

Waterloo Metro Quarter Over Station Development – Central Precinct

State Significant Development Assessment SSD 10439

November 2021



NSW Department of Planning, Industry and Environment | dpie.nsw.gov.au

Published by the NSW Department of Planning, Industry and Environment

dpie.nsw.gov.au

Title: Waterloo Metro Quarter Over Station Development - Central Precinct

Subtitle: State Significant Development Assessment

Cover image: Photomontage of Central Precinct (Source: EIS)

© State of New South Wales through Department of Planning, Industry and Environment 2021. You may copy, distribute, display, download and otherwise freely deal with this publication for any purpose, provided that you attribute the Department of Planning, Industry and Environment as the owner. However, you must obtain permission if you wish to charge others for access to the publication (other than at cost); include the publication in advertising or a product for sale; modify the publication; or republish the publication on a website. You may freely link to the publication on a departmental website.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (November 2021) and may not be accurate, current or complete. The State of New South Wales (including the NSW Department of Planning, Industry and Environment), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own inquiries and rely on their own advice when making decisions related to material contained in this publication.

Glossary

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

Executive Summary

This report provides an assessment of a State significant development application (SSD 10439) seeking approval for the design and construction of a mixed use building with commercial premises, community facilities and residential apartments within the Central Precinct of the Waterloo Metro Quarter Over Station Development.

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 \$86million and the proposal would generate 221 construction jobs and 73 operational jobs.

Engagement

The Department publicly exhibited the proposal between 5 November 2020 and 2 December 2020 (28 days). The Department received 15 submissions from the public and interest groups (12 objections, 2 in support and one comment), a submission from Council and advice from eight Government agencies.

Council did not object to the proposal, but provided comments about residential amenity, materials and finishes, wind conditions and car parking.

The key issues raised in the public submissions included affordable housing, traffic and overshadowing impacts.

The Applicant's Response to Submissions (RtS) provided further justification in relation to design excellence, materials and finishes, 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 F**.

Assessment

The Department has considered 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 raise issues raised in submissions. The Department considers the proposal is acceptable for the following reasons:

- it is consistent with the strategic planning framework adopted for the site as it would deliver integrated land use and public transport by providing additional housing directly above the new Waterloo Metro Station
- it fully complies with the Sydney LEP 2012 and is consistent with the Concept Approvals in relation to density, land use and height
- it achieves design excellence, is appropriate within its urban context and is supported by the Sydney Metro DRP
- 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
- the proposal has acceptable amenity outcomes as it reduces overshadowing to surrounding properties and Alexandria Park compared to the Concept Approval
- the proposal would provide acceptable amenity to future residents with respect to the requirements of the Apartment Design Guide

• the proposal provides a 2,284m² community facility, 24 affordable housing apartments and contributes to public domain improvements.

Based on the reasons outlined above, the Department's assessment concludes the proposal is in the public interest and recommends that the application be approved subject to conditions of consent.

Contents

1	Intro	Introduction ······ 1		
	1.1	Waterloo	2	
	1.2	Waterloo Metro Quarter	3	
	1.3	The site and its surrounds	4	
	1.4	Related Applications and Previous Approvals	8	
2	Proj	ject	11	
	2.1	Project Outline	11	
	2.2	Related Development	19	
3	Stra	ntegic context ·····	21	
	3.1	Greater Sydney Region Plan: A Metropolis of Three Cities	21	
	3.2	Eastern Harbour City District Plan	21	
	3.3	Future Transport Strategy 2056	22	
	3.4	Sydney Metro City and Southwest Project	22	
4	Stat	tutory Context	23	
	4.1	State significance	23	
	4.2	Permissibility	23	
	4.3	Other approvals	23	
	4.4	Mandatory Matters for Consideration	23	
	4.5	Planning Secretary's Environmental Assessment Requirements	24	
	4.6	Biodiversity Conservation Act 2016	24	
5	Engagement		25	
	5.1	Department's engagement	25	
	5.2	Key Issues – Government agencies	25	
	5.3	Key Issues – Council	27	
	5.4	Key Issues – Community and public interest groups	29	
	5.5	Response to submissions	29	
6	Assessment		31	
	6.1	Density / Land Use	31	
	6.2	Building Height	33	
	6.3	Amenity Impacts	35	
	6.4	Public Domain	40	
	6.5	Design Excellence	42	
	6.6	Other Issues	43	
7	Evaluation		49	
8	Rec	ommendation	50	
a	Determination			

ppendices ·····	
NNANAICAE	5

1 Introduction

This report provides an assessment of a State significant development (SSD) application (SSD 10440) for the design and construction of commercial building and associated public domain works within the Central Precinct of the Waterloo Metro Quarter.

Specifically, this proposal seeks development consent for the detailed design, construction and operation of a mixed use development, comprising:

- a building height of 3 to 23 storeys
- a gross floor area (GFA) of 14,923.7m²
- use of the building for commercial premises and residential accommodation, including retail
 premises at the ground floor, community facilities at Levels 1 and 2, and affordable and market
 housing between Levels 4 and 22
- a pedestrian through-site link known as Grit Lane to the north of the building
- a pedestrian through-site link known as Church Square to the south of the building
- · vehicle loading and servicing facilities
- signage zones
- · staged stratum subdivision.

The application was 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 \$89million and would generate 221 construction jobs and 73 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.

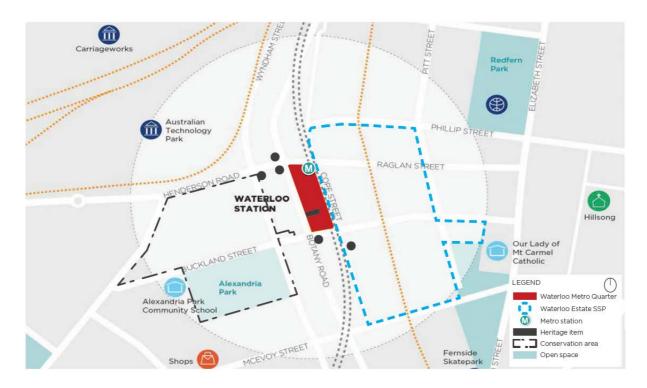


Figure 2 | Surrounding context (source: Applicant's EIS)

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.

The 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 Central Precinct (the site) is rectangular in shape and a single street frontage to Botany Road to the west. The northern boundary adjoins the approved Northern Precinct office building (SSD 10440), the southern boundary adjoins the Waterloo Congregational Church and the eastern boundary adjoins the approved Cope Street Plaza (SSD 10437) (**Figure 3**).

The Central Precinct has a total site area of 2,460m² and the broader WMQ site has an area of 1.287ha.

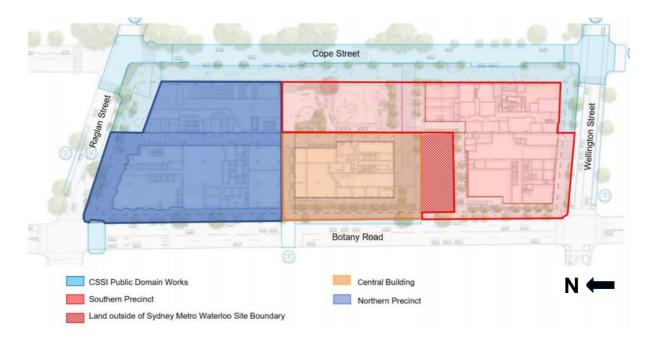


Figure 4 | Site plan of the Central Precinct (shaded orange). (Source: Applicant's EIS)

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 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), approved by the Minister's delegate on 23 September 2021
- Southern Precinct (SSD 10437), approved by the Minister's delegate on 30 July 2021
- Basement (SSD 10438), approved by the Minister's delegate on 30 September 2021.

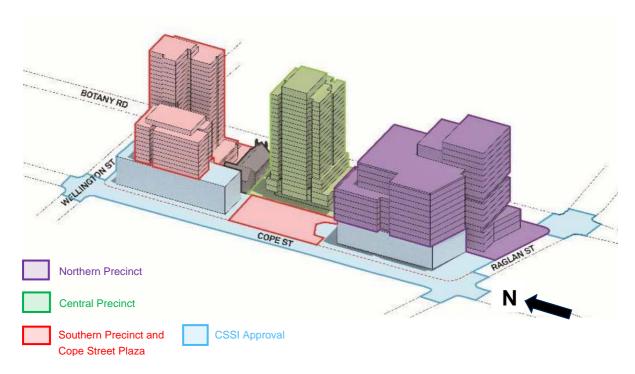


Figure 11 | Waterloo Metro Quarter and sub-precincts (source: Applicant's EIS)

2 Project

2.1 Project Outline

The proposal seeks a Detailed SSD consent for the design, construction and operation of the Northern Precinct within the Waterloo Metro Quarter.

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

Aspect	Description
Built form	 construction of a part-3 and part-23 storey mixed use building publicly accessible open space, including Raglan Plaza to the north, a walkway from Raglan Street to Cope Street Plaza and extended footpaths along Botany Road
GFA	 total GFA of 14,923.7m² 614.6m² for commercial premises 2,283.8m² for community facility 12,025.3m² for residential
Land uses	 podium retail and business premises podium community facilities residential accommodation – 24 affordable housing apartments and 126 market apartments
Employment	221 construction jobs73 operational jobs
Capital Investment Value (CIV)	\$89 million

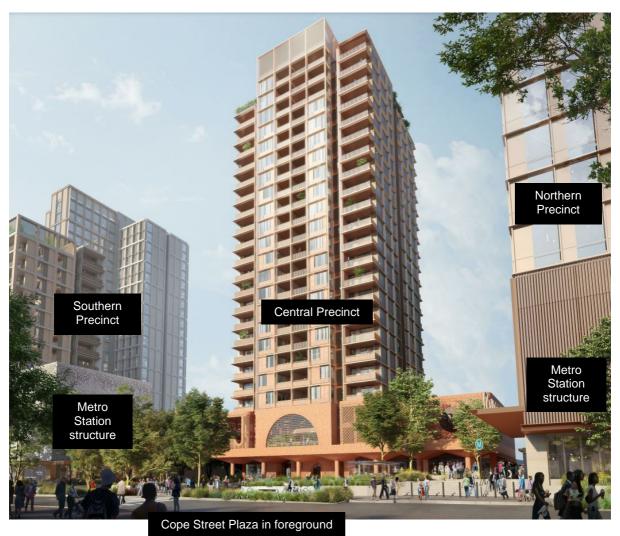


Figure 12 | Photomontage of proposed building with detailed designs for Northern Precinct and Southern Precinct to either side (source: Applicant's RtS)



