

Waterloo Metro Quarter Over Station Development – Basement Car Park

State Significant Development Assessment SSD 10438

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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, TfNSW
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 (SSD) application (SSD 10438) seeking approval for the design and construction of a basement carpark below the future Waterloo Metro Quarter Over Station Development.

The proposed basement carpark will service the central precinct, northern precinct and the social housing building in the southern precinct.

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 \$26 million and would generate 77 construction jobs.

Engagement

The Department publicly exhibited proposal between 5 November 2020 and 2 December 2020 (28 days).

The Department received a total of 10 public submissions (including four submissions from special interest groups) eight submissions from Government agencies and submission from Council.

Council did not object to the proposal, but it did provide comments on the number of car parking spaces, number of servicing spaces, maximising bike parking, end-of-trip facilities and waste management. The key issues raised in the public submissions included the number of parking spaces and car parking impacts on surrounding streets.

The Applicant's Response to Submissions (RtS) provided further justification in relation to car parking, servicing, bicycle parking, end-of-trip facilities and waste (refer to **Section 6**).

Assessment

The Department has assessed the proposal in accordance with section 4.15(1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and carefully considered the issues raised in submissions and the Applicant's response to those submissions.

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

- it fully complies with the Sydney LEP 2012 and the Concept Approval with regards car parking, provision of end of trip facilities and the overall basement design
- the proposal appropriately minimises car parking and promotes the use of public transport through the provision of 155 car parking spaces, which represents a 78% reduction compared to the permitted maximum under the Sydney LEP 2012
- it provides sufficient bicycle parking, motorcycle parking and other service facilities to support the overall Waterloo Metro Quarter Over Station Developments
- it would not result in any adverse traffic impacts given its limited car parking provision and access to public transport.

For the reasons outlined above, the Department is satisfied the proposal is in the public interest and recommends that the application be approved subject to conditions.

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1 Introduction

This report provides an assessment of a State significant development (SSD) application (SSD 10438) for the design, excavation and construction of a two-level shared basement located below the Waterloo Metro Quarter Over Station Development.

Specifically, this proposal seeks approval for:

- excavation to accommodate the proposed basement structure
- construction of a two-level underground basement structure comprising:
 - 155 car spaces
 - 13 motorcycle spaces
 - 315 bicycle parking spaces
 - residential storage
 - end of trip facilities for office and retail uses
 - in ground on-site stormwater detention tank, plant and services.
- construction of ground floor slabs on which future residential and commercial buildings proposed within the Central Precinct (SSD 10439) and Northern Precinct (SSD 10440) of the Waterloo Metro Quarter will be built
- staged stratum subdivision of the basement into associated aboveground parent stratum lots (being the social housing stratum lot, Building 1 commercial stratum lot, Building 2 residential stratum lot and Building 2 affordable housing stratum lot).

The proposed basement would sit directly below the Central Precinct and the Northern Precinct of the Waterloo Metro Quarter Over Station Development and would also include foundation slab for the construction of these developments.

The basement would accommodate car parking, bicycle parking, motorcycle parking end of trip facilities and residential storage spaces to service the Northern and Central buildings (SSD 10439 and SSD 10440) within the Waterloo Over Station Development, which has 38,824.5m² of commercial floor space, 150 dwellings (market and affordable homes), 2,785m² of retail floor space and a 2,200m² community childcare centre. The basement will also include some limited car parking spaces for apartments within the Southern Precinct (SSD 10437).

The application was lodged by WL Developer (the Applicant). The site is located within the City of Sydney local government area. The Capital Investment Value (CIV) for the proposal is \$26million and would generate 77 construction 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 regional 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.

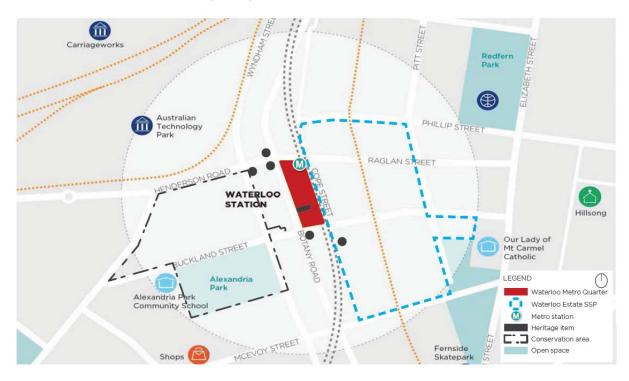


Figure 2 | Surrounding context (source: Applicant's EIS)

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 site 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 by the site on three of its boundaries but does not form part of the site. The approved station works extend up to the Church boundaries.

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

The new 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 eastern edge of the site will accommodate an above ground metro station box, comprising the station entrance, spaces for retail and commercial opportunities as well as the station plant room and other servicing areas. Approval for construction of the station box was subject to the CSSI approval (SSI 7740).

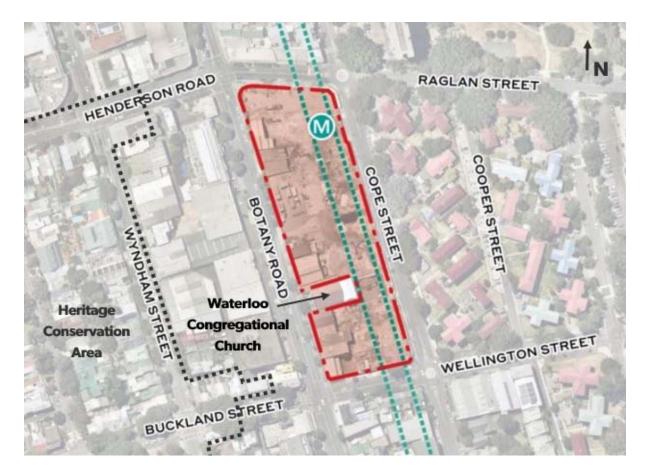


Figure 3 | Local context map (Base source: Applicant's EIS)

1.1 The site and its surrounds

The site

The basement site is largely rectangular in shape and has street frontages to Raglan Street (north) and Botany Road (west)(**Figure 4**). The Waterloo Congregation Church demarcates the southern boundary of the site and the Metro tunnel forms the western boundary.

The basement site has an area of 5,700m² and the broader Waterloo Metro Quarter site has an area of 1.287ha.



Figure 4 | Site Plan (extent of the basement is shown in blue). (Source: Applicant's EIS)

Surrounding development

Beyond the WMQ OSD site, 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)

1.2 Related Applications and Previous Approvals

State Significant Precinct

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

As part of the SSP process, the planning controls that applied to WMQ site were amended through a State led rezoning, enabling its development into the future WMQ OSD 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 concept building envelope for three towers on top of mid-rise podiums (4-8 storeys) for residential uses, including social and affordable housing, a new public plaza, commercial and retail uses.

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

An Amending Concept Application (SSD 10441) 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 having regard to the Amending Concept Application (SSD 10441) and Concept Approval (SSD 9393) and the following applications that collectively make up the Waterloo Metro Quarter Over Station Development:

- Northern Precinct (SSD 10440)
- Central Precinct (SSD 10439)
- Southern Precinct (SSD 10437)

The Southern Precinct SSDA, comprising the student housing tower, open space plaza and a social housing tower above the metro station box was approved by the Minister's delegate on 30 July 2021.

The Northern Precinct SSDA, which includes the commercial building located partially above the station metro box along Cope Street with street frontage along Raglan Street and Botany Road was also approved by the Minister's delegate on 23 September 2020.

