

7 September 2017

**NSW Planning Assessment Commission Determination Report
Building R4A (SSD 6964) and Building R4B (SSD 6965), Barangaroo South**

1. INTRODUCTION

On 7 August 2017, the Planning Assessment Commission (Commission) received from the Department of Planning and Environment (Department) a State significant development application from Lend Lease (Millers Point) Pty Ltd (the Applicant) to construct, use and fit-out a 72-storey building (RL 250m) and a 60-storey building (RL 210m) respectively known as Building R4A and Building R4B, above the approved Stage 1B basement car park on Block 4A within Barangaroo South.

The Department has referred the development application to the Commission for determination in accordance with the Minister for Planning’s delegation because the Department received an objection from the relevant local council (the City of Sydney Council).

Ms Lynelle Briggs AO, Chair of the Commission, nominated Annabelle Pegrum AM (chair), and John Hann to constitute the Commission to determine the development application.

1.1 Summary of Development Application

The development application seeks approval for Building R4A to contain 327 residential units and retail floor space at ground level and Building R4B to contain 297 residential units and retail floor space at ground level. Both building applications include a three-storey podium containing communal building facilities and both include fitout and use of the basement. A covered glazed pedestrian link bridge for resident use only is proposed to connect the two buildings at podium level 2 giving access to communal facilities. A pedestrian through-link called the ‘Strada’ is proposed below the link bridge to provide public access between the two buildings. The fitout of the retail tenancies is subject to separate development applications. A full summary of the applications was provided within section 2.1 Development Description of the Department’s Assessment Report Tables 1 and 2:

Table 1: Building R4A (SSD 6964):

Aspect	Description
Demolition	<ul style="list-style-type: none"> demolition of interim basement elements, such as access points and services risers, constructed on a temporary basis under the Stage 1B basement approval.
Built form	<ul style="list-style-type: none"> construction of a 72-story mixed use building with a height of 246.5m (RL 250m) including a three-storey, 10.6m high podium.
Use	<ul style="list-style-type: none"> two ground floor retail tenancies and 327 residential units above, including podium level communal facilities / open space.
Public domain/ landscaping	<ul style="list-style-type: none"> provision of a publicly accessible pedestrian through-site link (known as the Strada) at ground level located between the building and Building R4B; paving for a pedestrian area surrounding the building; a new porte cochere adjacent to Barangaroo Avenue; and landscape works including a podium rooftop garden.
Gross floor area (GFA)	<ul style="list-style-type: none"> total GFA of 48,004m² comprising: <ul style="list-style-type: none"> 47,564m² residential floorspace; and 440m² retail floorspace.

Basement use	<ul style="list-style-type: none"> • fit out and use of approved Stage 1B basement car park (driveway access from Watermans Quay) to accommodate: <ul style="list-style-type: none"> ○ 378 parking spaces (377 residential, 1 retail) allocated specifically to Building R4A; ○ residential and retail storage; ○ waste rooms; ○ facilities management offices; ○ shared plant and services; ○ end-of-trip facilities (changing rooms, lockers and showers); and ○ 327 resident bicycle parking spaces (located within the individual unit storage areas) and retail worker bicycle parking spaces.
Signage	<ul style="list-style-type: none"> • A signage zone to accommodate future building identification on the Barangaroo Avenue frontage.

Table 2: Building R4B (SSD 6965):

Aspect	Description
Demolition	<ul style="list-style-type: none"> • demolition of interim basement elements, such as access points and services risers, constructed on a temporary basis under the Stage 1B basement approval.
Built form	<ul style="list-style-type: none"> • construction of a 60-story mixed use building with a height of 206.5m (RL 210m) including a three-storey, 10.6m high podium; • construction of a covered pedestrian link bridge connecting with the podium of Building R4A; and • construction of a canopy over the Strada located between Building R4A and R4B.
Use	<ul style="list-style-type: none"> • two ground floor retain tenancies and 297 residential units above, including podium level communal facilities / open space.
Public domain/ landscaping	<ul style="list-style-type: none"> • paving for a pedestrian area surrounding the building; and • landscape works including a podium rooftop garden.
GFA	<ul style="list-style-type: none"> • total GFA of 38,896m² comprising: <ul style="list-style-type: none"> ○ 38,602m² residential floorspace; and ○ 294m² retail floorspace.
Basement use	<ul style="list-style-type: none"> • fit out and use of approved Stage 1B basement car park (driveway access from Watermans Quay) to accommodate: <ul style="list-style-type: none"> ○ 301 parking spaces (300 residential, 1 retail) allocated specifically to Building R4B; ○ residential and retail storage; ○ waste rooms; ○ facilities management offices; ○ shared plant and services; ○ end-of-trip facilities (changing rooms, lockers and showers); and ○ 297 resident bicycle parking spaces (located within the individual unit storage areas) and retail worker bicycle parking spaces.
Signage	<ul style="list-style-type: none"> • a signage zone to accommodate future building identification on the Watermans Quay frontage.

