

## 6.03 Wickham

### Amendment history

Version Number	Date Adopted by Council	Commencement Date	Amendment Type
1	15/11/2011	15/06/2012	New
2	27/06/2017	10/07/2017	Amended
3	23/10/2018	16/11/2018	Amended
4	TBA	TBA	Amended

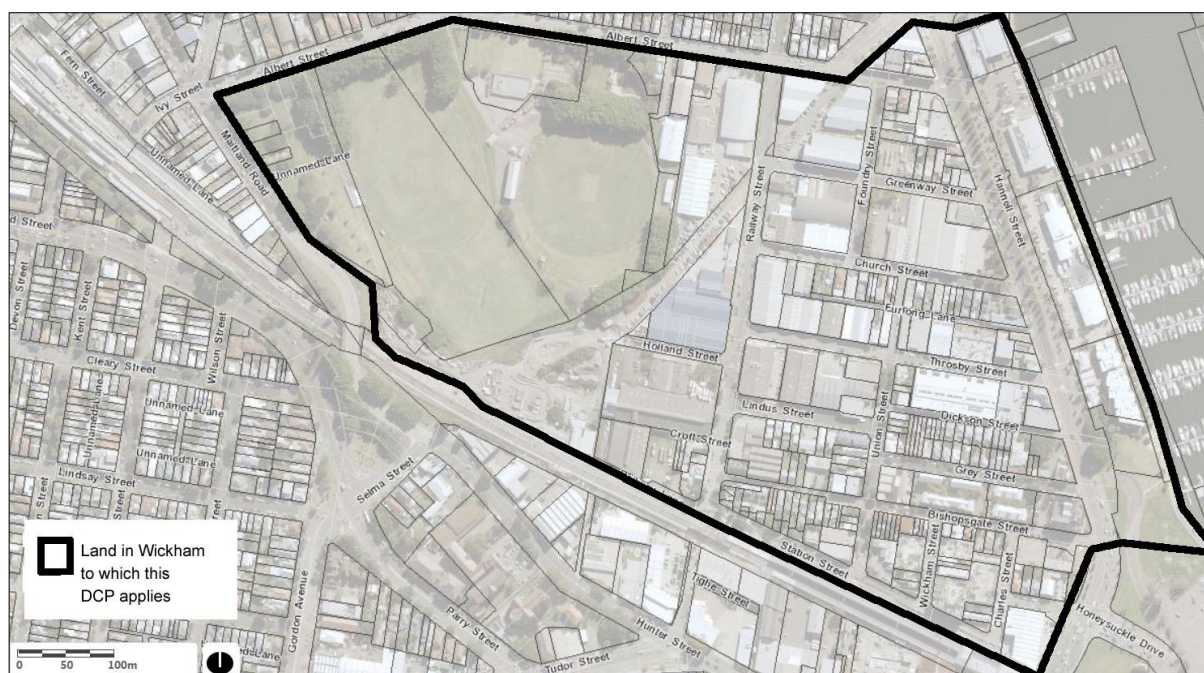
### Savings provisions

Any development application lodged but not determined prior to this section coming into effect will be determined taking into consideration the provisions of this section.

### Land to which this section applies

This section applies to all land within the heavy black line marked on *Figure 6.03 - 1 - Wickham*.

**Figure 6.03 - 1 - Wickham**



## Development (type/s) to which this section applies

This section applies to all development comprising:

- New buildings or structures
- Additions or alterations to existing buildings or structures
- Subdivision

## Applicable environmental planning instruments and legislation

The provisions of the Newcastle Local Environmental Plan 2012 apply to development applications to which this section applies.

Additional environmental planning instruments, including relevant State Environmental Planning Policies may also apply. In the event of any inconsistency between this section and an applicable environmental planning instrument, the environmental planning instrument will prevail to the extent of the inconsistency.

Note: The *Environmental Planning and Assessment Act 1979* enables an environmental planning instrument to exclude or modify the application of this DCP in whole or part.

## Related sections

The following sections of this DCP **will** also apply to development to which this section applies:

- Any applicable land use specific provision under Part 3.00
- 4.04 Safety and Security
- 7.02 Landscape, Open Space and Visual Amenity
- 7.03 Traffic, Parking and Access
- 7.06 Stormwater
- 7.08 Waste Management

The following sections of this DCP **may** also apply to development to which this section applies:

- 4.01 Flood Management - all land which is identified as flood prone under the Newcastle Flood Policy or within a PMF or area likely to flood
- 4.03 Mine Subsidence - within a mine subsidence area
- 4.05 Social Impact - where required under 'Social Impact Assessment Policy for Development Applications', 1999
- 5.01 Soil Management - works resulting in any disturbance of soil and/or cut and fill
- 5.02 Land Contamination - land on register or where risk from previous use
- 5.03 Vegetation Management - declared vegetation within 5m of a development footprint or likely to be affected by a development
- 5.04 Aboriginal Heritage - known/likely Aboriginal heritage item and/or place of significance and/or potential soil disturbance
- 5.05 Heritage Items - known heritage item or in proximity to a heritage item
- 5.06 Archaeological Management - known/likely archaeological site or potential soil disturbance
- 7.04 Movement Networks - where new roads, pedestrian or cycle paths are required
- 7.06 Energy Efficiency
- 7.07 Water Efficiency
- 7.09 Advertising and Signage
- 7.10 Street Awnings and Balconies - awnings or balconies located over public land.

In the event of an inconsistency between provisions within this section and any other section of the Newcastle Development Control Plan 2012, the provisions of this section will apply to the extent of the inconsistency.

### Associated technical manual/s

- Wickham Master Plan 2017
- [Wickham Masterplan \(2021 Update\)](#)
- City Centre Public Domain Technical Manual

### Purpose of this section

This section of the Newcastle Development Control Plan provides detailed standards and guidance for development in order to implement the Wickham Master Plan (2017) [and the changes adopted through the Wickham Masterplan \(2021 Update\)](#).

It integrates place-based planning and design guidelines to inform future redevelopment, consistent with the vision of the area as set out in the Wickham [Master Plan Masterplan \(2021 Update\)](#), in particular the characteristic features of each of the five identified interconnecting precincts (Key Precincts) within Wickham.

This section provides *performance criteria* that explain the planning outcomes to be achieved. Accompanying the performance criteria are *acceptable solutions* that illustrate the preferred way of complying with the performance criteria. There may be other ways of meeting the performance criteria and it is up to the applicant to demonstrate how the performance criteria are met.

### Development Application requirements

All applications that include the erection of a new structure or the extension of an existing structure with a height exceeding 8.5m are to be accompanied with a 3D model of the proposed development within in the context of the Newcastle CBD 3D model.

The format should be compatible to that used by City of Newcastle. [Format specification requirements for the model can be provided by City of Newcastle's Geospatial Information Services.](#)

The 3D Model should be used to illustrate the following information:

- context 'before' and 'after' streetscape drawings/images and/or photomontages;
- shadow diagrams; and
- assessment of impact on view corridors.

### Definitions

A word or expression used in this development control plan has the same meaning as it has in Newcastle Local Environmental Plan 2012, unless it is otherwise defined in this development control plan.

Other words and expressions referred to within this section are defined within Section 9.00 - Glossary, of this plan, and include:

- **Urban activation space** - a small public space that acts as a 'micro-scale' neighbourhood park that that contributes to the public domain through plantings and/or specific use or functions (e.g. small playground, community garden, or gathering space). Urban activation space is usually provided on corner sites within the development setback to the street and is incorporated into the road reserve.