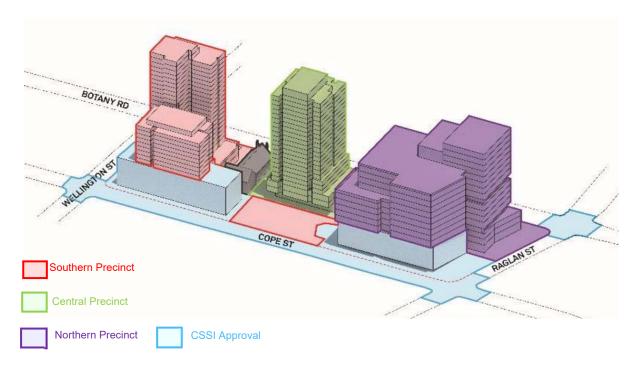


Figure 11 | The Waterloo Metro Quarter and sub-precincts. Source: Applicant's EIS

2 Project

The proposed SSD application involves the design, excavation and construction of a two level underground basement containing car parking, bicycle and motorcycle spaces, end of trip facilities for office and retail uses and residential storage facilities. It also includes the construction of a ground floor slab that will cap the basement structure and form the future ground level of the Northern Precinct and Central Precinct (refer to **Figure 15**).

The application also seeks approval for staged stratum subdivision of the basement into subsequent above ground parent lots (social housing stratum lot, Building 1 commercial stratum lot, Building 2 residential stratum lot and Building 2 affordable housing stratum lot).

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**.

SSD Components		
Aspect	Description	
Car Parking	 Maximum of 155 spaces, comprising: 65 spaces for office building in Northern Precinct 55 spaces for residential building in Central Precinct 8 spaces for social housing building in Southern Precinct 4 car share spaces 5 shared loading/servicing spaces 2 space for Sydney Metro operational staff 2 spaces for Waterloo Congregational Church 1 space for child care centre in Central Precinct 	
Bicycle Parking	 1 space for child care centre in Central Precinct 236 commercial spaces 65 residential lockers 150 residential storage spaces 14 retail and childcare spaces (visitor parking spaces, including 24 commercial spaces, 58 retail and childcare spaces and 23 residential spaces are accommodated within the public domain or building lobbies. They are not included in the basement SSD but are provided under the respective Northern, Southern or Central Precinct SSDs). 	
Motorcycle Parking	 6 commercial spaces 7 residential spaces	
Loading Docks	• 5 shared service spaces	

Table 1 | Main Components of the Project

End of Trip Facilities	•	Commercial: bicycle parking + 30 showers + 284 lockers Retail: bicycle parking + 2 showers + 16 lockers
Gross floor area (End of Trip Facilities + Security Room)	•	302.9m²
Jobs	•	77 construction jobs
Capital Investment Value (CIV)	•	\$26,392,785

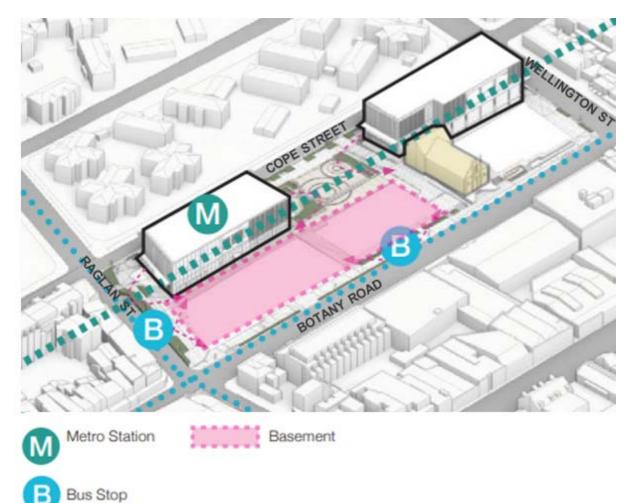
2.1 Physical layout and design

Basement access

Access to the basement is proposed off three separate locations (refer to Figure 14).

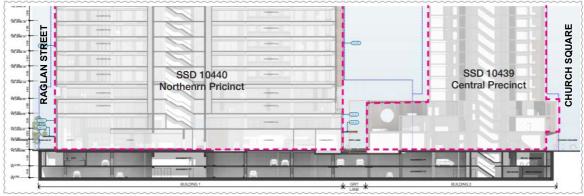
- Vehicular access to the basement (access point 1), including access for service vehicles is provided off Cope Street, via the new Church Square shared zone. A second loading dock accessed off Botany Road is proposed as part of the Northern Precinct Detailed Design SSD to service that precinct and the Metro Station.
- A separate and dedicated access point is proposed off Botany Road for the commercial end of trip facilities (access point 2).
- The retail end of trip facilities can be accessed via proposed shuttle lifts in the residential building at the Central Precinct SSD 10439 (access point 3).

The entries for access points 1, 2 and 3 are proposed to be delivered as part of the Southern, Northern and Central Precinct SSDAs respectively. Approval is only sought for the basement structure and ground floor slab under this application, with allowance made for future design.



Busticp

Figure 12 | Basement location plan (Source: Applicant's EIS)



Longitudinal Section Through Basement



Figure 13 I Longitudinal cross section of the proposed basement levels and Northern and Central

Figure 14 | Proposed basement access points (Source: Applicant's EIS)



Figure 15 | Proposed basement ground floor slab (Source: Applicant's EIS)

Affordable Housing	Commercial - Small	
Affordable Housing - DDA	Metro	
Car Wash	Residential	
Care Share	Service	
Childcare	Social Housing	
Church	Social Housing - DDA	
Commercial	Visitor - DDA	

Figure 16 | Proposed layout for basement Level P1 (Source: Applicant's EIS)



Figure 17 | Proposed layout of basement level P2 (Source: Applicant's EIS)

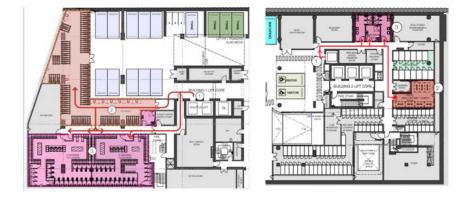


Figure 18 | Proposed arrangement of retail and commercial end of trip facilities, including bicycle parking located on level P1 (Source: Applicant's EIS)

2.2 Related Development

Sydney Metro City and Southwest Metro (CSSI 7400)

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

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

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

The CSSI approval conditions relevant to OSD at Waterloo include:

- Condition A4 which notes that any OSD, including associated future use, does not form part of the CSSI and will be subject to the relevant assessment pathway
- Condition E92 requires an Interchange Access Plan (IAP) to be prepared and approved for each station, in consultation with the Sydney Metro Design Review Panel (DRP), to inform the final design of transport and access facilities and services, including footpaths, cycleways, passenger facilities, parking, traffic and road closures, and integration of public domain and transport initiatives
- Condition E100 requires the Sydney Metro Design Review Panel (DRP) be established to refine the design objectives for the development and provide advice on place making, architecture, heritage, urban design, landscape design and artistic aspects. The DRP comprises five members, chaired by the NSW Government Architect, with the opportunity for Council or other stakeholders, including the Heritage Council (or delegate) to be invited 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 Statutory Context

3.1 State significance

The proposal is SSD under section 4.36 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as the concept development (SSD 9393) was SSD. Pursuant to clause 12 of the State Environmental Planning Policy (State and Regional Development) 2011, any subsequent development application is also SSD irrespective of whether the development exceeds the minimum CIV threshold value.

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

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

- there have been less than 15 submissions in the way of objection
- Council has not objected to the proposal
- no reportable political donation has been made by the Applicant.

3.2 Permissibility

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

3.3 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**).

3.4 Mandatory Matters for Consideration

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

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

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

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

3.5 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 Stage 2 detailed development application.

3.6 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.

4 Engagement

4.1 Department's engagement

In accordance with Schedule 1 of the EP&A Act, the Department publicly exhibited the proposed concept modification and 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.

Due to the Covid-19 pandemic, the exhibitions were online documents rather than hardcopy.

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

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

4.2 Summary of submissions

The SSD application received 19 submissions (7 objecting, 1 supporting and 11 providing comments), including:

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

A link to all submissions is provided at Appendix A.

4.3 Key Issues – Government agencies

A summary of the Government agencies submissions is provided in **Table 2**.