1.2 Need for proposals

The Applicant has stated that the applications are necessary to deliver the outcomes of the Barangaroo South Concept Plan Modification 8, MP_06_0162 (Concept Plan). The proposed R4A and R4B buildings are within the footprint of the approved Concept Plan.

1.3 Background

On 9 February 2007, the then Minister for Planning approved the Concept Plan to guide development of the Barangaroo site. Modification 8 to the Concept Plan, approved on the 28 June 2016, identified the configuration of Block Y, and Blocks 4A and 4B within Barangaroo South (see **Figure 1**). The Concept Plan identified the height and gross floor area requirements for each building within Barangaroo South. The proposed residential Buildings R4A and R4B are located within Block 4A of the Concept Plan. Details of each of the modifications was included within Appendix C of the Department's Assessment Report.

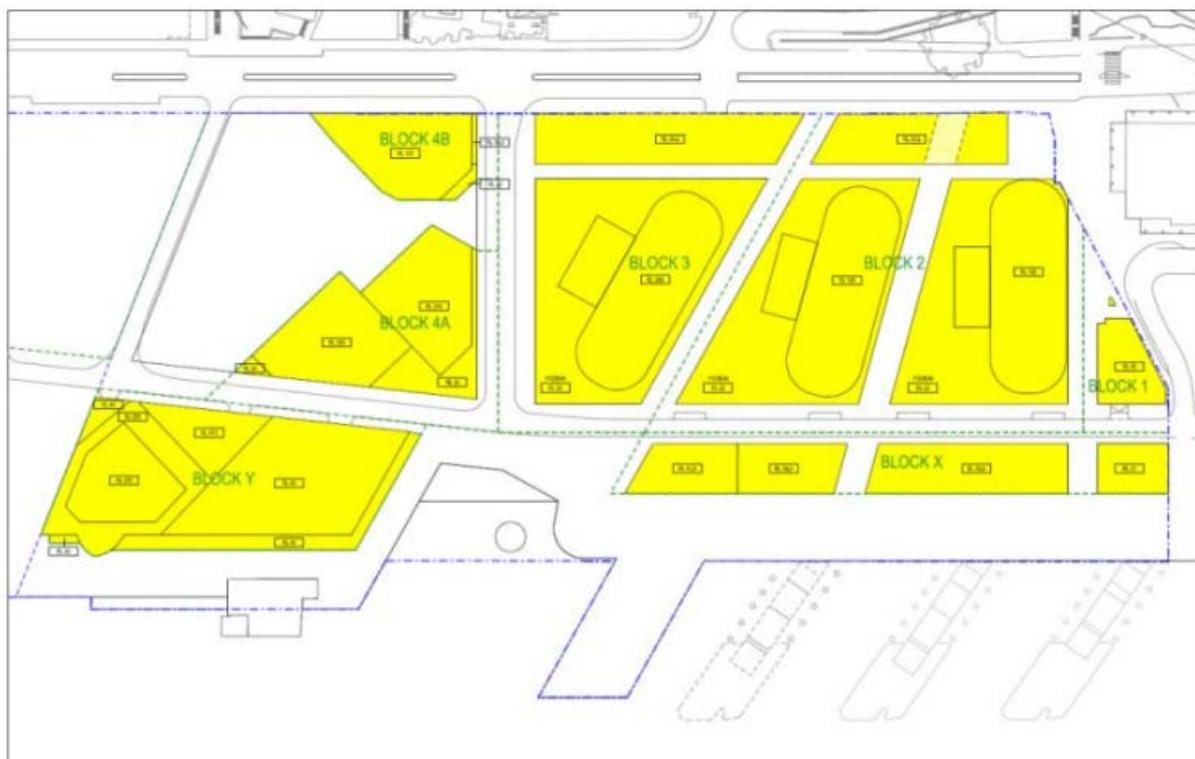


Figure 1: Barangaroo Concept Plan (Source: MP06_0162, MOD 8, Planning Assessment Commission determination report)

2. DEPARTMENT'S ASSESSMENT REPORT

The Department's Assessment Report identified key environmental assessment issues as built form, residential amenity, landscaping and the public domain and traffic and parking. The Department's assessment included consistency with the Concept Plan and design controls, design excellence, views, overshadowing, communal and public open space, solar access, deep soil zones, building separation, natural ventilation, apartment size and layout, private open space and balconies, storage, unit type amenity, landscaping / public domain works, the Strada, its canopy and the link bridge, wind impacts and traffic, access and parking as key impacts for the proposals. The Department also addressed the key issues raised by the Council. The Department concluded that the proposed two residential towers R4A and R4B are *consistent with the strategic objectives for the area ... (and) will result in a wide range of positive social and economic impacts ... which will benefit residents, workers and visitors ... (and) are in the public interest*'. The Department's assessment addressed the key issues and recommended conditions where necessary.

