

Attachment A1

Supplementary Urban Design Report – Botany Road Precinct
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Botany Road Precinct - Supplementary Urban Design Report



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Introduction

This Supplementary Urban Design Report for the Botany Road Precinct is written as an addendum to the report produced by Tonkin Zulaikha Greer Pty. Ltd. (TZG) for an extensive Urban Design Study and Non-Indigenous Heritage Study they conducted at the City's request in late 2020 (the 2020 Study).

The recommendations put forward in that study are largely supported by the City with some points of departure. These differences have resulted from a series of internal reviews with the City's Design Advisory Panel and Planning Control Update Working Group during the first half of 2021.

This report comprises two parts. It identifies the recommendations of the 2020 Study principally adopted by the City and illustrates the implementation of those recommendations. It then discusses the recommendations that the City has elected to modify, outlining a rationale for these modifications and illustrates their implementation.

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The Botany Road Precinct

Site location

The Botany Road Precinct (Figure. 1) is situated amongst some key development nodes to the south of Sydney's CBD and forms part of the Camperdown-Ultimo Health and Education Precinct and the Innovation Corridor.

The Precinct stretches from Redfern Station in the north to McEvoy Street in the south and includes lands in the street blocks either side of Botany Road, from Garden Street and Wyndham Street in the west to Cope Street in the east. Redfern Station and Town Centre sit immediately to its northwest and northeast. On its western edge lie the Australian Technology Park (ATP) and Redfern-North Eveleigh Precinct. The future Waterloo Metro station is located at its eastern edge and Waterloo Estate (South) lies immediately to its east.

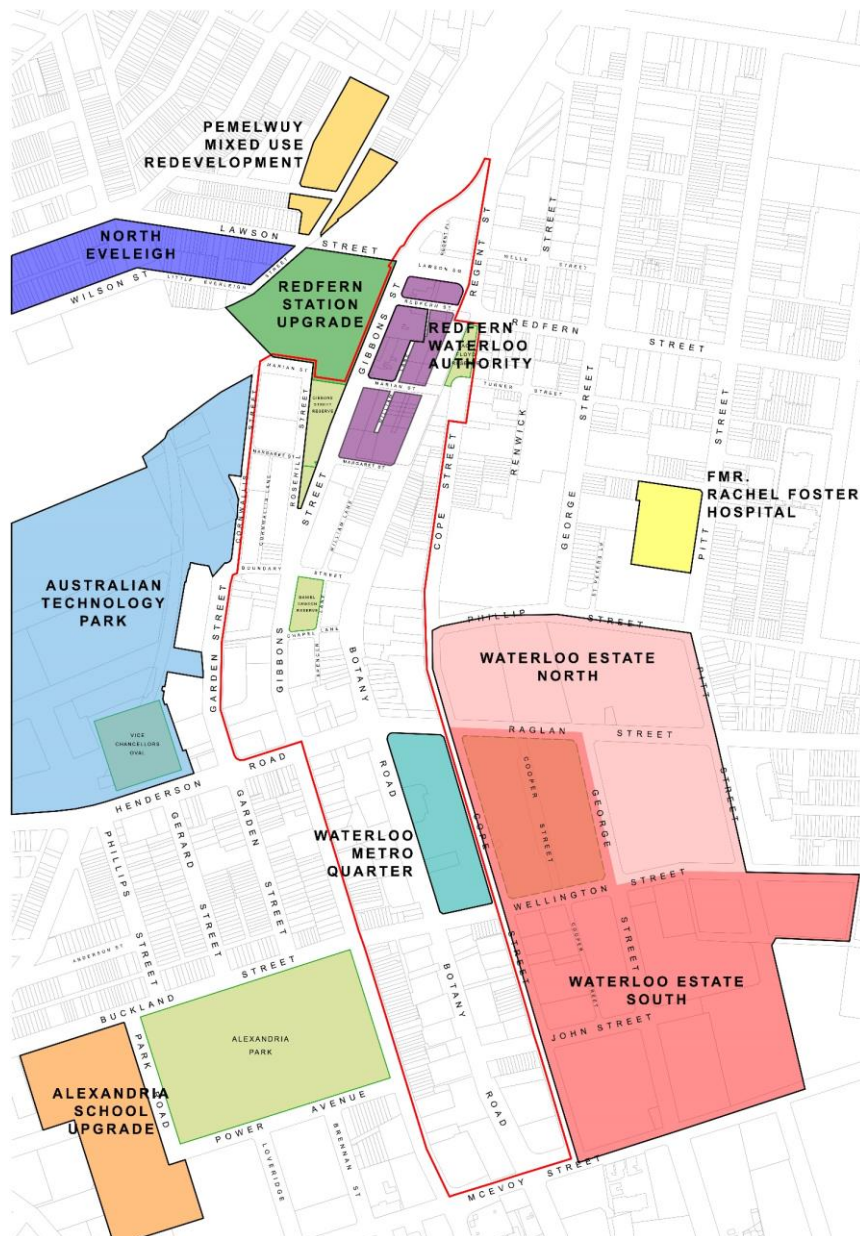


Figure 1. The Botany Road Precinct.

2020 Study – adopted recommendations

Urban strategy

The Urban Strategy establishes Regent Street and Botany Road as a principal activity street offering a high level of pedestrian amenity. Assuming the removal of the one-way traffic pair at Regent St and Gibbons St, a two-way traffic flow is restored to each.

Regent Street and Botany Road north of Henderson Road become a neighbourhood high street. Existing building height controls remain. Extending the Redfern Estate Heritage Conservation Area preserves the existing subdivision patterns, street alignments and terrace typologies to support a fine-grain high street environment.

Botany Road south of Henderson Road, and Wyndham Street/Gibbons Street north of Henderson Road become commercial main streets. Building height controls are increased to allow medium- and higher rise heights, supporting an increase in capacity for employment and affordable housing floor space opportunities.

Provisions for higher built forms are grouped on sites closer to Redfern Station adjacent to the Australian Technology Park (ATP), and opposite the Waterloo Metro Quarter block between Raglan and Wellington Streets.

Allowing for a network of mid-block laneways, running north-south and east-west, improves connections and access for pedestrians and service vehicles. Encouraging service vehicle access off these laneways improves the pedestrian amenity along the high street and main street environments.

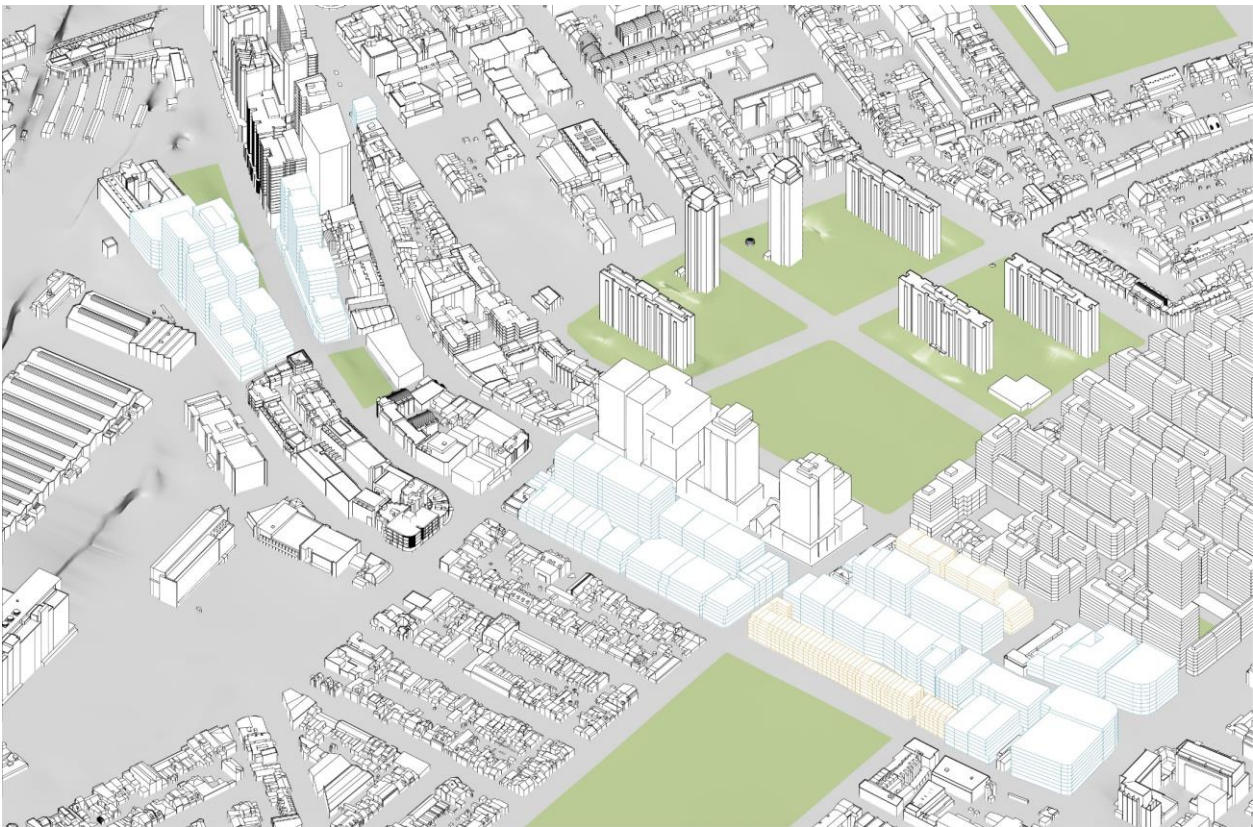


Figure 2. Aerial view of Botany Road Precinct from south west. Potential employment floor space capacity shown in blue.