Table 2 | 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
- as the Applicant is a private developer, the EPA would not be the appropriate regulatory authority under the POEO Act for the environmental performance of the development

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 to address residual risk during extreme floods, particularly around areas for refuge and flood evacuation. The basement is not considered a safe refuge during flood events.
- **RtS** EES raised issues in relation to residual risk and the flood emergency management plan for the basement. EES advised that the basement is not appropriate for shelter during a flood event. EES recommends a condition of consent requiring the preparation of a flood emergency management plan, including an egress from the basement to ensure safe evacuation.

Transport for NSW (TfNSW)

EIS	TfNSW did not object and made the following comments:					
	 independent road safety audits for loading docks should be prepared as part of the RtS 					
	• update the Green Travel Plan in consultation with TfNSW prior to the issue of an Occupation Certificate					
	Green Travel Plan should be implemented and updated annually					
	• update the Transport Access Guide in consultation with TfNSW prior to the issue of an Occupation Certificate					
	• prepare a final Construction Pedestrian and Traffic Management Plan in consultation with TfNSW and submit a final copy for endorsement prior to the issue of any Construction Certificate or any early works					
	 review inconsistencies in Freight and Servicing Management Plan 					
	• a single loading dock is likely to be insufficient for the Southern Precinct with seasonal movements of student residents at the end of semester					
	• update the Freight and Servicing Management Plan in consultation with TfNSW prior to the issue of any Construction Certificate					
	• bicycle facilities should be located in secure, convenient, accessible areas close to main entries.					
RtS	TfNSW recommended a series of conditions of consent be imposed regarding road safety audits, the Church Square shared zone, Construction Pedestrian and Traffic Management Plan, which are reflected in the Department's recommended conditions.					
Sydney Me	tro Corridor Protection Team					
EIS	Sydney Metro advised that concurrence is not required for the SSD and that Sydney Metro has no comments.					
Sydney Wa	ter					
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 Healt	th – Sydney Local Health District				
	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 				
EIS	 access to car parking, bike parking and car share should be equitable across social housing, affordable housing and private housing 				
	 support water recycling, but public health risks need to be managed 				
	 remediate the site as outlined in the Contamination Assessment 				
	 include the SLHD guidelines <i>Building Better Health</i> as a reference when considering the health impacts of the development. 				
	 reasonable and feasible noise mitigation must be undertaken to minimise any exceedance of construction Noise Management Levels for surrounding receivers. 				
	 Reasonable and feasible measures should be considered to further minimise impacts to apartments affected by traffic noise. 				
Heritage NS	SW				
	Heritage NSW did not object to the application but made the following comment:				
EIS	 The Archaeological Method Statement (AMS) does not address Aboriginal cultural heritage and should not be relied upon to manage unexpected finds of Aboriginal cultural heritage. Heritage NSW recommends Aboriginal archaeological test excavation if and where intact natural soil profiles are identified, or where Aboriginal objects are identified as an unexpected find. 				
RtS	Heritage NSW acknowledged that the Applicant incorrectly referenced the AMS as a mitigation measure for Aboriginal cultural heritage.				
Fire and Rescue NSW					
EIS and RtS	No comments were received				
NSW Police					
EIS and RtS	No comments were received.				

4.4 Key Issues – Council

A summary of Council's submissions is provided in Table 3

Table 3 | Summary of Council submission

City of Sydney Council (Council)			
EIS	 Council initially objected to the proposal and raised the following concerns: car parking is excessive and should be constrained or zero to reduce conflict between people walking and people driving through shared zone. traffic modelling data requires clarifications bike parking and end-of-trip facilities should be maximised. Bike parking for student housing should be provided as 1 per studio apartment in accordance with the Design Guidelines loading and unloaded spaces are under provided proposal should demonstrate sufficient waste storage infrastructure 		
RtS	 Council advised that they withdraw their objection for this application but re-stated the previous grounds of submission and added an additional issue as follows: in keeping with TfNSW's Walking Space Guide, a walking space level of service (LOS) higher than the minimum (being LOS C) is recommended for the new Church Square shared zone. 		

4.5 Key Issues – Community and public interest groups

The Department received a total of six submissions from the community and four from special interest groups, comprising seven objections, one in support and two providing comments.

A summary of the key issues raised in submissions is provided in **Table 8** below:

Table 4 | Summary of submissions

Issue	%
Reduce car parking	20%
Increase car parking – one space per apartment	10%
Residents, workers and visitors will park on local streets	10%
More car share spaces needed	10%
Parking spaces for key workers like care providers and nurses	10%

4.6 Response to submissions

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

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

The RtS was accompanied by the following:

- supplementary traffic and parking assessment
- modified architectural plans and design report
- amended design integrity report and design guidelines
- supplementary flood risk report
- structural statement
- pedestrian movement memo
- ESD memo

The RtS was made publicly available on the Department's website and was referred to relevant Government agencies and Council. An additional 3 submissions were received from Government agencies and a submission from Council.

Council withdrew their objection on the application but advised the RtS did not address all its concerns in relation to car parking, bicycle parking and traffic modelling.

5 Assessment

The Department has considered the EIS, the issues raised in submissions and 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:

- Traffic generation
- Car parking spaces
- Loading and servicing facilities
- Active transport

All other issues associated with the proposal have been considered in Section 6.5.

5.1 Traffic generation

The Waterloo Metro Quarter Over Station Development would accommodate 220 residential dwellings, 435 student housing rooms and approximately 38,828 m² of non-residential land uses. A total of 155 car parking spaces is proposed within the basement to support the these above ground uses within the Waterloo Metro Quarter.

The submitted traffic report identifies that the development would result in a maximum of 57 trips in peak hour, equating to one vehicle trip per minute. The report concludes that the proposed development would not result in any adverse traffic impact to the surrounding local road network and the existing level of service and average delays would remain unimpacted by the proposal.

Public submissions raised concerns regarding increased traffic on 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. Council also does not agree with the zero-traffic generation rate adopted by the Applicant for the student housing tower located in the Southern Precinct, because it does not account for occupants parking on surrounding streets or taxis and rideshare movements.

The Department notes that the Applicant addressed Council's concern in its RtS for the Southern Precinct SSD (SSD 10437). The Applicant noted that zero trip generation is reflective of the zero-student car parking proposed for the use, and is also consistent with other student housing developments in the area, including Iglu Broadway and Urban Nest Darlington. Further, the Applicant advised residents of student housing accommodations are generally less likely to own private cars relative to resident of residential flat buildings and are more likely to rely on public transport.

The Department agreed with the Applicant's submission and subsequently determined the Southern Precinct SSD on 30 July 2021.

The Department engaged an independent traffic consultant to assess the potential traffic impacts of the proposal. The Department's independent traffic consultant reviewed the Applicant's Traffic and Parking Impact Assessment and advised that:

- the proposed traffic generation rates are acceptable and consistent with the RMS *Guide to Traffic Generating Development* and *RMS Technical Direction – updated traffic surveys*
- the use of background traffic growth rather than defined traffic generation from new adjacent developments is appropriate in assessing and determining cumulative impacts on the surrounding road network as this information is not available at the time of determining this proposal. This is standard industry practice when measuring traffic generation on State arterial roads such as Botany Road that carry regional traffic from Greater Sydney. To determine accurate traffic generation for the proposal, the traffic modelling includes a background traffic growth up to the design year.
- the Applicant's comparison with comparable high-density development for traffic generation rates is prudent and provides a robust assessment
- the proposal will have relatively minor impact on existing travel delays and level of service along the surrounding road network including on five key surrounding intersections
- the occupants of the student housing are the least likely of all users across the site to own a car given the accessibility of the site and its proximity to public transport and other active transport options.

The Department accepts the 155 car spaces proposed is significantly below the maximum 304 car spaces (**Table 6**) permitted under the Sydney LEP and DCP. The substantial reduction in car parking across Waterloo Metro Quarter, including the zero-car parking provision for student housing, would significantly reduce traffic impacts associated with the development. The Department notes the overall, trip generation associated with the proposal is 41% less than anticipated under the original Concept Approval (57 trips compared to 98).

