URBIS

# WATERLOO METRO QUARTER OVER STATION DEVELOPMENT -SOUTHERN PRECINCT

Response to Submissions

Prepared for WL DEVELOPER PTY LTD 15 February 2021

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# 1. INTRODUCTION

This 'Response to Submissions' Report (**RtS**) has been prepared by Urbis on behalf of WL Developer Pty Ltd to address the matters raised by government agencies, the public, and community organisation groups during the public exhibition of the proposed Waterloo Metro Quarter (**WMQ**) Over Station Development (**OSD**) State Significant Development (**SSD**) applications, specifically the Southern Precinct.

The Department of Planning, Industry and Environment (**DPIE**) issued a letter to the applicant on 14 December 2020 requesting a response to the comments raised during the public exhibition period for SSD-10437.

### 1.1. OVERVIEW

The application was on public exhibition 5 November 2020 to 2 December 2020. During this period, submissions were received from NSW government agencies, the local Council and other key public authorities. The submissions received from public authorities included those from:

- Environment Protection Authority;
- Department of Planning, Industry and Environment Biodiversity and Conservation Division
- Transport for New South Wales (TfNSW)
- City of Sydney;
- Sydney Metro;
- Sydney Water; and,
- NSW Health.

In addition, submissions were received from neighbouring property owners and residents, the broader community, and an elected representative. The key matters raised in the agency and public submissions include:

- Adequate provision of social and affordable housing:
- Adequate provision of community facilities;
- Provision of car parking;
- Traffic generation and traffic impacts;
- Impacts associated with the provision of student accommodation on the site;
- Overshadowing, privacy, and visual impacts to neighbouring residences;
- Amenity of proposed apartments;
- Achievement of sustainability objectives for the proposed development;
- Overshadowing and amenity of existing and proposed public open space;
- Wind conditions on the site; and
- Commentary on overall architectural quality of the proposed designs.

This RtS provides an in-depth and holistic response to the above key matters and all other matters raised by public authorities and community submissions. Specific design changes are also proposed to the development in response to the submissions received and design development. Revised specialist documentation to support the revised scheme are provided in support of the RtS which includes:

- Amended Architectural Plans (Appendix A)
- Supplementary Architectural Design Report (Appendix B)
- Amended Landscape Plans (Appendix C)
- Supplementary Landscape Report (Appendix D)

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- Landscape Memo (Appendix E)
- Amended Design Integrity Report (Appendix F)
- Amended Design Guidelines (Appendix G)
- Pedestrian Wind Environment Assessment (Appendix H)
- Technical Memo Natural Ventilation Detail (Appendix I)
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- Technical Memo for Road Noise Attenuation (Appendix K)
- Public Benefits Advice (Appendix L)
- Supplementary Solar Access Assessment (Appendix M)
- Supplementary Overshadowing Assessment (Appendix N)
- Addendum Visual Impact Assessment (Appendix O)
- Façade Shading Analysis (Appendix P)
- ESD Technical Memo (Appendix Q)
- SEPP 65 Verification Statement (Appendix R)
- Supplementary Traffic and Parking Assessment and Pedestrian Modelling Memo (Appendix S)
- Revised Waste Management Report (Appendix T)
- Technical Memo Waste Management Requirements (Appendix U)
- Flood Risk Management Plan (Appendix V)
- Clause 4.6 Variation Request (Appendix W)

# 2. SUMMARY OF SUBMISSIONS

# 2.1. SOUTHERN PRECINCT SSD DA

A breakdown of the submissions by respondent type and their position is provided in the table below.

Table 1 Southern Precinct Detailed SSD DA Submissions Received by Respondent Type

Submitter	Position	Number of Submissions
Public Authorities and NSW Government Agencies		
Environment Protection Authority	Comment	1
Biodiversity and Conservation Division	Comment	1
TfNSW	Comment	1
City of Sydney	Object	1
Sydney Water	Comment	1
Sydney Metro	Comment	1
NSW Health	Comment	1
SUBTOTAL		7
Community and Organisations		
General public	Support	1
General public (includes one local Council representative)	Object	10
General public	Comment	1
Organisation	Object	5
Organisation	Comment	1
SUBTOTAL		18

# 2.2. ACTIONS COMPLETED FOLLOWING EXHIBITION

Since the public exhibition of the proposed detailed SSD DA, the applicant has consulted with government agencies as follows:

- Meeting with the DPIE on 16 December 2020 to discuss the key matters required to be addressed in the response to submissions and the supporting assessment and design analysis required to be demonstrated.
- The proposed development was re-presented to the Design Review Panel (DRP) on 28 January 2021 in accordance with the Design Excellence Strategy endorsed under the concept approval. The DRP provided the following feedback:

**Built form** 

- Response Item 13: The Panel accepts that the awnings to public spaces meets the required height specifications set out by Council.
- Response Item 24: The Panel requests further information on the expected thermal comfort conditions within the student apartments during summer to ensure safe conditions, and the role that user interventions will have in improving this, i.e. active cooling, blinds or curtains.
- Response Item 24: The Panel recommends improving solar shading to northern elevation windows that are not currently receiving any shade from the adjacent building during the hottest hours of the day.
- Response Item 17a: The Panel supports the additional windows proposed to the studios to break up the eastern façade blank walls.
- Response Item 25: The Panel recommends that the pergola proposed to the roof terrace to improve wind conditions be designed to allow solar access in winter whilst still providing weather protection to operable openings.
- Response Item 26 & 27: The Panel recommends reviewing the western façade design of Building 4
  in a similar manner as suggested by Council to Building 3. To both improve solar access to lower
  levels, and shading to upper levels, whilst also improving visual privacy to habitable spaces on all
  levels
- Response Item 28: The Panel supports the integration of plenum ventilation to various Building 4
  apartments to improve the number of units receiving cross ventilation. The Panel strongly
  recommends incorporating an occupant-controlled system to ensure heat loss during winter is
  mitigated; and acoustic baffles to reduce sound infiltration from the adjacent public areas.

#### Materials and finishes

- Response Item 17b: The Panel supports the increased level of detail provided to Council on the material intent of each building.
- Response Item 6: The Panel has no further comments on the signage design as this is a DPIE planning control matter.

Minutes of this meeting are provided at Appendix F.

- Meeting with the City of Sydney on 8 February 2021 to discuss the submission received from the City of Sydney. Key matters discussed include:
  - Façade articulation;
  - Materials and finishes:
  - Amenity of student accommodation (Building 3) with regards to external sun shading, wind and visual privacy; and,
  - Amenity of social housing (Building 4) with regards to solar access and natural cross ventilation,
  - Additional privacy mitigation measures to the social housing (Building 4).

# 3. AMENDMENTS TO THE PROPOSED DEVELOPMENT

Since lodgement and public exhibition of the detailed SSD DA (SSD-10437), the applicant has further developed the design of the proposed development. As a result, minor modifications are proposed to the Southern Precinct development. A summary of the proposed changes is provided below.

# 3.1. BUILDING 3 (STUDENT HOUSING)

As a result of refinements predominantly to the ground floor level of Building 3 to improve the functionality and usability of the ground level loading dock (including the addition of one B99 vehicle space) a reconfiguration of the podium is proposed within this RtS report. The proposed uses of the podium remain consistent with that proposed in the EIS submitted with SSD-10437. No significant change is proposed to the external appearance of the podium, noting however that the landscape design of the ground floor and level 2 terrace is also proposed to be adjusted to improve amenity of these spaces.

In response to the City of Sydney feedback, a fixed window is proposed to the eastern façade of Building 3 to provide additional design articulation to this façade. Minor amendments are also proposed to plant room and services configurations in response to detailed design evolution.

A comprehensive list of the minor amendments proposed to Building 3 as illustrated on the amended Architectural Plans at Appendix A are outlined in Table 2 below.

Table 2 Proposed amendments to Building 3

Location	Proposed Modifications Changes
Ground Floor	<ul> <li>Revised driveway ramp grading and allowance for additional B99 vehicle space</li> </ul>
	<ul> <li>Relocation of student accommodation and social housing bike store</li> </ul>
	<ul> <li>Reconfiguration of community space</li> </ul>
	<ul> <li>Allowance for BOH corridor from lobby to the loading dock and pedestrian corridor from street level to the loading dock</li> </ul>
	<ul> <li>Relocation of fire control room, NBN room and minor services</li> </ul>
	<ul> <li>Reconfiguration of waste room facilities</li> </ul>
	<ul> <li>Additional detail shown on student accommodation Lobby fit-out</li> </ul>
	<ul> <li>Revised landscaping along Botany Road frontage</li> </ul>
	<ul> <li>General reconfiguration of Ground Floor to accommodate above changes</li> </ul>
Mezzanine	<ul> <li>Relocation of the social housing bike store to Level 2</li> </ul>
	<ul> <li>Revision to plant room configurations.</li> </ul>
Level 1	Additional detail on student accommodation fit out
	<ul> <li>Revised stair design (Level 1 and 2)</li> </ul>
	<ul> <li>Relocated bike store</li> </ul>
	<ul> <li>Relocation of OSD tank to north-east corner of building and fire plant in location of old OSD tank</li> </ul>
Level 2	Additional detail on student accommodation fit out
	<ul> <li>Revised landscape design for communal roof terrace and pergola extent</li> </ul>
	<ul> <li>Relocated bike store</li> </ul>
	<ul> <li>Comms Room added</li> </ul>
	<ul> <li>Doors added to north-east plant room for roof maintenance access (Level 2 and 3</li> </ul>

Location	Proposed Modifications Changes
Level 3-5	<ul><li>Fixed windows to studios 3.18, 4.18 and 5.18 on south-east corner</li></ul>
	<ul> <li>Additional detail on student accommodation fit out</li> </ul>
	■ Fire Stair Wall shifted 250mm north
Levels 6-21	<ul> <li>Additional fixed window to SE studio</li> </ul>
Level 23	<ul> <li>Additional ladder adjacent to maintenance access door</li> </ul>
	<ul> <li>PV Inverters added with screening</li> </ul>
Level 24	<ul> <li>Removable panel to façade for maintenance access</li> </ul>
	<ul> <li>Removal of one door, fire stair and guard rail</li> </ul>
	<ul> <li>Additional ladder adjacent to maintenance access door</li> </ul>
	<ul> <li>Plant room equipment added and plant room reconfiguration</li> </ul>
	<ul> <li>Plant room screening added to maximum RL93.95</li> </ul>
Roof	<ul> <li>Additional louvers to plant level in lieu of windows</li> </ul>
	<ul> <li>Additional ladder adjacent to maintenance access door</li> </ul>
	<ul> <li>Louvres to corridor facades, inclusion of transom with fixed panel</li> </ul>
	<ul> <li>High level spandrel panels to corridor façade L23</li> </ul>
	<ul> <li>Removal of one door and guard rail</li> </ul>

# 3.2. BUILDING 4 (SOCIAL HOUSING)

Minor changes are proposed to Building 4 predominantly to refine building services and plant rooms, provide minor landscape changes, and commit to additional privacy mitigation measures on the western façade of Level 09 in accordance with DRP feedback and endorsement. A comprehensive list of the minor amendments proposed to Building 4 as outlined on the amended Architectural Plans at Appendix A is included in Table 3 below.

Table 3 Proposed amendments to Building 4

Location	Proposed Modifications Changes
Level 1	<ul> <li>Amend lift lobby facade to south west (Level 1 and Level 2)</li> </ul>
	<ul> <li>Minor increase in size to north-west riser</li> </ul>
	<ul><li>Fire stair wall shifted 250mm north (Level 1 and Level 2)</li></ul>
	<ul> <li>Infill slab to south-east corner of residential lobby</li> </ul>
	<ul> <li>Allowance for two 240L bin cupboards (relevant for Levels 1-9)</li> </ul>
Level 2	<ul> <li>Infill slab to south east corner (relevant for Levels 2-8)</li> </ul>
Level 9	Roof terrace pergola extended further north
	<ul> <li>Additional privacy mitigation measures provided to western façade</li> </ul>
Roof	<ul> <li>Adjust skylight above Apartment 2C</li> </ul>
	<ul> <li>Increase height of skylight to RL 64.36</li> </ul>
	<ul> <li>Remove roof access hatch</li> </ul>

# 4. RESPONSE TO DPIE ASSESSMENT

The NSW DPIE wrote to the applicant on 14 December 2020 requesting a response to the submissions and matters raised during the public exhibition period for SSD-10437.

The comments provided by the DPIE required further clarification on built form and amenity impacts (both external and internal) of the modified building envelope and detailed OSD designs.

The key matters that the DPIE have raised concern with are categorised under the following headings:

- Public Benefits:
- Design Integrity Reports;
- Wind Impact Assessment; and
- Active Street Frontages.

Each of these key matters are addressed in the following sections.

### 4.1. PUBLIC BENEFITS

Condition A12 of the concept approval SSD-9393 requires that the following is provided across the Waterloo Metro Quarter site:

- a) a minimum 5% of approved residential gross floor area dedicated or transferred to a Registered Community Housing Provider as affordable housing
- b) 70 social housing dwellings dedicated or transferred as agreed by NSW Land and Housing Corporation
- c) publicly accessible open space provision of minimum 2,200m2 across the Metro Quarter site including its final area, design and ongoing management, noting partial provision of this publicly accessible open space may also be delivered under the CSSI Approval
- d) community facilities gross floor area of a minimum 2,000m2 including its final area, design and future operating model. Community facilities are as defined in the Sydney Local Environmental Plan 2012.

The above is satisfied through the four detailed SSD DAs lodged currently for the WMQ OSD. The specific mechanisms of satisfying Condition A12 of SSD 9393 and the SLEP 2012 requirements are outlined within the letter provided at Appendix L. In summary it is noted that the proposed WMQ OSD will deliver the required public benefits as follows:

- A minimum of 5% of the residential gross floor area proposed to be delivered across the WMQ site (including the floor space to be used for student housing) is to be delivered as affordable housing. This affordable housing is nominated on the architectural plans and in the Environmental Impact Statement (EIS) submitted with the Central Precinct SSD DA (SSD-10439).
- 70 social housing dwellings are proposed to be delivered within 'Building 4' included within the Southern Precinct, the subject of this SSD DA. The social housing dwellings have been designed to satisfy the design and functional requirements of the NSW Land and Housing Corporation and are nominated in the architectural plans and in the EIS submitted with the Southern Precinct SSD DA (SSD-10437).
- A minimum of 2,200m<sup>2</sup> of publicly accessible open space is proposed to be delivered by the applicant and Sydney Metro across the WMQ. This area generally comprises Raglan Plaza (684m2) documented on the landscape plans submitted with the Northern Precinct SSD DA (SSD-10440) and the Cope Street Plaza (1,675m2, including areas for future licensed outdoor dining) documented on the landscape plans submitted with the Southern Precinct SSD DA (SSD-10437).
- It is noted that additional publicly accessible open space is proposed to be provided within the various over station development SSD DAs in the form of through-site links, widened footpaths, a shared way, and open space at Church Yard and Church Square. While these areas are proposed to be publicly accessible, they are not proposed or required to be delivered under Condition A12 of SSD-9393.

A tenancy within Level 1 and Level 2 of the podium of Building 2 is nominated to be used as a community facility, in accordance with the definition provided within the SLEP 2012, on the architectural plans and in the EIS submitted with the Central Precinct SSD DA (SSD-10439). The minimum gross floor area of this tenancy is 2,000m². This tenancy will be used in perpetuity for 'community facilities' as required by Condition A12 and will be secured by way of a Public Positive Covenant on title.

### 4.2. DESIGN INTEGRITY REPORTS

A revised Design Integrity Report has been prepared in response to the DPIE comments and is included at Appendix F. The revised Design Integrity Report relevantly includes:

- advice letters from each DRP review session as endorsed by Panel Chair, and
- a log of advice from the above letters, including a comprehensive matrix of how DRP comments have been responded to.

The revised Design Integrity Report includes a number of minor "Open" items that relate to the proposed design development of the Waterloo Metro Quarter OSD. It is anticipated that the timeline for resolution of these "Open" items is at the next DRP meeting scheduled for 18 February 2021.

### 4.3. WIND IMPACT ASSESSMENT

The DPIE requested the applicant demonstrate the proposed development's compliance with the requirements of Condition B14 of the concept approval regarding applying standing criteria to waiting zones at crossings of intersections, including on the opposite sides of the streets. In response to this, a revised Wind Impact Assessment has been prepared by RWDI and included at Appendix H.

The key waiting areas around the site include the bus stop zone along Botany Road, adjacent to Building 2 (Central Precinct), as well as the four main pedestrian crossings at the corners of the precinct. Prior to the implementation of mitigation measures, the bus stop zone along Botany Road generally satisfy the standing criteria, whilst the pedestrian crossing areas are noted to satisfy the walking criteria.

The inclusion of awnings and street tree planting result in the entire bus stop zone and pedestrian crossing areas satisfying the standing criteria as outlined in the Waterloo Metro Quarter Design and Amenity Guidelines (**WMQ Design Guidelines**) document. Areas for the bus stop waiting zone will also satisfy the sitting criteria conditions. This is outlined in the Supplementary Pedestrian Wind Environment Assessment at Appendix H.

With regards to the surrounding footpaths, wind conditions on the pedestrian footpaths opposite the site along Botany Road, Cope Street, Raglan Street and Wellington Street were found to generally satisfy the standing criteria.

Some localised areas within the southern end of Cope Street, the central area of Wellington Street, the northern end of Botany Road, and the eastern end of Raglan Street are noted within Appendix H as meeting the walking criteria. Additional testing with the inclusion of proposed new street trees in their mature form, as well as the inclusion of existing nearby adjacent trees in the wind model, indicate that wind conditions are further improved resulting in only localised areas satisfying the walking criteria, with the majority of areas satisfying the standing criteria.

# 4.4. ACTIVE STREET FRONTAGES

A Clause 4.6 Variation Request has been prepared by Urbis on behalf of the Applicant to support the detailed SSDA for the construction and operation of a mixed-use OSD and public domain works located at the Southern Precinct of the Waterloo Metro Quarter site, and is included at Appendix W.

The request seeks to vary the strict application of clause 7.27 of the *Sydney Local Environmental Plan 2012* (**SLEP 2012**) as it relates to active street frontages, namely that the proposal must comply with the Active Street Frontages Map as it applies to the site. While the proposal has sought to maximise activation of all frontages through business and retail uses, the operational requirements of the site and integrated station development have resulted in small portions of frontages being required for critical building services which is consistent with the concept approval.

As stated in *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118 (**Initial Action**) at [25], clause 4.6(3) does not require the consent authority to form its own opinion of satisfaction regarding the matters identified in clause 4.6(3)(a) and (b), but only indirectly must be satisfied that the applicant's written

request has adequately addressed those matters. The request at Appendix W does that, and therefore the consent authority is open to be satisfied that subclause 4.6(3) has been met.