Figure 13 | Artist's impression of proposed building (left) with Cope Street Plaza in foreground, Metro station entry and Northern Precinct to the right (source: Applicant's RtS)

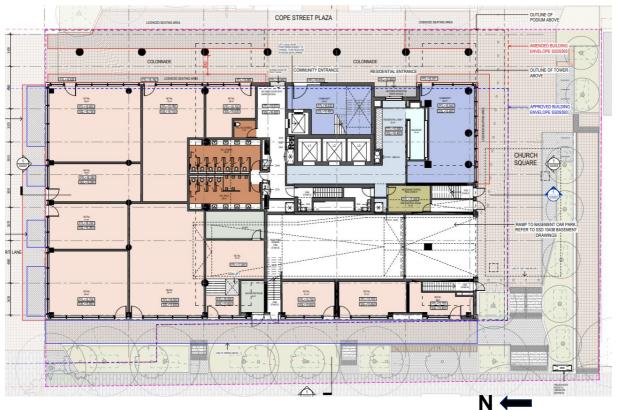


Figure 14 | Ground floor layout (source: Applicant's RtS)

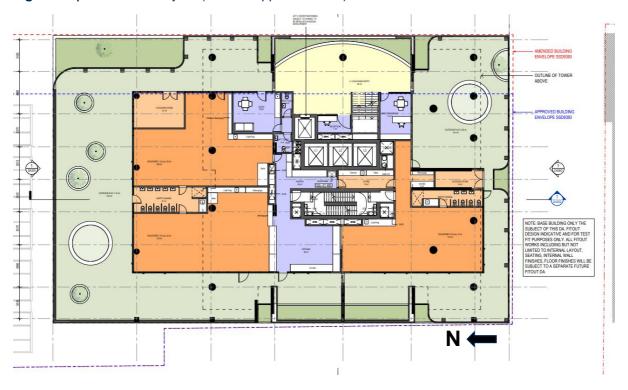


Figure 15 | First floor showing community facility layout (source: Applicant's RtS)

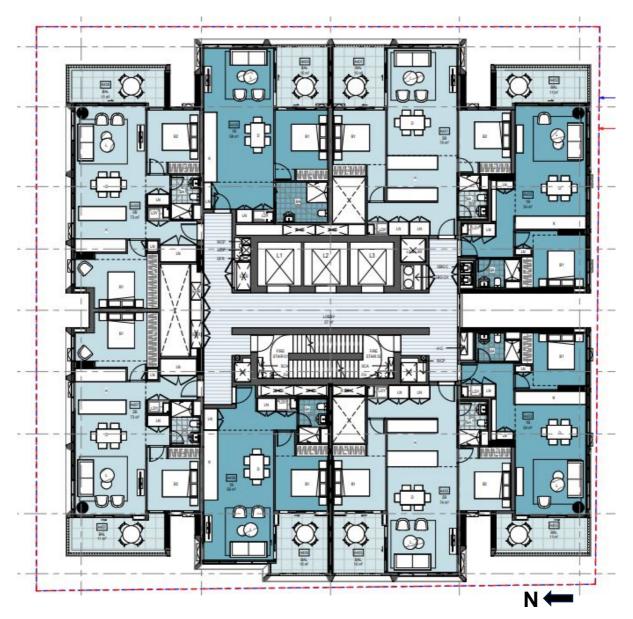


Figure 16 | Typical residential floor layout – Levels 3 to 18 (source: Applicant's RtS)

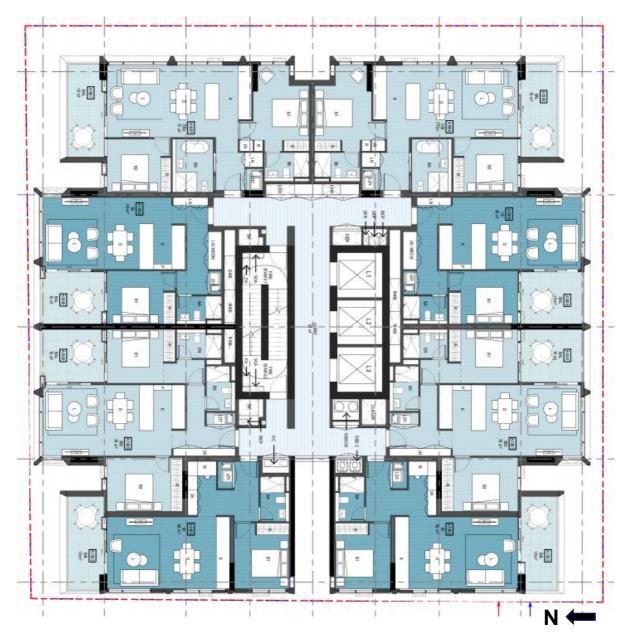


Figure 17 | Typical residential floor layout – Levels 19 to 21 (source: Applicant's RtS)

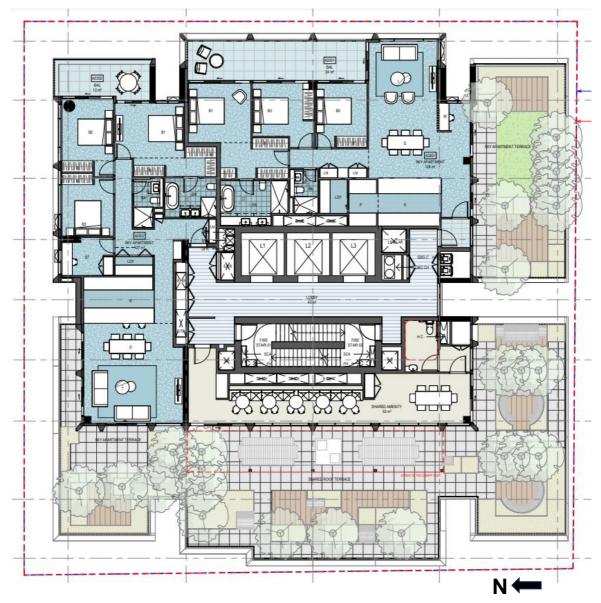


Figure 18 | Level 22 Plan with communal open space (source: Applicant's RtS)



Figure 19 | West Elevation (Botany Road) (source: Applicant's RtS)

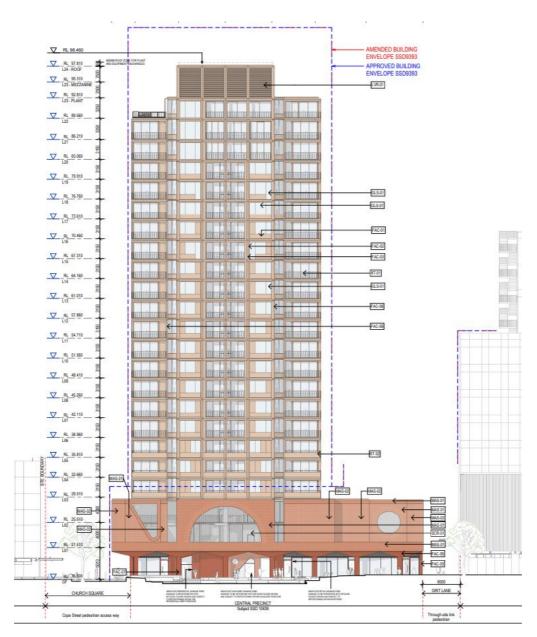


Figure 20 | East Elevation towards Cope Street Plaza (source: Applicant's RtS)

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 affordable and market 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 homes, 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-oftrip 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 premises, community facilities and retail tenancies 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 commercial premises 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.

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

- there have been less than 15 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 commercial premises, community facility and residential accommodation 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 F**).

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 C**.

4.5 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 application.

4.6 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.

The SSD application received 24 submissions (12 objecting, 2 supporting and 10 providing comments), including:

- eight from Government agencies
- one submission from Council
- five from special interest groups
- ten from the public.

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

5.2 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)

EIS EPA did not object to the proposal, however provided the following comments:

- proposal does not constitute a Scheduled Activity under Schedule 1 of the Protection of the Environment Operations Act 1997.
- 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.

Environment, Energy and Science Group (ESS)

EIS EES did not object and made the following comments:

- the proposal is unlikely to impact on biodiversity values. A Biodiversity Development Assessment Report (BDAR) waiver was issued on 24 July 2020
- flood level mapping for multiple scenarios is required
- · 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

• 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 flood emergency plan nor details of emergency management procedures are necessary at the DA stage and these matters should be discussed with NSW State Emergency Service prior to the Construction Certificate phase.

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
- 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

EIS

NSW Health did not object and made the following comments in relation to human health impacts:

 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
- the detailed SSD improves upon the original concept design in relation to the abovementioned factors
- broader cumulative impacts of concurrent and consecutive projects should be taken into account
- support the amendments from the concept resulting in fewer residents experiencing traffic noise
- all reasonable and feasible measures should be adopted to mitigate road traffic noise
- support water recycling, but public health risks need to be managed
- remediate the site as outlined in the Contamination Assessment
- include the SLHD guidelines *Building Better Health* as a reference when considering the health impacts of the development.

Sydney Airport Corporation

No objection, and noted that a controlled activity approval has already been issued for the Concept Application.

Civil Aviation Safety Authority (CASA)

No objection, and noted that a controlled activity approval has already been issued for the Concept Application.

Fire and Rescue NSW

EIS and RtS

No comments were received.

NSW Police

EIS and RtS

No comments were received

5.3 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 General issues:

- projected oversupply of child care centre places in the City of Sydney LGA, recommend the child care centre be turned into a health facility
- compliance with the Apartment Design Guide (ADG) for solar access is overestimated
- solar access should be measured between 9am and 3pm in midwinter and the Applicant's suggestion to include 8am to 4pm should not be considered
- increase sun shading to the western elevation
- · communal open space is underprovided

- some apartments have smaller than the required private open space
- detailed materials, colours, finishes schedule and sample boards should be provided
- wind comfort within Ragland Street Plaza, Cope Street Plaza and surrounding retail tenancies
- car parking is excessive and should be constrained or zero to reduce conflict between people walking and people driving through shared zone.

