

**ANGEL PLACE
LEVEL 8, 123 PITT STREET
SYDNEY NSW 2000**

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Urbis Pty Ltd
ABN 50 105 256 228

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Mr Anthony Witherdin
Director – Key Sites Assessment
Department of Planning, Industry and Environment
4 Parramatta Square, 12 Darcy Street,
Parramatta 2150

Attention: Russell Hand

Dear Russell,

WATERLOO METRO QUARTER - SOUTHERN PRECINCT SSD DA (SSD-10437) | RESPONSE TO REQUEST FOR FURTHER INFORMATION

This letter has been prepared to respond to the request for further information (RFI) issued by the Department of Planning, Industry and Environment (DPIE) on 15 April 2021 regarding the Waterloo Metro Quarter (WMQ) Southern Precinct State Significant Development (SSD) Development Application (DA) (SSD-10437). The RFI was issued following a review of the Response to Submissions (RtS) report submitted to DPIE by the applicant on 15 February 2021, and the first RFI Response submitted to DPIE on 31 March 2021.

This letter also provides the final BASIX Certificate for Building 03 to rectify an 'upload' error with the original certificate.

The subject RFI requested resolution around satisfaction of Condition A12 of the Concept Approval (SSD 9393) and advised that DPIE was awaiting further comments from Council and other agencies. Email correspondence was also received from DPIE on 11 May 2021 requesting the applicant respond to additional comments provided by the City of Sydney (Council) and input from the Environment, Energy and Science Group (EES) within DPIE. Recommended draft conditions were also provided by Transport for NSW (TfNSW) for consideration by DPIE should development consent be granted.

This letter comprises the applicant's response to the matters raised by DPIE in their RFI letter and the comments provided in the submissions received from Council and TfNSW. It is considered that these matters have been appropriately responded to and DPIE should now be in a position to finalise their assessment of SSD-10437, subject to securing a determination for the Amending Concept SSD-10441 and the Modification Application to Concept Approval SSD 9393 (SSD-9393-MOD-2).

It is noted that a separate letter will be provided to DPIE to respond to the comments provided by EES. This letter is accompanied by the following technical support documentation:

- Architectural Design Response prepared by Bates Smart (**Attachment A**),
- Landscape Design Response prepared by Aspect Studios (**Attachment B**),
- Ventilation Technical Response prepared by RWDI (**Attachment C**),
- Bicycle Parking Analysis prepared by Iglu (**Attachment D**),
- Waste Memo prepared by Elephants Foot (**Attachment E**), and
- BASIX Certificate for Building 03 prepared by Cundall (**Attachment F**).

1. DPIE – SATISFACTION OF CONDITION A12

DPIE requested the following further information regarding Condition A12 of the Concept Approval (SSD 9393):

Resolution around satisfaction of Condition A12 of the Concept Approval (SSD 9393) concerning obligations for public benefits prior to the determination of the first Detailed SSD.

We note a Modification Application to Concept Approval SSD 9393 is pending lodgement (SSD-9393-MOD-2). We understand the Modification will seek to stage the current requirements of Condition A12.

A legally binding agreement has been provided to DPIE to demonstrate that the public benefits required to be provided within the Southern Precinct are secured. This notably includes:

- 70 social housing dwellings dedicated or transferred as agreed by NSW Land and Housing Corporation; and
- A minimum 2,200sqm of publicly accessible open space across the Waterloo Metro Quarter (WMQ) site, including its final area, design and ongoing management, noting that partial provision of this publicly accessible open space is also proposed to be delivered within the Northern Precinct (SSD-10440) and under the CSSI Approval.

It is noted that a legally binding agreement has also been provided to DPIE to satisfy the other requirements of Condition A12 being a minimum of 5% of the approved residential gross floor area dedicated or transferred to a Registered Community Housing Provider as affordable housing, and community facilities with a minimum area of 2,000sqm as defined under the *Sydney Local Environmental Plan 2012 (SLEP 2012)*, each provided in the Central Precinct (SSD-10439).

A Section 4.55(1A) modification application to Concept Approval SSD 9393 (**SSD-9393-MOD-2**) was submitted to DPIE on 15 April 2021 seeking to modify Condition A12 to enable the determination of development applications on the WMQ site prior to the final resolution of the design, area and future operating model of the proposed community facilities located within Building 2 (Central Precinct). Condition A12 currently requires a legally binding agreement to be prepared prior to the determination of the first Future Development Application for the site. The application seeks modified wording to align the requirement to satisfy Condition A12 as it relates to the final 'design, area, and future operating model' of the community facilities, prior to the issue of an occupation certificate for Building 2 (Central Precinct).

This modification application is currently being assessed by DPIE and Council has raised no objections with the modifications proposed to Condition A12 which require the Applicant or its successor to enter into a legally binding agreement prior to the issue of an Occupation Certificate for the Central Precinct. As such, the modification application can now be determined under delegation.

The applicant notes the revised condition will streamline the assessment of the subsequent detailed SSD DAs to align with the intention of the proposed staging of the Concept Approval SSD 9393 and the Amending Concept DA (SSD-10441).