## 6.03.01 Urban Character

Wickham will continue to evolve from a semi-industrial area at the outer fringe of Newcastle City Centre into a mixed use urban neighbourhood supporting the emerging commercial core within Newcastle West.

Urban renewal is envisaged to build on the existing urban structure to deliver greater connectivity, improved public domain amenity and built form which reflects the function and character of the area.

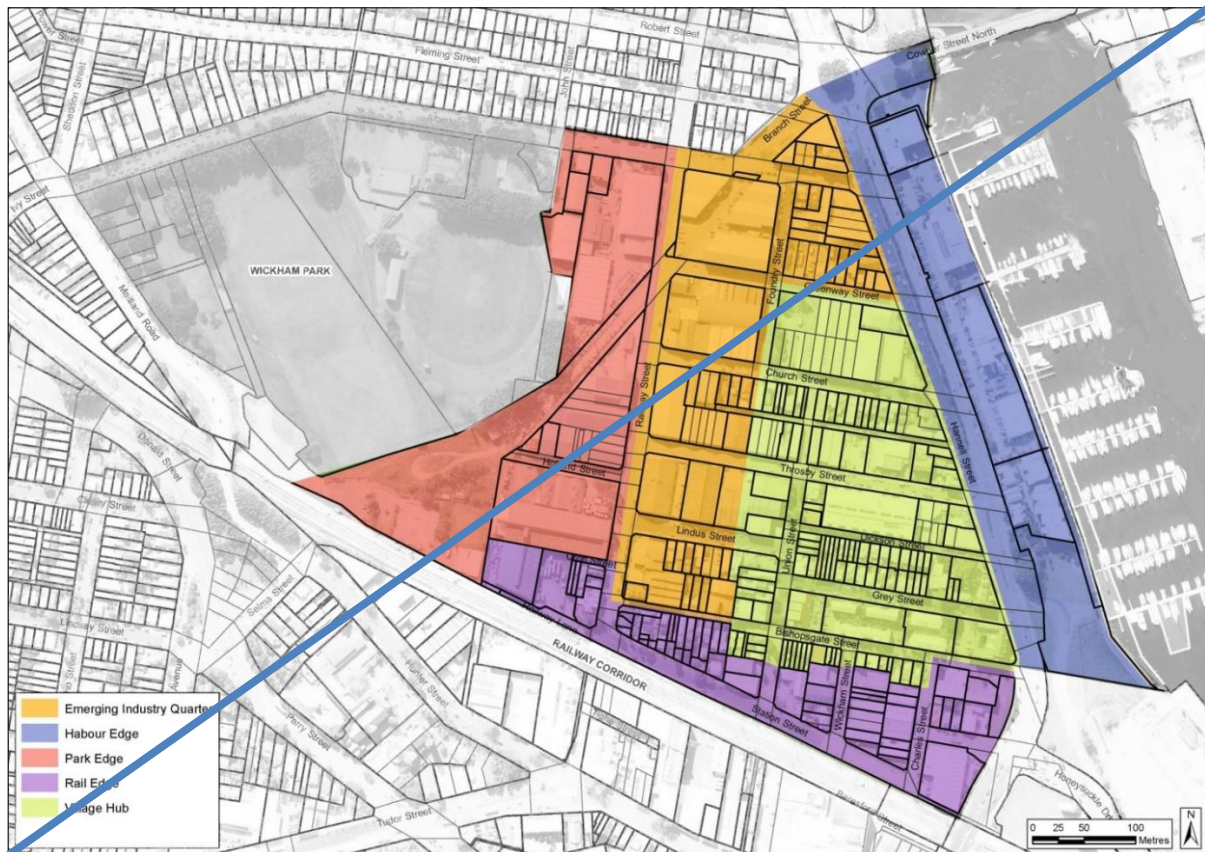
### Key Urban Precincts

The controls applying to this section of the DCP are based on achieving the intended future character of each **key urban** precinct, as identified in *Figure 6.03 - 2 Key Urban precincts*, consistent with the vision of the Wickham ~~Master Plan (2017)~~ Masterplan (2021 Update).

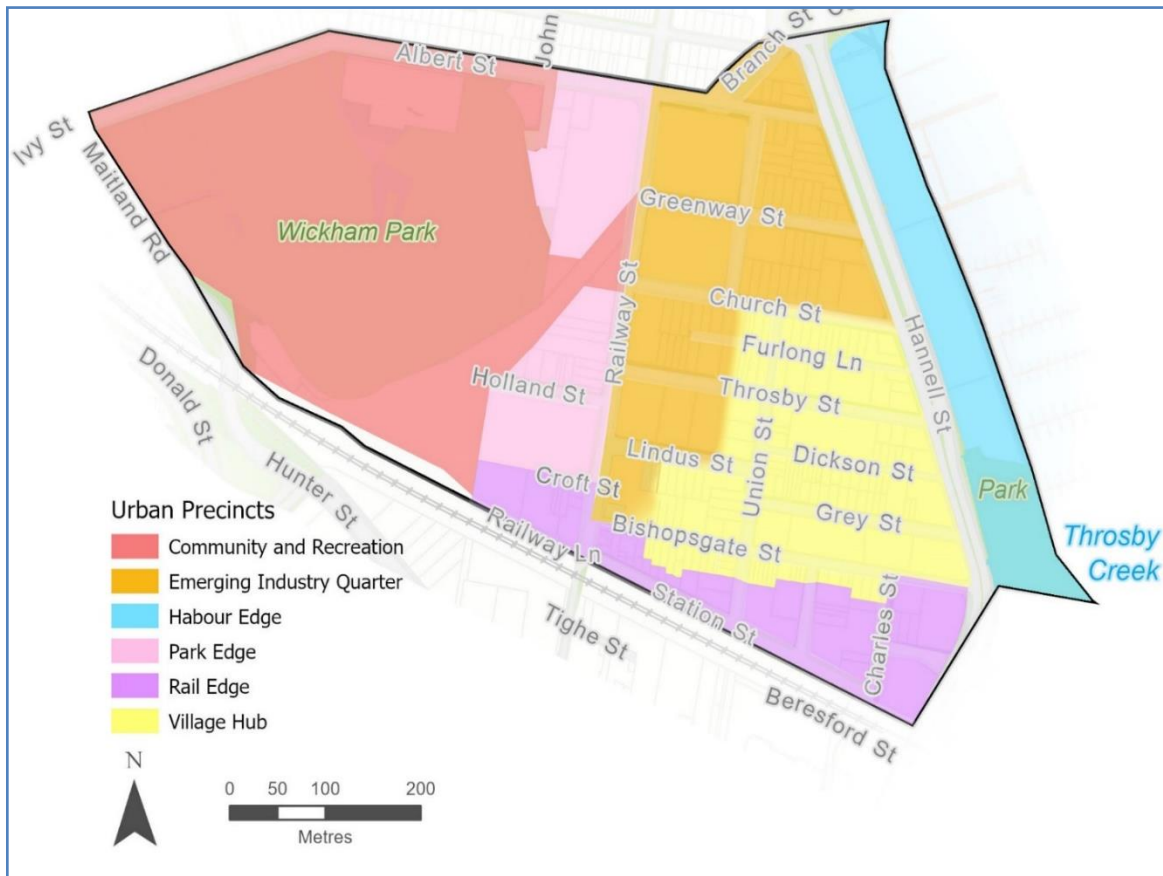
Any variation to the '*acceptable solutions*' proposed as an alternative means of meeting the specific '*performance criteria*,' will need to be justified having regard to achieving the future character of the relevant precinct.



