



# Waterloo Metro Quarter Over Station Development – Concept Modification 1 and Southern Precinct

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State Significant Development Assessment  
SSD 9393 MOD 1 and SSD 10437

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Cover image: *Photomontage of Southern Precinct development looking north (Source: EIS)*

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# Glossary

Abbreviation	Definition
<b>CIV</b>	Capital Investment Value
<b>CSSI</b>	Critical State Significant Infrastructure
<b>Council</b>	City of Sydney Council
<b>Department</b>	Department of Planning, Industry and Environment
<b>DRP</b>	Design Review Panel
<b>EESG</b>	Environment, Energy and Science Group
<b>EIS</b>	Environmental Impact Statement
<b>EPA</b>	Environment Protection Authority
<b>EP&amp;A Act</b>	<i>Environmental Planning and Assessment Act 1979</i>
<b>EP&amp;A Regulation</b>	Environmental Planning and Assessment Regulation 2000
<b>EPI</b>	Environmental Planning Instrument
<b>ESD</b>	Ecologically Sustainable Development
<b>FRNSW</b>	Fire and Rescue NSW
<b>Heritage</b>	Heritage NSW, Department of Premier and Cabinet
<b>Minister</b>	Minister for Planning and Public Spaces
<b>OSD</b>	Over Station Development
<b>RMS</b>	Roads and Maritime Services, Transport for NSW
<b>SEARs</b>	Planning Secretary's Environmental Assessment Requirements
<b>Planning Secretary</b>	Secretary of the Department of Planning, Industry and Environment
<b>RtS</b>	Response to Submissions
<b>SEPP</b>	State Environmental Planning Policy
<b>SLEP</b>	Sydney Local Environmental Plan 2012
<b>SSD</b>	State Significant Development
<b>SSI</b>	State Significant Infrastructure
<b>TfNSW</b>	Transport for NSW

# Executive Summary

This report provides concurrent assessment of a modification application to the Waterloo Metro Quarter Concept approval (SSD 9393 MOD 1) and a State significant development application (SSD 10437) for the design and construction of the Southern Precinct within Waterloo Metro Quarter Over Station Development.

The Concept modification seeks to:

- permit communal facilities for student housing in the podium levels of the Southern Precinct
- enable minor protrusions above the approved building envelope for the Southern Precinct.

The SSD seeks approval for the design and construction of two residential buildings, comprising:

- a student housing building of 25 storeys on the corner of Botany Road and Wellington Street, able to accommodate up to 474 students
- a social housing building of 9 storeys on the corner of Wellington Street and Cope Street with 70 social housing dwellings.

The Applicant is WL Developer and the proposal is located within the City of Sydney local government area. The Capital Investment Value (CIV) for the proposal is \$105 million and the proposal would generate 298 construction jobs and 57 operational jobs.

## Engagement

The Department publicly exhibited proposal between 5 November 2020 and 2 December 2020 (28 days) and received a total of 27 submissions, comprising eight submissions from Government agencies, a submission from Council, six submissions from special interest groups and 12 submissions from the public.

Council did not object to the proposal, but it raised comments about residential amenity (solar access, ventilation and sun shading), building separation and building materials and finishes.

The key issues raised in the public submissions included building height, the proposed student housing use, affordable housing, traffic and overshadowing impacts.

The Applicant's Response to Submissions (RtS) provided further justification in relation to design excellence, residential amenity, wind impacts and traffic issues (refer to **Section 6**).

Government agencies provided further comments and advice which informed the Department's recommended conditions in **Appendix G**.

## Assessment

The Department has assessed the proposal in accordance with section 4.15(1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and has carefully considered the issues raised in submissions as well as the Applicant's response. The Department considers the proposal is acceptable for the following reasons:

- it is consistent with the State's strategic planning objectives for the site as set out in the Region Plan and Eastern City District Plan as it would deliver integrated land use and public transport, delivering social and student housing above the new Waterloo Metro Station



- it fully complies with the Sydney LEP 2012 in relation to density, land use and height controls
- it achieves design excellence, is supported by the Sydney Metro DRP and is appropriate within its urban context
- it appropriately minimises overshadowing impacts on surrounding properties and no overshadowing of the Alexandria park would occur after 10 am which is considered to be an acceptable outcome given the site's context where multi storey development is anticipated and supported by the planning controls
- while the social housing building results in some height protrusions beyond the approved concept envelope, these protrusions are minor (less than one metre) and are necessary to accommodate skylights, plant enclosures and parapet structures and would not result in any adverse visual or environmental impacts
- the proposal would deliver 70 social housing apartments that would be transferred to NSW Land and Housing Corporation once completed
- the proposal appropriately minimises car parking which would support the use of public and sustainable transport options and it would not result in any adverse traffic impacts
- it would deliver the new Cope Street Plaza and Church Yard public domain areas, which exceed the open space requirements in the SLEP and the Concept Approval and would support a range of passive recreation activities and outdoor uses for future occupants, workers and commuters to the Waterloo Metro Quarter.

## Conclusion

Following its detailed assessment, the Department supports the proposal as consistent with strategic planning objectives and development controls for the site and it will deliver housing diversity and boost employment opportunities within Sydney's south. The Department is also satisfied that the RtS, appropriately addresses the remaining concerns raised in submissions about design excellence, residential amenity, wind and traffic, together with the recommended conditions of approval.

The Department's assessment therefore concludes the proposal is in the public interest and recommends that the applications be approved subject to the conditions of consent.

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# 1 Introduction

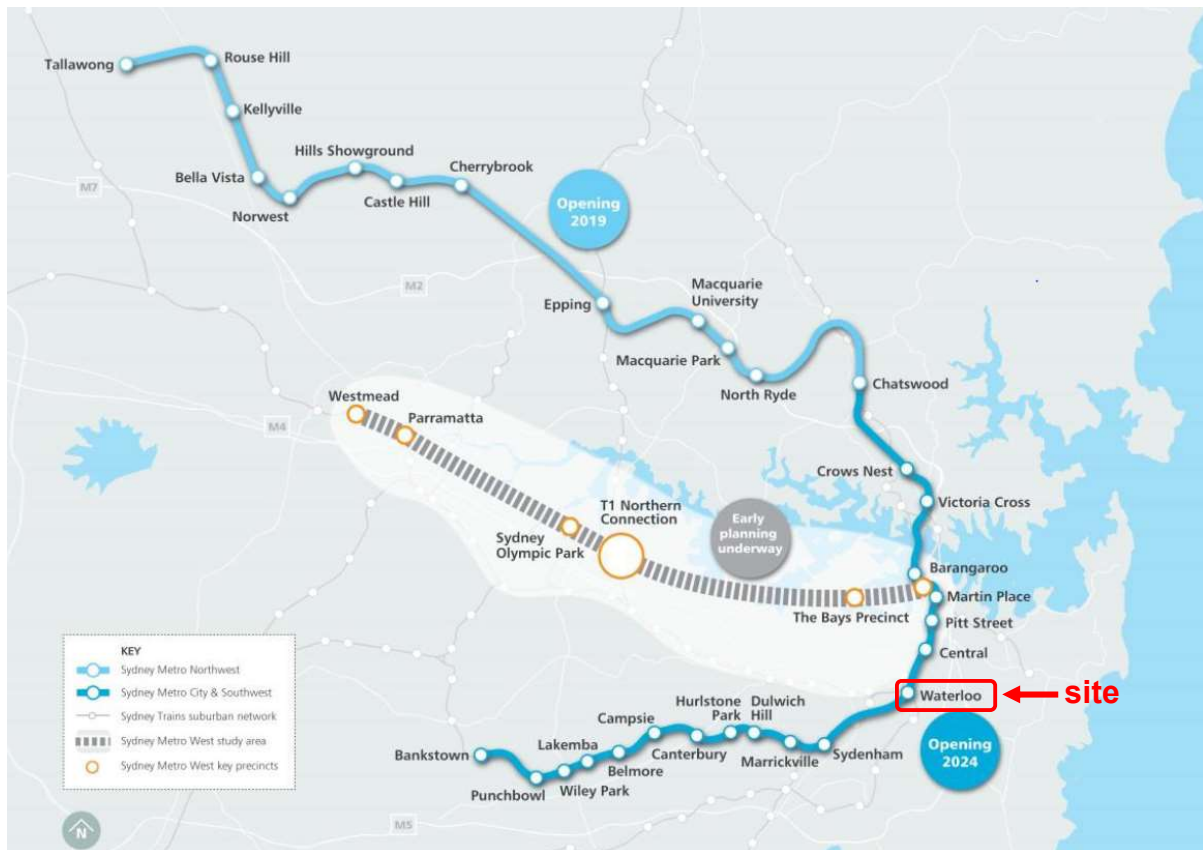
This report provides a concurrent assessment of a modification to the Waterloo Metro Quarter Concept Approval (SSD 9393) and a State significant development (SSD) application (SSD 10437) for the design and construction of two residential buildings and associated public domain works within the Southern Precinct of the Waterloo Metro Quarter.

Specifically, the proposal seeks approval for:

- modifications to the Concept Approval to permit:
  - (a) communal facilities in the podium levels associated with the proposed student housing; and
  - (b) protrusions above the approved Southern Precinct building envelope for the following on the proposed social housing building:
    - (i) a raised parapet to provide depth for rooftop decorative landscaping;
    - (ii) a skylight for natural light to apartments; and
    - (iii) a plant room enclosure.
- development consent for the detailed design, construction and operation of the Southern Precinct, comprising:
  - (i) a student housing building of 25 storeys on the corner of Botany Road and Wellington Street for approximately 474 students
  - (ii) a social housing building of 9 storeys on the corner of Wellington Street and Cope Street, above a southern Metro Station structure, with 70 social housing dwellings
  - (iii) gross floor area of 18,789m<sup>2</sup>, comprising 12,144m<sup>2</sup> for the student housing building, 5,431m<sup>2</sup> for the social housing building and 1,214m<sup>2</sup> for non-residential uses
  - (iv) ground floor and podium uses on the corner of Botany Road and Wellington Street for retail premises and communal uses for student housing
  - (v) publicly accessible open space including a 1,341m<sup>2</sup> plaza along Cope Street
  - (vi) a shared zone from Cope Street into the site and expanded footpaths along Botany Road and Wellington Street
  - (vii) signage zones
  - (viii) removal of 5 street trees and replacement with 25 trees along Botany Road and the existing Church
  - (ix) vehicle loading and service facilities accessed from Wellington Street
  - (x) staged stratum subdivision

The applications were lodged by WL Developer Pty Ltd (the Applicant). The site is located within the City of Sydney local government area. The Capital Investment Value (CIV) for the proposal is \$105 million and would generate 298 construction jobs and 57 operational jobs.

The Waterloo Metro station is one of seven new stations approved as part of the Critical State Significant Infrastructure (CSSI) approval (CSSI 7400) for the Sydney Metro City and Southwest Metro between Chatswood and Sydenham (**Figure 1**).



**Figure 1 | Regional context** (source: Applicant's EIS)

## 1.1 Waterloo

Waterloo is located to the south of the Sydney CBD. It extends north to Redfern, south to Green Square, east to Moore Park and west to Alexandria. Waterloo has excellent access to employment uses, public transport, urban services and open space. The closest existing rail stations are Redfern to the north and Green Square to the south. Waterloo Park and Waterloo Oval are at the corner of McEvoy and Elizabeth Streets, Redfern Park is north of the suburb and Alexandria Park is to the west. Moore Park and Centennial Park are to the east.

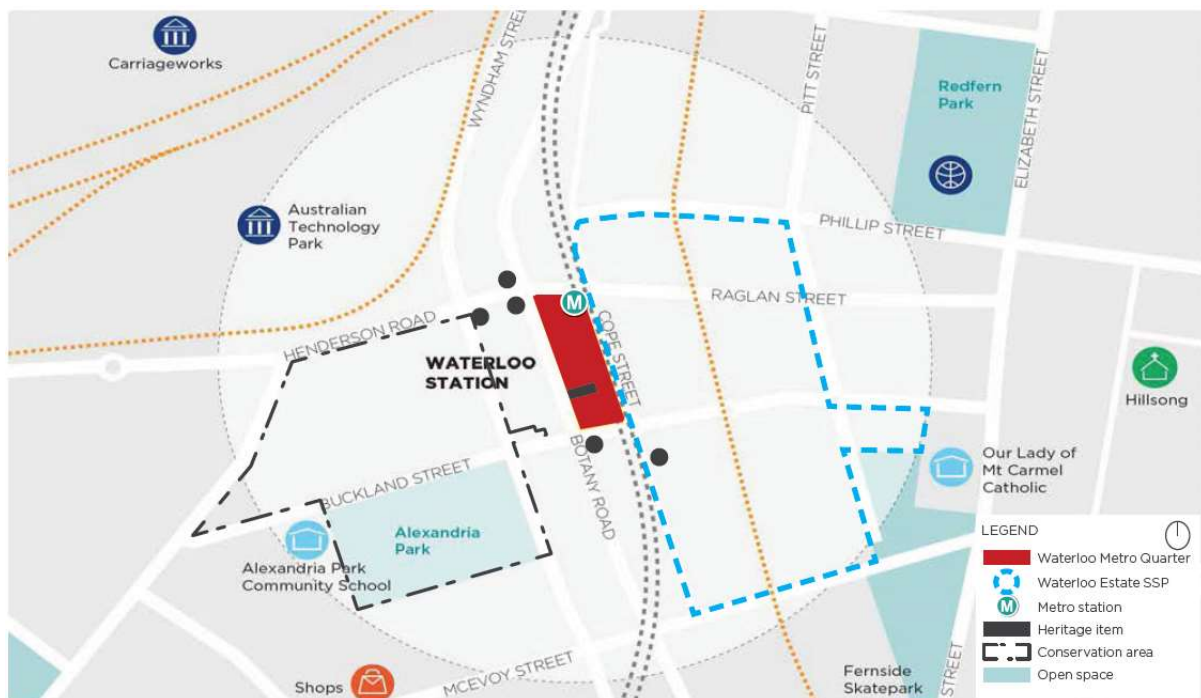
To the north-west of Waterloo is the Australian Technology Park containing significant employment generating technology, media and financial businesses providing approximately 20,000 jobs.

Much of the eastern end of Waterloo has transitioned from a former industrial suburb, as former warehouses and manufacturing sites have been redeveloped for mixed use development in the past 15 – 20 years. High density housing has been developed on former large industrial sites in clusters such as the Danks Street Precinct and former ACI Glass site.

Waterloo is characterised by a diverse mix of building heights ranging from single storey dwellings to 32 storey residential towers.

A large portion of the western end of the suburb is occupied by the Waterloo Estate social and affordable housing development owned and managed by the NSW Government. The estate is subject to a precinct planning process that is being managed by City of Sydney Council. Draft plans for the

southern part of the Waterloo Estate propose opportunities for new community spaces, residential and commercial uses and a new public park immediately east of the Waterloo Metro Quarter.



**Figure 2 | Surrounding context** (source: Applicant's EIS)

## 1.2 Waterloo Metro Quarter

The Waterloo Metro Quarter sits approximately 3.3 km south of the Sydney CBD, 700 m south-west of Redfern and five km north-east of Sydney Airport.

Waterloo Metro Quarter is largely rectangular in shape and occupies land above and around the new, underground Waterloo Metro Station, and is bound by Cope Street (east), Raglan Street (north), Botany Road (west) and Wellington Street (south) (**Figure 3**).

The Waterloo Congregational Church at 103-105 Botany Road (**Figure 3**) is a locally listed heritage item. The Church is surrounded on three of its boundaries but does not form part of the Waterloo Metro Quarter. The approved station works extend up to the Church boundaries.

All previous structures have been demolished and the Waterloo Metro Quarter is currently being used to facilitate construction of the Waterloo Metro Station. Previous development included three to five storey commercial, light industrial and shop top housing buildings.

The Waterloo Metro Station entrance is proposed via the corner of Raglan and Cope Streets, and active retail or other commercial uses along its Cope Street and Raglan Street frontages. Construction of the Sydney Metro is under way and Waterloo Station is scheduled to open in 2024.

The north-eastern corner of the Waterloo Metro Quarter will accommodate an above ground metro station structure, comprising the station entrance, spaces for retail and commercial opportunities as well as the station plant room and other servicing areas.



The south-eastern corner of the Waterloo Metro Quarter will accommodate a second aboveground station structure for power supply, traction systems and other mechanical services.

Between the two station structures is a station cavern that has been excavated and, when covered, will form the ground level of the proposed Cope Street Plaza within the Southern Precinct SSD.

Approval for construction of the station was subject to the CSSI approval (SSI 7740).



**Figure 3 |** Local context map (Base source: Applicant's EIS)

### 1.3 The site and its surrounds

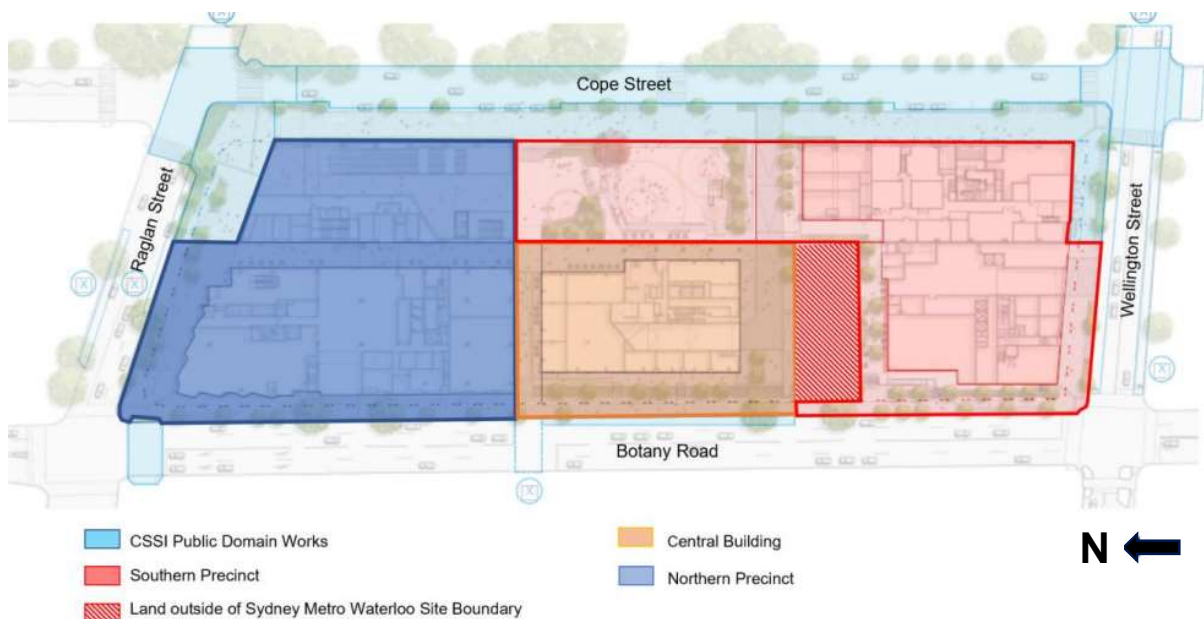
#### The site

The Southern Precinct (the site) is irregular in shape and occupies the southern end of the Waterloo Metro Quarter, bound by Wellington Street (to the south), Botany Road (to the west), Cope Street (to the east) and the adjoining Waterloo Congregation Church (to the north). It also includes a portion of land located between the church and the Central Precinct (to the west) and Cope Street (to the east) (**Figure 4**).

The Southern Precinct has a site area of 4,700m<sup>2</sup> and the broader Waterloo Metro Quarter has an area of 1.287ha.

The eastern edge of the site (fronting Cope Street) accommodates a part of the Waterloo metro station box currently under construction as part of the CSSI approval.





**Figure 4 |** Site plan of the Southern Precinct (shaded red). (Source: Applicant's EIS)

### Surrounding development

Beyond the Waterloo Metro Quarter, surrounding development comprises commercial premises to the north, light industrial and mixed-use development to the south, residential development to the east (Waterloo Estate) and predominantly commercial and light industry uses to the west.

To the north and beyond Raglan Street are 1 and 2 storey retail and commercial premises mostly accommodated in former terraces or other buildings. Further north is the Redfern Town Centre with a mix of residential, retail and student housing development of varying scale and configuration including numerous tall buildings and towers (**Figure 5**).

To the south beyond Wellington Street is a two storey hotel 'Cauliflower Hotel' on the corner of Botany Road and Wellington Street and two-storey terrace housing toward Cope Street (**Figure 6**).

To the east and beyond Cope Street is a mix of one and three storey mid-century residential flat buildings and attached dwelling houses that are part of the Waterloo Estate (**Figure 7**). Further east and north-east are high density residential towers in parkland settings that are also part of the Waterloo Estate.

To the west and beyond Botany Road are two to three storey commercial and light industrial premises and a large 5 storey mixed use residential flat building (**Figure 8**). No's 74-88 Botany Road is subject to development consent granted by Council for a four and five storey affordable housing development with ground floor retail premises fronting Botany Road. Further west are low scale terrace dwellings within the Alexandria Park Heritage Conservation Area and the Australian Technology Park with high density employment uses.

To the south-west is Alexandria Park, a regional open space containing formal and informal recreation areas (**Figure 9**). The eastern half of the Park comprises open grassed areas with walking paths and shade trees for passive recreation. The western half contains a grassed oval and other facilities used

for active recreation including cricket, soccer, athletics, tennis and basketball. The adjacent Alexandria Park Community School has agreement with Council for the use of the Park.



**Figure 5 |** View of Raglan Street looking west from Cope Street roundabout showing existing commercial uses to the northern side of Raglan Street (Source: DPIE)



**Figure 6 |** View of Wellington Street from Cope Street roundabout showing existing two storey terrace dwellings on the south side of Wellington Street (Source: DPIE)





**Figure 7 |** View of Cope Street from the Wellington Street roundabout showing existing 2 and 3 storey housing and tall towers within the Waterloo Estate on the eastern side of Cope Street (Source: DPIE)



**Figure 8 |** Commercial and light industrial developments along western side of Botany Road (Source: DPIE)





**Figure 9 |** View to the east from within Alexandria Park showing open grassed areas, pathways and lighting which facilitate passive recreation and some active recreation (Source: DPIE)

## 1.4 Related Applications and Previous Approvals

### State Significant Precinct

Approximately 20 hectares of land in Waterloo's north west was declared a State Significant Precinct (SSP) in 2019. The SSP area comprised the Waterloo Metro Quarter and the Waterloo Estate (**Figure 10**).

As part of the SSP process, the planning controls that applied to the Waterloo Metro Quarter were amended through a State-led rezoning, enabling its development with opportunities for a new public plaza, residential, social and affordable housing, commercial and community uses.

In 2019, the Minister of Planning and Public Spaces announced that City of Sydney Council is to manage the precinct planning process for the adjoining Waterloo Estate. The planning for the estate is currently underway. Draft plans for the southern part of the Estate propose new community spaces, residential and commercial uses and a new public park adjoining the Waterloo Metro Quarter.





**Figure 10 | Waterloo SSP area (source: DPIE website)**

### Concept and Amending Concept Approval

The Concept Application for the Waterloo Metro Quarter was granted approval by the Minister on 10 December 2019. The approval granted consent for the concept envelope of three towers on top of mid-rise podiums (4-8 storeys) for residential uses, including social and affordable housing, a new public plaza, commercial and retail uses.

The Concept Approval included endorsement of Design Guidelines to direct the detailed design of subsequent Stage 2 SSD applications.

An Amending Concept Application seeking new concept envelopes for the Northern Precinct and an expanded building envelope for the Central Precinct, as well as the use of the Northern Precinct for commercial premises, has also been assessed by the Department.

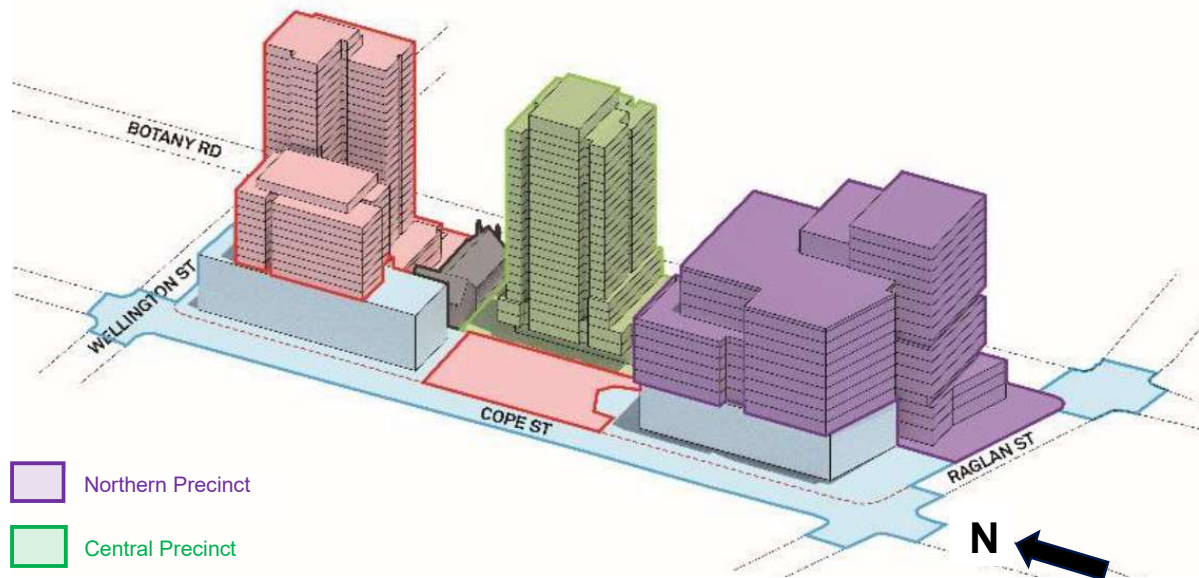
The Amending Concept Application was approved by the Minister's delegate on 17 June 2021.

The Amending Concept Application included updated Design Guidelines due to the new and expanded building envelopes and land uses. These amended Design Guidelines have been considered in the Department's assessment in Section 6 and Appendix F of this report.

### Waterloo Metro Quarter Over Station Development

This assessment has been carried out concurrently with the following applications that collectively make up the detailed designs for the Waterloo Metro Quarter:

- Northern Precinct (SSD 10440)
- Central Precinct (SSD 10439)
- Basement SSDA (SSD 10438)



**Figure 11 | The Waterloo Metro Quarter and sub-precincts (source: Applicant's EIS)**

## 2 Project

### 2.1 Project Outline

The proposal seeks approval to modify the Waterloo Metro Quarter Concept Approval and seeks a Detailed SSD consent for the design, construction and operation of the Southern Precinct within the Waterloo Metro Quarter.

The proposed modifications to the Concept Approval seek approval to permit:

- podium levels of the building envelope to be used for communal facilities, which is currently not permitted by the Concept. The communal facilities are associated with the proposed student housing tower.
- minor increases in building envelope height for the social housing building:
  - (i) raising the parapet height 200mm to provide greater depth for decorative landscaping on the roof level
  - (ii) a 300mm high skylight feature
  - (iii) a 960mm high plant room enclosure.

The Detailed SSD application involves the design, construction and operation of two buildings above and around the Waterloo Metro Station works, one a student housing tower and the other a social housing building. The application also includes retail and commercial tenancies, loading and unloading facilities, end of trip facilities, pedestrian entries, utilities and services, signage and Stratum subdivision.

The key components of the proposal (as amended by the RtS) are summarised at **Table 1**. A link to the Applicant's SSD documents is provided at **Appendix A**.