Other:

Council also provided the following comments:

- awning design should address signage, weather protection and clearance for vehicles, trees and infrastructure
- all plant should be located in the Level 24 rooftop plant room
- 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
- support the proposed photovoltaic system
- more detail is required on landscaping plans for green roofs
- 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
- flooding impacts on retail tenancies along Botany Road, as floor levels are below the flood planning level
- clarity is required on the extent of the public domain works under the CSSI and SSD.

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 the Applicant to the Apartment Design Guide (ADG) are not consistent with how to apply the ADG for solar access, natural cross ventilation and natural ventilation
- use of the community facility space for a child care centre
- 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 be conditioned to comply with Sydney DCP
- recommend condition of consent requiring specific materials and finishes schedule and no substitutes permitted without first consulting the Design Review Panel
- operable sun shading should be provided to windows affected by direct sun from December to February
- all plenums used to achieve natural ventilation to apartments should refer to Council's guidelines for detailed design
- recommend conditions of consent requiring consultation with Council's Public Art Advisory Panel in preparing Public Art Plans for the site
- waste bin allocation should be consistent with Council's Guidelines

- recommend landscape plans are prepared in consultation with Council and the Council's Landscape Code
- recommend public domain plans be approved by Council's Public Domain Team
- amendments made to floor planning levels are noted and no further comments
- 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.

5.4 Key Issues – Community and public interest groups

The Department received a total of 10 submissions from the community and five from special interest groups, comprising 12 objections, two in support and one providing comments. A summary of the key issues raised in submissions is provided in **Table 6** below.

Table 6 | Summary of submissions

Issue	%	
More affordable housing should be provided		
Density of Waterloo Metro Quarter generally should be reduced	36%	
Excessive height of the building	27%	
More open space is required	27%	

Other issues raised in individual submissions were:

- support apartments above railway lines
- support affordable housing being provided in perpetuity
- support child care centre
- arches within the podium are unattractive
- there is already high supply of child care centres and the space should instead be used by artists
- child care centre is a business and should not be listed as a community facility
- building should fit with surrounding character of neighbourhood
- overshadowing of Alexandria Park Conservation Area and Alexandria Park
- visual impact to Alexandria Park Conservation Area
- insufficient car parking provided one space per apartment should be provided
- high pedestrian movements at crossings should be addressed
- Botany Road should be widened to create a permanent bus lane
- public domain areas will be privately owned

5.5 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 30 March 2021, the Applicant submitted its Response to Submissions (RtS) which provided further justification and clarification for the proposed development.

On 9 August 2021 and 23 September 2021, the Applicant submitted responses to requests for information (RFIs) from the Department.

The RtS and RFI responses were 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
- detailed proposals for the community facility use and first operator.

The RtS and RFI responses were made publicly available on the Department's website and 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.

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:

- Density / Land use
- Built form
- Amenity impacts
- Public domain
- Design excellence.

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

6.1 Density / Land Use

6.1.1 Density

The Concept Approval provides for a maximum of 68,750m² across the overall Waterloo Metro Quarter.

The Amending Concept Approval (SSD 10441) increased the amount of non-residential floorspace within the Northern Precinct from between 12,000m² and 20,000m² to 34,715m². The Amending Concept Approval did not change the overall maximum floorspace for the Waterloo Metro Quarter.

The proposal contains 14,923.7m² of GFA, accommodating 150 apartments and non-residential uses comprising retail, business and community facility uses.

Public submissions raised concern about the density of the overall Waterloo Metro Quarter development and suggested that it should be reduced.

Neither Council nor the Sydney Metro Design Review Panel raised concerns about the proposed density of the proposal.

The Applicant argues the proposal complies with the floor space ratio control for the Waterloo Metro Quarter and has an appropriate density in the context of the surrounding development including a transition from lower density buildings to the north and west and the future higher density development in the east at Waterloo Estate.

The Department considers the proposed land uses and density are acceptable because:

- the proposal fully complies with the SLEP requirements in relation to overall FSR
- the proposed building, together with the Northern and Southern Precincts would have a total floorspace not exceeding the maximum of 68,750m² under the Concept Approval
- the proposed density would be in keeping with State and Regional strategic planning strategies aimed at encouraging greater housing diversity near major transport corridors

the impacts of the proposal, including amenity and traffic impacts are acceptable (see
 Section 6.4 and 6.6)

The Department's assessment therefore concludes the proposed density is appropriate as the proposal is consistent with the outcomes envisages for the Waterloo Metro Quarter under the Sydney LEP and Amending Concept Approval.

6.1.2 Affordable Housing

Clause 6.45(1) of the Sydney LEP and Condition A12(a) of the Concept Approval requires a minimum of 5% of total residential gross floor area (GFA) across Waterloo Metro Quarter to be provided as affordable housing. The Concept Approval requires the affordable housing to be dedicated or transferred to a Registered Community Housing Provider.

The proposal for the Central Precinct, includes 24 affordable apartments, which is 6% of the proposed residential floor space across the Waterloo Metro Quarter, to be transferred to a Community Housing Provider.

Public submissions raised concerns about the reduction of affordable housing being provided. In particular, concern was raised about the increase in commercial floor space in the Northern Precinct reducing the overall affordable housing dwellings across the Waterloo Metro Quarter from the original Concept Application.

The Department acknowledges the approved Amending Concept increased the amount of non-residential floor space. However, the Department considered the land uses were acceptable as they would still comply with the SLEP requirement of providing a minimum of 5% of total residential gross floor area (GFA) across Waterloo Metro Quarter as affordable housing.

The Department is satisfied the proposal complies with the Sydney LEP and Amending Concept SSD as it provides 6% of total residential GFA as affordable housing.

The Department recommends conditions be imposed requiring the affordable housing units to be transferred to a Community Housing Provider prior to the issue of an Occupation Certificate.

6.1.3 Community Facilities

Clause 6.45(1) of the Sydney LEP 2012 and Condition A12(d) of the Concept Approval require the provision of a minimum of 2,000m² gross floor area (GFA) for community facilities within the Waterloo Metro Quarter.

The definition of community facility under Sydney LEP 2012 is as follows:

community facility means a building or place -

- (a) owned or controlled by a public authority or non-profit community organisation, and
- (b) used for the physical, social, cultural or intellectual development or welfare of the community,

but does not include an educational establishment, hospital, retail premises, place of public worship or residential accommodation.

The proposal include community facilities at the first and second floor with an area of 2,284m² GFA.

One public submission said a child care centre is considered a business use and should not be considered as a community facility.

Council advised that there is low demand and high supply of child care centre spaces in the City of Sydney LGA. Council recommended the space be used for a health facility and specifically dedicated to NSW Health to operate a 'HealthOne' facility, comprising of a range of government and privately operated medical uses. Council also noted reservations about how a child care centre can be defined as a community facility.

In response, the Applicant considers a childcare to primarily serve the future employment base of the Waterloo Metro Quarter and secondly to serve the surrounding residential catchment would be more suitable than a health facility in terms of the mix of land uses on Waterloo Metro Quarter and its surrounds.

The Applicant also stated that the proposed community facility would be controlled by a non-profit organisation by lease terms to operate a childcare centre to service the community. The Applicant provided additional information, including company charter of the non-profit organisation and proposed a restrictive covenant can be imposed on the title of the property to secure all future uses of the property as community facility only.

Based on the submitted information, the Department accepts the proposed community facilities satisfies the requirements of the SLEP 2012 and is consistent with the Concept Approval, noting:

- the proposed community facilities is 2,284m² and exceeds the minimum requirement for a 2,000m² facility
- the proposed community facilities would be controlled by lease terms by a non-profit community organisation
- the proposed first use is for a childcare centre, which is consistent with the definition of a community facility for being used for the physical, social, cultural or intellectual development or welfare of the community
- the ongoing use of the proposed facilities would be secured by a restrictive covenant on title.

The Department recommends conditions requiring the Applicant to include a community member on the non-profit organisation's board of the first operator of the proposed childcare centre and also notify the Department of any future change of occupant and a covenant requiring the space to be used as a community facility in perpetuity.

6.2 Building Height

The Amending Concept SSD (SSD 10441) and the Sydney LEP 2021 allows for a maximum building height standard of RL 104.2.

The proposal has a varied building height ranging from 22 to 24 storeys with a maximum height up to RL 98.46 (**Figure 21**).

Public submissions raised concern about the height of the building being excessive and suggesting that it should be reduced.



Figure 21 | Photomontage of proposal as viewed from Cope Street (Source: Applicant's EIS)

The Department has carefully considered the proposed building height and considers:

- the site is located above and adjacent to the new Metro station and is suitable for higher scale development as envisaged in the permitted height standard of the LEP and envelope heights in the Concept Approval
- the proposed building is 5.74m lower than the maximum building height permitted by LEP and Concept Approval
- the proposed podium and ground plane are designed to complement the adjoining public domain and Cope Street Plaza
- the building is setback 24 m from the Northern Precinct commercial tower to the north,10m from Waterloo Congregational Church and 50m from the Southern Precinct to the south and would not result in any significant amenity impacts to neighbouring buildings
- the proposed height is acceptable in relation to residential amenity, overshadowing, visual and wind impacts (refer **Section 6.4**).

The Department also notes that Council and the DRP raised no concerns about the proposed building height. For the reasons above, the Department concludes the proposed building height is appropriate.

6.3 Amenity Impacts

6.3.1 Future residential amenity

The Department has considered the future residential amenity of the proposed apartments with respect to SEPP 65 and the Apartment Design Guide (ADG) in detail at **Appendix C.**

In summary, the Department is satisfied the proposal would achieve an acceptable level of residential amenity as it meets the intention of the ADG to maximise amenity.

However, the Department notes the proposal does not meet the ADG requirement for solar access. 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 midwinter.

At the EIS phase:

- 66 of the proposed apartments (44%) would achieve 2 hours solar access to living rooms and private open space between 9am and 3pm
- 19 apartments (12.7%), would receive no direct sunlight between 9am and 3pm.

Council raised concern that the proposal does not meet the objectives and requirements of the AGD with respect to solar access. Council also raised concerns regarding the accuracy of the Applicant's solar analysis and does not support solar access beyond 3 pm at min-winter to be considered in meeting the ADG requirements.

The Sydney Metro Design Review Panel (DRP) said they acknowledged it is difficult for the building to meet minimum ADG requirements for solar access and, whilst not compliant, a large number of apartments will have reasonable solar access during winter days.