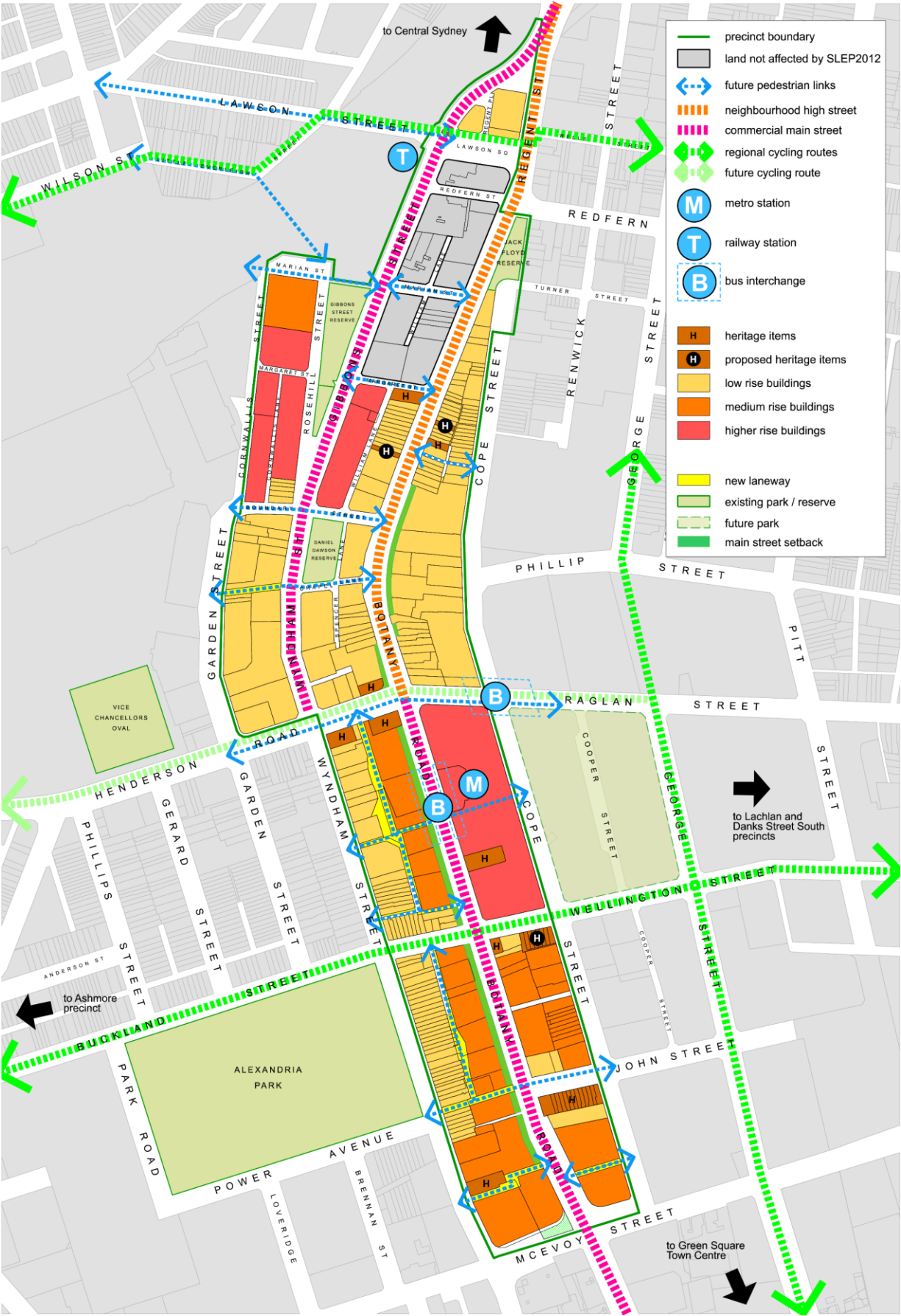


Figure 3. Urban Strategy.

Parks and reserves

Applying solar access controls to significant parks and reserves in the precinct will preserve the sunlight amenity to these public spaces. Sun Access Planes (SAPs) are proposed to protect available sunlight to Daniel Dawson Reserve and Alexandria Park between 10am and 2pm on June 21.



Figure 4. Solar Access Planes applied to Daniel Dawson Reserve (upper left) and Alexandria Park (lower centre).

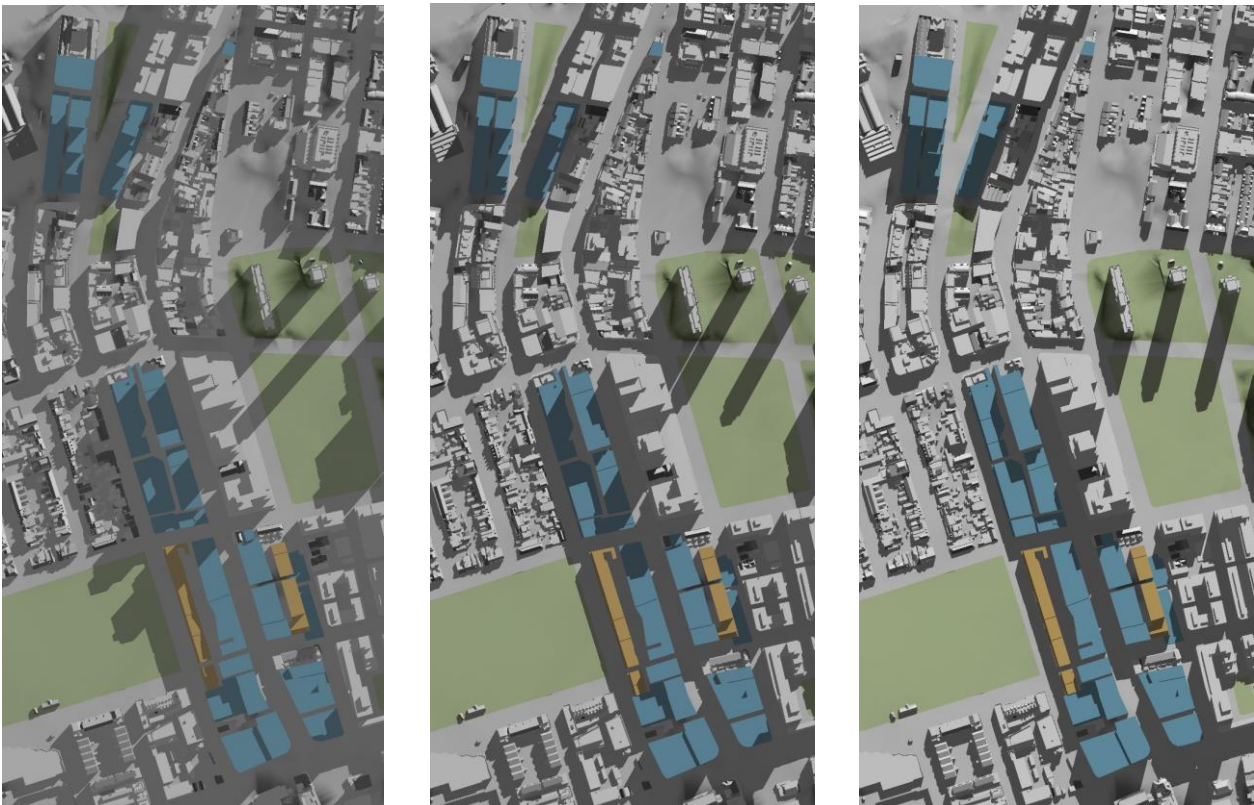


Figure 5. Plan views of the precinct showing shadows cast on 21 June, (left to right): 9.00 am, 10.00 am, 11.00 am.

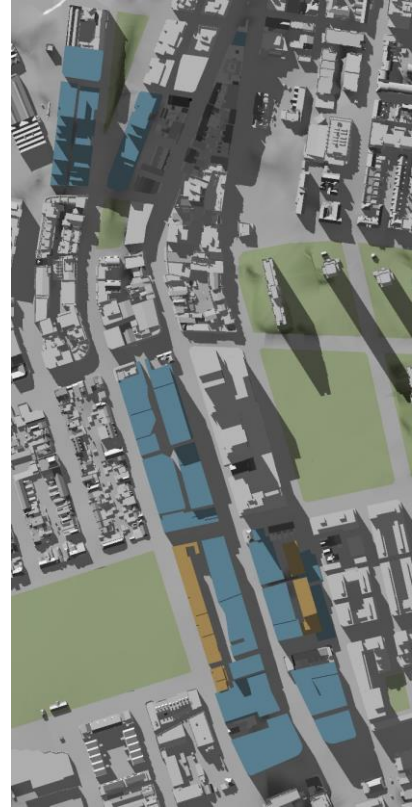
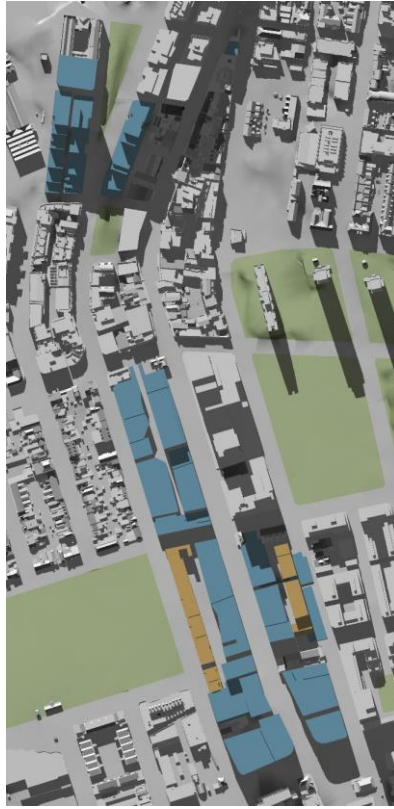


Figure 6. Plan views of the precinct showing shadows cast on 21 June, (left to right): 12.00 pm, 1.00 pm, 2.00 pm.



Figure 7. Plan view of the precinct showing shadows cast on 21 June, (left to right): 3.00 pm.

Streets and Laneways

Land proposed for laneway dedications and footpath widenings will provide for increased connections and pedestrian amenity through the precinct. Some sites along the western side of Botany Road are zoned SP2 for classified road acquisition. Where this occurs the proposed building alignment is set back to align with adjacent site boundaries, allowing for a consistent reservation for expansion of the footpath on the western side of Botany Road.