**Figure 6.03 - 2 - Key Urban precincts - CURRENT**



**Figure 6.03 - 2 - Urban precincts - NEW**



## A. Rail Edge

### *Existing character*

The Rail Edge precinct contains a mix of uses and building types and provides an interface to the emerging commercial core of Newcastle West.

The majority of this precinct has already been redeveloped given the proximity to the Transport Interchange and the already generous development standards.

The Rail Edge precinct is predominantly characterised by higher density residential development with a mix of uses at street level. The larger podium tower building types reflect the precinct's location at the interface to the emerging commercial core of Newcastle West.

### *Future character*

The precinct is envisaged to support high density residential development that capitalises on its location adjacent to Newcastle Transport Interchange and provides ground level commercial uses with neighbourhood level retail and services activating street corners. Building scale and form transitions down to integrate with the lower scale Village Hub precinct fronting Bishopsgate Street.

***Figure 6.03--3--Potential future built form of the Rail Edge precinct***



## **B. Village Hub**

### *Existing character*

The Village Hub retains much of the original residential subdivision patterns established in the 1800s, which is characterised by narrow streets and a mix of lower scale residential building typologies. Buildings are set back from the front boundary and the front setback typically contains landscaping and forecourts.

The existing scale of the precinct allows for 3 storey buildings. The building height along the southern side of Bishopsgate Street is currently 24m.

### *Future character*

~~Redevelopment and infill development is envisaged to include terrace style housing, shop top housing and smaller residential apartment buildings up to three storeys in height which incorporate design elements complementary to existing housing stock. Opportunities for onsite car parking and driveway access are limited to ensure priority to pedestrian amenity and safety.~~

~~Union Street provides the main north-south pedestrian connection with wide footpaths and street trees, linking the predominantly residential precinct the Newcastle Transport Interchange. Retail and commercial activity are focused along Union Street while the east-west orientated streets maintain a residential focus.~~

~~Redevelopment and infill development is envisaged to continue and include terrace style housing, shop top housing and smaller residential apartment buildings with a street wall height of up to three storeys along each street fronting setback, which incorporates design elements that complement that of existing housing stock.~~

~~Redevelopment of small residual sites for infill housing will also enable urban renewal where amalgamation of sites is not possible or unlikely to result in increased residential densities.~~

~~Opportunities for onsite car parking and driveway access are limited to ensure priority to pedestrian amenity and safety.~~

~~Union Street provides the main north-south pedestrian connection with wide footpaths and street trees, linking the predominantly residential precinct to the Newcastle Transport Interchange. Retail and commercial activity are focused on corner sites along Union Street while the east-west orientated streets maintain a residential focus, except for Throsby Street, which continues to support a mix of business uses at street level.~~

~~The interface to the adjoining Emerging Industry Quarter precinct mid-block along Bishopsgate, Church, Lindus and Throsby Streets focuses on creating a consistent character along the street edge by continuation of identified front setbacks, landscape provision, use of design elements that emphasise the lower levels, with upper levels setback from the street.~~

~~Where additional building height is currently permissible within this precinct, the use of upper-level setbacks and design elements will ensure development presents at a consistent scale and character when viewed from street level. Tree planting and other landscape elements within urban activation areas of the public domain will also help to soften the visual dominance of larger development and improve the visual amenity for pedestrians.~~



**Figure 6.03 – 4 – Potential future built form of the Village Hub precinct**



**Figure 6.03 - 3 - Envisaged character of the Village Hub based on permissible scale and densities**



## C. Harbour Edge

### *Existing character*

The precinct is characterised by predominately three storey high buildings with uses that reflect the mixed residential, maritime, tourism and entertainment activities along the water edge.

The precinct is characterised by predominately three storey buildings with uses that reflect the mixed residential, maritime, tourism and entertainment activities along Throsby Creek.

### *Future character*

The Harbour Edge Precinct builds on the recreational and economic opportunities on offer within this prime waterfront location, by supporting intensification of use while retaining vistas and connections between Hannell Street and Throsby Creek.

The Harbour Edge Precinct will continue to build on the recreational and economic opportunities within this prime waterfront location, by supporting intensification of use that respect the operational function of the Port of Newcastle and allow for vistas and connections between Hannell Street and Throsby Creek.

The parkland at the southern end of this precinct will connect to the public domain areas of the final stage of the Honeysuckle redevelopment area.

***Figure 6.03 - 5 - Potential future built form of the Harbour Edge precinct***





## **D. Emerging Industry Quarter**

### *Existing character*

~~The Emerging Industry Quarter is characterised by larger development sites and wider streets. The Precinct predominately accommodates employment uses including service industries, small scale niche manufacturing and research and development technologies.~~

The Emerging Industry Quarter to the east of Railway Street has been extended to incorporate land north of Church Street due to its characteristics of being larger sites that accommodate a range of remnant light industrial buildings with high occupancy rates of employment uses including service industries, small scale niche manufacturing, research and development technologies.

Redevelopment within this precinct is likely to occur on land unrestricted by mine subsidence, based on the feasibility and availability of land for current businesses to relocate, particularly where owner-occupied.

### *Future character*

~~Redevelopment is envisaged to provide opportunities for fostering business and employment generation uses.~~

~~The former Bullock Island corridor is adapted as open space and embellished to form a publicly accessible landscape element within the redevelopment site.~~

Redevelopment is envisaged to foster business and employment generation, particularly on sites less conducive to residential amenity, such as Hannell Street and where residential densities are restricted by mine subsidence risk.

Where residential uses are accommodated within the precinct as part of a mixed-use development, the challenge is to ensure these provide genuine economic generating uses on ground level, rather than provision of a token commercial space sleeving at grade car parking.

Ground level floor areas are of an area and dimensions conducive to supporting a range of low impact and clean business uses, including high technology industries, manufacturing and creative industries.

Development on land within this precinct adjoining the Village Hub, will be designed to address the scale and character it presents along the streetscape, using architectural elements, articulation of setbacks and upper levels set further back from the street.

City of Newcastle will seek to acquire the former rail corridor passing through this precinct to deliver a public space incorporating active transport that links to adjoining areas.

**Figure 6.03 – 6 – Potential future built form of the Emerging Industry Quarter precinct**



## **E. Park Edge**

### *Existing character*

The Park Edge precinct is characterised by large sites containing commercial, light industrial, storage and warehouse uses backing onto the eastern side of Wickham Park.

Land within this Precinct is likely to redevelop within the next development cycle when market demand increases, particularly if the former rail corridor land is transformed into a useable public space with active transport links.