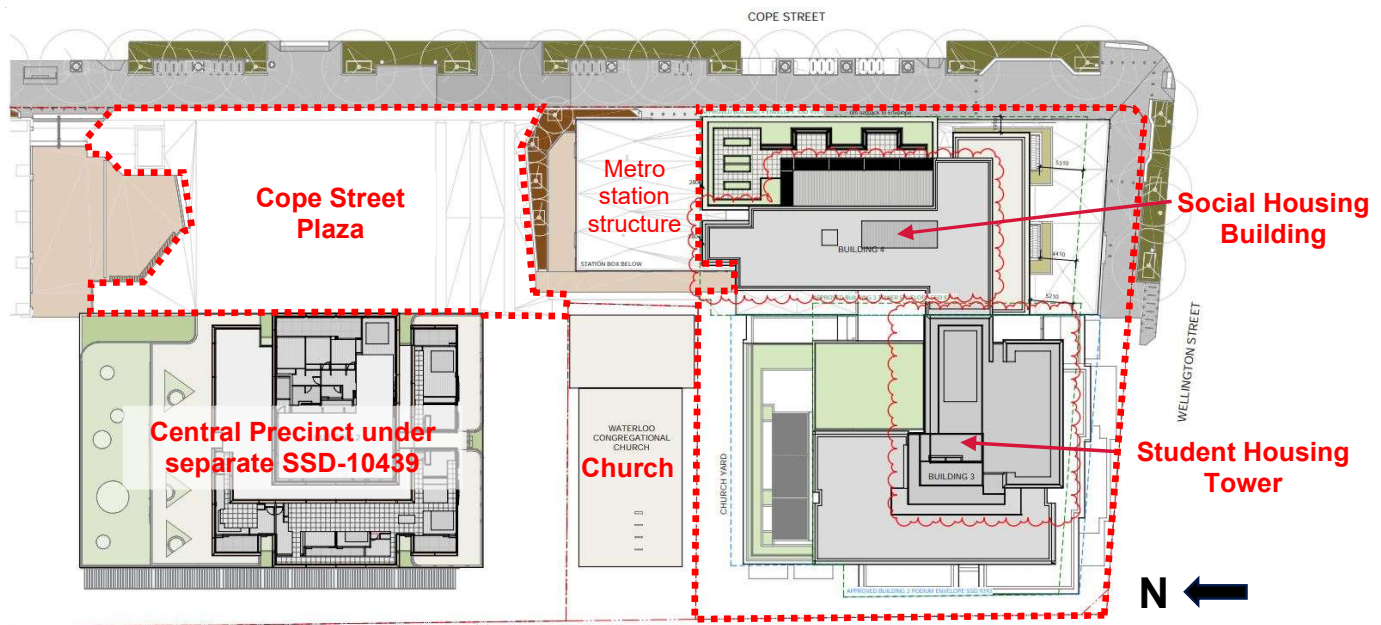
**Table 1 | Main Components of the Project**

Modification Application (SSD 9393 MOD 1)	
Aspect	Description
Built form	<ul style="list-style-type: none"><li>• enable the podium levels of the student housing tower to be used for communal facilities including student housing lounge</li><li>• enable the parapet to protrude above the approved building envelope of the social housing building by 200mm to support depth for rooftop decorative gravel</li><li>• enable a skylight to protrude above the approved building envelope of the social housing building by 300mm</li><li>• enable a plant room enclosure to protrude above the approved building envelope of the social housing building by 960mm</li></ul>
GFA	<ul style="list-style-type: none"><li>• no change to approved GFA</li></ul>



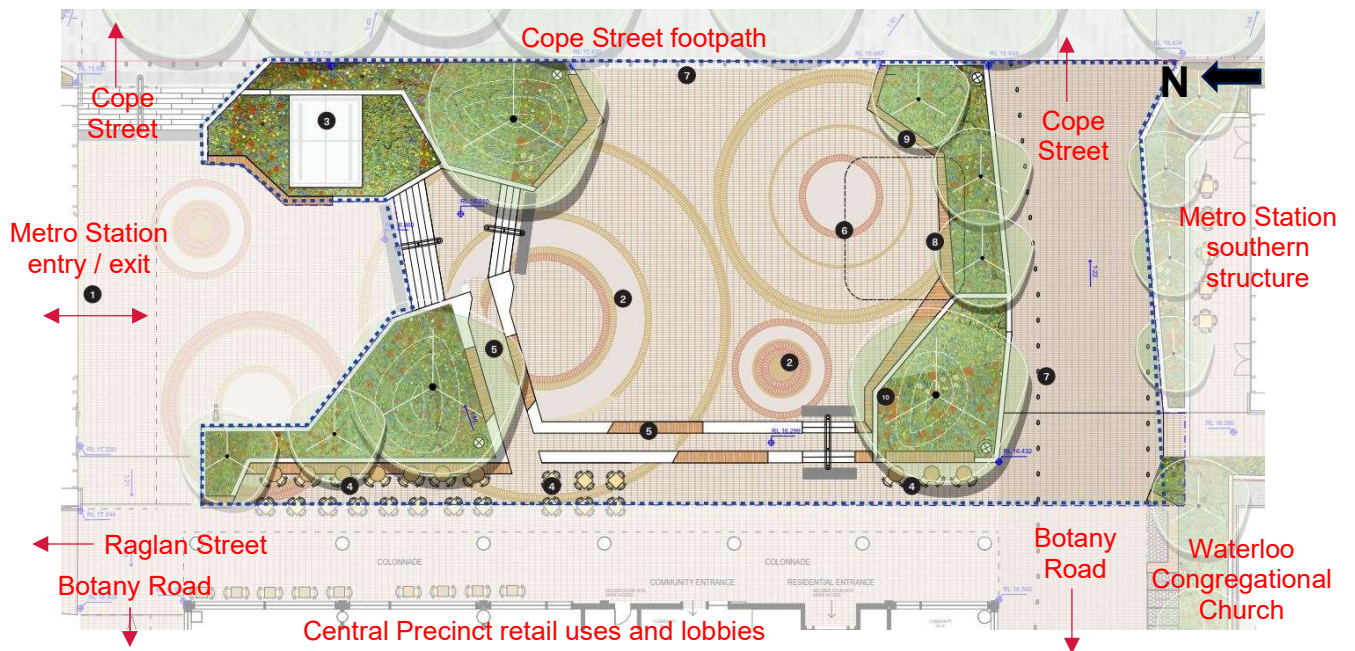
## SSD Application Components

Aspect	Description
<b>Built form</b>	<ul style="list-style-type: none"> <li>Construction of a 25 storey student housing building for approximately 474 students</li> <li>Construction of a 9 storey social housing building containing 70 apartments</li> <li>Publicly accessible open space, including a 1,675m<sup>2</sup> plaza, a shared zone from Cope Street and extended footpaths along Botany Road and Wellington Street</li> <li>Integration with the approved CSSI station box</li> </ul>
<b>GFA</b>	<ul style="list-style-type: none"> <li>total GFA of 18,789m<sup>2</sup>, excluding floor space approved by the CSSI</li> <li>12,144m<sup>2</sup> for student housing</li> <li>5,431m<sup>2</sup> for social housing</li> <li>1,214m<sup>2</sup> non-residential uses</li> </ul>
<b>Land uses</b>	<ul style="list-style-type: none"> <li>Student housing (residential flat building)</li> <li>Social housing (boarding house)</li> <li>Podium gym and retail premises (commercial premises)</li> </ul>
<b>Employment</b>	<ul style="list-style-type: none"> <li>298 construction jobs</li> <li>57 operational jobs</li> </ul>
<b>Capital Investment Value (CIV)</b>	<ul style="list-style-type: none"> <li>\$105,179,395</li> </ul>



**Figure 12 |** Proposed extent of works in application shown in red outline. Light brown highlighted areas indicate Metro station integration works under CSSI 7400 for station customer entry (north) and station retail and services (south) (source: Applicant's EIS)



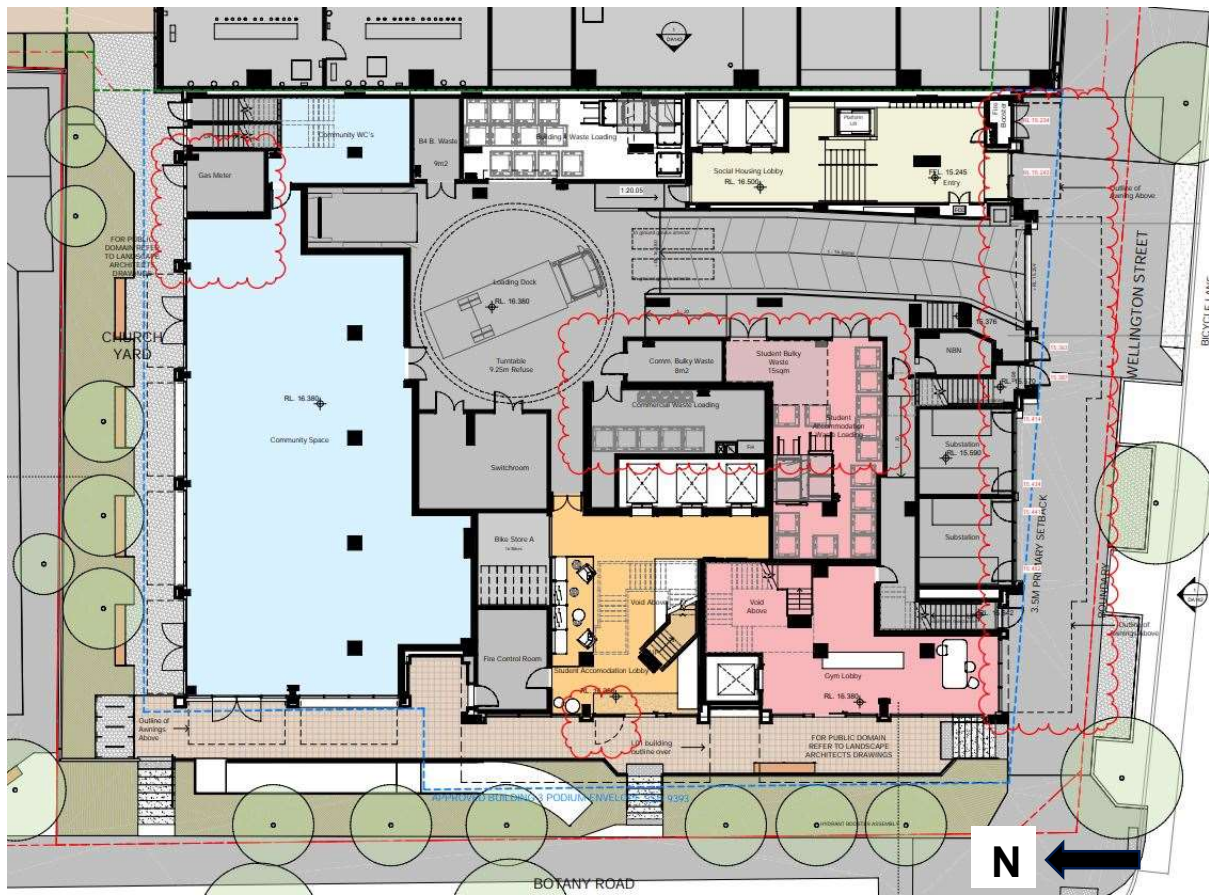


**Figure 13 |** Proposed Cope Street Plaza showing open paving for events, seating terraces, raised planters with trees and shrubs and walkways (source: Applicant's EIS)

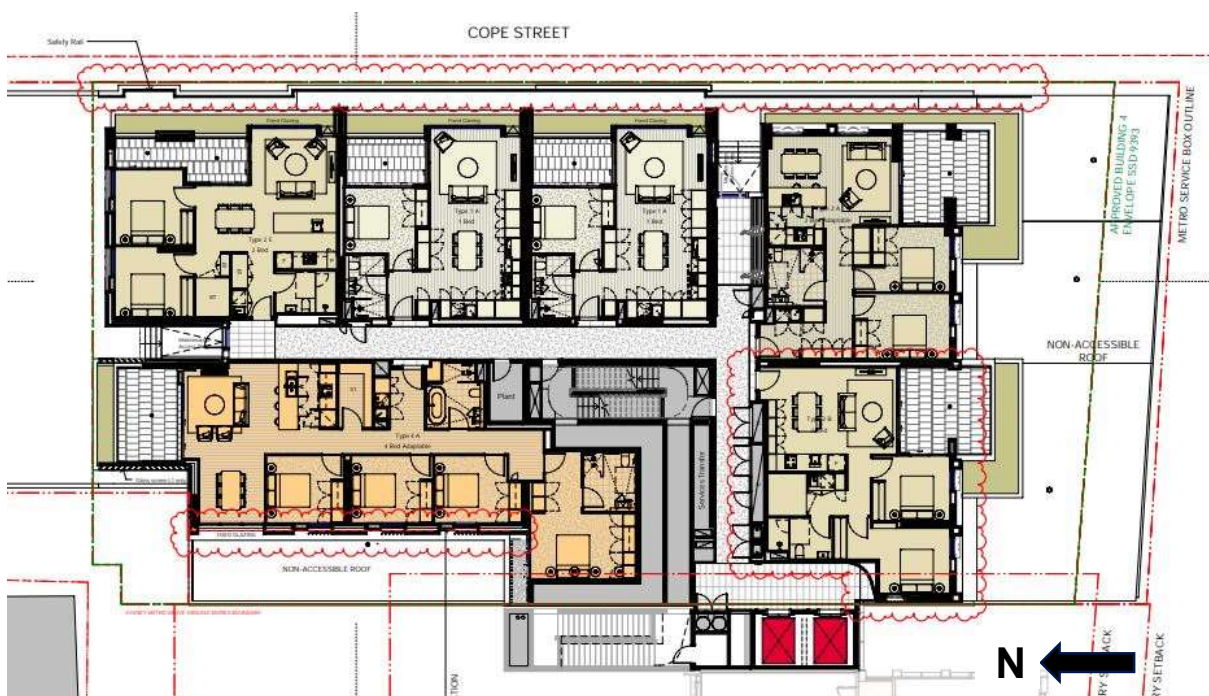


**Figure 14 |** Artist's impression of Cope Street Plaza with detailed design for the Central Precinct (left) (SSD-10439) and Northern Precinct (right) (SSD-10440) shown in backdrop (source: Applicant's EIS)

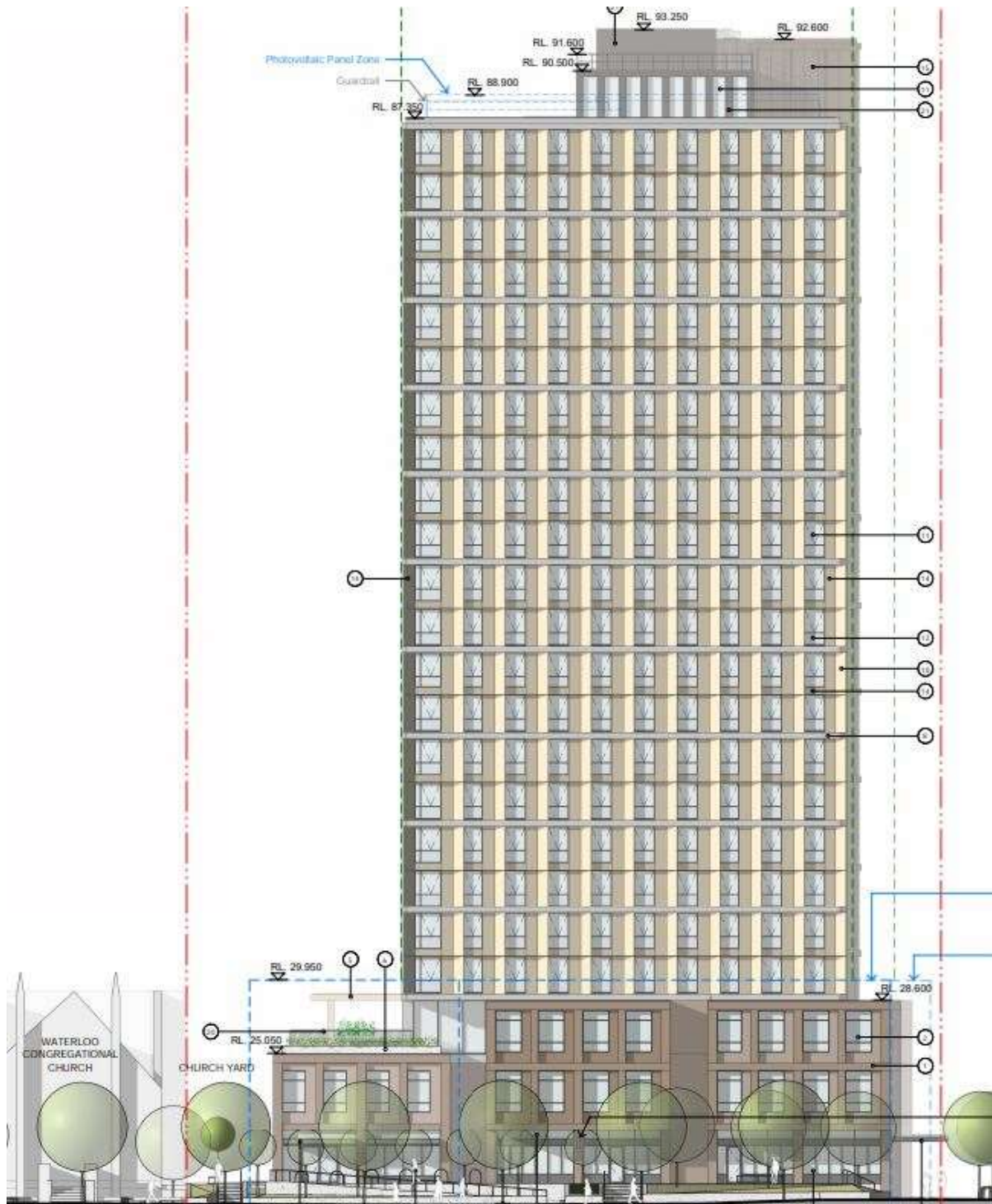




**Figure 15 |** Ground floor of student housing tower (source: Applicant's EIS)

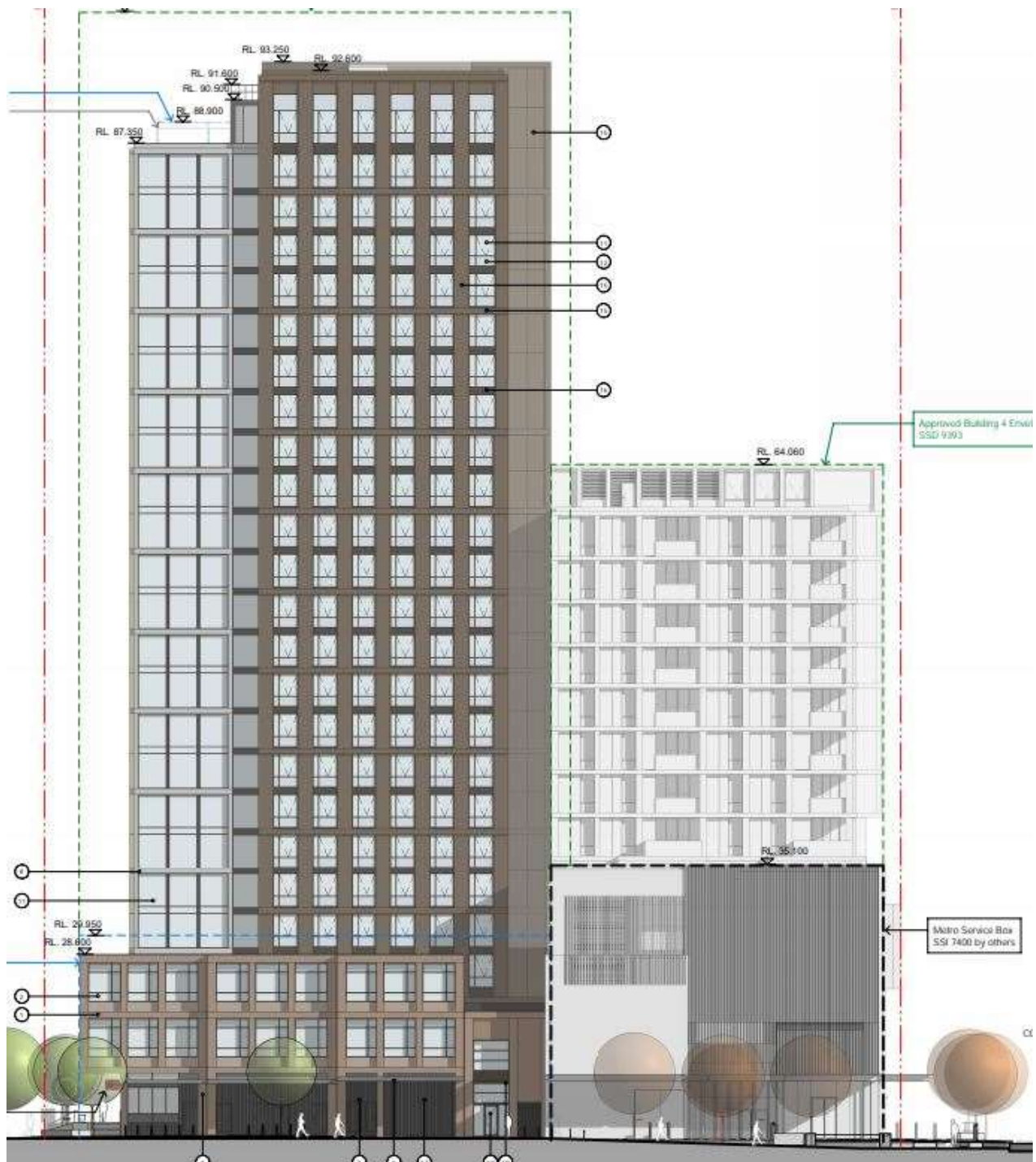


**Figure 16 |** Level 3 of social housing building (ground floor of the building above Metro Station structure) (source: Applicant's EIS)

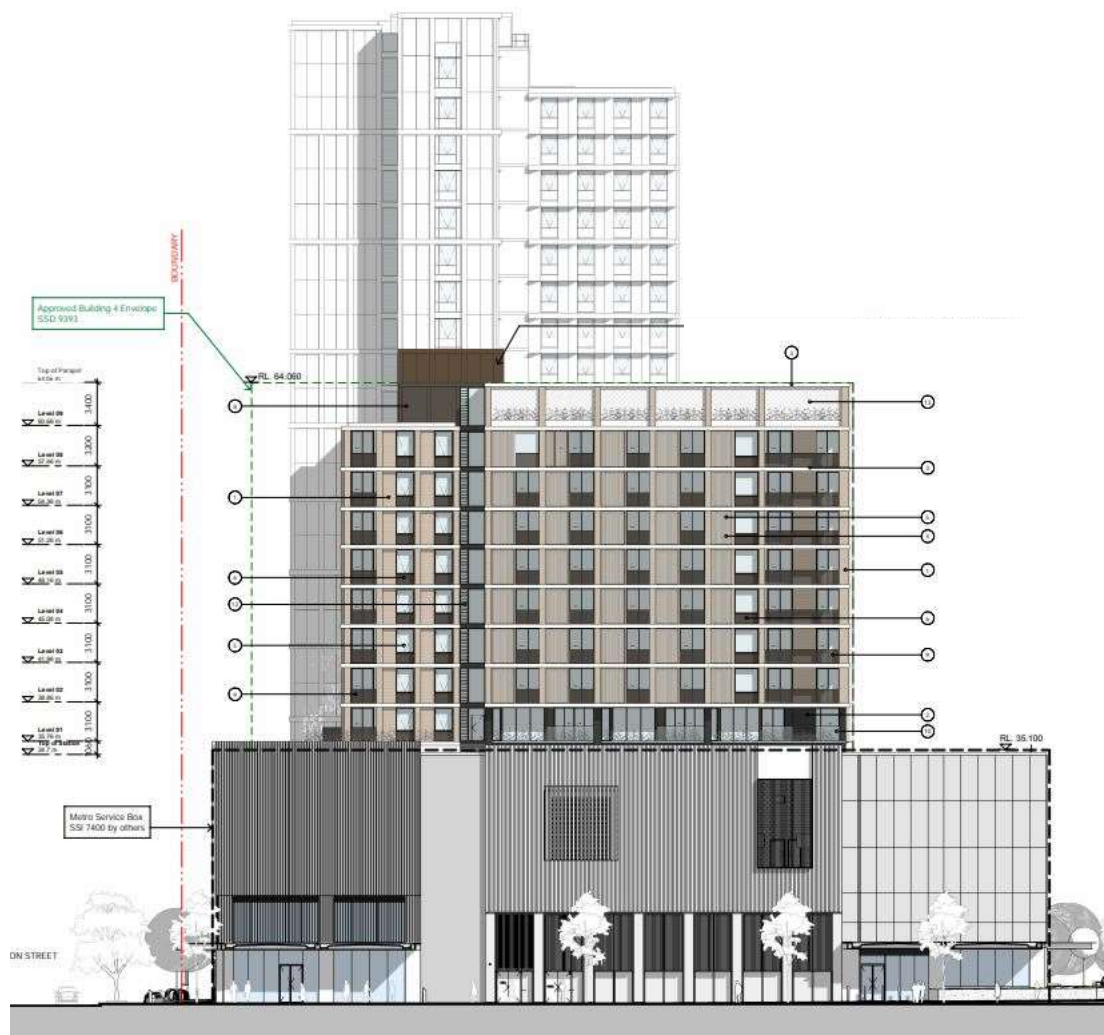


**Figure 17 |** West Elevation (Botany Road) of student housing tower (source: Applicant's EIS)





**Figure 18 |** South Elevation (Wellington Street) showing student housing tower, social housing building and Metro station structure (source: Applicant's EIS)



**Figure 19** | East Elevation (Cope Street) of social housing building with Metro structure at base and student housing tower behind (source: Applicant's EIS)



**Figure 20** | Artists impression of student housing building above Metro station structure along Cope Street (source: Applicant's EIS)

## 2.2 Related Development

### Sydney Metro City and Southwest Metro (CSSI 7400)

On 9 January 2017, the Minister for Planning granted infrastructure approval (CSSI 7400) for the construction and operation of the Sydney Metro City and Southwest Metro between Chatswood and Sydenham, including approval for 16.5km of rail lines, a tunnel under Sydney Harbour, links with the existing rail network, metro stations and associated infrastructure (**Figure 1**).

The CSSI approval as it relates to the Waterloo Station provides for:

- demolition of existing buildings within the site
- excavation of the rail tunnel, concourse and platforms and therefore the setting of surrounding structural zones, services and accesses
- the establishment of two aboveground station footprints of approximately four storeys (between RL 33 and RL 35) in height along the eastern edge of the site, fronting Cope Street.
- non-rail related structure within the station footprint for retail premises and OSD uses
- station entry via a large pedestrian entrance on Raglan Street and via the public plaza from Cope Street
- public domain works.

The CSSI approval conditions relevant to OSD at Waterloo include:

- Condition A4 which notes that any OSD, including associated future use, does not form part of the CSSI and will be subject to the relevant assessment pathway
- Condition E92 requires an Interchange Access Plan (IAP) to be prepared and approved for each station, in consultation with the Sydney Metro Design Review Panel (DRP), to inform the final design of transport and access facilities and services, including footpaths, cycleways, passenger facilities, parking, traffic and road closures, and integration of public domain and transport initiatives
- Condition E100 requires the Sydney Metro Design Review Panel (DRP) be established to refine the design objectives for the development and provide advice on place making, architecture, heritage, urban design, landscape design and artistic aspects. The DRP comprises five members, chaired by the NSW Government Architect, with the opportunity for Council or other stakeholders, including the Heritage Council (or delegate) to attend
- Condition E101 requires the preparation and approval of Station Design Precinct Plans (SDPPs) for each station. The SDPPs are to present an integrated urban and place making outcome. The SDPPs must be prepared in collaboration and consultation with relevant stakeholders, including council, the local community and the DRP. The SDPP must identify and address specific design objectives, principles and standards as are identified in Condition E101.

Eight requests to modify the CSSI approval have been determined by the Department. These requests have no direct influence on the Waterloo Metro Quarter.



## 3 Strategic context

### 3.1 Greater Sydney Region Plan: A Metropolis of Three Cities

The *Greater Sydney Region Plan: A Metropolis of Three Cities* ('Regional Plan') superseded *A Plan for Growing Sydney* and sets out the NSW Government's vision, through the Greater Sydney Commission, for Sydney to be "...a metropolis of three cities where the people of Greater Sydney live within 30 minutes of their jobs, education and health facilities, services and great places." These cities are: the Western Parkland City, the Central River City and the Eastern Harbour City.

Ten directions underpin the Regional Plan which focus on infrastructure and collaboration, liveability, productivity, sustainability and implementation. The overall direction of which is to manage population growth and support economic growth and environmental sustainability.

The site is located within the Eastern Economic Corridor, which extends from Macquarie Park through the Waterloo and South Sydney to Sydney Airport. The proposal is consistent with the Directions and Actions of the Plan, including:

- the proposal increases the competitiveness of Sydney by providing additional job opportunities in strategic employment centres (Objective 14: A Metropolis of Three Cities – integrated land use and transport creates walkable and 30-minute cities)
- the proposal is located in the Eastern Economic Corridor and provides for the economic use of land immediately above and around the future metro station (Objective 15: The Eastern, GPOP and Western Economic Corridors are better connected and more competitive)
- the proposal will increase housing and jobs along the emerging innovation corridor that stretches from The Bays Precinct to the Australian Technology Park at Redfern via the Harbour CBD (Objective 18: Harbour CBD is stronger and more competitive)
- the proposed development supports the strategic goals, directions and actions of the Plan by providing housing including social, affordable and student housing, additional public open space and commercial floor space in a strategic transport corridor. The proposal underscores the concept of integrated land use and transport by linking public transport use and promoting housing and employment opportunities in a highly accessible part of Sydney.

### 3.2 Eastern Harbour City District Plan

The Greater Sydney Commission has prepared District Plans to inform regional and local-level planning and assist the actions of State agencies. The aim of the District Plans is to connect local planning with longer-term metropolitan planning for Greater Sydney.

The Waterloo Station is located within the Eastern City District. The Eastern City District Plan contains key priorities for infrastructure that are relevant to the proposed development including:

- Planning Priority E1 - Planning for a city supported by infrastructure
- Planning Priority E5 - Providing housing supply, choice and affordability with access to jobs, services and public transport
- Planning Priority E7 - Growing a stronger and more competitive Harbour CBD
- Planning Priority E8 - Growing and investing in health and education precincts and the Innovation Corridor
- Planning Priority E10 - Delivering integrated land use and transport planning and a 30-minute city

- Planning Priority E18 Delivering high quality open space

The proposal is consistent with the above priorities as it facilitates the construction of high-quality housing and open space that forms part of broader Waterloo Metro Quarter for a vibrant mixed-use precinct and a well-designed and engaging public realm, above and around a new metro station. On completion, the proposal for the wider Waterloo Metro Quarter will contribute towards the area's housing diversity, replenishing affordable and social housing stock in the area, providing student housing and delivering new public open space. It also provides commercial floor space in proximity to the innovation and tech precinct from Central Station to Eveleigh, increasing investment opportunities along the emerging innovation corridor.

### **3.3 Future Transport Strategy 2056**

The Strategy was published by Transport for NSW to align with the Greater Sydney Commission's Regional Plans and sets out a transport vision, directions and outcomes framework for NSW to guide transport investment and policy. The aim is to achieve greater capacity, improved accessibility to housing, jobs and services and continued innovation. A planned and coordinated set of actions is set out to address challenges faced by the NSW transport system to support the State's economic and social performance over 40 years.

The proposal is consistent with the key outcomes of the Strategy as:

- it would provide new jobs and open space above and around a new Metro station
- it will encourage the use of the new Metro station, other forms of public transport, walking and cycling
- the site is located within walking distance to other high frequency public transport services including bus services and existing rail station
- the proposal provides for active transport options by providing bicycle parking spaces and end-of-trip facilities for walkers, runners and cyclists

### **3.4 Sydney Metro City and Southwest Project**

Sydney Metro is Australia's largest public transport project and a city-shaping project. The Sydney Metro City to Southwest stage of the project has an investment value over \$11 billion. With this significant public investment in transport infrastructure comes a number of benefits and opportunities for placemaking and transit-oriented development to provide jobs, homes, a new public domain and community infrastructure around new stations.

The proposal would take advantage of the Government's investment in public transport by locating residential and commercial premises, generating ongoing jobs, as well as retail tenancies above and around the new Waterloo Station.

## 4 Statutory Context

### 4.1 State significance

The proposal is SSD under section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as the development is permissible with consent and has a CIV in excess of \$30 million for the purpose of residential accommodation (affordable housing and student accommodation) associated with railway infrastructure under clause 8 of State Environmental Planning Policy (State and Regional Development) 2011.

In accordance with section 4.5(a) of the EP&A Act, clause 8A of State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP), the Minister for Planning and Open Spaces is designated as the consent authority for the applications.

However, under the Minister's delegation, the Executive Director, Regional and Key Sites Assessments may determine the application as:

- there have been less than 50 submissions in the way of objection
- no objection was received from Council
- no reportable political donation has been made by the Applicant.

### 4.2 Permissibility

The site is located within the B4 – Mixed Use zone under the Sydney Local Environmental Plan 2012 (SLEP). The proposed student housing and social housing buildings are permissible with consent. See **Appendix C** for the Department's detailed assessment against the zone objectives.

