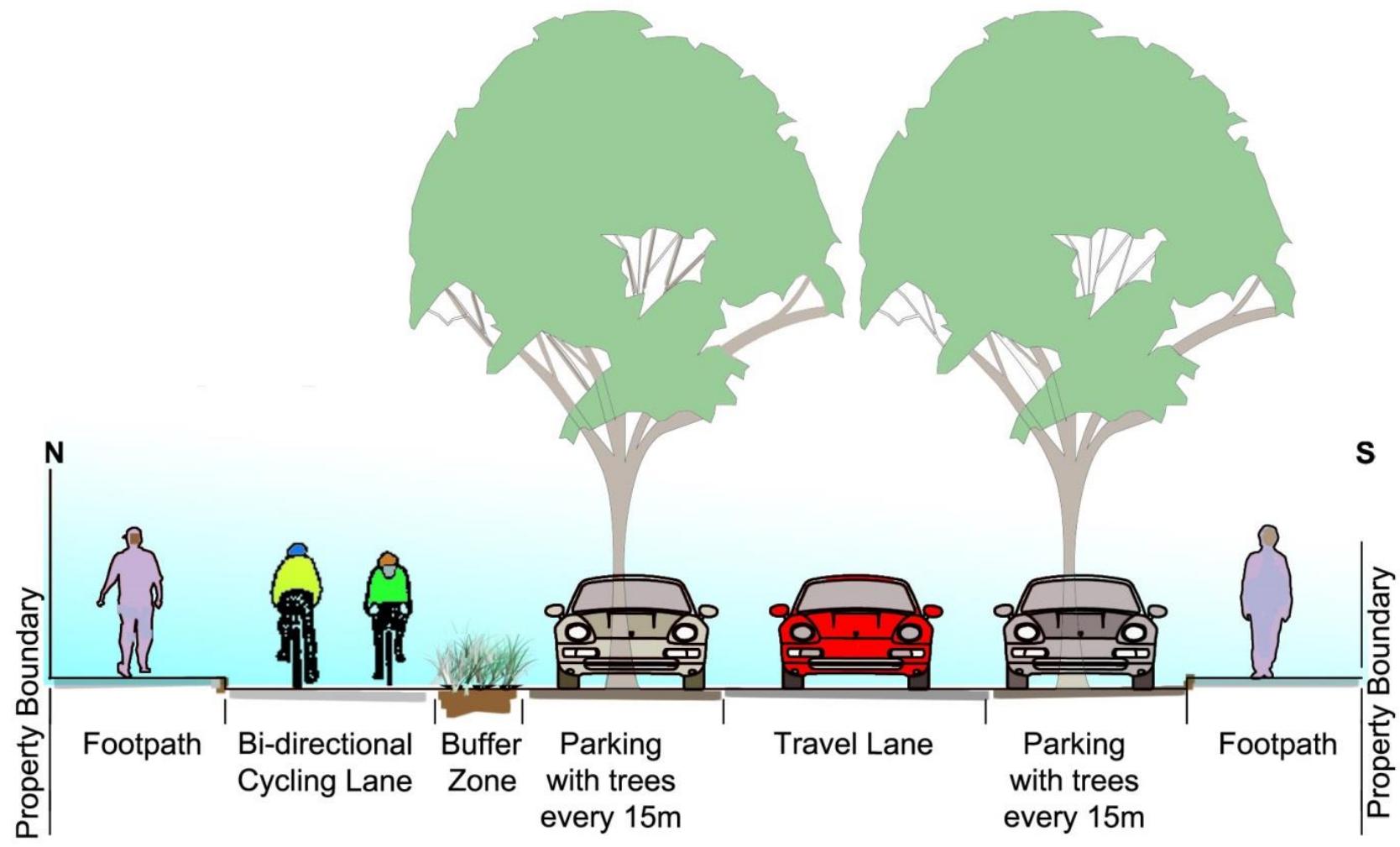
source: <http://ourtransport.revitalisingnewcastle.com.au/wickham-interchange>

5.1.1 Pedestrian and cycling network

The flat topography and proximity to the Harbour, city centre, public transport and local amenities make Wickham an ideal location to promote a walking and cycling environment. [Map 9- Envisaged pedestrian and cycling network](#) illustrates the future envisaged pedestrian and cycling network across the Master Plan area.

Strategy: Provide connected and accessible pedestrian and cycling routes through the Wickham Master Plan area

Actions to achieve this strategy	Mechanism	Responsibility	Priority
1. Reinstate pedestrian access across the railway corridor at Railway Street via a new pedestrian bridge.	Newcastle Transport Interchange	Transport for NSW	High
2. Union Street will be redesigned with widened footpaths to be the key pedestrian spine and intersection treatment will ensure pedestrian priority.	New Local Traffic Management Plan	NCC - Infrastructure Planning	High
3. Provide continuous footpaths along at least one side of all streets throughout Wickham that are universally accessible and introduce measures to improve pedestrian crossings of roadways.	New Local Area Traffic Management Plan	NCC - Infrastructure Planning	High
4. Where possible consolidate or eliminate driveway crossings along the primary frontage of all new developments to improve the amenity and safety of the pedestrian environment.	New provision in Development Control Plan	NCC - Strategic Planning	High
5. Encourage creation of midblock pedestrian walkways as part of new development to improve connectivity.	New provision in Development Control Plan	NCC - Strategic Planning	High
6. New cycleways throughout the area can provide links to the existing and planned cycling infrastructure to improve permeability across the network. Provision for cycling will include a combination of on and off street options to cater for all abilities and purposes (i.e. commuter or recreational).	Amend Newcastle Cycling Strategy and Action Plan	NCC - Infrastructure Planning	High
7. The roadway along Church Street will be reconfigured to include designated separated two-way cycle lanes. This will extend across Railway Street to link to Wickham Park and beyond to Maitland Road in the west. The eastern extent will continue southwards along part of Hannell Street to the signalised intersection with Throsby Street and further join to the cycleway along the Harbour onwards to Honeysuckle.	Amend Newcastle Cycling Strategy and Action Plan	NCC - Infrastructure Planning	High
8. The provision and location of end-of-trip facilities, including cycle parking/storage and changing facilities are a crucial component for consideration of implementing cycling infrastructure.	Newcastle City Centre Public Domain Technical Manual	NCC - Strategic Planning	High