This request contains justified reasoning for the proposed variation to the active street frontages development standard, and demonstrates that:

- The objectives of the development standard will be achieved, notwithstanding that the development standard not being achieved in entirety, and in doing so, establishes that compliance with the standard is unreasonable or unnecessary (Initial Action at [17]).
- The proposal is consistent with the objectives of the zone in which the proposed development is proposed to be carried out, being the B4 Mixed Use Zone.
- Whilst strict application of the development standard is not achieved, there are sufficient environmental planning grounds to support the proposed development.

Please refer to Appendix W for further justification.

### 4.5. SOUTHERN PRECINCT SSD DA – SPECIFIC COMMENTS

#### 4.5.1. Podium

Condition B4 of the concept approval SSD 9393 states:

"The approved podium building envelopes, as identified with green shading in the approved plans in Condition A2 must be used for non-residential uses only."

The current wording of the condition prohibits residential uses within the podium building envelopes. A Section 4.55(1A) modification application has been submitted to the DPIE seeking to amend Condition B4 of SSD 9393 to permit communal facilities **associated** with residential uses within the podium.

Subject to approval of the modification, the amendment will enable flexibility in the land uses proposed within the podium of the WMQ OSD as part of the detailed (Stage 2) SSD applications, specifically the Southern Precinct. Whilst not comprising any residential dwelling, the podium fronting Botany Road includes communal facilities that support the student accommodation located elsewhere within the building.

# 4.5.2. Skylight

As discussed above, a Section 4.55(1A) modification application has been submitted to the DPIE seeking to permit the installation of a skylight at the uppermost level of Building 4 that may penetrate the current approved building envelope.

The detailed design of Building 4 includes a skylight within the uppermost level of the social housing building to enable additional natural light into apartment Reference 902 (Type c). The installation of this skylight is required to penetrate the maximum height of the roof by 300mm and therefore will also penetrate the approved building envelope by 300mm for this small area of the roof.

Subject to approval of the modification, the amendment will ensure the installation of a skylight to Building 4 building is consistent with the concept SSDA SSD 9393.

# 4.5.3. Signage

Development consent is sought for the installation of three signs including top of building signage and smaller building entry signage. The following signs are proposed:

- 2 x Top of building signs
  - Sign type: Building identification
  - Sign text: Iglu logo
  - Location: Level 23 northern façade and Level 23 eastern façade
  - Dimensions: 2,700mm wide x 2,200mm high
- 1 x Building identification sign

Sign type: Building identification

Sign text: Iglu logo

Location: Ground floor entrance to student accommodation lobby

Dimensions: 800mm wide x 625mm high

An assessment of the proposed signage against State Environmental Planning Policy No. 64 - Advertising and Signage is provided in the EIS submitted with the original application. In accordance with clause 11 of the State Environmental Planning Policy (State and Regional Development) 2011, the provisions of the Sydney Development Control Plan 2012 (SDCP 2012) do not apply to this development. Notwithstanding this, an assessment of the proposed signage against the SDCP 2012 controls for Advertising and Signage is provided below.

Table 4 Assessment against SDCP 2012

Control	Provision	Proposed	Complies	
3.16 Signs and Advertisements				
3.16.1 Signage strategy	A signage strategy is to be prepared for all signage applications:  (a) in a heritage conservation area or involving a heritage item;  (b) on sites that are strata titled or contain more than four business premises; or  (c) seeking variations to the requirements of this section.  The requirement for a signage strategy may be waived by the consent authority where it is satisfied that a proposal is minor in nature and satisfies the objectives of this section.	Given the nature of the signs and total number of signs (3) proposed on a single building, a Signage Strategy is not considered necessary.	Appropriate on merit	
3.16.3 General requirements for signage	Signage is to be compatible with the architecture, materials, finishes and colours of the building and the streetscape.	The proposed top of building signs contain the Iglu logo, being the word 'Iglu' surrounded by an orange bubble. The signage is subdued and compatible with the material, finishes and colours of the building.	Yes	
	Signage attached to a building is to be positioned in locations or on panels in between any architectural elements.	The proposed top of building sign will be affixed to the northern and eastern elevation.	Yes	
	Signage is to be installed and secured in accordance with relevant Australian Standards.	All signage will be installed and secured in accordance	Yes	

Control	Provision	Proposed	Complies
		with relevant Australian Standards.	
	Signage that will detract from the amenity or visual quality of heritage items, heritage conservation areas, open space areas, waterways or residential areas is not permitted.	The proposed signs located at the top of building and ground plane will not detract from the amenity or visual quality of the adjoining heritage listed Waterloo Congregational Church.	Yes
	Signage should not create unacceptable visual clutter.	The proposed signage will be installed on a new building. It will not create unacceptable visual clutter. A maximum of two top of building and one ground plane sign is proposed.	Yes
	Signs should allow the main facades of buildings from the first floor to the rooftop or parapet to be uncluttered and generally free of signage.	The proposed top of building signs are located on the northern and eastern elevation. No top of building signs are proposed on the primary street frontages (Botany Road and Wellington Street) and therefore will remain uncluttered and generally free of signage.	Yes
	Signage is not to be supported by, hung from or placed on other signs or advertisements.	Noted.	N/A
	Signage that will distract road users, or could be mistaken for a traffic control device, is not permitted.	The proposed top of building signs will be visible when approaching the site from the north along Botany Road and east along Cope Street and Wellington Street. These signs are located at Level 23, affixed to the building façade and will not be illuminated. It is unlikely they will be mistaken for a traffic control device.  The proposed sign at the	Yes
		ground plane is modest in size and not readily visible	

Control	Provision	Proposed	Complies
		from the road. It is unlikely to cause any road safety issues.	
	Signage that will unduly obstruct the passage or sightlines of vehicles, cyclists or pedestrians is not permitted.	The proposed signage will be affixed to the building façade. They will not unduly obstruct the passage or sightlines of vehicles, cyclists or pedestrians is not permitted.	Yes
	Advertisements, dynamic content signs and light projection signs on or within the vicinity and visible from a classified road are to be consistent with the road safety criteria in section 3 of the NSW Transport Corridor Advertising and Signage Guidelines.	No advertisements, dynamic content or light projection signs are proposed.	Yes
	Signage is not to contain reflective materials, colours and finishes.	The reflectivity of the signage will be consistent with other façade materials.	Yes
	Signage is not to incorporate sound, vibration, odour or other emissions.	Noted. No sound, vibration, odour or other emissions is proposed.	Yes
	Signage is not to result in the gathering of people in any manner that will limit the movement of motorists, cyclists or pedestrians along a public road, thoroughfare, footway or other access way.	Noted. The proposed signage is for building identification purposes only. It will not result in the gathering of people in a manner that will impact on motorists, cyclists or pedestrians along a public road, thoroughfare, footway or other access way.	Yes
3.16.4 Illuminated signage	N/A	No illumination is proposed.	Yes
3.16.5 Building identification signs	Unless otherwise provided for in Section 3.16.5.2 (Top of building signs), a building identification sign should be located at or near the major pedestrian entry to a building and be designed to fit within the architectural elements of a building.	A total of three building identification signs are proposed. The signs have been designed to integrate with the architectural elements of the building.	Yes
	Unless provided for in a signage precinct in Section 3.16.12 (Signage precincts), a building identification sign should not be	The site is zoned B4 Mixed Use. Two top of building signs are proposed on Level 23 of	Appropriate on merit

Control	Provision	Proposed	Complies
3.16.5.2 Top of building signs	higher than 15m above the existing ground level or the top of any existing parapet, whichever is lower, unless the sign is for a building on land zoned B8 Metropolitan Centre or B3 Commercial Core.	Building 3. Whilst the DCP does not permit top of building signs on land zoned B4, the proposed signage is considered appropriate for the reasons outlined below:	
		The proposed height is considered appropriate on the basis that the top of building signs are for building identification purposes.	
		<ul> <li>Top of building signage has been supported within nearby commercial centres at Australian Technology Park and on student accommodation buildings at Central Park and Chippendale.</li> </ul>	
		<ul> <li>The proposed signage is not inconsistent with the character of Botany Road.</li> </ul>	
		City of Sydney's Local Strategic Planning Statement (LSPS) identified Botany Road as a major road corridor seeking to attract additional commercial office and employment uses in the future. It is anticipated top of building signage will also be a prominent feature of the future road corridor.	
		The proposal has sought to minimise visual clutter by locating the two signs at the top of the building to ensure they are visible without detracting from the built form.	
		Refer to Section 5.2 for further discussion.	

Control	Provision	Proposed	Complies
	Sky signs and other roof signs that project vertically above the roof of a building are not permitted.	The top of building signage does not project vertically above the roof of the building. Both signs will be affixed to the northern and eastern façade.	Yes
	Top of building signs are not permitted on heritage items, except where the consent authority is satisfied that the sign is compatible with the heritage significance of the building.	The top of building signage will be installed on a new building. The site is not identified as a heritage item.	N/A
	Top of building signs are permitted to incorporate the registered name and a logo of the building or development.	The top of building sign will contain the Iglu logo, being the word 'Iglu' surrounded by an orange bubble.	Yes
	Top of building signs are only to be allocated to a significant tenant of the building. Signs must be removed within three months of the relevant circumstances changing.	The top of building sign will be allocated to Iglu, a student accommodation operator and significant tenant of Building 3. Except for the non-residential uses located within the podium, Building 3 will be used for the purposes of student accommodation under Iglu's management.	Yes
	A top of building sign is not to be located within 500m of the lot boundary of a building with a top of building sign containing the same name or logo unless exceptional circumstances prevail.	Not applicable.	N/A
	The maximum number of top of building signs per building is two, with no more than one top of building sign per elevation. Each top of building sign is to be similar in size and appearance.	A maximum of two top of building signs are proposed on Building 3. No more than one top of building sign per elevation is proposed. Both signs will be the same size and appearance.	Yes
	Top of building signs are, in the opinion of the consent authority, to achieve a high degree of integration and compatibility with the architectural design, materials, finishes and colours of the building.	As discussed in the Architectural Design Report at Appendix B, the proposed signs do not overly dominate the building façade, and are well integrated with, and subservient to, the design of	Yes

Control	Provision	Proposed	Complies
		Building 3 and the public domain.	
	Top of building signs are to have a maximum vertical height equivalent to one typical floor of the building.	The proposed top of building signs have a maximum vertical height of 2.2m, less than the height of one typical floor of the building.	Yes
	Top of building signs are to comprise of individual raised letters, numbers or symbols affixed directly to the building with a concealed static light source. Light boxes and variable content displays are not permitted as top of building signs.	No light boxes or variable content displays are proposed.	Yes
	The illumination of top of building signs is to comply with the requirements of Section 3.16.4 (Illuminated signage). The illumination is to be powered by a renewable energy source(s) in accordance with clause 3.16.4(6) of this DCP.	No illumination is proposed.	Yes
	Top of building signs are not to be used, sold or leased as any form of business or third-party advertisement.	Noted.	Yes
	Development consents for top of building signs are to be limited to 5 years.	Noted. An application for renewal of the sign will be lodged 6 months before the expiration of a development consent.	Yes
	Signs painted on or applied to the surface of a building roof in order to be visible from the air are not permitted.	Noted. The sign will not be painted on or applied to the surface of a building roof.	Yes

As per DPIE's request, the proposed signage has been assessed against State Environmental Planning Policy No. 64 - Advertising and Signage and the SDCP 2012 controls for Advertising and Signage and is considered contextually appropriate.

# 4.5.4. Design Verification Statement

As per DPIE's request, a Design Verification Statement and assessment against Schedule 1 of SEPP 65 for the social housing development has been provided by Registered Architects of Bates Smart, which is included at Appendix B and Appendix R.

#### **RESPONSE TO PUBLIC AUTHORITY SUBMISSIONS 5**.

#### 5.1. **STATE PUBLIC AUTHORITY COMMENTS**

Table 5 Response to Public Authority Submissions - Southern Precinct SSD DA

Comment	Response	
Environment Protection Authority		
No comment.	No response required.	
Biodiversity and Conservation Division (Environr	nent, Energy and Science Group)	
A Biodiversity Development Assessment Report (BDAR) Waiver was approved on 24 July 2020.	Noted. No response required.	
Flooding Floodplain risk management  The reports have not included flood level mapping for any scenarios, except the 1% AEP flood event plus climate change. This is a significant omission. This mapping, including water level contours at appropriate intervals, must be provided as a minimum for the 5% and 1% AEP flood events and the PMF event.	As detailed in the technical response provided by WSP at Appendix V, maximum flood levels for the 1%, 1% + Climate Change and PMF flood events were included in the Flood Impact Assessment submitted with the EIS.  Flood levels for the 5% AEP flood event were not included in the flood impact assessment report as WSP have advised they are not relevant in the determination of flood planning levels. Flood planning levels have been informed by the 1% AEP, 1% AEP+CC and PMF maximum flood levels.  Water level contour maps (with a 50mm contour interval) for the 5% AEP, 1% AEP and PMF flood events have been prepared and attached at Appendix V.	
Flood impacts of the proposed development  The individual buildings of the over station development are not expected to cause any flood impacts; however, the ancillary road works are predicted to cause unacceptable impacts.	The construction of the individual buildings of the OSD are not expected to cause any negative flood impacts as the footprint occupied by the proposed buildings and Cope Street plaza is less than the existing buildings previously on site.  The construction of the proposed Southern Precinct, including Cope Street Plaza, do not affect topography levels located outside the existing buildings footprint (i.e. pre-development conditions prior to any work associated with the metro station construction). As such, it is not possible for the Southern Precinct and Cope Street Plaza to negatively affect flood conditions to the adjacent land because the building footprint is less than the pre-development footprint.  Flood impacts observed in the Stormwater Management Strategy and Flood Impact	

Comment	Response
	Assessment submitted with the EIS are caused by the proposed road works along Cope Street that forms part of the metro station Critical State Significant Infrastructure (CSSI) application scope. The road works along Cope Street are not part of this development application.
The Concept Water Quality, Flooding and Stormwater Report of 2018 showed flood level increases that were within the limit of 10mm. It appears that road works were not included in the concept stage modelling.	Noted. Further consultation with City of Sydney occurred in September and October 2020 as part of the metro station Critical State Significant Infrastructure (CSSI) application. It is anticipated that City of Sydney would accept the flood impact generated by the CSSI application.
The current report documents flood level increases that are well in excess of the 10mm tolerance. Increases of up to 100mm are documented for both the 1% and 5% AEP flood events. It appears that an attempt has been made to justify allowing the increase in levels on the premise that these occur for a short period of time, which is not appropriate.	As discussed above, the Southern Precinct development is not expected to generate negative flood impacts to the adjacent land.
Limited detail has been provided on the topographical changes that would cause the predicted increase. A reduced carriageway width and reconfiguration of two intersections are changes noted in the flood report. Reference is made to the "civil design report for a detailed discussion on the proposed development topography" however, no such discussion is available in that report.	
The report states that mitigation measures to ameliorate the flood impacts are under development. This work would need to be finalised and submitted for review by EES before a recommendation could be given supporting the project. If impacts cannot be reduced to a tolerable level, a detailed investigation of the affected properties, including at least three residential buildings on the other side of Cope St, including floor level survey would allow proper assessment of the impacts.	
Flood risk for the development - Flood Planning Levels  The Concept Water Quality, Flooding and Stormwater Report of 2018 recommended Flood Planning Levels (FPLs) of either the 1% AEP flood	The setting of the finished floor levels for Building 3 has responded to the flood planning levels required for the site as outlined in Appendix V.

#### Comment

level plus 500mm freeboard or the PMF level. This present 2020 report has adopted lower FPLs for retail areas of the 1% AEP flood level (without freeboard).

The apparent justification for this change in strategy is that this is consistent with City of Sydney policy, which is not unreasonable.

It appears that most of the floor levels meet the requirements. The exception is Area 6, which is below the 1% AEP flood level and houses substations. The report notes that this level has been discussed with Ausgrid, however no indication is given that Ausgrid accepted this lesser level of flood protection or what the predicted flood frequency would be.

Without any such assurance, EES recommends that the floor level be raised to comply with the requirements.

Flood risk for the development – Residual Risk and Emergency Management

There are several issues regarding residual risk that have not been addressed and require amendments to the design. It is recommended that the proponent engage a suitably qualified and experienced professional to develop an appropriate strategy for flood emergency management.

Before the proposal moves to the next stage, a proper assessment of the flood behaviour as it relates to emergency management is required, together with the development of a strategy for flood emergency management.

#### Response

Written correspondence was received from Ausgrid to verify their acceptance of the flood levels for the ground floor of the substations.

Floor levels proposed for the Southern Precinct provide flood protection in a flood emergency. No evacuation from the building would be required as safe refuge is provided within the development.

The following should be considered when determining the flood risk and residual risk for the development:

#### Area 1 (community use):

- Area 1 is designed to be at 1%AEP + 706 mm freeboard flood level. In an extreme flood event (i.e. PMF) water depth is expected to be up to 18 cm. As such, flood risk in a PMF event is considered low. According to ARR 2019 guidelines flood hazard in Area 1 in a PMF event is classified as H1 - generally safe for people, vehicles and buildings.
- No evacuation is deemed necessary for occupants of Area 1 as sufficient flood protection (i.e. 1%AEP+706 mm freeboard) is provided within the area. It is not possible for Area 1 to have floor levels above the PMF without compromising street activation.

# Comment Response In a PMF event, occupants of area 1 are safe and not in danger. Area 2 (student accommodation lobby): Area 2 is designed to be at 1% AEP + 706 mm freeboard flood level. In an extreme flood event (i.e. PMF) water depth is expected to be up to 18 cm. Access to higher floors is also possible within Area 2. Flood risk is considered low. As per ARR 2019 guidelines flood hazard in Area 2 during a PMF flood event is classified as H1 generally safe for people, vehicles and buildings. No evacuation is necessary for occupants of Area 2 as sufficient flood protection is provided within the area. Area 3 (Gym Lobby): Area 3 is designed to be at 1%AEP + 612 mm freeboard flood level. In an extreme flood event (i.e. PMF) water depth is expected to be up to 13 cm within Area 3. Access to higher floor is also possible within Area 3. Flood risk is therefore considered low. No evacuation is necessary for occupants of Area 3 as sufficient flood protection is provided within the area. Area 4 (loading dock): Area 4 is designed to be at 1%AEP + 657 mm freeboard flood level. In an extreme flood event (i.e. PMF) water depth is expected to be up to 14 cm. Flood risk in Area 4 is therefore considered low. No evacuation is necessary for occupants of Area 4 as sufficient flood protection is provided within the area. Area 5 (lobby) Lobby entry is designed to be at street level

with a stepped in area at PMF flood level.