### 4.3 Other approvals

Under sections 4.41 and 4.42 of the EP&A Act, a number of other approvals are either integrated into the SSD approval process and consequently are not required to be separately obtained for the proposal or are required, but must be substantially consistent with any development consent for the proposal (e.g. approvals for any works under the Roads Act 1993).

The Department has consulted with the relevant public authorities responsible for integrated and other approvals, considered their advice in its assessment of the proposal, and have included suitable conditions in the recommended conditions of consent (see **Appendix G**).

### 4.4 Mandatory Matters for Consideration

Section 4.15(1) of the EP&A Act outlines the matters that a consent authority must take into consideration when determining development applications. These matters are summarised as:

- the provisions of any environmental planning instruments (including draft instruments), development controls plans, planning agreements, the Environmental Planning and Assessment Regulation 2000
- the likely environmental, social and economic impacts of the development
- the suitability of the site for the development
- any submissions

- the public interest, including the objects in the EP&A Act and the encouragement of ecologically sustainable development (ESD).

The Department has considered all of these matters in its assessment of the proposal, as well as the Applicant's consideration in its EIS and RtS, as summarised in **Section 6** and **Appendix E** of this report.

## 4.5 Scope of modifications

Section 4.55(1A) of the EP&A Act outlines the matters that a consent authority must take into consideration when determining an application that seeks to modify an SSD application. The matters for consideration under section 4.55(1A) of the EP&A Act that apply have been considered in **Table 3**.

**Table 3 | Assessment against Section 4.55 of the EP&A Act**

Section 4.55 (1A) Evaluation	Consideration
a) that the proposed modification is of minimal environmental impact, and	<p><b>Section 6</b> of this report provides an assessment of the impacts associated with the modification application.</p> <p>The Department is satisfied that the proposed modification will have minimal environmental impact. The rooftop structures being added as permissible above the approved building envelope of the social housing building are considered to have minimal and acceptable impact. The use of the podium levels of the student housing tower for student communal activities are considered to have minor and would result in minimal environmental impact.</p>
b) that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all), and	<p>The Department is satisfied that the modification application is substantially the same development as the approved development. The modifications proposed to the social housing building roof are necessary to accommodate the needs of the building and are detailed design matters requiring coordination with the Concept Approval. The student housing tower podium use maintains the Concept Approval's intention of having no residential accommodation in the form of dwellings in the podium. The proposed podium would have the appearance of a fully commercial use despite the student housing communal facilities.</p> <p>Therefore, the modification does not alter key reasons for which the original development consent was granted.</p>
c) the application has been notified in accordance with the regulations, and	<p>The Department referred this application to Council. The application is also made publicly available on the Departments website. See <b>Section 5.7</b>.</p>

d) any submission made concerning the proposed modification has been considered.

A submission from Council was received. Council raised no objections to the proposal.

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#### **4.6 Planning Secretary's Environmental Assessment Requirements**

The Department is satisfied that the EIS and RtS adequately address the Planning Secretary's Environmental Assessment Requirements (SEARs) to enable the assessment and determination of the Stage 2 detailed development application. Furthermore, the Department is satisfied the proposed Concept modification remains consistent with the SEARs issued for the original Concept Application.

#### **4.7 Biodiversity Conservation Act 2016**

Under section 7.9(2) of the Biodiversity Conservation Act 2016 (BC Act), SSD applications are *"to be accompanied by a biodiversity development assessment report (BDAR) unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values"*.

On 24 July 2020, the Environment, Energy and Science Group (EESG) determined that the proposed development is not likely to have any significant impact on biodiversity values and that a BDAR is not required. The Department supported EESG's decision and on 28 July 2020 also determined that the application is not required to be accompanied by a BDAR.

## 5 Engagement

### 5.1 Department's engagement

In accordance with Schedule 1 of the EP&A Act, the Department publicly exhibited the proposed SSD application between 5 November 2020 and 2 December 2020 (28 days):

- on the Department's website
- at NSW Service Centres
- at City of Sydney's One Stop Shop.

The Department notified adjoining landowners, previous submitters to the original Concept Approval and relevant Government agencies in writing regarding the SSD.

The Department also inspected the site and surroundings on 25 November 2020 to gain a better understanding of the issues raised in submissions.

### 5.2 Summary of submissions

The SSD application received 27 submissions (16 objecting, 1 supporting and 10 providing comments), including:

- eight from Government agencies
- one submission from Council
- six from special interest groups
- 12 from the public.

A link to all submissions is provided at **Appendix A**.

### 5.3 Key Issues – Government agencies

A summary of the Government agencies submissions to the SSD is provided in **Table 4**.

**Table 4 | Summary of Government agency submissions**

#### Environmental Protection Agency (EPA)

- |            |   |
|------------|---|
| <b>EIS</b> | EPA did not object to the proposal, however it provided the following comments: <ul style="list-style-type: none"><li>• proposal does not constitute a Scheduled Activity under Schedule 1 of the Protection of the Environment Operations Act 1997.</li><li>• any consent should include acceptable vibration and ground borne noise limits for spaces within the development drawn from the EPA's Rail Infrastructure Guidelines and Assessing Vibration: A Technical Guideline</li><li>•</li></ul> |
|------------|---|

#### Environment, Energy and Science Group (ESS)

- |            |   |
|------------|---|
| <b>EIS</b> | EES did not object and made the following comments: <ul style="list-style-type: none"><li>• the proposal is unlikely to impact on biodiversity values. A Biodiversity Development Assessment Report (BDAR) waiver was issued on 24 July 2020</li><li>• flood level mapping for multiple scenarios is required</li></ul> |
|------------|---|

- further information on flood mitigations measures are required
- if flood impacts on downstream properties cannot be reduced to a tolerable level, detailed investigation of the flood affected properties is necessary
- assurance is required from Ausgrid on one of the floor levels which is below the 1% AEP and houses substations
- a flood emergency management plan is required, particularly around floor levels, areas for refuge and flood evacuation.

**RtS** EES had remaining issues with flood evacuation and recommends review of a range of storm durations is needed to inform future flood emergency management. EES advised that neither a floor emergency plan nor details emergency management procedures are necessary at the DA stage. The Applicant has since submitted additional information, including data on storm durations in response to EES's concerns.

### Transport for NSW (TfNSW)

**EIS** TfNSW did not object and made the following comments:

- independent road safety audits for loading docks should be prepared as part of the RtS
- update the Green Travel Plan in consultation with TfNSW prior to the issue of an Occupation Certificate
- Green Travel Plan should be implemented and updated annually
- update the Transport Access Guide in consultation with TfNSW prior to the issue of an Occupation Certificate
- prepare a final Construction Pedestrian and Traffic Management Plan in consultation with TfNSW and submit a final copy for endorsement prior to the issue of any Construction Certificate or any early works
- review inconsistencies in Freight and Servicing Management Plan
- a single loading dock is likely to be insufficient for the Southern Precinct with seasonal movements of student residents at the end of semester
- update the Freight and Servicing Management Plan in consultation with TfNSW prior to the issue of any Construction Certificate
- bicycle facilities should be located in secure, convenient, accessible areas close to main entries.

**RtS** TfNSW recommended a series of conditions of consent be imposed regarding road safety audits, travel planning, construction management and freight/servicing management, which are reflected in the Department's recommended conditions.

### Sydney Metro Corridor Protection Team

**EIS** Sydney Metro advised that concurrence is not required for the SSD and that Sydney Metro has no comments

### Sydney Water

**EIS** Sydney Water provided advice on:

- what works may be required to provide water servicing, recycled water, wastewater and stormwater
- the presence of a major stormwater channel on the west side of Cope Street and likely within the footpath



- detailed servicing requirements will be subject to a Section 73 Certificate at the Construction Certificate phase.

#### NSW Health – Sydney Local Health District

<b>EIS</b>	<p>NSW Health did not object and made the following comments in relation to human health impacts:</p> <ul style="list-style-type: none"> <li>• support consideration given to several factors comprising active and public transport; sustainability and adaptation; equity and affordable housing; mixed use development associated with major public transport hub; and design that is sensitive to the existing varied community and area</li> <li>• the detailed SSD improves upon the original concept design in relation to the abovementioned factors</li> <li>• broader cumulative impacts of concurrent and consecutive projects should be taken into account</li> <li>• support the amendments from the concept resulting in fewer residents experiencing traffic noise</li> <li>• all reasonable and feasible measures should be adopted to mitigate road traffic noise</li> <li>• access to car parking, bike parking and car share should be equitable across social housing, affordable housing and private housing</li> <li>• support water recycling, but public health risks need to be managed</li> <li>• remediate the site as outlined in the Contamination Assessment</li> <li>• include the SLHD guidelines <i>Building Better Health</i> as a reference when considering the health impacts of the development.</li> </ul>
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#### Sydney Airport Corporation

<b>EIS</b>	No objection, and noted that a controlled activity approval has already been issued for the Concept Application.
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#### Civil Aviation Safety Authority (CASA)

<b>EIS</b>	No objection, and noted that a controlled activity approval has already been issued for the Concept Application.
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#### Fire and Rescue NSW

<b>EIS</b>	No comments were received.
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#### NSW Police

<b>EIS</b>	No comments were received
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## 5.4 Key Issues – Council

A summary of Council's submissions is provided in **Table 5**.

**Table 5 | Summary of Council submission**

#### City of Sydney Council (Council)

**EIS**

Council initially objected to the proposal and raised the following concerns:

**General issues:**

- non-compliance with SLEP and Design Guidelines on active street frontages
- insufficient building separation below Level 9 between social housing building and student housing tower for privacy
- wind comfort within Cope Street Plaza and surrounding retail tenancies
- extent and design of deep soil landscaping
- bollard spacing and placement within Cope Street Plaza and shared zone
- detailed materials, colours, finishes schedule and sample boards should be provided for all buildings
- car parking is excessive and should be constrained or zero to reduce conflict between people walking and people driving through shared zone.

**Student Housing Tower:**

- blank side walls on north and east elevations
- alternative materials or textures necessary for east elevation
- greater clarity required regarding materials and finishes
- additional western sun shading through operable shade devices
- northern sun shading is required
- communal terrace should achieve wind criteria for sitting
- bike parking should be provided as 1 space per apartment.

**Social Housing Building:**

- solar access to apartments
- calculation of sunlight to living spaces questionable
- issues with claimed number of cross ventilated apartments
- demonstrate compliance with SEPP (Infrastructure) for internal noise criteria
- top of building signage is inconsistent with Sydney DCP and should not be approved.

**Other:**

Council also provided the following comments:

- makerspace should be operated by a non-government organisation or not-for-profit operator and subject to a Voluntary Planning Agreement
- awning design should address signage, weather protection and clearance for vehicles, trees and infrastructure
- landscape drawings lack detail such as levels and sections
- existing street trees should be retained and protected
- prepare a dilapidation report for Waterloo Congregational Church
- prepare a detailed Heritage Interpretation Strategy
- traffic modelling data requires clarifications
- bike parking and end-of-trip facilities should be maximised
- loading and unloaded spaces are under provided
- sustainability ratings and targets should be clarified and made stronger
- strengthen Public Art Strategy by artists accessing materials budgets for awnings and paving, working with landscape architects through design and species selection and expressions of interest for Aboriginal artists
- proposal should demonstrate sufficient waste storage infrastructure
- a holistic signage strategy should be subject to a separate application to Council

- clarity is required on the extent of the public domain works under the CSSI and SSD.

Council also provided a separate technical memo prepared by Flux Consultants on the proposed ventilation details provided with the EIS. The technical memo raised issues in relation to the detailed design of the ventilators chosen to provide natural ventilation to noise-affected apartments.

## RtS

Council withdrew its objection to the SSD and provided the following comments:

- a more coordinated approach between Waterloo Metro Quarter, Waterloo Estate and Botany Road Precinct would have been preferable
- Design Guidelines should have been finalised prior to lodgement of the SSD
- responses provided by Applicant to the Apartment Design Guide (ADG) are not consistent with how to apply the ADG in regard to solar access, natural cross ventilation, natural ventilation and visual privacy
- makerspace should be subject to a VPA or secured through other mechanism
- the Wind Assessment shows improvements to pedestrian amenity and compliance with comfort and safety criteria. However, wind outcome relies on tree canopy coverage, so tree depth and volume should be provided.
- awnings over footpaths should be conditioned to comply with Sydney DCP
- student housing tower north and east walls should have greater variety in material colour for cladding
- parapets on both buildings should be raised a minimum 1m - 1.5m above roof level to obscure views to services, exhausts and plant, subject to any overshadowing impact on Alexandria Park
- parapet near solar panels should be raised 1.5m to conceal the panels
- recommend condition of consent requiring specific materials and finishes schedule and no substitutes permitted without first consulting the Design Review Panel
- high performance and heavily tinted glazing is not supported
- sun shading to the student housing tower should be by externally mounted and operable screens
- more generous horizontal and vertical sun shade fins should be provided
- social housing building should have operable external screens, otherwise should have fixed angles to louvers which allow morning sunlight through
- do not support extending the assessment time for solar access beyond 9am and 3pm midwinter
- building separation in the ADG is misrepresented – the requirements should be measured from ground level
- natural cross ventilation in the ADG is misrepresented – apartments have been counted which are not naturally cross ventilated
- trip generation for the student housing tower does not account for students parking on local streets or taxis and rideshare movements
- traffic modelling should have considered forecast from Waterloo Estate to the east. However, noted that this information is not currently available.
- bike parking for student housing tower should be increased
- public art opportunities should be open Expressions of Interest for all First Nations' artists to apply.
- recommend conditions of consent requiring consultation with Council's public art team regarding shortlist of artists before selection
- waste bin allocation should be consistent with Council's Guidelines.

- recommend increasing the depth of Level 3 garden beds on the student housing tower at the edges rather than tapered depth to zero
- recommend green roofs replace any bare roof space and around photovoltaic cells
- flooding at street level may have an impact on the proposal – in one particular spot adjacent to the Central Precinct along Botany Road
- top of building signage is not supported
- remediation to a standard suitable for residential use and open space is necessary
- any land to be dedicated to Council will need to be remediated to minimum depth of 1.5m and no Long Term Environmental Management Plan attached.

Note: Council also submitted to the concurrent Basement SSD RfS that more bicycle parking should be provided in the basement for the Southern Precinct.

## 5.5 Key Issues – Community and public interest groups

The Department received a total of 12 submissions from the community and six from special interest groups, comprising 15 objections, one in support and two providing comments. A summary of the key issues raised in submissions is provided in **Table 7** below:

**Table 7 | Summary of submissions**

Issue	%
Height of student tower	22 %
Student housing not necessary in area	22 %
More social housing needed	17 %
Height of both buildings should transition to neighbouring properties	11 %
Amenity impacts on properties – privacy, views and shadowing	11 %

Other issues raised in individual submissions were:

- students will not look after the area
- student housing may be converted to a boarding house
- more affordable housing is needed
- increase student housing tower setback from Wellington Street
- Cope Street Plaza is not a public space
- reduce scale and density of Waterloo Metro Quarter in general
- more green space and local parks
- cultural space needed
- wind impacts on public space
- local traffic issues
- noise from loading dock
- coordination required with Waterloo Estate
- heritage impacts on Alexandria Park Conservation Area.

## 5.6 Response to submissions

Following the exhibition period, the Department placed copies of all submissions received on its website and requested the Applicant provide a response to the issues raised in the submissions.

On 15 February 2021, the Applicant submitted its Response to Submissions (RtS) which provided further justification and clarification for the proposed development.

On 6 April 2021, the Applicant submitted a response to request for information from the Department.

The RtS was accompanied by the following:

- supplementary technical reports responding with further analysis and recommendations in relation to matters raised in submissions, including further wind impact assessment, additional ecologically sustainable development review, further traffic and parking analysis, etc
- modified architectural plans

The RtS was made publicly available on the Department's website and was referred to relevant Government agencies and Council. An additional two submissions were received from Government agencies and a submission from Council.

All public authorities re-stated the recommendations of their EIS submissions.

Council advised the RtS did not address its concerns in relation to apartment amenity, materials and finishes and landscaping. However, Council downgraded its submission from an objection to comments.

## 5.7 Modification Application

The Concept Approval Modification was referred to relevant Government agencies and made available on the Department's website. However, the notification requirements of the EP&A Regulation do not apply to a Section 4.55(1A) modification with minimal environmental impacts. Accordingly, due to the minor nature of the proposed modifications, the application was not publicly notified.

A submission from Council was received. Council raised no objections to the proposal. However, Council recommended sufficient parapet heights be incorporated into the proposal to screen services and plant. Council referred to its submission to the Response to Submissions for the SSD.

## 6 Assessment

The Department has considered the EIS, the issues raised in submissions, the Applicant's RtS and the Applicant's additional information in its assessment of the proposal.

The Department considers the key assessment issues associated with the proposal are:

- built form
- land use
- amenity impacts
- public domain
- parking and traffic.

All other issues associated with the proposal have been considered in **Section 6.6**.

### 6.1 Built form

The Concept Approval established the maximum permitted building envelope and gross floor area (GFA) for the Southern Precinct, which includes:

- a maximum building height of RL 96.9 (82m) relating to the student housing tower;
- a maximum building height of RL 64.06 (49m) relating to the mid-rise social housing building;
- a rectilinear building envelopes and accompanying Design Guidelines providing guidance and criteria for detailed design; and
- a maximum overall GFA for the Waterloo Metro Quarter of 68,750m<sup>2</sup>.

Having carefully considered the scale, height and form of the proposed buildings, the Department considers the key issues for consideration are:

- building height and scale
- building separation
- building articulation.

#### 6.1.1 Building height and scale

The proposal seeks approval for a student housing building of 25 storeys on the corner of Botany Road and Wellington Street and a social housing building of 9 storeys on the corner of Wellington Street and Cope Street, above the station building (**Figure 21**).





**Figure 21 | Artists Impression of the proposed buildings as viewed from the corner of Wellington Street and Cope Street (Source: Applicant's EIS)**

Public submissions raised concerns about the height and scale of the student housing tower, arguing it should be reduced to provide a better transition to the surrounding development and minimise bulk and scale. Public submissions also raised concerns about the student housing tower being 25 storeys in height, when the indicative plans in the Concept Approval showed the building being 23 storeys in height.

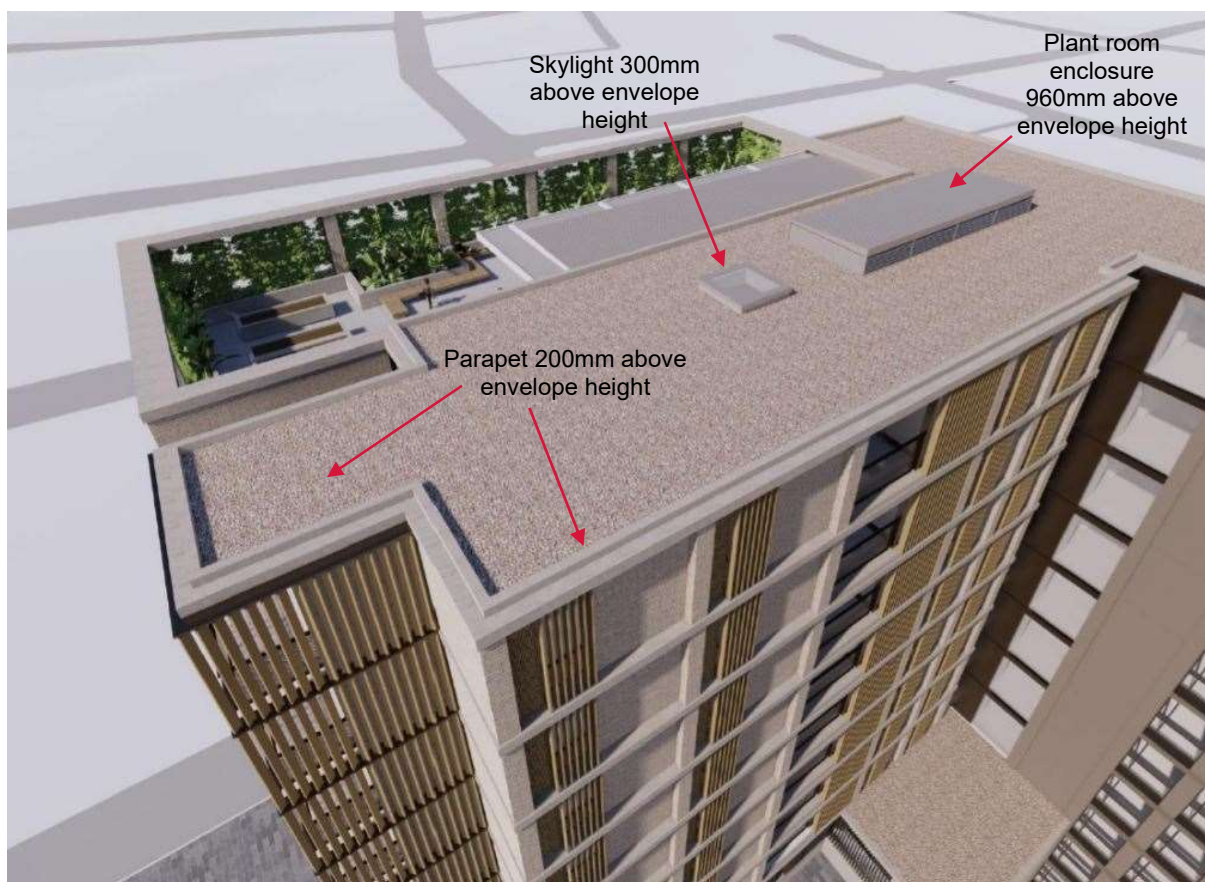
The Applicant argues the height of the student housing tower is 3 m lower than what is permitted in the Concept approval, the form is responsive to the future desired character of the site and surrounding area and the design is supported by the DRP.



The Department notes the proposed student housing tower has a maximum height of RL 93.95, which is 2.95m less than the maximum height approved under the Concept Approval and it complies with the SLEP height control of RL 96.9. The proposed building also steps down to RL 90.5 and RL 87.35 to provide some modulation (**Figures 17 and 18**).

The Department also notes the Concept Approval was accompanied by an indicative design showing a 23 storey tower on the corner of Botany Road and Wellington Street. However, the Concept Approval does not restrict the number of storeys that can be accommodated with the maximum building envelope. The proposed student housing tower has 25 storeys primarily due to reduced floor-to-floor heights compared to the indicative market housing scheme shown in the Concept Approval.

With regard to the mid-rise social housing building, the Department notes it has a maximum height of RL 64.06, which is equal to the Concept Approval maximum height. However, the modification seeks approval for three minor height projections relating to a raised parapet, a skylight and a plant room enclosure on the roof level in the detailed design which are 200mm, 300mm and 960mm above the approved envelope respectively (**Figure 22**).



**Figure 22 | Building envelope projections for social housing building (Source: Applicant's Concept Modification)**

The Department has carefully considered the proposal against the Concept approval and the issues raised in submissions. Overall, the Department is satisfied the proposed building heights are appropriate because:

- the buildings are located above and adjacent to the new Metro station and the site is suitable for higher scale development

- the proposed student housing tower fully complies with the maximum height controls set out in the concept approval and the SLEP and it provides suitable modulation in building heights as it steps down towards the Waterloo Congregational Church to the north
- while the mid-rise social housing building includes some roof top elements which project beyond the approved concept envelope, the projections are considered to be acceptable as,
  - the overall building is 33m lower than the maximum LEP height control;
  - the proposed skylight and plant enclosure are located away from the street boundaries and are not visible from street level;
  - the raised parapet height is minor and would not be perceptible from the street level due to the 200mm difference between approved and proposed.
- the proposed building heights are acceptable in relation to overshadowing as they would not result in any additional overshadowing of Alexandria Park and would generally maintain complying solar access to residential properties to the west and south (refer **Section 6.3**).

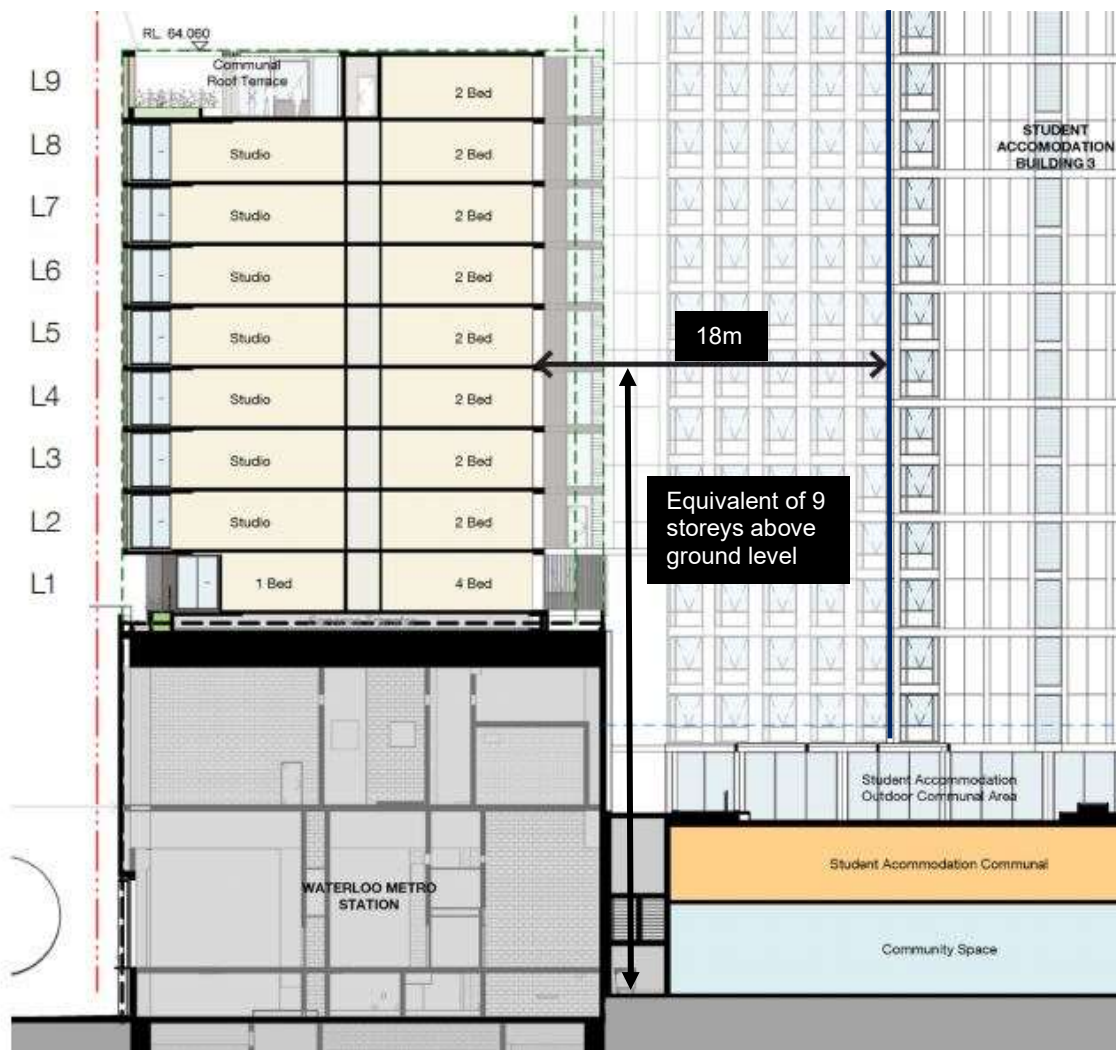
The Department's assessment therefore concludes the proposed building heights are acceptable as they are largely consistent with the Concept Approval, they fully comply with the SLEP height controls and would not result in any significant visual or amenity impacts.

#### 6.1.2 Building Separation

The Apartment Design Guide (ADG) recommends a 24m building separation for buildings at 9 storeys and above to improve amenity in relation to visual and acoustic privacy, outlook, natural ventilation and daylight access.

The building separation between the proposed social housing building and the student housing tower is 18m which is 6 m less than the 24 m separation distance recommended in the ADG. The Department considers the required 24m separation distance applies from Levels 5 to 9 (5 floors) of the proposed social housing tower given it sits on top of the future Metro Station which has an equivalent height of five storeys (**Figure 23**).

The reduced separation distance affects two apartments per floor (10 of out 70 apartments) within the eastern elevation of the social housing building and 20 apartments within the western elevation of the student housing building.



**Figure 23 |** Section showing building separation between student housing tower and social housing building (Base source: Applicant's EIS)

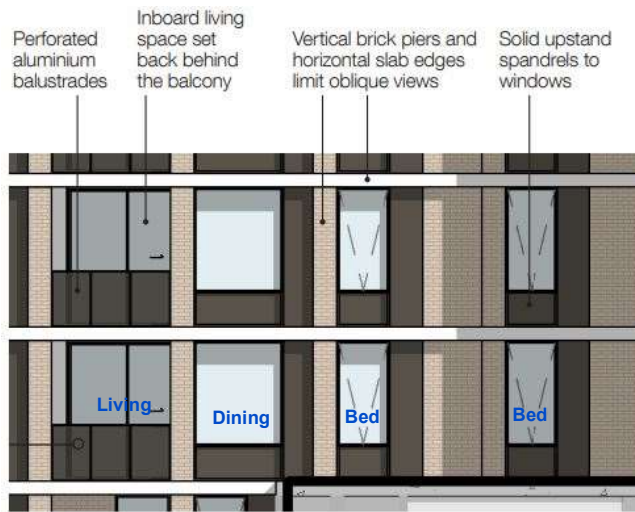
Council raised concerns about potential visual privacy impacts between the buildings. Council recommended the proposed privacy screens to the student housing building be replaced by an alternative such as bay windows with angled glazing toward the north and a solid material to the east to give student housing occupants views away from the social housing building.

The Sydney Metro Design Review Panel (DRP) recommended the Applicant review the design of the western facade of the student housing tower in response to the reduced building separation distance and to improve amenity between the two buildings.

In response to the DRP feedback and Council's submission, the Applicant provided further information on the proposed design and contended that mitigating measures were not necessary, as:

- the west elevation of the social housing building has a reduced glazing area and a greater proportion of solid materials comprising brick wall piers, spandrels panels to windows and perforated balustrades in front of living room windows (**Figure 24**)

- the east elevation of the student housing tower has fixed screening covering 21% of the east facing windows, spandrel panels to waist height of windows and internal roller blinds for occupant control (**Figure 25**).



**Figure 24** | Close view of social housing west elevation showing solid elements (Source: Applicant's RtS)



**Figure 25** | Close view of student housing east elevation showing solid elements (Source: Applicant's RtS)

Following consideration of the additional information, the DRP subsequently advised the proposed design measures were supported and the extent of non-compliance was considered minor across the impacted levels.