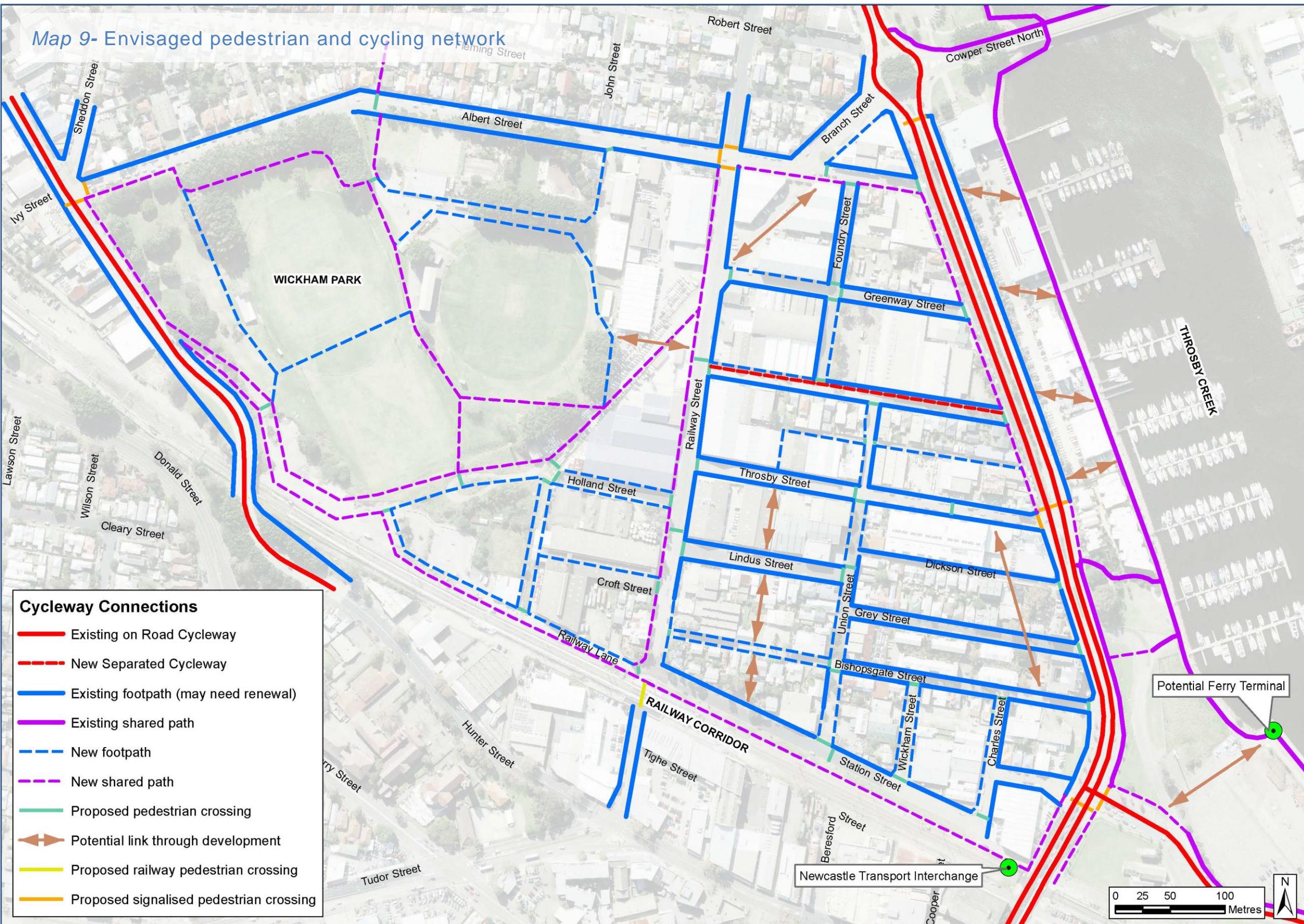
Clockwise from above:

Figure 31 - Example of bi-directional cycleway as proposed for Church Street

Figure 32 - diagram showing cross-section of Church Street (looking east) to demonstrate proposed cycleway,

Figure 33 - consideration for cycle parking and end of trip facilities is necessary to encourage cycling.





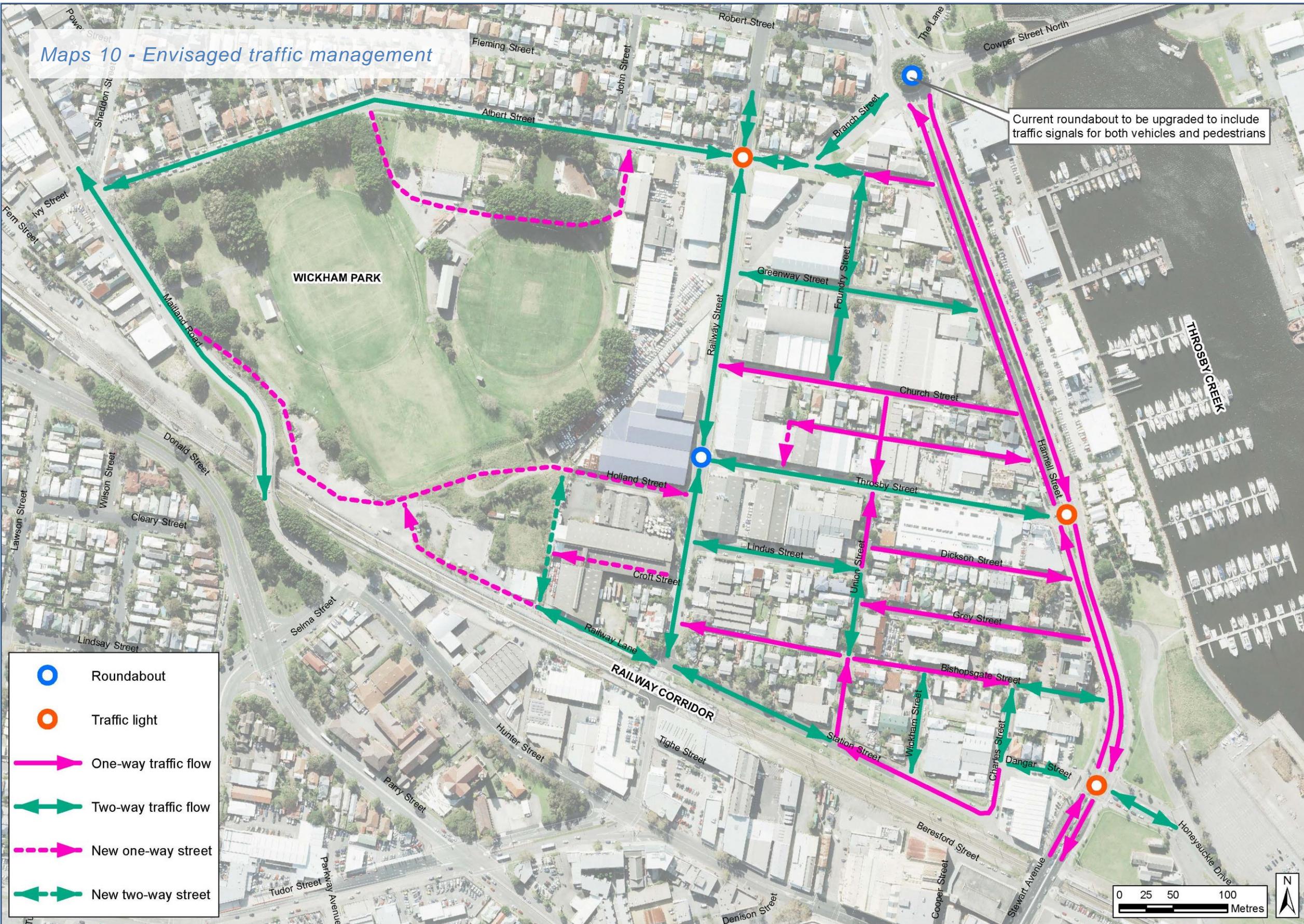
5.1.2 Traffic networks

Traffic within the Master Plan area is influenced by some of Newcastle's major arterial roads, including Hannell Street and Maitland Road, as well as traffic generated by the Wickham Transport Interchange. The future challenge is to maintain a separation of traffic from these arterial roads and non-local traffic generators, and the local street network. Redevelopment within the Master Plan area is limited by the capacity of the narrow local streets to cater for generation of increased traffic whilst aiming to improve the amenity and safety of the pedestrian environment.