On this basis, the Department agrees with the advice of its independent traffic 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.

5.2 Car parking spaces

Car parking spaces

The proposal includes 155 car parking spaces for all land uses and floor space in the aboveground precincts. Parking spaces are allocated to each precinct and land use as outlined below.

Precinct	Land use	Maximum permitted under the SLEP / SDCP 2012 and SSD 9393	Proposed car spaces
Southern precinct	social housing (70 dwellings)	56 (including 12 accessible spaces)	8 (including 2 accessible spaces)
	Student accommodation (435 rooms)	44 spaces	Nil

Table 5 | Proposed car parking split

Central precinct	market housing and affordable housing (150 apartments)	80 (including 23 accessible spaces)	67 (including 9 accessible spaces)
Northern	childcare centre (2,219.6 m ²)	23	1
	Commercial / office (33,824.5 m ²)	78	63 (including 2 accessible spaces)
precinct	retail (838 m²)	2	Nil
	Residential visitor parking	Nil	2 residential visitor parking spaces (both accessible spaces)
	Ride share	4	4
	Waterloo Congregational church	2	2
Other uses	Car wash	1 (minimum)	1
	Services vehicles	13	5 (additional 5 spaces proposed within the southern and northern loading docks)
	Sydney Metro spaces	-	2
Total		304 spaces	155 spaces

Based on the land used proposed, the Sydney LEP 2012 would permit a maximum of 273 car parking spaces. An additional 31 car parking spaces are permitted under the Sydney DCP 2012 for service vehicles and car share spaces. The Concept Approval adopts the maximum car parking rates of the Sydney LEP and DCP, but requires subsequent development to consider further reduction in car parking spaces to promote use of active and public transport.

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

Public submissions raised mix views on the proposed car parking provision. Some submissions argue that too many car parking spaces are proposed while others raised concern that not enough parking was being provided resulting in people parking on the street.

The Applicant's EIS submitted that the proposed number of parking spaces is appropriate as it promotes sustainable transport choices at the site through public transport use and active transport as the site is above a Metro station with high frequency train services.

The Department engaged an independent traffic consultant to assess the proposed number of car parking spaces. The consultant advised:

• the proposed residential car parking spaces would result in only 0.34 space per dwelling compared to the maximum Sydney LEP rates (at 0.52 spaces per dwelling)

- lowering residential car parking below the amount proposed, or removing car parking altogether, may undesirably result in residents parking on-street in the surrounding road network
- commercial car parking for the Northern Precinct is acceptable as it equates to 80% of the Sydney LEP maximum parking
- the proposed 63 commercial car parking spaces would provide car parking for only 2% of the 3,200 workers expected for the Northern Precinct.

The Department accepts the consultant's advice and considers the proposed car parking provision would achieve an appropriate balance in encouraging public transport use and managing impacts to street parking.

The Department notes the proposed 155 car parking spaces represents a 78% reduction of car spaces compared to the maximum car parking rates permitted under the SLEP and the Concept Approval. The Department therefore concludes the proposal is consistent with the Concept Approval and the principles of transit-orientated development which seek to minimise private car use in highly accessible areas.

Childcare centre drop off / pick up

The proposal includes one car parking space for the proposed childcare centre within the Central Precinct. The car space is proposed to be allocated for staff parking.

The Applicant's EIS contended that one space for the childcare centre is appropriate as:

- the childcare will predominantly be used by local residents and workers in the vicinity
- trips will be taken by public transport, walking or as part of a combined trip (i.e. staff of site) using parking already provided for other uses
- staff and visitors will be able to use the station
- the proposal is consistent with other childcares in Barangaroo and the Sydney CBD which have no car parking.

The Department notes that the childcare centre can have a maximum of 23 spaces under the Sydney LEP. Council's DCP also specifies that parking may be reduced by demonstrated demand, accessibility to walking and public transport, convenient and safe on-street parking and potential traffic and amenity impacts.

The Department considers adequate drop off and pick up spaces must be provided for the childcare use proposed within the Central Precinct, because:

- the childcare centre would accommodate up to 146 childcare places and would generate a high number of drop off and pick up movements
- not all users of the childcare centre are envisaged to be workers or local residents around the Waterloo Metro Quarter due to the size of the centre
- it is not practical for parents to always use public transport or walk particularly during wet weather conditions and allowance should be made to make the journey to the centre easier

- the Applicant's RtS included a lift capacity study for the childcare centre, which estimated arrival and departures would generate up to 300 people over a 2 hour period, with half of those being parents. This would equate to 18 parents per 15-minutes going in and out of the childcare centre during morning and evening peak periods
- while a majority of the drop off and pick-ups (18 parents per 15 minute period) is likely to be by parents who live or work in the area, some parents accessing the centre are likely to be by car.

The Department considers that drop off and pick up for the childcare could be accommodated within existing non-residential car parking spaces or service bays rather than additional car parking spaces, because drop-off and pick-up partly occurs outside of ordinary office hours and requires short term parking only.

The Department recommends that:

- childcare centre drop off and pick up spaces be provided during the morning peak (being 7:00am to 9:00am, Monday to Friday in line with the RMS Guide to traffic generating developments) and afternoon peak (being after 4:00pm, Monday to Friday in line with the RMS Guide to traffic generating developments)
- the number of time-limited car parking spaces provided for the childcare centre are to be reviewed post-occupation annually, to allow for drop-off and pick up spaces to be increased or decreased based on actual demand
- parking duration, during the peak hours for the childcare centre be limited to a maximum of 15 minutes.

Subject to the recommended conditions above, the Department is satisfied there are sufficient drop off and pick-up spaces for the proposed childcare centre.

Accessible car parking spaces

The proposal includes 11 accessible car parking spaces for the Central Precinct affordable housing and market housing and 2 accessible car parking spaces for the Southern Precinct social housing building.

The Concept Approval requires one accessible parking space for every adaptable apartment provided based on Council's DCP, but allows for the reduction in accessible parking spaces when the number of car spaces are provided below the maximum car parking rates permitted under the Concept Approval and SLEP. This is to ensure private car dependency is minimised in areas provided with convenient public transport.

The Applicant notes that the 75 residential car parking spaces proposed across Waterloo Metro Quarter precinct is 80 spaces less than the maximum permitted under the Concept Approval. On this basis, the Applicant proposes a proportional reduction, in accordance with Condition B9(a)(i) of the Concept Approval, for accessible car parking spaces.

The Department accepts the reduced accessible car parking rate for residential use in the Southern and Central Precinct is acceptable as:

- strict compliance with the SDCP 2012 rates (1 space per accessible apartment) would require significant additional residential parking (23 additional spaces) within an already limited / constrained basement area.
- in keeping with Condition B9(a)(i) of the Concept Approval, accessible car parking (15% of all residential car parking spaces) is provided at the same rate as the number of adaptable units (15% of all dwellings).

Loading and Servicing

The proposal seeks consent for five basement loading spaces and two separate servicing bays for Sydney Metro use, accessed off Cope Street (**Figure 14**). Together with the above ground loading docks proposed under the Southern Precinct SSD and the Northern Precinct SSD, there would be 12 loading/unloading spaces (2 Sydney Metro spaces and 10 spaces for servicing other deliveries) across the Waterloo Metro Quarter.

Council did not object to the proposed loading docks but noted there is one less loading space than would otherwise be recommended in the Sydney DCP 2012.

The Applicant's traffic report acknowledges the shortfall of one less servicing bay, but advises that access to the loading dock and service bays will be managed through an online booking system which will ensure that bookings do not exceed the number of available bays for each time slot, manage vehicular access to the loading dock and service bays, and minimise any potential queuing onto the surrounding road network.

The Department's independent traffic consultant reviewed the proposed loading and servicing arrangement and advised the proposal is acceptable noting that the shortfall is only by one less space and that the loading docks across the Waterloo Metro Quarter 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 considers the proposed servicing is acceptable as a shortfall of one loading space is minor and loading and servicing can be appropriately managed subject to a condition requiring a site-wide Freight and Servicing Management Plan being prepared and implemented for the proposal.