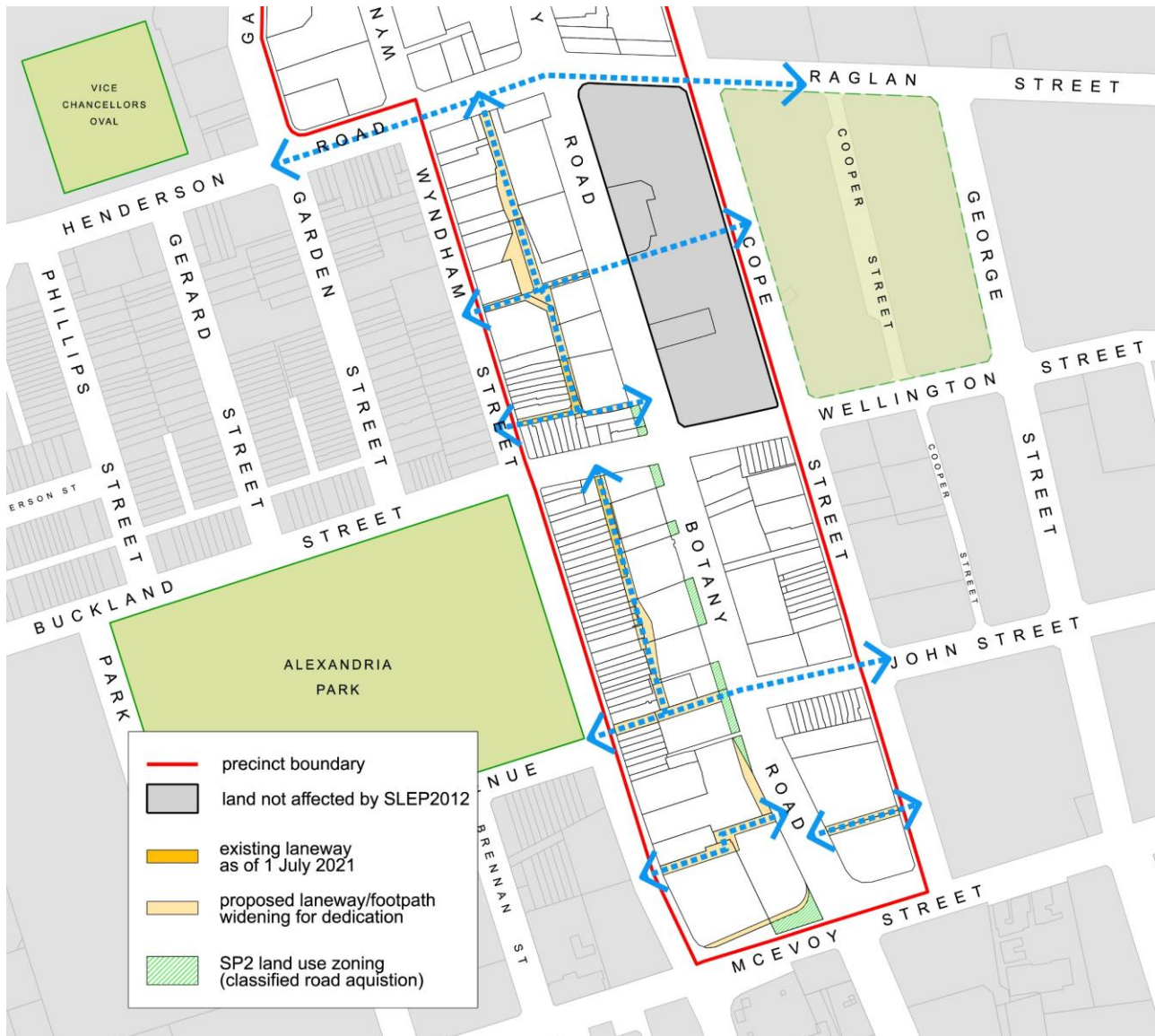


Figure 8. Laneway network and footpath widenings. Walkable connections shown dotted in blue.

2020 Study – modified recommendations

Internal review outcomes - Planning Control Update Working Group

The 2020 Study identified a select group of sites to consider for changes controls for built form, floor space capacity and use. These sites were identified as having greater opportunity for change in the life of the plan on the basis of lot size, proximity to transport nodes and the ATP, and patterns of strata ownership.

Internal reviews conducted with the Planning Control Update Working Group resulted in several actions, exploration of which modified the recommendations from the 2020 Study. These were:

- provide a justification for the uplift in the north of the Precinct being close to Redfern Station focused on employment uses only and consider affordable residential uses;
- consider including affordable housing opportunities in areas proposed for change, as long as amenity is protected;
- consider residential development in locations with good amenity, such as opposite Alexandria Park;
- for the block opposite Metro Quarter, re-examine the status of the conservation area and consider the spread of development across the block and extending the lane network;
- include actions to make Botany Road and Gibbons Street roads 2-way where possible; and
- focus on new walkable connections to break long blocks and allow access to parks, transport and services. Prioritise a walking connection between John St and Power St.

In response, the City conducted further analysis on a widened selection of sites to consider the potential for changes to capacity, balancing opportunities for employment and affordable housing floor space with amenity. Two sets of alternative controls for this wider group of 'Opportunity Sites' were developed (Figure 6). These alternative controls only apply to the Opportunity Sites when additional floor space for employment uses (referred to as Employment Sites) or affordable housing uses (referred to as Affordable Housing Sites) are proposed.

The analysis also considered changes to the standard controls for sites in proximity to Alexandria Park and Cope Street, where good amenity could support residential development.

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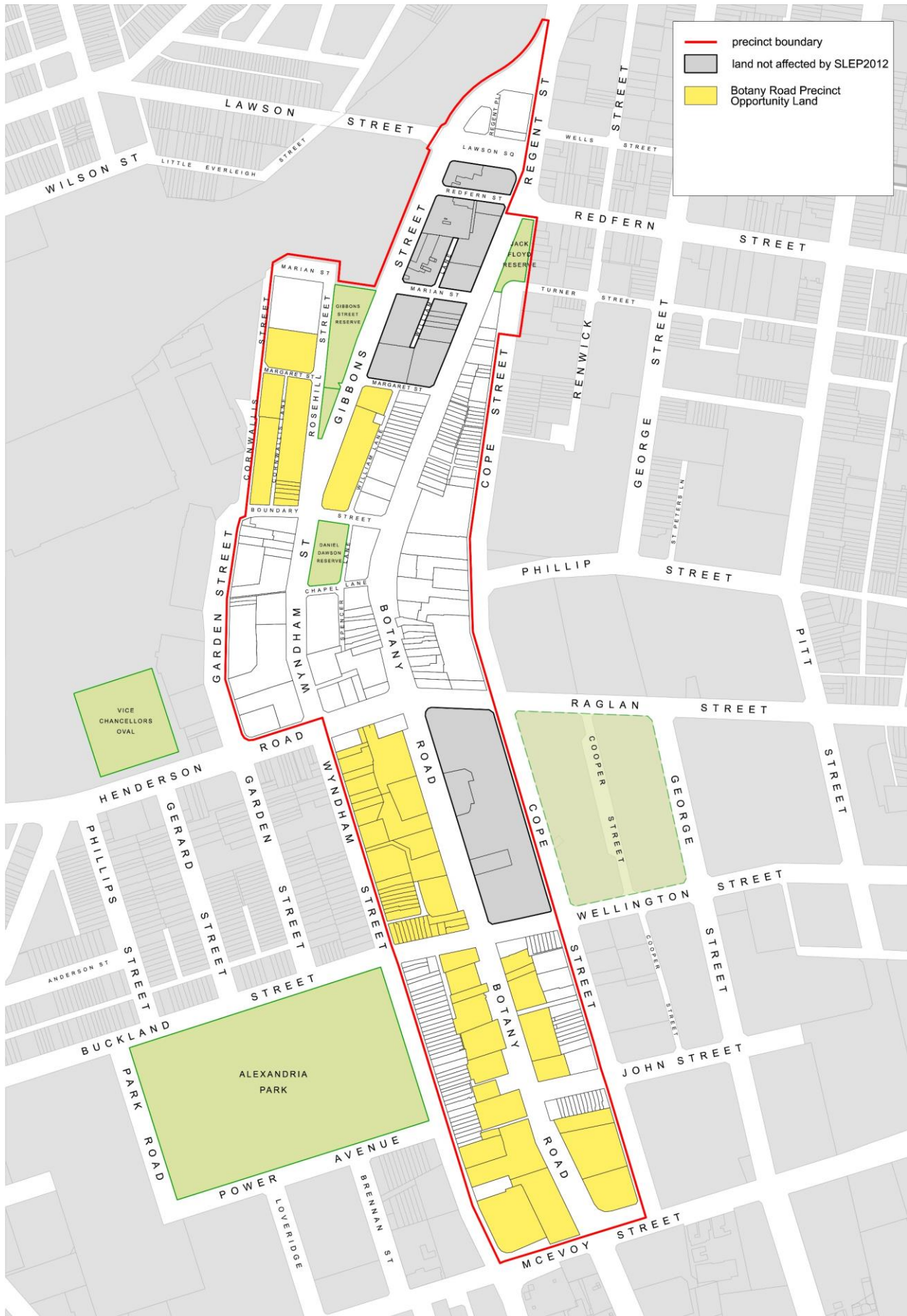


Figure 9. Opportunity Sites where alternative controls for Employment uses or Affordable Housing uses apply.

Floor space uses at Ground Floor and First Floor level

The alternative controls call for employment floor space to be provided at Ground Floor level and First Floor level for both Employment Sites proposals and Affordable Housing Sites proposals.



Figure 10. Floor space uses required under the Alternative Controls at Ground Floor level and First Floor level.

Alternative height controls

Where Opportunity Sites propose employment floor space, or a combination of employment and affordable housing floor space, alternative controls for building height will apply.

Generally, for sites fronting Botany Road between Henderson Road and McEvoy Street, an eight-storey height limit applies. There are localised differences for sites at the intersection of Buckland and Wellington Streets with proximity to heritage items.

Immediately opposite the Waterloo Metro Quarter site, where sites propose employment floor space only, a 10-storey street wall height applies with a two-storey upper level setback for some sites. Where sites in this block propose a mix of employment and affordable housing floor space, an equivalent overall height results in an 11-storey street wall with two storey upper level setback for some sites.

Along Wyndham Street between Henderson Road and Buckland Street height controls are designed to preserve morning sunlight access to the residential development on the western side of Wyndham Street. Where sites propose employment floor space only, a four-storey street wall height applies with a one-storey upper level setback. Where sites propose a mix of employment and affordable housing floor space, a four-storey street wall height applies with a two-storey upper level setback.

For sites along Gibbons Street adjacent to the ATP and near Redfern Station, height controls vary from 2 to about 20 storeys. The variation is in response to the sun access plane proposed to protect available sunlight to Daniel Dawson Reserve.