### *Future character*

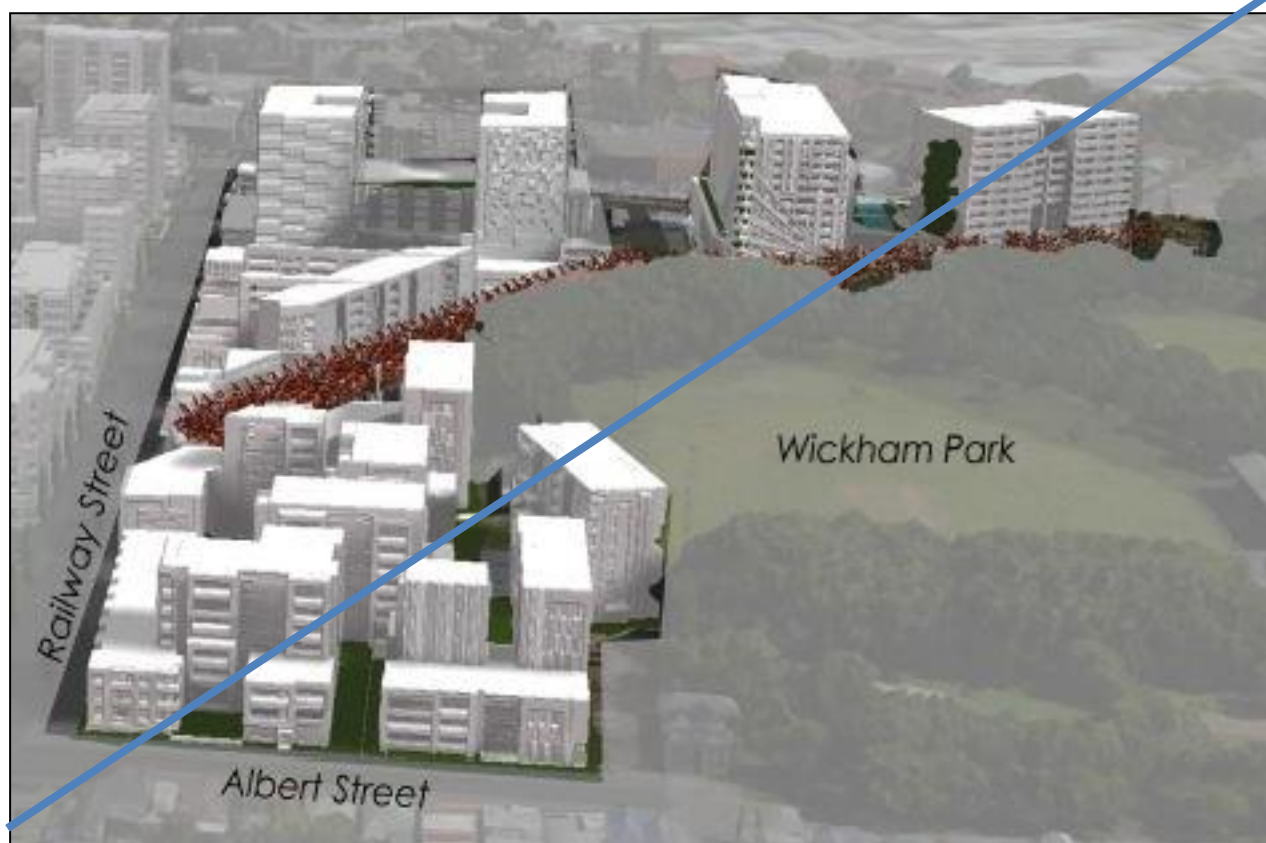
The Park Edge precinct will provide activation and natural surveillance to Wickham Park from a mix of uses. The precinct may also contain public parking facilities integrated into development parcels.

The precinct will provide key connections for pedestrians and cyclists through the extension to Holland Street and the opening of the former Bullock Island rail corridor for public access. The precinct will include 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.

The Park Edge precinct is envisaged to transform into a mixed-use area including medium to high density residential development with building scales reflective of mine subsidence restrictions.

The precinct will activate the eastern edge of Wickham Park and provide natural surveillance to the active transport corridor diagonally dissecting the precinct. There are opportunities to improve public access through to Wickham Park with a key connection for pedestrians and cyclists being proposed through a widened Holland Street, the extension of Croft Street, the end of railway lane and a wide opening to the former Bullock Island rail corridor and through to Wickham Park on land opposite from Church Street along the western side of Railway Street.

**Figure 6.03 – 7 – Potential future built form of the Park Edge precinct**



## **F. Community and Recreation**

### *Existing character*

This precinct combines land previously identified in WMP as 'Wickham Park' with part of the adjacent 'Park Edge', being the land known as the former Wickham to Bullock Island Railway Corridor. This land continues to act as a physical barrier between the City Centre and Wickham Park. The land contains some rail infrastructure along its southern extent, is partly leased to adjoining landowners along Railway Street but has otherwise remained vacant since it was last used as a works depot during the construction of the Newcastle Transport Interchange.

City of Newcastle has validated its intention to acquire the majority of the former rail corridor land from its current owner, through its inclusion on the Land Reservation Acquisition (LRA) map within Newcastle LEP 2012.

Wickham Park continues to cater for the recreational and social needs of both local residents and the wider Newcastle community. City of Newcastle will prepare a comprehensive plan of management for Wickham Park to improve amenity, connectivity, and surveillance, as identified in the WMP and reiterated within the Newcastle Strategic Sports Plan 2020.

### *Future character*

The precinct will continue to cater for sporting, community events and festivals, which will benefit from improved pedestrian and cycle links to public transport and adjoining areas.

The former rail corridor will support active transport including shared pedestrian and cycleways that extend from Maitland Road alongside a new roadway at the southern boundary of the precinct, to connect with existing cycleways east of the intersection of Cowper and Hannell Streets at Throsby Creek, as shown in *Map 4 - Traffic and Transport, Wickham Masterplan (2021 Update)*.

The rail corridor will include appropriate interpretive treatments acknowledging its local heritage listing within Newcastle LEP 2012 and lined by distinctive planting to differentiate it from other street tree planting within the area.

Redevelopment of the larger triangle shaped part of the former railway corridor lands is significantly restricted due to former mine workings. If acquired by City of Newcastle, this land will provide a vital role in supporting the precinct through provision of community facilities, formalised parking areas that can cater for both commuters and city workers during the week and park users on weekends, as well as infrastructure that supports a range of events and activities.

## **6.03.02 Building Envelopes**

### **A. Setbacks to streets**

#### *Performance criteria*

- P1. Buildings setbacks define the street edge and public domain and reinforce the envisaged character of each precinct.

#### *Acceptable solutions*

- A1. **Ground level building** setbacks to street boundaries are consistent with *Figure 6.03 - 8 4*
- A2. Where land is identified for acquisition by Council, in *Figure 6.03 - 8 4*, the minimum setback includes the land to be acquired plus any additional identified setback.
- A3. Where building setbacks are not specified in *Figure 6.03 - 8 4*, buildings may be built to the street edge (zero setback) at ground level but only for:
- (a) non-residential uses where the street facing façade has a minimum of 50% windows and /or other openings; or
  - (b) residential uses consisting of the covered private open space (outdoor living) component and where screened and/or elevated from the adjacent footpath/public domain area.

Note: Further design criteria for development interface to the public domain are provided in Section [compliance-with-section 6.03.03 Urban Design](#).