The Department acknowledges the proposed building separation is less than the 24m as recommended by the ADG, but the Department considers the reduced distance is acceptable in this case because:

- the elevations are considered to have suitably solid facades to reduce visual and acoustic privacy impacts to an acceptable level despite the non-compliance
- the buildings have acceptable outlook, natural ventilation and daylight access despite the non-compliance (see **Section 6.3**)
- the combination of solid building materials and blinds would appropriately minimise overlooking between apartments.

The Department has also considered the merits of the proposed building separation in relation to built form and massing. The Department considers the proposed building separation would result in an acceptable built form outcome as both buildings have satisfactory height (**Section 6.1.1**) and floor layouts, and as the relevant affected area is not visible from the public domain. Strict imposition of the 24m ADG recommendation would result in a portion of the social housing building being removed from the rear elevation (west elevation) in the centre of the building, which would have a negligible change to the external appearance of the proposal.

For these reasons, the Department considers the building separation is acceptable.



### 6.1.3 Building Articulation

Council raised concerns that the north and east elevations of the proposed student housing building features large expanses of solid cladding. Council advised that while articulation is achieved by horizontal and vertical framing with infill panels, the materials for each panel element are the same and should be more varied.

Council recommended the design of the student housing tower would be improved by adding a window to the east wall of the studios in the south-east corner on levels 6 and above. Council also recommended the elevations could be further articulated by using alternate materials or textures for the infill panels, with the east elevation noted as being of particularly dark in colour.

In response to Council's concern, the Applicant amended the proposal to include an additional window to the south east studio apartments on the eastern elevation of the tower (**Figure 26**) and it also provided additional information on proposed materials and finishes.



**Figure 26** | Left: Proposed east elevation at EIS stage containing long wall without further articulation. Right: Proposed east elevation at RtS stage incorporating windows (Source: Applicant's EIS)

The Department notes the proposed new windows to the east elevation and materials and finishes were presented to DRP on 28 January 2021. The DRP supported the additional windows to the studios and the proposed student housing tower materials and finishes. The DRP recommended the

selected materials and proposed glazing be maintained throughout the design process into the Construction Certificate documentation.

The Department agrees with the advice of the DRP and also supports the additional windows and the proposed materials and finishes. In particular, the Department agrees the windows will help break up the solid cladding to the eastern elevation, whilst also providing solar access and easterly views to the corner studio apartments, and the bronze coloured aluminium exterior cladding is considered a suitable choice.

The Department's assessment therefore concludes the revised articulation and building materials are acceptable and the proposal would result in a high-quality design outcome for the site. The Department also recommends a condition of consent requiring the materials and finishes be reviewed prior to the Construction Certificate phase and further recommends any variations to those materials to be presented to the DRP (**Conditions B11 and B12**).

## 6.2 Land use

The proposal provides a total of 18,789m<sup>2</sup> (excluding station floor space), including:

- 12,144m<sup>2</sup> for student housing
- 5,431m<sup>2</sup> for social housing
- 1,214m<sup>2</sup> non-residential uses for gym and retail premises with the podium.

The Concept Approval provides for a maximum of 68,750m<sup>2</sup>, including a minimum of 12,000m<sup>2</sup> of non-residential floor space across the overall Waterloo Metro Quarter. The Amending Concept Approval (SSD 10441) changed the land use mix of the Waterloo Metro Quarter to provide 30,000m<sup>2</sup> of residential floor space and 35,000m<sup>2</sup> of commercial floor space.

The Department notes the proposed uses and gross floor area comply with the Amending Concept. Together with the proposals for the basement, Northern Precinct and Central Precinct, the proposal would remain consistent with the gross floor area and land uses envisaged for Waterloo Metro Quarter.

### 6.2.1 Student Housing

The proposed student housing tower would provide 435 rooms to accommodate up to 474 students.

Public submissions raised concern there is already an oversupply of student housing in the area. Submissions also considered the proposed student housing is inconsistent with the community's vision for the area, because transient residents from student housing would adversely impact the sense of place and community for the area.

The Applicant contends that while the current Covid-19 pandemic will significantly impact demand in the short term, there will be growth in demand for student housings in the inner-city area in the longer term. The Applicant also argues that the student accommodation will diversify the resident population and benefit the night-time economy in the area.

The Department has considered the concerns raised in submissions and the Applicant's response. The Department considers the proposed student housing is an appropriate use for the site because:

- the use is permissible in the B4 Mixed Use Zone under Sydney LEP 2012 and consistent with the objectives of the zone to provide a mixture of compatible uses
- the site is ideally located to accommodate student given its proximity to four university campuses and excellent access to public transport, amenities and services
- an Operational Plan of Management has been provided outlining the systems and procedures to be put in place for matters such as resident house rules, property maintenance and communications to residents.

The Department's assessment therefore concludes the proposed student accommodation is acceptable and it is consistent with the Concept approval. The Department also recommends conditions requiring a final Operational Plan of Management be prepared and submitted for approval prior to the issue of an Occupation Certificate to ensure the building is well managed and residents are made aware of operational expectations.

### **6.2.2 Social and Affordable Housing**

Submissions raised concerns about the proposed 70 social housing apartments being insufficient to meet existing demand. Some submissions also considered that isolating the proposed social housing apartments to one building may create community stigma.

The Applicant contends that the proposal provides a total of 70 social housing apartments and is consistent with the Concept Approval and the proposed 24 affordable housing dwellings in the Central Precinct is consistent with the requirements of the SLEP 2012.

The Department accepts the proposed 70 social housing apartments are consistent with the Concept Approval. The Department notes the proposed social housing was commissioned by the NSW Land and Housing Corporation (LAHC) and would be transferred to LAHC once completed. The Department notes the proposed single housing tower (rather than blending social housing in with market housing) is required for transfer of the future stratum lot to LAHC's ownership and to suit LAHC's management and operating model.

The Department is also satisfied the proposed social housing would be co-located with a mix of commercial and residential uses across the Waterloo Metro Quarter, including student and affordable housing to support the social mix.

Clause 6.45 of the SLEP 2012 requires 5% of the total residential floor area of the Waterloo Metro Quarter. The Department notes the proposed 24 affordable housing dwellings in the Central Precinct would exceed 5% of the total residential GFA across the Waterloo Metro Quarter and would satisfy the requirements of the SLEP. The affordable housing apartments within the Central Precinct would be transferred to a Registered Community Housing Provider.

In summary, the Department's assessment concludes the proposed land use mix is appropriate because it:

- would deliver 70 social housing dwellings and 435 student apartments which would contribute to a diverse mixed-use development around high frequency public transport as envisaged by the regional plan for the Eastern Harbour City and the Sydney LEP 2012
- is consistent with the Concept in terms of density and distribution of a range of land uses.



## 6.3 Amenity impacts

### 6.3.1 Overshadowing of Alexandria Park

The Concept Approval requires the Waterloo Metro Quarter development to:

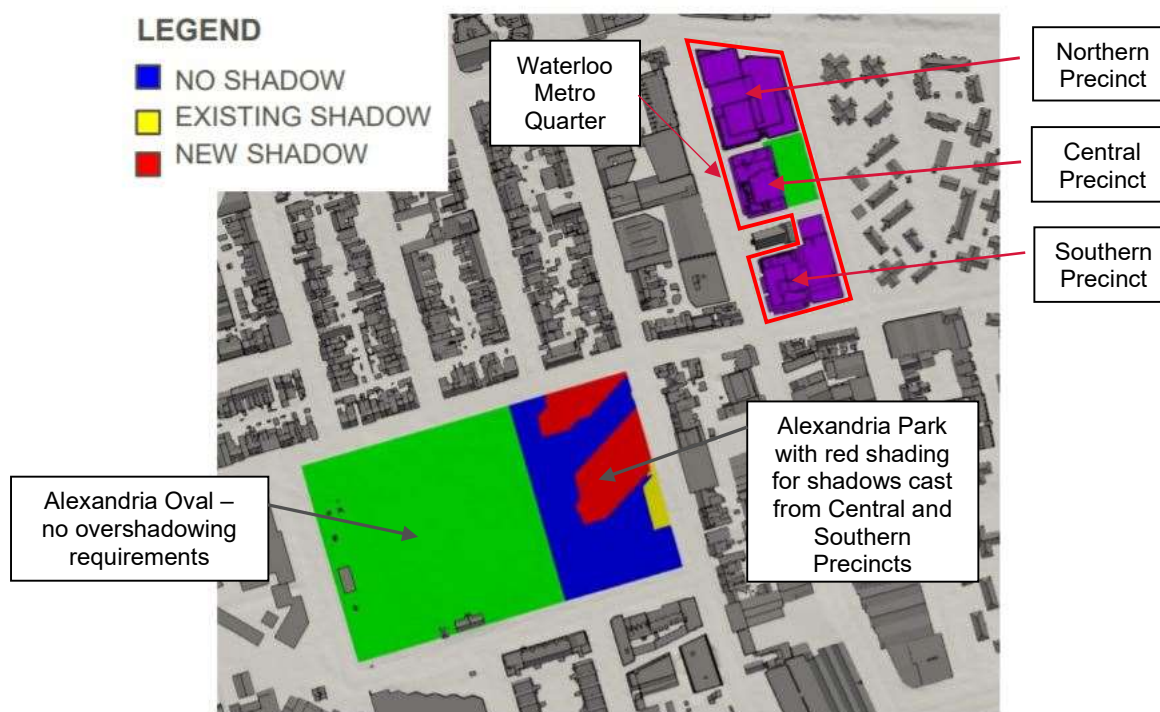
- limit overshadowing impacts to Alexandria Park to a maximum of 30% of the area of the Park after 9am in midwinter
- result in no shadows on the Park after 10am in midwinter
- identify opportunities to improve solar access to Alexandria Park between the hours of 9am and 10am in midwinter when compared to the shadows cast by the indicative scheme lodged with the Response to Submissions for the Concept Approval.

The endorsed Design Guidelines also requires a maximum of 30% of overshadowing of Alexandria Park after 9am and no overshadowing of the Park after 10am.

Council advised the proposal does not achieve sufficient improvements to solar access compared to the Concept Approval as required by Section 3K of the endorsed Design Guidelines.

Public submissions raised concerns with overshadowing impacts to Alexandria Park.

The proposal is supported by solar analysis which identifies the potential overshadowing impacts of the proposed buildings to Alexandria Park. The submitted shadow diagrams identified the overshadowing impacts from the Waterloo Metro Quarter are cast by the proposed buildings in the Central and Southern Precincts (**Figure 28**).



**Figure 28 |** Overshadowing analysis on Alexandria Park showing impact caused from Central and Southern Precinct buildings at 9:30am in midwinter (Source: Applicant's EIS)

The Department engaged an independent solar access consultant to review the Applicant's shadow analysis. The Department's consultant accepted that the Applicant's analysis is accurate and advised the modelling provided sufficient detail to assess the proposal.

The submitted shadow analysis demonstrates that no more than 30% of Alexandria Park is overshadowed between 9am and 10am midwinter and no shadows from Waterloo Metro Quarter are cast on the Park after 10am in midwinter (**Table 8**), consistent with the requirements of the Concept Approval.

**Table 8 | Summary of overshadowing of Alexandria Park between 9am and 10am midwinter**

Approved and proposed development	Overshadowing of Park
Concept Approval building envelopes – 9am	49.65 %
<b>Southern Precinct detailed design – 9am</b>	<b>29.94 %</b>
Concept Approval building envelopes – 10am	2.6 %
<b>Southern Precinct detailed design – 10am</b>	<b>0 %</b>

In relation to improvement in solar access to the Park between 9am and 10am compared to the indicative scheme lodged with the Concept Approval (i.e. not the approved building envelopes but the indicative design lodged at the time), the Department notes the Central and Southern Precinct designs comply with this requirement. At 9am in midwinter there is a 2.04% improvement in the area of the Park affected, which incrementally reduces to a 0.17% improvement at 10am.

The Department considers the proposal fully complies with the requirements of the Concept Approval and associated Design Guidelines and has acceptable overshadowing impact on Alexandria Park, noting:

- the proposed student housing tower has a building height between 3.95m and 9.55m less than the LEP maximum height and Concept Plan building envelope height (RL 96.9)
- the proposal has been carefully designed with setbacks and height steps to comply with all requirements
- whilst improvement in solar access to the Park are minor, it nonetheless satisfies the Design Guidelines
- no overshadowing of the park would occur after 10 am which is considered a reasonable outcome given the site's context where multi storey development is anticipated and supported by the planning controls.

Based on the above, the Department concludes the overshadowing impacts of the proposal to Alexandria Park is acceptable.

### 6.3.2 Overshadowing of private properties

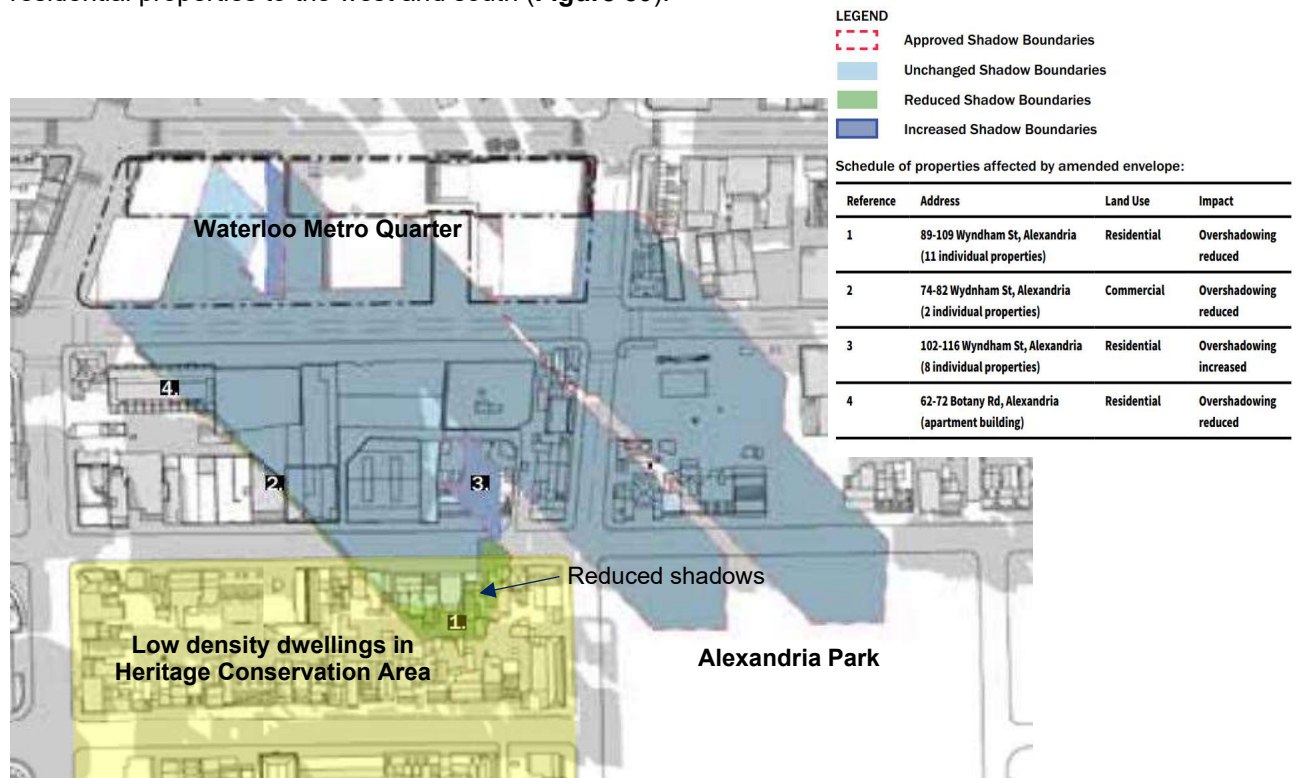
Public submissions raised concerns about overshadowing of:

- the north facing windows, a lightwell and the rooftop at 180 Cope Street which is located to the south of the site;
- an apartment in 138-140 Botany Road located to the south-west of the site;
- the Wellington Street terraces and the Cauliflower Hotel located to the south; and
- terraces within the Heritage Conservation Area located to the west.

Council acknowledged the improvement to solar access to residential properties in the Heritage Conservation Area due to the reduced height of the Amending Concept SSD and Northern Precinct Detailed Design compared to the Concept Approval (**Figure 29**).

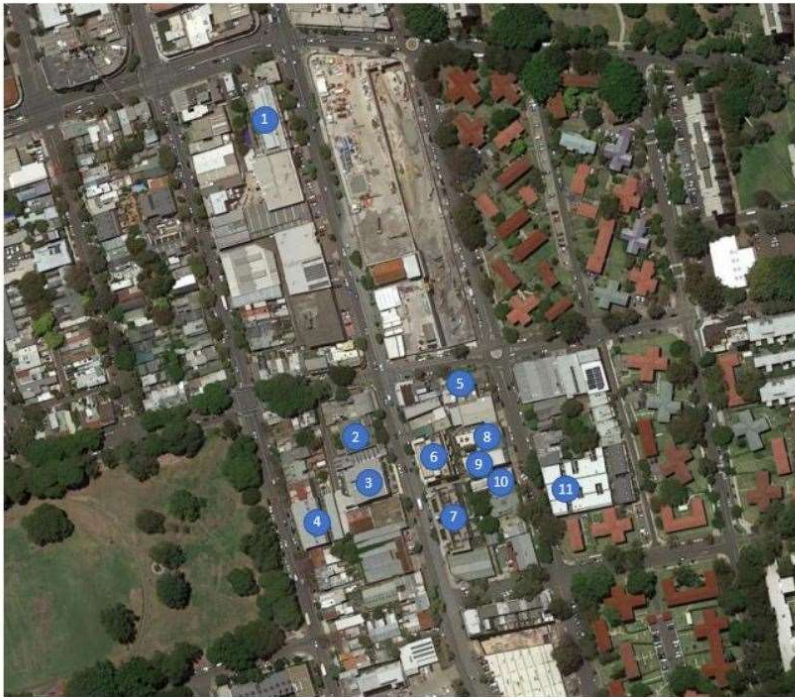
However, Council advised that the Applicant's solar analysis did not demonstrate specific criteria in the Design Guidelines had been met with respect to analysis of all living rooms windows and did not adequately consider impacts to residential properties to the south.

In response, the Applicant's RtS was accompanied by additional overshadowing analysis of private residential properties to the west and south (**Figure 30**).



**Figure 29 |** Solar access to Alexandria Park Heritage Conservation Area to the west at 10am  
(Source: Applicant's EIS)





1. 62-72 Botany Road
2. 138-140 Botany Road
3. 146-156 Botany Road
4. 146-156 Wyndham Street
5. 122-134 Wellington Street
6. 133-141 Botany Road
7. 143-159 Botany Road
8. 180 Cope Street
9. 184 Cope Street
10. 186 Cope Street
11. 233-243 Cope Street

**Figure 30 | Private residential properties considered in Applicant's overshadowing analysis (Source: Applicant's RtS)**

Based on the submitted shadow diagrams, the Department accepts that the Conservation Area is not affected by overshadowing impacts from the Southern Precinct between 9am and 3pm in midwinter.

The Department notes that except for 138-140 Botany Road, all the affected private residential properties (including 180 Cope Street and the Wellington Street terraces) analysed to the west and south either comply with the minimum solar access requirements of the ADG and requirements of the Design Guidelines, or already do not achieve ADG compliant solar access due to self-shadowing. The Cauliflower Hotel, as mentioned in public submissions, is a commercial property and is not subject to ADG requirements or the approved Design Guidelines.

In relation to overshadowing impacts of the proposal to 138-140 Botany Road, the Applicant's analysis demonstrates:

- four west facing apartments will not be affected by the proposal and will continue to receive compliant western sunlight.
- five east facing apartments will not receive compliant solar access to the private open space. Two are on Level 1 and three double-storey apartments are on Levels 2 and 3. All five apartments have living room windows setback behind the depth of their private open space and do not currently receive 2 hours of direct sunlight between 9am and 3pm midwinter regardless of the proposed development. However, the proposed development will reduce solar access to their private open spaces to less than 2 hours between 9am and 3pm in midwinter, contrary to the ADG and Design Guidelines.

The Department has considered the public submissions and the Applicant's response and finds the overshadowing impact to 138-140 Botany Road is minor and acceptable because:

- the proposal for the Southern Precinct complies with the maximum building height and density standards of the Sydney LEP and Concept Approval
- the proposal has demonstrated it has less impact on apartments within the property than the Concept Approval building envelopes
- the relative position of 138-140 Botany Road with respect to the Waterloo Metro Quarter would mean any mid to high rise buildings toward the south-west of the site would overshadow the property. The Department estimates an eight to ten storey structure, compared to the 25 storey structure proposed, would result in the same level of solar access non-compliance
- the proposal does not affect compliant solar access to all other private properties, and the non-compliance with private open spaces of the apartments is considered a minor impact in the context of the envisaged scale and density of the Waterloo Metro Quarter.

In conclusion, the Department considers the overshadowing impact of the proposal on private residential properties to the west and south is acceptable.

### 6.3.3 Future residential amenity

The proposed social housing building is a residential flat building and therefore SEPP 65 and the ADG apply.

The proposed student housing tower is defined as a boarding house under the Sydney LEP 2012. SEPP 65 (and the ADG) does not apply to boarding houses and State Environmental Planning Policy (Affordable Rental Housing) 2009 (ARH SEPP) does not apply in this instance due to a clause in the Sydney LEP. Nevertheless, the Applicant has designed the proposed student housing tower having regard to the requirements of the ARH SEPP in relation to room sizes, requirements for communal open space, solar access to communal open space and the like to demonstrate an appropriate level of residential amenity would be achieved.

The Department has considered the residential amenity of both the proposed social housing and the student housing in detail in **Appendix C**. The Department's assessment of the key issues are discussed below.

#### Visual and Acoustic Privacy

The minimum separation distance between the social housing building and student housing building is 18m, where the ADG requires a separation of 24m. Council raised concerns that the non-compliance between the social housing building and student housing tower would result in adverse visual privacy impacts for future residents. This matter is addressed in **Section 6.1** above and the Department is satisfied the proposal would not result in unacceptable amenity or built form impacts.

Council also raised concern about road traffic noise from Botany Road on the proposed social housing building. Council stated the acoustic assessment does not adequately address SEPP (Infrastructure) 2007 (ISEPP) as it incorrectly measured acoustic privacy with windows open, which under the *Development Near Busy Roads and Rail Corridor Interim Guideline*, allows a 10dBA exceedance of ISEPP noise criteria for developments near busy roads with windows closed. Council said the proposal should assess acoustic privacy with windows closed and the proposed acoustic ventilators open, without permitting a 10dBA noise criteria exceedance.

In response, the Applicant clarified the proposal has been designed to achieve the ISEPP noise criteria plus 10dBA allowance with windows closed and the alternative ventilation system open. The Applicant argues it is not reasonable to expect any natural ventilation opening in a facade (i.e. any window, door or acoustic ventilator) to perform identically to a closed window pane or solid wall.

The Department agrees that the relevant noise criteria with windows closed and the ventilator open should be ISEPP level plus 10dBA allowance. The ISEPP criteria gives occupants the choice of opening windows, doors or in this case a ventilator, which includes some road traffic noise on a busy road, or keep all openings closed. The Department is satisfied the proposal complies with the adopted criteria and it achieves an appropriate balance between achieving natural ventilation and designing the building to mitigate road traffic noise to an industry acceptable standard.

#### Solar Access to Social Housing Building

The ADG requires that:

- living rooms and private open space of at least 70% of apartments receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid-winter
- a maximum of 15% of apartments receive no direct sunlight between 9am and 3pm at mid-winter.

Council raised concern that the proposal does not comply with the ADG solar access requirements as:

- 21% of apartments do not receive solar access between 9am and 3pm mid-winter, which exceeds the maximum 15% recommended in the ADG
- the Applicant's calculation of sunlight to living rooms should take into account the fixed vertical louvres on the external facade of Levels 2 to 7 of the east facing apartments which may block morning sunlight. Council estimates that when the louvres are included it would bring compliance below the 70% required in the ADG.

In response to Council's concerns, the Applicant states 21% of the apartments that would not receive sunlight is due to the constraints of the site, including the building envelopes for the Central Precinct, the adjacent student housing tower and the NSW Land and Housing Corporation's design requirements for studio apartments. The Applicant also clarified that the calculation of sunlight to the east facing apartments would not be affected by the vertical louvres as the sunlight would be received through the sliding glass doors next to the living room.

The Department engaged an independent solar access consultant to review and provide advice on the Applicant's solar access analysis. The consultant confirmed 51 out of 70 apartments (72.9%) would achieve solar access to living rooms and private open space between 9am and 3pm mid-winter, complying with the ADG minimum requirement of 70%. The consultant also confirmed the east facing apartments would receive compliant solar access to the sliding glass doors of the living room rather than the windows behind the fixed vertical louvres.

The consultant also agreed that 15 out of 70 apartments (21.4%) do not receive solar access between 9am and 3pm in midwinter. However, the consultant was satisfied the Applicant had maximised solar access by placing the majority of apartments on the eastern elevation, meeting the objective of the ADG. While the northern and western apartments are overshadowed by the Central Precinct and adjacent student housing building, the Department's consultant notes that the proposal complies with



the ADG with over 70% of apartments receiving compliant sunlight to living rooms and private open space. As such, the consultant recommends the proposal should be supported.

The Department accepts the findings of the consultant's review and considers the level of solar access achieved for the social housing building is acceptable. While the proposal would exceed maximum number of apartments receiving no direct sunlight direct, the Department is satisfied the non-compliance is minor and acceptable. Further, the Department is satisfied 70% of apartments would receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid-winter, in accordance with the ADG.

#### Solar Access to Student Housing Tower

The Department notes that there are no requirements for the student housing tower in relation to solar access for apartment living rooms and private open spaces. However, the ARH SEPP has been considered (despite not being applicable in this instance) which requires communal open space to achieve a minimum of 3 hours solar access between 9am and 3pm in midwinter.

The Department's consultant confirmed that the communal open space on Level 2 receives a minimum 3 hours solar access between 9am and 3pm in midwinter, complying with Clause 29(2)(c) of the ARH SEPP.

#### Natural Cross Ventilation to Social Housing Building

The ADG requires that at least 60% of apartments achieve natural cross ventilation.

Council contends that only 10% of apartments achieve natural cross ventilation, as some apartments affected by road traffic noise rely on user controlled air plenums and airflow pathways through the common lobby and circulation spaces.

The Applicant argues the proposal achieves 33 out of 70 apartments (47%) being naturally cross ventilated and nine additional apartments (overall 42 out of 70 (60%)) rely on mechanical ventilation through the use of plenums and two airflow pathways through an open lift lobby and circulation lobby.

The Department has assessed the ventilation for the social housing building having regard to the proposed floor plans, and considers that:

- 33 out of 70 apartments (47%) are naturally cross ventilated
- 7 out of 70 apartments (10%) are mechanically ventilated through the use of plenums
- 2 out of 70 apartments (3%) rely on airflow pathways through an open lift lobby and circulation lobby.

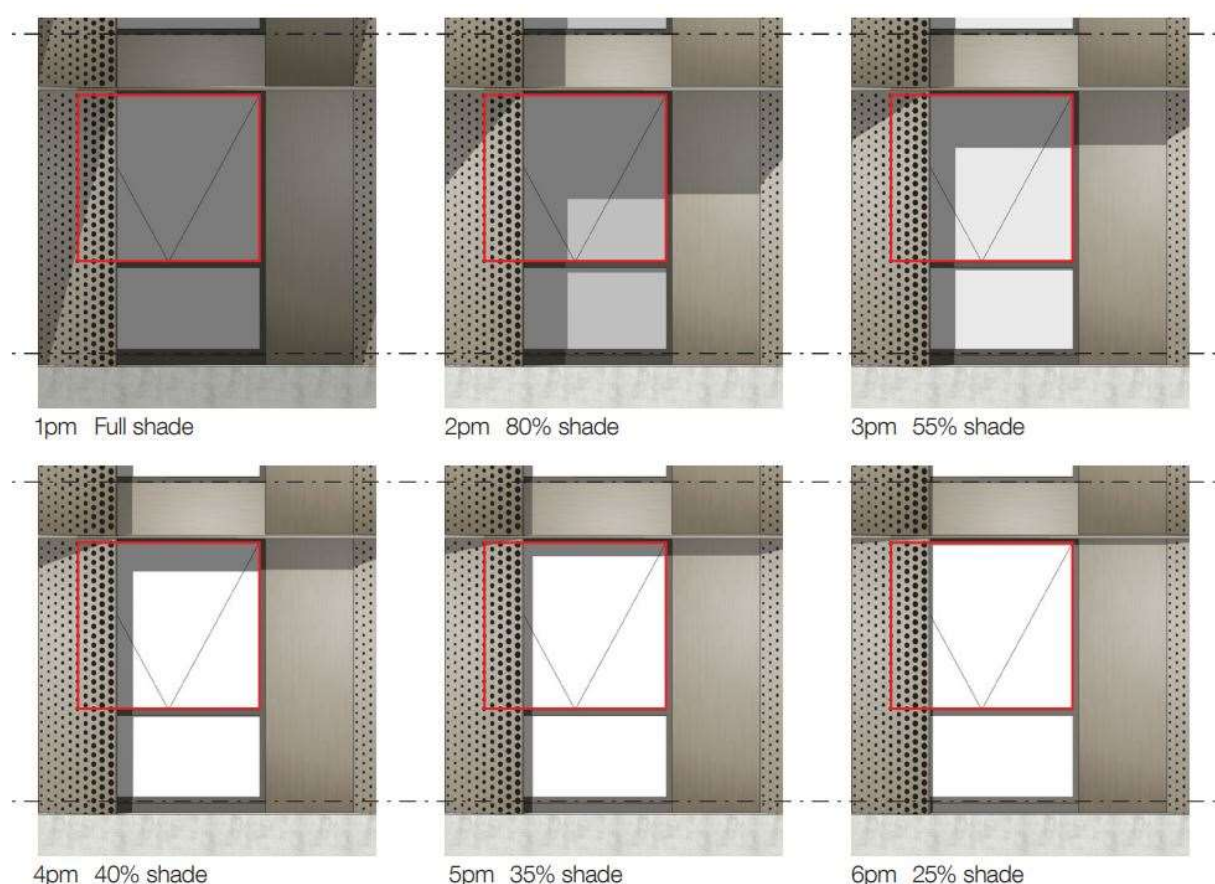
The Department notes the use of plenums to achieve ventilation is common in the City of Sydney Council area for apartments affected by road noise. The Department also accepts the additional measures proposed by the Applicant, such as vents to a lift lobby and corridor, would further improve natural ventilation of these apartments.

