

## Section 75W Modification



### Commercial Building C3 - MP11\_0044 (Mod 2)

Barangaroo South

Submitted to Department of Planning and Infrastructure  
On Behalf of Lend Lease (Millers Point) Pty Ltd

October 2013 ■ 10051

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Date 04/10/13

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Date 04/10/13

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*ARUP*

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*ARUP*



## 1.0 Introduction

This Environmental Assessment Report (EAR) accompanies an application to modify the Minister's approval of Project Application MP11\_0044 for Commercial Building C3 at Barangaroo South (Modification Application 2). The application is submitted on behalf of Lend Lease (Millers Point) Pty Limited (Lend Lease) to the Minister for Planning pursuant to clause 3(1) of Schedule 6A to the *Environmental Planning and Assessment Act 1979* (EP&A Act) that provides for the continued application of the now repealed provisions of Part 3A of the EP&A Act.

Project Application MP11\_0044 for Commercial Building C3 at Barangaroo South (the Project Application) was approved by the Minister for Planning under section 75J of the EP&A Act on 24 April 2012, and modified once under section 75W of the EP&A Act, on 18 February 2013 (the Approved Project). The Approved Project provides for the construction and use of a 49-storey (plus plant) commercial building on land known generally as Block 3 at Barangaroo South and an allocation of GFA and use of 183 car parking spaces and 336 bicycle spaces within the Stage 1A basement below. The basement structure was approved by the Bulk Excavation and Basement Car Parking Project Approval, MP10\_0023 (Basement Approval).

This Modification Application 2 seeks to modify the Approved Project to refine the design of the building facades, podium and lobby areas and roof plant. It also seeks minor modifications to the approval conditions and statement of commitments, mostly associated with the proposed design refinements.

No Director-General's Environmental Assessment Requirements (DGR's) for Modification Application 2 have been notified to Lend Lease under section 75W(3) of the EP&A Act. Accordingly, this EAR references the DGR's issued in respect of the original Commercial Building C3 Project Application MP11\_0044 issued 9 September 2011 (and modified on 21 October 2011), at **Appendix A**. Section 3 of the EAR describes and assesses Modification Application 2 against those matters included in the DGRs that are relevant to Modification Application 2.

JBA has prepared this EAR based on plans and drawings by Rogers Stirk Harbour + Partners and other supporting documents provided by technical consultants, which provide a technical assessment of the potential environmental impacts of the proposed modified development and, where appropriate, recommend measures to mitigate these potential impacts (see Table of Contents).

This EAR should be read in conjunction with the EAR prepared by JBA to accompany the original Project Application (dated November 2011), the Preferred Project Report (PPR) for the Project Application prepared by JBA (dated March 2012), and the Section 75W Mod 1 approval (dated November 2012). Where relevant, this EAR modifies those documents. This EAR should also be read in conjunction with the Terms of Approval of Project Application MP11\_0044 (as modified), included at **Appendix B**.

### 1.1 Barangaroo Concept Plan

The Barangaroo Concept Plan was approved in February 2007. The Concept Plan covers urban design and policy initiatives and is the overarching site planning approval to guide the urban renewal of Barangaroo.

The approved Concept Plan has been modified four times since originally being approved and the Statement of Commitments has been revised

accordingly. The most recent modification, Concept Plan (Mod 4) was approved on 16 December 2010.

As part of the on-going design and development of the Barangaroo South site, Lend Lease has identified a range of opportunities to improve the relationship of the built form with the public domain and also to reduce the impacts of the construction process across the Barangaroo South site. Accordingly, Lend Lease submitted an application to the Department of Planning and Infrastructure for a range of modifications to the approved Concept Plan (Mod 4), known as Concept Plan (Mod 6) on 5 June 2013. Concept Plan (Mod 6) has been publicly exhibited and is currently being assessed. Its scope includes:

- Realignment of the development block boundaries for Blocks 3, 4A and 4B.
- Revisions to the approved Urban Design Controls to reflect the realigned block boundaries.
- Amendment to Condition B4(2) 'Built Form' to clarify the wording of a condition relating to the distribution of community uses floorspace at Barangaroo.
- Amendment to Condition B4 'Built Form' to allow for architectural roof elements and building management units to be excluded from the otherwise maximum building height limits.
- Amendment to Condition C4 'Car Parking' to replace the reference to 'City of Sydney Council rates' for 'other uses' with the specific rates used for other uses in Sydney Local Environmental Plan 2005, which applied at the time of the Concept Plan Approval.
- Amendment to Statement of Commitment 47 to require that bicycle parking reflect the Central Sydney DCP 1996 rate of one bicycle space for every 100 car spaces. This reflects the rate of bicycle parking inferred within the approved Concept Plan TMAP.