- A4. ~~Minimum setbacks to the street front for upper levels are consistent with the ground level setbacks, except where identified in the table below:~~

Precinct	Minimum street setback above 12m building height
Rail Edge	6m
Village Hub	N/A
Harbour Edge	N/A
Emerging Industry Quarter	6m
Park Edge	6m

The upper levels for any development in an identified Urban Precinct (Column 1), which is located at a height above that described in Column 2, is setback at the minimum distance identified in Column 3 from the street front boundary (measured along the horizontal) as identified in *Table 6.03 - 1*, below:

**Table 6.03 - 1 - Upper level setbacks**

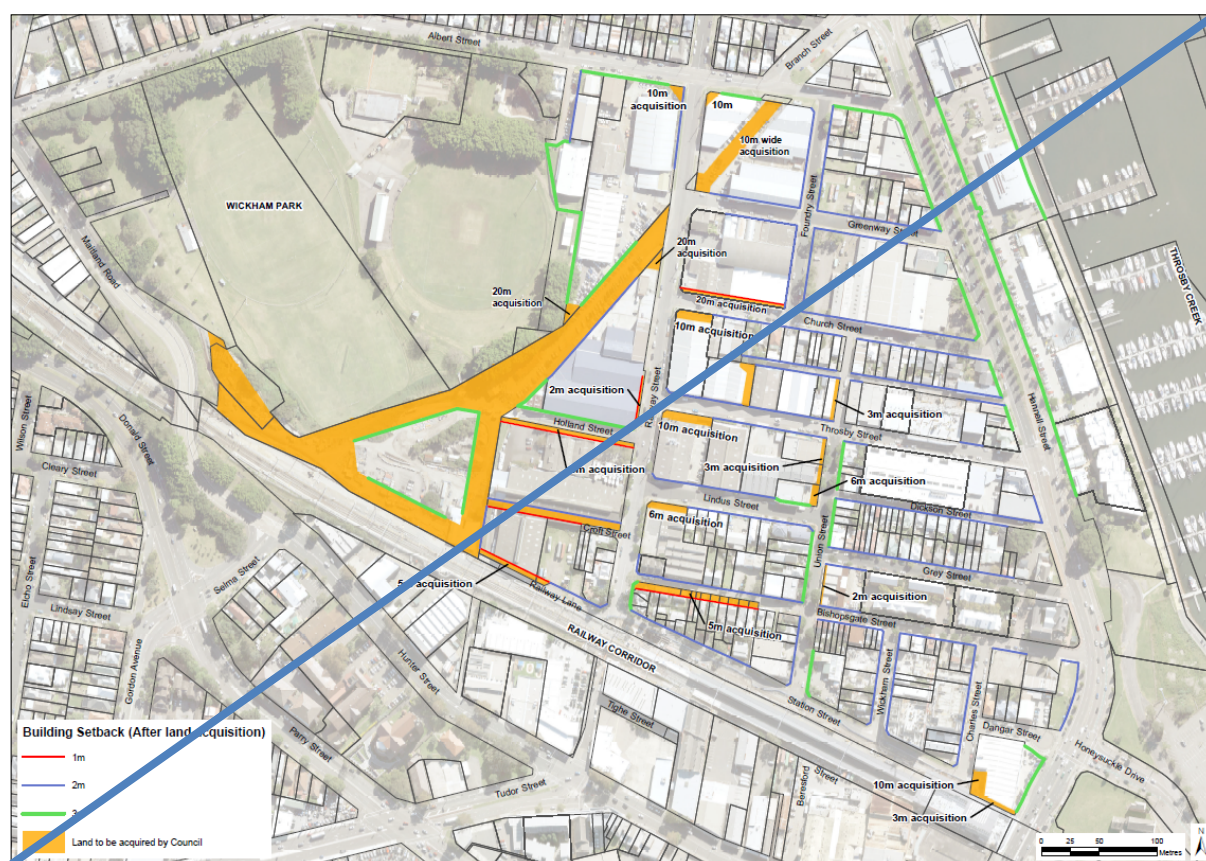
Urban Precinct	Upper-level setback applies to any part of the building above the following height:	Minimum setback to street front (for the upper-level setback)
Rail Edge	12m	6m
Village Hub	10m	6m*
Harbour Edge	12m	N/A
Emerging Industry Quarter	12m	6m
Park Edge	12m	6m

\*Refer to A6 for land at 29 Bishopsgate Street.

Note: Where the requirements of SEPP 65 and/or the Department of Planning and Environment's 'Apartment Design Guide', apply to a development proposals subject to this section, any inconsistencies in minimum setbacks will be resolved by the greater of the two setbacks applying.



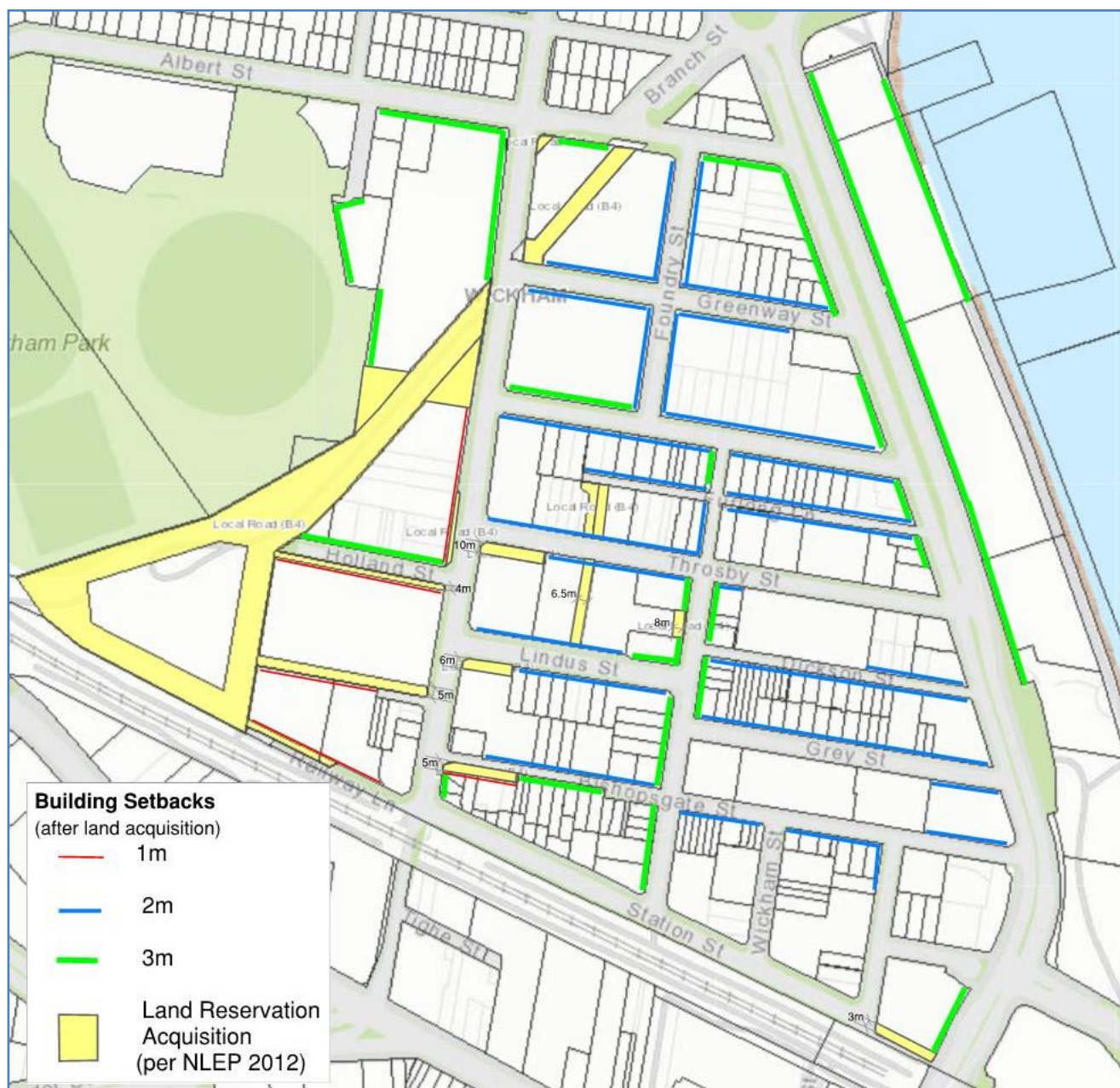
**Figure 6.03 – 8 – Building setbacks**



*Additional acceptable solutions applying to development within the Village Hub Precinct*

- A5. Within the Village Hub precinct development may encroach into the minimum street setback at the first level (i.e. second storey) for 50% of the frontage but only where the encroachment is for private open space such as a veranda, balcony, pergola or deck.
- ~~A6. Development fronting Bishopsgate Street has an upper level setback of 6m from the street boundary for parts of the building above 9m.~~
- ~~A7 6. Large scale development incorporates building articulation such that the building form is broken into smaller elements that relate to the fine grain pattern of development along Bishopsgate Street.~~
- A7. Notwithstanding the upper level setbacks identified in A4, development on land at 29 Bishopsgate Street has an upper level setback of 15m from the street boundary for parts of the building above 10m.