Based on the above, the Department accepts 60% of apartments achieve natural ventilation, which complies with the ADG.

## External Sun Shading

The northern and western elevations of the student housing building are exposed to direct summer sun and associated heat load. To mitigate this the proposal includes awnings on the north and western facades and tinted high-performance glazing to the north and west.

Council recommended externally mounted, individually operated shade devices allowing occupants to control heat load. Council also recommended external sunshade devices be provided to the eastern elevation of the social housing building similar to the west elevation of the student housing tower.



**Figure 31 | Typical west elevation of student accommodation façade showing windows outlined in red and amount of window in shade on 4 February “Summernox” (Source: Applicant’s RtS)**

In response to Council’s submission, the Applicant provided a Façade Shading Analysis Report and increased the depth of the awnings on the northern elevation of the student housing building to match the depth of those on the west elevation. The Applicant contended that when compared to no shading devices being used, the revised proposal would achieve a 45% heat load reduction (**Figure 31**), and further mitigation is unnecessary.

At its meeting on 18 February 2021, the DRP accepted the proposed sun shading awnings to the student housing building and social housing building. The DRP noted the proposed thermal comfort strategies enable the apartments to exceed comfort requirements in the National Construction Code and commended the additional depth provided to the shading devices at the upper levels of the student housing tower.

The Department has considered the views expressed by the Applicant, the DRP and Council in relation to sun shading and considers the proposal is acceptable as:

- the western elevation has a high degree of solid materials, where 68% is solid and 32% is glazing. In addition, walls are insulated for reduced heat load
- the glazing area proposed on the north and west elevations have 70% clear glass and 30% tinted glass to further reduce heat load
- additional mitigation measures are provided with a combination of 400mm deep horizontal sunshades for early afternoon sun, 400mm deep vertical sunshades for mid-to-late afternoon sun, internal roller blinds for occupant control and high-performance double glazing
- due to the 400mm deep sunshades, windows to upper levels on the northern elevation of the student housing building are completely in shade in mid-summer
- the DRP supports the proposed approach and notes that comfort requirements in the National Construction Code are likely to be exceeded.

For these reasons, the Department supports the proposed approach to provide sun shading. However, the Department recommends a condition requiring the final glazing selection be presented to and endorsed by the DRP prior to construction. This will allow the panel to review the thermal qualities, level of tint, colour and any required adjustments.

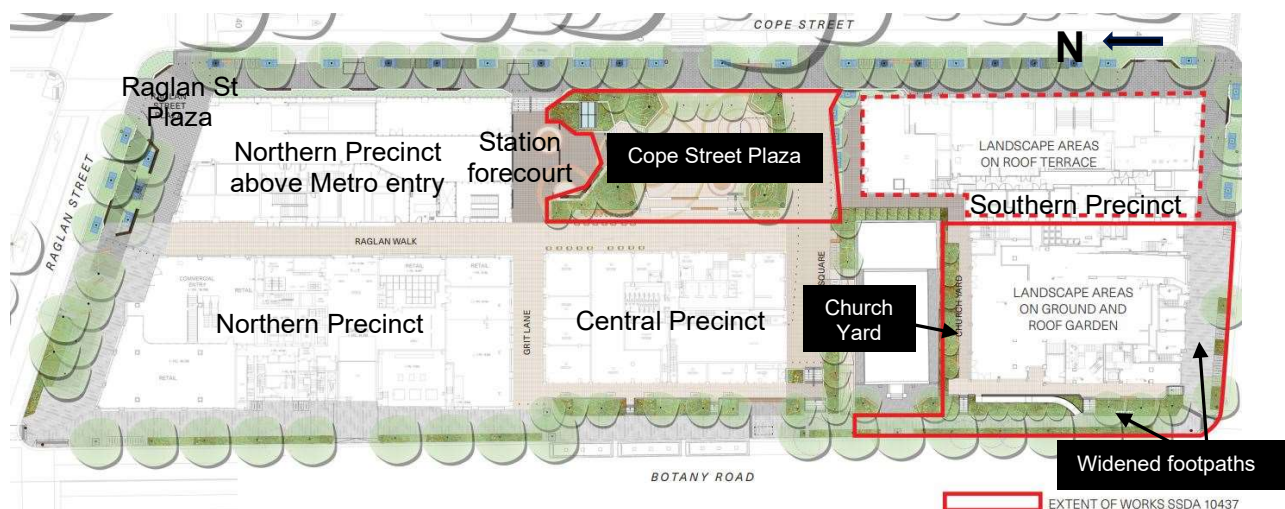
## 6.4 Public domain

### 6.4.1 Proposed publicly accessible spaces

The proposal seeks approval for the construction of publicly accessible open spaces comprising the Cope Street Plaza, a courtyard immediately south of Waterloo Congregational Church ('Church Yard') and widened footpaths along Botany Road and Wellington Street (**Figure 32**).

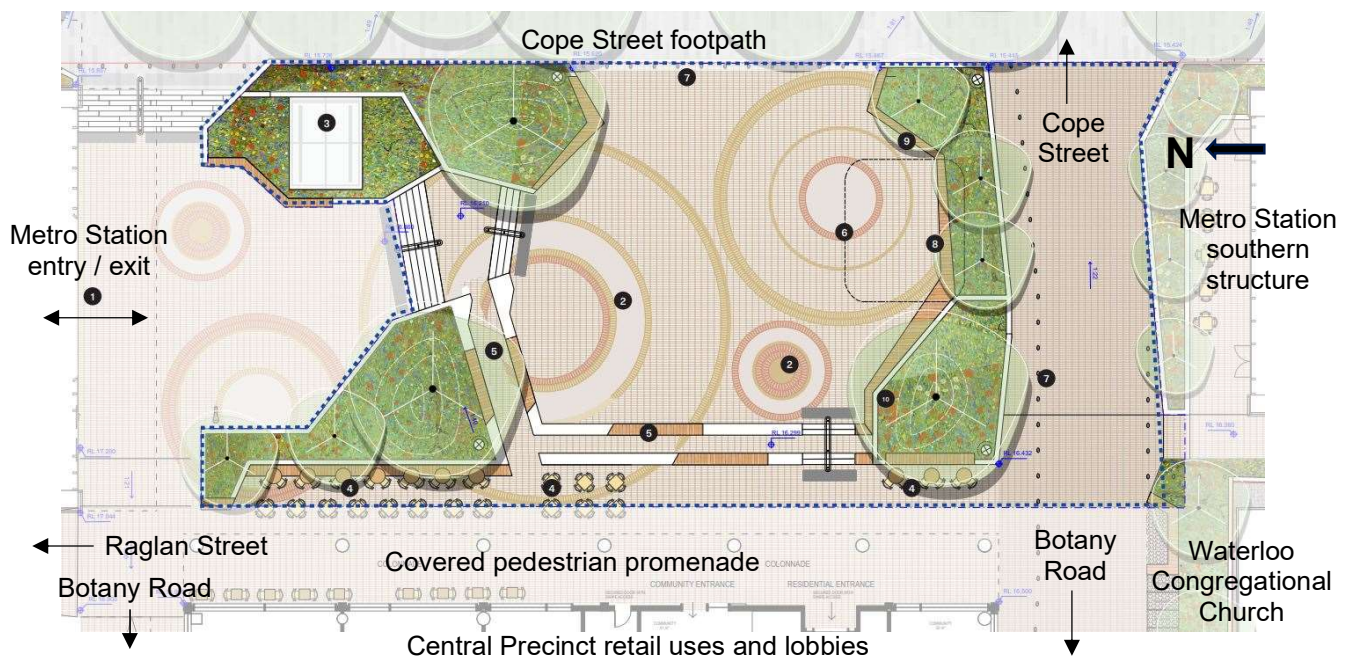
Cope Street Plaza (**Figure 33**) also functions as an entry forecourt to the Metro station. Metro users to and from the south, east and west will traverse through the Plaza to the station.

The proposed public domain works are integrated with public domain works to be carried out under the separate infrastructure approval (CSSI 7400) for the Metro station such as station forecourts.



**Figure 32 | Publicly accessible open spaces in red outline (Source: Applicant's EIS)**





**Figure 33 |** Proposed Cope Street Plaza with open paving for events, seating terraces, raised planters with trees and shrubs and walkways (source: Applicant's RtS)

#### 6.4.2 LEP and Concept Approval requirements

The Sydney LEP 2012 and the Concept Approval require a minimum of 2,200m<sup>2</sup> of publicly accessible open space across the Waterloo Metro Quarter. The Concept Approval identifies the LEP open space requirement would be met by a larger and centrally located plaza fronting Cope Street and a separate smaller plaza fronting Raglan Street.

Public submissions raised concerns regarding insufficient public open space within the Waterloo Metro Quarter. Public submissions also raised concerns about Cope Street Plaza being privately owned and controlled by the Applicant.

The proposal would provide a combined area of 2,545m<sup>2</sup> of open space comprising:

- the Cope Street Plaza, which has an area of 1,391m<sup>2</sup>
- the "Church Yard" between the community space on the northern side of the student housing tower and the Waterloo Congregational Church, which has an area of 207m<sup>2</sup> for (**Figure 32**).
- the Raglan Plaza which will be provided under the CSSI approval and the Northern Precinct SSD containing an area of 1,155m<sup>2</sup>.

The Department accepts the proposed open space has a combined area greater than 2,200m<sup>2</sup> and therefore would meet the requirements of the LEP and the Concept Approval.

The Department is also satisfied that the Applicant has provided evidence demonstrating the Cope Street Plaza and Raglan Plaza publicly accessible open space is subject to a legally binding agreement with Sydney Metro to be delivered for the site as required by the Condition A12 of the Concept Approval.



The Department recommends conditions of consent requiring covenants over the publicly accessible open space to secure public rights of access in perpetuity prior to occupation of the development.

#### **6.4.3 Cope Street Plaza**

Council raised concerns with the capacity of the publicly accessible open space to accommodate pedestrians, including future Metro customers. Council also provided detailed comments regarding wall levels, spot levels, soil depths and bollards.

The DRP supported the design and layout of Cope Street Plaza and reviewed the detailed design over the course of numerous sessions. The DRP provided comments on the design of Cope Street Plaza including retail interfaces, wayfinding, landscaping features, public art approach and wind conditions.

In response, the Applicant amended the design of the Cope Street Plaza by incorporating additional canopy trees, clarifying garden and seating levels, providing power and water for event space and making allowance for public art in the Plaza.

The Department has carefully considered Council's comments and the advice from the DRP and is satisfied the design of Cope Street Plaza is appropriate because:

- a variety of spaces are proposed including shaded seats and terrace edges, an open area for events, an area with power and water supply for markets and space for outdoor dining for the surrounding retail tenancies
- there is clear wayfinding and separation between 'dwell' spaces, active spaces and pedestrian thoroughfares
- tree and shrub planting achieves a balance between wind mitigation, allowing sunlight during winter, providing shade in summer and transitioning the Plaza levels from high to low.

The Department is also satisfied the submitted pedestrian forecast data from Sydney Metro demonstrates the proposed publicly accessible open space would have sufficient capacity to accommodate the demands for both the Waterloo Metro Quarter over station development and the operation of the Metro Station and are appropriate in terms of pathway widths and desire lines.

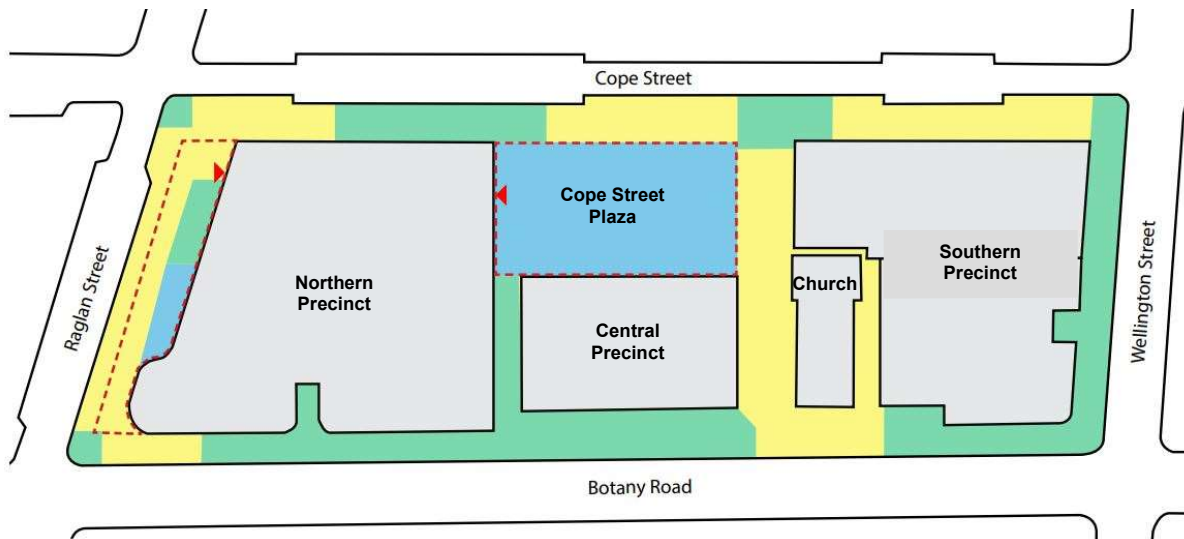
#### **6.4.2 Pedestrian Wind Environment**

The Applicant submitted a Wind Impact Assessment which modelled the wind impacts of the proposal against the wind criteria in the endorsed Design Guidelines for the public domain and open spaces (**Figure 34**).

The Design Guideline criteria states that at least 50% of publicly accessible open space should achieve the wind comfort criteria for sitting rather than standing or walking.

## LEGEND

- Wind comfort standard for walking criteria of 8m/s (5% exceedance)
- Wind comfort standard for standing criteria of 6m/s (5% exceedance)
- Wind comfort standard for sitting criteria of 4m/s (5% exceedance)
- Publicly accessible open space



**Figure 34 | Wind comfort criteria in endorsed Design Guidelines (Source: SSD 9393)**

Council noted that wind conditions would generally be in accordance with the Design Guidelines. However, Council noted that the compliant wind conditions rely on the success of extensive tree canopy coverage throughout the Waterloo Metro Quarter. Council recommended:

- the recommendations of the wind assessment form part of the conditions of consent and the required measures be fully coordinated with architectural plans;
- sufficient soil volumes and soil depths for each tree type chosen; and
- replacement tree planting occurs if trees fail.

The DRP requested the Applicant to provide additional wind mitigation to Cope Street Plaza to achieve compliance in excess of the Design Guidelines.

In response, the Applicant presented further wind assessment demonstrating wind criteria are generally achieved subject to suitable mitigation measures including awnings and tree planting. However, the DRP advised additional planting should not be provided along the Cope Street entrances and frontage to shield easterly winds as wind conditions were already acceptable and any minor improvement would not outweigh adverse impacts in terms of visual connection and wayfinding.

The Department accepts the findings of the submitted wind assessment and the advice of the DRP and considers the proposal would achieve a reasonable level of wind comfort for the proposed open space and surrounding public domain, noting:

- 60% of Cope Street Plaza will achieve sitting criteria for 90% of the year

- Cope Street Plaza will achieve the sitting criteria all year subject to the implementation of the proposed detailed design elements including raised planters, bench seating, soil mounds and mature trees.
- bus stop areas along Botany Road, will achieve standing criteria throughout the year.
- there are some marginal localised exceedances of the desired standing criteria at footpaths opposite the site, however these are limited in annual probability and duration and will be further mitigated by existing street trees opposite the site and proposed street trees.

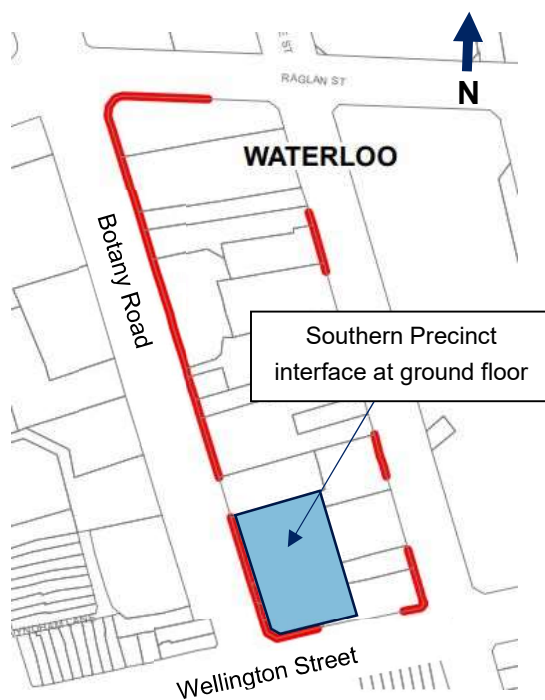
The Department is therefore satisfied that the proposal would not result in any unacceptable wind impacts subject to the recommended wind mitigation measures contained in the wind impact assessment.

#### 6.4.3 Ground Floor and Public Domain Activation

The proposal includes a ground floor frontage along Botany Road and Wellington Street. The Cope Street frontage is to be occupied by the approved Metro station structures and also the proposed Cope Street Plaza. (Figures 35 and 36).



**Figure 35 |** Proposed ground floor showing extent of active street frontage (Source: RtS)



**Figure 36 |** Sydney LEP Active Street Frontage Map (Source: Sydney LEP)



**Figure 37 |** Artists impression showing active uses along Botany Road and Wellington Street frontages and around Waterloo Congregational Church (Source: Applicant's EIS)

Council noted the proposal does not comply with Clause 7.27 of the Sydney LEP 2012 as active street frontages are not provided for the full extent shown on the LEP map (**Figure 36**) and a statement under Clause 4.6 of the LEP in relation to the non-compliance would be required.

In response, the Applicant lodged a request under Clause 4.6 of the Sydney LEP in relation to building services along the frontages that are not excluded by Clause 7.27. The request addresses one fire control room along Botany Road and two substations along the Wellington Street frontage (**Figure 36**).

The Department notes the objective of the SLEP's Active Frontage Clause is to promote uses that attract pedestrian traffic along affected ground floor street frontages. It states development consent must not be granted unless the consent authority is satisfied all premises on the ground floor of the building that face the street will be used for business premises or retail premises and those premises have an active street frontage with the exception for entries and lobbies, access for fire services and vehicular access.

The Department's detailed consideration of the Applicant's Clause 4.6 request is included in **Appendix D**. In summary, the Department considers the objectives of the Active Frontage requirement of the SLEP have been achieved because:

- the ground floor frontage along Botany Road would be occupied and activated by building entries and a large makerspace for community use which wraps around the north-west corner and also activates the Church Yard
- the ground floor frontage along Wellington Street would be occupied by two building entries and is otherwise occupied by necessary vehicle access to the site and necessary substations to service the buildings
- the Level 1 and Level 2 uses for a gym and student housing common facilities would provide additional activation and overlooking of the street
- the Cope Street frontage of the site is occupied by the approved CSSI station structure and is not part of the consideration of the Clause 4.6 submission.



The Department considers the extent of non-compliance is minor and acceptable and the locations of the essential services and substations is driven by utility and other authorities' requirements. The Department therefore supports the Applicant's Clause 4.6 request and concludes the variation is well founded because the objective of the active street frontage clause would still be achieved despite the variation.

## **6.5 Parking and traffic**

### **6.5.1 Car Parking**

Car parking for the proposal would be provided within a basement which is subject to the separate Basement Car Park SSD (SSD 10438) application. The Basement Car Park SSD seeks approval for the construction of 155 car parking spaces, including 8 spaces for the social housing building, including 2 adaptable car spaces. No car parking is proposed to be allocated to the student housing tower.

Public submissions did not raise any concerns with the proposed amount of car parking for the Southern Precinct.

Council said that the proposal should have zero or absolute minimum car parking in order to reduce impacts on the congested road network, support a transit-oriented development and achieve mode shift from private car usage to public and active transport.

The Applicant's EIS submitted that eight spaces for the social housing building and zero parking for the student housing tower is appropriate as it promotes sustainable transport choices at the site through public transport use, walking and cycling.

The Department engaged an independent traffic consultant to review the submitted Transport, Traffic and Parking Assessment, including comments on the quantum of the proposed car parking. The consultant considers the proposed amount of car parking for the social housing is reasonable.

The Department accepts the consultant's advice and considers that an appropriate number of car parking spaces would be provided for the proposal because:

- the proposed 155 car parking spaces within the Basement Carpark (SSD 10438) represents a 78% reduction in car spaces compared to the maximum car parking rates permitted under the SLEP and the Concept Approval.
- zero car parking for the proposed student housing is consistent with several comparable student housing towers built in the City of Sydney local government area, as students are likely to walk to their main destinations, including nearby universities and are less likely to own cars than permanent residents.
- there are no specific car parking rates in the SLEP for social housing but the proposed 8 car spaces for the social housing tower is lower than the maximum car parking rates applying to residential flat buildings and is acceptable.

The Department therefore recommends conditions of consent requiring no car parking to be provided for the student housing and a maximum of 8 car spaces to be provided for the social housing tower. The final design of the car spaces, including the number of adaptable car spaces, would be subject to the separate assessment under of the Basement Car Park SSD.

### 6.5.2 Bicycle Parking

The proposal includes bicycle parking for student housing residents at the rate of one space per five rooms. The proposal references the bicycle parking rate contained within ARH SEPP and would require 87 spaces.

Council raised concerns about insufficient bicycle parking and requested more bicycle parking be provided as there is an 80% shortfall of spaces compared to the number of spaces (one bicycle parking space per apartment, 435 spaces in this case) required under the Sydney DCP 2012 for market apartments.

Council also noted ARH SEPP does not apply to the site as Clause 1.9 of the Sydney LEP 2012 excludes it from applying to the Waterloo Metro Quarter and that the ARH SEPP is over 10 years old and not reflective of growth in uptake of cycling.

The Department also notes Council's submission in relation to the Basement SSD (SSD 10438) contended that additional bike parking for the student housing tower may be provided within the basement below the Central Precinct.

In response to Council's submission, the Applicant provided additional information, justifying the proposed bicycle rate is acceptable as:

- surveys of eight other student housing facilities run by Iglu (the intended operator for the student housing) shows bicycle parking usage of 2.5% to 5%, due to close walking distance to educational facilities and public transport.
- the level of demand for the proposal is expected to be a similar as above as the student housing sits above the future Metro station and is near four universities
- additional bicycle parking in a basement below another building creates security and management issues for the operator and occupants of the affected buildings, compared to the bicycle parking proposed at ground level off the residential lobbies
- the 87 spaces provided is considered in excess of requirements, equating to 20% of the beds proposed.

The Department notes the rate of one bicycle space per apartment referenced by Council is for market apartments, which encompasses a household with usually more than one occupant. This is ordinarily accommodated in basement storage, whereas the student housing tower is for 396 single occupant rooms and 39 twin rooms with no basement storage capability. As such, the Department considers the provision of one space per student room, resulting in 435 bike parking spaces, would be unreasonable for the proposed student housing.

The Department accepts the Applicant's submission, including evidence to substantiate the specific demand of bike parking for student housing, which is currently at 2.5 to 5% of students. In this regard, the Department accepts the proposed 87 bike parking spaces, representing one space per 5 student rooms or 20% of students, would be sufficient to accommodate the likely bike parking demand and future growth in bike uptake.

The Department's independent traffic consultant agreed the proposed rate is reasonable and consistent with similar developments in the City of Sydney area.

The Department therefore accepts the proposed amount of bike parking at a rate of 1 per 5 student rooms, consistent with the established rates in the Affordable Housing SEPP is acceptable.

### **6.5.3 Traffic Generation**

Public submissions raised concern about the proposal increasing traffic within the local road network.

Council raised concern that Waterloo Metro Quarter was proceeding ahead of the Waterloo Estate and that the cumulative traffic impacts of the developments is not yet known.

Council also advised the Applicant's adoption of zero traffic generation for the student housing tower due to no parking being provided does not account for occupants parking on streets or taxis and rideshare movements.

The Department engaged an independent traffic consultant to assess the traffic impacts of the proposal. The consultant advised that:

- the proposed traffic generation rates are acceptable and consistent with the RMS *Guide to Traffic Generating Development* and *RMS Technical Direction – updated traffic surveys*
- the use of background traffic growth rather than defined traffic generation from surrounding development is appropriate in assessing and determining cumulative impacts on the surrounding road network
- the Applicant's comparison with comparable high-density development for traffic generation rates is prudent and provides a robust assessment
- the proposal will have a relatively minor impact on existing travel delays and level of service along the surrounding road network including on five key surrounding intersections.

The consultant also found, the proposed onsite car parking would help minimise on-street parking in the surrounding road network, compared to the minimal or zero parking Council was seeking.

The consultant also advised that occupants of the student housing are the least likely of all users across the site to own a car and therefore would have a negligible impact on traffic generation.

The Department agrees with the advice of its consultant and is satisfied that the proposal would not result in any adverse traffic impacts given its limited car parking provision and high accessibility to public transport.

### **6.5.4 Servicing and Loading Facilities**

The proposal includes a loading dock accessed from Wellington Street within the Southern Precinct. The loading dock has a medium rigid vehicle space, which is sized to allow for servicing and loading and unloading vehicles.

Public submissions raised concerns about the potential safety impacts on pedestrians and other road users from the use of the loading dock on Wellington Street.

Council did not object to the proposed loading dock and acknowledged that a basement loading dock for the Southern Precinct would not be able to be accommodated due to the location of the Waterloo Congregational Church and the Metro station infrastructure which limit the space available for excavation and ramp gradients.

The Department's independent traffic consultant reviewed the proposed loading and servicing arrangement and advised the proposal is acceptable noting:

- there would be 10 total loading docks across the Waterloo Metro Quarter and they would be subject to a site-wide Freight and Servicing Management Plan to manage the available spaces and prevent on-street kerbside parking and loading.
- the student housing rooms are proposed to be fully furnished. A list of the furniture and fittings supplied when a new student moves in was provided with the draft Plan of Management. This would reduce the frequency of loading and servicing vehicles to the site.
- the location of the loading dock on Wellington Street is satisfactory as the Southern Precinct is disconnected from the basement car park proposed to the north due to the Waterloo Congregational Church owned by others.

In conclusion, the Department considers the proposed servicing is acceptable and recommends a condition of consent requiring a Freight and Servicing Management Plan to be prepared in accordance with TfNSW prior to the occupation.

## **6.6 Design excellence**

Clause 6.21 of the Sydney Local Environmental Plan 2012 (SLEP 2012) outlines the provisions for design excellence.

The Concept Approval sets out a framework for demonstrating design excellence. This includes:

- independent review by an expert design review panel;
- addressing the approved Design Guidelines; and
- the provision of a Design Integrity Report.

The DRP has met on 14 occasions since the Concept Approval. The Department notes the DRP provided advice and is satisfied with various aspects of the design including:

- diverse land use mix providing increased activation of the site through the day and uses that serve the needs of the community
- articulation of the podium to provide a finer grain in urban design terms
- variety in podium elements and materials which respond to the character of each street and setting of the Waterloo Congregational Church
- variety of public spaces and their permeability
- achievement of deep soil and tree canopy targets
- diverse mix of materials and detailing
- integration of Metro station structures and services with the over station development.

The DRP made several recommendations on the composition of the buildings, the proposed open spaces, environmental performance, internal residential amenity and transport matters, which have been resolved in the detailed design proposal.



Following the Applicant's final presentation to the DRP on 18 February 2021, the DRP confirmed outstanding matters had been resolved. The DRP also confirmed the proposal meets the design quality benchmarks outlined in the Design Guidelines and reinforces the positive aspects of the tender winning scheme presented to the DRP. The DRP advised that the proposal can achieve design excellence.

The Department has also carried out a detailed consideration of the proposal against the matters with respect to Design Excellence such as built form, façade design, integration with the public domain and amenity as specified in Clause 6.21(4) of SLEP 2012 in **Appendix C**. Overall, the Department's assessment concludes the proposal satisfies the Design Excellence requirements of the SLEP and the proposal would deliver a high standard of architectural and urban design outcome for the site.

The Department recommends a further Design Integrity Review process should be put in place where any future design changes, particularly on the key aspects contributing to design excellence can be referred for further advice from the DRP (**Conditions B3 to B8**). The recommended conditions for Design Integrity Review is consistent with the endorsed Design Excellence Strategy and conditions for other over station developments on the City to Southwest Metro.

## 6.7 Other issues

The Department's consideration of other issues is summarised in **Table 8** below. These are issues raised by Council or in agency or public submissions which are otherwise not key issues addressed above.

**Table 8 | Response to other assessment issues**

Issue	Findings	Recommendations
<b>Consistency with the Concept Approval</b>	<ul style="list-style-type: none"> <li>The Concept Approval sets the parameters for future development on the site and conditions to be met by future applications.</li> <li>The Department is satisfied the application has adequately addressed the requirements of the Concept Approval, as discussed earlier in the report at: <ul style="list-style-type: none"> <li>Section 6.1 with respect to the design of the proposed built form</li> <li>Section 6.2 in relation to the proposed land use mix</li> <li>Section 6.3 in addressing the requirements of SEPP 65 and the ADG</li> <li>Section 6.5 in addressing the parking and traffic impacts of the proposal.</li> </ul> </li> <li>The Department has undertaken a detailed assessment of the proposal against the conditions of the Concept Approval at <b>Appendix E</b> of this report.</li> <li>The Department has also undertaken a detailed assessment of the proposal against the Design Guidelines in <b>Appendix F</b>.</li> <li>The Department is satisfied the proposal is consistent with the Concept Approval and the proposed changes subject to the Modification Application are acceptable on merit.</li> </ul>	No additional conditions required.