3. COMMISSION'S MEETINGS AND SITE VISIT

As part of its assessment of the proposals, the Commission met with the Department, the Applicant, and viewed the site. Notes from these meetings and the viewing of the site are provided in **Appendix 1**.

3.1 Briefing from the Department

On 16 August 2017, the Department briefed the Commission on the design of the buildings, interpretation of the Apartment Design Guidelines and the projects consistency with them and the Concept Plan.

3.2 Briefing from the Applicant and site visit

On 22 August, the Applicant wrote to the Department with proposed changes to the draft conditions of consent including requests for staged Occupation Certificates. The Department provided the Commission with its response on the same day.

On 23 August 2017, the Commission met with the Applicant and viewed the site. The Applicant delivered a presentation to the Commission addressing in particular the:

- Building architecture and materiality (including an indicative sample board) and connectivity and public/resident access at the ground level;
- Canopy, Strada and link bridge between the buildings;
- Wind mitigation and the implications for the 'enclosure' of the Strada;
- Closure of the Strada at night as a crime prevention strategy;
- Calculations of total communal open space;
- Consultations regarding Building R4A and R4B with the Barangaroo Delivery Authority and their Design Advisory Panel;
- Commitment to key worker housing as part of the future Building R5 and offsite proposals consistent with the Concept Plan; and
- Spatial impact of providing ducted ventilation to more apartments than currently proposed and the complexity of adding windows to the proposed study spaces.

The Applicant tabled a proposal for a new exclusion zone within Hickson Park to assist with the construction of the proposed buildings and the future R5.

3.3 Meeting with City of Sydney Council

On 11 August 2017, the Commission wrote to the City of Sydney Council inviting them to meet with the Commission to provide the opportunity to discuss their objection. Council chose not to meet with the Commission and relied upon the current objection registered with the Department.

4. ADDITIONAL INFORMATION

The Commission requested the following additional information from the Department:

- Confirmation that a Design Excellence Strategy had been prepared by the Applicant and submitted to the Barangaroo Planning Reference Group or equivalent; and
- Whether the Applicant's proposed exclusion zone within Hickson Park, could operate within the current B12 staging condition requirements of the Concept Plan.

The Commission requested the following additional information from the Applicant:

- Details of the façade, including the type of glass proposed;
- Details of the materials used within the notches;
- A list of Apartment Design Guideline compliance and non-compliance by unit type and number for both buildings;
- Confirmation that Renzo Piano has been engaged as the architect for the development of the project including to deliver the design elements of the buildings' façade;
- A summary of the development applications identified as 'excluded' on the submitted plans;

- Information on the maturity of the trees proposed to be included within the landscape upon occupation of R4A and R4B;
- Modelling of pedestrian movements within the Strada;
- Details of how the proposed exclusion zone could operate, consistent with condition B12 of the Concept Plan.

5. COMMISSION'S CONSIDERATION

In this determination, the Commission has considered carefully:

- the information provided by the Applicant;
- the Department's Assessment Report and response to the applicant request to amend the draft conditions of consent;
- advice and recommendations from government agencies;
- submissions by the City of Sydney Council;
- public submissions;
- relevant matters for consideration specified in section 79C of the *Environmental Planning and Assessment Act 1979* (EP&A Act), including:
 - relevant environmental planning instruments;
 - the *Environmental Planning and Assessment Regulation 2000*;
 - the likely impacts of the development on both the natural and built environments;
 - social and economic impacts in the locality;
 - the suitability of the site for the development;
 - written and verbal submissions from the public; and
 - the public interest, including the objects of the EP&A Act.

The key matters considered by the Commission include:

- Consistency with the Concept Plan
- Architecture, building materials and detailing;
- Consistency with the Apartment Design Guidelines under State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development (SEPP 65);
- The Strada enclosure and the Link Bridge;
- Staging;
- Public Interest;
- Hickson Park;
- Tree maturity; and
- Other relevant issues.

5.1 Consistency with Concept Plan

The proposed Buildings R4A and R4B are located within the boundary of Block 4A of the Barangaroo Concept Plan. Modification 8 to the Concept Plan approved a height of 250RL and GFA of 86,979m² for Block 4A. The Concept Plan also defined site boundaries for the buildings and allocated various land uses (residential and retail). The proposed development has a maximum height of 246.5m, a combined GFA of 86,900m² and is within the footprint envelope defined by the Concept Plan. The Commission is satisfied that the proposed buildings are consistent with the desired future character of the Barangaroo area, including provisions to ensure design excellence and built form outcomes.

5.2 Architecture, building materials and detailing

The Commission was concerned that the architecture achieved the expected design excellence that the site context and development warranted. The Commission noted the Secretary's certification of waiver for an architectural design competition pursuant to the state significant precincts SEPP and Concept Plan.