In response to Council's concerns, the Department engaged an independent solar access consultant to review the Applicant's solar access analysis, including its accuracy and also to provide recommendations on options to further improve solar access. The recommendations included review of the south-eastern and north-western corner apartments to comply with the ADG, and review of the northern orientation of apartments in general.

The Applicant revised its solar analysis and amended the layout of a number of apartments to improve solar access as follows:

- 14 west facing centre apartments from Level 6 to 19 had living room walls shifted to enable the living room and private open space to achieve 1 hour and 50 minutes of solar access
- 19 south-east corner apartments from Level 3 to 21 had living room glazing shifted to enable
 1 hour and 40 minutes of solar access
- two east facing apartments at Levels 20 and 21 had living room glazing shifted enabling solar access for more than 2 hours.

As a result of the amendments, the proposal has 68 apartments (45%) that comply with the ADG and 101 apartments (67%) that are within either 10 minutes or 20 minutes of complying (**Table 7**).

Table 7 I ADG compliance scenarios

Scenario	Number of apartments	Percentage
ADG compliant apartments	68 / 150	45%
Applicant's amendments - 1hr 40 mins for south-east apartments and 1hr 50mins for western apartments	101 / 150	67%
Applicant's contention - 9am - 3:30pm extended solar access time	120 / 150	80%

The Applicant argued that full compliance with the ADG is not necessary for the following reasons:

- the Central Precinct and the entire Waterloo Metro Quarter is not oriented in a north-south direction. It is 17 degrees off true north and therefore has an orientation that reduces its ability to gain afternoon solar access from the west
- the Central Precinct receives an amenity and thermal benefit from afternoon sun beyond 3pm. In particular, the Applicant argues that 3:00 3:30pm has a similar level of solar irradiance as 3:00pm and, as such, the equivalent compliance should be considered as 80%.

The Applicant argued that the additional 33 apartments that are close to compliance, and the additional 19 apartments that have solar access after 3:00pm in midwinter, should be considered as consistent with the intent of the ADG as they maximise solar access.

The Department is satisfied that the Applicant's revised solar analysis and amended proposal satisfactorily addressed the independent consultant's advice and recommendations, noting:

- amendments were made to the Level 20 and 21 apartments to increase compliance with the ADG
- amendments were made to the south-eastern corner apartments to increase their solar access exposure
- amendments were made to the north-western corner apartments to increase their solar access exposure.

The Department is also satisfied that despite the numerical non-compliance, the proposal is acceptable, because:

- amendments have been made to bring 33 non-complying apartments as close as possible to compliance
- the proposal has achieved reasonable solar access despite the off-north orientation of the site.

The Department therefore considers the level of solar access achieved has been maximised and is acceptable in this instance.

6.2.2 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 raised concern that the proposal does not achieve sufficient solar access improvements to Alexandria Park compared to the Concept Approval as required by Section 3K of the endorsed Design Guidelines. Council noted a minor reduction in shadows between 9am and 10am in midwinter.

Public submissions raised concerns with overshadowing impacts to Alexandria Park.

The proposal is supported by solar analysis to identify 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 22**).

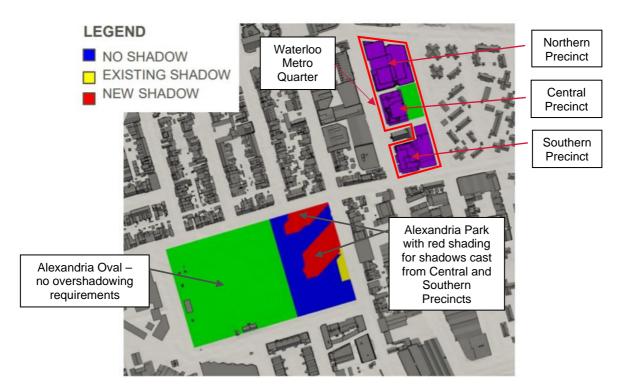


Figure 22 | Overshadowing analysis on Alexandria Park showing impact caused from Central and Southern Precinct buildings at 9:30am in midwinter (Source: Applicant's EIS)

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 %
Central Precinct detailed design – 9am	29.94 %
Concept Approval building envelopes – 10am	2.6 %
Central Precinct detailed design – 10am	0 %

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 proposal has a building height less than the LEP maximum height and Concept Plan building envelope height
- 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 Concept Approval and Design Guidelines to ensure the design has less impact on the Park
- 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.

6.2.3 Overshadowing of private properties

Public submissions raised concerns about overshadowing of the residential properties within the Heritage Conservation Area to the west.

Council acknowledged improvements to solar access to residential properties in the Heritage Conservation Area due to the reduced height of the Northern Precinct compared to the Concept Approval (**Figure 23**).

However, Council raised concern 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 to Council's concern, the Applicant submitted additional overshadowing analysis of private residential properties to the south and west (**Figure 23**). The analysis showed that all affected properties are able to maintain at least two hours solar access between 9am and 3pm in midwinter and satisfied the requirements of the Design Guidelines. Whilst some properties in the Alexandria Park Conservation Area show reduced shadow impact compared to the Concept Approval, other properties in the block immediately west of the Waterloo Metro Quarter have marginally increased shadow impact, whilst maintaining at least two hours.



Figure 23 | Solar access to Alexandria Park Heritage Conservation Area to the west at 10am (Source: Applicant's EIS)

The Department has carefully considered the issues raised in submissions and the Applicant's response and finds the overshadowing impact is acceptable because the proposal:

- complies with the maximum building height and density standards of the Sydney LEP and Concept Approval
- has demonstrated it has less impact than the Concept Approval building envelopes
- meets the requirements of the approved Design Guidelines in relation to maintaining two hours solar access to surrounding properties.

The Department therefore accepts that the proposal would reduce its overshadowing impacts to the Conservation Area compared to the Concept Approval between 9am and 3pm in midwinter and

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

6.4 Public Domain

6.4.2 Public spaces

The Sydney LEP 2012 and the Concept Approval require a minimum of 2,200m² of publicly accessible open space across the Waterloo Metro Quarter. However, the Department notes this requirement has already been met by the Cope Street Plaza approved as part of the Southern Precinct SSD (SSD 10437) and Raglan Plaza approved as part of the CSSI station works (CSSI 7400) and the Northern Precinct SSD (SSD 10440).

The proposal includes the design and construction of a laneway, identified as "Grit Lane" and a small plaza, called "Church Square" (**Figure 24**). Both areas would provide pedestrian connection from the approved Cope Street Plaza (part of Waterloo Southern Precinct SSD 10437) to Botany Road.

The Department supports the proposed Grit Lane and Church Square, which are designed to complement the approved Cope Street Plaza and would assist in transport interchange from the new Metro station to bus stops along Botany Road, wayfinding and permeable access across the Waterloo Metro Quarter (**Figure 24**).

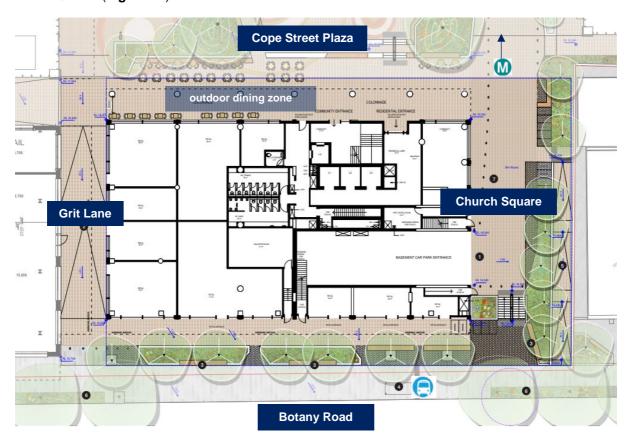


Figure 24 | Proposed publicly spaces (Source: Applicant's EIS)

The Department is also satisfied that the additional pedestrian connections have been designed appropriately for pedestrian demands and retail activation.

The Department recommends conditions of consent requiring easements and covenants over the publicly accessible spaces to secure public rights of access prior to occupation of the development.

6.4.2 Pedestrian Wind Environment

The Applicant submitted a Wind Impact Assessment to assess the proposal against the wind criteria in the Design Guidelines for the public domain and publicly accessible and private open spaces (**Figure 25**).

The Design Guidelines require that at least 50% of publicly accessible open space achieves wind comfort criteria for sitting rather than standing or walking.

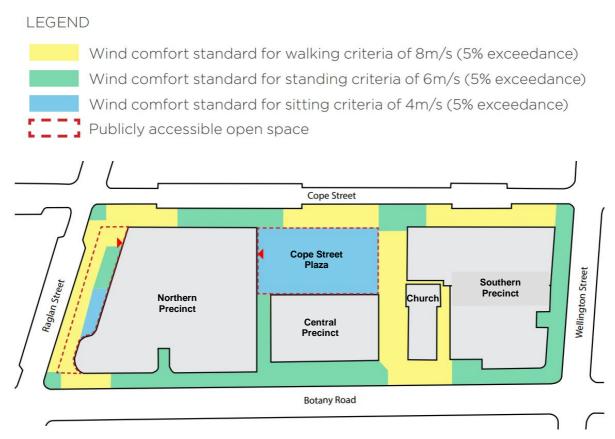


Figure 25 | Wind comfort criteria in endorsed Design Guidelines (Source: SSD 9393)

Council noted that wind conditions would generally be in accordance with the Design Guidelines and the RtS amendments to the design demonstrated improvements compared to the EIS. Council also noted the compliant wind conditions rely on the success of extensive tree canopy coverage throughout the Waterloo Metro Quarter site. Council requested:

- 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 depth be provided for each tree type chosen; and
- replacement tree planting occurs where trees fail.

In response to Council's concerns, the Applicant provided additional wind modelling demonstrating the wind criteria are generally achieved subject to suitable mitigation measures including awnings and tree planting.

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

- with design elements that are targeted to reduce wind impact, Cope Street Plaza will achieve sitting criteria all year round. The design elements include raised planters, bench seating, soil mounds and mature trees.
- the 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 at
 maturity.

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.

6.5 Design Excellence

Clause 6.21 of the Sydney Local Environmental Plan 2012 (SLEP 2012) outlines the provisions for design excellence. The Concept Approval also sets out a framework for demonstrating design excellence. This includes:

- independent review of an expert design review panel
- Applicant must address the approved Design Guidelines
- · Applicant must provide a Design Integrity Report.