As such, no evacuation is necessary for occupants of Area 5 as flood protection is

provided within the area.

Comment	Response
	Area 7 (bike room / waste room):
	Area 7 is designed to be at 1%AEP + 657 mm freeboard flood level. In an extreme flood event (i.e. PMF) water depth is expected to be up to 14 cm.
	<ul> <li>Flood risk is considered low.</li> </ul>
	Area 8 (switch room and fire control room):
	<ul> <li>Area 8 is designed to be at 1%AEP + 700 mm freeboard flood level. In an extreme flood event (i.e. PMF) water depth is expected to be up to 18 cm.</li> </ul>
	<ul> <li>Flood risk is considered low. Occupants of area</li> <li>8 can also access area 2.</li> </ul>
	<ul> <li>Except for area 6 FPLs are above the 1% AEP</li> <li>+ 500 mm freeboard flood level as a minimum.</li> </ul>
An attempt has been made to identify areas where occupants could shelter in place. However, no consideration has been given to the number of persons at risk and whether there is enough space for these individuals in the nominated shelter areas.	All areas in the southern building are provided with sufficient freeboard above the maximum 1% AEP flood level. Refer to discussion above for further details regarding FPLs.
Any persons in external licenced seating areas, must be accounted for in emergency planning.	There are no external licenced areas in the Southern Precinct.
	A flood emergency management plan will be provided at a later stage prior to occupation of the building.
Lifts and escalators may not be operational during extreme floods. It is not considered acceptable for persons coming from the basement to exit onto the street in extreme floods. Direct stair access must be provided to refuge internal to the building.	There is no access to the Basement from the Southern Precinct.
Emergency response planning must consider human behaviour. It is not considered appropriate to expect a worker to remain alone inside a small meter room or similar until an extreme flood event passes.	There is no isolated small meter room in the Southern Precinct. As discussed, floor levels are proposed to be above the 1% AEP flood level + freeboard. Emergency management procedures are not included in the flood study.
Consideration should be given to possible medical evacuations necessary during an extreme flood	As indicated above, floor levels are proposed to be above the 1% AEP flood level + freeboard.
event.  The City of Sydney policy requires a raised area to be provided above the PMF level for shelter in place purposes. The reports have demonstrated cases where the raised area would only be above	In a PMF event maximum water depth is expected to be 18 cm in Area 1 which represents the relevant maximum water depth in a PMF event. Flood

### Comment Response the 1% AEP flood level. In this case, alternative hazard is classified as H1- generally safe for provisions must be in place for evacuation during people, vehicles and buildings. extreme floods, specifically internal access to a Evacuation is not necessary in an extreme flood shelter. event as the level of flood protection achieved within the building is sufficient to protect occupants of the building. All areas except Area 5 are below the PMF level Refer to discussion above. and require consideration of residual risks per above comments. Areas 2 and 3 have stair access to upper floors and areas 4 and 7 have access to Area 2. The emergency response section of the report has not demonstrated suitable consideration of the issues. It is not acceptable to consider the 1% AEP flood event only and state that occupants can 'remain safe' in extreme flood events. The full range of floods must be considered.

#### **Transport for NSW**

Safety Assessment of the Proposed Development

Requested a Stage 2 (Concept Plan) Road Safety Audit for the proposed access arrangements to the loading docks in accordance relevant Austroads guidelines.

Based on the results of the road safety audit, the applicant shall review the design drawings and implement safety measures in consultation with TfNSW as required.

In accordance with design criteria 3P of the WMQ Design Guidelines, both the Northern and Southern loading docks include mechanical turntables to ensure service and refuse collection vehicles can enter and exit in a forward motion. This will minimise potential pedestrian and vehicle conflicts throughout the site.

It is noted that comments to this affect were not provided by TfNSW at the initial RTS stage of similar OSD projects such as Victoria Cross and Pitt Street (north and south). Addressing this request at the construction stage does not compromise the implementation of design measures to address potential pedestrian or road safety (if required).

It is suggested that a condition of consent is included on any consent issued for road safety audits to be carried out prior to Construction Certificate stage to the following effect:

"Prior to the issue of the Construction Certificate. the applicant shall undertake a Stage 2 (Concept Plan) Road Safety Audit for the Loading Dock arrangements to the loading docks. This audit shall be undertaken in accordance with Austroads Guide to Road Safety Part 6: Managing Road Safety Audits and Austroads Guide to Road Safety Part

Comment	Response
	6A: Implementing Road Safety Audits by an independent TfNSW accredited road safety auditor.  Based on the results of the road safety audit, the applicant shall review the design drawings and implement safety measures in consultation with TfNSW as required, prior to the issue of the Construction Certificate."
Green Travel Plan  Requested condition requiring GTP to be updated in consultation with TfNSW, prior to the issue of the Occupation Certificate. The GTP must be implemented accordingly and updated annually.	A Green Travel Plan ( <b>GTP</b> ) was prepared by ptc as part of the EIS (refer Appendix I of the EIS). The applicant will update the GTP in consultation with TfNSW prior to the occupation of the site. It is anticipated that a standard condition requiring the preparation of a GTP would be imposed for the WMQ OSD, as has been imposed for other over station developments.
Transport Access Guide  Request that the applicant be conditioned to update the Transport Access Guide (TAG), in consultation with TfNSW, prior to the issue of the Occupation Certificate.	A GTP was prepared by ptc as part of the application and included a Transport Access Guide (TAG) to inform residents, employees and visitors of the available travel choices. The applicant is committed to updating the TAG in consultation with TfNSW prior to the issue of an Occupation Certificate, as per the requested condition in relation to the TAG matter.  The TAG will include information such as:  information regarding lack of off-street car parking and passenger pick-up and set-down areas at the development site;  suitable nearby drop-off/pick-up locations;  identify areas where drop-off/pick-up is prohibited and instruct visitors to avoid use of these areas; and  suitable nearby taxi zones.
Construction Pedestrian and Traffic Management Requested condition to prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with TfNSW.	A Preliminary Construction Pedestrian and Traffic Management Plan ( <b>CPTMP</b> ) was prepared by ptc. and submitted at Appendix J of the EIS for SSD-10437. The CPTMP will be further updated as required prior to the issue of any construction certificate or any preparatory, demolition or excavation works (whichever is earlier), in consultation with the Sydney Coordination Office within TfNSW in response to the imposed condition

#### Comment Response of consent for construction pedestrian and traffic management. Bike parking for student residents is provided within Active Transport the Building 3 podium in a dedicated bike store. Recommend locating bicycle facilities in secure, Bike parking is provided for social housing convenient, accessible areas close to the main residents and visitors on Level 2 of Building 4. entries, incorporating adequate lighting and passive These are secure parking / storage facilities that surveillance and in accordance with Austroads

The proposal will ensure adequate lighting and clear wayfinding signage is provided throughout the detailed design phases to ensure workers, residents and visitors know where they are travelling.

are easily accessible directly from the adjacent lift

cores near to building entries.

#### Freight and Servicing Management

quidelines.

Request further details in relation to the management of service bays for the whole of WMQ.

All new developments should not rely on on-street parking or loading zones.

Resolve inconsistencies for the development applications in relation to the management of service bays for the whole of Waterloo Metro Quarter (WMQ) in particular in the documents prepared for the Southern Precinct SSDA.

Freight and Servicing Management Plan to be updated in consultation with TfNSW, prior to the issue of any Construction Certificate.

Ptc prepared a Freight and Servicing Management Plan (**FSMP**) (which was appended to 'Appendix I – Traffic and Parking Impact Assessment') to manage processes and procedures for vehicles accessing the loading docks.

In accordance with the SEARs, the FSMP details the loading dock and service provision, adequacy and management with consideration of precinct wide shared loading docks and provides a detailed queuing analysis to show that vehicles will not queue onto the surrounding road network.

As outlined in the supplementary Traffic and Parking Assessment memo prepared by ptc (Appendix S), all loading and servicing will occur within the designated loading docks on-site or the additional service bays within the basement car park. The proposal does not rely on any kerbside loading zones.

The proposed loading docks and service bays within the basement car park will be managed by means of an integrated site-wide booking system. This will allow each bay to be pre-booked prior to arrival to ensure that there are available bays for any delivery or service vehicles.

A concept timetable has been prepared as part of the FSMP to demonstrate that there are a large number of time slots available which allow the bays to be shared across the site amongst the different components of the development. In this regard, the proposed loading/servicing provision is considered

Comment	Response
	acceptable and able to be managed for the coordination of deliveries and servicing.
	The FSMP will be updated to provide a site-wide plan in consultation with TfNSW prior to the issue of any Construction Certificate. The applicant will implement the FSMP following the issue of an Occupation Certificate.
The single dock facility is unlikely to be sufficient to service the Southern Precinct, which is to accommodate more than 500 units with 435 student accommodation units. At the beginning and end of trimesters/semesters of the universities, it is likely that there would be movement of student residents of this developments. As a result, there would be demand for servicing activities (such as removalist and the like) during this period.	Provision for an additional B99 vehicle space has been provided for in the Southern Precinct loading dock.
Sydney Metro Corridor Protection	
No comments.	No response required.
Sydney Water	
Water Servicing	Noted. No response required.
Potable water servicing should be available via a 150mm CICL watermain (laid in 1897) on Botany Road. Amplifications or alterations to the potable water network may be required complying with the Water Services Association of Australia (WSAA) code – Sydney Water edition.	
Recycled Water Servicing	
Sydney Water is open to working in partnership with developers to consider potential decentralised recycled water servicing solutions that may offset potable water demands for irrigation, toilet flushing and domestic washing machines, as well as air cooling towers. Consideration can also be given for rainwater capture and stormwater runoff reduction.	
Wastewater Servicing	
Wastewater servicing should be available via a 400 VC wastewater main (laid in 1891) within the property boundary.	
Amplifications or alterations to the wastewater network may be required complying with the Water	

#### Comment

#### Response

Services Association of Australia (WSAA) code -Sydney Water edition.

#### Stormwater

Our available records indicate there that a major Sydney Water stormwater channel located on the western side of Cope Street. Detailed requirements, including any potential extensions or amplifications, will be provided once the development is referred to Sydney Water for a Section 73 application.

#### **NSW Health**

#### Cumulative Impacts

Consider cumulative impacts and mitigation measures beyond those normally employed for isolated impacts.

Potential broader cumulative impacts on concurrent / consecutive projects and further mitigation measures will be considered and managed accordingly throughout the ongoing detailed design, construction and operational phases of the project. Where appropriate, additional mitigation measures will be considered and implemented when required.

#### Noise Impacts

Support the amended plans resulting in fewer residences experiencing traffic noise exceedances than were expected from earlier plans.

All reasonable and feasible mitigation measures should be undertaken to further minimise traffic noise exceedances to residences requiring alternative sources of ventilation.

All reasonable and feasible best practice noise mitigation measures should be undertaken to minimise exceeding noise management levels, including mitigating noise generated by truck movements as well as engaging an acoustics consultant given the size of the overall development.

Noted. To date, all reasonable and feasible acoustic mitigation measures have been considered and implemented into the detailed design of the residential buildings. A technical memo has been prepared by Stantec and submitted at Appendix K.

#### Public/active transport incentives

Support the incentives to use public, active, and shared transport. Clarify on basement plans if access to parking/bike parking/car share spaces is equitable for those in social housing, affordable housing, and private housing residences.

Not specifically relevant to SSD-10437. Notwithstanding this, the basement car park (SSD-10438) accommodates vehicle parking to support several uses including commercial, residential accommodation, social housing, a place of public workshop (adjacent church) and Sydney Metro. In addition, the basement facilitates provisions for car share, commercial and retail EOTF, as well as commercial, retail and residential bicycle parking to

Comment	Response
	encourage and support active and public transport opportunities available at the WMQ site and within the surrounds.
	The Basement Level P1 Plan clearly denotes parking spaces for affordable housing, private housing, social housing and car share. This includes 67 parking spaces for private and affordable housing (for Building 2), eight (8) social housing spaces (for Building 4) and a total of four (4) car share spaces. These provisions are below the maximum permissible parking spaces in accordance with relevant SLEP 2012, SDCP 2012 and concept SSD 9393 conditions of consent. Furthermore, the parking provisions are suitable for the number of apartments for the overall WMQ site and are consistent with the objective of providing reduced car parking in proximity to public transport.
	All parking areas are easily accessible from the Southern Precinct via the respective lift cores for Buildings 1 and 2, as well as off Church Square.
Water recycling/rainwater  Support water recycling however public health risks from using recycled water will need to be managed appropriately, including approval by the appropriate regulatory authorities.	Noted. The proposal will ensure potential public health risks from using recycled water will need to be managed appropriately.

#### **5.2. CITY OF SYDNEY COMMENTS**

A response to the matters raised by the City of Sydney either to the entire Waterloo Metro Quarter OSD proposal or specifically in relation to the Southern Precinct SSD DA is provided in Table 6 below.

Table 6 Response to Public Authority Submissions - Southern Precinct SSD DA

Comment	Response	
Social Planning and community land uses		
Affordable housing - The development must be held to provide the affordable housing in perpetuity as previously promised and in accordance with the statutory provisions (Clause 6.45 (2)) applicable to the Metro Quarter.	Affordable housing is proposed to be located within the Central Precinct (SSD-10439), which will be owned by a community housing operator to be utilised as affordable housing in perpetuity.	
A wholistic approach to development - The developer and DPIE are to have greater consideration to the provision of community infrastructure and the future redevelopment of the	To avoid duplication of infrastructure and community uses, a 'whole of precinct' approach has been adopted in the development of the WMQ OSD. The Southern Precinct will deliver the Cope	

#### Comment Response Waterloo Estate to avoid duplication of Street Plaza, and a 'Makerspace' tenancy which infrastructure, provide flexible spaces for will complement the community facilities and community uses and adequately meet the needs of community uses proposed in the other detailed the community in the decades to come. SSD DAs. As outlined in the Consultation Report submitted with the EIS, over the next few years while the station is being built, engagement will occur with community organisations to identify locally relevant activations for publicly accessible areas and facilities when the precinct is operational. For example, the nature and operation of the Makerspace will be developed over the three-year construction period in consultation with the community to ensure it is responsive to the needs of the community. Engaging with the community - The development The Public Art Strategy and Placemaking Strategy must imbed commitments to culturally appropriate have placed a strong emphasis on recognition and design and community consultation in future celebration of culturally appropriate design, contracts and tenders. specifically Aboriginal culture, as well as multicultural and social diversity of the area. Opportunities for skill development with local NCIE, TAFE, retailers and community services, as well as youth at risk and mature age ex-offenders or people in recovery are a high priority. Centre-based childcare Not relevant to SSD-10437. Social enterprise café Not relevant to SSD-10437. Makerspace - Consider the space would be best The Makerspace is proposed to support community used as workspaces for industrial design and uses on the site in addition to the community woodwork type practices. Recommend the fit out of facilities provided within the Central Precinct and the space happen after construction with further required in accordance with clause 6.45 of the SLEP 2012. As noted in the Consultation Report, input from the City. the details of this program and the nature and operation of the Makerspace will be developed over the three-year construction period. The fit-out of the space will occur after construction. Place Manager - Further information regarding the A place manager will be appointed by the Precinct role of a place manager to coordinate activities on Leadership Group to administer activation and site. place making activities. This role will be filled prior to PC and will be the point of contact for the community on all (nonmetro) issues related to the development. The role is yet to be fully defined by the Precinct Leadership Group however it is expected to have a

#### Comment Response stated mission to support positive social, cultural and environmental interactions between the community, commuters, visitors, tenants and residents. Practically, this will include both a community engagement role as well as administrative tasks around events and space management. They will be available to meet with the future Waterloo South redevelopment team as appropriate. Voluntary Planning Agreement - Any Planning A Voluntary Planning Agreement is not proposed to Agreement should address the provision of a place be entered into order to satisfy condition A12 of the manager and require the social enterprise cafe and concept approval (SSD 9393). The requirement for makerspace to be operated by an appropriate community facilities is satisfied through the NGO, NFP or other suitable organisation in provision of a centre-based childcare facility to be perpetuity, negotiated in consultation with the City operated by a non-for-profit entity as outlined in of Sydney. SSD-10439 and at Appendix L. Non-compliance with development standards Active Frontages - The location of services and The Botany Road frontage contains three small infrastructure in areas fronting Botany and portions of façade which are not considered Wellington Street is contrary to Clause 7.27 and activated by business premises or retail premises. Section 3I of the Waterloo Metro Design and These portions of Building 1 and Building 3 contain Amenity Guidelines. an entrance to end of trip facilities, a fire stair exit, substation, fire control room, switch room and other critical building services. Additionally, the Wellington Street frontage contains two substations, a fire control room and two stairs accessing the mezzanine level above. A detailed Clause 4.6 Variation request has been prepared and is included at Appendix W. The request concludes that the minor variations to the development standard are justified in the circumstances of the case, as: The objectives of the development standard are still achieved. Additional internal activation ensures precinct wide activation is achieved. There are sufficient planning grounds to support the proposed development. Location of loading facilities - It would have been Noted. Service vehicle entry points have been preferable for loading facilities to be co-located located as envisaged under the concept SSD DA to underground within the basement car park to allow ensure the overall site operations and functionality

for greater activation on these streets and reduce

vehicle crossings across the site. However, it is

of both the metro station and commercial aspect of

the remaining development.

Comment	Response
acknowledged that this option would require excavation under the Church which does not form part of the application site and that the driveway is required on Botany Road for servicing the metro.	
Clause 4.6 - The applicant must provide a statement addressing Clause 4.6 of the SLEP to overcome non-compliance with Clause 7.27.	Noted. A detailed Clause 4.6 Variation Request has been included at Appendix W.

#### **Design Excellence**

Wind - concerned regarding the Raglan Street and Cope Street plazas and areas surrounding the retail tenancies for sitting and outdoor dining. The development fails to satisfy Section 3G of the Waterloo Metro Quarter Design and Amenity Guidelines.

An amended wind assessment has been prepared by RWDI and submitted at Appendix H.

#### Raglan Street

The wind conditions along Raglan Street generally satisfy the standing comfort criteria throughout the year. Localised areas at the eastern and western ends of Raglan Street are exposed to the northeasterlies and westerly winds respectively, which interact with the built form resulting in conditions which satisfy the walking criteria. The inclusion of street trees in their initial state and awnings on the subject development is noted to further improve these conditions by helping to filter these winds directed along Raglan Street and reducing downwashed winds from the form above. such the majority of the Raglan Street area will satisfy the standing criteria.