The Commission considers that the proposed building height, relationship and massing is consistent with the Concept Plan and acknowledges the international design credentials of the eminent architect

– the Renzo Piano Building Workshop (RPBW). The Commission noted the refinements made to the design by the architects in response to submissions, queries from the Department and to the *Built Form Principles and Urban Design Controls* (Design Controls) under the Concept Plan (including as illustrated in their Supplementary Design Report for both buildings). The Commission had regard to the proposed crystalline expression of the two towers and their slender sculptural profile, the separation of the curtainwall facades from one another by the use of the recessed corner ‘notch’, the podium scale and relationship to the ground plane and Hickson Park, the positive relationship between the buildings and of the development with the approved Crown Sydney Hotel Resort. The Commission considers that the buildings will result in an excellent design outcome.

The Commission was however concerned that the proposed materials and associated façade details would be of a high quality and finish and that the architect would have an ongoing design role in the development through to completion. The Commission recognised that whilst the primary materials had been selected, there was considerable further design development and specification that would be necessary for documentation and approval prior to construction.

The Commission received confirmation from the Applicant that the RPBW had *‘been engaged as the Principal Architect ...through to practical completion ... (and would) complete the design development of the façade to Tender stage and have an ongoing role in reviewing shop drawings ... (and) approve details throughout documentation and delivery’*.

Nevertheless, to ensure building materials meet the expectations of the quality required for the buildings, the Commission has amended condition B9 to require all samples be provided for approval by the Secretary prior to construction.

B9 Schedule of Materials

Prior to the issue of the relevant Construction Certificate details of materials used in the development (that have been certified by Renzo Piano) shall:

- (a) be submitted to the Secretary
- (b) be approved by the Secretary, having regard to any advice from the NSW Government Architect; and
- (c) include:
 - i. a list of the final schedule of materials
 - ii. 1sqm sample boards for the façade cladding, glazing, fixings and signage;
 - iii. Computer generated imagery and other visual supporting documentation;
 - iv. Plans and elevations indicating the location of materials on the building;
 - v. Confirmation of the process/methods in arriving at the final chosen schedule of materials; and
 - vi. Any other information deemed necessary to justify the schedule of materials.

5.3 Consistency with the Apartment Design Guidelines under State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development (SEPP 65)

The Commission notes that the Apartment Design Guidelines provide important guidance to the consent authority in the assessment of development applications. However, apart from the non-discretionary development standards in SEPP 65 the Apartment Design Guidelines are not intended to be applied as a set of strict development standards. The use of the guidelines was recently clarified in Planning circular PS17-001 *Using the Apartment Design Guide* issued on 29 June 2017.

Among other things, the City of Sydney Council submission raised concerns with the number of units within Building R4A and Building R4B that it considers are non-compliant with the Apartment Design Guidelines. Council suggested that apartment yield is excessive and that non-compliances should be excised from the proposals. Their main areas of concern relate to the:

- Minimum separation distance between R4A and R4B is 13m, which is 11m less than the recommended 24m separation required between habitable rooms above nine storeys;
- 'Compliance' with the minimum threshold for solar access; and
- Requirements for natural cross ventilation.

The Commission considered these matters and consistency associated with communal open space and sunlight access.

Minimum separation distance between R4A and R4B

The Apartment Design Guidelines identify a minimum separation distance for buildings over 25m high as 24m between habitable rooms / balconies, 18m between habitable rooms and non-habitable rooms and 12m between non-habitable rooms. The primary aim of the setback is to provide residential amenity to residents and sustainable open space areas.

The Applicant maintains that whilst the design of the buildings does not meet these separation requirements they are consistent with the Design Controls within the Concept Plan which establish a minimum separation of buildings on Block 4A of 9m. The Department agrees that the proposed separation distance of 13m between buildings R4A and R4B is compliant with the Concept Plan. Further, the Department considers that the staggering of the buildings, floor layout, *'use of architectural elements such as opaque facades and overlapping façade wings, and orientation of views to the north and north-east'* is consistent with the intent of the guidelines and together with the proposed floor layout will provide adequate amenity to the residents. The Department considered that the proposed development will provide acceptable privacy for future residents.

The Commission agrees with this position and finds that the proposals are consistent with the Concept Plan and that through architectural design achieve the intended aims of residential amenity including for visual privacy and suitable open spaces.

Solar Access

The Apartment Design Guidelines identifies solar and daylight access design criteria such that:

- Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid winter; and
- A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid winter.

The Department identified that 9.4% of Building R4B had no solar access in midwinter and 64% of units in R4A and 65% of units in R4A receive two hours of solar access between 9am to 3pm in midwinter. This would result in 221 units of the 624 total units receiving less than two hours solar access between 9am to 3pm in midwinter. To meet the requirements of the Apartment Design Guidelines (70% of all units receiving two hours solar access between 9am and 3pm) an additional 34 of the 624 units would need two hours of solar access.