Maps 10 - Envisaged traffic management identifies the future envisaged traffic flows and intersections within the Master Plan area.

Strategy: Manage traffic within the Wickham Master Plan area to improve amenity and safety within local streets

Actions to achieve this strategy	Mechanism	Responsibility	Priority
1. Restrict traffic flows of local streets to predominantly one-way in order to reduce shortcuts from non-local traffic, reduce the width of the carriageway pavement to enable widening of footpaths and provision of on-street car parking.	New Local Area Traffic Management Plan	NCC - Infrastructure Planning	High
2. Widening the road reserve of select streets to enable adequate capacity of traffic, parking and pedestrian flows.	New Local Area Traffic Management Plan	NCC - Infrastructure Planning	High
3. Introduce traffic calming measures to slow traffic to improve safety for pedestrians and cyclists through implementation of a local area traffic management plan.	New Local Area Traffic Management Plan	NCC - Infrastructure Planning	High
4. Extend streets and lanes where necessary to eliminate dead ends and to improve connectivity, particularly where linking between Railway Street and Wickham Park	LEP amendment to acquire necessary land.	NCC - Strategic Planning	High
5. Provide a new one-way road link along the southern and south eastern edge of Wickham Park within the surplus railway land being part of the former Bullock Island rail corridor. This roadway would link between Maitland Road and Holland Street and provide an activated edge to Wickham Park, as well as providing access to formalised car parking areas and new development parcels that front onto Wickham Park.	New Local Area Traffic Management Plan	NCC - Infrastructure Planning	High



5.1.3 Car parking

Local industry and residential uses within Wickham have traditionally lacked onsite car parking, hence relying on provision within local streets. Whilst new development is required to accommodate car parking onsite the following externalities place increased pressure on demands for on-street car parking:

1. The loss of car parking within the city centre due to the uptake of development on land within Honeysuckle, which provided temporary at grade all day parking in the intermediate period (over the last decade). Whilst Transport for NSW have instigated preparation of a city centre car parking study to identify potential solutions, this is unlikely to be realised in the short to medium timeframe.
2. The absence of public car parking facilities being provided as part of the 'Newcastle Transport Interchange' is likely to increase demand in adjoining areas, particularly within a five-minute walkable catchment. Whilst the purpose of the interchange is to provide a transition between modes of public transport and not act as a park and ride facility, demands are anticipated to remain high until a streamlined public transport solution or park and ride facility outside of the city centre are provided.
3. The shift of the commercial core of the city centre to Newcastle West will further increase demand for car parking until future light rail services are expanded and/or advances in technology, such as driverless vehicles, address this issue.



Figure 34 -improved economies of scale and efficient use of space may be achieved by provision of centralised car parking stations, where provision of onsite car parking is not practical or feasible to achieve.

Source: www.my-autoparking.com



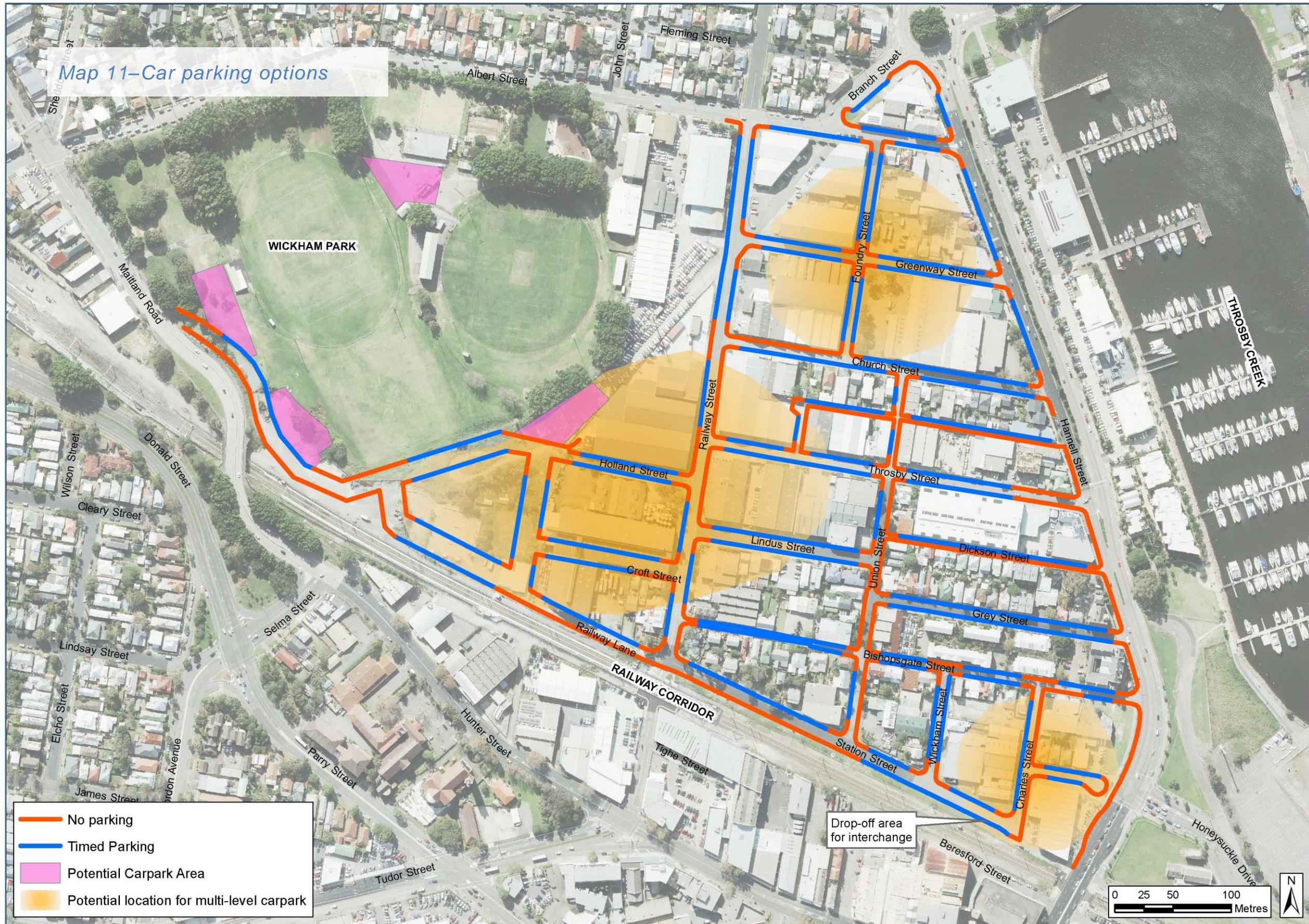
Figure 35 -An example of pervious paving applied to define on street car-parking areas and facilitate stormwater management.