2. TRANSPORT FOR NEW SOUTH WALES COMMENTS

Transport for New South Wales (**TfNSW**) provided comments on the Southern Precinct on 21 April 2021. TfNSW comments included recommendations for conditions of consent to be included on any consent issued. In summary, the recommendations for conditions related to:

- Undertaking a 'Stage 2 (Concept Plan)' Road Safety Audit for the loading dock access arrangement prior to the issue of any Construction Certificate,
- Updating the Green Travel Plan (**GTP**) in consultation with TfNSW and updating it annually,
- Preparing a Transport Access Guide (**TAG**) in consultation with TfNSW and obtaining approval prior to the issue of an Occupation Certificate,
- Preparing a Construction Pedestrian and Traffic Management Plan (**CPTMP**) in consultation with TfNSW prior to the issue of any Construction Certificate or site preparation works, and
- Updating the Freight and Servicing Management Plan (**FSMP**) in consultation with TfNSW prior to the issue of any Construction Certificate and obtaining endorsement from TfNSW.

The applicant does not raise any objection to the imposition of the recommended conditions outlined in the submission issued by TfNSW on SSD-10437.

3. CITY OF SYDNEY COUNCIL COMMENTS

The Council provided comments to DPIE on the RtS package for the Southern Precinct on 6 May 2021. The Council comments and the key items raised are addressed in the following sub-sections.

3.1. PLANNING PROCESS

It is noted that the Council has expressed concern regarding the separation of planning processes for the Botany Road Corridor, the WMQ, and the Waterloo Estate. The Council are currently undertaking a strategic planning review of the Botany Road Corridor; however, this review is yet to be publicly released or exhibited for comment. It is understood that the Council are looking to incentivise commercial land uses within the corridor, and it is therefore noted that the proposed Amending Concept DA (SSD-10441) specifically responds to this objective as outlined in the Environmental Impact Statement submitted with that development application.

The development of the Waterloo Estate is likely to progress over the next 15-20 years, and the Planning Proposal Authority for the first stage of the rezoning (Waterloo Estate South) is now DPIE. The Waterloo Estate South rezoning is yet to be placed on public exhibition and is currently not a relevant matter for planning consideration. Notwithstanding, the masterplan layout and detailed design of the proposed development at the WMQ has been in part informed by indicative locations of new public open space and new built form envisaged within his precinct directly to the east of the WMQ site.

On 12 September 2019, *State Environmental Planning Policy Amending (Waterloo Metro Quarter) 2019* was made. This SEPP introduced new planning controls for the WMQ site to enable the redevelopment of the site to align with the construction and completion of the metro station. It is not reasonable or necessary for planning processes for the WMQ site to be delayed until the rezoning of adjacent precincts such as the Botany Road Corridor or Waterloo Estate.

Further it is noted that the Waterloo Metro Quarter Design and Amenity Guidelines were finalised following the determination of the Concept DA (SSD-9393). As an Amending Concept DA has been submitted, it is therefore appropriate to update the Design and Amenity Guidelines to be consistent with a revised Concept Plan. The detailed development applications, such as the Southern Precinct SSD DA (SSD-10437), are to then be subsequently assessed and considered against the final Design and Amenity Guidelines in accordance with clause 6.45(2)(d) of SLEP 2012.

3.2. MISAPPLICATION OF ADG DESIGN CRITERIA AND GUIDANCE

Council has acknowledged that not all developments can achieve strict compliance with the Apartment Design Guide (**ADG**) but they have raised concern with the method of assessment of the proposal against the 'design criteria' and 'design guidance' of the ADG, in particular with regards to solar access and natural cross ventilation for Building 04.

The assessment of the proposed development against key ADG provisions are discussed in the following sections including solar access (**Section 3.9**), visual privacy (**Section 3.10**) and natural cross ventilation (**Section 3.11**).

Where necessary clarification has been provided on how the ADG has been applied to the proposal, including how the proposal has addressed the relevant objectives, design criterion and guidance contained within the ADG through the assessment process. The proposed development is therefore considered consistent with *State Environmental Planning Policy 65 – Design Quality of Residential Apartment Development (SEPP 65)* and achieves the objectives of the ADG.

3.3. MAKERSPACE AND PLACE MANAGER

Council have stated that the layout of the Makerspace space is compromised by the addition of a B99 service vehicle space and have requested clarification on the design, operation and securing of a Place Manager.

An Architectural Design Memo has been prepared by Bates Smart and submitted at **Attachment A**. The Memo discusses the layout, design and functionality of the proposed Makerspace.

Due to the servicing and back of house requirements for the four building occupants (i.e. student accommodation, social housing, makerspace and gym), ground floor space is constrained. Accordingly, the B99 space has been co-located with the loading dock to consolidate similar uses and to limit the number of vehicular entries on the façade.

The gym area on the ground floor is relatively modest in space and will serve as the gym lobby, reception and circulation space. It is anticipated that the Makerspace area behind the B99 space will be used for ancillary functions such as toilets and storage. As such, the proposed layout of the Makerspace is considered suitable for the use and a functional layout.

With regards to the operation of the Makerspace, it is noted that the tenancy is not proposed as a 'community facility' as required under condition A12 of the Concept DA (SSD-9393). As such it will not be the subject of a Planning Agreement. There is no requirement for this tenancy to be used as a community facility within the planning controls. The use of the space is intended for the benefit of the community as required under the Project Delivery Agreement between the applicant and Sydney Metro, however the future operating detail of the tenancy will be required to be determined through a future fit-out and operational development application.