The Applicant advised that the approved Crown Sydney Hotel Resort results in overshadowing of the north-western and western elevations of Building R4A from approximately 1:30pm until after 3pm in midwinter. The location of the Crown Sydney Hotel Resort means that the 70% of all units receiving more than two hours solar access is difficult to achieve. The Applicant argues that an extension of the solar access hours from 9am to 5pm is more appropriate as the western façade of the building has unimpeded western solar access over the harbour.

The Department's Assessment Report references the judgement of *Botany Development Pty Ltd v Botany Council [2013]* where the 9am to 3pm time span nominated in the Apartment Design Guidelines may be extended in some cases where the analysis clearly demonstrates solar access before and after those times can be obtained. When applying the extended hours, the number of units receiving sufficient solar access increases from 64.5% to 88.5%. The Commission is satisfied that

although the solar access does not strictly meet the Apartment Design Guidelines criteria, a large portion of the units will receive adequate solar access due to the unimpeded westerly access overlooking the harbour.

In addition, the Applicant identified that of the 34 units not receiving any direct solar access, nearly all of the other Apartment Design Guidelines are achieved for these units (with the exception in some instances of a window not being provided within a study and a small proportion of the required storage not being provided internally within the unit). The Commission is satisfied that the 9.4% or 28 units is less than the maximum of 15% of units allowed to receive no solar access in accordance with the design criteria stipulated within the Apartment Design Guidelines.

Natural Ventilation

The Apartment Design Guideline requirements for units below nine storeys require 60% of units be naturally cross ventilated. The proposed Buildings R4A and R4B, in the first nine storeys, naturally cross ventilate 27 of the 54 units (50%). The City of Sydney Council objected to this aspect of the project accordingly. Units at 10 storeys or greater comply with cross ventilation requirements with wintergardens that cannot be fully enclosed.

The Department notes that the Applicant has proposed to meet the 60% cross ventilation requirement in the form of an internal ducting system with air intake from an adjacent façade carried through a ceiling duct to the unit. The proposed ducting system would service an additional one unit on each of the first nine floors by facilitating air circulation by increasing the air intake from an adjacent façade. The Applicant's wind report identified that the ducting system would provide suitable air flow to achieve an air flow comparable to the naturally ventilated units. When combining the naturally cross ventilated units and ducted units, the Applicant was able to cross ventilate 36 of the 54 units (67%) of the units on the first nine storeys.

The Department requested the Applicant provide ducted system ventilation to the remaining two units on each of the first nine storeys to provide a superior design and amenity outcome that is consistent with the design excellence outcome required under the Concept Plan. The Applicant advised the Department that due to structural limitations and potential Building Code of Australia compliance, ducting the remaining two units is difficult to achieve. Nevertheless, the Department considered that all design options had not yet been thoroughly explored and recommended a condition requiring the remaining two units to be ducted by the same form of ventilation.

During the Applicant's briefing with the Commission, the architect gave a comprehensive presentation to the Commission regarding the consequences of delivering two additional ducted ventilated units on each floor including 'non-compliance' with other Apartment Design Guidelines and a significant reduction in the amenity of the residential access corridors. Specifically, the ceiling height of common areas would need to be lowered to accommodate the structural insertion of the ducting system. The Applicant also felt that they were being unjustly penalised by the Department requiring them to achieve a higher level of ventilation than that required under the Apartment Design Guidelines, given that the Department had assessed that the proposed method of hybrid ventilation ducting would provide '*a satisfactory design outcome*'.

The Commission agrees with the Department that the ducted ventilation as proposed is appropriate in this circumstance for cross ventilation and notes the benefits of the wintergarden design for levels 10 and above. However, the Commission considers that the Applicant has tested the design and building consequences of adding a form of hybrid ventilation ducting to additional apartments, as envisaged under the draft conditions, and finds that the impact would have a broader negative effect on communal amenity and the quality of the building. The Commission has therefore deleted this additional requirement (for ducted ventilation to the two remaining units on each of the first nine floors) from the conditions.

Council also objected to the number of studies that have no 'windows'. The Applicant and the Department consider that this apparent inconsistency with the Apartment Design Guidelines is more than offset by the significant increase in area for the apartments above the provisions of the guidelines, the extent of glazing giving natural light and views to the outside and the floor planning relationship of the study areas to other open spaces within the units. The Commission agrees.

Communal and public open space

The Apartment Design Guideline requires 25% of the site area be provided as communal open space with at least 50% of this space receiving at least two hours of direct sunlight between 9am and 3pm. The objective is to enhance residential amenity and provide opportunities for landscaping. Together buildings R4A and R4B provide 53.4% or 1,124m² of communal open space of which 849m² is external space (albeit not all is at ground level which is generally consistent with the guideline alternative provisions for dense urban locations). However, only 24.3% of the total communal open space will receive two hours of direct sunlight, which is under the 50% required under the Apartment Design Guidelines.