The Applicant presented the proposal to the DRP on a number of occasions, seeking its views on the design of the proposal. Following the Applicant's final presentation to the DRP on 19 March 2021, the DRP confirmed its outstanding matters had been resolved. The DRP confirmed the proposal meets the design quality benchmarks in the Design Guidelines and reinforces the positive aspects of the tender winning scheme presented to the DRP.

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 agrees with the key reasons outlined by the DRP on why the proposal exhibits design excellence. These include:

- contribution to a diverse land use mix to provide activation for the precinct
- relationship of the podium to the surrounding public domain and context, in this case the Waterloo Congregational Church to the south, Cope Street Plaza to the east and Botany Road to the west
- integration of the community facilities into the design, and
- diversity in materials and detailing, in this case the varied brickwork in the podium in particular.

The Department also 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 B9**). The recommended conditions for Design Integrity Review are consistent with the endorsed Design Excellence Strategy and conditions for other over station developments on the City to Southwest Metro.

6.6 Other Issues

The Department's consideration of other issues is summarised in **Table 9** below.

Table 9 I Response to other assessment issues

Issue	Findings	Recommendations
Consistency with the Concept Approval	 The Concept Approval sets the parameters for future development on the site and conditions to be met by future applications. The Department is satisfied the application has adequality addressed the requirements of the Concept Approval, as discussed earlier in the report at: Section 6.1 in relation to the proposed land use mix Section 6.2 with respect to the design of the proposed built form Section 6.6 in addressing the parking and traffic impacts of the proposal. The Department has undertaken a detailed assessment of the proposal against the conditions of the Concept Approval at Appendix E of this report. The Department has also undertaken a detailed assessment of the proposal against the Design Guidelines in Appendix F. The Department is satisfied the proposal is consistent with the Concept Approval. 	No additional conditions required.
Public Benefits	 Condition A12 of the Concept Approval requires public benefits within the overall Waterloo Metro Quarter. The requirements relevant to the Central Precinct are to provide a minimum of 5% of residential GFA as affordable housing and 2,200m² GFA of community facilities. As discussed in Section 6.2, the proposal includes 6% of the residential GFA as affordable housing and 2,283m² of community facility space, therefore satisfying the requirement. The Department is therefore satisfied the necessary public benefits relating to the proposal are provided. 	requires a covenant on title securing the community facility in perpetuity. Condition E42 sets out requirements for the transfer of the affordable housing to a Community Housing Provider (CHP).
Local Developer Contributions	 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. The Department has recommended a condition requiring contributions to be paid. 	Condition B1 sets out requirements for required payment.

Ecologically Sustainable Development (ESD)

- Council supported the adopted energy rating scores and methodologies proposed to achieve the rating efficiencies, as well the onsite rainwater harvesting.
- However, Council recommended 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.
- 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 that rainwater collection tanks have been maximised.
- The Department is satisfied suitable ESD measures have been incorporated into the project in accordance with the ESD commitments outlined as part of the Concept Approval. The Department also accepts that the Green Star rating system allows applicant to use As-Built tool under transitional provisions. Notwithstanding, the proposal would still provide appropriate ESD credentials.

Condition B24 and B25 set out requirements to ensure the committed ESD initiatives are carried through to the construction and operational phases.

Construction Impacts

- The EIS addressed construction impacts and was accompanied by a Construction Management Plan and a Construction Traffic and Pedestrian Management Plan.
- 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.
- The Department is satisfied the construction impacts can be appropriately managed subject to relevant conditions of consent.

Condition C19 sets out requirements for a Construction Management Plan and associated sub-plans.

Noise / Acoustic Privacy

- 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 a 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

No conditions are necessary.

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.

Natural Ventilation

- The ADG usually requires that at least 60% of apartments achieve natural cross ventilation for the first nine storeys of the building. However, in a high nose environment, the requirements for natural cross ventilation are relaxed and the requirement reverts to maximising natural ventilation.
- The proposal is affected by high traffic noise along Botany Road which affects the northern, western and southern facades.
- The proposal achieves 36 out of 48 apartments (75%) natural ventilation in the first nine storeys, with 6 apartments being naturally cross ventilated and 30 apartments relying on natural ventilation through the use of acoustically attenuated plenums.
- Council raised concerns that the Applicant was labelling naturally ventilated apartments as naturally cross ventilated apartments which is not in keeping with the ADG requirements.
- The Department acknowledges the Applicant's use
 of terminology in relation to naturally cross ventilated
 apartments is incorrect. The glossary of the ADG
 gives a definition for natural cross ventilation. The
 use of plenums does not create a natural cross
 ventilation path, rather it creates a natural ventilation
 path.
- The Department notes the use of plenums to achieve ventilation is common for apartments affected by road noise.
- The DRP were satisfied with the proposed ventilation strategy proposed.
- Based on the above, the Department accepts that the proposed apartments achieve an acceptable level of natural ventilation, which complies with the ADG.

Heritage

- Council recommended the proposal should adopt all heritage and archaeology-related recommendations in the consultant reports lodged with the EIS.
- The Department finds that the recommendations of the heritage and archaeological assessments are appropriate for implementation.
- The Department recommends appropriate heritage interpretation at the operational stage in line with the Heritage Interpretation Strategy lodged.

No conditions are necessary.

Condition B40

requires implementation of the Heritage Interpretation Strategy.

Condition B38 deals with public art opportunities, which may incorporate elements of heritage interpretation.

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 currently known.
- The Department engaged an independent traffic consultant to assess the traffic impacts of the proposal. The Department's independent traffic consultant reviewed the Applicant's Traffic and Parking Impact Assessment.
- The review found that the proposed traffic generation rates are acceptable and the Applicant's comparison with comparable high-density development for traffic generation rates is prudent and provides a robust assessment. The review also found that the proposal will have a minor impact on existing travel delays and the level of service within the surrounding road network including five key intersections.
- 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.

No additional condition required.

Car Parking

- Car parking for the proposal is provided within a basement which has been approved as part of the Basement Car Park SSD (SSD 10438). The approved basement contains 67 spaces for the proposed 150 apartments and one space for the proposed child care centre.
- No car parking is proposed for the proposed retail and business premises.
- Public submissions raised concerns about insufficient car parking for the proposed apartments, arguing that each apartment should have at least one space.
- Council said the amount of parking is excessive to promote a transit-oriented development and recommends zero or absolute minimal parking.
- The Department carried out an assessment of the number of car parking space in the assessment of the Basement SSD (SSD 10438).
- The Basement SSD assessment found:
 - the Department agreed with its independent traffic consultant on the quantum of the proposed parking for apartments which would result in only 0.34 spaces per dwelling compared to the Sydney LEP maximum rates equivalent to 0.52 spaces per dwelling
 - the Department accepted no car parking for the proposed retail and business premises
 - the proposal provides bicycle spaces complying with Council's DCP
 - however, the Department recommended increased childcare centre drop off / pick up

No conditions are necessary.

spaces, on a trial basis, should be provided in the basement in the morning and afternoon peaks.

 Subject to the trial of increased child care centre spaces, the Department considers the number of car parking spaces provided for the proposal is acceptable.

Loading and Servicing

- The proposal includes a driveway providing access to the basement accessed from Cope Street. The Basement SSD (SSD 10438) contains five service bays directly under the Central Precinct for tradespeople or contractors and access to the loading dock within the Northern Precinct for two medium rigid vehicle spaces and two small vehicle spaces.
- The Department's independent traffic consultant reviewed the proposed loading and servicing arrangement and advised the proposal is acceptable noting there would be 10 loading docks in total 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 Department accepts the traffic consultant's findings and is satisfied the proposed servicing is acceptable, subject to a condition of consent requiring a Freight and Servicing Management Plan to be prepared in consultation with TfNSW prior to the occupation.

Condition B32

requires a Freight and Servicing Management Plan to be prepared in consultation with TfNSW prior to occupation.

Site Suitability

- The proposal involves commercial and residential premises.
- 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 the ground floor and driveway access comply with flood planning levels.
- The Environment, Energy and Science Group raised concerns with the location and size of flood refuge areas for occupants of the ground floor and Level 1 and 2 community facility.
- The Applicant responded by nominating future refuge areas within the flood proofed areas of the publicly accessible open space above Cope Street Plaza and the expected capacities of each area.
- The Department considers the proposed refuge area would allow for suitable protection from the height and duration of maximum flood levels and recommends the Applicant be required to prepare a detailed Flood Emergency Management Plan in consultation with the NSW State Emergency Service.
- The Department is satisfied the site is suitable for the proposed development and has recommended

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. conditions requiring site contamination management and auditing and compliance with the flood planning levels.

7 Evaluation

The Department has assessed the merits of the proposal taking into consideration the issues raised in submissions, as well as the Applicant's response to these, and is satisfied the impacts have been addressed by the proposal and through the Department's recommended conditions.

The Department considers the proposal is acceptable for the following reasons:

- it is consistent with strategic planning objectives for the site as it would deliver integrated land use and public transport by providing housing above and around the new Waterloo Metro Station
- it fully complies with the Sydney LEP 2012 and Amending Concept Approval in relation to density, land use and height controls
- it achieves design excellence, is appropriate within its urban context and is supported by the Sydney Metro DRP
- 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
- the proposal has acceptable amenity outcomes as it reduces overshadowing to surrounding properties and Alexandria Park compared to the Concept Approval
- the proposal would provide acceptable amenity to future residents with respect to the requirements of the Apartment Design Guide
- the proposal provides a 2,284m² community facility, 24 affordable housing apartments and contributes to public domain improvements
- it will contribute to local economic activity with approximately 73 new operational jobs and 221 construction jobs.

The Department's Assessment therefore concludes the proposal is in the public interest and recommends the application be approved subject to the conditions (**Appendix F**).

8 Recommendation

It is recommended that the Director, Key Sites 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 approve SSD 10439
- agrees with the key reasons for approval listed in the notice of decision (Appendix B)
- **grants consent** for the application in respect of SSD 10439, subject to the conditions in the attached development consent (**Appendix F**)
- signs the attached development consent (Appendix F).