The modifications proposed as part of Concept Plan (Mod 6) will result in changes to the configuration of Block 3 at Barangaroo South within which Commercial Building C3 is located. It will also allow for Building Management Units (BMU) on the commercial towers to project above the otherwise maximum building height that apply under the approved Concept Plan (Mod 4).

This Modification Application 2, amongst other things, includes design changes to Commercial Building C3 that will result in the BMU projecting above the building height limit of the Concept Plan. This modification should therefore be read in conjunction with the Concept Plan (Mod 6) application. The modifications contained within Concept Plan (Mod 6) have been used as a basis for assessment of this application, where relevant. **Figure 1** illustrates the Commercial Building C3 site within the context of the indicative maximum building heights, location and dimensions proposed under Concept Plan (Mod 6).



**Figure 1** – Indicative Maximum Building Height, Location and Dimensions Map Proposed under Concept Plan (Mod 6) (the C3 development site is shown outlined red)

## 1.2 Approved Commercial Building C3

The original Project Application MP 11\_0044 for Commercial Building C3 was submitted to the Minister for Planning in November 2011 and publicly exhibited for a period of 34 days between 16 November 2011 and 19 December 2011. A Preferred Project Report (PPR) was submitted for the project by Lend Lease in March 2012, and approval was granted by the Minister for Planning on 24 April 2012.

A Section 75W Modification Application to modify MP 11\_0044 was submitted to the Minister for Planning in November 2012 (Modification Application 1). This was an administrative modification that sought to vary the wording of approval Condition A7 to allow for the progressive validation of remediation works at Barangaroo South. The Modification Application 1 was approved on 18 February 2013 (the Approved Project).

The Approved Project generally comprises:

- piling and associated earthworks and remediation;
- construction and use of a new Commercial Building C3 with a maximum 115,448m<sup>2</sup> GFA accommodating:
  - 7,021m<sup>2</sup> retail floor space;
  - 105,488m<sup>2</sup> commercial floor space;
  - 1,145m<sup>2</sup> office lobby;
  - 117m<sup>2</sup> of allocated GFA within the basement; and
  - 1,677m<sup>2</sup> on podium level 3 for potential use as a child care centre.
- operation and use of part of the basement car park to accommodate 183 car spaces (175 commercial and 8 for other uses) allocated specifically to the proposed uses within Commercial Building C3;
- 401 bicycle spaces including:
  - 65 spaces to be temporarily located within the landscaped forecourt along the site's Hickson Road frontage; and
  - the use of 336 spaces within the basement car park (the construction of which is the subject of the Basement Approval);

- pedestrian and cycle access and circulation arrangements;
- signage zones on the building's facade that will accommodate building and business identification signage;
- temporary works and uses, including:
  - creation of a temporary forecourt and landscaping along Hickson Road;
  - surfacing of surrounding streets and laneways including part of Globe Street, part of City Walk and part of Shelley Lane; and
  - hoardings;
- installation of services and utilities to service the building.

### 1.3 Bulk Excavation and Basement Car Park Project Application

Project Application MP10\_0023 for bulk excavation and construction of a car park at Stage 1A Barangaroo South was approved by the Minister for Planning on 2 November 2010. A number of modifications have been made to the Basement Approval, the most recent being Modification 5 approved on 8 August 2013. The approved basement project, as modified, generally comprises:

- demolition of existing structures and footings, part of an underground caisson wall, hardstand areas, removal of piles, and removal of existing vegetation within Blocks 1, 2, 3(in part), 4A (in part) and X and within the adjacent public domain area, which had not been previously approved to be demolished or removed under MP 07\_0077 Demolition Works;
- site establishment, including provision of concrete crushing infrastructure, environmental protection structures, de-watering infrastructure, and groundwater treatment;
- bulk earthworks for the purposes of excavating for the basement within Blocks 1, 2, 3(in part), 4A (in part) and X and the adjacent public domain area;
- on-site treatment and remediation of contaminated soils;
- temporary stockpiling of excavated material across the Barangaroo site as required;
- transportation and disposal of material off site, where required;
- structural works, comprising the construction of:
  - foundations (piling, caps and footings);
  - basement levels;
  - perimeter retention system to basement walls; and
  - all associated elements and structures;
- up to 779 car parking spaces which equates to the car parking required to support GFA as envisaged by the approved Concept Plan (Mod 4) for Blocks 1, 2, 3 (in part), 4A (in part) and X in accordance with the car parking rates approved under the Concept Plan;
- indicative parking layout, loading, plant location, bicycle parking and associated amenities;
- road works;
- construction of temporary vehicular access from Hickson Road and permanent vehicular access from Lime Street;

- associated utilities and infrastructure works including decommissioning and/or relocation of services;
- temporary use of the basement for construction related storage and activity;
- construction and use of a Harbour Heat Rejection System to the centralised cooling system for the basement and buildings associated with the Barangaroo South site.

A number of modifications have been made to the Basement Approval. application further modification to the Approved Basement is currently under preparation (Basement Modification 6). This application will seek to modify the Basement Approval to provide:

- above ground basement risers, car park fire stairs and access lifts and bicycle entry and exit ramps that will eventually be integrated into the design of the future peripheral buildings C1, C2, C6, R1 and R7; and
- temporary ground floor treatments and public domain within the footprint of the future peripheral buildings C1, C2, C6, R1 and R7.

The temporary public domain and basement risers to be proposed by Basement Modification 6 covers the same area as the temporary public domain included in this Modification Application 2 and the approved Commercial Building C3 Project Application (i.e. the intended site of future the site of future peripheral building C1). It is intended that the temporary public domain Basement Modification 6 will be provided instead of the temporary public domain contained within the Building C3 Project Application. However, if a construction certificate has not been issued for the proposed above-ground basement risers on the relevant development block by the time Commercial Building C3 is ready for occupation, the temporary public domain approved from the Building C3 Project Application will be constructed.

## 1.4 Part 3A Repeal

On 1 October 2011, Part 3A of the EP&A Act was repealed. Despite this, Part 3A continues to apply to certain projects subject to the transitional provisions identified in Schedule 6A of the Act.

Clause 3 of Schedule 6A of the EP&A Act provides that the provisions of Part 3A continue to apply to "transitional Part 3A projects", relevantly including approved projects. The Approved Project is a transitional Part 3A project that can continue to be modified under section 75W of the EP&A Act.

Clause 3 of Schedule 6A of the EP&A Act also provides that any State environmental planning policy or other instrument made under or for the purposes of Part 3A, as in force on the repeal of that Part and as amended after that repeal, continues to apply, 7 to 2, and in respect of, a transitional Part 3A project.

## 1.5 The Site

Barangaroo is located on the north-western edge of the Sydney Central Business District (CBD), bounded by Sydney Harbour to the west and north, the historic precinct of Millers Point (for the northern half), The Rocks and the Sydney Harbour Bridge approach to the east; and a range of new development dominated by CBD commercial tenants to the south.

The Commercial Building C3 Approved Project site is located on the land identified in the approved Concept Plan (Mod 4) as Block 3. Despite the block

modifications sought under Concept Plan (MOD 6), the Approved Project site would remain wholly within Block 3. This land is on Lot 5 in DP 876514, which is owned by the Barangaroo Delivery Authority (The Authority). This application is lodged with the owner's consent of The Authority.

The development proposed in Modification Application 2 is located entirely within the Approved Project site.

A detailed description and analysis of the Approved Project site is provided at Section 2 of the EAR accompanying the Approved Project. The assessment of proposed Modification Application 2 is informed by the information in that EAR and the associated PPR.

## 2.0 Description of Proposed Modification

Lend Lease seeks the Minister's approval under Schedule 6A and Section 75W of the EP&A Act to modify the Approved Project (a "transitional Part 3A project"). The scope of proposed Modification Application 2 is described below.

Architectural drawings illustrating the proposed modifications and an updated Design Report have been prepared by Rogers Stirk Harbour + Partners (RSHP) are at **Appendix C** and **Appendix D**, respectively.