Source: www.harvestingrainwater.com

Strategy: Manage car parking demands generated both internal and external to the Wickham Master Plan area

Actions to achieve this strategy	Mechanism	Responsibility	Priority
1. Introduce timed paid parking restrictions for all on-street parking to ensure parking turnover.	New Local Area Traffic Management Plan	NCC - Infrastructure Planning	Medium
2. Implement a residential parking scheme but only for existing residents that do not have the ability for providing onsite car parking.	Residential parking scheme	NCC - Infrastructure Planning	Medium
3. Consider extending the parking scheme to provide a limited number of passes to existing businesses that do not have existing onsite car parking.	Residential parking scheme	NCC - Infrastructure Planning	Medium
4. Ensure on-street parking is restricted where this compromises pedestrian amenity and safety.	New Local Area Traffic Management Plan	NCC - Infrastructure Planning	High
5. Decouple car parking ownership from other residential land uses to encourage car parking to be used as a tradeable commodity, thereby increasing consumer choice, improving housing affordability, and maximising efficiency of distribution and opening opportunities for car sharing schemes or car rental businesses.	Revised provisions in Development Control Plan	NCC - Strategic Planning	Medium
6. Explore the potential for developing centralised public car parking facilities on targeted sites that are designed to enable future adaptive reuse for other land uses as demands shift in the future to decreases in private vehicle ownership but increase for inner city floor space.	Parking Strategy and/or Plan	NCC - Compliance and Parking; or Transport for NSW	High
7. Create formalised public car parking along the southern edge of Wickham Park, which could provide for both weekend activities and city workers during the week.	POM for Wickham Park	NCC - Recreation and Facilities	Medium

Map 11 – Car parking options identifies preferred location of both on street and off-street public car parking, as determined through the traffic modelling and assessment carried out by Bitzios Consulting.



5.2 Create safe, attractive and inclusive public places

This objective will be achieved by delivery of strategies addressing:

1. Streetscapes
2. Urban Activation
3. Land Acquisition



Figure 36 - Visualisation of envisaged safe, attractive and inclusive pedestrian focused public domain along Union Street Wickham.

5.2.1 Streetscapes

The streetscapes within Wickham are eclectic in character, due to the diversity of land uses, street widths, and irregular subdivision patterns. This is a result of the suburb developing over different phases and for different purposes over time rather than being planned and subdivided in one stage.

Many of the narrow older streets were subdivided in the 1800s to accommodate workers' residences and are unlikely to have been constructed to accommodate little more than pedestrian traffic. However, with the inclusion of vehicle lanes, on-street car parking, footpaths, street trees, power poles and driveways, the current standards of pedestrian amenity, safety and universal accessibility are difficult to achieve.

Strategy: Improve streetscapes to meet future capacities and current community expectations

Actions to achieve this strategy	Mechanism	Responsibility	Priority
<p>1. Streets within the Wickham Master Plan area to reflect the criteria set out in Table 1 - 'Proposed street profiles' and as described below:</p>	City Centre Public Domain Technical Manual Newcastle DCP Local area traffic management plan	NCC - Strategic Planning; and Infrastructure Planning	High
<p>2. Footpaths</p> <ul style="list-style-type: none"> a. Each street has a footpath along at least one side that provides universal access to adjoining land and forms a seamless network that connects to surrounding areas. b. Footpath pavement is consistent with materials selected in the Newcastle City Centre Public Domain Technical Manual. c. Where possible reuse the existing sandstone when relocating kerb and gutter. 	City Centre Public Domain Technical Manual	NCC - Strategic Planning; and Infrastructure Planning	High
<p>3. Driveways</p> <ul style="list-style-type: none"> a. New vehicle access to private property is restricted along primary street frontages as identified in Map 12 - Restrictions to location of vehicle access to private land. b. Redevelopment consolidates vehicle access to minimise driveway crossovers along footpaths. Multiple driveway crossovers accessing individual garaging is not supported. c. Location of loading zones does not impede pedestrian accessibility or placement of street trees. 	Newcastle DCP	NCC - Strategic Planning	High

Actions to achieve this strategy	Mechanism	Responsibility	Priority
<p>4. Street trees</p> <ul style="list-style-type: none"> a. Where possible urban greening is to be achieved on private property within the front building setback. b. 'New' street trees are generally to be located: <ul style="list-style-type: none"> i. where not conflicting with existing or planned infrastructure or services ii. not within the alignment of existing footpaths (but possibly within widened footpath areas) iii. along designated parking lanes at intervals between 12m to 18m iv. where not impeding pedestrian flows/accessibility and/or vehicle sight lines v. in tree vaults or in raised planters as specified by the city arborist. c. Location of street trees do not impede on construction of designated cycleway along the northern side of Church Street. d. New Street trees along Union Street are selected and located to provide a canopy cover conducive to a high amenity pedestrian environment. e. Tree planting along the former Bullock Island Rail Corridor are distinguished from other streets by selection of species that have brightly coloured foliage. f. Street trees are only replaced or added within the same alignment as existing street trees, where the location is reviewed and deemed suitable having regard to the above. 	Newcastle DCP; Street Tree Technical Manual	NCC - Strategic Planning; and Infrastructure Planning	High
<p>5. Infrastructure and services</p> <ul style="list-style-type: none"> a. New development will replace existing overhead electrical wiring and cabling with underground services where: <ul style="list-style-type: none"> i. connecting into a new building ii. on the same side of the street for a length of 20m or more iii. any balcony, window or other opening of a proposed building is located within six metres of an overhead cable or wire, regardless of whether the cable or wire is insulated. b. Provision is made for stormwater management including overland drainage to detention areas (e.g. in Wickham Park), the use of rain gardens, permeable pavement (in parking lanes) and other water sensitive urban design (WSUD) measures or devices. c. Allowance is made for future engineering solutions to manage and remove rising groundwater levels associated with potential sea level rise. 	Newcastle DCP	NCC - Strategic Planning	High

Table 1– Proposed street profiles

Street type	Arterial	Collector	Local			Laneway					
Street Names	Hannell Street; Maitland Road; Stewart Avenue	Albert Street; Branch Street; Railway Street	Station Street; Throsby Street	Foundry Street; Greenway Street; Lindus Street; Wickham Street; Proposed New Street^	Eastern end of Albert Street, Bishopsgate Street; Charles Street; Church Street; Dangar Street; Grey Street; Holland Street; Railway Lane; Union Street	Croft Street; Lee Terrace*	Dickson Street	New access road through Wickham Park			
Road reserve width	20m to 30m	20m to 30m	15m	15m to 20m	10m to 15m	Less than 10m		Varied			
Intended purpose	High volume of through traffic separated from pedestrians	Main vehicle connections through local area that cater for local traffic generation, whilst also accommodating cycling and pedestrian users.	Pedestrian focused streets that also accommodate lower volumes of local traffic movement. Union Street forms main north south pedestrian link. Church Street provide main east west cycle link.		Limited shared vehicle and pedestrian access local land uses directly in vicinity	Vehicle and pedestrian access to uses in Wickham Park and formalised car park areas					
Speed limit (km/hr)	60	50	40	preferably less than 40							
Traffic lanes	4 lanes (i.e. two traffic lanes in each direction)	2 (i.e. one lane in each direction, except for Station Street east of Union Street which is one way and has one traffic lane and one set-down/drop-off lane along the southern side)	1 (i.e. one-way traffic, with the exception of Dangar Street, and parts of Bishopsgate, Charles and Union Streets which are two-way traffic, hence 2 lanes)								
On-street parking lanes	2	1 or 2 (if possible)		2	NIL	1	Minimum of 1 plus access to designated parking areas				