**Figure 6.03 - 4 - Ground level building setbacks to street boundaries**



## **B. Setbacks to neighbouring sites**

### *Performance criteria*

- P1. Side setbacks provide opportunity for landscaping and protect amenity to adjoining sites.
- P2. Development provides natural surveillance to side and rear setback areas
- P3. Redevelopment within the Harbour Edge precinct provides for public access and views to Throsby Creek.

### *Acceptable solutions for all precincts, except the Village Hub*

- A1. Development may be built to the side boundary (zero setback) for a height up to 8.5m where a landscaped setback of at least 3m from the side boundary is provided within the first 6m from any street fronting boundary, as shown in ~~Figure 6.03 – 09~~ *Figures 6.03 - 5 and 6.03 - 6*.
- A2. The landscaped side setback (described above):
  - (a) consists of deep root planting with suitable trees, shrubs and groundcovers; and
  - (b) is visible from adjoining uses (within the site) through the placement of windows and open space areas.
- A3. Development adjoining the Village Hub precinct has an upper level setback for any part of the development above 12m, of 8m to the side or rear boundary that adjoins the Village Hub precinct.

### *Additional acceptable solutions for the Harbour Edge precinct*

- ~~A3~~ 4. Development provides pedestrian and cycling links between Hannell Street and Throsby Creek.
- ~~A4~~ 5. Built form within the Harbour Edge precinct enables view lines to Throsby Creek from the east-west orientated streets to the west of Hannell Street.

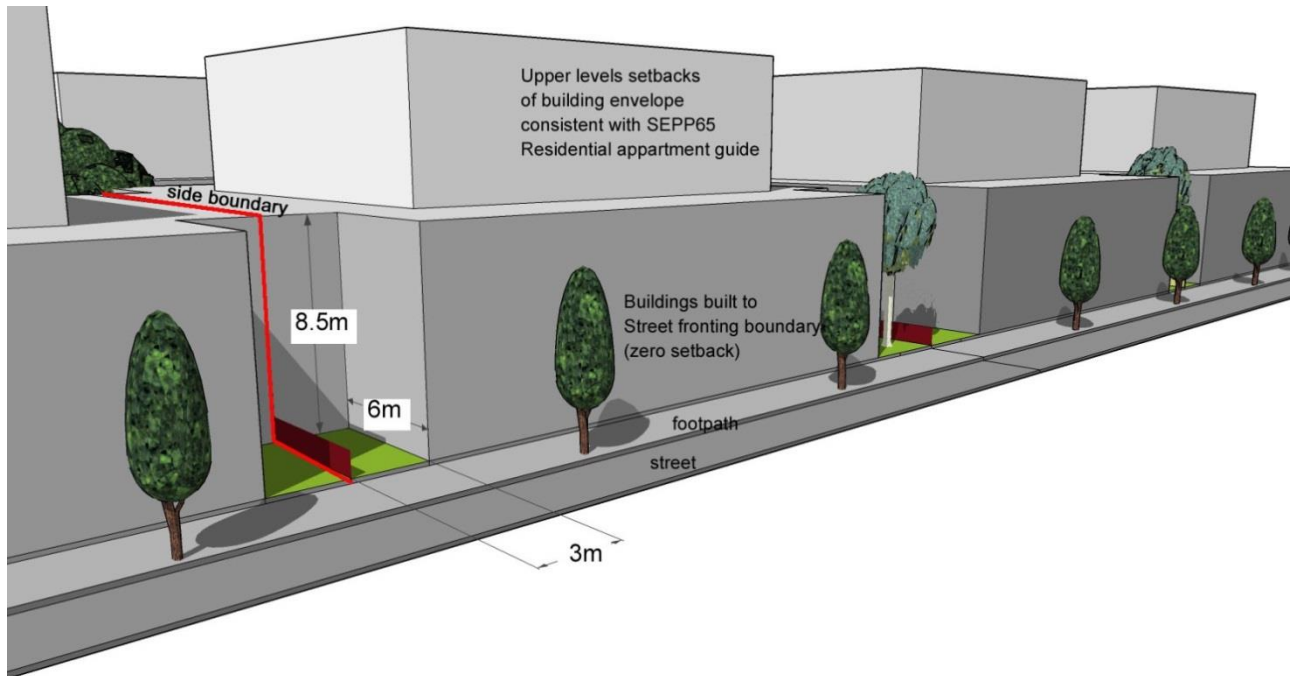
### *Additional acceptable solutions for the Village Hub precinct*

- A6. Development within the Village Hub that has a building height (HOB) greater than 10m, has an upper level setback for any part of the development above 10m of 8m to the side or rear boundary of any land that is also within the Village Hub precinct.



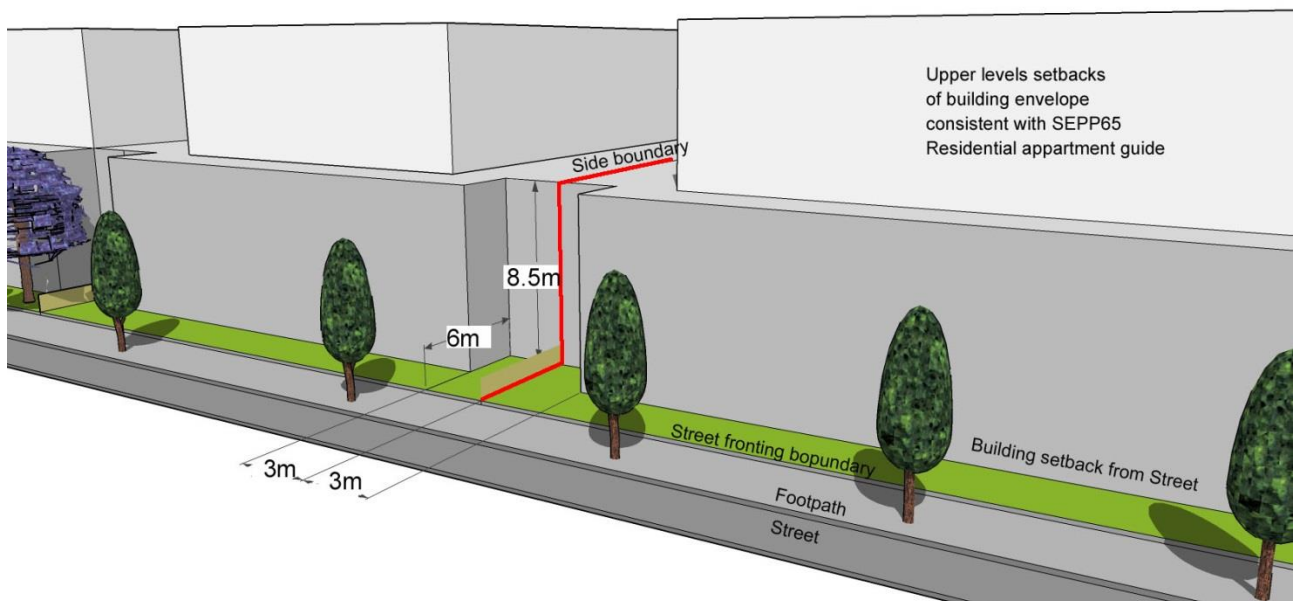
*Figure 6.03 - 9 - Side setbacks*

*Figure 6.03 - 5 - Example of building envelopes with no setback to street front (zero setback)*