5.3 Bicycle Parking

Bicycle parking

The proposal would provide 315 bicycle parking spaces in the basement. The proposed bicycle parking breakdown is outlined in **Table 7** below.

Precinct	Land use	Minimum under the SDCP 2012/ AHSEPP and SSD 9393	Proposed bike parking spaces
Southern Precinct	retail (1,273m²)	5 spaces (Class 2)	5 spaces (Class 2)

Table 6 | Proposed bicycle parking spaces

Central Precinct	market housing and affordable housing (150 apartments)	65 spaces (Class 1) + storage cage	65 spaces (Class 1) + storage cage
	childcare centre (2,219.6 m² facility / 30 staff)	3 spaces for staff (Class 2)	3 spaces for staff (Class 2)
	retail (674m²)	3 spaces (Class 2)	3 spaces (Class 2)
Northern Precinct	commercial / office (33,824.5 m ²)	226 spaces for workers	236 spaces (Class 2)
	retail (838 m ²)	3 spaces (Class 2)	3 spaces (Class 2)

The Department notes the proposed bike parking provision is consistent with the conditions of the Concept Approval and where applicable the Sydney DCP 2012.

Student housing bicycle parking

Council raised concerns that the proposal does not comply with Sydney DCP with respect to student bicycle parking, where SEPP (Affordable Rental Housing) rates are adopted (1 space per 5 rooms), as no specific Sydney DCP rate applies to the land use. Council advised that the bicycle parking rate within SEPP (Affordable Housing) is not appropriate for student accommodation and recommended 1 space per dwelling (Sydney DCP market housing rate) be applied. Council notes that 87 student bicycle parking is approved under the Southern Precinct (SSD 10437) and recommends that additional student bicycle spaces be accommodated in the basement.

The Applicant's EIS states that the basement is designed to support the Northern and Central Precinct which will accommodate commercial, residential, retail and child-care uses.

The Applicant's RtS notes that:

- SEPP (Affordable Rental Housing) is the most relevant control to apply as the state-wide policy for boarding houses under which other student housing buildings have been assessed including within the City of Sydney LGA
- additional student bike parking spaces within the basement was investigated and not included in the proposal as:
 - a sufficient number is provided in the Southern Precinct as demonstrated through bike parking surveys of other student housing buildings within the City of Sydney LGA by the same proposed operator

locating the student bike parking spaces in the basement raises security and operational concerns across the Precincts

The Department assessed the number of student housing bicycle spaces as part of the Southern Precinct SSD. It was determined that the bicycle parking was sufficient for the student housing because:

• the rate of one bicycle space per apartment referenced by Council is for market apartments, which encompasses a household with usually more than one occupant. This is ordinarily accommodated in basement storage, whereas the student housing tower is for 396 single

occupant rooms and 39 twin rooms with no basement storage capability. As such, the Department considers the provision of one space per student room, resulting in 435 bike parking spaces, would be unreasonable for the proposed student housing

 demand based evidence submitted by the Applicant identified that bike parking uptake for student housing is currently at 2.5 to 5% of students. A total of 87 bike parking spaces is to be delivered under the Southern Precinct SSD, which represents one space per 5 student rooms or 20% of students. The proposal therefore provides sufficient space for current demand, and also includes a surplus for future increased uptake of bike parking spaces.

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

On this basis, the Department's concludes that sufficient bicycle parking for student housing is provided under the Southern Precinct SSD and no additional student bicycle spaces in the basement are required.

5.4 Other issues

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

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 relevant requirements of the Concept Approval, including car parking and bicycle parking. 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 are required
Ecologically Sustainable Development	 Council supported the car park's ability to expand the electric vehicle charging to 100% of the car parking spaces. Council also recommended energy efficiency initiatives for the basement, including the technology and performance targets, be committed to, at this stage of the project. Council also recommended that a minimum Green Star rating be adopted for the project. In response, the Applicant's RtS clarified that the basement would be designed to achieve a minimum 5.5 NABERS rating in line with target energy rating for the 	Condition B15 sets out ESD requirements for the basement.

Table 7 I Response to other assessment issues

	 commercial building in the northern precinct. The basement will also contribute to achieving a 6 Star Green Star rating commitment that has been adopted for the broader Waterloo Metro Quarter site. While specifics such as the technology to be used are yet to resolved at this stage, the proposed lighting and ventilation strategy will include tools and design that will enable carbon monoxide control for all ventilation, air flow circulation within the underground basement, use of low energy LED lights and detailed measures to be developed at construction design stage. The Department is satisfied suitable ESD measures have been incorporated into the project and the basement is designed to be capable of achieving the minimum precinct wide energy targets set out under the Concept Approval. The Department recognises that the Green Star rating system allows applicant to use As-Built tool under transitional provisions. 	
Flooding	 EES raised concerns on potential residual flood risks in the basement and requested that an emergency management strategy and evacuation plan be prepared. EES also queried whether all of the basement entries points are designed to have a FFL that is above the 1% AEP+ 500mm freeboard. The Applicant's RtS confirmed that the FFL of all basement ingress points are above the 1%AEP + 500mm freeboard height. The Applicant's RtS also noted that in the case of a flood emergency, no evacuation would be necessary from the basement as the egress points of the basement are all above the FPL. The entire basement would be safe from flooding in the event of a flood, and the occupant of the basement could remain safe until the flood emergency has passed. A flood emergency management plan would also be developed at later stages, prior to the occupation stage of the development. EES further advised that the basement is not suitable for shelter during a flood emergency and this may impose risk to life during rarer events. It is recommended that a condition of consent require the development of a flood emergency management plan, which provides an egress from the basement to ensure safe evacuation. The Department accepts that all of the basement entries are above the 1%AEP + 500mm freeboard height which would provide adequate flood protection. However, the Department recommends a condition of consent, requiring a suitable flood emergency management plan and evacuation plan be prepared for the basement plan 	Condition B27 sets out requirements for the preparation of a flood emergency management plan and evacuation plan in consultation with NSW State Emergency Services and NSW Environment, Energy and Science prior to the issue of an Occupation Certificate for the basement.
Deep Soil	 Council noted that deep soil is underprovided. The Applicant's EIS and RtS state that the basement has been designed to optimise deep soil area. The basement is intentionally setback along Raglan and Botany Street frontages to create two unencumbered deep soil zone areas that can support landscaping and improve amenity along the public domain. 	No additional conditions are required.

	 The Department notes that approximately 15% of the overall Waterloo Metro Quarter is provided as deep soil landscaping, most of which is within the Cope Street Plaza and is delivered under the Southern Precinct SSD (SSD 10437) and the CSSI 7400 Approval. The basement is also designed to optimise deep soil areas and has been setback to provide deep soil landscaping along street frontages. The Department is therefore satisfied that reasonable efforts have been made to optimise deep soil areas within the Waterloo Metro Quarter site where much of the underground area is utilised for critical infrastructure associated with the delivery of the Waterloo Metro Station. 	
Contamination	 The CSSI 7400 Approval sets out parameters for remediating the Waterloo Metro Quarter site. The Applicant submits that remediation works has already been carried out in accordance with the CSSI Approval for the eastern portion of the Waterloo Metro Quarter site, which will accommodate the station box. The Applicant has submitted a Contamination Sites Strategy that outlines how remediation will be carried out in accordance with the CSSI 7400 Approval for the western portion of the site, which will accommodate the basement structure. The Applicant confirms that a Site Audit Statement and Site Audit Report will be prepared and submitted to the Secretary and Council in accordance with the CSSI 7400 Approval. For the purposes of SEPP 55, the Department is satisfied that site can be made suitable if remediation is undertaken in accordance CSSI 7400 Approval and the Contamination Sites Strategy, dated 30 September 2020. 	Condition C33 to C37 sets out the Applicant is to carry out remediation in accordance with the Contamination Site Strategy Report prepared by Douglas Partners dated 30 September 2020.
Noise	 The Applicant submitted an Operational and Construction Noise and Vibration Impact Assessment, prepared in accordance with Conditions B23, B24 and B25 of the Concept Approval. The Department notes that anticipated noise and vibration levels are below, and will not exceed, the established noise management criteria for nearby noise sensitive receivers during the construction phase of the basement. Cumulative operational traffic noise (1.3dB increase) from the additional vehicles generated by the development is also below the threshold maximum (2dB increase) and complies with the NSW Road Noise Policy. The Department is therefore satisfied that noise and vibration impacts associated with the construction and operation of the basement can be appropriately managed. The Department recommends conditions to monitor and comply with noise and vibration limits set for the development during the course of its construction. 	Condition C22 sets out requirements for noise and vibration impacts to be managed during the construction and operational phase of the development.
Archaeology	 The CSSI 7400 Approval sets out the protocol for any archaeological investigation, excavation, including the unexpected finds policy for the Waterloo Metro Quarter. 	Condition C39 sets out that excavation is to be carried out in accordance with the updated