Street type	Arterial	Collector	Local	Laneway				
Street Names	Hannell Street; Maitland Road; Stewart Avenue	Albert Street; Branch Street; Railway Street	Station Street; Throsby Street	Foundry Street; Greenway Street; Lindus Street; Wickham Street; Proposed New Street^	Eastern end of Albert Street, Bishopsgate Street; Charles Street; Church Street; Dangar Street; Grey Street; Holland Street; Railway Lane; Union Street	Croft Street; Lee Terrace*	Dickson Street	New access road through Wickham Park
Cycle lanes	4 both shared path off street and on street on either side of road	2 on-street lanes	2 on shared path along southern side of Station Street	Nil, except 2 off street lanes along northern side of Church Street		2 separate off street lanes continue eastwards along Bullock Island rail corridor		
Footpaths	2 Shared paths at 3m wide (on each side)	2 at 2m to 3m wide	2 at 2m wide	2 at a minimum of 3m wide	2 at 1.4m to 2m wide	2 at 1m wide (if possible)	1 at a minimum of 1.4m wide	Minimum of 1 shared path of 2.8m wide
Footpath pavement types	Honed concrete with granite paver border as per Newcastle City Centre Public Domain Technical Manual. Note: footpaths adjoining heritage items will have customised finishes.				Asphalt with granite paver border	Concrete TBA		
Driveway crossovers on footpath	No	Limited to where no other option is available	No	Yes, with exception of Union Street (no driveways on eastern side and no additional driveways off western side) and Church Street (no driveway access across northern side due to cycle lane).				
Overhead electrical wires	Not applicable along Hannell Street	Electricity is provided to all redeveloped sites via subsurface trenching. Redevelopment with a frontage greater than 20m should include removal of overhead electrical wires and placement underground.			Not applicable or required			
Street trees	Existing	Along each side on footpath/road verges	On both sides of street within parking lanes and where footpath has been widened.	Not practical		Along both sides		

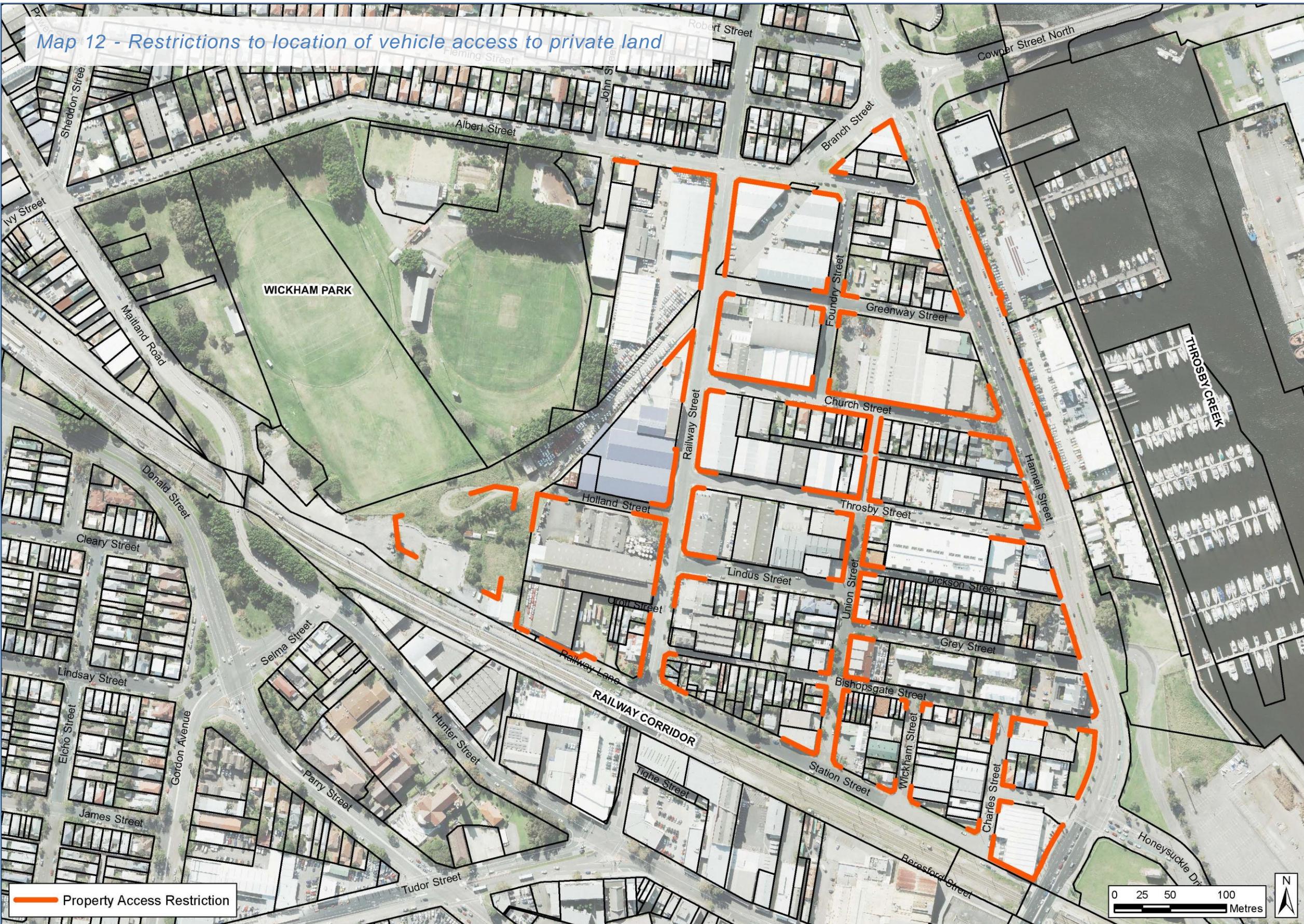
Street type	Arterial	Collector	Local	Laneway				
Street Names	Hannell Street; Maitland Road; Stewart Avenue	Albert Street; Branch Street; Railway Street	Station Street; Throsby Street	Foundry Street; Greenway Street; Lindus Street; Wickham Street; Proposed New Street^	Eastern end of Albert Street, Bishopsgate Street; Charles Street; Church Street; Dangar Street; Grey Street; Holland Street; Railway Lane; Union Street	Croft Street; Lee Terrace*	Dickson Street	New access road through Wickham Park
Lighting	Existing	At each street intersection and mid block as required to ensure adequate illumination of footpaths along both sides of street.	Lower scale lighting fixtures with lamination compliant to Australian standards for residential streets. Additional footpath lighting provided along Union Street and main pedestrian thoroughfares.			Preferably along both sides plus footpath lighting within park		
Landscape elements	Bus stops	Street furniture (bins, seats, drink fountains, cycle parking) in select locations of urban activation	Street furniture, planter boxes/raised gardens (located and designed as urban activation/place making projects in partnership with local community) stormwater devices (e.g. rain gardens).		Not applicable			

[^]North South street linking western end of Railway Lane and Holland Street

*Unofficial local name for the laneway parallel to and between Throsby and Church Streets.



Figures 37 to 42 - Sample of envisaged materials and streetscape elements (to be consistent with selection identified in the Newcastle City Centre Public Domain Technical Manual)



5.2.2 Urban activation

A key message from the local landowners and business workshop was a desire for spaces that provide relief from hard surfaces and the bustle of the urbanised environment, where people can take timeout, gather or participate in activity.

Such opportunities are traditionally provided for within neighbourhood parks. Whilst improved links to Wickham Park and the embellishment of the foreshore parkland would partly address this, the existing urban areas lack the opportunities to provide for neighbourhood parks of a scale usually provided by Council within a suburban context.