*Where building envelopes have no setback to street front (zero setback)*

*Figure 6.03 - 6 - Example of building envelopes with front setback to street boundary*



*Where building envelopes are setback from street front*

### 6.03.03 Urban Design

#### A. Interface to the street

##### *Performance criteria*

- P1. Ground level uses promote pedestrian activation of the public domain
- P2. Development facilitates natural surveillance of the public domain.
- P3. Building form reflects the envisaged precinct character and takes design cues from existing built elements within the streetscape.

##### *Acceptable solutions*

- A1. The following design elements are incorporated in development facing a street or public domain area:
  - (a) building name and/or street number signage are easily identifiable;
  - (b) building entries are well-lit;
  - (c) individual ground floor uses have direct pedestrian access to footpath;
  - (d) universal access is provided to non-residential ground floor uses where the finished floor level is above or below the footpath;
  - (e) non-residential ground floor uses are visible from the street;
  - (f) the floor level of residential ground floor uses may be elevated not more than 1m above the footpath;
  - (g) building street setbacks incorporate gardens and/or landscaped forecourts; and
  - (i) green walls and/or street art (e.g. murals) are provided to reduce and/or break up non active building facades (i.e. blank walls, screened areas, services and utility cabinets, and/or garage doors).
- A2. Development on corner sites activate at least 50% each façade.
- A3. Residential development at ground level has a minimum 4m ceiling height and is designed to enable change of use in the future.



## B. Urban activation spaces

### *Performance criteria*

- P1. Development incorporates space that provides relief from the hard surfaces of the urban environment and for residents and the local community to gather or participate in activities.

### *Acceptable solutions*

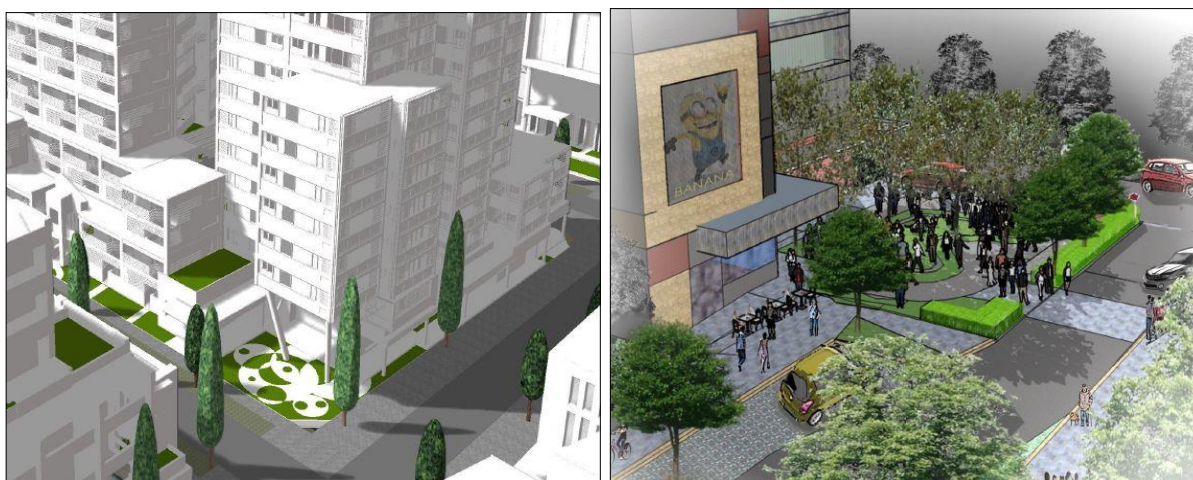
- A1. Urban activation spaces are located:

- (a) In central locations along identified pedestrian and cycle routes and at street corners as identified in *Figure 6.03 - 43 8 - Location of Urban activation spaces*; and
- (b) Within the front setback of larger development sites and partly incorporated into the road reserve; and
- (c) Adjoining supporting retail or community activities that provide natural surveillance, but do not commercialise the space for their own business.

- A2. Urban activation spaces incorporate uses or facilities such as:

- (a) shade and tree plantings;
- (b) community gardens;
- (c) rain gardens;
- (d) furnishings such as seats, bins and drinking fountains.
- (e) play equipment;
- (f) lawns and paved areas;
- (g) small stage areas with plugin facilities for open air music, performance or screenings;
- (h) lighting;
- (i) Wi-Fi;
- (j) public facilities

**Figure 6.03 - 42 7 - Urban activation space examples**



Draft Newcastle Development Control Plan 2012





## C. Vehicle access to land

### *Performance criteria*

P1. Vehicle and service entry ensure the safety and amenity of pedestrians.