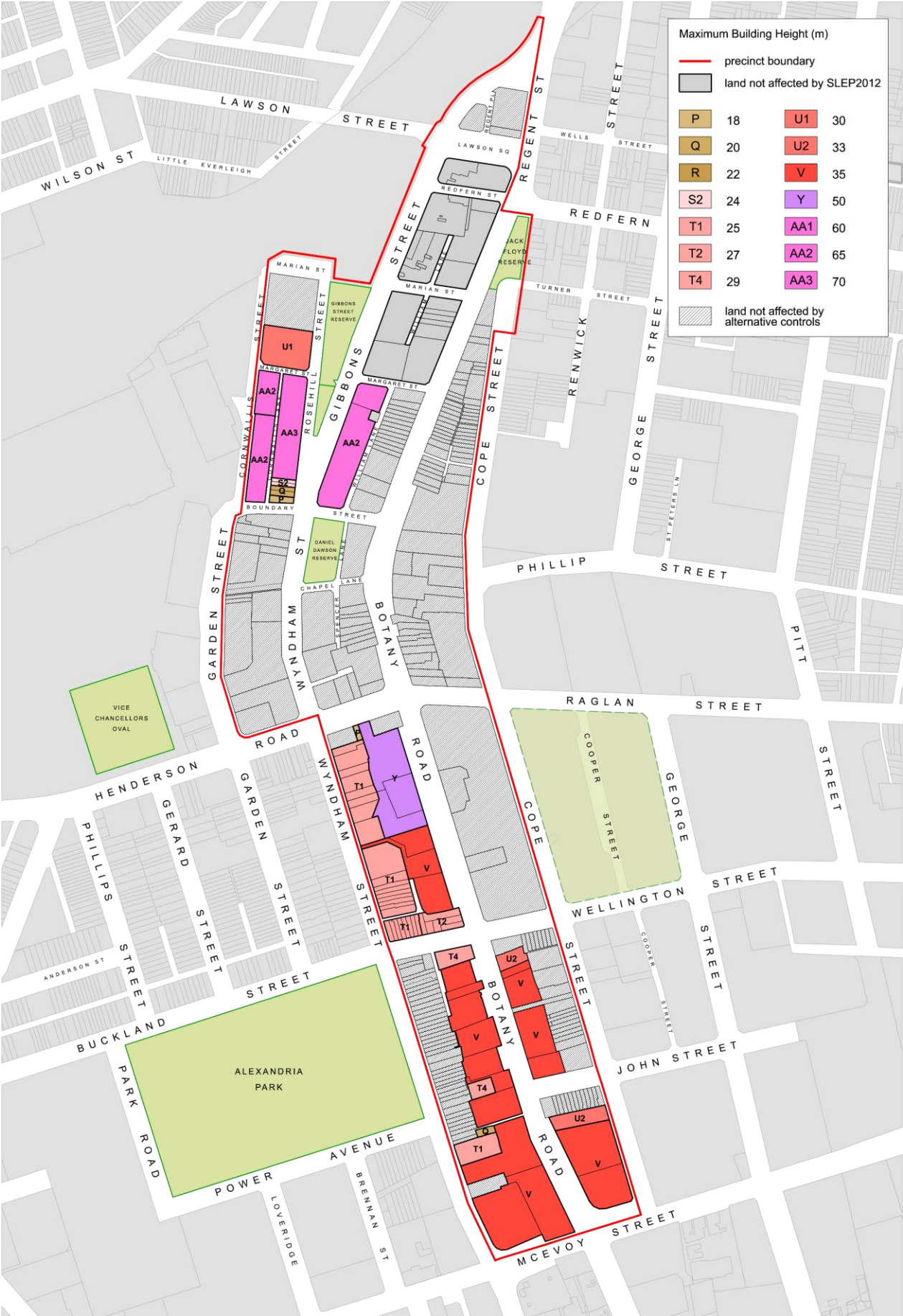


Figure 11. Alternative Controls for Height of Buildings.

Employment floor space sites – assumptions for alternative controls for built form

Where Opportunity Sites propose employment floor space only, specific built form controls inform the number of storeys and GFA available to those sites.

Floor-to-floor heights

For sites in the north of precinct (Group A), the controls assume typical floor-to-floor heights of –

Ground floor	4.6m.
First floor	4.4m.
Second floor and above	3.8m.

For all other Opportunity Sites in the precinct, the controls assume typical floor-to-floor heights of –

Ground floor	4.6m.
First floor	3.8m.
Second floor and above	3.6m.

Floor plate efficiencies

Two assumptions for floor plate efficiencies inform the provisions for GFA.

Floor plates at ground floor level assume an efficiency rate of 65% to account for loading docks, servicing areas etc. Floor plates at first floor levels and above assume an efficiency rate of 80%. These rates are designed to allow for some articulation of building form within the overall built form envelope.

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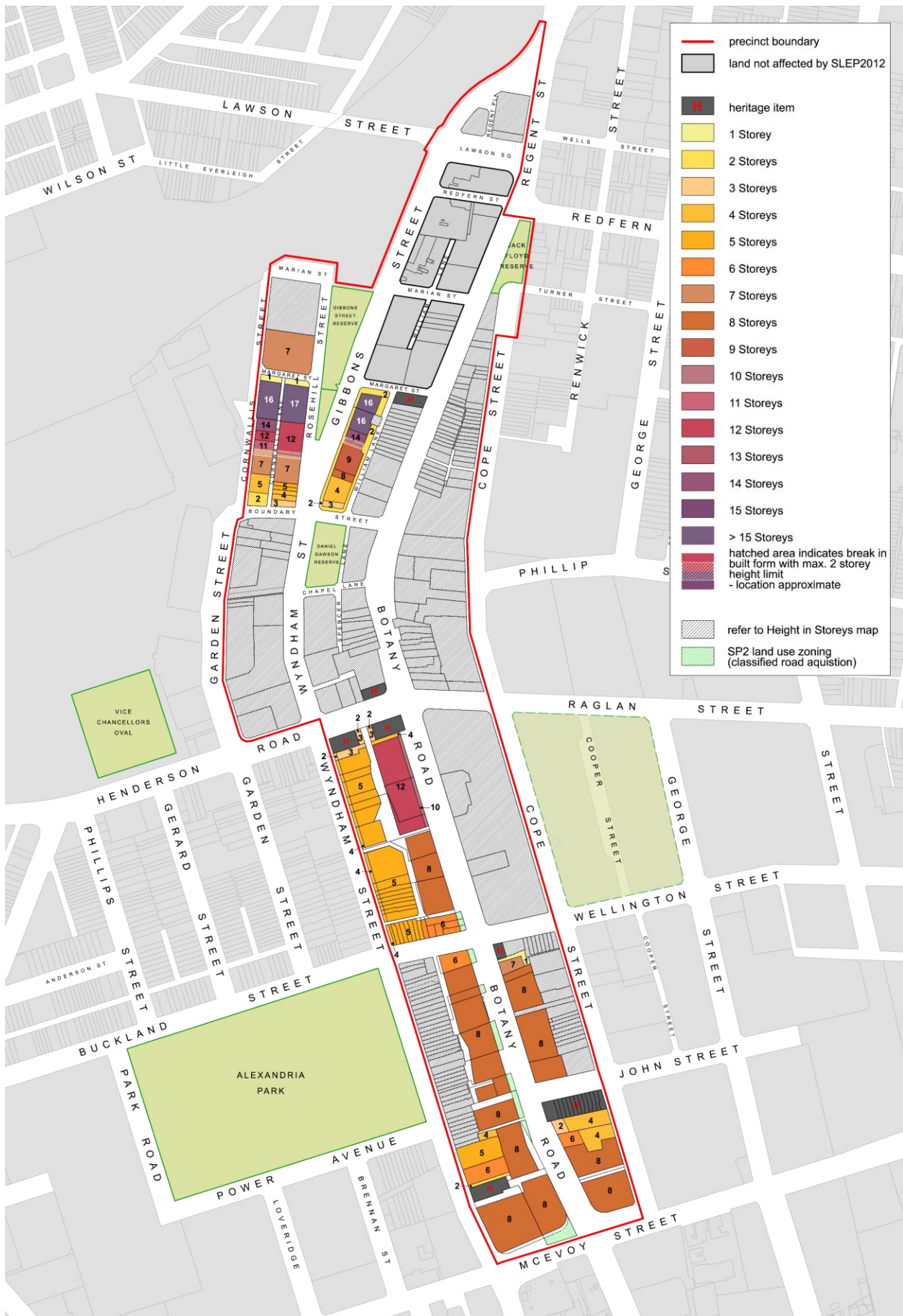


Figure 12. Alternative controls for building height – Employment floor space uses only.

Affordable Housing sites – assumptions for alternative controls for built form

Where Opportunity Sites propose a combination of employment floor space and affordable housing, specific built form controls inform the number of storeys and GFA available to those sites. For all Opportunity Sites in the precinct, ground and first floor levels must propose employment floor space only.

Floor-to-floor heights

For sites in the north of precinct (Group A), the controls assume typical floor-to-floor heights of –

Ground floor -	4.6 m. (employment uses)
First floor	4.4m. (employment uses)
Second floor and above	3.1m. (residential uses)

For all other Opportunity Sites in the precinct, the controls assume typical floor-to-floor heights of –

Ground floor -	4.6 m. (employment uses)
First floor	3.8m. (employment uses)
Second floor and above	3.1m. (residential uses)

Provisions for ensuring good amenity to Affordable Housing

The built form envelopes proposed for the residential components in the Affordable Housing Sites are designed to facilitate creation of apartments with good amenity. The envelopes are narrower than depths that predominate in market housing models. Along Botany Road and Wyndham Street, envelopes are generally 16.5 metres deep. These depths also allow for living areas to be located facing the street frontage and bedrooms to be oriented towards the interior of street blocks, facing away from the noise. Floor plant layouts are also expected to manage noise through measures such as noise attenuation plenums. The alignment of residential street frontages is designed to afford sunlight access to living areas as required by the ADG.

Some sites range between 11 to 15 metres depth in response to requirements of the ADG with respect to separations, cross ventilation and noise.

Floor plate efficiencies

A range of floor plate efficiencies inform the provisions for GFA on Opportunity Sites that propose mixed uses.

Employment floor plates at ground floor level assume an efficiency rate of 65% to account for loading docks, servicing areas etc. For employment uses at first floor level an efficiency rate of 80% is assumed. These rates are designed to allow for articulation of building form within the overall built form envelope.

For residential uses at second floor level and above where the built form envelope is 16.5m. deep., floor plate efficiencies range between 76 and 78% dependent on number the stories. On sites adjacent to McEvoy Street built form envelopes are narrower, ranging from 11 to 15 metres. These are designed to meet separation requirements of the ADG and respond to traffic volumes along McEvoy Street.