Furthermore, the Place Manager is a commitment of the Project Delivery Agreement whereby it is required to appoint a Place Manager that has recognised and appropriate qualifications and/or experience, with at least seven years relevant community and business liaison experience. This is a requirement of the Project Delivery Agreement and is explained in response to the Council submission on the Environmental Impact Statement. The imposition or requirement of a 'Place Manager' however is not a requirement of the development application nor to be the subject of a separate Planning Agreement.

3.4. WIND

Council have highlighted that the Wind Impact Assessment prepared by RWDI (version 5, dated 15 February 2021) requires extensive tree canopy coverage to meet the wind comfort and safety criteria in order to provide suitable pedestrian amenity. As such, Council have noted sufficient soil volumes and depths are to be provided for each street-tree type.

Aspect Studios (**Aspect**), the landscape architects for both the WMQ SSD DA's and CSSI Approval, have prepared a memo in response to the comments provided by Council with regards to wind and landscape matters (**Attachment B**).

It is noted that the Wind Impact Assessment recommendations have informed the position of tree planting at key locations in order to ensure a safe and comfortable wind environment is provided for pedestrians navigating the site. All proposed tree planting in these locations will be provided at grade within deep soil areas that allow the trees access to sufficient soil volumes. Aspect have advised that the tree positions and "rootballs" have been coordinated with below ground services to ensure that all trees reach full maturity, height and canopy width.

The applicant accepts references in the conditions of consent to Council's 'Landscape Code Volume 2'. To this point, Aspect notes that a minimum three metre wide garden bed has been provided to

ensure that tree planting successfully establishes and reaches its full height and maturity, in accordance with the deep soil guidelines contained within the Landscape Code Volume 2.

As such, the recommendations outlined within the Wind Impact Assessment (version 5, dated 15 February 2021) have guided the tree planting locations and detailed design within the proposed landscaping and public domain design for the WMQ site.

3.5. AWNINGS

A recommendation was put forward by Council for the inclusion of a condition requiring awnings located over the footpath and adjacent at grade spaces to comply with Section 3.2.3 of the Sydney Development Control Plan (**SDCP**) 2012 to provide weather protection and amenity for pedestrians.

As indicated in the RtS submitted 15 February 2021, the proposed design incorporates a variety of awnings which provide shelter (including weather and wind mitigation) adjacent building entries and improved pedestrian amenity.

The awnings provided adjacent to the student accommodation and gym area on Botany Road and along Wellington Street, including the pedestrian entrance to Building 4, all comply with the relevant SDCP controls with regards to height above ground level, setback from kerb, awning width and clearances to street tree planting and other landscaping elements. The awnings adjacent to the community space on Botany Road and along Church Yard have been specifically designed at a lower scale to create an intimate setting to the community space given they are located above an elevated terrace as opposed to a typical street footpath.

At the Design Review Panel (**DRP**) Presentation #12 on 28 January 2021, the **DRP** accepted that:

“the awnings to public spaces meets the required height specifications set out by Council.”

As such, no further design amendments are proposed to the awnings and a condition to the effect of requiring compliance with Section 3.2.3 of the SDCP is considered unnecessary.

3.6. BLANK SIDE WALLS

Council have accepted the proposed additional glazing on Building 3 in response to earlier feedback received, however have recommended treating the infill panels on the north and east walls with some variety in colour by way of conditions.

As outlined in the Architectural Design Memo prepared by Bates Smart at **Attachment A**, the design of the building has been developed in response to feedback from the **DRP**. The proposed façade design has sought to strike a balance between built form articulation, fenestration, and architectural expression through the expressed grid frame.

A simple and elegant approach is proposed, in keeping with the overall building architecture, as opposed to a variety of panel colours.

The design of the respective façades has undergone a rigorous design review process in conjunction with the **DRP** where this matter was discussed. The Panel supported the additional windows proposed to the studios to break up the eastern façade blank walls.

Given this, it is considered unnecessary to condition colour changes to the side walls as it would undermine the design integrity of the building and the detailed review process undertaken in consultation with the **DRP** where this design element was endorsed.

3.7. PARAPET

Council have requested that the height of the parapet on Buildings 3 and 4 is increased to screen any plant and services equipment.

As outlined in the Architectural Design Memo prepared by Bates Smart at **Attachment A**, the proposed increase to the parapet height for both Buildings 3 and 4 is not deemed acceptable for the following reasons:

Building 3

- In accordance with the Design and Amenity Guidelines, the development must not result in any additional overshadowing of Alexandria Park after 10am on 21 June and no more than 30% of Alexandria Park excluding the oval is overshadowed by the development as measured at any time after 9am on 21 June. The current proposal satisfies this design criteria.
- A lengthy and detailed design process was undertaken during the preparation of the development application to ensure minimal overshadowing from the proposed development to Alexandria Park. Various amendments were made to the detailed design to ensure the proposed scheme resulted in less overshadowing than the approved envelope. Increasing the parapet height for Building 3 will increase overshadowing to Alexandria Park and is not considered appropriate.
- To mitigate visibility from the surrounding area, the maximum height of the solar panel zone is proposed to be reduced from 1.5 metres to 1 metre and limited to 500mm high at the edge of the building to the north, south and east. The setbacks from the edge of the building to the solar panel zone is proposed to be increased to the north, south and east. It is requested that a condition of consent be imposed requiring these changes be made to the solar panel zone.
- Given the additional setback and reduced height of the solar panel zone, the proposed panels are not expected to be visible from the surrounding streets and prevent overshadowing to Alexandria Park. This is illustrated in the imagery prepared and provided by Bates Smart in **Attachment A** (refer to pages 4 to 8).