Map 13–Public domain elements identifies the main public domain improvements envisioned to contribute towards the desired future character of the Wickham Master Plan area.



Figure 43 - Example of how an urban activation area may be achieved by narrowing part of Lindus Street, Wickham and acquiring a small part of the land at the southern corner with Railway Street



Figure 44 - Street corners provide the ideal location for providing open space or activation within the existing urban structure.



Strategy: Implement opportunities for activation of the public realm

Actions to achieve this strategy	Mechanism	Responsibility	Priority
<p>1. Create a series of smaller spaces that act as 'micro-scale' neighbourhood parks (i.e. urban activation spaces) and provide one or more of a range of uses or facilities, including:</p> <ul style="list-style-type: none"> - shade trees and plantings - community gardens - rain gardens or other landscape stormwater features - furnishings (seating, bins, and drinking fountains) - play equipment - lawns and/or paved areas - small staged areas with plugin facilities for open air music, performances, or screenings - illumination - Wi-Fi - public facilities 	Location based landscape design plans	NCC - Strategic Planning; and NCC - Infrastructure Planning	Medium (or when land is acquired)
<p>2. Urban activation spaces are located:</p> <ul style="list-style-type: none"> - In central locations along identified pedestrian and cycle links. - At street corners but preferably not on the intersection with Hannell Street. - Within the front building setback of larger development sites and partly incorporated into the road reserve. This may be achieved by further removal of on street parking from street corners and widening of the footpath areas. Hence, wider street reservations such as Lindus Street are identified as ideal for creating these spaces. - Preferably adjoining supporting retail or community activities that provide natural surveillance and take on an informal role of guardians but do not take over or commercialise such spaces for their own businesses. Ground level residential uses should not directly open onto or front such public spaces. 	Location based landscape design plans	NCC - Strategic Planning; and NCC - Infrastructure Planning	Medium (or when land is acquired)
<p>3. Land for urban activation spaces may be acquired through:</p> <ul style="list-style-type: none"> - Inclusion in the Land Reservation Acquisition map of Newcastle LEP 2012 where identified as key locations for these spaces. - Dedication to Council, as part of negotiation with Council prior to redevelopment. This land may be in exchange for agreed development incentives or bonuses (through a formalised community benefit scheme). The land area dedicated to Council would still be able to form part of calculations for determining gross development floor area. 	LEP amendment	NCC - Strategic Planning	High

Actions to achieve this strategy	Mechanism	Responsibility	Priority
4. Embellishing of urban activation spaces may be funded by a codified community infrastructure incentives scheme, works-in-kind or planning agreements between developers and Council.	Community benefits scheme	NCC - Strategic Planning;	High
5. Involve a broad cross-section of the local community in determining the purpose and design features of each urban activation space to ensure public support, utilisation and creating a sense of community ownership.	Location based landscape design plans	NCC - Strategic Planning; and NCC - Infrastructure Planning	Medium (or when land is acquired)



Figure 45 to 49 - examples of landscape elements and uses that could be included in urban activation areas



Figure 50- Fine example of public art adorning an otherwise blank wall along Union Street, north of Throsby Street

5.2.3 Land acquisitions

In order to achieve the objectives within the Wickham Master Plan Council will require acquiring certain lands to achieve road and footpath widening and/or extensions, as well as providing new open space areas within the public realm.

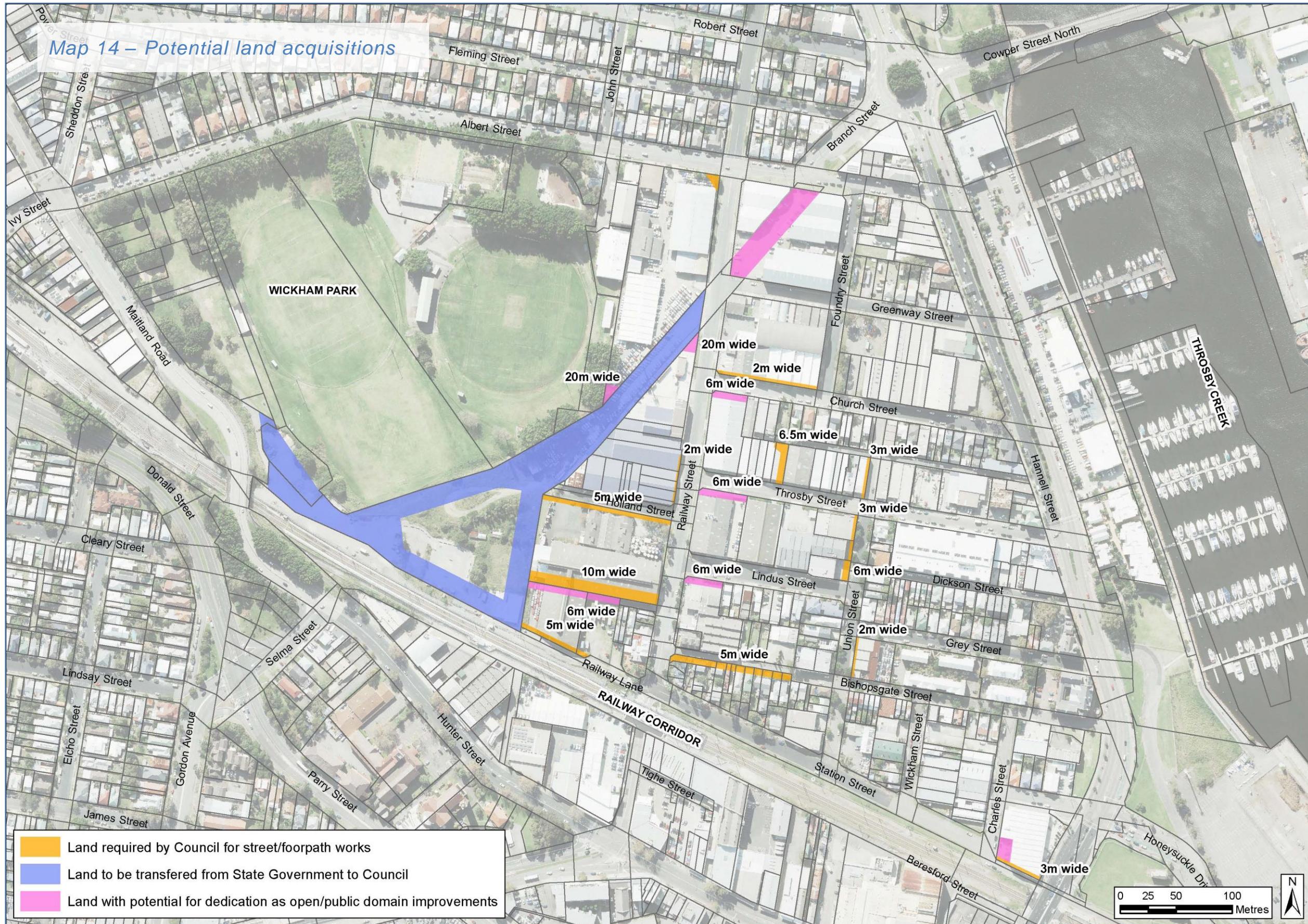
Map 14 – Potential land acquisitions identifies which land is required and how acquisition may be achieved.