The Apartment Design Guidelines 'design criteria' note that where developments are unable to achieve the design criteria they should demonstrate good proximity to public open space and facilities and/or provide contributions to public open space. The Applicant maintains that Buildings R4A and R4B will be on the doorstep of Hickson Park which will receive significant amounts of sunlight all year round and deep soil areas for trees. In addition, residents will have immediate access to the harbour foreshore and other significant public open space in walking distance. The Commission is satisfied that for Buildings R4A and R4B, the Applicant can deliver a high level of amenity for residents from the surrounding parks and foreshore consistent with the guideline objective for communal open space.

Other matters related to the Apartment Design Guidelines

The Commission received a comprehensive summary from the Applicant addressing consistency with the Apartment Design Guidelines by apartment type and location.

The Commission finds that 'compliance' issues associated with internal and external storage collectively meet the guidelines objectives for convenience, security and volume although the recommended 50% of the volume within the unit is not achieved for 242 units. The Department notes that the shortfall is minimal ranging from 0.4m³ for three bedroom units and between 1 – 1.3m³ for one bedroom units. The Commission considers this a minor shortfall that is met in the individual unit basement storage and is offset against the increased size of units throughout the development (which are above guideline size recommendations).

Similarly, minor discrepancies in the width of some living rooms and the area of some wintergardens is offset by the generous size of all the units, noticeably one bedroom apartments typically being 70.5m² some 20m² larger than the recommended 50m² in the guidelines

5.4 The Strada enclosure and link bridge

The Strada provides a key pedestrian access link between the buildings and from Hickson Park through to Watermans Cove and is proposed to have active retail frontages on either side.

Wind impacts

Buildings R4A and R4B are separated by a 12m Strada at ground level which is not inconsistent with the Concept Plan. The development is exposed to prevailing westerly winds due to the location and orientation of the site adjacent to Darling Harbour and the funnelling of southerly winds along the eastern and western aspects of the site due to associated street alignments. The separation of the buildings and the orientation of the site would create wind tunnel effects within the proposed Strada.

The City of Sydney Council raised concerns over the impact of wind on pedestrian amenity through the Strada as a result of the design of Buildings R4A and R4B and the lack of detail available on the design of Hickson Park including the location and quantity of tree plantings.

The Applicant acknowledges the forecast wind impacts created by the design of the buildings and have proposed a pair of bi-fold doors and a pair of 3m wide, 3.6m high glazed wind baffles at either end of Strada in addition to 1.1m high baffles within the Strada. The Applicant proposes to utilise the bi-fold doors to close the Strada during strong metrological events to mitigate wind impacts and maintain a suitable amenity within the Strada. They advise that the bi-fold doors would not permanently close the space but would open regularly for pedestrian movements. Based on modelling of pedestrian movements provided in additional information prepared by the Applicant, there would be a peak lunch time flow of 1,050 people per hour transiting through the Strada. The Applicant believes bi-fold doors could adequately mitigate adverse wind impacts for pedestrian walking and sitting.

The Department's assessment report noted that limited design information had been provided for the wind baffles and bi-fold doors. The Department recommended the insertion of an additional condition requiring further details of wind baffles and bi-fold doors, whose designs are underpinned by the principles of access, openness and transparency.

The Commission has reviewed the Applicant's wind report and considers that it is not certain that a satisfactory level of amenity will be achieved for pedestrians and retail patrons within the Strada. The Commission finds it unlikely that the Applicant will be able to achieve an acceptable level of pedestrian and sitting amenity with doors opening and closing intermittently when windy conditions are present. However, the Commission is satisfied that through more detailed modelling and additional mitigation measures, the Applicant will be able to achieve an acceptable level of pedestrian and sitting amenity and as such supports the Department's recommended condition (E4 of Building R4A) and has further amended it to require an adequate level of pedestrian and sitting amenity. The Commission finds that further modelling will assist in defining an appropriate solution including whether bi-fold doors or some alternative is the optimum appropriate suite of wind mitigation measures that will ensure maximum pedestrian walking and sitting amenity through the Strada. The Commission is also concerned that adequate provision is made for trees as wind mitigating elements (refer Section 5.8).

Privatisation of open space

The City of Sydney notes that the separation of Building R4A and R4B within the Concept Plan was intended to provide visual and physical permeability through the site. The Council is concerned that the construction of bi-fold doors at either end of the Strada will effectively privatise the space and discourage pedestrian connectivity.

The Department acknowledges that some design treatments at either end of the Strada are necessary to mitigate wind impacts but note that this needs to be balanced with the requirement to design a space that remains accessible to the public and of appropriate amenity. The limited information provided by the Applicant made it difficult for the Department to assess if the wind mitigation measures proposed would effectively privatise the Strada. The Department recommended an additional condition requiring the Applicant to prepare a Strada Access Management Plan, for the approval of the Secretary, prior to the issuing of any occupation certificate.