Building 4

- As per the DRP recommendation on 18 February 2021, the Building 4 roof design was amended to improve performance and visual amenity by adding a setback parapet to allow the addition of gravel and/or low planting.
- To further reduce visual impacts, a louvred enclosure over the fire stair is proposed to house the stair pressurisation plant equipment and all other plant equipment is to be located in the Level 9 plant room. This plant space has been partially 'sunken' below the roof slab to minimise visual impact.
- These changes were presented to the DRP on 18 March 2021 (Presentation 13) and subsequently endorsed. Any further increase to the parapet height was not deemed necessary as the impact to visual amenity from mechanical plant has been mitigated with the current design.

3.8. MATERIALS

Council requested the following be considered with regards to materials and finishes:

- A condition of consent regarding materials selection must require materials specifications including colour, material and where relevant manufacturer,

- The glazing does not appear to be clear and untinted. High performance and heavy tinted glazing are not a good urban design outcome, and
- Awning windows provide substandard amenity for occupants by minimising airflow. Sashes or casement windows should be provided instead of the awning windows.

Materials and Finishes

The applicant has previously provided additional information regarding materials and finishes (refer to Appendix B of RtS Submission). As detailed in the Supplementary Architectural Design Report, details regarding the specific type of materials and colours were provided in addition to photographs of sample materials. Furthermore, at DRP Presentation #13, the Panel supported the additional detail on the materiality of each building, as provided to Council. For clarity, the details of the materiality and finishes for Building 3 and 4 are provided again at **Attachment A**.

Given the additional information previously submitted to Council which was subsequently endorsed by the DRP throughout the iterative design process, it is not necessary to condition further details on materials specifications. Further conditional requirements would undermine the additional information previously submitted and the lengthy design review process undertaken with the DRP.

Glazing

With regards to the glazing selection, the applicant is exploring a range of glass products in consultation with the façade engineers to meet the desired building aesthetic and the required environmental performance. The glazing preference is for high visible light transmission (**VLT**), low reflectivity and a neutral body tint, however it is acknowledged these preferences will need to be balanced with the required environmental performance and cost considerations.

Whilst the final glass selection is yet to be determined, further details for both Buildings 3 and 4 are provided at **Attachment A** in response to 'Item 19' (refer page 9).

Windows

Awning windows are proposed as they enable occupants to open their windows and experience natural ventilation, whilst maintaining weather protection. A casement or sash window does not provide the same level of weather protection.

Sashes (double hung) windows are proposed to the western elevation where the windows are situated behind vertical louvres, and the operation of an awning window is not possible.

3.9. SOLAR ACCESS AND EXTERNAL SUN SHADING

Council have raised concerns with the solar access and external shading provisions for Buildings 3 and 4.

Building 3 – Student Accommodation

With regards to Building 3, the design of the western elevation has been developed through the DRP process to create a highly articulated facade that responds to the western sun. Individually operable shading devices were considered by the design team, however, they were deemed not practically viable for student accommodation due to ongoing maintenance and management issues. Fixed shading was therefore considered to be a more functional and suitable shading solution.

The solar and thermal performance of the Building 3 western facade was addressed during DRP no. 13 following comments raised in the RTS report. At the DRP meeting it was demonstrated that the inclusion of both vertical and horizontal shading elements contributed to a 45% reduction in solar gain

to windows during the summer months. It is also noted that the facade has a high degree of solidarity which benefits thermal performance. The 'Summernox' (the average of summer solstice and equinox) was considered to be an appropriate method of demonstrating the average efficacy over the full period of summer. The current proposed design was therefore supported by the DRP.

The DRP also noted the proposed thermal comfort strategies for apartments facing east and west exceed minimum Section J requirements for thermal comfort. It is noted that a BASIX Certificate has been issued for the project, ensuring that the student accommodation building meets the relevant requirements of this sustainability legislation (**Attachment F**).

Council indicated support for the DRPs comments which endorsed adopting the sun shading elements for Building 3 on the west elevation. It appears that Council are referring to the previous Design Integrity Report (**DIR**) dated 12 February 2021.

Following commentary in the RtS Report, Bates Smart reviewed the depth of shading on the northern facade. It was demonstrated to the DRP that the lower portions of the northern facade were shaded by Building 4 and the western portion of Building 3. An increase in the horizontal sun shading was made to level 16 to 23 of the northern facade. This approach was endorsed by the DRP following presentation No. 13.

Building 4 – Social Housing

Bates Smart considered the DRP comment from the 12th of February as well as Council RTS comments on visual privacy between Buildings 3 and 4. Modifications to the western facade of Building 4 were completed to include operable vertical louvres to allow occupants to adjust in response both privacy and shade.

The revised design was presented to the DRP on 18 February 2021. The DRP subsequently endorsed the design amendments to improve privacy and shading on the Building 4 west facade, as documented in the updated DIR dated 31 March 2021.