	 Archaeological investigation for the eastern portion of the site are complete and excavation for the station box underway. The Applicant has prepared and submitted an updated Archaeological Method Statement, outlining the excavation methodology that will be adhered to, to manage any archaeological finds on the remainder of the site (western portion) in accordance with the CSSI 7400 Approval. The assessment provides an updated assessment of the significance of the archaeological site and potential remains to be located on the site. The Department is satisfied that the updated Archaeological Method Statement (AMS) is prepared having regard to the relevant CSSI 7400 Approval conditions and provides a clear excavation methodology to manage archaeological significance and impacts on the remaining site. The Department recommends a condition of consent to require that archaeological excavation is carried out in accordance with the updated AMS prepared by AMBS and dated July 2020. 	Archaeological Method Statement prepared by AMBS, dated July 2020.
Aboriginal Archaeology	 Heritage NSW queried whether an Unexpected Finds Protocol is sufficient to manage Aboriginal archaeology on the site due to findings from previous assessments (carried out under CSSI 7400 Approval for the eastern portion of the site), identifying low to moderate potential for Aboriginal objects to occur as well as the potential for deeper dune deposits to remain intact on the site. The Applicant's RtS clarified that 54 test pits completed in the eastern portion of the site, adjacent to the basement location identified low density background scatter of artefacts, common to the region, in a highly disturbed context. Given the observed level of disturbance across the Waterloo study area, including the western portion of the site, it is unlikely that additional archaeological test excavations will identify intact or significant Aboriginal archaeological deposits on the site. Potential impacts and risks to Aboriginal heritage within the Waterloo Metro Quarter should therefore be managed through an application of an Unexpected Finds Protocol, and additional controls such as archaeological monitoring are not required for the currently proposed works. In response, Heritage NSW recommended that the Applicant's RtS be revised to include suitable mitigation measures to manage Aboriginal archaeological significance and impact by way of the CSSI 7400 Approval conditions and the implementation of an Unexpected Finds Protocol. The Department is satisfied that Aboriginal Archaeological significance and impacts can be appropriately managed by the CSSI 7400 Approval and an Unexpected Finds Protocol. 	Condition C38 requires that an Unexpected finds protocol is implemented if any Aboriginal archaeological artefacts are found during excavation or construction
Waste Management	 Council requested that waste storage facilities are to be provided in accordance with the City's Guidelines for Waste Management in New Developments. Sufficient space must also be provided for food waste. 	Condition E5 requires that the waste room for the Central Precinct is designed in accordance with the

	 The Applicant's RtS clarified that the waste storage and collection for the Northern and Central Precincts are provided at the ground level loading dock within the commercial building in the Northern Precinct. Only the residential waste room for the Central Precinct is located in the basement P2 Level. Also, a separate loading dock within the student housing building provides waste collection and storage for the Southern Precinct. As such, waste management does not relate to the basement proposal. The Department is satisfied that the Applicant has appropriately addressed waste management within the respective Southern, Northern and Central Precinct applications. 	City of Sydney's waste management guidelines.
Construction Impacts	 The Applicant has submitted preliminary Construction Environmental Management Plan (CEMP) prepared in accordance with the SEARs and the conditions of the Concept Approval. No public submissions were received relating to construction impacts. Council did not raise concerns with the Applicant's preliminary management strategies. TfNSW requested that the Applicant prepare a detailed Construction Pedestrian and Traffic Management Plan in consultation with TfNSW. The Department is satisfied that construction impacts can be managed appropriately in accordance with the various management strategies that is submitted with the EIS. Cumulative impact is also considered, and suitable mitigation measures proposed in the EIS and respective management strategies in order to manage impacts. The Department recommends a condition of consent for these strategies to be further developed into detailed management plans prior to the issue of a Construction Certificate. 	Condition C18 and C19 requires the Applicant to prepare a CEMP and a CPTMP in consultation with TfNSW prior to the issue of a Construction Certificate

6 **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, and is satisfied the impacts have been addressed by the proposal and through the Department's recommended conditions.

Overall, the Department considers the proposal is acceptable for the following reasons:

- it fully complies with the Sydney LEP 2012 and the Concept Approval with regards to car parking, provision of end of trip facilities and the overall basement design
- the proposal appropriately minimises car parking and promotes the use of public transport through the provision of 155 car parking spaces, which represents a 78% reduction compared to the permitted maximum under the Sydney LEP 2012
- it provides sufficient bicycle parking, motorcycle parking and other service facilities to support the overall Waterloo Metro Quarter Over Station Developments
- it would not result in any adverse traffic impacts given its limited car parking provision and access to public transport.

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

7 Recommendation

It is recommended that the Director, Key Sites Assessments:

- considers the findings and recommendations of this report
- **accepts and adopts** all the findings and recommendations in this report as the reasons for making the decision to approve SSD 10438
- agrees with the key reasons for approval listed in the notice of decision (Appendix B)
- grants consent for the application in respect of SSD 10438, subject to the conditions in the attached development consent (Appendix G)
- signs the attached development consent (Appendix G).

Recommended by:

Recommended by:

Joina Mathew Planning Officer Key Sites Assessments

len

Annie Leung Team Leader Key Sites Assessment

8 **Determination**

The recommendation is Adopted / Not adopted by:

Anthony Witherdin Director, Key Sites Assessments

Appendices

Appendix A – List of documents

- 1. Environmental Impact Statement
- 2. Submissions
- 3. Applicant's Response to Submissions

https://www.planningportal.nsw.gov.au/major-projects/project/29591

Appendix B – Community Views for Draft Notice of Decision

Issue	Consideration
 Built form and density Scale of Waterloo Metro Quarter development to be reduced Development will ruin the character of Waterloo 	 Guidelines. The scale and density of the above ground developments is not included in the scope of the basement application. The Department has considered this under the Concept Approval (SSD 9393).
 Overall car parking numbers are too high Insufficient car parking is provided for the development Provide more car spaces for key workers (care providers and health care workers) Provide more car share spaces 	 the maximum permitted under the Sydney LEP and the Concept Approval (SSD 9393). Neither is car parking amount too low, but sufficient in the circumstances of the case, noting the highly accessible and connected nature of the site, above the new Waterloo Metro Station. Approximately 24 affordable housing dwellings are proposed under the Central Precinct (SSD 10439) with the intent of providing affordable homes to key workers within inper city areas. A total of 12
 Land Use Reconsider student housing to reduce car parking 	······································

 Traffic and Parking Impacts Less on-site car parking will impact local street car parking Proposal will increase pedestrians. Pedestrian movement on Botany Road can impact traffic flow. 	 The Department engaged an independent traffic consultant to review the proposed traffic generation, traffic impacts and car parking numbers. 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 Northern 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.
 Heavy rail it is illogical to demolish the existing heavy rail system 	• The Department assumes the author of the submission is referring to the replacement of the Bankstown line with a Metro standard rail under the Critical State Significant Infrastructure works. The issue raised is not related to the Waterloo Metro Quarter development.