A portion of the Raglan Plaza space is also noted to satisfy the sitting criteria during the summer months. Only one location at the corner of Raglan Street and Botany Road is noted to marginally exceed the standing criteria (94% of the time satisfy) during the summer months.

It is noted that as the tree planting along Raglan Street matures, the conditions will further improve, with a large number of locations satisfying the sitting criteria, especially during the cooler winter months.

#### **Cope Street Plaza**

Cope Street Plaza is noted to generally satisfy the standing criteria without the consideration of landscaping within the plaza. Some localised areas at the southern end of the plaza satisfy the walking

#### Comment

#### Response

criteria which is in line with the wind comfort standards. Areas adjacent to Building 2 where outdoor seating is noted to be proposed will satisfy the sitting criteria throughout the year without any mitigation measures.

Consideration has been made for the inclusion of landscaping in the form of trees at the southern and northern ends of the plaza, with slightly more mature trees along Cope Street. These are noted to ensure that conditions throughout the entire Cope Street Plaza will satisfy either the standing or sitting criteria throughout the year. This includes areas adjacent to Building 2 where seating areas are proposed in the landscape design.

Currently over 30% of the Cope Street Plaza area achieves sitting conditions throughout the year, noting the modelling considered tree planting at an immature state. The majority of the plaza (over 60%) was found to achieve sitting conditions for 90% or more of the time with the northern portion found to be slightly more beneficial during the winter period due to the shielding from the prevailing westerly winds. It should be noted that the wind tunnel modelling does not include the raised planters or moulded soil elements within Cope Street Plaza landscape design. These elements will further enhance localised wind conditions for the adjacent seating areas within Cope Street Plaza.

It is noted that as documented in the Design Integrity Report, the proposed design of the Cope Street Plaza has been supported by the DRP. The DRP specifically stated on 20 November 2020 that "The Panel accepts the investigations undertaken in response to the Panels comments re. wind mitigation, and supports the design team's recommendation not to plant additional trees to the Cope Street entrance, as the anticipated wind conditions are already acceptable and any minor improvement to wind mitigation afforded by additional does not outweigh the impediment they may create to wayfinding, accessibility and solar access."

#### Section 3G

The inclusion of awning elements and street tree planting noted in the landscape plan results in the

Comment	Response
	entire bus stop zone as well as the pedestrian crossing areas satisfying the standing criteria as outlined in the Waterloo Metro Quarter Design and Amenity Guidelines. Furthermore, areas for the bus stop waiting zone will also satisfy the sitting criteria conditions.
Awnings – all awnings located over the public domain and through-site links are to be between 3.2m and 4.2m above finished ground level and to be setback a minimum 800mm from the kerb. Awning widths are to be between 2 metres and 3.6 metres whilst remaining clear of smartpoles by 1 metre and street trees by 1.5 metres.	The design incorporates a variety of awning types to provide shelter from the elements in front of building entries. The variety of awning types is consistent with the Urban Design principles for the precinct, Building 3 has an eclectic mix of awning types.  Types C, D and E are consistent with the City of Sydney requirements. Types A and B are typically lower to create a more intimate scale to the community space. These awnings are located above an elevated terrace, as opposed to a typical street footpath. All awnings proposed on Building 3 and 4 are compliant.
Building 1 – Amending Application	
a. Clause 6.45(2)(d) requires consideration of the Waterloo Metro Design and Amenity Guidelines prior to determining the application.	Minor changes are proposed to the WMQ Design Guidelines as outlined at Appendix G.
b. The analysis provided does not demonstrate that Design Criteria 4 of Design Guideline 3M is met and does not respond to the specificity of the criteria, which requires analysis of both 'at grade' areas and living rooms windows (living rooms windows are not addressed).	Not relevant to SSD-10437. However, it is noted that additional analysis into overshadowing impacts associated with the Southern Precinct is outlined at Appendix N and discussed within this report.
The analysis does not acknowledge that properties to the south of the site are impacted to an extent which exceeds the criteria. T	
The overshadowing analysis indicates a very minor reduction only in overshadowing to Alexandria Park between 9am and 10am. The application therefore does not achieve the improvements anticipated in the Guidelines to improve solar access to Alexandria Park through detailed design by reducing the northern tower only, which is not responsible for the non-compliant overshadowing of Alexandria Park.	
Building 1 (Northern Precinct)	Not relevant to SSD-10437.

Comment	Response	
Building 2 (Central Precinct)	Not relevant to SSD-10437.	
Buildings 3 and 4 (Southern Precinct)		
a. Blank side walls - The north and east elevations of Building 3 feature large expanses of solid cladding. The east elevation is proposed to be clad in a moderately dark colour. The design would be improved by adding a window to the east wall of the studios in the SE corner on levels 6 and above. While the cladding is articulated into horizontal and vertical framing with infill panels, the materials for each of the elements is the same, resulting in monotony. This could be relieved by using alternate materials or textures for the infill panels.	An additional window is proposed to the south-east studios on levels 3 to 21 to articulate the eastern elevation. The addition of this window will also improve solar access to 20 studios that are currently south facing and improve easterly views to this corner studio.	
	The Design Review Panel also support the additional windows proposed to the studios to break up the eastern façade blank walls.	
	The following design measures have been adopte to further articulate the north and east elevations:	
	Eastern Elevation	
	<ul> <li>Articulated into two volumes with corridor expressed as a glass slot.</li> </ul>	
	<ul> <li>Volumes stepped in plan to emphasise articulation.</li> </ul>	
	<ul> <li>Grid frame breaks down scale.</li> </ul>	
	<ul><li>Window to the twin room.</li></ul>	
	<ul> <li>Solid aluminium cladding - Medium bronze powder coat colour.</li> </ul>	
	Northern Elevation	
	<ul> <li>Articulated into two volumes with corridor expressed as a glass slot.</li> </ul>	
	<ul> <li>Grid frame breaks down scale.</li> </ul>	
	<ul> <li>Windows to corner studios further reduces the extent of solid cladding.</li> </ul>	
b. Lack of certainty or clarity of the actual finishes. Actual products must be specified.	Additional information regarding the proposed materials and finishes is provided at Appendix B.	
c. Require clarity on the proposed glazing (i.e. performance vision glass). Clear glazing is always preferred.	In coordination with the facade consultant, the architects are currently exploring a range of glass products to meet both the desired building aesthetic and the required environmental performance. The preference is for high VLT, low	

reflectivity glass with a neutral body tint.

#### Comment Response d. The stainless-steel tensile wire mesh screen Noted. Refer to supplementary architectural design should be specified as "marine grade." report at Appendix B. e. Support Level 9 plant room. Recommend a This suggestion from the City of Sydney is noted. condition of consent to require the integration of all The proposed development has sought to integrate roof services with the Level 9 plant room and to building services as much as possible to avoid any prohibit the installation of any roof plant on any visual impact associated with roof plant. other areas of the roof. Amenity - Central Residential Building Not relevant to SSD-10437.

#### Amenity - Students

External sun shading – the design includes some elements for shading to the western frontage, however the current measures are not considered to properly address the building's exposure to direct western summer 10 sun and urban heat considerations. Ideally, the west facade should be capable of providing close to 100% shading on extreme heat days.

On the northern facade, the design does not provide any shading. The design concept would not be compromised through the addition of horizontal shading elements, which could be incorporated within the window framing, similar to the proposed "thin horizontal sunshade" which is proposed on the western elevation.

On the western elevation, the horizontal sunshade has no effect on low altitude afternoon summer sun. The Design Integrity report notes that prior to closing out this issue, the Panel was supportive of the proposed 'moveable screens' solution. This has now been removed from the scheme and further endorsement should be sought from the Panel. The application of both changes discussed above could easily be achieved through a condition of consent and the City is able to provide the wording upon request.

#### Western elevation

A technical memo has been prepared by Cundall and submitted at Appendix P. The memo addresses the effectiveness of the proposed shading strategy to the western facade. The study is based on the layout and façade design of a typical west-facing studio. Façade solar irradiation under various horizontal and vertical shading scenarios are compared against both the current DA design and a design without any external shading.

The optimum fixed external shading strategy on the west façade is a combination of horizontal and vertical shades. The current design (400mm shading depth) reduces the solar irradiance on the external face of window by approximately 40% compared to an unshaded window.

A shadow box spandrel at the lower level further reduces the glass area. The extent of glass to the west elevation is approximately 32%- (i.e 2/3 solid).

#### Northern elevation

The northern facade currently has 250mm horizontal sunshades located directly above each window.

The north elevation is heavily shaded by the adjacent buildings, particularly to the lower levels. As the upper levels are less shaded by adjacent buildings, the horizontal sunshades to Level 16-23 are proposed to be increased to 400mm deep, to match the depth of the horizontal sunshades on the western elevation.

## Comment Response The shadow analysis demonstrates that the studios to the lower 2/3 of the elevation are heavily shaded throughout the day by adjacent buildings. It is proposed to: Increase depth of horizontal sunshades to 400mm to Levels 16-23. Studios to these levels are shaded to a lesser extent by the adjacent buildings. Retain 250mm deep horizontal sunshades to Levels 03-15. Studios to these levels are heavily shaded throughout the day by adjacent buildings Wind – recommend design refinements to improve An updated Wind Impact Assessment has been amenity of communal terrace to meet the sitting prepared by RWDI and included at Appendix H. comfort criteria. The Level 2 terrace on Building 3 currently satisfies standing conditions. To improve sitting conditions, the design of the communal roof terrace to Building 3 has been developed in response to the comments regarding wind conditions across the precinct, including: Pergola moved further west in line with the tower above Pergola length increased The pergola is proposed to have a mix of operable and fixed louvres for weather protection while maintaining solar access. Whilst item 25 relates to the Building 3 terrace, the pergola/awning structure to the communal roof terrace on Building 4 has been extended 2.6m to the north to further improve the wind conditions for residents. Since lodgement of the SSD DA, the applicant has **Visual Privacy** – Insufficient building separation engaged with both City of Sydney Council and the and visual privacy between the west facing social housing apartments and east facing boarding DRP to discuss potential design measures to rooms. Alternative design solution to boarding room improve visual privacy to the west-facing social housing apartments and east-facing boarding privacy screens is required. rooms. The visual privacy concerns largely stem from the 18m separation distance at Level 05 to 09. As discussed in the EIS, the proposed social housing development is constructed directly above the metro services box. SEPP 65 does not apply to the metro services box. Therefore, the building

separation requirements are not considered

#### Response

applicable to the proposed development below a height of 19m. Accordingly, the first habitable 'floor level' of the development is technically at RL 35.76. If the ADG requirements for buildings up to four storeys (approx. 12m) is applied to the building above the Metro Services Box, the proposed development is fully compliant with the ADG separation requirements with the exception of Level 9 which seeks a 6m variation to the 24m setback requirement. If the minimum building separation requirements are applied to both the Metro Services Box and the social housing building above, the proposal seeks a 6m variation to the minimum separation requirements on Level 5 to Level 9. For the purpose of this assessment, the worst-case scenario has been considered.

The concept DA envelope for Building 3 and 4 has a number of constraints that have limited the ability to provide increased building separation. These constraints include:

- The envelopes for Building 3 and 4 are located back to back in an L-shaped plan, limiting the potential to orientate the building layouts to face away from one another.
- To transfer to ground, the Building 4 lift core is located within the Building 3 envelope. The internal corner, which would typically be used for the core, becomes usable floor space.
- The Building 4 envelope is atypical in the sense that it is located above a ~20m high metro box and being adjacent to the 3-storey high podium of Building 3.
- To utilise the Building 4 envelope efficiently, a double loaded corridor is required, with some apartments orientated to the west.

Notwithstanding this, the reduced building separation only affects a total of 5 apartments (Apartment 2C) on levels 5 to 9, or 7% of the total number of apartments in Building 4. The layout for Apartment 2C has been designed to maximise functionality, privacy and outlook by:

Locating the living space as far north as possible to improve visual privacy to student

## Comment Response

accommodation rooms and the adjacent social housing lift lobby.

The in-board living space helps further improve visual privacy and reduces the facade heat load in summer.

Alternative layouts A and B were considered to relocate the living space and balcony further south and achieve direct solar access to this apartment in midwinter. However, given the constraints of the envelope, and the required building structure, these alternative layouts did not achieve the desired outcomes for apartment living.

The remainder of the dwellings comply with the minimum building separation requirements.

The following privacy measures are proposed to Building 3 and 4 to reduce opportunities for overlooking:

#### **Building 4**

- Glazing to bedrooms is limited to a single window that is 1.05m wide with 0.8m high solid spandrels.
- Bedroom windows are located in the corner of the rooms to limit view angles.
- Perforated aluminium balustrades provide further visual privacy to the west facing balcony.
- Providing a high level of facade depth and solidity on the western facade through the use of projecting horizontal slab edges, vertical brick piers and spandrels to windows helps restricts views from floors above and below.

#### **Building 3**

- Angled privacy/sunscreens to the Building 3 facade help to partially obscure the windows to the student accommodation studios.
- Integrated roller blinds installed to all studios.
- Locating the shared common space on western side of the floorplate, therefore not overlooking other buildings.

Comment	Response
	The detailed design of privacy screening will be subject to further endorsement by the DRP.

#### Amenity - Social Housing

Solar access – do not support justification regarding solar access after 3pm.

Consider some assertions regarding solar access are overstated, for example the quality of solar access to the living room of apartment 106 (the four-bedroom apartment).

The analysis ignores the fixed vertical louvres to the east facing studios on Level 2 to 7 which block winter morning sunlight to living spaces. This removes 4 apartments per floor on levels 2-7 (24 apartments) and reduces the tally to well below 70%.

This issue can easily be mitigated through a condition of consent requiring the fixed vertical blades to be changed to operable vertical blades. It should be noted that the Design Integrity Report records at item 4.03 that the supported privacy solution for these apartments is a "sliding privacy and sunscreen". This has now been removed from the scheme and further endorsement should be sought from the Panel.

A Technical Memo addressing solar access has been prepared by RWDI and included at Appendix M in response to Item 27.

As per the ADG, living rooms and private open spaces of at least 70% of apartments are to receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid-winter. A maximum of 15% of apartments in a building are to receive no direct sunlight between 9am and 3pm at mid-winter.

A total of 73% (51 out of 70) of apartments within Building 4 receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid-winter, which complies with the ADG.

21% of apartments (15 out of 70) on Building 4 receive no direct sunlight of any size on their living space windows and private open space and therefore does not comply with the ADG criteria.

The proposal does not strictly comply with the ADG by virtue of the site constraints, which limit the ability to achieve solar access to Building 4. These constraints include:

- The envelopes for Building 3 and 4 are located back-to-back in an L-shaped plan, reducing the extent of available frontage.
- Solar access to west facing apartments in mid-winter is limited by the shadow cast by the Central Building.
- The location of the core limits the extent of west facing apartments.
- To utilise the Building 4 envelope efficiently a double loaded corridor is required.
- The solar access studies from the concept DA demonstrate that the west elevation of Building 4 did not receive sunlight between 1pm and 3pm at mid-winter.

As outlined below, the proposal has sought to respond to both the site constraints and design guidance provided within the ADG. It should be

Comment	Response
	noted that the design guidance acknowledges that achieving the design criteria may not be possible on some sites such as:
	Where greater residential amenity can be achieved along a busy road or rail line by orientating the living rooms away from the noise source;
	<ul><li>On south facing sloping sites;</li></ul>
	Where significant views are oriented away from the desired aspect for direct sunlight.
	The proposal has sought guidance from the ADG to optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space. Design strategies include:
	The design maximises north and east facing apartments and minimises the quantity of apartments to the south and west.
	The east facing volume has been designed to be deeper (than the west facing volume) to maximise apartments on this frontage for solar access.
	<ul> <li>Multiple windows to the corridors and lift lobby to provide solar access and natural daylight to the common spaces.</li> </ul>
	The communal roof terrace on Level 09 has been orientated to the north east, has a high level of solar access and is accessible for all residents.
	With regards to the fixed vertical louvres to the east facing studios on level 2 to 7, the studio apartments achieve two hours solar access to the living space via the glazed sliding door to the side of the balcony. The solar access analysis contains 'views from the sun' diagrams which demonstrate that the studio apartments receive direct sunlight to the living space from 9:00am to 11:30am.
Natural cross ventilation – do not support justification regarding natural cross ventilation. Consider only 34% of apartments meet the	A Technical Memo addressing natural ventilation has been prepared by RWDI and included at Appendix I in response to Item 28.
definition of naturally cross ventilated.	As discussed above, the concept DA envelope for Buildings 3 and 4 has several constraints that have

Plenums must not be used to claim natural cross ventilation as they do not provide equal sized outlets for pressure-based airflows.

Corner apartments that do not have opposite openings of equal size and do not provide a logical flow path of air should not be counted.

Natural ventilation paths should not cross common circulation spaces.

Furthermore, 21 apartments are identified as being noise affected and are designed with acoustic ventilators to achieve natural ventilation and acoustic privacy to achieve Objectives 3B-2, 4J-1 and 4J-2 of the ADG. As a result, only 10% of apartments achieve natural cross ventilation.

#### Response

limited the ability to provide natural cross ventilation to Building 4. In addition, the brief from Land and Housing Corporation has an apartment mix that is not comparable with a typical build-to-sell apartment development in that it requires 26 studio apartments, making up 37% of the total development. The higher than usual quantity of single aspect apartments limits the number of apartments than can be located on building corners. Two storev apartments were also not considered to be appropriate for this typology of housing where access and mobility were key design considerations.

To efficiently utilise the available facade frontage, these studios have been designed as narrower, single aspect apartments.

Given the constraints of the site, the inclusion of plenums and open corridors was considered as part of the design to further enhance the natural cross ventilation performance of the building. This approach is in line with the design guidance of Objective 4B-2 which notes that single aspect apartment windows can be augmented with plenums and light wells, although generally not suitable for natural cross ventilation, can be considered in restricted cases. This approach has also been undertaken for other developments in the Sydney region, including throughout the Waterloo/Zetland precinct. Minimum effective open areas of the plenum of 0.4m2 has been noted, in line with previously studied projects and site measurements for suitable flow rates.

#### In summary:

A total of 33 (47.1%) dwellings are naturally cross ventilated by virtue of windows facing in more than one orientation. To achieve cross ventilation amenity elsewhere, the following alternative strategies are proposed:

The south west 2 bedroom apartment takes advantage of the cross ventilation flow path through the open lift lobby to create a pressure differential. This pressure differential draws air through the apartment via openings on opposing sides.

Comment	Response
	<ul> <li>Two apartments on Levels 06 &amp; 07 will be connected to the northern slot via a plenum in the ceiling of the common corridor to provide natural cross ventilation. In these instances, the distance between openings does not exceed 18m.</li> <li>The addition of these alternate cross ventilation solutions result in 42/70 units being cross ventilated.</li> </ul>

#### Natural ventilation and noise

The applicant has identified apartments within the central and southern precincts as being noise affected and requiring acoustically attenuated natural (non-mechanical) ventilation systems to meet these objectives.