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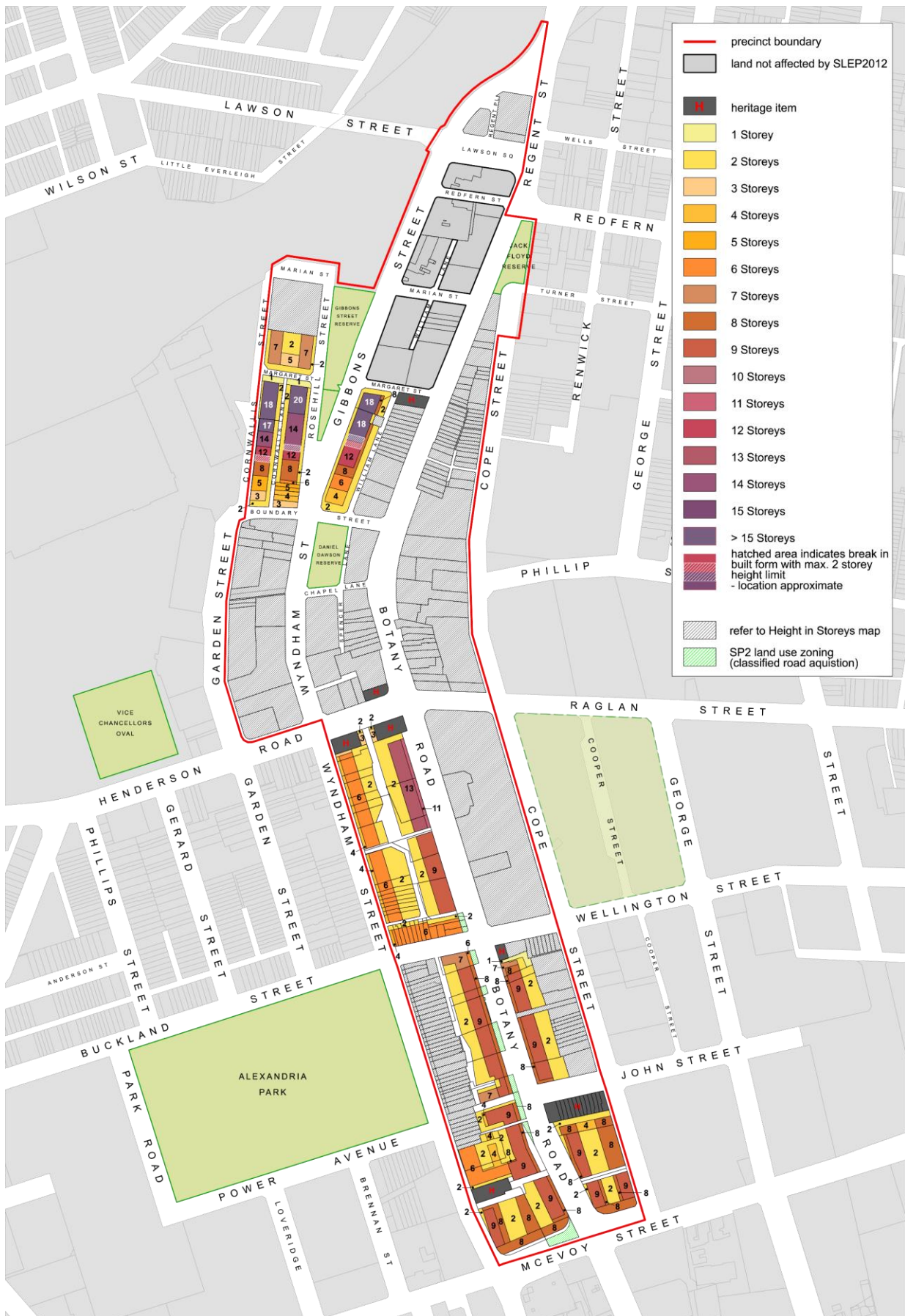


Figure 13. Alternative controls for building height – Ground- and First-Floor Employment floor space with Affordable Housing uses above.

Changes to standard height controls – Alexandria Park frontage and Cope Street

Changes to the standard height controls are proposed for other sites that benefit from good amenity. Sites along Wyndham Street between Buckland and McEvoy Streets benefit from good amenity due to their frontage onto Alexandria Park. Similarly, sites along the western side of Cope Street benefit from improved amenity due to the pattern of residential uses proposed in the Waterloo Estate (South) site and limited local traffic on Cope Street due to its closure at McEvoy Street.

Along Wyndham Street fronting the Alexandria Park, a five-storey street wall height applies with a 1-storey upper level setback limiting the total height to 6 storeys. A ground level setback of 3 metres from the street frontage boundary applies. The height control over these sites is designed to preserve sunlight access along the eastern edge of Alexandria Park from 10am onwards on June 21.

Along the western side of Cope Street fronting the Waterloo Estate (South), building heights are limited to a maximum of 8 storeys. Lower height controls at the intersection of John and Cope Streets allow for sunlight access to the row of terraces along the southern side of John Street between Botany Road and Cope Street. A ground level setback of 3 metres from the Cope Street boundary applies. The overall height control is consistent with the building height controls proposed along the eastern side of Cope Street. The height and setback controls combine to provide required sunlight access to the built forms proposed opposite in Waterloo Estate (South).



Figure 14. Changes to standard building height controls.

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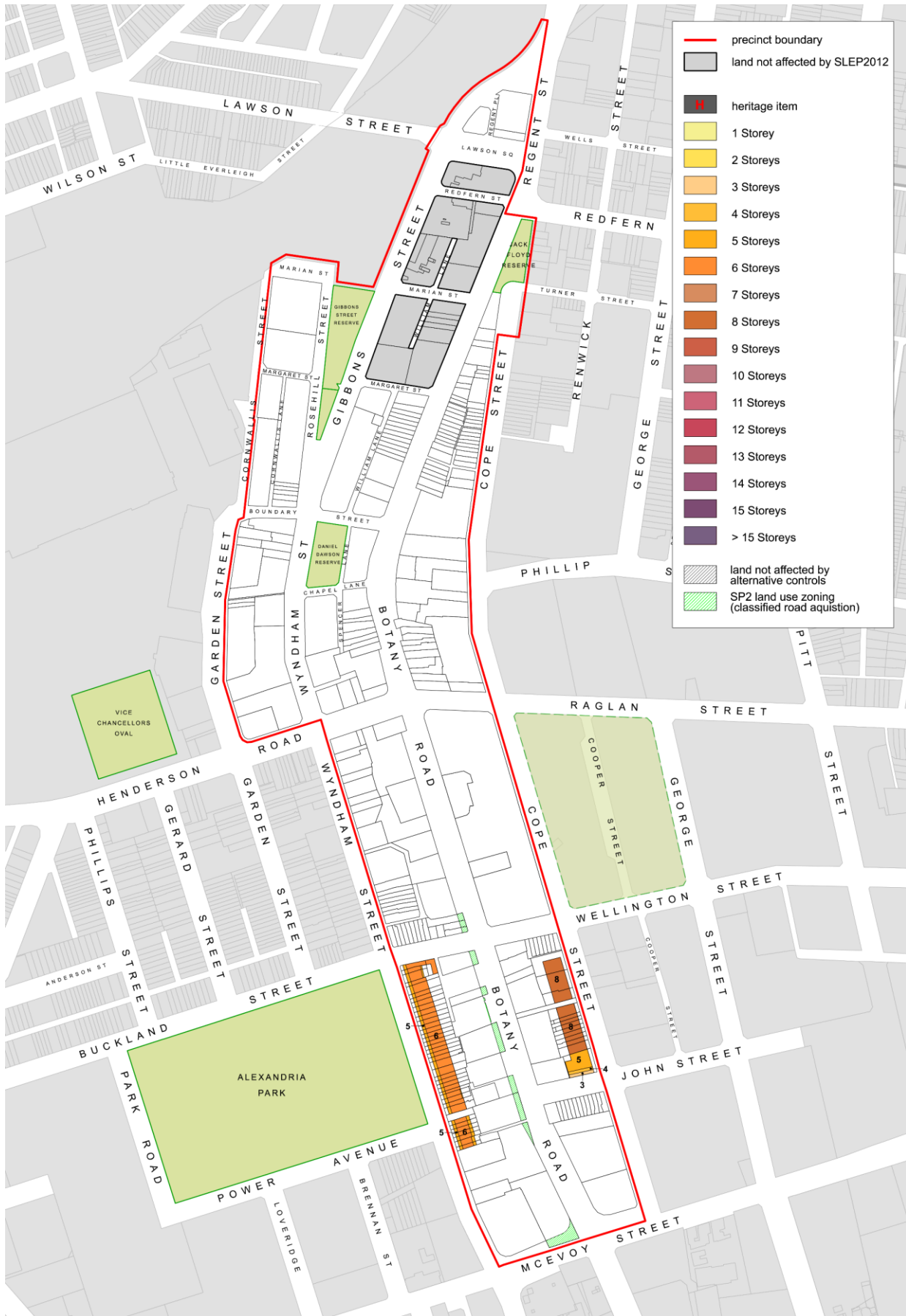


Figure 15. Changes to standard controls for height in storeys for sites along Wyndham Street opposite Alexandria Park and along Cope Street opposite the future Waterloo Estate (South) site.

Street cross-section studies

This series of street cross sections illustrate the intention of the proposed built form controls further.