A revised Landscape Design Statement and updated Public Domain and Landscape Plans have been prepared by Aspect Oculus and are at **Appendix E** and **Appendix F**, respectively.

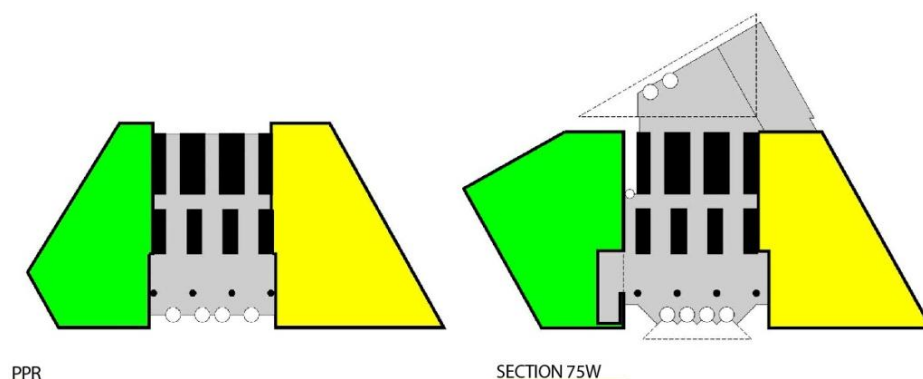
### 2.1 Proposed Modifications to the Development

This Modification Application 2 seeks to modify the Approved Project to make further design refinements to the building facade, podium and lobby areas and roof plant. The design changes are detailed below.

#### Modifications to the Podium

Consistent with the design development and the realignment of blocks and streets currently proposed via Concept Plan (Mod 6), the general podium design and siting is proposed to be modified (refer to **Figure 2**). An overall increase to podium area is sought, with the podium generally extending further north east and the addition of a northern element in the form of a lobby. These refinements are intended to better achieve consistency with Concept Plan Urban Design Controls 5 and 8 relating to ground floor permeability, accessibility to the public realm and active street fronts.

The predominant height of the podium is not proposed to be amended, apart from minor increases in height to account for plant enclosures. Overall, these changes will strengthen the identity, building and human scale of Commercial Building C3.



**Figure 2** – Approved (PPR) and proposed (Section 75W) podium design

The modifications to the podium are set out in the **Table 1** below.

Table 1 – Modification to Podium Design

Level	Design Change
<b>Ground</b>	<ul style="list-style-type: none"> <li>▪ A new north lobby entry from future Globe Street.</li> <li>▪ Recessed north lobby facade.</li> <li>▪ Provide a setback to the south lobby from the podium facades.</li> <li>▪ New (internal) through-site link within podium lobby space.</li> <li>▪ Reconfigured retail spaces.</li> <li>▪ Reconfigured fire stairs, plant and amenities.</li> <li>▪ Reconfigured and increased podium floor plate design.</li> <li>▪ Relocation and rationalisation of the basement vehicle ramp.</li> </ul>
<b>Level 1</b>	<ul style="list-style-type: none"> <li>▪ Reconfiguration of plant and amenities.</li> <li>▪ Reconfigured and increased podium floor plate design.</li> <li>▪ Increase in lobby void.</li> <li>▪ Inclusion of outdoor terrace.</li> <li>▪ Relocation of child care floor space from podium level 3.</li> </ul>
<b>Level 2</b>	<ul style="list-style-type: none"> <li>▪ New pedestrian bridge over internal void.</li> <li>▪ Reconfiguration of plant and amenities.</li> <li>▪ Reconfigured podium floor plate design.</li> <li>▪ Increase in lobby void.</li> </ul>
<b>Level 3</b>	<ul style="list-style-type: none"> <li>▪ Replace childcare use (relocated to Level 1) with office use.</li> <li>▪ Removal of commercial annex and replacement with terrace.</li> <li>▪ Provision of new roof structures over the north and south lobby spaces.</li> <li>▪ Provision of additional plant.</li> <li>▪ Reconfigured and increased podium floor plate design.</li> </ul>
<b>Level 4</b>	<ul style="list-style-type: none"> <li>▪ Reconfiguration commercial floor plate.</li> <li>▪ Infill of balconies with commercial floor space.</li> <li>▪ Relocated plant room.</li> </ul>
<b>Level 5</b>	<ul style="list-style-type: none"> <li>▪ Reconfigured plant roof.</li> <li>▪ Infill of balconies with commercial floor space.</li> </ul>

## Modifications to the Tower

The modifications to the tower are set out in the **Table 2** below. Whilst some of these modifications have arisen through the design development, other changes are proposed to strengthen the identity of the tower and its relationship to Commercial Buildings C4 and C5.