Recommended by:

Russell Hand Principal Planner

Key Sites Assessments

Recommended by:

Annie Leung Team Leader

Key Sites Assessments

9 Determination

The recommendation is **Adopted** by:

Ablibled: 24 November 2021

Anthony Witherdin

Director

Key Sites Assessments

Appendices

Appendix A - List of documents

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

https://www.planningportal.nsw.gov.au/major-projects/project/29596

Appendix B – Community Views for Draft Notice of Decision

Issue Consideration

Built form and density

- height and density of Waterloo Metro Quarter should be reduced in general
- scale of Central Precinct should be reduced.
- The Department's assessment finds the proposal acceptable as the built form complies with the Sydney LEP and the Concept Approval envelopes and the Design Guidelines.
- The Department acknowledges the built form of the building would be appropriately
 mitigated by the proposed modulation, articulation, materials and finishes. As such,
 the proposal would sit comfortably within the building envelope and within the
 neighbouring context

Land uses including affordable housing

- office floorspace reduces affordable housing dwellings
- 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
- The Department acknowledges the approved Amending Concept SSD, which
 included the Northern Precinct's office floorspace instead of the predominantly
 residential floorspace in the original Concept Approval, reduced the amount of
 affordable housing to be provided compared to the original Concept Approval.
- The Department notes that the Amending Concept secured four additional affordable housing apartments than required under the Sydney LEP and Concept Approval.
- The Department is satisfied the proposed amount of affordable housing complies with the requirements for the site and is acceptable

Parking and traffic

- proposal will increase traffic and make it difficult to get to surrounding properties
- widen Botany Road for a permanent bus lane.
- proposal will increase pedestrians.
- The Department engaged an independent traffic consultant to review the proposed traffic generation, traffic impacts, car parking numbers and loading/unloading of the proposal.
- 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.
- 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 Central Precinct, is noted to have minimal contribution to pedestrian demands compared to the Station infrastructure.
- The Department is satisfied the proposal will have acceptable parking and traffic impacts

Overshadowing impacts on:

- Alexandria Park
- Cope Street Plaza
- existing dwellings to the west.
- The Department's assessment finds:
 - the Central Precinct casts complying and acceptable shadows onto Alexandria Park
 - more than 50% of Cope Street Plaza will receive solar access for more than two hours between 9am and 3pm in midwinter as is required in the endorsed Design Guidelines
 - private dwellings to the west will have continue to maintain more than two hours solar access between 9am and 3pm in midwinter

Coordination with Waterloo Estate

 community infrastructure should be coordinated with the Waterloo Estate to avoid duplication.

- Strategic planning for Waterloo Metro Quarter was completed in 2019 and enabled the mixed-use development of the precinct with revised building heights and densities in response to the opportunity provided by the new Metro Station. The strategic planning was informed by concept land uses and rigorous assessment of the merits of the new planning controls.
- The Waterloo Metro Quarter would accommodate a mix of land uses to service the new metro station and surrounding residents and also provide new civic plazas, Raglan Plaza and Cope Street Plaza and a community facility.
- Waterloo Estate is subject to a current Planning Proposal for rezoning which would be informed by further studies to identify the future community infrastructure needs.

Heritage

 Heritage impacts on terraces and park within Alexandria Park Conservation Area

- 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.
- The Department also notes the building materials have been chosen to reflect the brick and masonry finishes of surrounding terrace houses, factories and warehouses.

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	 the proposal promotes the social and economic welfare of the community by providing housing 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 the proposal comprises development above and around the approved station infrastructure and does not have 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	the proposal has integrated ESD principles as discussed below.

- c) to promote the orderly and economic use and development of land
- 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.
- d) to promote the delivery and maintenance of affordable housing
- the application includes affordable housing as required under the Sydney LEP and Concept Approval.
- e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats
- the proposal, comprising affordable and market housing above the metro station, will not have any natural environmental impacts.
- f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)
- the Department considers that the heritage impacts of the development are acceptable, as set out in Section 6.
- g) to promote good design and amenity of the built environment
- 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.
- h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants
- 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 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
- the Department publicly exhibited the proposal as outlined in **Section 5**. This included consultation with Council and other public authorities and consideration of their responses.

j) to provide increased opportunity for community participation in environmental planning and assessment.

- 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.
- the engagement activities carried out by the Department are detailed in Section 5.

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 nationally recognised environmental standards of 5 Star Green Star Design, more than a score of 30 for BASIX energy rating and more than a score of 40 for BASIX water 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 matters for consideration

Section 4.15(1) Evaluation	Consideration
(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)(iiia) 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 Section 6 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 Section 5 of this report.
(e) the public interest	The proposal is considered acceptable and within the public's interest as the uses will provide affordable and market 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 the SRD 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 business identification signage zones for ground floor tenancies and child care and residential signage at the ground floor entry lobbies.

The Department has considered the proposed signage and finds that they are consistent with existing signage within the surrounding mixed use area and comply 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 site is not in a conservation area or 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?	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	
respect the viewing rights of other advertisers?			
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 surrounding 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 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	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
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?		
6. Associated devices and logos with a	dvertisements 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
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
8. Safety		
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, 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.

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
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 in the Waterloo Metro Quarter, complies with the FSR standard applicable and the density envisaged in the Concept Approval. The density of the building is suited to the location above the new high frequency metro line.
4. Sustainability	The building has integrated ESD principles as discussed above.
5. Landscape	The building integrates suitable rooftop communal open space. The building is surrounding on four side be pedestrian walkways 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.
7. Safety	Retail activation is achieved by providing tenancies in the round. Street level access to the community facility is through secure lobbies. The entries are designed to be secure, well-lit and enable easy identification between public and private realms.
Housing Diversity and Social Inclusion	The building includes a mix of apartment sizes. 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.

and a control of the proposal against the proposal action provided actions		
Relevant Criteria	Department's consideration	
 Building type/layouts respond to streetscape, optimising solar access Overshadowing of neighbouring properties 	The building responds to the streetscape with facades facing Botany Road to the west and Cope Street Plaza to the east.	
 is minimised during mid-winter Ensure solar access to existing buildings which don't achieve ADG sun access criteria is not reduced by more than 20%. 	 The building will have good levels of solar access to the proposed apartments, as discussed in Section 6.3. The building will not result in any neighbouring properties receiving less than two hours solar access. 	
3C Public Domain Interface		
 Transition between public/private without compromising security Amenity of public domain is retained and enhanced 	Entry to the building is appropriately designed, incorporating glazing to enable causal surveillance, and activation to enhance security and amenity.	
 3D Communal and Public Open Space Communal Open Space has a minimum area equal to 25% of the site area. 50% of communal open space has direct sunlight for at least 2 hours midwinter. 	Communal open space (185m²) for the building equals 7.5% of the site area. Whilst this is less than required, the proposed rooftop area has been maximised and consolidated into one space with excellent solar access and amenity. Further, the Department considers Cope Street Plaza to the immediate east of the building, as well as surrounding public walkways, provides large amounts of open space for residents to enjoy.	
3E Deep Soil Zones		
 For sites greater than 1,500 m² a minimum of 7 per cent of the site should provide for 	The building sits above the basement and therefore deep soil zone is not possible on the	

deep soil zone(s) and a minimum

strategies should be achieved.

Where this is not possible, options for

acceptable storm water management

dimension of 6 metres.

site alone. However, the Waterloo Metro

soil landscaping in the surrounds of the

buildings.

Quarter overall will provide over 25% deep

The submitted plans and landscaping report identifies there would be planting on roof

level, with the soil depth provided supporting soft landscaping.

3F Visual Privacy

Achieve the following building separation from windows and balconies to side and rear boundaries for habitable rooms

Up to 12 m / 4 storeys: 6 m
Up to 25 m / 8 storeys: 9 m.
25+ m / 9+ Storeys: 12 m.

 The proposal complies with the minimum separate distances is not considered to result in unacceptable privacy impacts. The building is 56m from the Southern Precinct residential uses and 24m from the Northern Precinct office uses.

3G Pedestrian Access and Entries

- Building entries and pedestrian access connects to and addresses the public domain.
- Access, entries and pathways are accessible and easy to identify.
- The entry lobbies are directly connected to Cope Street Plaza and easy to identify.
- The apartments sit above the podium and therefore do not have individual entry from the street.

3H Vehicle Access

- Vehicle access points are to be designed to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes.
- Car parking for the proposal is within the basement below the Northern and Central Precincts with access below the proposed building. The design has been subject to DRP review and would have a high quality streetscape in a shared zone environment.

4A Solar and Daylight Access

- To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.
- 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.
- Maximum of 15% of apartments have no direct sunlight 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.

- Refer to discussion in Section 6.3 It is considered that solar and daylight access has been maximised and is acceptable given the constraints of the site.
- Shading and glare control is considered appropriate as the proposal will meet the relevant requirements of SEPP (BASIX) and the National Construction Code.

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. 75% of apartments are naturally ventilated.

 The building is affected by road traffic noise and maximises natural ventilation rather than natural cross ventilation. Refer Section 6.3.

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 tenancies have generous ceilings exceeding 3.3m.

4D Apartment Size and Layout

- Minimum apartment sizes
 - o Studio 35 m²
 - 1 bedroom 50 m²
 - o 2 bedroom 70 m²
 - o 3 bedroom 90 m².
- The above requirements increase by 5m² 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 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 m² and other bedrooms have 9 m².
- Bedrooms have a minimum dimension of 3m (excluding wardrobes).
- Living rooms have a minimum width of:
 - o 3.6 m for studio and one bed
 - o 4 m for 2 and 3 bed.
- The width of cross-over or cross-through apartments are at least 4m internally.

- 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.

4E Private Open Space and Balconies

- Primary balconies are provided to all apartments providing for:
 - Studio apartments minimum area of 4m²
 - 1-bedroom minimum area of 8 m² and a minimum depth of 2m
 - 2-bedroom minimum area 10m² and a minimum depth of 2m
 - o 3-bedroom minimum area 12m² and minimum depth 2.5m.
- The apartments meet the minimum recommendations of the ADG for balcony size and dimensions with the exception of four 3bedroom units on Levels 20 and 21 which have non-uniform depth but still achieve acceptable amenity.

4F Common Circulation Space

- Maximum 8 apartments off a circulation core.
- Maximum number of apartments from a single circulation corridor is eight.
- Three lifts are provided which equals one lift per 50 apartments but has been assessed by the Applicant's vertical transport consultant for

 For buildings 10 storeys and over the maximum number of units to a lift is 40 performance. The Department accepts that the three lifts provide acceptable amenity.