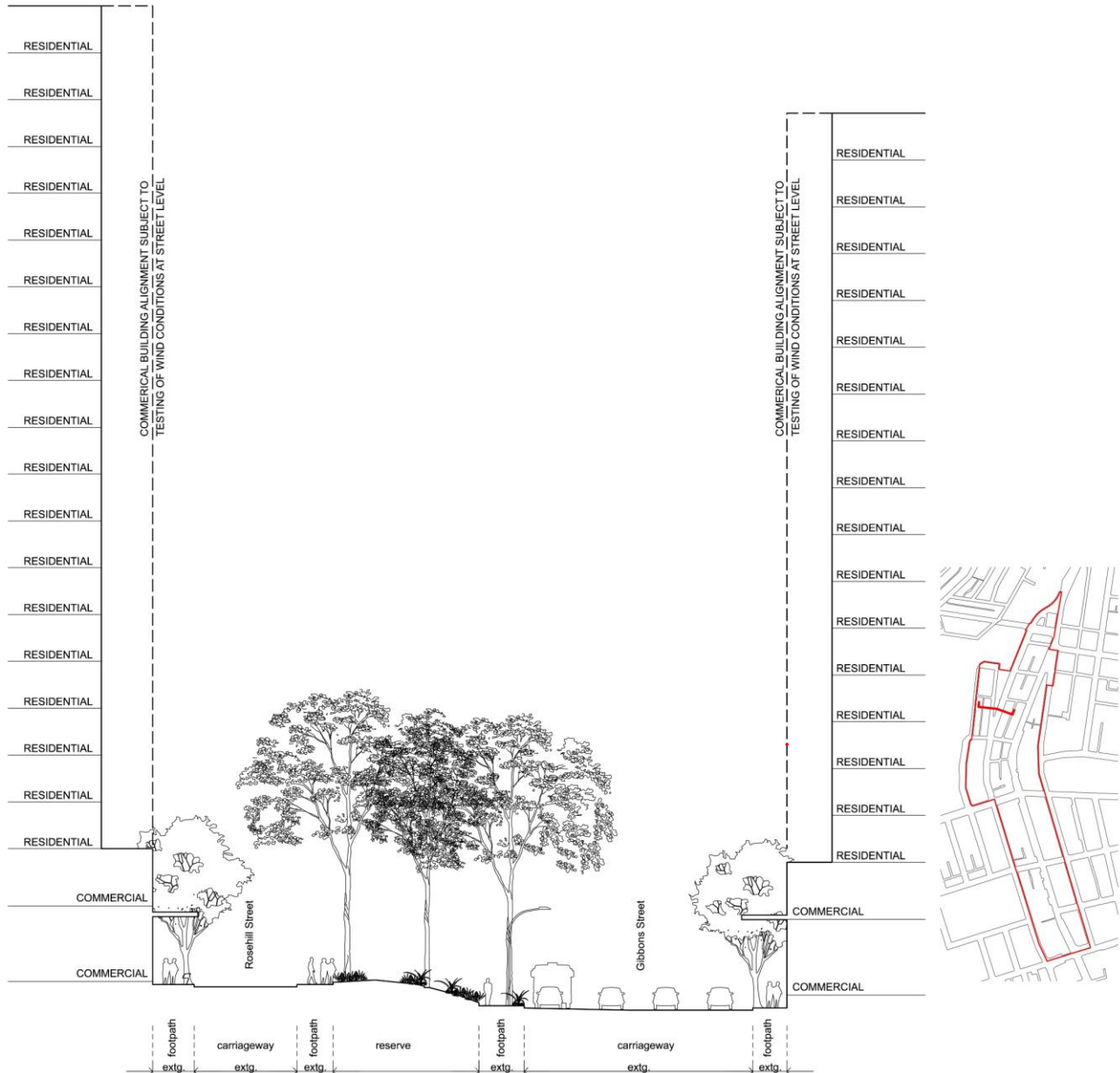


Figure 16. Street cross section through Rosehill Street and Gibbons Street looking north. Refer key map at right for location. A 2 storey street wall height for employment floor space with upper level setbacks for affordable housing uses is shown in solid line. Where sites propose employment floor space exclusively, the upper street wall alignment is subject demonstrating that wind impacts at street level can be successfully managed.

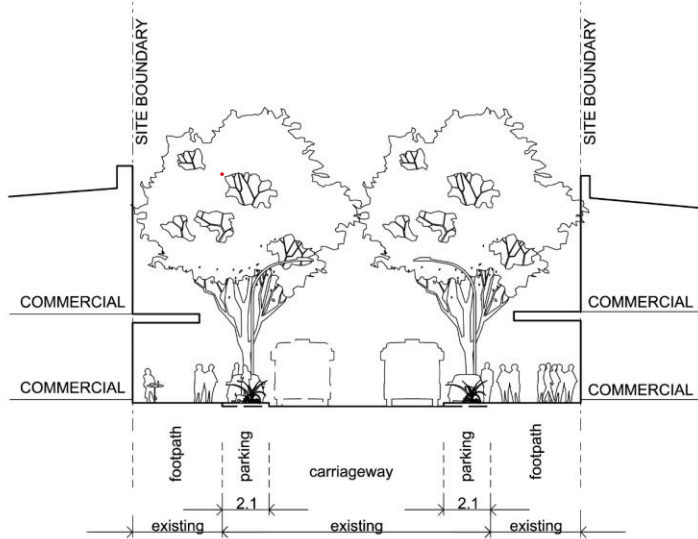


Figure 17. Street cross section through Regent Street looking north. Refer key map at right for location. Conversion of Regent Street to two-way carriageway allows for parking lanes at the edge with intermittent bays for tree planting and wider street furniture zones.

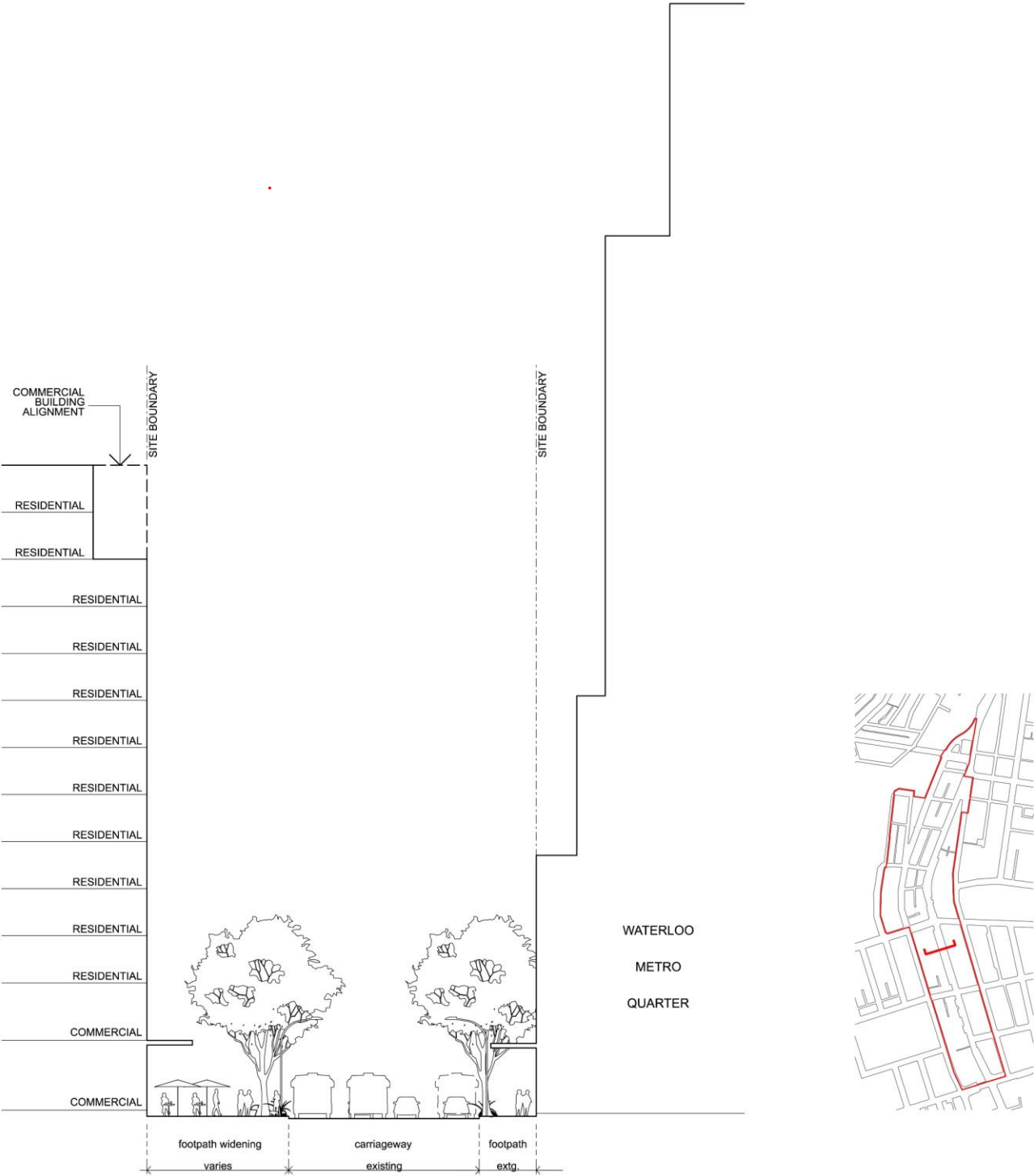


Figure 18. Street cross section through Botany Road opposite Waterloo Metro Quarter looking north. Refer key map at right for location. Deeper building alignment setbacks along western side allow for greater pedestrian amenity, outdoor dining, tree zones and street furniture zones.



Figure 19. Street cross section through Botany Road between Wellington and John Streets looking north. Refer key map at right for location. Deeper building alignment setbacks along western side allow for greater pedestrian amenity, outdoor dining, tree zones and street furniture zones.

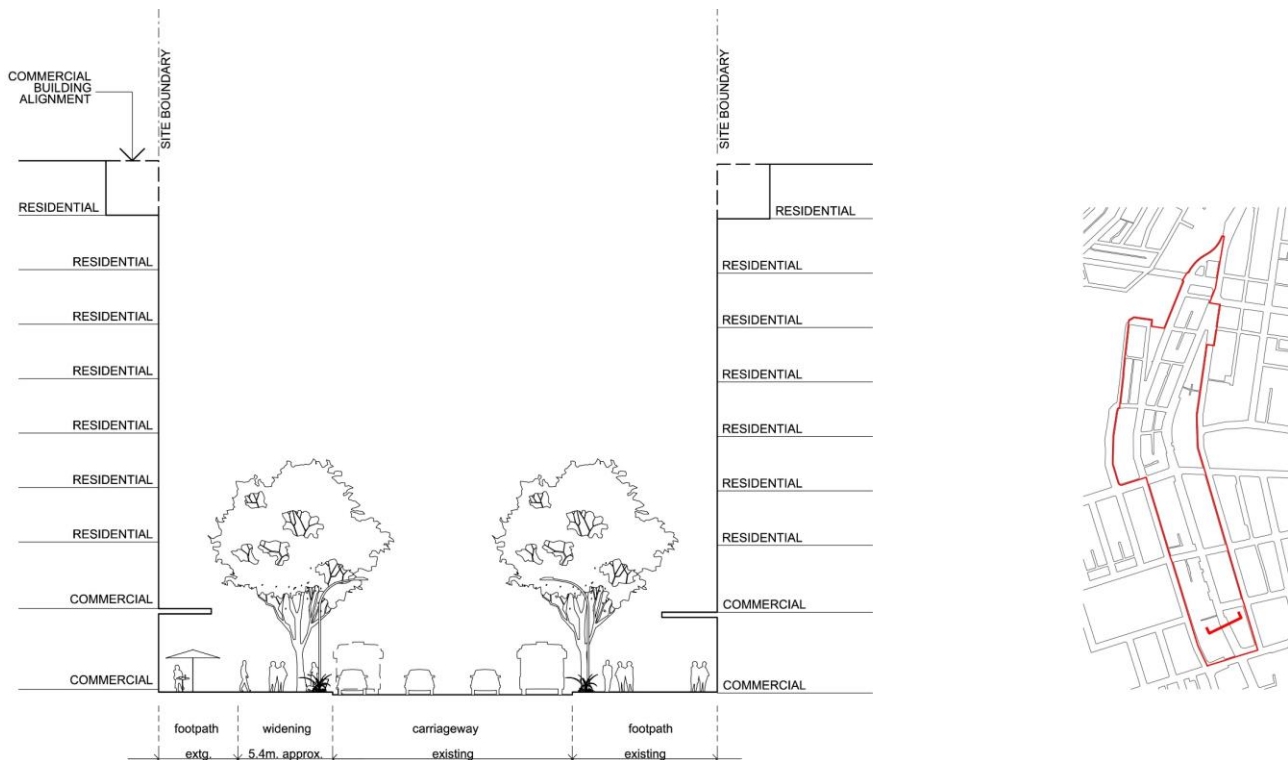


Figure 20. Street cross section through Botany Road between John and McEvoy Streets looking north. Refer key map at right for location. Deeper building alignment setbacks along western side allow for greater pedestrian amenity, outdoor dining, tree zones and street furniture zones.