A technical response to Item 29-33 has been prepared by Stantec and submitted at Appendix K.

The building has been sited and layouts designed to minimise the impact of external noise and pollution to the most sensitive spaces such as bedrooms.

The applicant has identified apartments within the southern precinct as being noise affected and requiring an alternative means of ventilation that meets the requirements of the Building Code of Australia (mechanical or natural). The ISEPP 2007 and DPIE Development Near Rail Corridors and Busy Roads – Interim Guideline states "if internal noise levels with windows or doors open exceed the criteria by more than 10dBA, the design of the ventilation for these rooms should be such that occupants can leave the windows closed, if they so desire, and also to meet the ventilation requirements of the Building Code of Australia".

The applicant has integrated an alternative means of natural ventilation within the proposed development to align with the site's sustainability targets and to offer enhanced benefit and living to the occupants of the apartments.

Concerned the acoustic report has not sufficiently assessed the performance of the building (Central and South) to mitigate road noise, and the application has not adequately demonstrated compliance with Clause 102 of the State Environmental Planning Policy (Infrastructure) (ISEPP).

As per above, a technical memo has been prepared by Stantec and submitted at Appendix K.

As discussed below, the acoustic report has assessed the performance of the buildings to mitigate road noise and demonstrated compliance with Clause 102 of the State Environmental Planning Policy (Infrastructure) (ISEPP).

Road noise from Botany Road has been measured both before and during COVID-19. The monitor on

## Comment Response Botany Roa

Botany Road was installed in a location similar to that of SLR's monitoring location for the concept SSD DA. Comparing the LAeq,15h (day) and LAeq,9h (night) noise data from both periods, the traffic noise emissions measured during COVID-19 are 1 dB(A) larger and 2 dB(A) smaller than that prior to, respectively. Given this conclusion, the higher of the two noise levels for each period was used to calibrate the road noise emissions model for Botany Road. Extensive noise monitoring studies were conducted to carefully quantify the magnitude of noise emissions from Botany Road.

The noise emissions model used to calculate the incident noise levels on the façade of Building 2 was created within SoundPLAN, a model recognized by DPIE for use for projects of this scale and complexity. The modelling provided the incident noise levels on the façade for use when calculating the resultant internal noise level within the space, applying the transmission loss associated with the components making up the building envelope (glass, solid wall, etc).

The required acoustic performance of the two types of elements making up the building envelope has been provided to demonstrate compliance with clause 102 of the ISEPP 2007. The development will comply with the noise criteria applied to bedrooms and anywhere else within the development, which is:

- (a) in any bedroom in the residential accommodation—35 dB(A) at any time between 10 pm and 7 am,
- (b) anywhere else in the residential accommodation (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.

Compliance with the requirements of this clause has been stated, so long as the acoustic performances outlined in the report are implemented.

The report focuses on the incorrect measure for assessing acoustic privacy with windows open, which under the Development Near Busy Roads & Rail Corridors - Interim Guideline is the criteria under Clause 102(3) + 10dB.

The measure for which acoustic privacy was assessed with windows open was using the criteria outlined within the SDCP 2012. This is consistent with the requirements of the WMQ Design Guidelines, which is the governing guideline for the

## Comment Response assessment of traffic noise impacts on the residential spaces. Where windows are required to be closed and an If an occupant chooses to operate/open another alternative ventilation strategy proposed, the natural ventilated opening within the façade to development must demonstrate that the criteria provide natural ventilation within the space (for under Clause 102 (3) is met without the 10dB example, through an acoustically attenuated variance. opening such as the acoustic ventilator), it is reasonable to assign a criteria similar to what a naturally ventilated opening would be required to achieve, that is, 102(3) + 10 dB(A). If the alternative means of ventilation integrated within this design was mechanical, then it is reasonable to assume the fan will supply air into the noise-affected space and also meet criteria under clause 102 (3) without the 10dB(A) variance. It is not reasonable to force a direct natural ventilation opening in a façade (window or acoustic ventilator) to perform identically to a solid pane of glass, particularly the glass types and performances nominated facing Botany Road. The ventilation rates modelled through each apartment have been designed to meet the Building Code of Australia, together with the City of Sydney's Draft Alternative natural ventilation of apartments in noisy environments – Performance Pathway Guideline. The points above show how Stantec have derived the criteria for the naturally ventilated opening

Acoustic report has not used correct criteria to demonstrate compliance with Clause 102(3). The City notes that the following information is pertinent to demonstrating compliance with the standard and must be forthcoming in the report:

- (a) The road traffic noise levels through noise monitoring, noting that traffic volumes may currently be depressed due to the pandemic.
- (b) The relevant materials and finishes of the building, both internal and external.

Road traffic noise level data has been provided within the report, both prior to COVID-19 and during the COVID-19 pandemic. Please see response to Item 30 for more information.

being in the open position, and why it is reasonable to assume an opening/hole directly exposed in the façade should not perform similar to that of a solid façade element such as a solid wall or glass lite.

Materials and finishes of the building have been provided for to demonstrate compliance with clause 102(3) of the ISEPP 2007. This has been provided in the form of glazing type acoustic performance and solid façade type acoustic performance.

Windows and doors shall have the ability to be operable where required for functionality and design, to meet the requirements of the ADG and

(c) Whether the windows or doors can be open or are required to be closed.

#### Response

BCA. The occupant will choose to open the window, door or acoustic ventilator to provide natural ventilation to the apartment. The report also outlines the spaces within apartments where the occupant should not have to rely on opening a window or door to provide natural ventilation to the apartment, and instead be provided with an alternative means of ventilation. These spaces have been noted as "noise-affected" and have been identified for relevant apartments within the Southern Precinct.

City staff are continuing to review the efficacy of the alternative natural ventilation system and will provide an addendum to this submission when that review is complete. However, concern is raised regarding the assessment of the acoustic performance of the system. There is no calculation of the ventilator performance in keeping with the variables outlined above. As the windows closed ventilator open design criteria within the report is incorrect, the ventilator performance requirement will need to be increased.

An addendum letter has been prepared by Stantec and submitted at Appendix I. This letter specifically responds to City of Sydney's submission and peer review by Flux Consultants.

#### Landscaping

Landscape drawings lack some critical information required to confirm the detail and viability of the proposals.

Additional detail is provided within the amended Landscape Plans for the Southern Precinct at Appendix C.

Request the applicant provides top of wall levels to all walls, and more detailed spot levels across all landscape spaces on all buildings and ground level. All landscape plans have been updated to include more detailed levels information, providing top of wall and more detailed spot levels.

Request comprehensive landscape sections through all green roofs and accessible landscape terraces, demonstrating soil depth and build-up, as well as the interface with the building.

Sections have been provided for all green roofs and accessible terraces, showing typical soil depths and interfaces with buildings.

Deep soil - Deep soil is underprovided. Sydney DCP and ADG both have a minimum deep soil dimension of three metres. Many of the proposed garden beds are less than this three metre minimum and it is noteworthy that the remaining quantity of compliant deep soil relies heavily on permeable paving. City staff calculate that approximately 470sqm or 5.7% of the site area is allocated to deep soil.

Deep soil areas have been amended and the calculations now only include soil areas with a minimum width of 3m. This includes a 3m wide deep soil area to the Botany Road frontage, removing raised planter retaining walls and providing a continuous planting area with steps bridging this space and permeable surfacing to the cantilevered ramp. The deep soil area allocated to the site now measures 10.4%.

Bollards - The use of bollards is awkward and excessive. To the Cope Street Plaza and the shared surface, bollards are spaced 1.2 metres apart and often directly adjacent to an alternative 'barrier' such as a raised planter or steps. Not only is the duplication of barriers unnecessary, but the 1.2 metres spacing may be prohibitive to wheelchair users who can just get through such a gap. Please remove bollards where they are unnecessary, such as in front of a natural barrier like stairs or a raised planter and increase the spacing of bollards to a more comfortable 1.5 metres.

#### Response

The bollards are required for Hostile Vehicle Mitigation (HVM) and are spaced 1200mm between the outside faces of the bollards. Typical occupied widths of wheelchairs is 800mm therefore the bollard spacing allows for sufficient wheelchair access. Bollards have only been placed where required to meet the HVM requirements as stipulated by Sydney Metro. Should a more generous spacing be agreed by Sydney Metro then this can be accommodated during design development.

Green roofs - Clarify maintenance access to all green roofs and planters. Wherever possible, planting should be able to be maintained without the use of specialist safety systems.

All planters can be maintained safely from the accessible areas of the terraces. Inaccessible green roofs can be safely maintained from maintenance paths around the planters away from the edge of the building.

#### **Tree Protection**

City does not support the high number of trees and existing canopy coverage proposed for removal.

There are 13 trees in total located around the site. These include:

- Wellington Street 3 trees
- Botany Road 8 trees
- Raglan Street 2 trees

Under the CSSI consent, approval was granted for the removal of 8 trees. This application seeks approval for the removal of the remaining five trees located on Wellington Street and Botany Road.

The removal of the five existing trees is essential to allow for the construction of the proposed development. Removing the trees will allow for the undergrounding of overhead power lines along Botany Road. It is also worth noting that the existing trees are significantly compromised by these powerlines, all have been extensively clipped and have unnatural forms and their survival is unlikely.

As part of the wider public domain proposal, a continuous canopy of street trees is proposed along Botany Road, Wellington, Cope and Raglan Street. This significantly improves upon the existing canopy coverage currently provided on site, creating larger areas of shade and urban greening.

Comment	Response
	Kerbside understorey planting and raingardens encircle the site and provide lush planted areas to the footpaths and road edges. The proposed replacement planning will result in an improved streetscape outcome when compared to the existing trees.
The redevelopment of Waterloo Metro will result in a significant loss of existing tree canopy. The various NSW Government documents should be applied to this site, retain medium-high 14 significance trees and increase the canopy coverage of the area including more tree planting within the site.	The proposal is consistent with NSW Government policy and seeks to provide an increase in canopy coverage and urban greening. The public domain proposals provide an increase in tree numbers and ground floor garden beds, creating habitat and shade for pedestrians and residents.
Existing street trees and trees with medium-high retention values must be retained and protected.	An Arborist Report has been prepared by Urban Forestry Australia and submitted with SSD-10437. No trees proposed for removal have a medium to high retention value.
	The arborist has assigned the following retention values to the trees proposed for removal:
	■ Low retention value – 1x
	■ Low to Medium retention value – 1x
	■ Medium retention value – 3x
	As discussed above, the removal of the five trees is essential to allow for the undergrounding of the overhead power lines along Botany Road. The existing trees are significantly compromised by these powerlines, all have been extensively clipped and have unnatural forms.
The location of any new driveway must ensure it does not require the removal of any existing street tree. The driveway shall be appropriately setback so as it does not adversely impact on any existing street trees both below and above ground.	There are no existing trees located on Cope Street where the driveway to the basement or loading docks are proposed.
All trees to be retained must be in accordance with AS 4970-2009 Protection of Trees on Development Sites, a Project Arborist must be engaged to assist with tree management advice during the various stages of the design and construction process.	As outlined in the Landscape Plans at Appendix C, any tree retention is problematic on all four street frontages of the WMQ site, given the extensive replanting strategy committed to by the applicant and Sydney Metro.
City staff met with the developer on 23 November 2020 where a commitment was made to provide the City with detailed sub-service plans (existing and proposed) within the TPZ and SRZ of existing	Further as part of the construction of the metro station, it is noted that in-grounding of above ground HV power lines, and the installation of street lighting on all street frontages will have

#### Comment Response trees and greater detail of their trenched (size, implications on any possible retention of existing location etc). The developer also committed to undertake exploratory root investigations to inform location of new services. This information must be provided in the Response to Submissions. The protection and retention of all existing street As discussed above, the removal of the five trees is a priority for the City of Sydney. Street trees existing trees is essential to enable the are long term assets that the community highly redevelopment of the site and the undergrounding values. The City of Sydney Street Tree Master Plan of overhead power lines along Botany Road. It is includes general street tree protection measures also worth noting that the existing trees are and conditions that must be followed. See Section significantly compromised by these powerlines, all 8 of the document. have been extensively clipped and have unnatural forms. All new street trees must be planted in accordance Adequate provision of deep soil and tree spacing to with the City's STMP 2011, this includes species, create areas of continuous canopy has been adequate spacing (refer to Part D Section 2.2 provided in the public domain. Appropriate detailing STMP), soil and tree pit type etc. and specification will be considered to ensure the successful establishment of street trees. Newly planted trees must meet Australian Standard 2303: Tree Stock for Landscape Use (2015). 52. All street tree plantings must be in accordance with the City's Street Tree Master Plan 2011. The street trees must be a minimum container size of 200 litres, at the time of planting and stock must be sourced well in advance. Heritage Construction Management – request CMP includes The CEMP developed by John Holland dated 30 specific construction methodology strategies to September 2020 and included at Appendix Q of the ensure that bulk excavation adjacent to the EIS will be further developed prior to Waterloo Congregational Church will have no commencement of construction and address physical impact on the stability of the ground specific construction methodology strategies to beneath. ensure that bulk excavation adjacent to the

A detailed dilapidation report of the church and surrounds to record the existing conditions should be prepared and submitted for approval prior to

If any damage to the church fabric occurs during the excavation or the construction, it should be reported to DPIE and City of Sydney along with a

works commencing on site.

This comment is noted, and it is anticipated that this requirement will inform a condition on any development consent issued for the WMQ OSD.

Waterloo Congregational Church will have no physical impact on the stability of the ground

beneath.

This comment is noted, and it is anticipated that this requirement will inform a condition on any development consent issued for the WMQ OSD.

Comment	Response
remediation report to rectify the works in consultation with the heritage consultant.	
Vibration measurements should be conducted on the structure of the Waterloo Congregational Church to ensure the vibration generated on the structure does not exceed the values for cosmetic damage and structural damage outlined in BS 7385 and DIN 4150.	This comment is noted, and it is anticipated that this requirement will inform a condition on any development consent issued for the WMQ OSD.
Detailed material, colours and finishes schedule and sample boards to be provided for all the buildings.	This comment is noted. Additional details regarding materials and finishes are provided within the RtS reports for the Northern, Central, and Southern Precinct SSD DAs. Refer to Appendix B.
A detailed Heritage Interpretation Strategy should be prepared in consultation with the Council, implemented prior to OC and certified by their Heritage Consultant to Council's satisfaction. The HIS should be developed in conjunction with the Landscape and Public Art strategies.	This comment is noted, and it is anticipated that this requirement will inform a condition on any development consent issued for the WMQ OSD.
Adopt all heritage and archaeology related recommendations and strategies in the Heritage Impact Statement, Geotechnical Report, Structural Report, Public Art Strategy, Landscaping Strategy and Heritage Interpretation Strategy.	Noted. All heritage and archaeology related recommendations and strategies in the Heritage Impact Statement, Geotechnical Report, Structural Report, Public Art Strategy, Landscaping Strategy and Heritage Interpretation Strategy will be implemented.

#### **Transport**

#### Walking access

(a) Concerned regarding pedestrian priority and functionality of the new shared street and the surrounding intersections during peak hours (having regard to Section 3D of the Waterloo Metro Design and Amenity Guide), particularly morning peak is of concern.

Vehicle parking on the site should be constrained further to reduce conflicts between people walking to and from the site and people driving through the shared zone.

The Supplementary Traffic and Parking memo prepared by ptc (Appendix S) reiterates that the projected peak hour trip generation for the WMQ basement car park is approximately 57 trips, representing a net reduction of 41 trips in comparison to the concept approval (98 trips). The projected traffic generation of 57 trips is deemed a low traffic volume equating to less than one (1) vehicle trip per minute. The approximate 40% reduction in vehicular trips per hour will reduce potential conflicts between pedestrians and vehicles.

With reference to TTD 2016/001, 'Design and implementation of shared zones including provision for parking, the following is noted:

The proposed shared zone has been designed to ensure that drivers are aware of the clear pedestrian priority, including

## Comment Response promotion of low vehicle speeds. Additional speed control devices can be provided to forcibly reduce vehicle speeds for improved pedestrian safety, where appropriate and if required. WSP have noted that the majority of pedestrians accessing the metro station would utilise Grit Lane or Cope Street Plaza to access the zebra crossings and bus stops along Botany Road. The combination and dispersion of pedestrian movement via these alternate pathways, together with the lower vehicle volumes, reduces pedestrian movements across or through the shared zone and further reduces potential pedestrian-vehicle conflicts. The shared zone will be fully designed at the detailed design stage and will be submitted to TfNSW for approval. The shared zone will be subject to an independent safety audit process to assess the safety aspects of the proposed layout. In addition, a Traffic Management Plan will be prepared and submitted to TfNSW for approval of the design and suitability. (b) It is recommended that level of service for The 'Walking Space Guide' recommends a walking follow Transport for NSW's guidance to minimum of level of service (LoS) C should be ensure that sufficient space is provided to achieve achieved. Internal and adjacent footpaths for the comfortable environments which encourage people WMQ achieve a LoS C or better for both to walk as relevant to the NSW context. 'interchange' and more onerous street criteria typically adopted in a high-pedestrian environment such as WMQ. Raglan Walk and Grit Lane can be considered as a Type 3 or 4 footpath due to the proximity to the metro station (i.e. within 200m) and the number of peak hour users (70-2000 per hour). For these footpath types, a minimum footpath width of 3-3.7m is recommended to achieve a LoS C. The proposed design adopts the "not adjacent" width as it includes additional footpath space (in addition to the clear width) that may comprise street furniture and/or retail frontage. As per the WMQ Project Delivery Agreement between the applicant and Sydney Metro, minimum footpath requirements for the project include a minimum clearance width (free of retail frontages or furniture) of 3.5m for key connections has been provided. This has been determined to

## Comment Response accommodate the anticipated pedestrian flows for the metro station. It is noted that the footpath provision at these locations is significantly wider, though may include some retail frontage or furniture. Overall, the minimum requirements are satisfied. Raglan Place may represent a Type 5 footpath (minimum of 3.9m) and is within 50m of the metro station. A footpath width of 5.5-6.5m is proposed in the design, and a LoS C or better is achieved based on the peak pedestrians per hour. Other internal connections can be treated as Type 2 or 3 footpaths due to their proximity and comparatively lower patronage. In this regard WSP notes the following: Cope Street Plaza and Church Square sufficient width for the shared zone is proposed. Church Lane and Church Yard – behave as Type 2 connections as both developments front onto Wellington Street as their main walkable connection, hence the proposed widths in combination with the adjacent walkable landscaped areas provide sufficient width and capacity. Overall WSP have confirmed that pedestrian movement throughout the Waterloo Metro Quarter OSD satisfies the Walking Space Guide requirements. Vehicle parking Eight residential car spaces for residents of the social housing building will be provided within the (a) The vehicle parking proposed for residential and basement which sits below the Northern and commercial use is excessive for a transit-oriented Central Precincts and is subject to a separate development and should be minimised. SSDA (SSDA 10439). Nil car parking is proposed for residents, staff or visitors of the student accommodation, and visitors of the non-residential components of the proposal.