Strategy: Acquire land required for implementing the Wickham Master Plan

Actions to achieve this strategy	Mechanism	Responsibility	Priority
1. Ensure the identified land acquisitions are legally implemented within Council's Local Environmental Plan (LEP) by amendment of the Land Reservation Acquisition Map.	LEP amendment	NCC - Strategic Planning	High
2. Ensuring redevelopment does not compromise Council's ability to acquire land required for implementing the Wickham Master Plan.	Note on S149 certificate	NCC - Strategic Planning	High
3. Ensure acquisition does not reduce the redevelopment potential of the land due to a decreased site area. This may be achieved by including the subject area as part of the site area calculations when determining potential gross floor areas.	Include provision in Development Control Plan	NCC - Development & Building Services	Ongoing



Figure 51- Land consisting the former Bullock Island rail corridor provides opportunities for improving connectivity and providing recreational opportunities



5.3 Ensure built environment is functional, responsive and resilient

This objective will be achieved by delivery of strategies addressing:

1. Redevelopment density
2. Built form

5.3.1 Redevelopment density

Community expectations play a vital role in determining the scale and intensity of future development. Hence, it is important for the community to understand the potential cost and benefits resulting from future redevelopment densities.

The approach proposed, is to ensure that redevelopment above the current maximum building heights and FSR provides a measurable community benefit through provision of improvements to the public domain and urban structure that are not otherwise attainable through standard developer contributions or development conditions.

Thereby future redevelopment densities will facilitate the implementation of the envisaged character of the Wickham Master Plan area using incentives and bonuses in exchange for additional building height and/or FSR, provided planning capacity is determined suitable.

The following redevelopment density strategies are recommended in order to implement the above-described approach:

Strategy: Redevelopment densities achieve the desired future character of the Wickham Master Plan area:

Actions to achieve this strategy	Mechanism	Responsibility	Priority
1. Consider increased building heights on sites where consistent with Map 15 – Potential redevelopment densities and where a community benefit is provided, as defined within a codified community infrastructure incentives scheme.	LEP amendment	NCC - Strategic Planning	High
2. Consider increased FSR on sites where consistent with Map 15 – Potential redevelopment densities and where a community benefit is provided, as defined within a codified community infrastructure incentives scheme.	LEP amendment	NCC - Strategic Planning	High
3. Regardless of the above strategy, ensure FSR within the Wickham Master Plan area is not less than a FSR of 1.5:1.	LEP amendment	NCC - Strategic Planning	High
4. Whilst the Wickham Master Plan has taken a conservative approach to the building height and FSR nominated for redevelopment of land within the Harbour Edge precinct, greater scale may be achieved where design excellence is demonstrated through an architectural design competition process as defined within Clause 7.5 of Newcastle LEP 2012. Land within the Harbour Edge precinct is to be included within the Key Sites Map of the same LEP.	LEP amendment	NCC - Strategic Planning	Medium

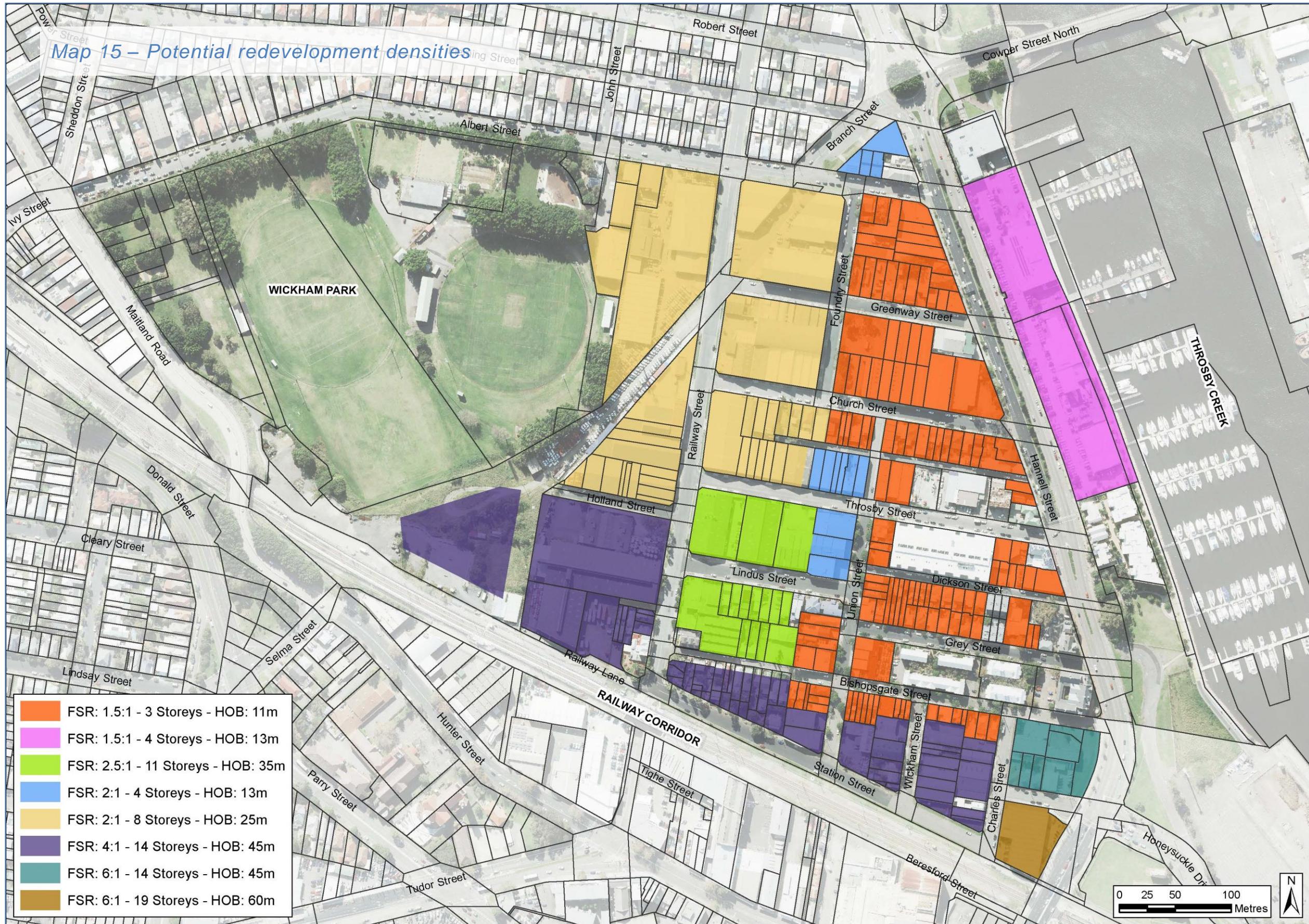




Figure 52 - Wickham as viewed from Honeysuckle showing the existing built form, including approved development proposals



Figure 53 - View from Honeysuckle showing proposed building envelopes for Wickham and including the existing maximum building heights within the Newcastle City Centre as per the Newcastle Local Environmental Plan 2012



Figure 54 - Wickham's existing built form as viewed from Honeysuckle illustrating the envisaged building heights and existing heights within the Newcastle City Centre



Figure 55 - Envisaged built form within Wickham as viewed from Honeysuckle in context of building heights within the Newcastle City Centre

5.3.2 Built form

NSW planning legislation requires density to be controlled by nominating maximum building height and maximum Floor Space Ratio (FSR) within Council's Local Environmental Plan (LEP). FSR is used together with other development controls, such as building setbacks and site coverage to determine the scale and bulk of envisaged building envelopes.