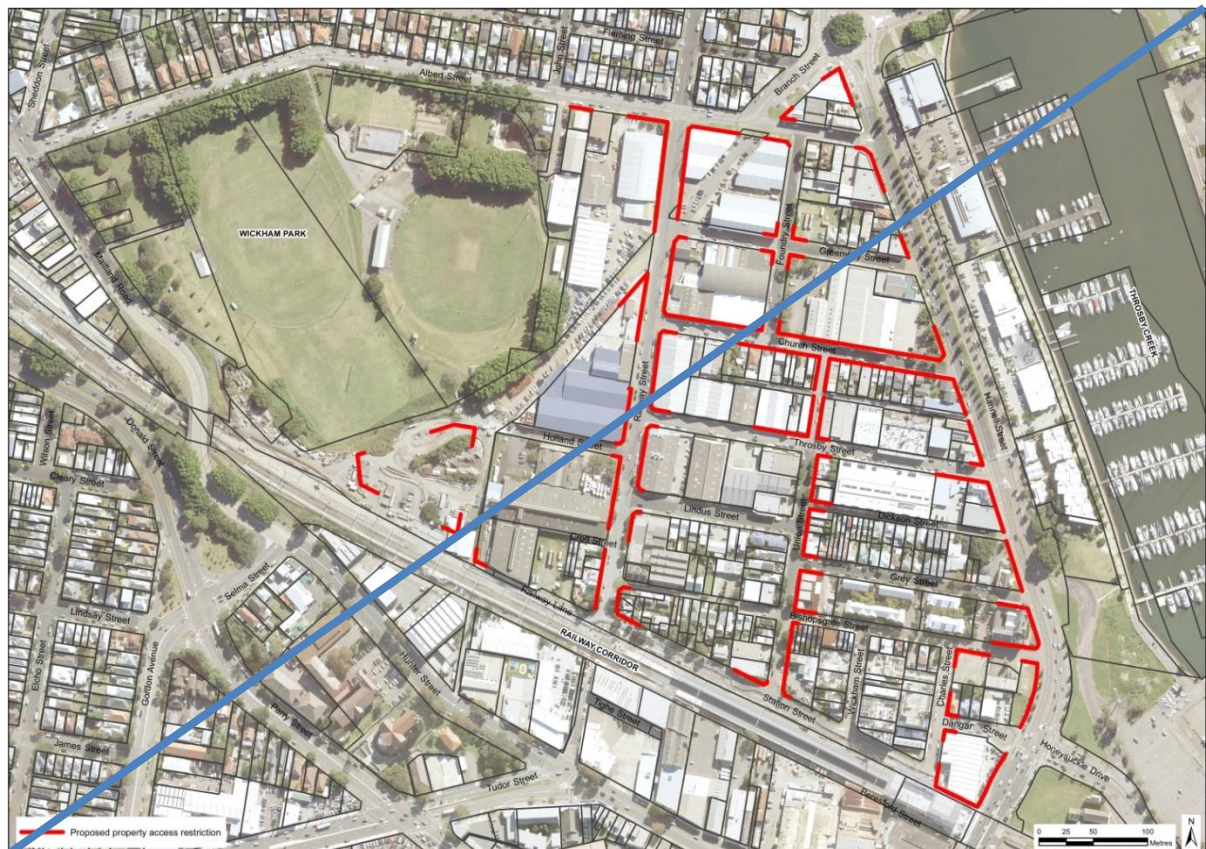
### *Acceptable solutions*

- A1. Vehicle access and service entries are located consistent with *Figure 6.03 -10 9*.
- A2. Driveway crossings are consolidated or eliminated along the primary frontage of new developments.

### *Acceptable solutions - Village Hub*

- A3. For development consisting of two or more dwellings, on-site car parking is consolidated to minimise the number of driveways.
- A4. Driveway access is single vehicle width at the footpath crossover.

**Figure 6.03 – 10 8 - Vehicle ~~and service entry points access restrictions to new development~~**  
**~~CURRENT~~**





**Figure 6.03 – 40 9 - Vehicle access restrictions to new development - NEW**



## 6.03.04 Car Parking

### A. Car parking demand management

#### *Performance criteria*

- P1. Provision of car parking caters for the demands of different uses and reflects the proximity to the city centre and active and public transport options.
- P2. Consumer choice and affordability is provided in the ownership of car parking spaces.

#### *Acceptable solutions*

- A1. Car parking spaces are created as separate lots in the strata plan and are not allocated to individual units.

Note: Residential parking permits are not available to owners or occupants of new developments and this information is required to be provided by the developer to all potential owners and occupants.
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- A2. Designated car sharing spaces are retained as common property in the strata plan and are:
  - (a) clearly marked and sign-posted as car share spaces; and
  - (b) located so that they accessible to the public at all times.

### B. Design of parking structures

#### *Performance criteria*

- P1. Parking structures are integrated into new buildings and are not visually prominent from the public domain.
- P2. The design and construction method of at grade and above ground car parking areas enable adaptable reuse in the future for residential or commercial uses.
- P3. Car parking areas are able to be adapted in response to changing future transport mode or demands

#### *Acceptable solutions*

- A1. All parking is located within the building footprint, either in a basement or integrated into the building.
- A2. Ground level or above ground parking areas are not visible from the public domain by:
  - (a) being located behind other uses; or
  - (b) using green walls and roofs; or
  - (c) using architecturally designed façade treatment or artwork.



- A3. Car parking is located on level flooring and has a minimum ceiling height of:
- (a) 4m where located on ground level; and
  - (b) 3m where located on any upper levels.

## 6.03.05 Constraints on development

### A. Flooding

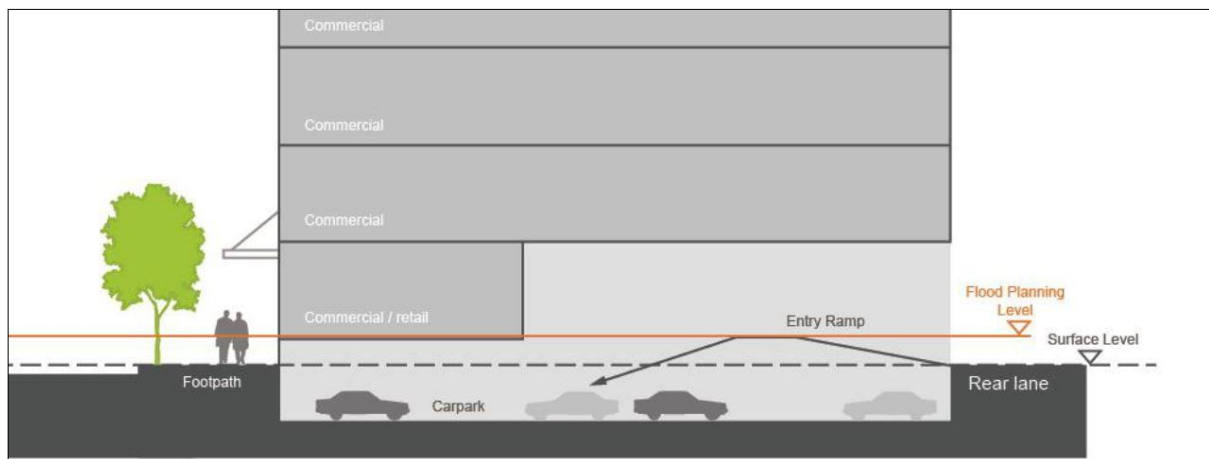
#### *Performance criteria*

- P1 Basement car parks minimise the entry of flood water and include information on emergency egress.

#### *Acceptable solution*

- ~~A1. Entry ramps, ventilation points and pedestrian exits prevent flood water entering the a basement carpark until the last possible moment in a flood event as shown in Figure 6.03-11.~~
- A1. The development is designed to minimise flood waters from entering car parking levels by:
- a) orienting access points away from overland flow paths;
  - b) designing access points to be above the 1 in 100 year flood level plus freeboard as shown in *Figure 6.03 - 10*; and
  - c) ensuring any aboveground perimeter walls are impermeable up to the 1 in 100 year flood level plus freeboard.
- A2. A plan is developed detailing emergency egress procedures during a flood, as well as any refuge areas in reasonable proximity of the development. The plan is to be positioned in the basement car park in an easily recognisable location/s.

**Figure 6.03 - ~~11~~ 10 - Basement ramp design to minimise inundation**



*Additional performance criteria for land in Park Edge precinct*

- P2 Development on land bounded by the former Bullock Island rail corridor, Railway and Holland Streets does not adversely impact on the local hydrology or increase the risk of localised flooding on adjoining land in a stormwater event.

*Additional acceptable solution for land in Park Edge precinct*

- A2. Where the area to be filled and/or built upon exceeds 20% of the land, development includes and overland flow path (designed and certified by a suitably qualified engineer) for the relief of stormwater from Railway Street to Wickham Park.

## **B. Mine Subsidence**

Note: All proposed development on land in Wickham identified within the Newcastle Mine Subsidence District will need to be assessed on application by Subsidence Advisory NSW. Due to the nature of the old mine workings in the area, redevelopment is likely to include significant and costly engineering controls including extensive grouting.

Council advises prospective applicant to first contact Subsidence Advisory NSW to gain an understanding of the potential risks, limitations and financial costs associated with developing over the old mine workings.

## **C. Operational requirements of Port of Newcastle**

Note: Applicants for development within the Harbour Edge precinct are advised to engage with Port of Newcastle prior to lodgement regarding the location and requirements for maintaining navigation aids in this locality to ensure the safe and efficient operation of the Port.