Separately, the Council has suggested fixed louvre panels be angled on the eastern side of Building 4 to increase solar access during winter to the apartments. The applicant has proposed to keep louvres straight as the apartments receive solar access through the glazed side return of the balcony. Furthermore, angling the louvres blocks occupants view directly out from the apartment at the future green space provided directly across Cope Street.

3.10. VISUAL PRIVACY

Council have raised concerns with the building separation and visual privacy between the student housing and social housing residents in the Southern Precinct.

A detailed overview of the proposed building separation distances was provided in the EIS for SSD-10437 (refer section 6.7.4) and the supporting Architectural Design Report prepared by Bates Smart (refer Appendix F of the EIS). The EIS (section 6.7.4) acknowledged that the application of the ADG minimum separation distances to Building 4 was not easily defined given the proposed social housing development is constructed directly above the metro services building.

Both the EIS and RtS submission considered the "worst-case" scenario whereby a variation to the design criteria for minimum separation requirements for Levels 5 to 9 was sought (5 apartments or 7% of the total number of apartments in Building 4).

Following receipt of Council's comments on the EIS, additional mitigation measures were incorporated into the design to improve privacy and reduce overlooking opportunities. Specifically, the following

additional privacy mitigation measures were provided at the RtS stage and subsequently presented to the DRP.

Following comments received on the RTS and from the DRP after meeting no.12, on both solar shading and privacy between Building 3 and Building 4, a detailed assessment and revised design was completed by Bates Smart. The proposed response revised the entire western facade of Building 4 with operable louvres providing occupants of Building 4 with complete control over privacy and solar access to their apartments. This was considered by the design team a better outcome than providing additional fixed protection or angled windows to Building 3. This solution was supported by the DRP at meeting no. 13.

Building 3:

- Angled privacy/sunscreens were straightened along the Building 3 facade help to partially obscure the windows to the student accommodation studios.
- Internal integrated pull-down roller blinds will be installed to all studios for use by future students.
- The shared common space is proposed to be located on the western side of the floorplate to ensure there is minimal overlooking to other buildings.

Building 4:

- Windows are treated with operable louvre screens to all windows on the western façade, allowing occupants of Building 4 control over privacy.
- The proposed glazing to bedrooms is limited to a single window that is 1.05m wide with 0.8m high solid spandrels.
- The bedroom windows are proposed to be located in the corner of the rooms to limit view angles.
- Perforated aluminium balustrades are provided for further visual privacy to the west facing balcony.
- A high level of facade depth and solidity on the western facade has been proposed through the use of projecting horizontal slab edges, vertical brick piers and spandrels to windows in order to assist with restricting views from floors above and below.

The DRP endorsed the design with regards to 'visual privacy and shading' (items 26 and 27) on 18 February 2021, acknowledging the proposed screens and other measures improve privacy and shading to the Building 3 east façade and Building 4 west façade.

3.11. NATURAL CROSS VENTILATION AND NATURAL VENTILATION

Council have provided comments regarding the application of the ADG and the interpretation of the design criteria for 'natural cross ventilation' compared to the achievement of 'natural ventilation' and the subsequent assessment of units which achieve natural cross ventilation. RWDI have prepared a technical memo in response to Council's comments on ventilation which is provided at **Attachment C**.

With regards to the definition under the ADG, RWDI have noted that the assessment of apartments for natural cross ventilation have considered the prevailing wind directions and the wind tunnel modelling where measurements of the pressures on the façade, window openings and plenum openings were able to be determined.

The assessment considered the internal layout of apartments to ensure an air flow path is available through the living space and bedrooms. Bathrooms were not considered in the assessment due the tendency for this room to be closed when guests are present and potential for odour transfer. This

methodology is consistent with the definition of natural cross ventilation in the ADG. Occupants will be able to control window openings to control the ventilation rate and flow path. The location of plenum openings and positioning within the apartments have also considered this flow path to ensure the most beneficial flow path and distribution through the apartment.

The applicant does not agree with Council's assertion that only 8 out of 70 social housing units achieve natural cross ventilation. RWDI have indicated the design achieves the following:

- 47% (33 out of 70) of apartments throughout the 9 levels of Building 4 are naturally cross ventilated via window openings, and
- In addition, 13% (9 out of 70) of apartments are naturally cross ventilated with the inclusion of plenums.

Council have also raised concerns with the effectiveness of the plenums. To this point, RWDI note that the airflow volume through the apartment is determined based on the pressure differential between opening locations. Direction of airflow does not govern the flow rate as the same "restrictions" would be existent along the flow path.

Modelling undertaken for the apartments which utilise plenums for natural cross ventilation have been modelled based on pressure measurements from a wind tunnel study. It was demonstrated that each apartment would achieve two air changes per hour for more than 95% of the time throughout the year.

The design includes nine apartments which utilise plenums for natural cross ventilation which is due to the constraints of the site. The applicant is willing to accept a condition of consent which requires the cleaning and maintenance of plenums proposed to the social housing apartments to ensure that the internal amenity is maintained, and adequate natural ventilation is provided.

For clarity, the DRP supports the integration of plenum ventilation to various Building 4 apartments to improve the number of units receiving cross ventilation. The DRP also accepts the proposed alternative cross ventilation solution for apartments where this cannot be achieved via operable windows.