4G Storage

- Studios 4m³.
- 1 bedroom 6m³.
- 2 bedroom 8m³.
- 3 bedroom 10m³.

In addition to kitchens, bathrooms and bedrooms:

 at least 50% of the required storage is to be provided within the apartment Apartments are provided with storage as required by the ADG.

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.

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 68 one-bedrooms (45%), 76 two-bedrooms (51%), and 6 three-bedroom plus (4%).
- The Apartment mix is distributed throughout the development.

4M Facades

- Building facades provide visual interest along the street while respecting the character of the local area.
- Building functions are expressed by the facade.
- 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.

4N Roof Design

- 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.
- Roof treatments integrate with the building design.
- 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 provided in appropriate locations and provide active street frontages that encourage pedestrian movement.
- Residential levels are integrated within the development, and safety and amenity is maximised for residents.
- The proposal provides a mixed use development with active street frontages.
- Residential levels are integrated within the development and separate secure entry is provided for residents.

4T Awnings and Signage

- Awnings are well located and complement and integrate with the building design
- Signage responds to context and desired streetscape character.
- An entry colonnade is proposed above the ground floor lobby and complements the design.
- Ground floor signage zones are integrated well into the design.

4U Energy Efficiency

- Development incorporates passive environmental design.
- Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer.
- Adequate natural ventilation minimises the need for mechanical ventilation.
- The Department considers the proposal is acceptable as it is supported by a BASIX Certificate, and ESD assessment demonstrating relevant requirements are satisfied.
- 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.

4V Water management and conservation

- Potable water use is minimised.
- Urban stormwater is treated on site before being discharged to receiving waters.
- Flood management systems are integrated into site design.
- The development will meet BASIX water targets.
- Urban stormwater will be treated
- Floor level of the entry point is designed having regard to flood levels.

4W Waste management

- Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents
- 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.

- Domestic waste is minimised by providing convenient source separation and recycling.
- 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	 The relevant aims of the Plan include: To support the City of Sydney as an important location for business, education and cultural activities and tourism To promote ecologically sustainable development To encourage economic growth To encourage growth and diversity in residential population by providing a range of appropriately located housing including affordable housing To enable a range of services and infrastructure that meet the needs of residents, workers and visitors To enhance the amenity and quality of life of local communities 	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.
	To achieve high quality urban form through design excellence.	

2.3 – Land use zoning	The site is within the B4 Mixed Use. The objectives of the 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 maximum public transport use and encourage walking and cycling To ensure uses support the viability of centres.	The proposal is permissible with consent and consistent with the objectives of the zone.
4.3 – Height of buildings	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.	The proposal complies with the maximum height standards applying to the site.
4.4 – Floor space ratio	The floor space ratio for a building is not to exceed the FSR shown on the map. In this case, the Waterloo Metro Quarter has an FSR standard of 6:1.	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.
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	The consent authority must consider the effect of the proposed development on the heritage significance of a heritage item or conservation area. 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.	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.	The Department's assessment on design excellence is contained in Section 6.6. 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.

An independent DRP process in lieu of a competitive design process under SLEP 2012 was held, because it is considered to deliver better design outcomes due to the circumstances of the site and relationship with the metro station below.

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.

The Department notes the DRP is providing advice on the design of the Waterloo Metro Station to assist with achieving an integrated design outcome

The Department finds that the Minister may form the opinion that the proposal exhibits design excellence.

6.45 – Waterloo Metro Quarter - general

- (1) The consent authority must not grant consent unless the development is consistent with the following objectives:
- (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
- (b) at least 2,000 sqm of GFA of buildings at the Waterloo Metro Quarter must be used for community facilities

The proposal, together with other precincts under separate SSDs, will contribute to a minimum 12,000m² of non-residential uses at or below podium levels.

Community facility floorspace is proposed and meets the requirements.

Affordable housing is proposed and meets the requirements.

Non-residential floorspace is split up across all proposed buildings in the Waterloo Metro Quarter including the proposed building.

- (c) at least 2,200 sqm of land at the Waterloo Metro Quarter must be used for publicly accessible open space.
- (2) Consent must not be granted to development involving one of more dwellings unless:
- (a) it is satisfied at least 5% of GFA of residential accommodation will be used for affordable housing.
- (b) not relevant to this application minimum apartment size for affordable housing
- (c) it is satisfied that land uses other than residential accommodation or passenger transport facilities will be evenly distributed through the Waterloo Metro Quarter
- (d) it has taken into consideration any guidelines made by the Planning Secretary relating to the design and amenity of the Waterloo Metro Quarter.

The Department has considered the Design and Amenity Guidelines in the assessment of the application. A summary assessment is contained in Appendix E.

6.46 – Waterloo Metro Quarter – State public infrastructure 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.

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)

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.

The Minister therefore may grant consent to the application as Clause 6.46 of the Sydney LEP has been satisfied.

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.
7.16 – Airspace Operations	The consent authority must consult with the relevant Commonwealth body for any application which penetrates the Limitation or Operations Surface (OLS). The consent authority may grant consent for the development if the relevant Commonwealth body advises that it has no objections to its construction.	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.	The Department is satisfied the proposal has maximised active street frontage along Botany Road and also along the internal pedestrian walkways and Plaza.

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 – Consistency with Concept Approval

Concept Approval Condition

	Department's Assessment
Planning Agreement / Binding Agreement	
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: (c) a minimum 5% of approved residential gross floor area dedicated or transferred to a	The affordable housing and community facility public benefits are proposed in this application. The Department is satisfied the proposal meets the requirements and recommends conditions requiring: • transfer of the affordable housing to a community housing provider

- Registered Community Housing Provider as affordable housing
- (d) 70 social housing dwellings dedicated or transferred as agreed by NSW Land and Housing Corporation
- (e) publicly accessible open space provision of minimum 2,200m² across the Metro Quarter site including its final area, design and ongoing management, noting partial provision of this publicly accessible open space may also be delivered under the CSSI Approval
- (f) community facilities gross floor area of a minimum 2,000m² including its final area, design and future operating model. Community facilities are as defined in the Sydney Local Environmental Plan 2012.

 a restriction on title securing the community facility space in perpetuity.

Maximum Building Envelopes

- 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.
- B3. The maximum achievable gross floor area (GFA) for the non-station related floor space is 68,750 m² and this amount will only be achieved subject to demonstration of:
 - (a) being wholly contained within the approved building envelopes
 - (b) compliance with the conditions of this concept approval
 - (c) demonstration of design excellence
 - (d) consistency with the Design Guidelines (as amended by Condition A14).
- 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.

The building will be fully contained within the approved building envelopes.

The gross floor area of the Waterloo Metro Quarter is calculated across all Detailed Design SSDs. The SSDs have less than 68,750m².

Built Form and Urban Design

- B5. The detailed development applications shall address compliance with:
 - (e) the Design Guidelines as endorsed by the Planning Secretary pursuant to Condition
 - (f) the Design Excellence Strategy as endorsed by the Planning Secretary pursuant to Condition A15
 - (g) the conditions of this consent.
- B6. The following elements are not inconsistent with the consent proposal but are subject to further assessment with the relevant detailed development application:
 - (i) conceptual land uses, except for the approved minimum non-residential

The applications address compliance with:

- with the Design and Amenity Guidelines in the EIS and RtS;
- the Design Excellence Strategy in the EIS, RtS and Design Integrity Report
- the conditions of consent in the EIS.

The Department has addressed the Design Guidelines in Appendix E, the Design Excellence Strategy in Section 6.6 and the conditions in this table.

- GFA, community facilities GFA, affordable housing rate and number of social housing dwellings approved
- (ii) indicative signage zones, following preparation of a Signage Strategy
- (iii) subdivision.
- B7. Future development applications shall address the following:
 - (h) not relevant to this application.
 - (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:
 - (i) the design objectives of the Concept Development Application
 - (ii) consistency with the approved Design Guidelines as amended by Condition A14
 - (iii) the DEEP's Design Excellence Report
 - (iv) the advice of the SDRP (or approved alternative under Condition A15)
 - (v) the conditions of this consent.
 - (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.

The proposal includes land uses, signage and subdivision and is consistent with the Concept Approval inclusions.

The requirements in Condition B7 are satisfied.

Car Parking and Bicycle Parking

- 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:
 - (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.
 - (I) the allocation of residential car parking spaces, up to the maximum of 170 spaces must not exceed the following maximum rates:
 - (i) 0.1 space per studio dwelling
 - (ii) 0.3 parking spaces per 1 bedroom dwelling
 - (iii) 0.7 parking spaces per 2 bedroom dwelling
 - (iv) 1 parking space per 3 bedroom or more dwelling

The proposal fully complies with the car parking and bike parking rates applied.

- residential car share parking rate of 1 (v) space per 50 residential car parking spaces provided
- non-residential car parking to be provided in (m) accordance with the following:
 - a maximum of 1 space for 435m² of GFA for any commercial uses
 - a maximum of 2 spaces for use of the (ii) Waterloo Congregational Church
 - (iii) non-residential car share parking at rate of 1 space per 30 non-residential car parking spaces.
- 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:
 - accessible car parking spaces provided as per Sydney DCP 2012 rates
 - motorcycle parking spaces provided as per (o) Sydney DCP 2012 rates
- 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.

Consultation with Waterloo Congregational Church

- 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:
 - (a) potential for Church gathering space
 - (b) wedding and funeral cars
 - (c) waste and servicing
 - (d) building maintenance
 - (e) design of the public domain around and within the Church property including safe access and passive surveillance in the setbacks.

The applicant includes a Consultation Report demonstrating the owners of the Church have been consulted and the proposal responds to the matters required.

Heritage Impact Assessment

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.

The application includes a Heritage Impact Statement and Heritage Interpretation Strategy prepared in consultation with Council.

Wind Impact Assessment

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.

The application includes Wind Impact Assessment as required. This includes

B14. The Wind Impact Assessment must consider the locations of existing and future pedestrian crossings modelling of the adjacent 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.

Traffic, Access and Parking Assessment

- B15. Future development applications shall be accompanied by a Traffic and Transport Impact Assessment.
- 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:
 - (a) construction car parking strategy
 - (b) haulage movement numbers / routes including contingency routes
 - (c) detailed travel management strategy for construction vehicles including staff movements
 - (d) maintaining property accesses
 - (e) maintaining bus operations including routes and bus stops
 - (f) maintaining pedestrian and cyclist links / routes
 - (g) independent road safety audits on construction related traffic measures
 - (h) measures to account for any cumulative activities / work zones operating simultaneously.
- 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.