<b>Public Benefits</b>	<ul style="list-style-type: none"> <li>• Condition A12 of the Concept Approval requires evidence of agreements for public benefits within the overall Waterloo Metro Quarter.</li> <li>• Relevant to the Southern Precinct are requirements to provide open space and social housing. The remaining public benefits are related to the Central Precinct.</li> <li>• The proposal includes the construction of 24 social housing dwellings and Cope Street Plaza, comprising 1,341m<sup>2</sup> of publicly accessible open space.</li> <li>• These public benefits satisfy Condition A12, in combination with publicly accessible open space proposed as part of the Northern Precinct (Raglan Street Plaza).</li> <li>• The Department is therefore satisfied the necessary public benefits relating to the proposal are provided.</li> </ul>	<p><b>Conditions E38 to E40</b> set out requirements for</p> <ul style="list-style-type: none"> <li>- future publicly accessible open space to have rights of access to the public.</li> <li>- ownership of social housing to be transferred to LAHC.</li> </ul>
<b>State Public Infrastructure</b>	<ul style="list-style-type: none"> <li>• Clause 6.46 of the Sydney LEP states consent must not be granted for residential accommodation unless the Planning Secretary has certified in writing that satisfactory arrangements have been made to contribute to State public infrastructure such as roads, regional open space and social infrastructure.</li> <li>• On 24 November 2019, the Planning Secretary's delegate certified that satisfactory arrangements have been made in relation to the concept proposals in SSD 9393 (the Concept Approval)</li> <li>• The Southern Precinct SSD does not trigger the requirement for fresh or amended certification in relation to Clause 6.46. As such, the Planning Secretary's existing certification remains in place for the purposes of Clause 6.46.</li> <li>• The Minister therefore may grant consent to the application as Clause 6.46 of the Sydney LEP has been satisfied.</li> </ul>	<p>No conditions are necessary in relation to this issue.</p>
<b>Local Developer Contributions</b>	<ul style="list-style-type: none"> <li>• The proposal is subject to contributions under the City of Sydney Section 7.11 Contributions Plan 2015 for the cost of local infrastructure including open space, community facilities, transport and stormwater drainage.</li> <li>• The Department has recommended a condition requiring contributions be paid in accordance with Council's contributions plan.</li> </ul>	<p><b>Condition B1</b> sets out requirements for required payment.</p>
<b>Materials and Finishes</b>	<ul style="list-style-type: none"> <li>• Council raised concern about the proposed materials and finishes not being well defined and requiring further clarification.</li> <li>• One public submission contended the proposed buildings will look unattractive due to their materials and finishes. The submission recommended a unified podium, greater architectural connectivity between precincts</li> </ul>	<p><b>Conditions B11 and B12</b> set out requirements for submitting details of final materials and finishes and requires the DRP feedback to</p>

	<p>and increased facade articulation to break up the bulk and scale of the buildings.</p> <ul style="list-style-type: none"> <li>• The DRP initially raised concern that materials and finishes were not well defined and recommended further work be undertaken to specify the materials and finishes.</li> <li>• In response, the Applicant amended the materials and finishes providing specific colour and material references.</li> <li>• The Applicant submitted that the Waterloo Metro Quarter buildings now provide a diverse character and the chosen materials reflect the robust nature of surrounding industrial, warehouse and residential buildings.</li> <li>• The Department is satisfied the proposed materials and finishes provides a human scale to the streetscape through the masonry podium and that the buildings above are well articulated with suitable materials and finishes applied.</li> <li>• The Department recommends the detailed selection of materials and finishes be carried through to the Construction Certificate phase and any changes to the materials and finishes be presented to the DRP for review.</li> </ul>	<p>be obtained for any substitutions.</p>
<p><b>Ecologically Sustainable Development (ESD)</b></p>	<ul style="list-style-type: none"> <li>• Council supported the adopted energy rating scores and methodologies proposed to achieve the rating efficiencies, as well the onsite rainwater harvesting.</li> <li>• However, Council recommended additional initiatives comprising a photovoltaic array or a green roof be provided on the social housing building, larger rainwater detention systems be investigated and use of the Green Star Buildings Tool rather than Green Star Design and As-Built Rating Tool as the former is more up-to-date in its requirements.</li> <li>• In response, the Applicant's RtS reiterated that the proposal includes best practice ESD measures and it exceeds the minimum Green Star targets. It also reaffirmed the proposal would register for Green Star Design and As-Built as a transitional project and it argued the social housing building does not have sufficient space for additional photovoltaics over and above the Level 23. Further, roof and rainwater collection tanks have been maximised on the site and are constrained by photovoltaic cells and green roof space.</li> <li>• The Department is satisfied suitable ESD measures have been incorporated into the project in accordance with the ESD commitments outlined as a part of the Concept Approval. The Department also accepts that the Green Star rating system allows applicant to use the As-Built tool under the transitional provisions. Notwithstanding, the proposal would still provide appropriate ESD credentials.</li> </ul>	<p><b>Conditions B27 and B28</b> set out requirements to ensure the committed ESD initiatives are carried through to the construction and operational phases.</p>

<b>Construction Impacts</b>	<ul style="list-style-type: none"> <li>• The EIS addressed construction impacts and was accompanied by a Construction Management Plan and a Construction Traffic and Pedestrian Management Plan.</li> <li>• The Department notes the proposed construction staging and management strategies would mitigate and manage noise, vibration, dust, soil, water, works zones, waste management and the like.</li> <li>• The Department is satisfied the construction impacts can be appropriately managed subject to relevant conditions of consent.</li> </ul>	<b>Conditions C19</b> sets out requirements for a Construction Management Plan and associated sub-plans.
<b>Heritage Impacts</b>	<ul style="list-style-type: none"> <li>• The proposal is immediately south of locally-listed heritage building Waterloo Congregational Church.</li> <li>• Council raised concerns with the structural integrity of the Church during construction and recommended dilapidation reporting, construction monitoring and remediation of damage if any occurs.</li> <li>• Council also recommended the proposal should adopt all heritage and archaeology-related recommendations in the consultant reports lodged with the EIS.</li> <li>• The Department notes the built form of the SSD, and particularly its relationship with the Church, is consistent with the Concept Approval and has benefitted from design advice from the DRP in relation to the podium scale, setback, public domains and materials and finishes. The Department considers the interface with the Church is therefore appropriate and acceptable.</li> <li>• The Department also recommends a suite of conditions in relation to construction impacts on the Church and appropriate heritage interpretation.</li> <li>• Subject to the recommended conditions, the Department is satisfied the proposal will have acceptable heritage impacts.</li> </ul>	<p><b>Condition C22</b> sets out requirements for construction vibration limits.</p> <p><b>Condition B46</b> requires implementation of the Heritage Interpretation Strategy.</p> <p><b>Condition B44</b> deals with public art opportunities, which may incorporate elements of heritage interpretation.</p>
<b>Signage</b>	<ul style="list-style-type: none"> <li>• The proposal seeks approval for two top-of-building signs (2.7m wide x 2.2m high) and one ground floor building identification sign (0.8m wide x 0.6m high) displaying “Iglu” for the student housing operator.</li> <li>• Council raised concerns the proposed top-of-building signage is inconsistent with Sydney DCP and would set an unacceptable precedent for this locality.</li> <li>• Council also recommended a wholistic Signage Strategy be prepared and submitted to Council for signage zones in relation to all tenancies and uses.</li> <li>• In response, the Applicant’s RtS argued the placement and scale of the signage integrates with the design of the building, is consistent</li> </ul>	<b>Condition A6</b> sets out requirements for separate consent to be obtained for signage other than the proposed Iglu signs.



with several top-of-building signs in the City of Sydney LGA at Central, Redfern and Broadway; is 500m east of the ATP site which has several top-of-building signs; and Sydney DCP 2012 does not apply to an SSD.

- The Applicant also argued a Signage Strategy is not required as there is a total of three signs and they are small.
- Council maintained its concerns about the top-of-building signage after the Response to Submissions stage.
- The Department notes that DCP does not apply to SSD applications, which are subject to merit assessments. The Department considers three signs is a small number for a large student tower and they are designed to complement the architecture of the tower. The top-of-building signage in particular is consistent with Iglu signage in other locations and considered reasonable.
- The Department is therefore satisfied the proposed signage is acceptable.

#### **Site Suitability**

- The proposal involves commercial premises and residential accommodation partially above the approved Metro station and partially above former industrial land.
- The Department notes site suitability matters in relation to contamination and archaeology are to be addressed under works approved by the CSSI, with reliance on the CSSI consultant studies and strategies.
- With regard to flooding and stormwater issues the applicant submitted a Stormwater and Flood Management Plan which found that building ground floors and basement access comply with flood planning levels.
- The Department is therefore satisfied the site is suitable for the proposed development and has recommended conditions requiring site contamination management and auditing and compliance with the flood planning levels.

**Conditions A2, B42 and B43** require the development to be carried out in accordance with the Flood Management Plan, Stormwater Assessment, Archaeological Reports, Geotechnical Report and Contamination Strategy.

#### **Non-residential use in the podium**

- The proposal seeks to amend Condition B4 of the Concept Approval to permit residential communal facilities within the podium of the student housing tower. The communal facilities comprise a resident lounge, kitchen, study rooms, gym and laundry.
- The condition was imposed to promote non-residential uses in the podium such as commercial and retail premises and prevent apartments within the podium where they would be subject to high traffic noise along Botany Road.
- The Applicant contended that the student housing uses are ancillary to the student rooms above and the design gives the appearance of active non-residential uses.

**Condition B4** of the MOD 1 instrument would permit the proposed change.

- The Department supports the proposed amendment to enable the proposed student housing uses in the podium. The Department agrees the uses are ancillary to the student uses above and are designed to reflect the properties of a commercial use. The Department considers the uses do not generate any traffic noise concerns for residents.

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**Maker space use**

- The proposal includes a 300m<sup>2</sup> ground floor tenancy for a community “maker space”. The “maker space” is proposed to be used by community groups for artwork, woodwork, sculpture or similar social and creative uses.
- Public submissions raised concerns that the nature of the use and its funding were not clear.
- The Applicant proposed that the final use of the space, its operation and fitout will be subject to a separate future approvals process.
- Council raised no concerns regarding the fitout of the space occurring after construction of the Precinct. Council recommended the space be used for industrial design and woodwork to enable the community and local artists to network, develop skills and support students.
- The Department notes there is no requirement to provide a maker space under the Sydney LEP or Concept Approval. As such, the hub is a applicant-led, additional inclusion.
- The Department supports the maker space use as it would activate Botany Road and the proposed ‘Church Yard’ and would enable further public benefits over and above those required in the Sydney LEP and committed in the Concept.
- The Department is also satisfied that any potential issues associated with the detailed operation and fitout of the space can be appropriately assessed and considered as a part of a future application to Council.

**Condition A6** sets out requirements for separate consent to be obtained for the makerspace.

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## 7 Evaluation

The Department has assessed the proposal in accordance with section 4.15(1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and has carefully considered the issues raised in submissions as well as the Applicant's response. Overall, the Department considers the proposal is acceptable for the following reasons:

- it is consistent with the State's strategic planning objectives for the site as set out in the Region Plan and Eastern City District Plan as it would deliver integrated land use and public transport, delivering social and student housing above the new Waterloo Metro Station
- it fully complies with the Sydney LEP 2012 in relation to density, land use and height controls
- it achieves design excellence, is supported by the Sydney Metro DRP and is appropriate within its urban context
- it appropriately minimises overshadowing impacts on surrounding properties and no overshadowing of the Alexandria park would occur after 10 am which is considered to be an acceptable outcome given the site's context where multi storey development is anticipated and supported by the planning controls
- while the social housing building results in some height protrusions beyond the approved concept envelope, these protrusions are minor (less than one metre) and are necessary to accommodate skylights, plant enclosures and parapet structures and would not result in any adverse visual or environmental impacts
- the proposal would deliver 70 social housing apartments that would be transferred to NSW Land and Housing Corporation once completed
- the proposal appropriately minimises car parking which would support the use of public and sustainable transport options and it would not result in any adverse traffic impacts
- it would deliver the new Cope Street Plaza and Church Yard public domain areas, which exceed the open space requirements in the SLEP and the Concept Approval and would support a range of passive recreation activities and outdoor uses for future occupants, workers and commuters to the Waterloo Metro Quarter.

The Department's Assessment therefore concludes the proposal is in the public interest and recommends the applications be approved subject to the conditions (**Appendices G and H**).

## 8 Recommendation

It is recommended that the Executive Director, Key Sites and Regional Assessments:

- **considers** the findings and recommendations of this report
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to approve SSD 9393 MOD 1 and grant consent to SSD 10437
- **agrees** with the key reasons for approval listed in the notice of decision (**Appendix A**)
- **modifies** the consent SSD 9393 MOD 1
- **grants consent** for the application in respect of SSD 10437, subject to the conditions in the attached development consent (**Appendix G**)
- **signs** the attached modified instrument and development consent (**Appendix H**).

**Recommended by:**



**Annie Leung**  
Team Leader  
Key Sites Assessments

**Recommended by:**



**Anthony Witherdin**  
Director  
Key Sites Assessments



## 9 Determination

The recommendation is **Adopted / Not adopted** by:

**Anthea Sargeant**

Executive Director, Key Sites and Regional Assessments

# Appendices

## Appendix A – List of documents

SSD 9393 MOD 1 – Concept Modification application:

1. Modification Report
2. Submissions
3. Applicant's Response to Submissions
4. Notice of Decision

<https://www.planningportal.nsw.gov.au/major-projects/project/41341>

SSD 10437 – Detailed Design application:

1. Environmental Impact Statement
2. Submissions
3. Applicant's Response to Submissions
4. Notice of Decision

<https://www.planningportal.nsw.gov.au/major-projects/project/29586>

## Appendix B – Community Views for Draft Notice of Decision

Issue	Consideration
<b>Built form</b> <ul style="list-style-type: none"><li>• height of student housing tower is excessive</li><li>• height of both buildings should transition towards neighbouring properties</li><li>• height and density of Waterloo Metro Quarter should be reduced in general</li><li>• project ruins the character of Waterloo. However, further explanation of this objection was not provided</li></ul>	<ul style="list-style-type: none"><li>• The Department's assessment finds the proposal acceptable as the built form complies with the Sydney LEP and the Concept Approval envelopes and Design Guidelines.</li><li>• The Department acknowledges that the podium of the student housing tower has a three storey scale and its materials reflect the surrounding brick and masonry factories, warehouses and dwellings. As such, the proposal would sit comfortably within the neighbouring context</li></ul>

<p><i>Land use</i></p> <ul style="list-style-type: none"> <li>• no demand for student housing</li> <li>• students will not look after the neighbourhood like permanent residents.</li> </ul>	<ul style="list-style-type: none"> <li>• The Department considers the proposed land uses are suitable as they are permissible in the zone, in keeping with the Concept Approval and will assist in Waterloo Metro becoming a mixed use development which is highly integrated with transport.</li> <li>• The Department accepts that the student housing tower will have an Operational Plan of Management to guide the operators and residents.</li> </ul>
<p><i>Affordable housing</i></p> <ul style="list-style-type: none"> <li>• more affordable and social housing is required</li> <li>• there is a reduction in affordable housing dwellings</li> </ul>	<ul style="list-style-type: none"> <li>• The Department acknowledges the Northern Precinct office floorspace, instead of the approved predominantly residential floorspace, reduces the amount of affordable housing to be provided compared to the Concept Approval for the overall Waterloo Metro Quarter.</li> <li>• The Department notes that the Amending Concept (SSD 10441) would secure four more affordable housing apartments than the requirements in the Sydney LEP and Concept Approval.</li> <li>• The Department considers that the proposed amount of affordable housing and social housing complies with the requirements for the site and is acceptable.</li> </ul>
<p><i>Open space</i></p> <ul style="list-style-type: none"> <li>• more open space should be provided</li> <li>• Cope Street Plaza will be privately owned</li> <li>• wind impacts on open space areas</li> </ul>	<ul style="list-style-type: none"> <li>• The Department is satisfied with the amount of public accessible open space provided as it complies with the amount required under the Sydney LEP and Concept approval.</li> <li>• The Department notes Cope Street Plaza would be privately owned with public access rights. However, the materials and experience of the Plaza would not give the impression that the space is privately owned.</li> <li>• The Department considers that the proposed amount of open space and its management are acceptable.</li> </ul>
<p><i>Parking and traffic</i></p> <ul style="list-style-type: none"> <li>• proposal will increase traffic and make it difficult to get to surrounding properties</li> <li>• widen Botany Road for a permanent bus lane.</li> <li>• proposal will increase pedestrians</li> </ul>	<ul style="list-style-type: none"> <li>• The Department engaged an independent traffic consultant to review the proposed traffic generation, traffic impacts, car parking numbers and loading/unloading of the proposal.</li> <li>• The Department's consultant considered the proposal has satisfactorily addressed traffic and parking issues and there are minor impacts on the road network and pedestrian facilities.</li> <li>• In relation to pedestrian capacity along footpaths and at crossings, the Critical State Significant Infrastructure application and SSDs have been guided by detailed pedestrian forecast modelling for the operational phase of the Metro Station demonstrating the adequacy of surrounding and upgraded infrastructure. The Waterloo Metro Quarter, including the Southern Precinct, is noted to have minimal contribution to pedestrian demands compared to the Station infrastructure.</li> <li>• The Department is satisfied the proposal will have acceptable parking and traffic impacts.</li> </ul>
<p><i>Street trees and landscaping</i></p> <ul style="list-style-type: none"> <li>• project should retain existing trees in Cope Street.</li> <li>• project should preserve existing trees in the Waterloo Estate (to the east, on the opposite side of Cope Street</li> <li>• extent and design of deep soil landscaping is questioned</li> </ul>	<ul style="list-style-type: none"> <li>• The Southern Precinct SSD has no impact on street trees along Cope Street and in the Waterloo Estate.</li> <li>• The proposal includes removal of five street trees along Botany Road and Wellington Street, which is supported by an Arborists Report demonstrating low retention value, and offset by nine replacement trees to achieve the minimum site-wide and footpath canopy coverage requirements.</li> <li>• The proposal include Cope Street Plaza which contains various areas for tree and shrub planting. The DRP process and RtS has provided further information on deep soil landscaping.</li> </ul>

<p><i>Coordination with Waterloo Estate</i></p> <ul style="list-style-type: none"> <li>community infrastructure should be coordinated with the Waterloo Estate to avoid duplication.</li> </ul>	<ul style="list-style-type: none"> <li>Strategic Planning for Waterloo Metro Quarter was completed in 2019 to enable additional housing, including social and affordable homes, retail and entertainment, employment opportunities to be integrated with the planning and delivery of the new Waterloo Metro Station. The Waterloo Metro Quarter development would provide a 2,000 m<sup>2</sup> of community facility and 2,545m<sup>2</sup> of open space on the site to support the proposed development and also commuters and visitors to the site.</li> <li>Waterloo Estate is subject to a current Planning Proposal for rezoning, including consideration of future land uses and densities.</li> </ul>
<p><i>Solar access</i></p> <ul style="list-style-type: none"> <li>proposal reduces sunlight to author's apartment within 138 Botany Road</li> </ul>	<ul style="list-style-type: none"> <li>The Department notes that shadows cast on that building arise from the Central Precinct tower and Southern Precinct tower.</li> <li>The Department acknowledges that the Southern Precinct impacts five apartments in 138 Botany Road. These apartments would not receive a minimum of 2 hours solar access in midwinter in relation to their private open space. However, the Department's assessment finds this impact is reasonable and acceptable as the proposal complies with the height standards and Concept Approval, the impact is minor and any proposal over approximately 10 storeys would cause the same level of impact</li> </ul>
<p><i>Heritage</i></p> <ul style="list-style-type: none"> <li>Heritage impacts on terraces and park within Alexandria Park Conservation Area</li> </ul>	<ul style="list-style-type: none"> <li>The Department notes the proposal complies with the Sydney LEP and Concept Approval in regard to building height and density and has an acceptable relationship with Alexandria Park Conservation Area.</li> <li>The Department also notes the building materials have been chosen to reflect the brick and masonry finishes of surrounding terrace houses, factories and warehouses</li> </ul>
<p><i>Noise</i></p> <ul style="list-style-type: none"> <li>noise impact from loading dock on Wellington Street</li> </ul>	<ul style="list-style-type: none"> <li>The application was accompanied by an Acoustic Assessment demonstrating the loading dock can comply with noise criteria for the site.</li> <li>The Department notes that the loading dock is internalised within the student housing building and that a Servicing and Freight Management Plan will be prepared to maximise the efficiency of the dock to ensure vehicle arrivals and departures are scheduled appropriately</li> </ul>

## Appendix C – Mandatory Matters for Consideration

Decisions made under the EP&A Act must have regard to the objects set out in **Section 1.3** of the Act. A response to the objects is below.

Object of Section 1.3 of EP&A Act	Department's Response
a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources	<ul style="list-style-type: none"> <li>the proposal promotes the social and economic welfare of the community by providing social housing and student accommodation within a highly accessible site for transport and urban services, and, in doing so, contributing to the achievement of State, regional and local planning objectives</li> <li>the proposal comprises development above the approved station infrastructure and does not have</li> </ul>



	any impacts on the State's natural or other resources.
b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment	<ul style="list-style-type: none"> <li>the proposal has integrated ESD principles as discussed below.</li> </ul>
c) to promote the orderly and economic use and development of land	<ul style="list-style-type: none"> <li>the proposal represents the orderly and economic use of the land primarily as it will increase housing opportunities near services and public transport. The proposed land uses are permissible and the form of the development has regard to the planning controls that apply, the character of the locality and the context of surrounding sites.</li> </ul>
d) to promote the delivery and maintenance of affordable housing	<ul style="list-style-type: none"> <li>not applicable to this application. Affordable housing is to be provided in the Central Precinct under SSD 10439.</li> </ul>
e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats	<ul style="list-style-type: none"> <li>the proposal, comprising social and student housing above the metro station, will not have any natural environmental impacts.</li> </ul>
f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)	<ul style="list-style-type: none"> <li>the Department considers that the heritage impacts of the development are acceptable, as set out in <b>Section 6</b>.</li> </ul>
g) to promote good design and amenity of the built environment	<ul style="list-style-type: none"> <li>the proposal demonstrates a good design approach to the relevant planning controls and local character. Amenity impacts in the locality are managed by either the form of the development or by the recommended conditions of consent for mitigation measures during the construction and operational phase of the development.</li> </ul>
h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants	<ul style="list-style-type: none"> <li>the proposal demonstrates that construction work will be undertaken in accordance with national construction standards, relevant regulation and the site specific construction management plan. Any impacts during this phase will be monitored and managed in keeping with the conditions of consent set out to mitigate any impacts. Ongoing management and maintenance of the</li> </ul>

	development shall be managed by the building management.
i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State	<ul style="list-style-type: none"> <li>the Department publicly exhibited the proposal as outlined in <b>Section 5</b>. This included consultation with Council and other public authorities and consideration of their responses.</li> </ul>
j) to provide increased opportunity for community participation in environmental planning and assessment.	<ul style="list-style-type: none"> <li>the Department publicly exhibited the application which included notifying adjoining landowners, placing a notice in the local press and displaying the application on the Department's website and at the Council's office and Service NSW Centres. The Department also provided the RtS to Council and other relevant agencies and placed the RtS on its website.</li> <li>the engagement activities carried out by the Department are detailed in <b>Section 5</b>.</li> </ul>

### Ecologically sustainable development

The EP&A Act adopts the definition of ESD found in the Protection of the Environment Administration Act 1991. Section 6(2) of the Protection of the Environment Administration Act 1991 states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

- the precautionary principle;
- inter-generational equity;
- conservation of biological diversity and ecological integrity; and
- improved valuation, pricing and incentive mechanisms.

The development proposes ESD initiatives and sustainability measures, including targeting minimum environmental standards of 6 Star Green Star Design and As-Built and 5 Star NABERS Energy rating.

The Department has considered the project in relation to the ESD principles. The Precautionary and Inter-generational Equity Principles have been applied in the decision-making process by a thorough assessment of the environmental impacts of the project. Overall, the proposal is consistent with ESD principles and the Department is satisfied the proposed sustainability initiatives will encourage ESD, in accordance with the objects of the EP&A Act.

### Section 4.15(1) matters for consideration

**Table 4** identifies the matters for consideration under section 4.15 of the EP&A Act that apply to SSD in accordance with section 4.40 of the EP&A Act. The table represents a summary for which additional information and consideration is provided for in **Section 6** and relevant appendices or other sections of this report and EIS, referenced in the table.

**Table 4 | Summary of Modifications**

<b>Section 4.15(1) Evaluation</b>	<b>Consideration</b>
(a)(i) any environmental planning instrument	A comprehensive assessment of all relevant EPIs by the Department is discussed below this table.
(a)(ii) any proposed instrument	Relevant applicable draft EPIs have been considered below.
(a)(iii) and development control plan (DCP)	Under clause 11 of the SRD SEPP, DCPs do not apply to SSD. Notwithstanding, the Department has considered relevant provisions of the Sydney DCP 2012 in its consideration of issues in Section 6.
(a)(iia) any planning agreement	Not applicable.
(a)(iv) the regulations	The application satisfactorily meets the relevant requirements of the EP&A Regulation, including the procedures relating to applications (Part 6 of the EP&A Regulation), public participation procedures for SSD and Schedule 2 of the EP&A Regulation relating to EIS.
(a)(v) any coastal zone management plan	Not applicable.
(b) the likely impacts of that development including environmental impacts on both the natural and built environments, and social and economic impacts in the locality	Likely impacts are proposed to be appropriately mitigated or conditioned. Refer to <b>Section 6</b> of this report.
(c) the suitability of the site for the development	The site is deemed suitable for the proposed development.
(d) any submissions	Consideration has been given to the submissions received during the exhibition period. See <b>Section 5</b> of this report.
(e) the public interest	The proposal is considered acceptable and within the public's interest as the uses will provide social and student housing and enabling the Waterloo Metro Quarter to become a quality mixed use development supported by high frequency public transport.

### Environmental Planning Instruments (EPIs)

To satisfy the requirements of Section 4.15 of the Act, this report includes references to the provisions of the EPIs that govern the carrying out of the project and have been taken into consideration in the Department's environmental assessment of the project.

The EPIs that have been considered as part of the assessment of the proposal are:

- State Environmental Planning Policy (State & Regional Development) 2011
- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

- State Environmental Planning Policy No. 55 – Remediation of Land
- Draft State Environmental Planning Policy (Remediation)
- State Environmental Planning Policy No. 64 – Advertising and Signage
- State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development
- Draft Housing Diversity SEPP
- Sydney Local Environmental Plan 2012.

### **State Environmental Planning Policy (State and Regional Development) 2011**

The development is identified as State Significant Development under Clause 19 of Schedule 2 of SEPP. The Minister for Planning and Public Spaces is the consent authority for the application.

### **State Environmental Planning Policy (Infrastructure) 2007**

The application was referred to Transport for NSW under the requirements of Clause 86 and 88B of the SEPP. TfNSW, through its Sydney Metro Corridor Protection Team, provided comments and recommended conditions.

The Applicant's EIS considered the provisions of the Development Near Rail Corridors and Busy Roads - Interim Guideline in relation to earthing, bonding, electrolysis and safety.

The development has a frontage to a classified road (Botany Road) and is subject to Clause 102 in relation to consideration and mitigation of road traffic noise impact on residential accommodation. Internal noise goals are applied to bedrooms during the night time period and living rooms during day and night.

The Applicant's EIS included a Noise and Vibration Impact Assessment addressing the SEPP noise criteria and considering the Interim Guideline for Development Near Rail Corridors and Busy Roads. The Applicant's Assessment established that relevant road traffic noise affected apartments can achieve the noise criteria required through a combination of facade treatments (glazing and wall specifications) and acoustically treated ventilators on the most affected apartments.

The development constitutes traffic-generating development under Clause 104 and was referred to Transport for NSW for review and comment. Transport for NSW recommended several conditions of consent regarding management of construction traffic, servicing and green travel plans.

The Department has considered Transport for NSW's comments and incorporated their recommendations into the recommended conditions of consent.

### **State Environmental Planning Policy (BASIX) 2004**

The SEPP (BASIX) encourages sustainable residential development across NSW by setting targets that measure efficiency of buildings in relation to water, energy and thermal comfort. Minimum BASIX targets for reductions in energy use and water use are applied.

The EIS includes a BASIX certification confirming the proposal is capable of complying with the SEPP targets and Concept Approval conditions, comprising a BASIX Energy 30 rating and more than BASIX Water 40.

The Department recommends conditions of consent which bind the Applicant to achieving the targets outlined throughout the construction and operational phases of the development.



## State Environmental Planning Policy No. 55 – Remediation of Land

The proposed development will be subject to the approved CSSI remediation strategy. The CSSI approval covered demolition and excavation works on the eastern half of the Waterloo Metro Quarter. The SSD proposes that the remediation and site audit regime adopted for the eastern half of the site be rolled onto the western half of the site.

The EPA recommends that conditions of consent be applied to ensure compliance with the CSSI remediation methodology and ensure the site is remediated to a standard suitable for the proposal.

Accordingly, SEPP 55 is satisfied, and the proposal is suitable for the site.

## Draft State Environmental Planning Policy (Remediation)

As above, the CSSI approval covered demolition and excavation works on the eastern half of the Waterloo Metro Quarter. The SSD proposes that the remediation and site audit regime adopted for the eastern half of the site be rolled onto the western half of the site.

The EPA recommends that conditions of consent be applied to ensure compliance with the CSSI remediation methodology and ensure the site is remediated to a standard suitable for the proposal.

Accordingly, the draft SEPP is satisfied, and the proposal is suitable for the site.

## State Environmental Planning Policy 64 – Advertising and Signage

The proposed development includes provision of two top-of-building business identification signs and one wall mounted business identification signage on the ground floor. The architectural drawings show the proposed signage at the top of the student housing tower on two of the four elevations.

The Department has considered the proposed signage and finds that they are consistent with existing signage within the surrounding mixed use area and complies with the requirements of SEPP 64, as set out in the table below.

**Table 5: SEPP 64, Schedule 1 compliance table**

Assessment Criteria	Comments	Compliance
1. Character of the area		
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	The proposed signs are compatible with the bulk and scale of the proposed buildings and other future buildings in the Waterloo Metro Quarter	Yes
Is the proposal consistent with a theme for outdoor advertising in the area or locality?	The surrounding area does not have a theme for outdoor advertising.	Yes
2. Special areas		
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The Department notes that the development site is not located in a heritage conservation area or in other environmentally sensitive areas. The proposed signage, the area of the signs and their location on the development are consistent with other signage observed and is not considered to detract from the amenity or visual quality of the surrounding area.	Yes

### 3. Views and vistas

Does the proposal: obscure or compromise important views? dominate the skyline and reduce the quality of vistas? respect the viewing rights of other advertisers?	As the signage is located on the building facades they will not obscure views or vistas and will not impact on the viewing rights of other advertisers.	Yes
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### 4. Streetscape, setting or landscape

Does the proposal: provide an acceptable scale, proportion and form, appropriate for the streetscape, setting or landscape?	The scale of the signage is acceptable for its location and is consistent with similar signage on the top of buildings.	Yes
contribute to the visual interest of the streetscape, setting or landscape?	The signage will function as building/business identification and will be consistent with similar signage for other student housing buildings across the City of Sydney LGA.	Yes
reduce clutter by rationalising and simplifying existing advertising?	Not applicable.	N/A
screen unsightliness?	Not applicable.	N/A
protrude above buildings, structures or tree canopies in the area or locality?	The signage is contained within the building façade and does not protrude above the building.	Yes
require ongoing vegetation management?	No vegetation management required.	N/A

### 5. Site and building

Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located? Does the proposal respect important features of the site or building, or both? Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The signage is compatible with the scale and context of the proposed building. It will not detract from the design features of the building.	Yes
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### 6. Associated devices and logos with advertisements and advertising structures

Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	Not applicable. These controls relate to freeway advertising signs.	Yes
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### 7. Illumination

Would illumination: result in unacceptable glare? affect safety for pedestrians, vehicles or aircraft? detract from the amenity of any residence or other form of accommodation?	Not applicable. No illumination is proposed.	Yes
Can the intensity of the illumination be adjusted, if necessary and is the illumination subject to a curfew?	Not applicable. No illumination is proposed.	Yes
<b>8. Safety</b>		
Would the proposal reduce safety for: pedestrians, particularly children, by obscuring sightlines from public areas? any public road?	As the signage is wall mounted on the ground floor and top-of-building they will not obscure any sightlines for pedestrians.	Yes

### State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development (SEPP 65)

SEPP 65 aims to improve the design quality of residential development and encourage innovative design. The Apartment Design Guide (ADG) is closely linked to the aims and design principles of SEPP 65 and sets out best practice design standards for apartment development.