Council have encouraged DPIE to consider their draft alternative natural ventilation guideline for apartments in noisy environments to ensure the plenums design provide both acoustic privacy and natural ventilation for noise affected apartments.

The design of the plenums has been developed in coordination with the acoustic team on the project (Stantec) who will ensure that suitable acoustic lining will be provided along the length of the plenum to provide amenity and privacy for residents. The plenums are designed to replicate the operation of a window rather than an acoustic attenuation ventilator. The apartments that are noise affected will have a separate ventilator device as per Council's draft guideline.

3.12. TRANSPORT

3.12.1. Traffic Modelling

Council has raised concerns with the traffic assessment for the student accommodation and the assumption that the use does not generate any private vehicle movements within the traffic network. Further, Council question whether residents will park on the street and any taxis or rideshare movements that may occur.

No parking provision is proposed for the student accommodation component of the development. This is consistent with similar student accommodation developments in the area, which have no parking for residents. Examples include Iglu Broadway and Urbanest Darlington.

The student housing development is located directly above a metro station and will be serviced by high-frequency public transport services. Both student residents and visitors will have access to numerous transport options when travelling to and from the site including the metro, buses and bike links.

Whilst the development may generate some vehicle activity such as taxis and carshare services, these vehicles are included within the 'background movements' considered for the road network and generally occur as activity throughout the day rather than being concentrated within the morning and evening peak periods where people are travelling to and from the WMQ site.

Given the nature of the development, it is expected that the majority of student residents will not own motor vehicles and will utilise public transport. Furthermore, parking restrictions in the area will effectively discourage car ownership and the related trip generation. This is consistent with other similar developments in the area where on-street parking is heavily restricted, such as Iglu Broadway.

In light of the above, the zero-trip generation is reflective of this car parking provision. Importantly, the proposal has sought to minimise car parking, consistent with the objectives of the SDCP to reduce car dependency.

3.12.2. Bicycle Parking

Council have indicated they do not support the proposed changes to Section 3N of the Design and Amenity Guidelines to require on-site bicycle parking for student accommodation at a minimum rate of 1 space per 5 rooms. They have also noted there is limited context for the surveys of existing student accommodation developments to assert the bicycle parking provisions proposed are appropriate.

A total of 87 bicycle spaces are provided for the proposed student housing in Building 3. This has been calculated based on the *State Environmental Planning Policy (Affordable Rental Housing) 2009 (AHSEPP)* requirements using the rate of 1 space per 5 boarding rooms. In accordance with clause 11 of the *State Environmental Planning Policy (State and Regional Development 2011) (SRD SEPP)*, the provisions of the SDCP do not apply to State Significant Development. In the absence of an applicable control guiding bicycle parking on the site, it was considered that the most relevant control would be the state-wide policy for boarding houses, under which a significant number of other student accommodation developments in the City of Sydney have been assessed against as the relevant planning control.

Iglu have previously undertaken real-world bicycle parking occupancy surveys at various sites within the City of Sydney LGA and other urban areas. Notably, some of these include Central Park, Broadway and Redfern. The surveys indicate that the maximum utilisation of bicycle parking provided equates to approximately 5% of the total number of units (refer **Attachment D**).

This is significantly lower than the proposed bicycle parking provisions for student housing which caters for 20% of units based on AHSEPP rates. As such, the proposed 87 bicycle parking spaces for student accommodation is considered suitable to accommodate the anticipated occupancy of bicycle parking. In addition, it is noted that the student accommodation building is located within walking distance of the future metro station and a number of existing tertiary education facilities.

The context of the proposed student accommodation use, the site's location, ease of access to transport orientated uses, and amount of bicycle parking spaces also to be delivered within the public domain to support visitors to the precinct should all be considered in the determination of the appropriate number of bicycle spaces.

As demonstrated in the attached survey summaries, it is noted that these were undertaken prior to May 2019 and all the student accommodation facilities achieved near 100% occupancy levels with usually above 85% international students. These surveys occurred prior to the Covid-19 pandemic and

as such are considered accurate representations of student housing tenancy and the associated typical bicycle usage which should not be ignored.

Overall, the 87 proposed bicycle parking spaces are considered appropriate to support the student accommodation building and no further provisions are required.

The changes proposed to Section 3N of the Design and Amenity Guidelines to include the provision of on-site bicycle parking for student accommodation at a minimum rate of 1 space per 5 rooms should be supported to ensure there is a control specific to student accommodation uses.

3.13. PUBLIC ART

Council have recommended advertising an open 'expression of interest' (**EOI**) as part of the public art process for First Nations' artists and requests conditions be included which require further consultation with Council's Public Art Team.

We reiterate that a detailed Public Art Strategy was prepared and submitted with the EIS for SSD-10437 (Appendix MM) which placed a strong emphasis on recognition and celebration of Aboriginal Culture and the multicultural diversity of the area.

The Public Art Strategy highlights that key recommendations and advice provided by Council in June 2020, such as ensuring the strategy reflects local and national indigenous identity, character and heritage of the area, was taken into consideration in formulating the strategy. The Public Art Strategy has also been prepared in accordance with the design criteria and objectives outlined in Sections 3U and 3V of the Design and Amenity Guidelines to create opportunities to celebrate and express Aboriginal cultural heritage values and narratives.