The application includes a Traffic and Transport Impact Assessment and a CTMP as required.

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.

Environmental Performance / ESD

- 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.
- B19. The minimum performance targets for environmental performance are:
 - (i) Precinct overall:
 - (i) 6 star Green Star Communities Rating

The application includes a ESD and Sustainability Strategy documenting how the proposed measures have been incorporated into the design, construction and operational phases.

The documentation lodged demonstrates the relevant ESD targets will be met by the development. Conditions are recommended requiring compliance with the targets.

- (ii) Endorsed under One Living Planet framework
- (j) Commercial / office uses:
 - (i) 5 Star Green Star Design and As-Built Rating Tool
 - (ii) 5.5 Star NABERS Energy
 - (iii) 4.5 Star NABERS Water
 - (iv) 'Gold Certification: Shell and Core' under WELL Building Standard
- (k) Residential uses:
 - (i) 5 Star Green Star Design and As-Built Rating Tool
 - (ii) more than BASIX 40 Water
 - (iii) BASIX 30 Energy.

Security and Crime Assessment

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.

The application includes a CPTED Assessment prepared in accordance with the requirements.

Construction Impact Assessment

- B21. Future development applications shall provide analysis and assessment of the impacts of construction works and include:
 - (a) Construction Traffic and Pedestrian Management Plan, as per Condition B9
 - (b) Community Consultation and Engagement Plan(s)
 - (c) Noise and Vibration Impact Assessment
 - (d) Construction Waste Management Plan
 - (e) Air Quality Management Plan.
- 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).

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.

Noise and Vibration Assessment

- B23. Future development applications shall be accompanied by a Noise and Vibration Impact Assessment that demonstrates the following requirements are met:
 - (a) vibration from construction activities does not exceed the vibration limits established in British Standard BS7385-2:1993 Excavation and

The application includes a Noise and Vibration Impact Assessment addressing the requirements.

- measurement for vibration in buildings. A guide to damage levels from groundborne vibration.
- (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.
- (g) advice of a heritage specialist has been incorporated on methods and locations for installed equipment used for vibration movement and noise monitoring of heritagelisted structures.
- 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.
- B25. The Noise and Vibration Assessment must address the conclusions and recommendations of the Concept Acoustic Assessment Report, SLR Consulting dated 9 November 2019.

Flooding and Stormwater Assessment

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.

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,

Archaeological and Aboriginal Cultural Heritage

- 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:
 - (a) Artefact 2016, Sydney Metro City and Southwest, Chatswood to Sydenham: Aboriginal Cultural Heritage Assessment
 - (b) Artefact 2016, Sydney Metro City and Southwest, Chatswood to Sydenham:

The Department is satisfied that archaeological and Aboriginal cultural heritage issues have been considered in the Basement SSD (SSD 10438) and that the Central Precinct does not have any excavation.

Aboriginal Heritage – Archaeological Assessment.

- 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:
 - (a) provide an assessment of the findings of the eastern clearance works and reporting (i.e. the CSSI works)
 - (b) identify any new research questions, if required
 - (c) make recommendations for any revised archaeological mitigation measures, if required
 - (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.

Airspace Protection

- B30. Future detailed development applications for aboveground works must comply with the following requirements:
 - (a) buildings must not exceed a maximum height of 116.9 metres AHD. This includes all lift overruns, vents, chimneys, aerials, antennas, lightning rods, and roof top garden plantings, exhaust flues, etc.
 - (b) obstacle lighting not applicable
 - (c) obstacle lighting not applicable
 - (d) advisory condition
 - (e) advisory condition
 - (f) advisory condition
 - (g) advisory condition

The maximum height of RL116.9 relates to the Northern Precinct. The Central Precinct is well below that height at RL 98.46.

Appendix E – 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 provides that future applications shall 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 Design and Amenity Guideline

Department's Assessment

3C Public domain

lic domain

The proposal and the application for the Northern
Precinct, which overshadows the Cope Street Plaza,
demonstrate the Plaza receives sunlight to more than
accessible open space

50% of its area in midwinter.

 achieve solar access to 50% of Cope Street Plaza between 9am and 3pm in midwinter The landscape design for roof gardens is consistent with the Urban Forest Strategy.

 meet the requirements of City of Sydney Urban Forest Strategy Accessibility requirements are satisfactory as demonstrated in the Access Report.

 design publicly accessible spaces to be used for people of all abilities Awnings above footpaths have been designed to comply with Sydney DCP

 provide awnings along street frontages Lighting along Botany Road are smartpoles as per Council standards

 provide public domain lighting per City of Sydney Code. Provide private space lighting per Australian Standards. Publicly accessible space lighting will comply with Australian Standards.

3D Streets, laneways and footpaths

This application includes the pedestrian laneways at north-eastern and south-eastern corners of Cope Street Plaza. They have been designed as per the Design Guideline criteria and guidance and subject to the advice of the Design Review Panel.

 Provide a laneway along the southern edge of Cope Street Plaza for low traffic speed, pedestrian priority over vehicles.

The proposed buildings fully comply with the required setbacks from Botany Road.

 Provide building setbacks as required by section diagrams in the Guidelines.

3E Tree canopy cover

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.

- Achieve 23% overall canopy cover over the site
- Achieve 50% street tree canopy cover

3F Tree planting specifications

 Detailed requirements are listed for protecting existing trees, undergrounding services, minimum tree size when planted and long term maintenance. Suitable detail has been provided in the Arborists Report and Landscape Plans regarding satisfaction of the detailed requirements on tree planting.

3G Wind

- At least 50% of publicly accessible open space meet wind comfort criteria for sitting. Dining areas should correspond with these areas.
- Section 6.4 of this report reviews compliance against the wind criteria contained in the Design Guidelines.
- Not to exceed wind safety standard of 24m/s.

3H Building uses

 Affordable housing dwellings are not readily distinguishable from market housing. This application includes affordable housing dwellings and the design of the building is considered to achieve design excellence and will not be readily distinguishable from market housing.

3I Street activation

- Provide fine grain activation at ground level.
- Provide frequent building entries that face and open to the street.

Building entries and retail spaces in the proposal provide fine grain and address the Botany Road and Cope Street Plaza frontages.

3J Podium and street wall

- Articulate podiums as a separate element from towers above.
- Relate materials and finishes in the podium to the local character.
- Setback buildings from the Waterloo Congregational Church as per the requirements.
- Encourage active uses at the southern setback of the Church and opportunities for Church users to meet.
- Adopt CPTED measures in and around the Waterloo Metro Quarter and also the Church,

The podium is articulated to appear as a separate element from the tower above.

The brick podium materials relate strongly to the character of surrounding buildings.

The proposed Church Square provides a space for activity and meeting.

The CPTED Assessment lodged demonstrates the proposal is designed to mitigate crime and safety management issues.

3K Built form above the podium

- Tower buildings should not be identical in appearance.
 Architectural diversity is encouraged.
- Residential towers have a maximum floorplate size of 900sqm.
- Wind mitigation is achieved through building form with reliance on wind devices as secondary measures.
- 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.

The proposed towers in each Detailed Design SSD have been designed by separate architects and do not appear the same as each other.

The tower complies with the maximum 900sqm floorplate at 700sqm.

The application has demonstrated that suitable wind conditions will be achieved by building design and wind mitigation measures.

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.

3L Residential amenity

- Adopt relevant noise criteria from Development Near Rail Corridors and Busy Roads and the Sydney DCP 2012
- Fully comply with the requirements of the Apartment Design Guide (ADG) for natural

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.

- ventilation, solar amenity, communal open space and private open space.
- Condition wind impacts and incorporate mitigation measures.

3M Solar access and amenity

- No overshadowing of Alexandria Park after 10am in midwinter.
- No more than 30%
- Proposed apartments and neighbouring development to achieve min. 2 hours sunlight between 9am and 3pm to living room windows and open space.

Overshadowing of Alexandria Park, overshadowing of surrounding development and solar access to the proposed apartments are discussed in Section 6.4.

3N Pedestrian and cycle network

 Provide generous footpath widths that can accommodate pedestrian flows from Metro users. The application demonstrates suitable footpath widths are provided to accommodate the future demands from rail users.

30 Car parking and access

- Car parking is provided as per Sydney LEP rates.
- Bike parking for the student housing tower is provided as per SEPP (Affordable Housing)

The proposal complies with all car parking and bicycle parking requirements.

3P Service vehicles and waste collection

- Access the site in a forward direction.
- Separate service vehicles from car parking spaces.
- Locate waste servicing in a basement preferable, then at grade if necessary.

The loading dock is designed for vehicles travelling in a forward direction only.

The loading dock is separate from any car parking. Waste servicing is in the basement.

3Q Integration with metro station

- Coordinate structures, services, car parking, lift cores,
- The station and over station development must have functional autonomy in relation to maters such as building services, emergency egress and access, maintenance and utilities.

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.

3R Sustainability

 Comply with the performance targets in the Concept Approval. Appendix C above demonstrates the proposal has been designed to comply with the sustainability targets of the conditions of consent to the Concept Approval.

3S Stormwater and flooding

- Provide on-site stormwater detention
- Achieve water quality targets
- Flood planning levels should be adopted.

The Water Quality, Flooding and Stormwater Report lodged with the EIS demonstrates the detailed requirements of the Design Guidelines have been satisfied.

3T Waste Management

- Comply with Council's guidelines
- Detailed requirements as then listed for waste systems and management devices.

The Waste Management Plan lodged with the EIS responds to each design criteria and guideline appropriately.

3U Culture

 Develop measures to improve employment, empowerment and economic development for Aboriginal and Torres Strait Islander peoples. The EIS includes commitments to participation in construction and promoting First Nations enterprise and employment in the Waterloo Metro Quarter placemaking, activation and retail strategy.

3V Public art

 Deliver public art that is coordinated with the design and considers connection, safety, landscaping, wayfinding, key movement corridors and early involvement of artists. The Public Art Strategy lodged with the EIS demonstrates the public art opportunities are capable of satisfying the design guidance.

Appendix F - Recommended Development Consent

https://www.planningportal.nsw.gov.au/major-projects/project/29596