SEPP 65 applies to the social housing building as this is defined as a residential flat building. SEPP 65 does not apply to the student housing tower.

The Department is satisfied the proposal achieves the objectives and principles of SEPP 65 as detailed in the table below.

Design Principle	Department's consideration
1. Context and Neighbourhood Character	The building responds to and contributes to its context. It is consistent with the desired future character established by the development standards in the Sydney LEP, the built form envisaged in the Concept Approval and the desired outcomes of the endorsed Design Guidelines.
2. Built Form and Scale	The building complies with the built form and scale established for the site by the SLEP 2012 and Concept Approval. Refer to Section 6.1 for further details.
3. Density	The building, in combination with other Precincts under assessment, complies with the FSR standard applicable and the density envisaged in the Concept Approval. The density of the

	social housing building is well suited to the site's location above the new high frequency metro line.
4. Sustainability	The building has integrated ESD principles as discussed above. The social housing building has been designed to achieve excellent solar access amenity and acceptable ventilation to apartments, as detailed in Section 6.3.
5. Landscape	The building integrates suitable rooftop communal open space and private open space above the podium. The building sits above the metro station podium building and, as such, does not have ground floor landscaping.
6. Amenity	Section 6.4 and the table below provides an assessment of the building against key residential amenity matters including solar access, cross ventilation, privacy and open space. The proposal is considered to achieve good levels of internal amenity and minimise impacts on the student housing tower.
7. Safety	Street level access is through the student housing tower as the Metro structure occupies the ground floor. The entry is designed to be secure, well lit and enable easy identification between public and private realms.
8. Housing Diversity and Social Inclusion	The building includes a mix of apartment sizes but was subject to a design brief from Land and Housing Corporation seeking a majority of studio apartments. The building also includes communal open space on the roof to provide opportunities for social interaction amongst residents.
9. Aesthetics	The facade incorporates a variety of materials, colours and finishes. The design has been subject to review and feedback by the Design Review Panel and the panel confirmed it supported the proposed approach and that the proposal will achieve design excellence.

### Apartment Design Guide (ADG)

An assessment of the proposal against the ADG best practice standards is provided below.

Relevant Criteria	Department's consideration
<b>3B Orientation</b>	
<ul style="list-style-type: none"> <li>Building type/layouts respond to</li> </ul>	<ul style="list-style-type: none"> <li>The building will have excellent solar access to the proposed apartments, as discussed in <b>Section 6.3</b>.</li> </ul>



streetscape, optimising solar access	<ul style="list-style-type: none"> <li>The building will impact solar access to 138-140 Botany Road to the south as discussed in Section 6.4. The Department considers the impacts as modelled are reasonable having regard to the approved Concept Plan envelope, the degree of impact and the alternative sunlight locations provided at the affected apartments as discussed in Section 6.4.</li> </ul>
<ul style="list-style-type: none"> <li>Overshadowing of neighbouring properties is minimised during mid-winter</li> <li>Ensure solar access to existing buildings which don't achieve ADG sun access criteria is not reduced by more than 20%.</li> </ul>	
<b>3C Public Domain Interface</b>	
<ul style="list-style-type: none"> <li>Transition between public/private without compromising security</li> <li>Amenity of public domain is retained and enhanced</li> </ul>	<ul style="list-style-type: none"> <li>Entry to the building is appropriately designed, incorporating glazing to enable causal surveillance, and activation to enhance security and amenity.</li> </ul>
<b>3D Communal and Public Open Space</b>	
<ul style="list-style-type: none"> <li>Communal Open Space has a minimum area equal to 25% of the site area.</li> <li>50% of communal open space has direct sunlight for at least 2 hours midwinter.</li> </ul>	<ul style="list-style-type: none"> <li>Communal open space (290m<sup>2</sup>) for the building equals 20.36% of the site area (rooftop of Metro and ground floor lobby). Whilst this is less than desirable, the proposed rooftop area has been maximised and consolidated into one space with excellent solar access and amenity. Additional open space to make up for the difference were examined by the Applicant. The Department agrees that additional space on the roof of the Metro service structure is not practical due to distance from the lift core and disruption to the proposed apartments at that level.</li> </ul>
<b>3E Deep Soil Zones</b>	
<ul style="list-style-type: none"> <li>For sites greater than 1,500 m<sup>2</sup> a minimum of 7 per cent of the site should provide for deep soil zone(s) and a minimum dimension of 6 metres.</li> <li>Where this is not possible, options for acceptable storm water management strategies should be achieved.</li> </ul>	<ul style="list-style-type: none"> <li>The building sits above the metro station which has a 100% site coverage and therefore deep soil zone is not possible.</li> <li>The submitted plans and landscaping report identifies there would be planting on roof level, with the soil depth provided supporting soft landscaping.</li> <li>The Waterloo Metro Quarter overall will provide 15% deep soil landscaping, most of which is within the Cope Street Plaza.</li> </ul>
<b>3F Visual Privacy</b>	
	<ul style="list-style-type: none"> <li>Visual privacy is discussed in greater detail in <b>Section 6.4</b> and the proposal is not considered to result in unacceptable privacy</li> </ul>

<p>Achieve the following building separation from windows and balconies to side and rear boundaries for habitable rooms</p> <ul style="list-style-type: none"> <li>• Up to 12 m / 4 storeys: 6 m</li> <li>• Up to 25 m / 8 storeys: 9 m.</li> <li>• 25+ m / 9+ Storeys: 12 m.</li> </ul>	<p>impacts notwithstanding non-compliance with the building separation requirements.</p>
<p><b>3G Pedestrian Access and Entries</b></p> <ul style="list-style-type: none"> <li>• Building entries and pedestrian access connects to and addresses the public domain.</li> <li>• Access, entries and pathways are accessible and easy to identify.</li> </ul>	<ul style="list-style-type: none"> <li>• The entry lobby, through the student housing building, is directly connected to the street and easy to identify.</li> <li>• The building sits above the Metro services structure and apartments do not have individual entry from the street.</li> </ul>
<p><b>3H Vehicle Access</b></p> <ul style="list-style-type: none"> <li>• Vehicle access points are to be designed to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes.</li> </ul>	<ul style="list-style-type: none"> <li>• The proposed loading dock has been designed to achieve safety, minimise conflict and create a satisfactory streetscape.</li> <li>• Car parking for the proposal is within the basement below the Northern and Central Precincts, accessed off Botany Road and subject to assessment of SSD-1043</li> </ul>
<p><b>4A Solar and Daylight Access</b></p> <ul style="list-style-type: none"> <li>• To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.</li> <li>• Minimum of 70% of apartments' living rooms and private open spaces receive 2hrs direct sunlight between 9 am -3 pm in mid-winter in the Sydney Metropolitan Area.</li> <li>• Maximum of 15% of apartments have no direct sunlight</li> </ul>	<ul style="list-style-type: none"> <li>• 73% of apartments will receive at least 2 hours of solar access between 9am and 3pm.</li> <li>• 21% of apartments would have no solar access between 9am and 3pm.</li> <li>• Facade design incorporates adequate shading control.</li> </ul> <p>Refer to discussion in <b>Section</b> Error! Reference source not found.. It is considered that solar and daylight access has been maximised given the constraints of the site and the overshadowing caused by surrounding buildings.</p> <p>Shading and glare control is considered appropriate as the proposal will meet the relevant requirements of SEPP (BASIX) and the National Construction Code.</p>

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between 9 am - 3 pm  
in mid-winter.

- Daylight access is maximised where sunlight is limited.
- Design incorporates shading and glare control, particularly for warmer months.

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#### 4B Natural Ventilation

- At least 60% of apartments in the first 9 storeys are naturally cross ventilated
- The proposal incorporates a mix of naturally cross-ventilated apartments on corners and natural ventilated apartments with acoustically designed ventilators and plenums.
- The building is affected by road traffic noise and maximises natural ventilation rather than natural cross ventilation.

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#### 4C Ceiling Heights

Measured from finished floor level to finished ceiling level, minimum ceiling heights are:

- Habitable rooms 2.7 m
- Non-habitable rooms 2.4 m.
- Ground and first floor 3.3m
- All habitable rooms have a minimum ceiling height of 2.7m.
- All non-habitable rooms have a minimum ceiling height of 2.4m
- Ground floor residential entry from the student housing tower has generous ceiling exceeding 3.3m.
- There is no first floor in this instance as the Metro services structure is below the building.

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#### 4D Apartment Size and Layout

- Minimum apartment sizes
  - Studio 35 m<sup>2</sup>
  - 1 bedroom 50 m<sup>2</sup>
  - 2 bedroom 70 m<sup>2</sup>
  - 3 bedroom 90 m<sup>2</sup>.
- The above requirements increase by 5m<sup>2</sup> for each additional bathroom provided
- Every habitable room must have a window in an external wall with a total glass area of not less than 10% of the floor area. Daylight and air may not be borrowed from other rooms.
- Habitable room depths are limited to
- All apartments layouts comply in regard to size and dimensions.
- All habitable rooms have windows which represent more than 10% of the area of the room
- All apartments comply with the 8m to window guidance.
- All apartments comply with the minimum bedroom sizes and minimum living room widths

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2.5 x the ceiling height.

- In open plan layouts the maximum habitable room depth is 8m from a window.
- Master bedroom have a minimum area of 10 m<sup>2</sup> and other bedrooms have 9 m<sup>2</sup>.
- Bedrooms have a minimum dimension of 3m (excluding wardrobes).
- Living rooms have a minimum width of:
  - 3.6 m for studio and one bed
  - 4 m for 2 and 3 bed.
- The width of cross-over or cross-through apartments are at least 4m internally.

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#### **4E Private Open Space and Balconies**

- All apartments meet the minimum recommendations of the ADG for balcony size and dimensions.
- Primary balconies are provided to all apartments providing for:
  - Studio apartments - minimum area of 4m<sup>2</sup>
  - 1-bedroom - minimum area of 8 m<sup>2</sup> and a minimum depth of 2m
  - 2-bedroom - minimum area 10m<sup>2</sup> and a minimum depth of 2m
  - 3-bedroom - minimum area 12m<sup>2</sup> and minimum depth 2.5m.

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#### **4F Common Circulation Space**

- Maximum number of apartments from a single circulation corridor is eight and the maximum number of apartments per lift core is nine. However, the apartments are arranged into distinct wings orientated in different directions and have access to two lifts.
  - Maximum 8 apartments off a circulation core.
  - For buildings 10 storeys and over the
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maximum number of units to a lift is 40

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#### 4G Storage

- Studios 4m<sup>3</sup>.
- 1 bedroom 6m<sup>3</sup>.
- 2 bedroom 8m<sup>3</sup>.
- 3 bedroom 10m<sup>3</sup>.
- Apartments are provided with storage as required by the ADG.

In addition to kitchens, bathrooms and bedrooms

- At least 50% of the required storage is to be provided within the apartment

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#### 4H Acoustic Privacy and 4J Noise and Pollution

- Noise transfer is minimised through the siting of buildings and building layout and minimises external noise and pollution.
- Noise impacts are mitigated through internal apartment layout and acoustic treatments.
- Internal layouts and design are considered appropriate to minimise acoustic impacts
- Noise impacts to neighbours are considered in **Section 6.4** and the proposal is not considered likely to result in adverse acoustic outcomes.

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#### 4K Apartment Mix

- Provision of a range of apartment types and sizes.
- Apartment mix is distributed to suitable locations within the building.
- The proposal includes a range of apartment sizes including 26 studios, 2 one-bedrooms, 30 two-bedrooms, 4 two-bedroom adaptable units, 7 three-bedrooms and 1 four-bedrooms. A higher than normal number of studios is incorporated to satisfy the design brief from Land and Housing Corporation.
- The Apartment mix is distributed throughout the development.

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#### 4M Facades

- Building facades provide visual interest along the street while respecting the character of the local area.
- Building functions are expressed by the façade.
- The proposal will achieve a high standard of architectural design and will positively contribute to the character of the area.
- Facade design is further discussed in **Section 6.1**.

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#### 4N Roof Design

- Roof treatments integrate with the building design.
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- Roof treatments are integrated into the building design
  - Opportunities to use roof space for residential accommodation or open space are maximised
  - Roof design incorporates sustainability features.
  - Communal space including open space is provided at roof level
  - Photovoltaic arrays are provided on the roof
- 

#### **4P Planting on structures**

- Appropriate soil profiles are provided
  - Plant growth is optimised with appropriate selection and maintenance
  - Contributes to the quality and amenity of the open space.
  - Raised planters are included to provide soil depth for planting of trees, shrubs and ground covers.
- 

#### **4Q Universal design**

- Universal design features are included in apartment design to promote flexible housing for all community members (Developments achieve a benchmark of 20% of the total apartments incorporating the Liveable Housing Guidelines silver level universal design features).
  - A variety of apartments with adaptable designs are provided.
  - Apartment layouts are flexible and accommodate a range of lifestyle needs.
  - 20% of apartments will meet silver level universal design.
  - The proposal is capable of complying with the other requirements for universal and adaptable design, as all apartments are of a size and layout that allows for flexible use and design and therefore can accommodate a range of lifestyle needs.
- 

#### **4S Mixed Use**

- Mixed use developments are
  - In conjunction with the CSSI Station Approval, the proposal provides a mixed use development with active street frontages.
-

<p>provided in appropriate locations and provide active street frontages that encourage pedestrian movement.</p> <ul style="list-style-type: none"> <li>Residential levels are integrated within the development, and safety and amenity is maximised for residents.</li> </ul>	<ul style="list-style-type: none"> <li>Residential levels are integrated within the development and separate secure entry is provided for residents.</li> </ul>
<p><b>4T Awnings and Signage</b></p> <ul style="list-style-type: none"> <li>Awnings are well located and complement and integrate with the building design</li> <li>Signage responds to context and desired streetscape character.</li> </ul>	<ul style="list-style-type: none"> <li>An entry awning is proposed above the ground floor lobby, complements the design . Otherwise the ground floor footprint below the building is occupied by the Metro services structure.</li> <li>Ground floor and top-of-building signage is integrated well into the design.</li> </ul>
<p><b>4U Energy Efficiency</b></p> <ul style="list-style-type: none"> <li>Development incorporates passive environmental design.</li> <li>Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer.</li> <li>Adequate natural ventilation minimises the need for mechanical ventilation.</li> </ul>	<ul style="list-style-type: none"> <li>The Department considers the proposal is acceptable as it is supported by a BASIX Certificate, and ESD assessment demonstrating relevant requirements are satisfied.</li> <li>The buildings and their individual apartments have been orientated to achieve maximum available solar access, and ventilation is acceptable, as discussed in 4A and 4B of this table.</li> </ul>
<p><b>4V Water management and conservation</b></p> <ul style="list-style-type: none"> <li>Potable water use is minimised.</li> <li>Urban stormwater is treated on site before being discharged to receiving waters.</li> <li>Flood management systems are integrated into site design.</li> </ul>	<ul style="list-style-type: none"> <li>The development will meet BASIX water targets.</li> <li>Urban stormwater will be treated</li> <li>Floor level of the entry point is designed having regard to flood levels.</li> </ul>

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#### 4W Waste management

- Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents
  - Domestic waste is minimised by providing convenient source separation and recycling.
  - Waste management facilities are provided and accessible from the loading area and the building uses a waste chute system to transfer waste from apartments to the loading dock.
  - Separate bins allow for normal residential waste to be sorted.
- 

#### Draft State Environmental Planning Policy (Housing Diversity)

There are current three separate SEPPs (the Seniors SEPP, the Affordable Rental Housing SEPP and SEPP 70) in place to facilitate the delivery of diverse housing types to meet the needs of the people of NSW. The draft SEPP (Housing Diversity) proposes to consolidate and update the Government's housing-related policies.

The proposal is not affected by any of the provisions of the Draft SEPP.

#### Sydney Local Environmental Plan 2012 (SLEP)

An assessment of the proposal against the aims, objectives, standards and relevant provisions of SLEP is set out in the table below.

SLEP Clause	Relevant controls / criteria	Department's Assessment
1.2 – Aims of the Plan	<p>The relevant aims of the Plan include:</p> <ul style="list-style-type: none"><li>• To support the City of Sydney as an important location for business, education and cultural activities and tourism</li><li>• To promote ecologically sustainable development</li><li>• To encourage economic growth</li><li>• To encourage growth and diversity in residential population by providing a range of appropriately located housing including affordable housing</li><li>• To enable a range of services and infrastructure that meet the</li></ul>	<p>The proposal is in keeping with the aims of the Plan in that the land use is compatible with the desire to ensure growth and diversity in residential uses and compliance is achieved with standards governing bulk and scale, protection of solar access to public space and amenity of surrounding properties.</p>

	<p>needs of residents, workers and visitors</p> <ul style="list-style-type: none"> <li>• To enhance the amenity and quality of life of local communities</li> <li>• To achieve high quality urban form through design excellence.</li> </ul>	
2.3 – Land use zoning	<p>The site is within the B4 Mixed Use. The objectives of the Zone are:</p> <ul style="list-style-type: none"> <li>• To promote a mixture of compatible land uses</li> <li>• To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximum public transport use and encourage walking and cycling</li> <li>• To ensure uses support the viability of centres.</li> </ul>	The proposal is permissible with consent and consistent with the objectives of the zone.
4.3 – Height of buildings	<p>The height of a building is not to exceed the maximum height shown on the <i>Height of Buildings Map</i>. In this case, the relevant height standard is RL 96.9.</p>	The proposal complies with the maximum height standards applying to the site.
4.4 – Floor space ratio	<p>The floor space ratio for a building is not to exceed the FSR shown on the map.</p> <p>In this case, the Waterloo Metro Quarter has an FSR standard of 6:1.</p>	The proposal complies with the maximum FSR standard applying to the site. A cumulative tally of GFA will be required for this proposal and subsequent proposals to determine the overall FSR of the Waterloo Metro Quarter.
4.6 – Exceptions to development standards	<p>The clause enables a degree of flexibility in applying certain development standards.</p>	<p>The Applicant has lodged a Clause 4.6 submission in relation to non-compliance with strict imposition of Clause 7.27 in relation to active street frontages.</p> <p>The Department's consideration of the Clause 4.6 submission is contained in <b>Appendix D</b>.</p>



5.6 – Architectural roof features	Development consent can be granted to development that includes an architectural roof feature.	The proposed development does not include any architectural roof features as the proposal complies with the height standard.
5.10 – Heritage conservation	<p>The consent authority must consider the effect of the proposed development on the heritage significance of a heritage item or conservation area.</p> <p>The consent authority may require a heritage assessment before granting consent to any development on land that is within the vicinity of a heritage item or conservation area.</p>	The site does not contain any heritage items. However, the site is near the Alexandria Park Heritage Conservation Area, Waterloo Congregational Church and Cauliflower Hotel. A Heritage Impact Assessment has been lodged and the Department has considered this assessment in its assessment of the application.
5.10 – Heritage conservation	<p>The consent authority must consider the effect of the proposed development on the heritage significance of a heritage item or conservation area.</p> <p>The consent authority may require a heritage assessment before granting consent to any development on land that is within the vicinity of a heritage item or conservation area.</p>	The site does not contain any heritage items. However, the site is near the Alexandria Park Heritage Conservation Area. A Heritage Impact Assessment has been lodged and the Department has considered this assessment and the views of the NSW Heritage Council in its assessment of the application.
6.21 - Design Excellence	Consent must not be granted unless, in the opinion of the consent authority, the proposal exhibits design excellence.	<p>The Department's assessment on design excellence is contained in Section 6.6.</p> <p>In terms of the design excellence process followed, the Design Excellence Strategy was endorsed by the Concept Approval, including independent review of the development by the State Design Review Panel (State DRP) or an alternative endorsed by GA NSW.</p> <p>An independent DRP process in lieu of a competitive design process under SLEP 2012 was held, because it is considered to</p>

		<p>deliver better design outcomes due to the circumstances of the site and relationship with the metro station below.</p> <p>GA NSW endorsed the Sydney Metro DRP (the DRP) as an alternative to the State DRP. The endorsement was subject to a revised set of terms of reference for the DRP, which was updated to include an independent panel secretariat and panellist nominated by Council.</p> <p>The Department notes the DRP is providing advice on the design of the Waterloo Metro Station to assist with achieving an integrated design outcome.</p> <p>The Department finds that the Minister may form the opinion that the proposal exhibits design excellence.</p>
6.45 – Waterloo Metro Quarter - general	<p>(1) The consent authority must not grant consent unless the development is consistent with the following objectives:</p> <p>(a) there must be at least 12,000 sqm of GFA at or below podium level of buildings used for land uses other than residential accommodation or passenger transport facilities</p> <p>(b) at least 2,000 sqm of GFA of buildings at the Waterloo Metro Quarter must be used for community facilities</p> <p>(c) at least 2,200 sqm of land at the Waterloo Metro Quarter must be used for publicly accessible open space.</p>	<p>The proposal, together with other precincts under separate SSDs, will contribute to a minimum 12,000m<sup>2</sup> of non-residential uses at or below podium levels.</p> <p>Community facility floorspace is proposed in the Central Precinct SSD (SSD-10439).</p> <p>The proposed Cope Street Plaza and Church Yard contribute to the satisfaction of at least 2,200m<sup>2</sup> of publicly accessible open space.</p> <p>Affordable housing is proposed in the Central Precinct SSD.</p> <p>Non-residential floorspace is split up across all proposed buildings in the Waterloo Metro Quarter including the proposed buildings.</p>

	<p>(2) Consent must not be granted to development involving one of more dwellings unless:</p> <p>(a) it is satisfied at least 5% of GFA of residential accommodation will be used for affordable housing.</p> <p><i>(b) not relevant to this application – minimum apartment size for affordable housing</i></p> <p>(c) it is satisfied that land uses other than residential accommodation or passenger transport facilities will be evenly distributed through the Waterloo Metro Quarter</p> <p>(d) it has taken into consideration any guidelines made by the Planning Secretary relating to the design and amenity of the Waterloo Metro Quarter.</p>	<p>The Department has considered the Design and Amenity Guidelines in the assessment of the application. A summary assessment is contained in Appendix F.</p>
6.46 – Waterloo Metro Quarter – State public infrastructure	<p>Consent must not be granted for residential accommodation unless the Planning Secretary has certified in writing that satisfactory arrangements have been made to contribute to State public infrastructure such as roads, regional open space and social infrastructure.</p>	<p>The Planning Secretary's delegate certified on 24 November 2019 that satisfactory arrangements have been made in relation to development that is consistent with the concept proposals set out in SSD 9393 (the Concept Approval)</p> <p>The Department sought and received legal advice that the Amending Concept SSD (SSD 10440) does not trigger the requirement for fresh or amended certification in relation to Clause 6.46. As such, the Planning Secretary's existing certification remains in place and reliable for the purposes of Clause 6.46.</p> <p>The Minister therefore may grant consent to the application as Clause 6.46 of the Sydney LEP has been satisfied</p>

7.1-7.9 – Car parking	Maximum car parking rates apply to the proposal including residential rates, business premises rates and retail premises rates.	The proposal does not exceed the maximum permissible parking rates of the LEP. There are 8 proposed spaces for the social housing building and no spaces for the student housing tower. The Department's independent traffic consultant advised that this amount of parking is satisfactory.
7.16 – Airspace Operations	<p>The consent authority must consult with the relevant Commonwealth body for any application which penetrates the Limitation or Operations Surface (OLS).</p> <p>The consent authority may grant consent for the development if the relevant Commonwealth body advises that it has no objections to its construction.</p>	The proposal penetrates the OLS for Sydney Airport. Approval has been granted by the Commonwealth Department of Infrastructure, Regional Development and Cities for the maximum height of the building envelope up to RL 230. Relevant conditions of the approval have been included in the recommended conditions.
7.27 – Active Street Frontages	Development consent must not be granted unless the consent authority is satisfied all premises on the ground floor that face the street, on the map accompanying the LEP, will be used for business premises or retail premises and those premises have an active street frontage. Exclusions apply for entrances and lobbies, access for fire stairs and vehicle accesses.	<p>The Department's consideration of non-compliance with this Clause is found in Section 6.4 and in the Department's response to the Applicant's Clause 4.6 submission in <b>Appendix D</b>.</p> <p>The Department is satisfied the non-compliance is acceptable and the proposal has maximised active street frontages.</p>

## Sydney Development Control Plan (SDCP) 2012

It is noted that Clause 11 of State Environmental Planning Policy (State & Regional Development) 2011 provides that development control plans do not apply to SSD. Notwithstanding, consideration of relevant controls under SDCP has been given in Section 6 of this Assessment where the controls are taken as guidance on aspects of the proposal.

## Appendix D – Department's consideration of Clause 4.6 submission – Active Frontage

The proposal seeks a variation to the extent of active street frontages along Botany Road and Wellington Street as required under the Sydney Local Environmental Plan 2012 (SLEP).

As set out in **Section 6.4.5** of this assessment report, the proposal includes ground floor activation on street frontages along a large portion of Botany Road and a small portion of Wellington Street. However, the remaining prescribed street frontages on the SLEP map have not been provided due to the location of critical building infrastructure and services along the Botany Road and Wellington Street frontages, and the Metro station structure on the corner of Wellington Street and Cope Street (which this approval does not seek consent for ground floor uses on this portion of the site).

Clause 4.6(2) of the SLEP permits the consent authority to consider a variation to a development standard. The aims of clause 4.6 are to provide an appropriate degree of flexibility in applying certain development standards and to achieve better outcomes for and from development by allowing flexibility in particular circumstances.

When considering a proposed variation, clause 4.6(3) requires the following:

*Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:*

- (a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and
- (b) *that there are sufficient environmental planning grounds to justify contravening the development standard.*

Clause 4.6(4)(a) requires the consent authority to be satisfied that:

- i. the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3) (above), and
- ii. the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and
- iii. the concurrence of the Secretary has been obtained (although this is not required for SSD).

The following provides an assessment of the proposed exception to the development standard under clauses 4.3 of the SLEP, applying the tests summarised by *Preston CJ in Initial Action Pty Ltd v Woollahra Municipal Council [2018] NSWLEC 118* and *Wehbe v Pittwater Council [2007] 156 LGERA 446; [2007] NSWLEC 827*.

## **1. Is the consent authority satisfied that the proposed development will be consistent with the objectives of the zone?**

The objectives of the B4 Mixed Use zone are:

- *to promote a mixture of compatible land uses*
- *to integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport use and encourage walking and cycling*
- *to ensure uses support the viability of centres.*

The Department considers the proposal is consistent with the objectives of the B4 zone as the proposed development:



- will provide a genuine mix of retail uses to the overall mixed-use precinct that will support ground level and upper level commercial uses
- encourages the integration of uses within the broader Waterloo Metro Quarter that will enable greater activation during the day and night, contribute to create a lively streetscape and desired sense of place for the site and broader precinct
- will support the patronage of the site by providing activated uses at the ground floor and take advantage of the close proximity to public transport including the adjacent Metro station
- will provide areas of active frontages for the purposes of retail commercial premises to support the viability and growth of the long-term development of the Innovation Corridor, contributing to its economic success and global competitiveness.

**2. Is the consent authority satisfied that the proposed development will be consistent with the objectives of the standard?**

The objective of Clause 7.27 Active street frontages in the SLEP is to promote uses that attract pedestrian traffic along certain ground floor street frontages. The Clause states development consent must not be granted unless the consent authority is satisfied all premises on the ground floor of the building that face the street will be used for business premises or retail premises and those premises have an active street frontage. Exclusions apply for entries and lobbies, access for fire services and vehicular access.

The Department considers the proposal is consistent with the objectives of the active street frontages standard as it:

- promotes uses that encourage activation and pedestrian traffic to ensure the desired future character and envisioned streetscape of the site and broader precinct can be achieved
- includes active street frontage uses along a large portion of Botany Road and a portion of Wellington Street to promote pedestrian activity along primary roads. The location of a gym on level 1, directly above the portion of inactive ground floor attracts pedestrian activity along Wellington Street via stair access to the premises along the street frontage
- provides over 215m of uses within the southern precinct to promote internal activation and ensure pedestrian movement is encouraged.

**3. Has the consent authority considered a written request demonstrating compliance with the development standard is unreasonable or unnecessary in the circumstances of the case?**

The Applicant has submitted a written request seeking a variation to the active street frontage standard that applies to the site under the SLEP.

In summary, the Applicant's clause 4.6 request demonstrates that compliance with the active street frontage standard is unreasonable and unnecessary in the circumstance of the case as the development is consistent with the objectives of the standard, in keeping with the first test of the five-part tests in *Wehbe v Pittwater Council [2007] NSWLEC 827*.

The Applicant's written request provides the following reasons to demonstrate that the development is consistent with the objectives of the active street frontage standard:

- only a portion of Wellington Street is required to be an active street frontage under clause 7.27 of the SLEP. The portion that does not provide active uses on ground floor does not comply with clause 7.27 however, still promotes pedestrian traffic by locating a commercial use, in the form of a gym, on level 1 with access via the non-activated portion of the street frontage on Wellington Street
- whilst there are portions of non-active street frontages, there is a focus on creating a highly activated urban streetscape within the southern precinct. Retail premises have been proposed along Botany Road and Wellington Road, externally as well as internal spaces of the site to create;
  - a 24m activated walkway with access via Church Yard (between Building 3 and the Waterloo Congregational Church), and
  - a 32m activated space in Building 4 (adjacent to the Cope Street Plaza) encouraging pedestrian traffic.
- without adhering to the standard, the objective is still achieved. Pedestrian traffic is encouraged by promoting active uses on street frontages and ground floor spaces.