(b) The amount of parking directly impacts the overall objective of the new metro line which aims to reduce reliance on cars.

The mode share targets to shift private car users to public and active transport uses will never be achieved without making the parking supply competitive.

As discussed above, minimal parking (i.e. 8 spaces) are provided for social housing residents only. The provision of nil parking spaces for the student accommodation and non-residential uses directly aligns with the overall objective of the new metro line which aims to reduce reliance on cars. A Green Travel Plan has also been prepared to

Comment	Response
	encourage a modal shift away from car usage and encourage active transport.
(c) DPIE are strongly advised to insist the proponent work together with the development partners, TfNSW, RMS and strive for 'zero' car parking provision or absolute minimums.	As discussed above, the proposal provides minimal parking for social housing residents only. Nil parking is proposed for the gym and the community space on the basis that the site is highly accessible to high frequency public transport services including buses, trains, light rail and the future Waterloo metro station.
(d) If parking is to be provided, accessible car parking space provision should be prioritised and provided for as per SDCP. All accessible car spaces are to be allocated to adaptable units.	The OSD has been assessed against the relevant accessibility requirements of the Building Code of Australia access requirements and Disability Discrimination Act 1992. The accessible car parking provision is allocated to adaptable units.
(e) Parking for loading and servicing should be prioritised over general vehicle parking. Given the rate of vehicle parking provided the site should provide for the required amount of loading and servicing.	The proposed development provides minimal parking for general vehicles (8 spaces). An additional B99 service vehicle space has also been provided within the Southern Precinct loading dock.
Traffic modelling  (a) It is unclear from the submitted documentation if the traffic modelling includes the cumulative traffic generation from adjacent developments plus the projected traffic generation for the subject proposal.	The traffic modelling does not currently include defined traffic generation from adjacent developments as this information it not currently finalised or available. However, to ensure that the network is being tested to the extent that new developments are expected, the traffic modelling includes a background traffic growth up to the design year.
(b) The zero trip generation rates for student housing are unrealistic.	As discussed above, no car parking is provided for the student accommodation component of the development which is consistent with similar student accommodation developments in the area which have no parking for residents (i.e. Iglu Broadway and Urbanest Darlington). Zero trip generation is therefore reflective of the car parking provision and the proposal has sought to minimise car parking, consistent with the objectives of the City of Sydney to reduce car dependency. It is further noted that the residents of the student accommodation are less likely to own private cars than occupants of residential flat buildings and are anticipated to use public transport and active travel options readily to and from the site.

#### Comment Response (c) The traffic modelling should include changes to The future road network improvements associated the street network and intersections proposed as with the Sydney metro station have been included part of the Metro development. in updated traffic modelling provided at Appendix S. Bike parking This comment is noted. The proposal will deliver bicycle parking and end of trip facilities to (a) Bike parking and end of trip facilities should be encourage sustainable modes of transport and maximised and world class in design and provision maximise patronage of Sydney Metro. As outlined to assist in the transition away from private vehicle in the EIS submitted with SSD-14038, the use. basement design accommodates bicycle parking and end of trip facilities (showers and lockers) for commercial and retail uses in accordance with the SDCP 2012 controls. (b) Bike parking for the student accommodation Bike parking for student accommodation has been should be provided as per residential studio calculated based on the requirements stipulated within apartment rates (i.e. 1 per studio apartment) in the AHSEPP 2009 using rate of 1 space per 5 accordance with design criteria 3 Section 3N of the boarding rooms. Waterloo Metro Design and Amenity Guideline. Real-world bicycle parking occupancy surveys at various sites within the City of Sydney have been undertaken by Iglu. The surveys found that the maximum utilisation of the provided bike spaces as a percentage of total units in the site was approx. 5%. This is significantly lower than the proposed bike parking provision which caters for 20% of units based on AHSEPP rates. As such, the proposed provision of 87 bike spaces for student accommodation is considered generous and appropriate for the development. Loading and servicing If the loading dock requirements are calculated separately for each land use type within the (a) The proposal presents a shortfall of loading and development, this results in a shortfall in service servicing and should be provided as per the SDCP vehicle parking. However, this approach ignores 2012 rates. the ability to accommodate more than one vehicle, per day, in each dock and dismisses the efficiencies created by grouping land uses. The proposed loading docks and service bays within the basement car park will be managed by means of an integrated site-wide booking system. This will allow each bay to be pre-booked prior to arrival to ensure that there are available bays for any delivery or service vehicles. A concept timetable has been prepared as part of the FSMP to demonstrate that there are a large number of

time slots available which allow the bays to be shared across the site amongst the different

components of the development. In this regard, the

Comment	Response
	proposed loading/servicing provision is considered acceptable and able to be managed for the coordination of deliveries and servicing.
	An additional B99 service vehicle space has also been provided within the Southern Precinct loading dock.
(b) All loading and servicing should occur onsite and the development should not be potentially reliant on kerbside loading arrangements which are open to other users and subject to change.	Loading and servicing will occur within the designated loading docks on-site or the service vehicle bays within the basement car park. The proposed development does not rely on kerbside loading zones.
(c) Parking for loading and servicing should be prioritised over general vehicle parking.	The Northern and Southern loading docks are provided with access and egress driveways separate from the basement parking area and therefore do not interact with the general parking access driveways. The remaining service bays located in the basement, will be line marked and signed accordingly and will be solely for the use of general service/loading vehicles (e.g. residents moving into residences and unloading utes and vans). As outlined further this in response, general vehicle parking proposed on the site is less than the site-specific maximum rates that have been prescribed for the site in the SLEP 2012 and the concept approval. As such the proposed car parking spaces are appropriate to support the development.
(d) The design of the loading areas to accommodate a City of Sydney 9.25m waste collection vehicle is supported. This needs to be ensured and should be conditioned.	As outlined in the Supplementary Traffic and Parking Assessment prepared by ptc. (Appendix S), the loading docks have been designed to accommodate entry and egress of a 9.25m Council waste vehicle.
Sustainable development	
General – consider advancing sustainable outcomes.	We note that the City has recognised that the proposed development has made many important commitments to best practice in sustainable developments, in some instances exceeding minimum targets and incorporating many other key targets to reflect current best practice.
Green star – encourages the Applicant and DPIE to move to the new Green Star Buildings tool.	As outlined in the ESD Response provided at Appendix Q, the project will be registered for Green Star Design & As-Built version 1.3. We note that

# Comment Response projects can register with this tool until 31 December 2021.

#### Rating tools

The City supports the energy ratings scores and methodologies used to achieve these efficiencies. The City also supports the use of Section J, rather than NatHERS to achieve thermal performance in the social housing building.

#### **Energy efficiency**

The PV panels should be relocated to avoid overshadowing in the morning and maximise energy generation. Additional PV or non-trafficable green roof could be provided to the roof of the social housing building. The size and capacity of the PV array must be clearly stated on the plans.

#### Potable water savings

The onsite rainwater harvesting detentions are small but reasonable. The City encourage the developer to investigate larger detention systems. Hydraulic plans are to be updated to identify their capacity and connection to irrigation supply.

This is comment is noted.

The Level 24 roof cannot feasibly include the PV panels, as it is proposed to accommodate a fire sprinkler tank, mechanical plant and hydraulic plant and is therefore congested. As such, the Level 23 roof is considered the most suitable location for PV panels.

The BASIX plans have allowed for 17.5 KW, which equates to 42 panels (1.2m x 2m) based on First Solar Series 6 (420 W per panel). The area required for these panels is approximately 130sqm, to accommodate 100sqm of panel surface.

The space for tanks within the podium is limited and the size of the tanks have been maximised to suit the space available. The tanks have been sized to suit both the rainwater catchment area and the irrigation demand within the buildings.

#### **Public Art**

It is not clear from the strategy that the artists will have access to the material budgets for the project when working with integrated opportunities such as awnings and paving. If this is not the current intent these budgets should be made available to the artists over and above the \$4M specified and this should be made clear in the Strategy

The expectation is that the \$4M budget allocated for the Public Artwork Strategy will include the cost for the integration of the artwork within existing structures or features of the precinct. However, depending on the selected artwork, if there are additional costs required for connections to awnings or modification to landscaping this will be assessed at the time and the priority given to ensure the artwork is well integrated in the precinct.

A powerful extension of the public art process could be for the landscape architects to work with Murawin and the relevant artists to extend and integrate any additional Aboriginal ideas and stories relevant to this specific site (captured through the development of the artworks) through the landscape design and species selection across the site, if appropriate. It is noted that the work Murawin have done to date has informed the Landscape Plan so this would only be relevant if

The opportunity to make an artistic expressions in the landscape design is acknowledged. The proponent will continue to progress the Public Artwork Strategy in parallel with the landscape design.

#### Comment Response new stories come to light through the development of the artworks. It is noted that none of the public art opportunities The proposed artist selection criteria and are to be advertised as open Expressions of experience of the curatorial team as noted in the Interest. In the interest of equality and facilitating Public artwork Strategy is a sound process to access to all artists, it may be worth considering ensure the artist's experience, quality of previous identifying at least one of these opportunities as an work and connection to community will deliver a open call for all Aboriginal artists. broad range of artistic expressions within the precinct.

#### Waste

72. Requests that the developer use the waste calculator and demonstrate that sufficient area has been provided to meet the needs of each use proposed on site. Please note that the City discourages more than 3 collections per week to minimise traffic movements.

A response to Item 72-74 has been prepared by Elephant's Foot and submitted at Appendix T. The Waste Management Report submitted with the EIS was prepared using the Guidelines for Waste Management in New Development 2018. Notwithstanding this, the developer has also used the waste calculator to ensure the development provides sufficient waste storage. It should be noted the waste calculator is not entirely accurate for some waste rooms, as it does not account for waste management equipment, including linear track systems and compactors.

A comparison is provided below for spatial advice derived from the waste calculator and actual waste room sizes for each waste:

#### Social housing waste room:

Calculator: 18.6sqm

Area provided: 43sqm

Complies: Yes

#### Social housing bulky waste room:

Calculator: 10.5sqm

Area provided: 9sqm

Complies: An additional 1sqm has been provided for textile waste storage.

#### **Boarding House Waste Room**

- Calculator: 53.1sqm (based off 3 weekly collections)
- Area provided: 48sqm (based off 5 weekly collections)

## Comment Response Complies: No however 2 x 2-bin linear track systems for 1100L bins are provided in this waste room, hence the calculator does not capture this. **Boarding House Bulky Waste Storage (caged** Calculator: 8sqm Area Provided: 15sqm Complies: Yes **Commercial Waste Room** Calculator: 22sqm Area Provided: 28sqm Complies: Yes **Commercial Bulky Waste Room** Calculator: 8sqm Area Provided: 8sqm Complies: Yes With regards to waste collection, 5 x weekly collections are the preferred option. The traffic consultant has confirmed the proposed number of weekly collections will not disrupt traffic in the loading dock. IGLU boarding houses typically have a building manager onsite 24/7 who will monitor the capacity of the bins and schedule collections when required. The turntable is to be a minimum dimension of 10.5 The turntable has been designed in co-ordination metres in accordance with the City's Guidelines for with the Traffic Consultant to accommodate the Waste Management and Section 3P of the 9.25m City of Sydney Refuse Collection Vehicle -Waterloo Metro Design and Amenity Guidelines. the largest expected vehicle. Ptc. have provided the following advice: Section B19 of the Guidelines for Waste Management in New Developments state that the 'minimum radius turning circle required is 10.5 metres' This dimension relates to the minimum turning circle radius required for a moving vehicle and is not the requirement for the diameter of a turntable.

The turntable has been provided at 9.25m diameter to accommodate the largest expected vehicle and

## Comment Response the design also includes a minimum 500mm clearance from the edge of the turntable to any walls or structure. Noted. Should City of Sydney Council's food waste Sufficient space must be provided for food waste for each relevant use. The City is trialling a food trial progress to a Council service during operation waste collection service and the developer is of the site, consideration will be given to providing encouraged to make provision for this service, for a specific food waste collection service. rather than providing on-site composting which in However, waste generation rates, available bin the City's experience is likely to fail. Again, the sizes and collection frequencies are not readily Guidelines for Waste Management in New available at this stage in the Guidelines for Waste Development provides suitable provisions. Management in New Developments 2018. **Social Housing** Based on the food waste generation rate available for single dwellings (40L/dwelling/week), 8 x 120L bins would substitute 1 x 1100L general waste bin. If this is to occur during operation, 8 x 120L food waste bins will be provided in the social housing waste room for residents to access and dispose of their food waste. The chutes and linear track systems must be caged off from these bins, with access granted to authorised personnel only. Student Housing The provision of food waste has been considered in the boarding house calculations and bin summary. However, food waste has been included with the general waste stream in the Operational Waste Management Plan.

Should the boarding house operator elect to separate food waste from general waste during operation, provision has been allowed for and 38 x separate 120L food waste bins will be provided in the waste room to substitute 4 x 1100L waste bins. These food waste bins will be caged off at the southern end of the waste room and a door will be inserted to provide access to students if this is to occur.

#### Commercial

Due to the commercial component having dining/kitchen areas, food waste has been considered and separated from general waste in the Operational Waste Management Plan. 5 x 120L separate food waste bins have been provided in the commercial waste room.

#### Response

#### **Signage**

Insufficient information such as form, size, siting, materiality, illumination and proliferation, has been provided to support the indicative signage zones. It is recommended that a wholistic signage strategy be the subject of a separate application to Council post consent.

Consent is sought for the installation of three signs including top of building signage and smaller building entry signage. Detailed signage plans have been prepared by Bates Smart and submitted with the EIS. Given the nature of the signs and total number of signs proposed (i.e. three), a Signage Strategy for the entire site is not considered necessary.

3D images of the proposed signage are provided in Appendix B. The 3D images show the proposed top of building signage to the north and east elevations, as viewed from the street level.

The placement and scale of the signage has been designed to be integrated with the overall building design.

Do not support top of building signs to the commercial and student housing buildings. The proposal is inconsistent with the Schedule 1 Assessment Criteria under *State Environmental Planning Policy 64 – Advertising and Signage* as top of building signs are prohibited within this location in accordance with sections 3.16.5.2 and 3.16.12.15 of the SDCP. Furthermore, the signs are not accommodated under the Waterloo Metro Quarter Design and Amenity Guidelines.

As top of building signs are not common in the locality and are not accommodated within existing planning policies, they cannot be considered reflective of either the existing or desired future characters of the area. Support for these signs will establish an unacceptable precedent for future development in the area and should therefore be refused.

An assessment of the proposals compliance with the Schedule 1 Assessment Criteria under *State Environmental Planning Policy 64 – Advertising and Signage* is provided in the EIS submitted with the application.

Whilst SDCP 2012 does not permit top of building signs in B4 zones, in accordance with Clause 11 of the State and Regional Development SEPP, the provisions of *Sydney Development Control Plan 2012* (**SDCP 2012**) do not apply to this development. Notwithstanding this, an assessment of the proposed signage against the SDCP 2012 controls for Advertising and Signage is provided in Section 4.5.2. The proposed signage is considered appropriate for the reasons outlined below:

- The proposal is consistent with the theme for top of building signage in the surrounding area. The site is located within 500m of the Australian Technology Park which comprises several top of building signs.
- Similar top of building signage is installed on buildings elsewhere in the City of Sydney for Iglu tenants including, Iglu Central, Iglu Broadway and Iglu Redfern.
- The proposed signs will be placed on a simple architectural design and will not result in additional visual clutter.

#### Response

- The proposed size of the signs respond to the proportions of the building and will not result in any impacts on the architectural integrity of the building and the surrounding streetscape.
- The signs are located on adjacent elevations and therefore will be visible from separate streets.
- The signage seeks to fulfil the purpose of identifying the building and improve wayfinding to the student accommodation building for residents and visitors, without compromising the design integrity of the building.
- The proposed signs are well integrated with, and subservient to Building 3 so as not to detract from the heritage of Waterloo Congregational Church and nearby items.
- The proposed signs are affixed to the façade of Building 3 and therefore not visible above the roof line.
- The proposed signage is scaled appropriately for the building and broader WMQ site.
- The proposed signage is compatible with the character of the area and existing signage. It effectively communicates the building tenant (Iglu) when approaching from the north and east.
- The proposed signage has been confined to the ground plane and top of building and integrated into the architectural design. The proposed signage is simple and well positioned to identify the building tenant.

#### **Public domain**

Public domain works - There is a discrepancy between the scope of works to be undertaken by the station development under CSSI and these SSDs. It is strongly recommended that the Interface Agreement and the scope of public domain work is agreed prior to the detailed design SSDs being approved.

We note that the documentation submitted to the City of Sydney previously under the CSSI approval may not have aligned with the agreed OSD scope of works previously outlined between Sydney Metro and the DPIE. This comment is noted and is to be verified with the full scope of works approved under the CSSI application being submitted to the City of Sydney. For completeness it is noted that the landscape plans submitted with this SSD DA illustrate the complete public domain works

Comment	Response
	proposed for the WMQ site across both the CSSI and OSD applications demonstrating consistency of outcome across the precinct.
Flood planning - Each application has its own site-specific flood assessment which is based on the proposed building layout to produce flood planning levels for the individual precincts. The flood planning levels specified in the assessment are in accordance with Councils Interim flood plain management policy with the exception of a retail strip fronting Botany Road identified as retail area 11 in the Central Precinct. In this case the proposed floor levels of 15.2m AHD are below the flood planning level of 15.7m AHD. The flood planning level being the 1% AEP flood level for retail floor space.	It is noted that this submission notes that the proposed flood planning levels for the Southern Precinct comply with the Council's Interim flood plain management policy. Comments regarding the Central Precinct are addressed within that separate SSD DA.
Public access - A public access easement (or similar) is required for the private land along Botany Road and Raglan Street. The buildings along these frontages have been set back to allow for public access but a formal guarantee is required so that these access paths will remain in perpetuity.	This is noted and it is expected that a condition would be imposed on any development consent granted for the development requiring the registration of a right of way easement on title to benefit public pedestrian access for all widened public footpaths.

## **RESPONSE TO COMMUNITY AND ORGANISATION** 6. **SUBMISSIONS**

Table 7 provides a detailed response to the public submissions and Table 8 provides detailed response to the organisation submissions as they relate to the detailed Southern SSD DA only.