The proposed artist selection criteria and experience of the curatorial team as noted in the Public Art Strategy is a sound process to ensure the artist's experience, quality of previous work and connection to community will deliver a broad range of artistic expressions within the precinct. It is noted that Council has acknowledged the expertise in the curatorial team and the proposed selection criteria contained within the Strategy.

3.14. WASTE

Council has provided various comments with regards to the Waste Management Plan (**WMP**) and general waste provisions. Elephants Foot have prepared a technical memo in response to Council's comments which is provide at **Attachment E**.

For Building 3, all chutes have been designed to be installed behind closed doors to create an air lock and maintain separation from the foyer areas and chute intake doors. Due to the spatial constraints of the floorplates, 'backup' bins have not been designed into habitable areas. Instead, the chute system for Building 3 will have an automated blockage alarm which alerts the management office of blockages where there are five consecutive failed drops. This allows building management to release the blockage within 15 minutes. Elephants Foot have determined that the solution is appropriate for Building 3 as it is managed by staff full-time and note this system has been successfully installed and operated at other projects within Council's LGA.

The chute system for Building 4 meets Council's requirements. The chutes are in an airlock adjacent to the lift lobby and 2 x 240L bins for waste and recycling located in room in close proximity.

Elephants Foot have also responded to Council's comments with regards to waste collection frequencies. Building 4 forms part of the WMQ precinct which is a busy mixed-use development comprising over 200 residential apartments. Collections are proposed to occur twice weekly in order to reduce odour impacts within the building given the size of the development. Elephants Foot have

advised that twice weekly collections for residential waste bins and weekly collections for residential recycling bins is consistent with other WMPs they have prepared for approved developments within Council's LGA.

Whilst it is acknowledged three services per week for developments is beneficial as an average across various types and sizes of developments, Elephants Foot consider it does not necessarily address the needs of large developments that by virtue of the populations involved, require more regular waste collection.

Due to the large-scale nature of the proposed development, the developer intends to undertake five general waste pickups per week for the Building 3 commercial uses. Elephants Foot consider this to be a typical collection frequency for waste streams managed by commercial contractors to ensure the loading dock and bin room remain clean. Ptc (project traffic engineers) have considered the impact of this on the road network and confirm the provision of a waste collection service on any particular day would not register in any form of modelling or analysis.

The following is noted with regards to other matters raised by Council pertaining to food waste, further details on ongoing management and the preparation of construction and demolition WMPs:

- Food waste is currently captured within the normal waste stream and therefore the development is capable of accommodating food waste generation. If Council's service is confirmed in the future, one 1100L bin can be converted to 4 x 240L bins for food waste.

This would require all building occupants to store their food waste in eco-friendly bags and then transport them down via the lift into the waste room allocated in basement where the 240L bins are located. These 240L bins will be caged off from all other bins and equipment.

- Details regarding ongoing management, storage and collection of waste, implementation and maintenance of signage, and security of storage areas have been provided previously in the Operational WMP submitted with the DA:
 - Refer Section 11 – 'Stakeholder Roles & Responsibilities' (page 36)
 - Refer Section 13 – 'Waste and Recycling Storage Areas' (page 38).
- A separate Construction and Demolition WMP will be prepared by the applicant and provided prior to the relevant Construction Certificate. This is consistent with other OSD proposals (such as Pitt Street and Victoria Cross) and the applicant accepts a condition to this effect.

3.15. LANDSCAPE

As outlined in the Landscape Memo prepared by Aspect (refer **Attachment B**) and discussed previously in **Section 3.4**, the recommendations contained within the Wind Impact Assessment prepared by RWDI (version 5, dated 15 February 2021) have been incorporated into the landscape design for the WMQ site.

Council have noted that the inaccessible green roof proposed on level 3 of Building 3 and the associated landscape drawings, illustrate a substrate soil mound that does not include an appropriate edge depth for the planter. Aspect have advised that this is a graphical error on the plans and a minimum depth of 200mm will be provided at the planter edges to ensure sufficient soil depth is provided to support the planting. Localised mounding to 400mm will be provided where possible to increase soil volume and allow variety in plant selection. Aspect have prepared an updated landscape section drawing WMQ-BLD3-ASP-LS-DA303 which provides 200mm depth to planter edges on the level 3 green roof (revised drawing is appended to **Attachment B**).

Council also provided the following comment:

In addition to improved biodiversity, stormwater management, reduced albedo and urban heat island effects, green roofs can significantly reduce the temperature of PV equipment thereby increasing their efficiency. It is recommended that DPIE compel the applicant by condition to engage with this research and provide green roofs not just where PV cells are provided but replace any bare roof spaces.

The applicant does not accept Council's recommendation for a condition requiring further investigation of this research or the provision of additional green roofs. The applicant and project team have only been made aware of Lendlease and UTS undertaking **preliminary** research / testing on this matter (as referenced by Council in their response comments for the Northern Precinct SSD-10440). The relevance of Council's comments regarding this preliminary research and the lack of substantiative findings is not understood, especially considering the ongoing assessment and design review process that has been undertaken to date since lodgement of the SSD DAs in October 2020.

Given the lack of substantiative evidence for this research and the timing of this request, it is not considered necessary or appropriate in this instance for a condition requiring the applicant to engage with this research or provide additional green roofs as part of the design.

3.16. FLOODING

Council have provided a number of comments around the previous non-compliance of the proposed floor level of a retail building in the Central Precinct ("Area 11"). We note that this item relates to the Central Precinct and not the Southern Precinct.