For the reasons provided above, the Department accepts that compliance with the active street frontage standard is unreasonable or unnecessary given the circumstances of the case.

#### **4. Has the consent authority considered a written request that demonstrates there are sufficient environmental planning grounds to justify contravening the development standard?**

The Department considers there are sufficient environmental planning grounds to justify the development's contravention of the development standard in the circumstances of the case as provided in the Applicant's written request and as summarised below:

- the development is consistent with the objectives of the B4 Mixed Use Zone by providing a genuine mix of uses across the Waterloo Quarter site. Proposed ground floor retail premises will support upper level commercial and residential uses within the broader precinct, creating an integrated precinct with compatible uses.
- the proposal achieves the objective of the clause 7.27 active street frontage standard to attract pedestrian traffic along the ground floor street frontages. The minor variation to the standard is still considered in keeping with the desired future character of the site and broader surrounds. It still enables activated uses to attract pedestrian traffic and connect the precinct to its surrounding area.
- strict compliance with clause 7.27 of the SLEP 2012 would result in the illogical and inefficient location of critical building infrastructure including a switch room, two substations, fire control room and two sets of stairs to access the mezzanine level, that are currently located along the street fronts of Wellington Street and Botany Road. Excavation would be required to establish the infrastructure in the basement and under the Waterloo Congregational Church, which is not part of the site. Therefore, the relocation of infrastructure and services would have no benefit to the operation of the site.
- there is no public benefit to strictly maintaining the active street frontage standard as the introduction of active uses internal to the development balances the portion of street frontages on Botany Road and Wellington Street that have not been activated.

The Department considers the Applicant's arguments above to be well founded. In supporting the above environmental planning grounds to vary the development standard, the Department considers that the development will deliver a better planning outcome for the site.

The Department also considers the proposed active street frontage variation is acceptable because:

- the proposed development achieves the objectives of the land use zoning and active street frontage development standard
- the proposal maximises the activation of the site by promoting uses that encourage pedestrian movements along street frontages, as prescribed by the SLEP and additional internal activated spaces. The Applicant has demonstrated the provision of additional commercial and retail premises provides a high level of internal activation at a human scale, which encourages pedestrians to move within the site as well as along primary road frontages
- the relocation of infrastructure and services located along the street frontages, that are not considered active uses under clause 7.27, would not significantly benefit the outcome, functionality or overall activation of the site. There would be greater disbenefits to the relocation of this infrastructure associated with logistics and costs.

## Conclusion

Having considered the written request, the Department is satisfied the Applicant has provided sufficient environmental planning grounds to justify the contravention to the extent of ground floor active street frontages required to be demonstrated under clause 4.6 have been adequately addressed. The Department concludes the proposed development is in the public interest and the variation to the active street frontage standard results in a better development outcome.

## Appendix E – Consistency with Concept Approval

Concept Approval Condition	Department's Assessment
Planning Agreement / Binding Agreement	
<p>A12. Prior to the determination of the first Future Development Application, the Applicant or its successors must enter into a Planning Agreement and/or other legally binding agreement to the satisfaction of the Planning Secretary securing the provision of the following public benefits of the Concept:</p> <ul style="list-style-type: none"> <li>(c) a minimum 5% of approved residential gross floor area dedicated or transferred to a Registered Community Housing Provider as affordable housing</li> <li>(d) 70 social housing dwellings dedicated or transferred as agreed by NSW Land and Housing Corporation</li> <li>(e) publicly accessible open space provision of minimum 2,200m<sup>2</sup> across the Metro Quarter site including its final area,</li> </ul>	<p>The Applicant has demonstrated that the Project Delivery Agreement (PDA) with Sydney Metro for the construction of the Waterloo Metro Quarter includes securing the required open space and social housing.</p> <p>The affordable housing and community facility public benefits are proposed to be provided in the Central Precinct under SSD 10439.</p>

<p>(f) design and ongoing management, noting partial provision of this publicly accessible open space may also be delivered under the CSSI Approval community facilities gross floor area of a minimum 2,000m<sup>2</sup> including its final area, design and future operating model. Community facilities are as defined in the Sydney Local Environmental Plan 2012.</p>	
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### Maximum Building Envelopes

<p>B1. Future development applications must demonstrate that the buildings are wholly contained within the building envelopes consistent with the plans listed in Condition A2, as modified by the conditions of this consent.</p> <p>B3. The maximum achievable gross floor area (GFA) for the non-station related floor space is 68,750 m<sup>2</sup> and this amount will only be achieved subject to demonstration of:</p> <ul style="list-style-type: none"> <li>(a) being wholly contained within the approved building envelopes</li> <li>(b) compliance with the conditions of this concept approval</li> <li>(c) demonstration of design excellence</li> <li>(d) consistency with the Design Guidelines (as amended by Condition A14)</li> </ul> <p>B4. The approved podium building envelopes, as identified with green shading in the approved plans in Condition A2, must be used for non-residential uses only.</p>	<p>The modification to the Concept proposes to allow minor building envelope protrusions for a skylight, plant room and parapet. As modified, the Detailed Design SSD will be fully contained within the approved building envelopes.</p> <p>The gross floor area of the Waterloo Metro Quarter is calculated across all Detailed Design SSDs and a final tally will need to be made with the last SSD. The concurrent SSDs under assessment have less than 68,750m<sup>2</sup>.</p> <p>The modification to the Concept proposes to permit student housing facilities in the podium of that building.</p>
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### Built Form and Urban Design

<p>B5. The detailed development applications shall address compliance with:</p> <ul style="list-style-type: none"> <li>(e) the Design Guidelines as endorsed by the Planning Secretary pursuant to Condition A14</li> <li>(f) the Design Excellence Strategy as endorsed by the Planning Secretary pursuant to Condition A15</li> <li>(g) the conditions of this consent.</li> </ul> <p>B6. The following elements are not inconsistent with the consent proposal but are subject to further assessment with the relevant detailed development application:</p> <ul style="list-style-type: none"> <li>(i) conceptual land uses, except for the approved minimum non-residential GFA, community facilities GFA, affordable housing rate and number of social housing dwellings approved</li> </ul>	<p>The applications address compliance with:</p> <ul style="list-style-type: none"> <li>• with the Design and Amenity Guidelines in the EIS and RtS;</li> <li>• the Design Excellence Strategy in the EIS, RtS and Design Integrity Report</li> <li>• the conditions of consent in the EIS.</li> </ul> <p>The Department has addressed the Design Guidelines in Appendix F and the Design Excellence Strategy in Section 6.6.</p> <p>The proposal includes land uses, signage and subdivision and is consistent with the Concept Approval inclusions.</p> <p>The requirements in Condition B7 are satisfied.</p>
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<p>(ii) indicative signage zones, following preparation of a Signage Strategy</p> <p>(iii) subdivision.</p> <p>B7. Future development applications shall address the following:</p> <p>(h) <i>not relevant to this application.</i></p> <p>(i) submission of a Design Integrity Report to the satisfaction of the Planning Secretary that demonstrates how design excellence and design integrity will be achieved in accordance with:</p> <p>(i) the design objectives of the Concept Development Application</p> <p>(ii) consistency with the approved Design Guidelines as amended by Condition A14</p> <p>(iii) the DEEP's Design Excellence Report</p> <p>(iv) the advice of the SDRP (or approved alternative under Condition A15)</p> <p>(v) the conditions of this consent.</p> <p>(j) the Design Integrity Report (DIR) as required by Condition B7(b) must include a summary of feedback provided by the SDRP (or alternative approved in accordance with Condition A15) and responses by the Applicant to this advice. The DIR shall also include how the process will be implemented through to completion of the approved development.</p>	
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### Car Parking and Bicycle Parking

<p>B8. Future development applications shall reduce total car parking provision to reduce private car ownership and promote use of active and public transport. Future development applications must demonstrate compliance with:</p> <p>(k) the maximum number of car spaces to be provided for all residential accommodation within the development is limited to 170 spaces, including residents' spaces and residential car share spaces but excluding visitor spaces and service vehicle spaces.</p> <p>(l) the allocation of residential car parking spaces, up to the maximum of 170 spaces must not exceed the following maximum rates:</p> <p>(i) 0.1 space per studio dwelling</p> <p>(ii) 0.3 parking spaces per 1 bedroom dwelling</p>	<p>The proposal fully complies with the car parking and bike parking rates applied.</p> <p>The amount of adaptable car parking spaces proposed is addressed in Section 6.5.2 and it is considered the maximum LEP car parking rates must take precedence over the DCP as the proposal aims to reduce overall car parking. The proposal is not inconsistent with the Concept Approval for the reasons set out in Section 6.5.2.</p>
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<ul style="list-style-type: none"> <li>(iii) 0.7 parking spaces per 2 bedroom dwelling</li> <li>(iv) 1 parking space per 3 bedroom or more dwelling</li> <li>(v) residential car share parking rate of 1 space per 50 residential car parking spaces provided</li> <li>(m) non-residential car parking to be provided in accordance with the following: <ul style="list-style-type: none"> <li>(i) a maximum of 1 space for 435m<sup>2</sup> of GFA for any commercial uses</li> <li>(ii) a maximum of 2 spaces for use of the Waterloo Congregational Church</li> <li>(iii) non-residential car share parking at rate of 1 space per 30 non-residential car parking spaces.</li> </ul> </li> </ul> <p>B9. Future development applications must include a Car Parking Strategy and Management Plan adopting the maximum residential parking cap and allocation rates above and demonstrating compliance with the following:</p> <ul style="list-style-type: none"> <li>(n) accessible car parking spaces provided as per Sydney DCP 2012 rates</li> <li>(o) motorcycle parking spaces provided as per Sydney DCP 2012 rates</li> </ul> <p>B10. Bicycle parking and end-of-trip facilities for the OSD shall be in accordance with the rates specified within the Sydney DCP 2012 for the final land use mix in the future development application.</p>	
<b>Consultation with Waterloo Congregational Church</b>	
<p>B11. Future development applications must demonstrate consultation with the owners and operators of Waterloo Congregational Church and project responses. Consultation is to include consideration of:</p> <ul style="list-style-type: none"> <li>(a) potential for Church gathering space</li> <li>(b) wedding and funeral cars</li> <li>(c) waste and servicing</li> <li>(d) building maintenance</li> <li>(e) design of the public domain around and within the Church property including safe access and passive surveillance in the setbacks.</li> </ul>	<p>The applicant includes a Consultation Report demonstrating the owners of the Church have been consulted and the proposal responds to the matters required.</p>
<b>Heritage Impact Assessment</b>	
<p>B12. Future development applications for aboveground works shall include a detailed Heritage Impact Statement and a Heritage Interpretation Strategy for the proposed works prepared in consultation with the City of Sydney Council.</p>	<p>The application includes a Heritage Impact Statement and Heritage Interpretation Strategy prepared in consultation with Council.</p>

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## Wind Impact Assessment

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| <p>B13. Future development applications for aboveground works shall be accompanied by a Wind Impact Assessment including computer modelling of detailed building form and demonstrating compliance with the criteria in Pedestrian Wind Environment Study by Windtech dated 26 September 2019.</p> <p>B14. The Wind Impact Assessment must consider the locations of existing and future pedestrian crossings and apply standing criteria zones to match the width of crossings and the waiting zones for crossings, including on the opposite side of streets.</p> | <p>The application includes Wind Impact Assessment as required. This includes modelling of the adjacent pedestrian crossings.</p> |
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## Traffic, Access and Parking Assessment

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| <p>B15. Future development applications shall be accompanied by a Traffic and Transport Impact Assessment.</p> <p>B16. Future development applications shall include a Construction Traffic and Pedestrian Management Plan (CTMP) prepared in consultation with the Sydney Coordination Office and City of Sydney, and to the satisfaction of the relevant road authorities. The CTMP shall include, but not be limited to:</p> <ul style="list-style-type: none"><li>(a) construction car parking strategy</li><li>(b) haulage movement numbers / routes including contingency routes</li><li>(c) detailed travel management strategy for construction vehicles including staff movements</li><li>(d) maintaining property accesses</li><li>(e) maintaining bus operations including routes and bus stops</li><li>(f) maintaining pedestrian and cyclist links / routes</li><li>(g) independent road safety audits on construction related traffic measures</li><li>(h) measures to account for any cumulative activities / work zones operating simultaneously.</li></ul> <p>B17. Independent road safety audits are to be undertaken for all stages of further design development involving road operations and traffic issues and cognisant of all road users. Any issues identified by the audits will need to be closed out in consultation with Sydney Coordination Office, RMS and/or City of Sydney to the satisfaction of the relevant roads authorities.</p> | <p>The application includes a Traffic and Transport Impact Assessment and a CTMP as required.</p> <p>The Applicant submits that road safety audits will be undertaken prior to the issue of a Construction Certificate. The Department's independent traffic consultant finds this approach acceptable. Conditions are recommended.</p> |
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## Environmental Performance / ESD

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<p>B18. Future development applications must demonstrate how the principles of ecologically sustainable development (ESD) have been incorporated into the design, construction and ongoing operation of the proposal. This shall include preparation and implementation of Environmental Sustainability Strategies that incorporate low-carbon, high efficiency targets aimed at reducing emissions, optimising use of water, reducing waste and optimising carparking provision to maximise sustainability and minimise environmental impacts.</p> <p>B19. The minimum performance targets for environmental performance are:</p> <ul style="list-style-type: none"> <li>(i) Precinct overall: <ul style="list-style-type: none"> <li>(i) 6 star Green Star Communities Rating Tool</li> <li>(ii) Endorsed under One Living Planet framework</li> </ul> </li> <li>(j) Commercial / office uses: <ul style="list-style-type: none"> <li>(i) 5 Star Green Star Design and As-Built Rating Tool</li> <li>(ii) 5.5 Star NABERS Energy</li> <li>(iii) 4.5 Star NABERS Water</li> <li>(iv) 'Gold Certification: Shell and Core' under WELL Building Standard</li> </ul> </li> <li>(k) Residential uses: <ul style="list-style-type: none"> <li>(i) 5 Star Green Star Design and As-Built Rating Tool</li> <li>(ii) more than BASIX 40 Water</li> <li>(iii) BASIX 30 Energy.</li> </ul> </li> </ul>	<p>The application includes a ESD and Sustainability Strategy documenting how the proposed measures have been incorporated into the design, construction and operational phases.</p> <p>The documentation lodges demonstrates the relevant ESD targets will be met by the development. Conditions are recommended requiring compliance with the targets.</p>
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### Security and Crime Assessment

<p>B20. Future development applications shall be accompanied by a Security and Crime Risk Assessment prepared in consultation with NSW Police having regard to Crime Prevention Through Environmental Design (CPTED) Principles and NSW Police publication "Safe Place: Vehicle Management: A comprehensive guide for owners, operators and designers." The future development is to have regard to the recommendations contained within the submission by NSW Police on the Concept SSD.</p>	<p>The application includes a CPTED Assessment prepared in accordance with the requirements.</p>
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### Construction Impact Assessment

<p>B21. Future development applications shall provide analysis and assessment of the impacts of construction works and include:</p> <ul style="list-style-type: none"> <li>(a) Construction Traffic and Pedestrian Management Plan, as per Condition B9</li> <li>(b) Community Consultation and Engagement Plan(s)</li> <li>(c) Noise and Vibration Impact Assessment</li> <li>(d) Construction Waste Management Plan</li> </ul>	<p>The application includes a CEMP prepared in accordance with the requirements. The CEMP incorporates the sub-plans required. Conditions of consent are recommended for a final CEMP to be prepared and submitted prior to the issue of a Construction Certificate.</p>
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<p>(e) Air Quality Management Plan.</p> <p>B22. The plans above may be prepared as part of a Construction Environmental Management Plan prepared for implementation under the conditions of any consent for future development applications, having regard to the Construction Environmental Management Framework and Construction Noise and Vibration Strategy prepared for the Sydney Metro City and Southwest (CSSI 7400).</p>	
<p><b>Noise and Vibration Assessment</b></p>	
<p>B23. Future development applications shall be accompanied by a Noise and Vibration Impact Assessment that demonstrates the following requirements are met:</p> <ul style="list-style-type: none"> <li>(a) vibration from construction activities does not exceed the vibration limits established in British Standard <i>BS7385-2:1993 Excavation and measurement for vibration in buildings. A guide to damage levels from groundborne vibration</i>.</li> <li>(f) vibration testing is conducted before and during vibration generating activities that have the potential to impact on heritage items to identify minimum working distances to prevent damage. In the event the vibration testing and monitoring shows that the preferred values for vibration are likely to be exceeded, the Applicant must review the construction methodology and, if necessary, propose additional mitigation measures.</li> <li>(g) advice of a heritage specialist has been incorporated on methods and locations for installed equipment used for vibration movement and noise monitoring of heritage-listed structures.</li> </ul> <p>B24. The Noise and Vibration Assessment must provide a quantitative assessment of the main noise generating sources and activities during operation. Details are to be included outlining any mitigating measures necessary to ensure the amenity of future sensitive land uses on the site and neighbouring sites is protected during the operation of the development.</p> <p>B25. The Noise and Vibration Assessment must address the conclusions and recommendations of the Concept Acoustic Assessment Report, SLR Consulting dated 9 November 2019.</p>	<p>The application includes a Noise and Vibration Impact Assessment addressing the requirements.</p>
<p><b>Flooding and Stormwater Assessment</b></p>	

B26. Future development applications shall be accompanied by a Flood and Stormwater Impact Assessment. The Assessment must demonstrate the conclusions and recommendations of the Concept Water Quality, Flooding and Stormwater Report dated 31 October 2018 prepared by AECOM.	The application includes a Flood and Stormwater Impact Assessment addressing the requirements,
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#### **Reflectivity Assessment**

B27. Future development applications for aboveground works shall include a Reflectivity Assessment demonstrating that external treatments, materials and finishes of the development do not cause adverse or excessive glare	The application includes a Reflectivity Assessment addressing the requirements,
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#### **Archaeological and Aboriginal Cultural Heritage**

<p>B28. Future development applications shall demonstrate the recommendations and mitigation measures of the following Sydney Metro City and Southwest (CSSI 7400) reports are to be incorporated during the construction of the SSD project:</p> <ul style="list-style-type: none"> <li>(a) Artefact 2016, Sydney Metro City and Southwest, Chatswood to Sydenham: Aboriginal Cultural Heritage Assessment</li> <li>(b) Artefact 2016, Sydney Metro City and Southwest, Chatswood to Sydenham: Aboriginal Heritage – Archaeological Assessment.</li> </ul> <p>B29. Future development applications shall include an Archaeological Research Design (ARD) and subsequent Archaeological Method Statement (AMS), or updated/amended CSSI ARD and AMS that clearly applies to the SSD scope of works, informed by the results of the archaeological works undertaken for the CSSI works. This may include consultation with the Registered Aboriginal Parties for the project and may include further field study. The AMS must:</p> <ul style="list-style-type: none"> <li>(a) provide an assessment of the findings of the eastern clearance works and reporting (i.e. the CSSI works)</li> <li>(b) identify any new research questions, if required</li> <li>(c) make recommendations for any revised archaeological mitigation measures, if required</li> <li>(d) provide an assessment of benefits of completing archaeological testing, clearance and salvage and/or make a recommendation, if appropriate, that these measures are not required.</li> </ul>	The Department is satisfied that archaeological and Aboriginal cultural heritage issues have been considered in the Basement SSD (SSD 10438) and that the Southern Precinct does not have any excavation.
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#### **Airspace Protection**



<p>B30. Future detailed development applications for aboveground works must comply with the following requirements:</p> <ul style="list-style-type: none"> <li>(a) buildings must not exceed a maximum height of 116.9 metres AHD. This includes all lift over-runs, vents, chimneys, aerials, antennas, lightning rods, and roof top garden plantings, exhaust flues, etc.</li> <li>(b) <i>obstacle lighting – not applicable</i></li> <li>(c) <i>obstacle lighting – not applicable</i></li> <li>(d) <i>advisory condition</i></li> <li>(e) <i>advisory condition</i></li> <li>(f) <i>advisory condition</i></li> <li>(g) <i>advisory condition</i></li> </ul>	<p>The maximum height of RL116.9 relates to the Northern Precinct. The Southern Precinct student housing tower is well below that height at RL 93.95.</p>
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## Appendix F – Consistency with Design Guidelines

The Guidelines were created to guide the design of development on the site. The Guidelines were updated and approved by the Department in satisfaction of Condition A14 of the Concept Approval.

Conditions B3 and B5 of the Concept Approval require that future applications address compliance with the Design Guidelines. The Applicant's EIS and Design Integrity Report provides a comprehensive assessment of the proposal against the guidelines. The following provides a summary assessment against the key guidelines applicable to this proposal.

Relevant Guideline	Department's Assessment
<p><b>3C Public domain</b></p> <ul style="list-style-type: none"> <li>provide 2,200m of publicly accessible open space</li> <li>achieve solar access to 50% of Cope Street Plaza between 9am and 3pm in midwinter</li> <li>meet the requirements of City of Sydney Urban Forest Strategy</li> <li>design publicly accessible spaces to be used for people of all abilities</li> <li>provide awnings along street frontages</li> <li>provide public domain lighting per City of Sydney Code. Provide private space lighting per Australian Standards.</li> </ul>	<p>The proposal includes Cope Street Plaza and Church Yard which contribute to providing 2,200m of publicly accessible open space across the Waterloo Metro Quarter.</p> <p>The proposal and the application for the Northern Precinct, which overshadows the Cope Street Plaza, demonstrate the Plaza receives sunlight to more than 50% of its area in midwinter.</p> <p>The landscape design for communal terraces and roof gardens is consistent with the Urban Forest Strategy. Accessibility requirements are satisfactory as demonstrated in the Access Report.</p> <p>Awnings above footpaths have been designed to comply with Sydney DCP</p> <p>Lighting along Botany Road and Wellington Street are smartpoles as per Council standards</p> <p>Publicly accessible space lighting will comply with Australian Standards.</p>
<p><b>3D Streets, laneways and footpaths</b></p> <ul style="list-style-type: none"> <li>Provide a laneway along the southern edge of Cope Street Plaza for low traffic speed, pedestrian priority over vehicles.</li> </ul>	<p>This application includes the desired laneway at the southern end of Cope Street Plaza. It has been designed as per the Design Guideline criteria and guidance and subject to the advice of the Design Review Panel.</p> <p>The proposed buildings fully comply with the required setbacks from Botany Road and Wellington Street.</p>

<ul style="list-style-type: none"> <li>• Provide building setbacks as required by section diagrams in the Guidelines.</li> </ul>	
<b>3E Tree canopy cover</b> <ul style="list-style-type: none"> <li>• Achieve 23% overall canopy cover over the site</li> <li>• Achieve 50% street tree canopy cover</li> </ul>	<p>Together with other Detailed Design SSDs, the proposal contributes to the achievement of 25.7% overall tree canopy cover and 54.8% street canopy cover.</p>
<b>3F Tree planting specifications</b> <ul style="list-style-type: none"> <li>• Detailed requirements are listed for protecting existing trees, undergrounding services, minimum tree size when planted and long term maintenance.</li> </ul>	<p>Suitable detail has been provided in the Arborists Report and Landscape Plans regarding satisfaction of the detailed requirements on tree planting.</p>
<b>3G Wind</b> <ul style="list-style-type: none"> <li>• At least 50% of publicly accessible open space meet wind comfort criteria for sitting. Dining areas should correspond with these areas.</li> <li>• Not to exceed wind safety standard of 24m/s.</li> </ul>	<p>Section 6.4 of this report reviews compliance against the wind criteria contained in the Design Guidelines.</p>
<b>3H Building uses</b> <ul style="list-style-type: none"> <li>• Provide 70 social housing dwellings.</li> <li>• Social housing dwellings are not readily distinguishable from market housing.</li> </ul>	<p>This application includes 70 social housing dwellings and the design of the building is considered to achieve design excellence and will not be readily distinguishable from market housing.</p>
<b>3I Street activation</b> <ul style="list-style-type: none"> <li>• Provide fine grain activation at ground level.</li> <li>• Provide frequent building entries that face and open to the street.</li> </ul>	<p>Building entries and retail spaces in the proposal provide fine grain and address the Botany Road and Wellington Street frontages.</p>
<b>3J Podium and street wall</b> <ul style="list-style-type: none"> <li>• Articulate podiums as a separate element from towers above.</li> <li>• Relate materials and finishes in the podium to the local character.</li> <li>• Setback buildings from the Waterloo Congregational Church as per the requirements.</li> <li>• Encourage active uses at the southern setback of the Church</li> </ul>	<p>The podium to the student housing tower is articulated to appear as a separate element from the tower above.</p> <p>The brick podium materials relate strongly to the character of surrounding buildings.</p> <p>The student housing podium and tower are setback the required dimensions from the Church.</p> <p>The proposed Church Yard provides a space for activity and meeting.</p> <p>The CPTED Assessment lodged demonstrates the proposal is designed to mitigate crime and safety management issues.</p>

<p>and opportunities for Church users to meet.</p> <ul style="list-style-type: none"> <li>• Adopt CPTED measures in and around the Waterloo Metro Quarter and also the Church,</li> </ul>	
<p><b>3K Built form above the podium</b></p> <ul style="list-style-type: none"> <li>• Tower buildings should not be identical in appearance. Architectural diversity is encouraged.</li> <li>• Residential towers have a maximum floorplate size of 900sqm.</li> <li>• Wind mitigation is achieved through building form with reliance on wind devices as secondary measures.</li> <li>• Identify opportunities to improve solar access to Alexandria Park between 9am and 10am in midwinter compared to the indicative scheme lodged with the Concept Application.</li> </ul>	<p>The proposed towers in each Detailed Design SSD have been designed by separate architects and do not appear the same as each other.</p> <p>The towers comply with the maximum 900sqm floorplate. The largest is 706sqm.</p> <p>The application has demonstrated that suitable wind conditions will be achieved by building design and wind mitigation measures.</p> <p>Solar access to Alexandria Park is discussed in Section 6.4 and it is concluded that an improvement is achieved compared to the Concept's indicative design.</p>
<p><b>3L Residential amenity</b></p> <ul style="list-style-type: none"> <li>• Adopt relevant noise criteria from <i>Development Near Rail Corridors and Busy Roads</i> and the <i>Sydney DCP 2012</i></li> <li>• Fully comply with the requirements of the Apartment Design Guide (ADG) for natural ventilation, solar amenity, communal open space and private open space.</li> <li>• Condition wind impacts and incorporate mitigation measures.</li> </ul>	<p>Apartment amenity in relation to noise, natural ventilation, solar access, communal open space and private open space is discussed in detail in Section 6.4 and summarised in the ADG table in Appendix C.</p>
<p><b>3M Solar access and amenity</b></p> <ul style="list-style-type: none"> <li>• No overshadowing of Alexandria Park after 10am in midwinter.</li> <li>• No more than 30%</li> <li>• Proposed apartments and neighbouring development to achieve min. 2 hours sunlight between 9am and 3pm to living room windows and open space.</li> </ul>	<p>Overshadowing of Alexandria Park, overshadowing of surrounding development and solar access to the proposed apartments are discussed in Section 6.4.</p>
<p><b>3N Pedestrian and cycle network</b></p>	<p>The application demonstrates suitable footpath widths are provided to accommodate the future demands from rail users.</p>

<ul style="list-style-type: none"> <li>• Provide generous footpath widths that can accommodate pedestrian flows from Metro users.</li> </ul>	
<b>3O Car parking and access</b> <ul style="list-style-type: none"> <li>• Car parking is provided as per Sydney LEP rates.</li> <li>• Bike parking for the student housing tower is provided as per SEPP (Affordable Housing)</li> </ul>	<p>The proposal complies with all car parking and bicycle parking requirements.</p>
<b>3P Service vehicles and waste collection</b> <ul style="list-style-type: none"> <li>• Access the site in a forward direction.</li> <li>• Separate service vehicles from car parking spaces.</li> <li>• Locate waste servicing in a basement preferable, then at grade if necessary.</li> </ul>	<p>The loading dock is designed for vehicles travelling in a forward direction only.</p> <p>The loading dock is separate from any car parking. Waste servicing is at grade within the loading dock, but sleeved by retail uses and building entry so that the frontage is limited to the driveway width.</p>
<b>3Q Integration with metro station</b> <ul style="list-style-type: none"> <li>• Coordinate structures, services, car parking, lift cores,</li> <li>• The station and over station development must have functional autonomy in relation to matters such as building services, emergency egress and access, maintenance and utilities.</li> </ul>	<p>The Applicant has a Project Delivery Agreement with Sydney Metro which provides for the station and over station development to function independently in relation to the matters listed in the Design Guidelines. For example, emergency responders do not need to traverse through any over station development to access the station.</p>
<b>3R Sustainability</b> <ul style="list-style-type: none"> <li>• Comply with the performance targets in the Concept Approval.</li> </ul>	<p>Appendix C above demonstrates the proposal has been designed to comply with the sustainability targets of the conditions of consent to the Concept Approval.</p>
<b>3S Stormwater and flooding</b> <ul style="list-style-type: none"> <li>• Provide on site stormwater detention</li> <li>• Achieve water quality targets</li> <li>• Flood planning levels should be adopted.</li> </ul>	<p>The Water Quality, Flooding and Stormwater Report lodged with the EIS demonstrates the detailed requirements of the Design Guidelines have been satisfied.</p>
<b>3T Waste Management</b> <ul style="list-style-type: none"> <li>• Comply with Council's guidelines</li> <li>• Detailed requirements as then listed for waste systems and management devices.</li> </ul>	<p>The Waste Management Plan lodged with the EIS responds to each design criteria and guideline appropriately.</p>
<b>3U Culture</b>	<p>The EIS includes commitments to participation in construction and promoting First Nations enterprise</p>

<ul style="list-style-type: none"> <li>Develop measures to improve employment, empowerment and economic development for Aboriginal and Torres Strait Islander peoples.</li> </ul>	and employment in the Waterloo Metro Quarter placemaking, activation and retail strategy.
<b>3V Public art</b> <ul style="list-style-type: none"> <li>Deliver public art that is coordinated with the design and considers connection, safety, landscaping, wayfinding, key movement corridors and early involvement of artists.</li> </ul>	The Public Art Strategy lodged with the EIS demonstrates the public art opportunities are capable of satisfying the design guidance.

## Appendix G – Recommended Modification of Development Consent

<https://www.planningportal.nsw.gov.au/major-projects/project/41341>

## Appendix H – Recommended Development Consent

<https://www.planningportal.nsw.gov.au/major-projects/project/29586>