Appendix E – 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 parking, amenities and facilities to enable the residential, commercial and retail developments within the WMQ OSD precinct to have access to transport options, urban services and facilities, and, in doing so, contributing to the achievement of State, regional and local planning objectives
	• the proposal relates to development on land that has already been cleared off vegetation and structures for construction of the Sydney Metro station infrastructure and therefore is not likely to have any impacts on the State's natural or other resources. A full assessment of the any impacts associated with the development have been undertaken in Section 6.0 of this report.

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 and in Appendix E.
c) to promote the orderly and economic use and development of land	• the proposal represents the orderly and economic use of land as it will support the increase of housing opportunities and jobs, near services and public transport.
	• the proposed basement use for residential and commercial car parking, bicycle parking, storage etc is permissible and the development has regard to the planning controls that apply, the desired character of the locality and the context of surrounding sites.
d) to promote the delivery and maintenance of affordable housing	• an allocated number of car spaces provided are designated to the affordable housing dwellings of the whole WMQ OSD precinct, supporting the delivery and maintenance.
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 for the construction of an underground basement will not have any significant impacts on the environment.
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 by providing secure underground residential and commercial car parking, bicycle parking, loading and services parking etc that supports the broader Waterloo Metro Quarter and promotes good design and active uses of the ground level. 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 basement 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 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 environmental standards of 5 Star Green Star Design and As-Built and 5.5 Star NABERS Energy rating for the commercial building in the Northern Precinct (SSD 10440). The basement will also contribute to achieving a potential 6 Star Green Star rating commitment that has been adopted for the broader Waterloo Metro Quarter site.

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

Section 4.15(1) matters for consideration

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

Table 4 | Summary of Modifications

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 it will facilitate the development of the central and northern precincts within 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 No. 55 Remediation of Land
- Draft State Environmental Planning Policy (Remediation)
- Sydney Local Environmental Plan 2012.

State Environmental Planning Policy (State and Regional Development) 2011

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

State Environmental Planning Policy (Infrastructure) 2007

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

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

The development 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 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 prior to the construction of the basement.

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.

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

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 To achieve high quality urban form through design excellence. 	The basement proposal is in keeping with the aims of the Plan. The proposal supports the above ground land uses (commercial, residential, retail, childcare etc) at Waterloo Metro Quarter by accommodating residential and commercial car parking, bicycle parking, end of trip facilities etc underground in a secure basement car park.
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 basement proposal is located below ground and will not exceed the maximum height standard for 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 basement comprises 302.9m ² of GFA which complies with the maximum FSR standard applying to the site.
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 but is in proximity to the Alexandria Park Heritage Conservation Area, Waterloo Congregational Church and Cauliflower Hotel. The proposal for an underground basement will not result in any adverse heritage impacts. A Heritage Impact Assessment has been lodged and the Department has considered this assessment 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 6.5 . 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 Sydney Metro Design Review Panel (DRP). 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. 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

(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 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 in the Central Precinct SSD (SSD-10439).

The proposed Cope Street Plaza aww and Church Yard contribute to the satisfaction of at least 2,200m² of publicly accessible open space which is delivered under the CSSI Approval and the Southern Precinct SSD (SSD 10437).

Affordable housing is proposed in the Central Precinct SSD.

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

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

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 seeks approval for 155 car parking spaces which is well below the 273 car parking spaces permitted under the LEP. The proposal's car parking response is balanced between its mix of land uses to the support Waterloo Metro Quarter Precinct. The Department's independent
		traffic consultant advised that this amount of parking is satisfactory.
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 basement proposal is below ground and does not penetrate the OLS for Sydney Airport.
	The consent authority may grant consent for the development if the relevant Commonwealth body advises that it has no objections to its construction.	

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 E – Consistency with Concept Approval

Conc	ept A	Approval Condition	Department's Assessment	
Planning Agreement / Binding Agreement				
A12.	Deve succ Agre agre Secr	r to the determination of the first Future elopment Application, the Applicant or its cessors must enter into a Planning ement and/or other legally binding mement to the satisfaction of the Planning retary securing the provision of the wing public benefits of the Concept: a minimum 5% of approved residential gross floor area dedicated or transferred to a Registered Community Housing Provider as affordable housing 70 social housing dwellings dedicated or transferred as agreed by NSW Land and Housing Corporation publicly accessible open space provision of minimum 2,200m ² 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 community facilities gross floor area of a minimum 2,000m ² including its final area, design and future operating model. Community facilities are as defined in the Sydney Local Environmental Plan 2012.	The Applicant has demonstrated that the Project Delivery Agreement (PDA) with Sydney Metro for the construction of the Waterloo Metro Quarter includes securing the required open space and social housing. The affordable housing and community facility public benefits are proposed to be provided in the Central Precinct under SSI 10439.	

B1.	Future development applications must demonstrate that the buildings are wholly contained within the building envelopes	The basement is consistent with the approved Concept Approval and within the extent of the approved envelopes.
	consistent with the plans listed in Condition A2,	
	as modified by the conditions of this consent.	The gross floor area of the Waterloo Metro
B3.	The maximum achievable gross floor area	Quarter is calculated across all Detailed
	(GFA) for the non-station related floor space is	Design SSDs and a final tally will need to
	68,750 m ² and this amount will only be	be made with the last SSD. The concurrent
	achieved subject to demonstration of:	SSDs and the basement SSDA under
	(a) being wholly contained within the	assessment concurrently have less than
	approved building envelopes	68,750m².

	(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 ar	pproved podium building envelopes, as	
		fied with green shading in the approved	
		in Condition A2, must be used for non-	
		ential uses only.	
Built	t Form	and Urban Design	
B5.	The d	letailed development applications shall	The basement application addresses
-		ess compliance with:	compliance with:
	(e)	the Design Guidelines as endorsed by	 with the Design and Amenity
		the Planning Secretary pursuant to	Guidelines in the EIS and RtS;
		Condition A14	 the Design Excellence Strategy in
	(f)	the Design Excellence Strategy as	the EIS, RtS and Design Integrity
		endorsed by the Planning Secretary	Report
		pursuant to Condition A15	 the conditions of consent in the
	(g)	the conditions of this consent.	EIS.
B6.		ollowing elements are not inconsistent	The Department has addressed the Design
		he consent proposal but are subject to	Guidelines in Appendix F, the Design
	furthe	er assessment with the relevant detailed	Excellence Strategy in Section 6.5 and the
	devel	opment application:	conditions in this table.
		(i) conceptual land uses, except for	The proposal includes land uses and
		the approved minimum non-	The proposal includes land uses and subdivision and is consistent with the
		residential GFA, community	Concept Approval inclusions.
		facilities GFA, affordable housing	
		rate and number of social housing	The requirements in Condition B7 are
		dwellings approved	satisfied.
		(ii) indicative signage zones,	
		following preparation of a Signage	
		Strategy (iii) subdivision.	
B7.	Futur	e development applications shall address	
07.		llowing:	
	(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	

|--|

Car Parking and Bicycle Parking

B8.	1 11		rking provision to reduce private car and promote use of active and port. Future development	The proposal fully complies with the car parking and bike parking rates applied.
	(a) (b)	be pr acco is lim resid share spac spac spac	naximum number of car spaces to rovided for all residential mmodation within the development nited to 170 spaces, including ents' spaces and residential car e spaces but excluding visitor es and service vehicle spaces. Illocation of residential car parking es, up to the maximum of 170 es must not exceed the following mum rates:	
		(i) (ii) (iii) (iv) (v)	 0.1 space per studio dwelling 0.3 parking spaces per 1 bedroom dwelling 0.7 parking spaces per 2 bedroom dwelling 1 parking space per 3 bedroom or more dwelling residential car share parking rate of 1 space per 50 residential car parking spaces provided 	
	(c)		residential car parking to be ded in accordance with the	
B9.	a Car adop and a	r Parki ting th allocati	elopment applications must include ng Strategy and Management Plan e maximum residential parking cap ion rates above and demonstrating with the following:	