Notwithstanding this, the matter was addressed by WSP in the memo prepared and submitted with the Central Precinct SSD-10439 RtS Report (refer Appendix S), whereby the finished floor level of Area 11 was raised to 15.7m ADH which sits above the 1% annual exceedance probability (**AEP**) flood level.

Council has also noted previous comments provided by Environment, Energy and Science Group (**EES**) raising concerns about the impact of flooding from the proposed road works along Cope Street associated with the Station development noting. This matter was addressed as part of the Flooding Memo prepared by WSP and submitted as part of the Southern Precinct SSD-10437 RtS Report (refer Appendix V).

WSP acknowledged that the EES reviewer at the time noted the individual buildings of the OSD are not expected to cause any negative flood impacts. WSP noted that the Southern Precinct development (including Cope Street Plaza) do not affect topography levels outside the existing buildings footprint (i.e. pre-development conditions prior to any work associated with the metro station construction).

The flood impacts are caused by the proposed road works along Cope Street which form part of the CSSI approval and are outside the scope of works under SSD-10437. This matter will be addressed as part of the separate CSSI application.

3.17. SIGNAGE

Council has raised concerns regarding the two top of building signs proposed on the student accommodation building. Council is of the view that the signs will result in visual clutter, set an unacceptable precedent in the area and are inconsistent with the first and fourth assessment criteria of Schedule 1 of the *State Environmental Planning Policy No 64— Advertising and Signage*.

The proposed signage is considered acceptable for the reasons outlined below:

- The proposal recognises the importance of providing high quality signage that is integrated with and contributes to the character of the student housing development and WMQ. More importantly, the proposed signage seeks to fulfill a purpose, that is identify the student accommodation tenant, Iglu, and enhance legibility through the precinct.
- The proposed signage merely seeks to display the student accommodation operators name and logo. No advertising is proposed.
- The signs will not be illuminated, comprise no advertising and will integrate with the overall building design to ensure no impact on mechanical louvres or openings and that fixings are concealed.
- The signs provide certainty for both the future tenant (Iglu) and Council through the submission of detailed signage plans that illustrate the signage type, dimensions and materials. As illustrated in the submitted montages, the top of building signs are subservient to the architectural built form and do not detract from the streetscape.
- The signage proposed is commonplace on student accommodation buildings within the City of Sydney. 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.
- Whilst the site is located outside the CBD, WMQ is a significant landmark development and signage provides an effective means of communication for residents and visitors to the precinct.
- Whilst Council consider Australian Technology Park to be an 'incomparable' in context, ATP is located just 500m of the site and it is considered an appropriate comparison as it demonstrates that high quality top of building signage that is cohesive and integrated with the built form can result in a positive outcome.
- The site is a major landmark development that will attract significant commercial office and employment uses in the future. Whilst the top of building signage relates to the student accommodation component only, it is considered appropriate in the context of the site.

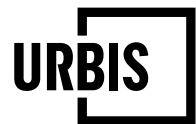
Accordingly, this application seeks approval for the proposed signage illustrated in the Architectural Design Report at Appendix F of the EIS and the revised Architectural Drawings at Appendix B of the RtS Report for SSD-10437.

3.18. REMEDIATION

Council have noted that the Remedial Action Plan (**RAP**) prepared by Douglas Partners and Section B Site Audit Statement endorsed by NSW Accredited Site Auditor (Tom Onus) appears to relate to the eastern section of the site only in relation to the CSSI station works. As such, they've requested that further investigations be carried out for all other land within the site, especially with the potential plume of chlorinated hydrocarbons from the former dry cleaners at 87 Botany Road.

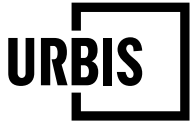
As outlined in Section 8.2.2 of the Contaminated Sites Strategy Report submitted with the EIS for SSD-10437 (Appendix OO), a RAP specific to the western section of the site will be prepared to manage the potential contamination on site and achieve a Site Audit Statement that will state that the land is suitable for the proposed land use.

As such a Remediation Action Plan (**RAP**) for the eastern portion of the site is currently being prepared. The RAP, once finalised, will outline the remediation requirements and the need to obtain a Site Audit Statement which confirms the land is suitable for the proposed residential land use in



Building 3 and proposed open space areas, referred to as HIL (B) for residential use and HIL (C) for open space.

We note that given the findings of the RAP prepared by Douglas Partners for the CSSI approval (western portion of site), the site can likely be made suitable for the proposed land use. We anticipate that a condition of consent will be imposed requiring the preparation of a RAP, if necessary, and will outline the requirements to obtain a Site Audit Statement for the site to ensure the land is suitable for the proposed land use.



4. CONCLUSION

We trust the information provided in this letter and the supporting documentation satisfies the matters raised in the RFI letter and assist the DPIE in finalising the assessment of the development application and prepare a recommendation for approval.

Should you wish to discuss any of the above matters further, please do not hesitate to contact Ashleigh Ryan at aryan@urbis.com.au or the undersigned.

Yours sincerely,

A handwritten signature in black ink that reads "Jack Kerstens". The signature is written in a cursive, flowing style.

Jack Kerstens
Senior Consultant
+61 2 8233 7636
jkerstens@urbis.com.au