The Commission supports the Department's recommended condition and notes the importance of any measures that are agreed not presenting as privatisation of space or loss of public access.

The Commission notes that the fitout of the tenancies lining the Strada are not included in these development applications. The Commission acknowledges that activation of the Strada should be

assured and notes that the schedule of drawing within the development consents provides for retail uses which includes restaurants and cafes.

Canopy

The City of Sydney Council submission objected to the proposed canopy because in their view it encloses the public domain and will privatise this space. The Council considers that this is not in the public interest. The Department assessed that the canopy will provide weather protection for diners and pedestrians and that its benefits will outweigh any minor visual impacts.

The Applicant presented details of the canopy to the Commission noting that it is open at both ends, is lightweight, glazed and transparent, will afford excellent visual permeability and amenity. The Commission considers the success of the retail/restaurant tenancies lining the Strada, particularly any outdoor seating, will be enhanced by well designed weather protection and finds that the canopy will be a positive design element that supports public amenity. The Commission acknowledges Council's concerns that detailed design of the canopy is required and support's the Department's recommended condition requiring further details for the canopy be provided.

Limitations on operating hours

The Applicant requested an amendment to the conditions allowing for the Strada to be closed between 11pm and 7am. The Applicant prepared a *Crime Prevention Through Environment Design* report that identified public safety concerns and recommended the Strada be closed during late night hours. The City of Sydney Council submission stated that there was insufficient evidence specifying the need for the arrangements and insufficient information made it difficult to provide detailed comment. The Applicant argues that the closure of the Strada is consistent with previous approvals for through site links within Barangaroo South and notes that the area is 'leased' land.

The Department agreed with Council that the *Crime Prevention Through Environment Design* report does not provide sufficient evidence or justification for the closure of the Strada on security grounds. The Department notes that the Strada will be an important natural surveillance precinct and its closure at night would reduce site-wide ground level natural surveillance provided to all other parts of Barangaroo South. The Department considers the closure of the Strada unnecessary and contrary to the provision of a through-link between Hickson Park and Watermans Cove as required in the Concept Plan.

In a letter from the Applicant to the Commission on the 23 August 2017, the Applicant requested amendment to the Department's proposed condition to keep the Strada publicly accessible 24-hours-a-day. The Commission finds that the opening hours of the Strada will be closely tied to development of the Strada Management Access Plan and associated finalisation of the wind mitigation design elements. If those measures require the Strada to be enclosed by doors (in whole or part) closure at night may be the best option. However, in the event that doors are found not to be critical, keeping the Strada open may be the best and safest option. The Commission considers that the Applicant should be required to justify any closure of the Strada in the context of the management plan and final wind mitigation design measures including plantings in Hickson Park. The Commission conditioned (Condition E4) the projects requiring the Applicant to consult with NSW Police and City of Sydney Council when preparing the Strada Management Access Plan to ensure adequate safety standards are met.

The Link Bridge

The Building R4B proposal includes a glazed 2.8m wide and 3m high enclosed link bridge between the two buildings above the Strada for resident use only primarily to give access to communal facilities. The City of Sydney Council objected to the link bridge arguing that it will discourage pedestrian activation at ground level and participation in city life. The Commission finds that it is reasonable to provide internal access for residents to their facilities and that the bridge will improve their amenity

and enable socialisation between people in the buildings. The public will have visual access to the link which together with the Strada will provide visual interest and activation between the buildings.

5.5 Staging

The Applicant wrote to the Commission requesting the insertion of a temporary construction exclusion zone including 12-16 metres along the Hickson Park frontage to Building R4A and Building R4B. The Commission understood that the Applicant was seeking to replace Barton Street as the temporary construction road corridor. The Concept Plan requires Hickson Park (*other than the temporary construction road corridor on the alignment of the former Barton St*) to be constructed, landscaped and publicly accessible before an occupation certificate may be granted for the Crown Sydney building, Building R4A or Building R4B (Condition B12). Barton Street is retained as a temporary road for construction and is then returned as parkland integrated with Hickson Park (Condition B3(5)).

The Commission consulted the Department on the proposed replacement of the temporary construction zone. The Department informed the Commission that this requirement had not formed part of the application and that they had not been provided with associated documentation as part of the assessment process. The Department noted that the inclusion of a temporary construction zone would require further assessment against the terms of the Concept Plan as required by clause 3B (sub clause 2(d) of Schedule 6A of the *Environmental Planning and Assessment Act 1979*. The Commission is concerned that the City of Sydney Council and the public has not had reasonable opportunity to comment on this request as part of the assessment consultation. The Commission also notes that the proposed temporary construction exclusion zone is outside of the building envelope R4A and R4B (on Block 4A) as identified within the Concept Plan. For these reason, the Commission does not support the proposed exclusion zone as part of this modification determination.