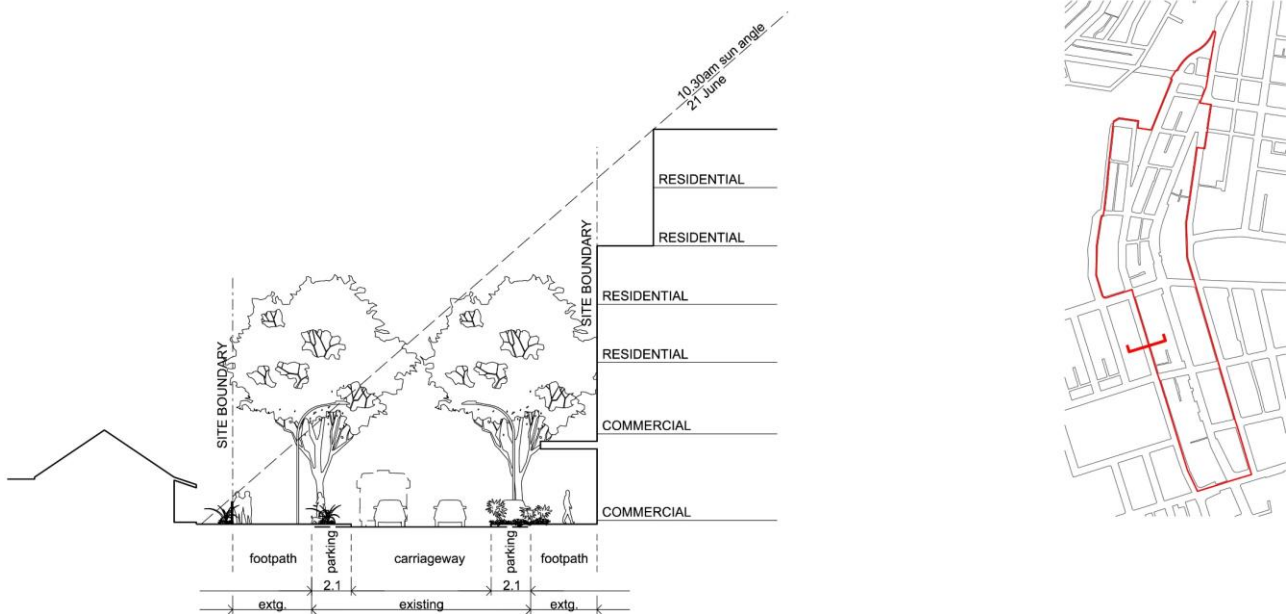


Figure 21. Street cross section through Wyndham Street between Henderson Road and Buckland Street looking north. Refer key map at right for location. 4 storey street wall height, lower overall building height controls and upper level setbacks apply to protect sunlight access to existing residential development opposite.

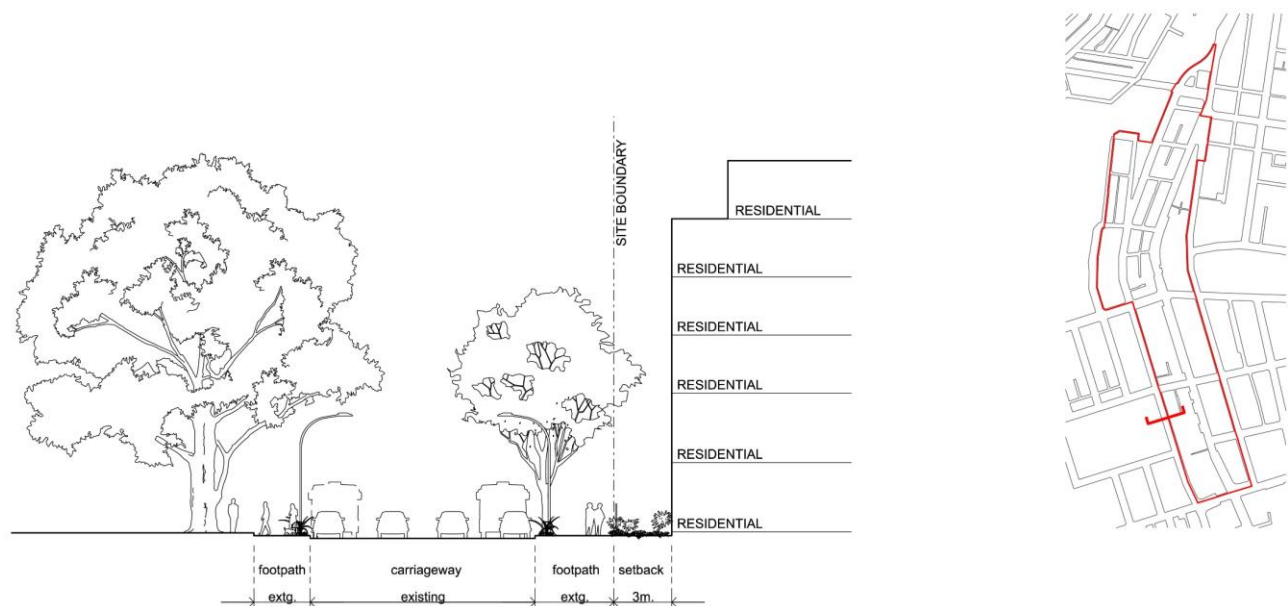


Figure 22. Street cross section through Wyndham Street between Buckland Street and McEvoy Street looking north. Refer key map at right for location. Ground level setbacks, 5 storey street wall height and upper level setbacks to six storeys apply to protect sunlight access to along the eastern edge of Alexandria Park from 10am onwards, June 21.

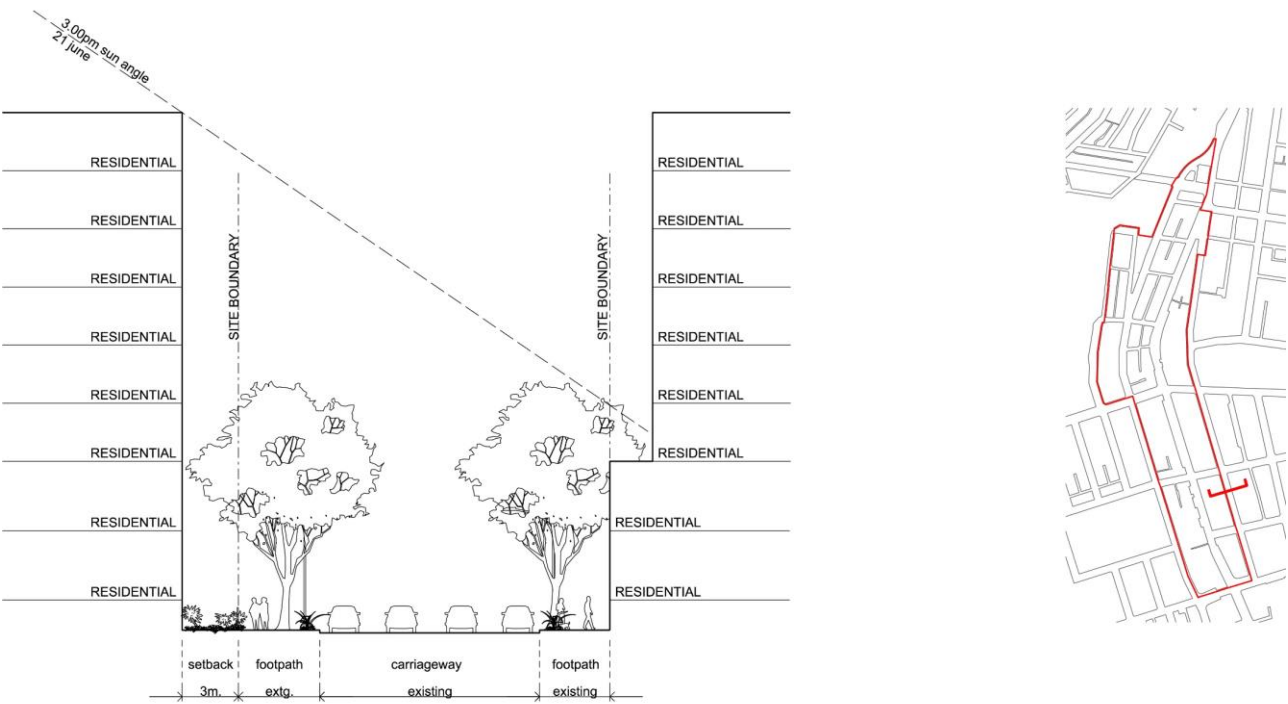


Figure 23. Street cross section through Cope Street between Wellington Street and John Street looking north. Refer key map at right for location. Ground level setbacks, 5 storey street wall height and upper level setbacks to six storeys apply to protect sunlight access to along the eastern edge of Alexandria Park from 10am onwards, June 21.

Built form controls for additions to terrace typologies along Regent St high street

Special guidance for additions to sites along the high street environment of Regent Street is proposed. As identified in the 2020 Study for Non-Indigenous Heritage, this section of Regent Street comprises Victorian and Federation era terrace buildings of varying height and roof forms. These terraces accommodate a diversity of uses and which, combined with the built form and fabric, contribute to the high street character of this section of Regent Street.