B10.	 (d) accessible car parking spaces provided as per Sydney DCP 2012 rates, unless the following applies (i) if the total maximum number of car parking spaces provided for all residential accommodation permitted under Condition B8 is not delivered within the development, then the amount of accessible car parking spaces required by Sydney DCP 2012 is permitted to be reduced by the same proportion of total car parking spaces as proposed for standard residential spaces. (e) motorcycle parking spaces provided as per Sydney DCP 2012 rates 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, with the following exception: (i) A minimum of 78 class 3 bicycle parking spaces must be available to visitors to the approved development. This must include no less than 24 visitor bicycle parking spaces to be provided for the commercial office floorspace within the Northern Precinct. 	
Cons	ultation with Waterloo Congregational ch	
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	The application includes a Heritage Impact
	aboveground works shall include a detailed	Statement and Heritage Interpretation
	Heritage Impact Statement and a Heritage	Strategy prepared in consultation with
	Interpretation Strategy for the proposed works	Council.
	prepared in consultation with the City of	
	Sydney 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 basement is below ground and will not result in any wind impacts.
B14.	The Wind Impact Assessment must consider the locations of existing and future pedestrian crossings and apply standing criteria zones to match the width of crossings and the waiting zones for crossings, including on the opposite side of streets.	
Traff	ic, Access and Parking Assessment	
B15. B16.	accompanied by a Traffic and Transport Impact Assessment.	The application includes a Traffic and Transport Impact Assessment and a CTMP as required. The Applicant submits that road safety
	 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: (f) construction car parking strategy (g) haulage movement numbers / routes including contingency routes (h) detailed travel management strategy for construction vehicles including staff movements (i) maintaining property accesses (j) maintaining bus operations including routes and bus stops (k) maintaining pedestrian and cyclist links / routes (l) independent road safety audits on construction related traffic measures (m) measures to account for any cumulative activities / work zones operating simultaneously. 	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.
B17.	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.	
Envii	ronmental Performance / ESD	

 B. 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. B. The minimum performance targets for environmental performance are: 			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.
(n)		nct overall:	
	(i)	6 star Green Star Communities Rating Tool	
	(ii)	Endorsed under One Living Planet framework	
(o)	Comr	mercial / office uses:	
. ,	(i)	5 Star Green Star Design and As- Built Rating Tool	
	(ii)	5.5 Star NABERS Energy	
	(iii) (iv)	4.5 Star NABERS Water 'Gold Certification: Shell and	
	(17)	Core' under WELL Building Standard	
(p)	Resid	dential uses:	
	(i)	5 Star Green Star Design and As-	
	(;;)	Built Rating Tool	
	(ii) (iii)	more than BASIX 40 Water BASIX 30 Energy.	
	(11)	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.
Cons	truction 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 	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.

	(e)	Air Quality Management Plan.	
	Cons prepa cond deve Cons Fram Vibra Metro	plans above may be prepared as part of a struction Environmental Management Plan ared for implementation under the itions of any consent for future lopment applications, having regard to the struction Environmental Management nework and Construction Noise and ation Strategy prepared for the Sydney o City and Southwest (CSSI 7400). Vibration Assessment	
202	F.	re development explications shall be	The employee includes a Nicion and
D23.	accol Asse requi (a) v n ii <i>E</i>	re development applications shall be mpanied by a Noise and Vibration Impact assment that demonstrates the following irements are met: <i>vibration from construction activities does</i> not exceed the vibration limits established in British Standard <i>BS7385-2:1993</i> <i>Excavation and measurement for vibration</i> <i>n buildings. A guide to damage levels from</i> <i>groundborne vibration.</i> 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. advice of a heritage specialist has been incorporated on methods and locations for installed equipment used for vibration	The application includes a Noise and Vibration Impact Assessment addressing the requirements.
B24.	 movement and noise monitoring of heritage-listed structures. 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 		
		ite and neighbouring sites is protected	
B25.	durin The I addr recor Asse Nove	ig the operation of the development. Noise and Vibration Assessment must ress the conclusions and mmendations of the Concept Acoustic essment Report, SLR Consulting dated 9 ember 2019.	

Flooding and Stormwater Assessment

	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,
Refle	ctivity Assessment	
	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,
Arch	aeological 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: Aboriginal Heritage – Archaeological Assessment. 	The Department is satisfied that archaeological and Aboriginal cultural heritage issues have been considered under the CSSI approval for the eastern portion of the site and can be rolled onto the western portion of the site to ensure the proposal will not result in any adverse archaeological and Aboriginal cultural heritage impacts. Suitable conditions are proposed to manage impacts.
	 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. 	
Airsp	ace 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 over-runs, vents, chimneys, aerials, antennas, lightning rods, and roof top 	The basement is below ground and will no exceed the maximum building height for airspace protection.
	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	

Appendix F – Consistency with Design Guidelines

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

Conditions B3 and B5 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
 3N Pedestrian and cycle network Provide generous footpath widths that can accommodate pedestrian flows from Metro users. Provide marked pedestrian crossings in accordance with the Interchange Access Plan Provide on-site bicycle parking for any commercial office as per the Green Star requirements Student accommodation at a minimum rate of 1 space per 5 rooms Metro customers as per the CSSI approval 	The application demonstrates suitable footpath widths are provided to accommodate the future demands from rail users.

30 Car parking and access	The proposal complies with all car parking and bicycle parking requirements.
• Car parking is provided as per Sydney LEP rates.	Parried redarioneries
 Design of basement car parking is to ensure adequate soil volume and 	
depth for street tree planting	
• Vehicular access to minimise conflicts	
with metro customers and pedestrians	
and disruption to the active frontagesCar share parking spaces to be	
provided in addition to the maximum	
number of car parking spaces	
3P Service vehicles and waste collection	The loading docks are provided at grade and not included in the basement SSD application but in the respective above ground development.
• Access the site in a forward direction.	
Separate service vehicles from car	
parking spaces.	
 Waste collection and loading to be in accordance with Council's guidelines. 	
 Locate waste servicing in a basement 	
preferable, then at grade if necessary.	
3Q Integration with metro station	The Applicant has a Project Delivery Agreement with
	Sydney Metro which provides for the station and over station development to function independently in
Coordinate structures, services, car parking, lift cores with metro station	relation to the matters listed in the Design Guidelines.
The station and over station	For example, emergency responders do not need to
development must have functional	traverse through any over station development to access the station.
autonomy in relation to maters such as building services, emergency	
egress and access, maintenance and	
utilities.	
 Provide clearance zones for air intake 	
and exhaust outlets to eliminate cross contamination of air flows	
3R Sustainability	Appendix C above demonstrates the basement has
- - - - -	been designed to comply with the sustainability targets
Comply with the performance targets in the Concent Approval	of the conditions of consent to the Concept Approval.
in the Concept Approval.	
3S Stormwater and flooding	The Water Quality, Flooding and Stormwater Report lodged with the EIS demonstrates the detailed
Provide on-site stormwater detention	requirements of the Design Guidelines have been
Achieve water quality targets	satisfied.
 Flood planning levels should be adopted. 	
3T Waste Management	The Waste Management Plan lodged with the EIS
	responds to each design criteria and guideline
Comply with Council's guidelines.	appropriately.

• Detailed requirements as then listed for waste systems and management devices.

3U Culture

- Develop measures to improve employment, empowerment and economic development for Aboriginal and Torres Strait Islander peoples.
- Participation of Aboriginal artists, designers and landscapers is encouraged to incorporate and reflect Aboriginal cultural values.

The EIS includes commitments to participation in construction and promoting First Nations enterprise and employment in the wider Waterloo Metro Quarter placemaking, activation and retail strategy.

Appendix G – Recommended Development Consent

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