Table 7 Response to community submissions

#### Comment Response

## Adequate provision of social and affordable housing

- Inadequate provision of social housing.
- Reduction of affordable housing units in comparison to the concept approval.
- Over provision of other types of uses, e.g. commercial and student housing. Should reconsider the provision of commercial spaces from the change in office demand due to COVID 19.
- The WMQ development will provide a total of 70 social housing dwellings, which is consistent with the concept DA conditions of consent.
- 24 affordable housing dwellings are proposed in the Central Precinct (approx. 11%), which exceeds 5% of the total residential GFA within the WMQ as required under clause 6.45 of the SLEP 2012 and concept DA conditions of consent.
- Overall, the proposed WMQ development is anticipated to create a vibrant mixed-use precinct on the fringe of the Sydney CBD. The proposed mixed of uses are supported by the market assessment identifying demand for the proposed uses.
- The proposed commercial use will deliver more readily available employment opportunities by integrating new commercial floor space with high frequency public transport network connecting to Sydney CBD and other strategic centres across the city.

#### Suitability of the childcare

- The suitability of the childcare centre as a community facility.
- The hours of operation should be commensurate with the commercial, retail and residential needs of the immediate community.

Not relevant to SSD-10437. Notwithstanding this, section 4.1 of the report demonstrates the suitability of the childcare centre as a community facility.

The proposed childcare facility will operate in accordance with the following hours of operation:

Monday to Friday: from 7am to 7pm.

Saturdays: from 9am to 3pm

The proposed hour of operation is consistent with the recommended hours in the DPIE Child Care

Comment	Response
	Planning Guideline 2017 (the Childcare Guideline).

#### Adequate provision of community facilities

- Community rooms should be on the ground floor for easy access.
- Reduction in the provision of community facilities - In the original concept scheme, there was planned space for community, health facility and support services. These services should be allocated.
- Should reinstate the Community Centre envisioned in the concept design.
- Practical uses with appropriate funding should be made to offer community services. For example, art galleries, music or art classes, affordable sport clubs.
- Inclusion of arts and cultural space.

A communal room is proposed on the rooftop of Building 4, directly adjoining the rooftop terrace. Publicly accessible community space is also provided on the ground floor of the Southern Precinct.

A minimum of 2,000sqm GFA will be provided for the purposes of community facilities within Building 2. The community facility will be used for the purposes of not-for-profit, community centre-based childcare. Furthermore it is noted that an additional 630sqm of ground level GFA is proposed to be used for a variety of community uses, including for instance a medical/health centre, enterprise café, Makerspace, community hub etc, however with the specific uses to be determined at a future stages. The provision of community facility GFA exceeds the requirement under clause 6.45 of the SLEP 2012, and more than what is anticipated in the concept approval SSD.

#### Provision of car parking

- Should provide greater number of car share vehicle spaces.
- Too much parking space.
- Should consider power points for installation of car charging stations in each car parking space.
- Inadequate car parking space for residential units, support workers, care providers, nursing staff and student accommodation - may create adverse impact on the local streets.
- Project requires more consideration of providing more parking for units and student accommodation to minimise impacts on local streets

The proposed WMQ development provides car share parking for the residential and commercial land uses in accordance with the guidelines and concept DA (SSD 9393) conditions of consent. The basement incorporates 4 car share parking bays.

Overall, the WMQ development provides a maximum of 155 car parking spaces, which is less than what is permitted under the concept DA (SSD 9393) conditions of consent. The proposal seeks to strike a balance to support a reduction in the reliance of private vehicle ownership across the WMQ site and encourage active / sustainable modes of transport, whilst alleviate on-street parking pressures within the surrounding area.

The proposal will install trickle-EV charges to nominated car parking spaces as required to meet total demand. These can be suspended from cable trays and wall or floor mounted depending on parking space location.

#### Traffic generation and traffic impacts

- Consider widening of Botany Road for additional bus lane.
- There is no bus stopping bay at the Waterloo station on Botany Road. Busses may block a lane on the extremely busy Botany Road.
- The proposed loading dock on Wellington Street is concerning for pedestrian, cyclists and driver safety. The location of the loading dock will also create traffic congestion on Wellington Street, as a number of vehicles wait to access the loading dock area on a very small stretch of road on Wellington Street. Vehicles will also increase the noise levels for apartments directly facing. The loading dock should be relocated to Botany road to create a more effective and safer access and exit point.
- Increase traffic congestion on surrounding road network.

#### Response

Botany Road is a publicly owned and managed road situated outside the property boundary and scope of this proposal.

There are two new bus stops provided on Raglan Street and Botany Road. Widened footpaths around the perimeter of the precinct will enable waiting bus passengers to safely queue whilst also allowing pedestrians to pass.

The loading dock accessed off Wellington Street relates to the Southern Precinct and not the basement proposal. Notwithstanding, it is noted that the Southern Precinct loading dock incorporates a mechanical turntable to ensure loading/servicing vehicles enter and exit in a forward direction, mitigating potential pedestrian/cyclist safety impacts. Further, a Freight and Servicing Management Plan (FSMP) was submitted as part of Appendix I of the EIS. The FSMP outlines that the loading dock will be available for use by appointment only through the use of an online booking system, which will allocate the times and durations vehicles will be allowed to access the site, any potential queuing onto the external road network will be minimised.

As outlined in the EIS and accompanying Traffic and Parking Impact Assessment, the traffic modelling undertaken demonstrated that the external road network will continue to operate at an acceptable level of service and experiences no changes in current level of service or at a level of service less than the concept approval (SSD 9393), and therefore, the development is not considered to have a detrimental impact on the operation of the road network.

#### Increased pedestrian movement

- Future increased pedestrian movement across Botany Rd and Wyndham St should be considered.
- Adequate provision of pedestrian crossing should be considered for safety.

Modelling and analysis of the existing and future pedestrian and cyclist movement, connectivity and circulation within the extent of the site and to surrounding areas have been assessed in the Pedestrian Modelling Report prepared by WSP (attached at Appendix I of the EIS). An additional Pedestrian Movement Technical Memo has been provided to address potential concerns raised by TfNSW (refer Appendix S of this RtS). This assess

#### Response

the likely pedestrian movements throughout and around the site.

The Waterloo Metro Quarter precinct design is compliant with the project requirements under the 2056 assessment scenario within the internal walkways, footpaths surrounding the site, Raglan Street and Botany Road and Raglan Street and Cope Street intersections, Botany Road bus stops.

A new pedestrian crossing on Botany Road will provide direct connection to the proposed Grit Lane and the metro stations, providing safe pedestrian connection into the site.

#### Impacts associated with the provision of student accommodation on the site

- Over supply of student housing in the area.
- Not wanting a 'boarding house'.
- Adequate internal amenity for student accommodation.
- Transient population and not being able to create a sense of community.
- Adverse impact on proposed and existing public open space, e.g. crowds etc.

The proposed student accommodation facility is supported as it will help address a significant shortage in Inner Sydney. While COVID-19 will significantly impact demand in the short term, there is projected to be growth in the longer term that supports the proposed development. Student accommodation at the subject site will also be able to leverage off its positioning between four university campuses and ample public transport, which will allow it to attract a diverse range of students. The inclusion of student accommodation on the site will also diversify the resident population and benefit the night-time economy in the area.

The student housing development includes generous internal and external communal facilities that offer onsite amenities including a communal area and outdoor terrace on level three. Facilities such as a laundry, media room and library are also provided communally for residents. All rooms have been designed to comply with the minimum room size requirements under the AHSEPP.

The existing and proposed open spaces are publicly accessible public open spaces that are equitable to all residents and visitors.

#### Overshadowing, privacy, view and visual impacts to neighbouring residences

- Development should consider overshadow impact on existing buildings to the east.
- The project will have significant view impact to the eastern boundary of the Alexandria Park Heritage Conservation Area and Alexandria

Majority of the overshadow falls to the west and south of the site. Additional modelling on solar impacts has been undertaken for neighbouring dwellings to the west and south of the site. The assessment is attached at Appendix N.

Park. The loss of crucial access to sky views from these areas would damage vital heritage value for the area.

#### Response

Cardno have prepared a Visual Impact Assessment (VIA). This VIA identifies the visual changes from the Concept DA built form and the proposed detailed built form, including view from Alexandria Park. Distant views along view corridors within the conservation area are rare towards the site and the location of the proposed development. As such, the proposal would have a negligible, if any, visual impact on the conservation area.

#### Amenity of proposed apartments

- Concern of slum.
- No communal space is provided for the social housing units in the Southern Precinct.

The Northern and Southern precincts are designed with high-quality living environment by providing a high level of internal amenity for all residents, largely compliant with the with SEPP 65 residential design guideline and provides for shared common spaces, communal rooftop terrace and community rooms.

A large north-facing communal terrace and indoor communal room is provided on level 9 of Building 4. The community room is a bookable space for social housing residents to hold meetings or small social gatherings.

#### Overshadowing and amenity of existing and proposed public open space and conservation area

- The development should maximise the amount of solar into adjacent apartments.
- The development shadow Alexandria Park Heritage Conservation Area in Winter Solstice 9am-11am and Equinox 9am-10am. This results in:
- Significant impact on heritage east-west facing, adjoining terraces with loss of crucial morning sunlight for significant periods of the year.
- Significant impact on heritage value of Alexandria Park that provides civic and visual focus for the Alexandria Park Heritage Conservation Area.
- The student housing building overshadows Cauliflower Hotel, the Wellington Street Victorian terraces, and Wellington Street footpath. Greater setback from Wellington Street should be incorporated.

An Overshadowing Technical Memo has been prepared by RWDI and included at Appendix N. Solar access to the nearby residential apartment buildings has been considered as part of the proposed design, in particular 180 Cope Street.

A comparison was initially undertaken between the approved envelope and the proposed scheme for the Waterloo Metro Quarter Development. The comparison highlighted the increase in annual direct sunlight hours surrounding the site based on the form and arrangement of the design proposed. This includes a number of residential properties surrounding the site as noted in Appendix N.

#### **Encourage more tree planting**

Should incorporate more trees to block wind and provide shade.

#### Response

Street trees and additional planting are proposed along the street boundary, the proposed laneway and around Cope Street Plaza.

The WMQ site provides 54.8% of street tree canopy coverage, and 12% private land canopy coverage, which equates to 25.7% overall canopy coverage for the site and complies with the tree coverage requirements under the Waterloo Design Amenity Guidelines.

The proposed street trees and planting contributes to the landscape of the WMQ site, mitigate wind impact and provide shade in public domain areas.

#### Commentary on overall architectural quality of the proposed designs

- Inconsistent with the context and character of Waterloo.
- Design of the development should consider transition to lower scale residential area and the urban landscape.
- The Northern Precinct is a cultural and visual clash with the three 19th century heritage buildings at the intersection of Botany Road/Ragland St/Henderson Rd.
- The Northern Precinct should have a similar scale and height to the central and northern precincts.
- The student housing building is inconsistent with the scale of the surrounding context.
- The materiality and design of the Central building is inconsistent with the character of Waterloo and the nearby heritage conversation area/item.
- The three precincts should be considered as whole.

Building height is lower than what is permitted in the approved concept DA.

All buildings have been developed to the same level of design resolution.

Buildings and public domain have benefited from an extensive DRP process and the team has focused on developing highly distinctive buildings while also ensuring the precinct remains cohesive.

A diverse palette of building materials and finishes have been employed to provide visual interest with a focus on highly detailed podium structures.

Overall, the proposed development delivers a built form that is responsive to the context of the existing and future desired character of the site and the surrounding area of Waterloo including, the heritage conservation area.

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Design of the development should consider transition to lower scale residential area and the urban landscape.

The Northern Precinct is a cultural and visual clash with the three 19th century heritage buildings at the Building height is lower than what is permitted in the approved concept DA.

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The student housing building is inconsistent with the scale of the surrounding context.

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The three precincts should be considered as whole.

#### Response

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A diverse palette of building materials and finishes have been employed to provide visual interest with a focus on highly detailed podium structures.

Overall, the proposed development delivers a built form that is responsive to the context of the existing and future desired character of the site and the surrounding area of Waterloo including, the heritage conservation area.

#### **Public Open Space**

The land/plaza around the buildings will be privately owned by the Developer - does this mean that the public has no access to these areas.

More public open space and green recreational open space should be provided for the increased population.

All proposed public domain space, including Cope Street Plaza are publicly accessible. It is managed by Mirvac, however the public open space will not restrict public access. Positive public covenants will be in place to ensure the public open space is retained into perpetuity.

The overall WMQ site achieves 10.7% deep soil coverage, exceeding the DCP and ADG guidelines.

The proposed Cope Street Plaza provides 1,325m<sup>2</sup> of public open space. Raglan Street plaza provides 875m<sup>2</sup> of open space. The combined area of new public domain is 2,680m<sup>2</sup>, which exceeds the required 2,200m<sup>2</sup> under the Waterloo Design Amenity Guidelines and is able to achieve the best public domain outcome for the site.

Table 8 provides detailed response to the organisation submissions made specifically on the detailed SSD DA.

Table 8 Response to Organisation Submissions

Comments	Response
Counterpoint Community Services Inc	
Community consultation concerns:  The pre-lodgement consultations were significantly disadvantaged by Covid19 restrictions and the effectiveness of which questionable.	The timeframe for engagement coincided with the restrictions imposed to respond to the COVID 19 pandemic. Accordingly, engagement activities were modified to comply with restriction requirements to minimise community exposure and transmission.

#### General comment on amended proposed plans:

- no health impact study completed.
- it is not clear that planning controls will protect any future request to increase the height.
- preparation of a local employment strategy to ensure targeted employment creation is realistic.

#### Response

Key environmental and health issues have been addressed in detail through the EIS report prepared for the SSDAs.

The height of the building is governed by the approved plans and the approved concept DA, any future increase in height limit will need to be sought via a section 4.55 modification application to both concept DA and detailed SSD.

The Eastern City District Plan includes planning Priorities that directly relates to employment target for the area.

#### Placemaking /management:

- Missed opportunity for shared use of facilities in conjunction with the overall Waterloo Redevelopment.
- Placemaking strategies are lacking attention to the physical, cultural, and social identities that define Waterloo Metro Quarter and support its ongoing evolution.
- Limited details on cultural/community dynamics strategies for residents from different backgrounds.

Proposed basement and servicing requirements are shared between the uses with the WMQ. The proposed public plaza and community facilities will be shared with residents and visitor of the Waterloo area.

The Public Art Strategy and Placemaking Strategy has a strong emphasis on recognition and celebration of Aboriginal culture and the multicultural diversity of the area.

Comments on diversity and social identify of Waterloo have been noted. There is a commitment to establish a placemaking fund to run events and activations. A place manager will also be employed to coordinate activities on site. As the site is being constructed, the developer will be working with local organisations to explore how this would be curated.

#### Traffic and pedestrian safety:

- Concern over Pedestrian traffic across Botany road to South Eveleigh.
- There needs to be adequate pedestrian and bike paths around the Metro Quarter

The Pedestrian Movement Memo prepared by WSP confirms that all internal walkways, external footpaths and intersection ques achieve a LoS C or higher in accordance with TfNSW *Walking Space Guide*.

As previously stated, a new zebra crossing is being provided across Botany Road as part of the Waterloo metro station. Internal walkways such as Grit Lane and Church Square (shared zone) directly connect to the bus stop and crossing on Botany Road.

Bike paths are provided around the WMQ site, which link directly into the regional cycle network via the bike path on Wellington Street.

#### Comments Response **Southern Precinct:** The Southern Precinct provides a diverse mix of social and student housing as well as a ground No provision for Aboriginal housing - there floor Makerspace and gym to encourage social mix. should be a minimum of 5% affordable housing and 5% Aboriginal specific affordable housing. The apartments have been designed in accordance with the Apartment Design Guide and satisfy the There was no health impact statement minimum apartment size requirements. provided, including concerning effects of small dwellings. Small apartments may create The social housing building adjoins the student isolation leading to health issues. housing building to create a precinct centred around Cope Street Plaza and Church Square. Isolating social housing within a single building This reduces the stigma of a single building may create stigma. dedicated to social housing. **Basement Car Park:** Not relevant to SSD-10437. Create a balance between providing sufficient parking and discourage car reliance. **Waterloo Public Housing Action Group** A Social and Economic Impact Assessment has Student housing was never included as part of the been prepared by Urbis and submitted with the community consultation process, approved Concept DA, nor is it in line with the community's EIS. The assessment notes that the diverse mix of vision for the local area. market, affordable, social and student housing across the WMQ precinct are supported with the The development should also be making space for market assessment identifying demand for these permanent residents and work to meet the housing uses. shortfall, rather than servicing more transitory residents. **Shelter NSW** Affordable Housing to be provided in perpetuity. Affordable housing is proposed to be located within the Central Precinct (SSD-10439), which will be owned by a community housing operator to be utilised as affordable housing in perpetuity. Overstates the potential contribution to low-cost The affordable housing units will provide for very affordable housing (especially for 'key workers' in low, low and moderate income households as the case of affordable housing). defined by the State Environmental Planning Policy No. 70 - Affordable Housing (Revised Schemes), Affordable housing provisions should be extended which includes key workers. and that local key workers (for the Waterloo Metro and Waterloo Estate) be given special Affordable housing would also be managed by a consideration. Tier 1 Community Housing Provider and designed to be 'tenure blind'. Affordable Housing should be managed by a Community Housing Provider.

'affordable'.

Student housing accommodation should also be

The proposed student housing will benefit the

students out of the private rental market. It is

overall affordability of housing in Waterloo by taking

Comments	Response
	affordable for students because it is purpose built delivering student requirements in a highly efficient space. All bills are covered in rent including internet, utilities and gym. Furthermore, it is furnished saving students furnishing costs.
The provision of affordable and social housing represents a very small contribution to Sydney LGA's housing targets. The proposed development will not reduce the extent of housing stress.	The WMQ site will provide 70 social housing dwellings and 24 affordable housing dwellings, which exceeds 5% of the total proposed residential GFA and will assist with contribute to affordable/housing in the LGA.
Social and affordable housing should be reviewed to better match consumer demand of two and three bedrooms.	24 affordable housing apartments to be delivered as a mixture of 1 bedroom (50%) 2 bedroom (50%) which responds to the demand of the locality.
Overstates the potential contribution to low-cost affordable housing (especially for 'key workers' in the case of affordable housing).  Affordable housing provisions should be extended and that local key workers (for the Waterloo Metro and Waterloo Estate) be given special consideration.  Affordable Housing should be managed by a Community Housing Provider.	The affordable housing units will provide for very low, low and moderate income households as defined by the <i>State Environmental Planning Policy No. 70 – Affordable Housing (Revised Schemes)</i> , which includes key workers.  Affordable housing would also be managed by a Tier 1 Community Housing Provider and designed to be 'tenure blind'.