For example, the same FSR will result in a more slender built form when building height is higher but a stockier/bulkier form when a lesser building height is applied.

While this Master Plan advocates a continuation of the current eclectic urban character resulting from a mix of design styles and building form and materials, the following built form strategies are recommended to reflect the findings of the aforementioned workshops, design analysis including 3D modelling of the potential built form.

Strategy: Built form reflects the desired future character of the Wickham Master Plan area

Actions to achieve this strategy	Mechanism	Responsibility	Priority
1. Buildings are setback from street boundaries as identified in Map 16 - Minimum building setbacks in order to improve the interface between buildings and the public domain by providing more opportunities for gardens, landscaped forecourts, or widened footpaths that cater for outdoor dining and cafés.	Include provision in Development Control Plan	NCC - Strategic Planning	High
<p>2. Buildings built to the street edge (zero setback) as shown in Map 16 - Minimum building setbacks, should not have residential uses at ground level and should include street activation or treatment such as:</p> <ul style="list-style-type: none"> • Direct access to associated commercial or retail uses from the footpath • Windows and/or glazing. • Setbacks at ground level resulting in colonnades or cantilevering of upper levels to provide covered outdoor areas. • Green walls or street art installations (e.g. murals). • Discourage blank walls, garage doors, commercial or visitor parking spaces, electrical substations, water hydrants, or doorways associated with fire exits, parking stations, and service areas fronting street where buildings built to street front (i.e. no building setback), other than in laneways (e.g. Lee Terrace, Croft Street, or new service lanes created as part of redevelopment). 	Include provision in Development Control Plan	NCC - Strategic Planning	High
3. In addition to the recommended minimum building setbacks along street frontages as identified in Map 16 - Minimum building setbacks , new development is to provide further visual interest through horizontal articulation, a breakup of building materials and architectural style that emphasises the original pattern of subdivision and eclectic character of built form along the streetscape.	Include provision in Development Control Plan	NCC - Strategic Planning	High
4. New development is generally to comply with the nominated building envelopes within this Master Plan in addition to those design requirements specified within other legislated design codes and/or guidelines (e.g. SEPP 65 Residential apartment code).	Include provision in Development Control Plan		High

Actions to achieve this strategy	Mechanism	Responsibility	Priority
<p>5. Upper level setbacks are provided to achieve the following:</p> <ul style="list-style-type: none"> • Reduce the impacts of overshadowing during mid-winter. • Enable adequate building separation where streets are narrow. • Reduce the perceived scale of buildings as viewed at street level. • Create street wall heights that reflect and/or enhance the envisaged character and building types within a precinct. • Provide vertical articulation and visual relief of building bulk. 	Include provision in Development Control Plan	NCC - Strategic Planning	High

Sample buildings shown within this master plan are indicative only of the potential scale, form, and/or building types envisaged, should the land be redeveloped to its full planning capacity. These images are not of actual development proposals nor should they be considered as precedents for assessment of future development proposals on the land.

Any eventual redevelopment will be subject to assessment under the controls active at the time, including density controls.



Figure 56 - View east of Wickham Master Plan area showing existing and approved built form



Figure 57 - View east of Wickham Master Plan area showing the envisaged building envelopes and existing building envelopes of the Newcastle City Centre.



Figure 58 - View east of Wickham Master Plan area showing the envisaged built form in context of the existing building envelopes of the Newcastle City Centre

Figure 59 (right) - View west of Wickham master plan area showing existing and approved built form

Figure 57 (below) - View west of Wickham master plan area showing envisaged building envelopes and existing building envelopes within the Newcastle City Centre

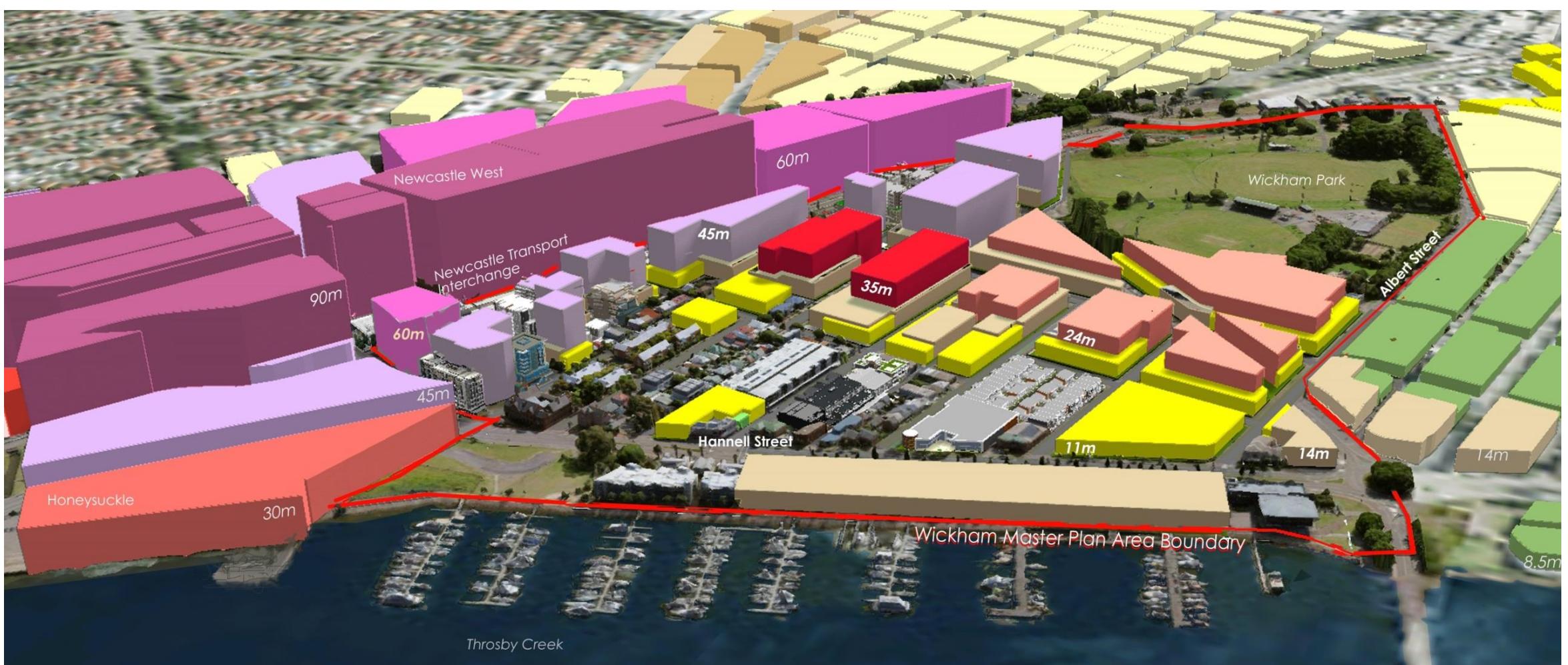




Figure 58 - View west of Wickham master plan area showing envisaged built form in context of the existing building envelopes within the Newcastle City Centre.



Bibliography

The following is a list (in alphabetical order) of resources referred to and/or used in preparing the Wickham Master Plan:

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