Apart from some recent infill and higher rise development, the existing street frontage along Regent Street is between one and two storeys. Both terraces with pitched roof forms and parapet terrace forms feature in the streetscape.

The current controls for floor space and building height will remain for these sites. Consequently, some sites may develop further within these controls to take advantage of site capacity.

For sites that feature a pitched roof form, additional floor space should be designed to set back behind the principal building (Figure 19).

For sites that feature a parapeted roof form, additional floor space can be designed above the parapet in line with the existing street frontage alignment (Figure 20).

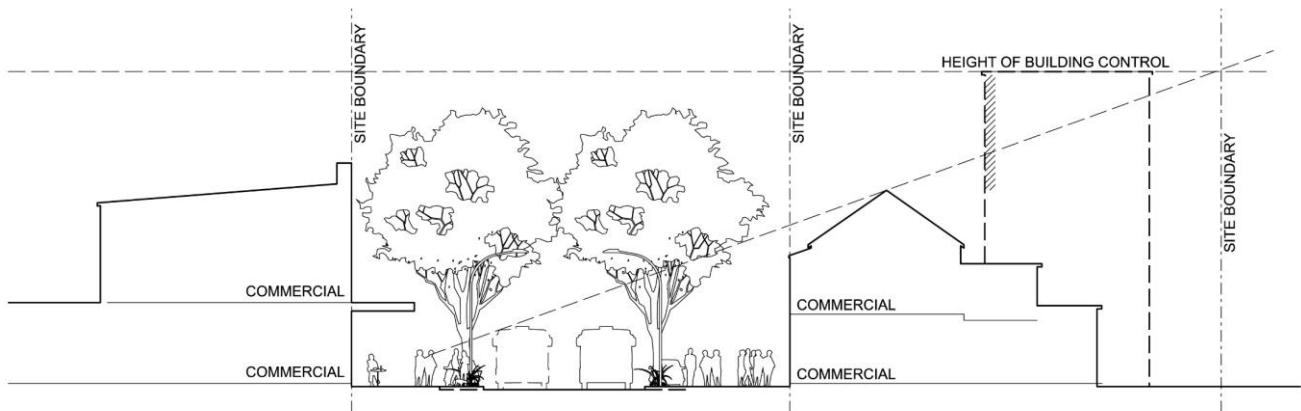


Figure 24. Street cross section through Regent Street showing approach to additions behind terrace typologies with an existing pitched roof form. Additional structure is permitted within the existing floor space and building height controls. New additions should be set back off the principal building form to enable the line of the pitched roof form to be read clearly from the street.

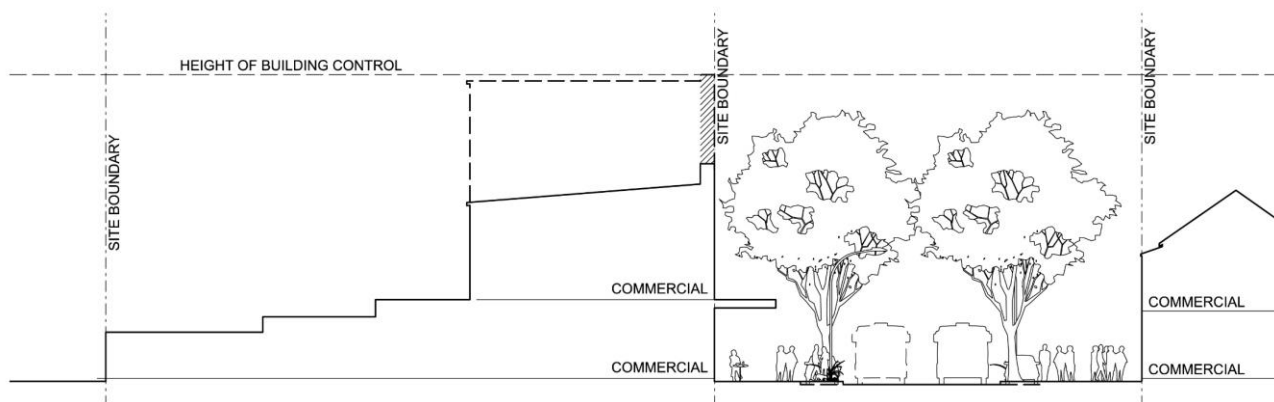


Figure 25. Street cross section through Regent Street showing approach to additions to terrace typologies with an existing parapet roof form. Additional structure is permitted within the existing floor space and building height controls. New additions above the existing parapet line may follow the existing street wall alignment. The existing parapet line should be legible through articulation of the building façade and expression of materiality.

Recommended changes to heritage listings and Heritage Conservation Areas

Changes to Heritage Conservation Areas and heritage items in the Botany Road Precinct were recommended in the 2020 Study by TZG. These recommendations were adopted with some exceptions. After internal consultation with the City's heritage experts, some changes were made to the recommendations made by TZG in relation to Heritage Conservation Area (HCA) boundaries and proposed listings of some heritage items.

Support for recommendations to add new items for heritage listing

Three new items are proposed for listing in the Sydney LEP 2012 for their historical and social value (Figure 11).

142 Regent Street is the site of the Former Aboriginal Legal Service. The building was the shopfront for this key service established in 1970, providing free legal advice to Aboriginal people living in Sydney.

171 Regent Street is the site of the Former Aboriginal Medical Service. Operating from this building from 1971-1977, it was the first medical service in Australia run by the Aboriginal community for the Aboriginal community.

122-136 Wellington Street, Waterloo is a row of two-storey terraces running from Cope Street to the Cauliflower Hotel at Botany Road. Constructed in the early 1880s, they are an intact terrace row dating from the key subdivision period of Waterloo, recalling the terrace fabric that characterised the Waterloo Estate neighbourhood prior to its redevelopment during the 1970s.

Support for recommendations to change the Redfern Estate Heritage Conservation Area

Regent Street is a mix of Victorian and Federation buildings set amongst more recent infill and high rise development. Extending the boundary of the Redfern Estate HCA to include this historic fabric offers a level of protection currently not in play (Figure 11). This assists in retain the diversity of uses currently occupying these terraces contributing to the high street character of Regent Street.

Modifying recommendations to change the Alexandria Park Heritage Conservation Area

Similar extensions were recommended to the boundary of the Alexandria Park HCA. Internal review by the City's heritage experts found that omitting these extensions would have negligible impact on the character or heritage significance of this HCA. Buildings that would have been captured by these extensions were not considered to be of high quality, nor unique to the conservation area (Figure 11).

Identifying these sites as Opportunity Lands allows access to incentive floor space and building heights embodied in the Alternative Controls. Further, accessing these controls will trigger requirements for increased setbacks and laneway dedications, allowing for improved amenity to the public domain and opportunities for increasing tree canopy.

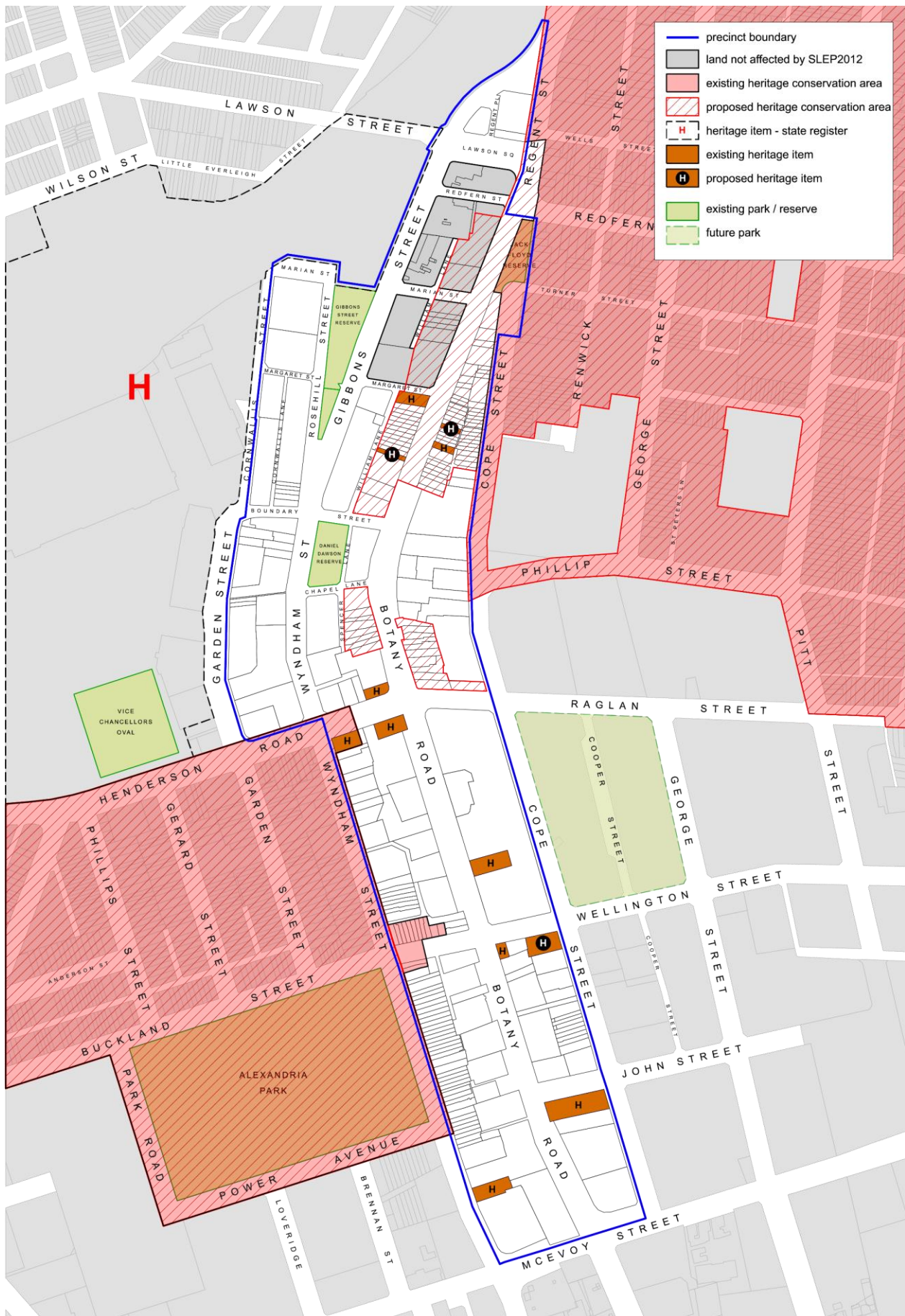


Figure 26. Proposed changes to Heritage Conservation Areas and new items.