# Velocity Owners Corporation – 180 Cope Street, Waterloo

Apartments facing north will entirely lose all open views.

An addendum to the Visual Impact Assessment prepared by Cardno is provided at Appendix O. The VIA outlined a sound methodology that was informed by an earlier assessment of the visual impacts of the amending concept development application (also prepared by Cardno, July 2020). This involved a process of consideration of established visual assessment criteria, Land and Environment Court planning principles, and identification of key viewpoints through GIS mapping and photomontage analysis. A comparative assessment of close, medium and long distance views impacts of the concept plan envelopes and proposed development compared to the existing situation was undertaken.

Overall, the VIA concluded that:

"contingent on the recommended mitigation measures in this report (ie. implement principles of design excellence for buildings; and tree planting scheme), the Southern Precinct proposal has been

Comments	Response
	found to represent an improvement in visual impacts in comparison with the approved concept and is considered worthy of support with regard to its effects on the existing visual environment of the site and its locality."
The loss of privacy to common shared rooftop and apartments facing north to Wellington Street, and that the proposed southern precinct buildings will overlook to these apartments.	<ul> <li>The proposed buildings have been designed to provide visual privacy to and from the dwellings. The following mitigation measures are proposed:</li> <li>Glazing to bedrooms is limited to a single window that is 1.05m wide with 0.8m high solid spandrels. Bedroom windows are also located in the corner of the rooms to limit view angles.</li> <li>Perforated aluminium balustrades to provide further visual privacy.</li> <li>Providing a high level of facade depth and solidity on the western facade through the use of projecting horizontal slab edges, vertical brick piers and spandrels to windows to help restrict views from floors above and below.</li> <li>Angled privacy/sunscreens to the Building 3 façade.</li> </ul>
Six (6) of the apartments have direct northerly aspect and access to sunlight through windows or doors opening onto their private balconies. The proposed development will result in significant loss of solar access.  3 apartments have a lightwell on the northern boundary. The Southern Precinct proposal does not assess the impact of natural sunlight into these apartments.	A response to the submission from the Velocity Owners Corporation has been prepared by RWDI and submitted at Appendix M.  Residential apartments are noted to mainly face Cope Street, with 6 apartments facing north, which are setback from the street.  As noted in the below image from the sun, overshadowing does not occur to this property until after 12:30pm, maintaining at least 2 hrs of solar access which complies with the ADG. The northern facing apartments will also have access to direct sunlight after 2:30pm.
The entrance and exit onto Wellington Street (left in left out) will increase traffic flow and cause congestion.  Vehicles will also increase the noise levels for apartments directly facing Cope Street.  Loading and service facilities area should be relocated to Botany Road (where a traffic hub is	The proposed vehicular access arrangements have been reviewed by ptc. and assessed with regards to safety and traffic implications.  To segregate vehicles from public transport users and areas of people congregation, only authorised users will be allowed within the Loading Dock area and will be required to wear high visibility safety gear. The entry shutter will be equipped with visual
already planned (car park).	strobe lighting to warn pedestrians when the

Comments	Response
	Loading Dock shutter is opening. All vehicles must enter and exit the Loading Dock in a forward direction.  To prevent queuing onto Botany Road and Wellington Street, the loading dock will be available for use by appointment only.
Community garden/park being developed is to ensure all local residents benefit from the planned developments in the area.	Noted. The intention is to provide a communal roof terrace on Level 9 of Building 4 with opportunities for tenants to grow edibles and gather in small groups.

### **Inner Sydney Voice**

#### General concerns:

- Increased foot and vehicle traffic across Botany Road to South Eveleigh.
- The development should provide adequate pedestrian and cycling infrastructure.

The Pedestrian Movement Memo prepared by WSP (Appendix S) confirms that all internal walkways, external footpaths and intersection ques achieve a LoS C or higher in accordance with TfNSW Walking Space Guide.

A new zebra crossing is being provided across Botany Road as part of the Waterloo metro station project. This can be accessed via Grit Lane and Church Square (shared zone), as well as pathways around the site.

Bike paths are provided around the WMQ site on the surrounding road network which link directly into the regional cycle network via the bike path on Wellington Street. The basement accommodates bicycle parking and EOTF to support pedestrians and cyclists accessing the site and utilising the metro.

- No provision for Aboriginal housing.
- The development should be meeting the needs of low-income residents rather than international students.
- A large influx of new residents will dilute the local Aboriginal community with fears that students will outnumber community members and create an "ethnic cleansing" of the area.
- If Waterloo becomes an even larger student hub, there is also a worry that Waterloo won't be seen as "high need" anymore and that funding for key services will be reduced.

The most prominent social infrastructure type proposed as part of the concept DA is social and affordable housing. Research undertaken by the City Futures Research Centre at UNSW shows there is current and projected unmet need of 217,000 units of social and affordable housing across Greater Sydney to 2036.

The proposed student housing will also ensure a wide range of housing typologies are provided, across the housing spectrum. This diversity is highly unusual and will create a positive social benefit.

### **REDWatch**

#### Comments

The scale and density of the development will have a major impact on the surrounding community with no adequate infrastructure support.

## Response

The WMQ development is a transit orientated development supported by planning metro infrastructure.

Utility infrastructure has been considered in the Utilities and Infrastructure Servicing Report, which identifies the existing capacity of the site to service the Waterloo Metro Quarter OSD and any augmentation requirements for utilities.

Cumulative impact from this development, and the lack of integration of proposed nearby developments.

Impacts on possible open space and the development to the east is not assessed. Cumulative impacts (traffic, noise, dust, etc.) associated with concurrent construction and operation of station and OSD, and other development in the area have been considered throughout the EIS and technical report submitted to each SSD. Mitigation measures are also recommended to minimise impact.

The site is located in close proximity to a number of public open space areas that will be able to accommodate existing and the incoming population. In addition, the development facilitates new public open space including the delivery of the Church Square, expanded footpaths on Botany Road and public domain upgrades.

## Southern Precinct:

- The provision of student housing was never consulted on in previous consultations.
- The need for student housing is not demonstrated and is oversupplied in the locality.
- The transient nature of students makes it challenging to build a sense of community.
- Student housing is small, and has limited amenities, which will put more pressure surrounding green space, public space and community infrastructure.
- The developer is responsible for providing amenity through its own site or on contributions to create more public space and community infrastructure to support the proposed use.
- A management plan for dealing with the impacts of the students in nearby public facilities and movement routes between those facilities should be provided.

Student accommodation is defined within the broader definition of residential accommodation, for which development consent was sought within the concept DA. A Social and Economic Impact Assessment has been prepared by Urbis and submitted with the EIS. The assessment notes that the diverse mix of market, affordable, social and student housing across the WMQ precinct are supported with the market assessment identifying demand for these uses. The new residents and workers on the site will drive demand for the supporting mix of uses, which will drive activity and vibrancy on the site and offer convenience retail and services to surrounding residents.

A generous area of outdoor communal open space is provided for student residents in addition to communal facilities on level 3. Students will also have access to Cope Street Plaza.

An Operational Management Plan for the proposed student housing has been submitted with the EIS.

## **REVISED PLANNING ASSESSMENT 7**.

#### 7.1. **ASSESSMENT OF PROPOSED MODIFICATIONS**

This section provides an assessment of the amended design proposal against the relevant statutory planning framework including relevant Acts, environmental planning instruments, draft environmental planning instruments, and development control plans under section 4.15 of the EP&A Act.

Table 9 Assessment of amended proposal against relent statutory planning framework

Consideration	Response	
Strategic Planning Context	The minor design changes proposed to the Southern Precinct remain consistent with the strategic planning framework as outlined in the EIS previously submitted with SSD-10437.	
Acts		
Environmental Planning and Assessment Act 1979	Pursuant to Section 4.36(2) of the <i>Environmental Planning and Assessment Act</i> 1979 (EP&A Act):  (2) A State environmental planning policy may declare any development, or any class or description of development, to be State significant development.  The proposal is classified as SSD. In accordance with Section 4.5 of the EP&A Act, the Independent Planning Commission is designated as the consent authority if there is a Council objection to the DA or there are more than 25 submissions, unless otherwise declared by the Minister as a State Significant Infrastructure related development.  Unless otherwise declared, the Minister will be the consent authority for the detailed SSDA (refer Clause 8A of the SRD SEPP and Instrument of Delegation dated 11 October 2018). An assessment of the proposal against the objectives contained within Section 1.3 of the EP&A Act is provided in the EIS. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Southern Precinct SSD.	
Biodiversity Conservation Act 2016	The purpose of the <i>Biodiversity Conservation Act 2016</i> is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and in the future, consistent with the principles of ecologically sustainable development.' The NSW DPIE granted a waiver on 24 July 2020 under Clause 7.9(2) of the Biodiversity Conservation Act 2016, concluding that:  "The proposed development is not likely to have any significant impact on biodiversity values. The application, therefore, does not need to be accompanied by a BDAR."  The assessment and conclusions in the EIS are unaffected by the proposed changes to the Southern Precinct SSD.	
SEPPs		
State Environmental Planning Policy	The State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) has the purpose of identifying development that is SSD, State	

Consideration	Response	
(State and Regional Development)	significant Infrastructure (SSI) (including critical) and regionally significant development.	
	The concept SSDA (SSD 9393) was classified as SSD under Section 4.36 of the EP&A Act as the development had a CIV in excess of \$30 million, and was for the purpose of residential accommodation associated with railway infrastructure under clause 8(1)(b) of the SRD SEPP. The proposed development remains consistent with the SRD SEPP and the concept approval. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Southern Precinct SSD.	
State Environmental Planning Policy (Infrastructure) 2007 (ISEPP)	The State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) came into force in December 2007 and aims to facilitate the effective delivery of infrastructure across the State. The SEPP identifies matters for consideration in the assessment of types of infrastructure development, including all new development that generates large amounts of traffic in a local area. Further clarification regarding the proposals compliance with Clause 102 of the State Environmental Planning Policy (Infrastructure) (ISEPP) is provided in Section 5.2. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Southern Precinct SSD.	
State Environmental Planning Policy (Building Sustainability Index: Basix) 2004	The State Environmental Planning Policy (Affordable Rental Housing) 2009 (AHR SEPP) aims to facilitate the delivery of new affordable housing through incentives such as expanded zoning permissibility and floor space ratio bonuses. The SEPP applies to in-fill affordable housing, secondary dwellings, boarding houses and supportive accommodation.	
	The proposed student accommodation and social housing has been assessed in accordance with the relevant requirements, and a BASIX Certificate has been issued. The certificate confirms that the proposed development achieves the minimum water and thermal performance ratings required. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Southern Precinct SSD.	
State Environmental Planning Policy (Vegetation in Non- Rural Areas) 2017	The State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 (Vegetation SEPP) works together with the Biodiversity Conservation Act 2016 and the Local Land Services Amendment Act 2016 to create a framework for the regulation of clearing of native vegetation in NSW. The Vegetation SEPP applies to the Sydney metropolitan areas and land zoned for urban purposes.	
	The removal of five trees of low to moderate retention value is necessary to allow for the future redevelopment of the site. Tree removal is permissible with consent under SLEP and as such SEPP Vegetation. It is noted that the new planting is proposed across the site including along all street frontages and within Cope Street Plaza which will result in more trees being provided on the site that proposed to be removed. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Southern Precinct SSD.	
State Environmental Planning Policy	State Environmental Planning Policy No.55 – Remediation of Land (SEPP 55) provides a State-wide approach to the remediation of contaminated land, and	

Consideration	Response	
No.55 – Remediation of Land (SEPP 55)	primarily promotes the remediation of contaminated land for the purpose of reducing risk of harm to human health.  The Contamination and Remediation Report submitted with the original application has been re-submitted as the previous submission did not upload all appendices of the report. The assessment and conclusions in the EIS are	
State Environmental	unaffected by the proposed changes to the Southern Precinct SSD.  State Environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64)	
Planning Policy No. 64 (Advertising and Signage) (SEPP 64)	aims to ensure that advertising and signage is compatible with the desired amenity and visual character of an area and provides effective communication in suitable locations and is of high-quality design and finish. It does not regulate the content of signs and advertisements.	
	The scope of the detailed SSDA seeks consent for the installation of three building identification signs associated with the student accommodation building. Clause 13 of SEPP 64 indicates that a consent authority must not grant consent to display signage unless it is consistent with the objectives of the policy and complies with the assessment criteria contained within Schedule 1 of SEPP 64.	
	An assessment of the proposed signage against Schedule 1 is provided in the EIS submitted with the application. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Southern Precinct SSD.	
State Environmental Planning Policy No. 65 (Design Quality Residential	State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development (SEPP 65) applies to development for the purposes of a building that comprises three or more storeys and four or more self-contained dwellings.	
Apartment and Apartment Design Guide. (SEPP 55)	The EIS assesses the proposed social housing dwellings against the requirements of SEPP 65 and the ADG. As per clause 4(4) of SEPP 65, the SEPP and the ADG do not apply to a boarding house (which includes student accommodation) development, unless otherwise prescribed by a local environmental plan. SLEP makes no such prescription and as such SEPP 65 and the ADG do not apply to the student accommodation component of the proposal.	
	An updated Design Verification Statement has been provided by Bates Smart, which confirms that the proposal can meet the objectives of Parts 3 and 4 of the ADG (refer to <b>Appendix R</b> ). The assessment and conclusions in the EIS are unaffected by the proposed changes to the Southern Precinct SSD.	
Sydney Local Environmental Plan 2012	The Sydney Local Environmental Plan 2012 (SLEP 2012) is the principal environmental planning instrument governing development at the Site. An assessment against the relevant controls of the SLEP 2012 is provided in the EIS. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Southern Precinct SSD.	
Design Guidelines / DCP	In accordance with Clause 11 of the State and Regional Development SEPP, the provisions of Sydney Development Control Plan 2012 (SDCP 2012) do not apply to this development.	

Consideration	Response	
	Sydney Metro has revised the WMQ Design Guidelines which have guided the detailed design of the proposed residential tower and OSD project. The assessment and conclusions in the EIS are unaffected by the proposed changes to the Southern Precinct SSD.	
Environmental impacts	As outlined throughout this RtS and as annexed, the applicant has received additional technical information to address questions and community concerns regarding environmental impacts. The additional information provided relates to:  Visual privacy;  Landscaping and tree removal;  Wind;  Natural ventilation;  Noise;  Solar access and overshadowing;  Visual impact;  Traffic and parking;  Waste; and  Flooding.	
Social and Economic	The proposal promotes the social and economic welfare of the community and a better environment through the delivery of an integrated transport oriented development above the Waterloo metro station. The potential for anti-social and criminal behaviour within the public domain footprint and more broadly, throughout the entire detailed OSD design has been addressed in the Crime Prevention Through Environmental Design (CPTED) Report prepared by Connley Walker Pty Ltd and submitted with the EIS.  A Social and Economic Assessment has also been prepared by Urbis (refer to Appendix AA of the EIS). In summary, the development will contribute to the ongoing economic activity of the New South Wales workforce and support employment generation in the local area consistent with the objectives of the Sydney Region Plan and the Eastern District Plan.	
Public Interest	<ul> <li>The proposed development is in the public interest for the following reasons:</li> <li>The proposed modification will activate the surrounding public domain by permitting communal facilities that support residential uses within the podium.</li> <li>The proposed use is permissible with consent and consistent with the objectives of the zone.</li> <li>The proposed development has had regard to relevant applicable statutory planning policies and complies with the objectives of the development controls for the site.</li> </ul>	

Consideration	Response	
	<ul> <li>The proposal will not have any unacceptable impacts on adjoining or surrounding properties or the public domain in terms of traffic, noise and environmental impacts.</li> </ul>	
Site Suitability	The proposed development remains suitable for the site for the reasons stated in the original approval of SSD 9393.	

## **7.2. SUMMARY OF MITIGATION MEASURES (AS AMENDED)**

The following section provides update mitigation measures that have resulted from the amended design response to the submissions. For clarification purposes, any new additions are marked as 'bold' and any changes no longer relevant have been struck through.

Table 10 Updated Mitigation Measures

Item	Potential Impact	Mitigation Measure
Aboriginal Heritage Archaeology and Non- Aboriginal Heritage	Potential impacts on Aboriginal historical (non-Aboriginal) places of significance (Construction).	The updated Archaeological Method Statement (AMS) prepared by AMBS (dated July 2020) must be adhered to for the full extent of excavation and construction outside of the envelope of the Sydney metro. This AMS outlines the proposed excavation methodology for the subject site to manage archaeological significance and impacts.  The recommendations of the Archaeological Method Statement are to be adhered to under the CSSI approval for the completion of the Waterloo Metro Quarter site.
Wind Impact	Adverse wind environment to outdoor areas in the OSD, including to private balconies, communal areas and Cope Street Plaza. Potential for general and localised wind effects.	Maintain awnings detailed on the architectural drawings and tree planting as illustrated in the landscape plan prepared by Aspect to ensure the ground plane, elevated areas, surrounding streets and Cope Street Plaza satisfy the required wind comfort conditions for the Southern Precinct.  Adhere to the mitigation measures outlined in the Technical memo prepared by RWDI at Appendix G of this report.
Waste	Waste production (Operation).	Implementation of the Operational Waste Management Plan prepared by Elephants Foot dated <b>5 February 2021</b> (Appendix T).
Flooding	Potential flooding of the OSD.	Comply with the recommendations and mitigation measures contained within the Stormwater and Flood Impact Assessment prepared by WSP dated 30 September 2020 (Appendix O) and technical memo prepared by WSP dated 15 February 2021 (Appendix V).

Item	Potential Impact	Mitigation Measure
		Adopt the permissible minimum building floor levels and below ground development flood planning levels for the WMQ site as defined within the Stage 1 concept DA Water Quality, Flooding and Stormwater Report (October 2018).
		Prepare a flood warning and evacuation plan to inform the residents and managers of the building on the procedures to adopt to in case of an emergency associated to flood risk.

### **CONCLUSION** 8.

This RtS has been prepared to address the matters raised by government agencies, the public and community organisation groups during public exhibition of the proposed Waterloo Metro Quarter Over Station Development State Significant Development applications, specifically the Southern Precinct. This RtS also responds to the preliminary assessment provided by DPIE on 14 December 2020.

As outlined throughout this report, the proposed development as sought within the detailed SSD DA is in the public interest and should be approved subject to appropriate conditions. As such, the proposal in its current form is considered appropriate for the location and should be supported by the Minister for Planning as the consent authority.

#### 9\_ DISCLAIMER

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