5.6 Public Interest

The proposals increase housing supply and choice, retail opportunities and public access to the Sydney harbour foreshore. The proposals are consistent with State strategies for the area including *NSW 2012, A Plan for Growing Sydney*, the *Draft Towards our Greater Sydney 2056* and the *Draft Central District Plan*. The Capital Investment Value for the combined developments is estimated at \$750.9 million creating 1,215 construction jobs and 55 operational jobs. The Commission finds that the proposals are in the public interest.

5.7 Hickson Park

The City of Sydney Council raised concerns with the delivery of Hickson Park and its interface with the proposals. Council is of the view that due to the uncertainty surrounding the design, intent and ability for Hickson Park to satisfy the Concept Plan, Buildings R4A and R4B should be withdrawn until Hickson Park is progressed. The Commission notes that the Hickson Park development application has recently been lodged and that the Department has had regard to it in the context of considering Council's concerns. The Commission appreciates that the landscaping of Hickson Park will contribute to public amenity in the vicinity of the R4A and R4B proposals and will need to be consistent with the Concept Plan. However, the Commission notes that Hickson Park does not form part of either of the two proposals before it for this determination.

5.8 Tree maturity

The Applicant's wind impact assessment recommended tree planting be incorporated as wind mitigation measures. The Department notes that all public domain works are to be completed prior to any occupation of the proposed buildings in accordance with the Concept Plan. The Commission questioned the Applicant as to the maturity of the trees proposed at the southern end of the through-site link. The Applicant acknowledged that the existence of mature trees from occupation of the buildings is important to delivering public amenity. The Applicant advised that the trees will be purchased at a size of 500L and then grown during the construction period. The Commission is satisfied that the tree sizes proposed by the Applicant will be adequate and has amended the conditions to assure that the trees provided will reflect the Applicant's commitment.

5.9 Other Relevant Issues

Administrative changes to the consent

The Applicant wrote to the Department on 22 August 2017 regarding the Department's recommended conditions of consent for Buildings R4A and R4B at Barangaroo South. The Applicant requested a number of administrative changes be amended to the recommended conditions. The Department confirmed that it has no problem with the minor amendments proposed to the conditions, but does not support the Applicants proposed amendments to the timing of the construction certificates and staged occupation certificates. The Department noted that it had previously considered and rejected these latter changes.

The Commission has considered the proposed amendments put forward by the Applicant and agrees with the Department's position. The Commission considers that the Concept Plan approval was quite purposeful in its decision making regarding occupational certificates and the approval of staged occupancy would be contrary to the original intended consent.

Views

Two submissions raised concerns with the proposed visual impacts of the proposed buildings. The Applicant provided a view and visual impact analysis that included 22 public domain views and views from four residential buildings as part of the application. The Heritage Division of the Office of Environment and Heritage were consulted on the project and found that the visual impacts of the proposal are the same as previously assessed for the Concept Plan and the proposed buildings are consistent with the approved Concept Plan (albeit they remain concerned that views to prominent elements in the visual setting will change). The Department's Assessment Report acknowledges that the proposed buildings will result in varying view impacts but considers that *'a high degree of change is inevitable with the redevelopment of a significant vacant urban renewal site such as Barangaroo'*. The Commission agrees. Having had regard to the visual impact analysis, the Commission is satisfied that the view impacts are contained within the parameters set by the Concept Plan and are no greater than that already assessed under the Concept Plan.

Overshadowing, signage, bicycle parking, operational noise, construction noise and loading dock capacity

Concerns with issues raised regarding these matters by either Council or within submissions were considered by the Department and assessed as having minimal impact. The Commission agrees and is satisfied that each has been satisfactorily addressed and that any impacts are acceptable.

Parking and traffic generation

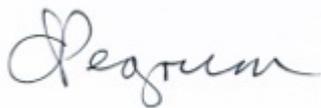
Council expressed concern that the number of car parking spaces provided is excessive and unwarranted and is also concerned with the traffic generated by the application. The Department identified that the project delivers 34 spaces less than the maximum permitted under the Concept Plan and that traffic generation is consistent with the modelling undertaken in preparation of the Concept Plan. The Commission is satisfied that the car parking and traffic generated by Buildings R4A and R4B are consistent with the approved Concept Plan.

6. COMMISSION'S FINDINGS AND DETERMINATION

The Commission has considered carefully the Applicant's proposals, the Department's Assessment Report and the relevant matters for consideration under section 79C of the EP&A Act. The Commission has also had regard to submissions from the City of Sydney Council and those raised in other submissions to the Department.

For the reasons set out in this report, the Commission finds that the proposals for R4A and R4B, Barangaroo South will deliver building outcomes of design excellence, are consistent with the Concept Plan and are in the public interest.

Accordingly, the Commission has determined to grant consent to the development applications subject to the conditions set out in the instruments of development consents.



Annabelle Pegrum AM (Chair)
Member of the Commission



John Hann
Member of the Commission