Table 2 – Modification to Tower changes

Level	Design Change
<b>Level 6-48</b>	<ul style="list-style-type: none"> <li>▪ Design refinements to the shading fins.</li> <li>▪ Design refinements to the lift shafts.</li> <li>▪ Design change of the stability brace from a "K-brace" on levels 18 and 34 to a "V-brace".</li> <li>▪ Reduction in selected column widths</li> </ul>
<b>Level 49</b>	<ul style="list-style-type: none"> <li>▪ Design changes to roof plant and Air Handling Units (AHU).</li> <li>▪ Additional roof element to embellish roof top.</li> </ul>
<b>Level 50</b>	<ul style="list-style-type: none"> <li>▪ Addition of photovoltaic cells on new roof element.</li> <li>▪ Design changes to roof plant.</li> <li>▪ Introduction of plant enclosures above the vertical villages.</li> <li>▪ Introduction of building management units (BMU).</li> <li>▪ Relocation of the signage zones from the rooftop plant room to the vertical village plant enclosures.</li> </ul>

## Other Modifications

Other modifications to Commercial Building C3 include:

- Minor increase in the total building GFA from 115,448m<sup>2</sup> to 117,968m<sup>2</sup>, generally attributed to the calculation of the commercial lobby areas (discussed further in **Section 3.7**) and the amended podium design.
- Minor increase in car parking from 183 car spaces to 192 car spaces, comprising an increase from 175 commercial car spaces to 182 spaces to and 8 car spaces to 10 car spaces for others uses. This reflects the minor increase in GFA.
- Reduction of temporary bicycle spaces in the temporary public domain to be provided from 65 to 37 spaces and provision of clarity in Condition B23 to identify under what circumstances the temporary bicycle parking is to be provided.
- Provision of 10 motor bike parking spaces within the basement.

As described in **Section 1.2** changes to temporary public domain and basement risers are proposed as part of Basement Modification 6 and it is intended that the works approved under Basement Modification 6 will be provided instead of the temporary public domain contained within the Building C3 Approval. However, if for any reason a Construction Certificate has not been issued for the proposed above-ground basement risers on the relevant development block by the time Commercial Building C3 is ready for occupation, then the temporary public domain approved as part of the Building C3 Project Application will be constructed. The proposed modification to Condition B23 is therefore intended to:

- Clarify the circumstances in which the public domain approved under this Project Application would need to be delivered; and
- Provide for the satisfaction of the condition in the case that the public domain proposed under the imminently proposed modification to the Basement Approval is approved and constructed instead on the same land.

The intent behind these modifications and an assessment of their potential impacts is detailed in **Section 3**. Photomontages of the proposed modified building are illustrated at **Figures 3-5**.



Figure 3 – Photomontage of the C3 podium looking north east



Figure 4 – Photomontage of the C3 podium looking south west



Figure 5 – Photomontage of Commercial Building C3

## 2.2 Proposed Modifications to the Approval

The proposed modifications to the development described above necessitate amendments to the approval conditions, identified below. Additionally, a minor modification to the wording of Condition E9 is proposed to clarify the requirement for construction of a temporary public domain at the site under this consent, and linkages with other projects at the site (namely the proposed Basement Car Park (Mod 6) being assessed by the Department concurrently with this application). Where relevant, the conditions have been restated and words proposed to be deleted are shown in ~~bold strike through~~ and words to be inserted are shown in **bold italics**.

### A1 DEVELOPMENT DESCRIPTION

Except as amended by this approval, project approval is granted for the following:

- piling and associated earthworks and remediation;
- construction and use of a new commercial Building (C3) with a maximum GFA of ~~115,448m<sup>2</sup>~~ **117,968m<sup>2</sup>** comprised of:
  - ~~7,021m<sup>2</sup>~~ **5,624m<sup>2</sup>** of retail floor space;
  - ~~105,488m<sup>2</sup>~~ **109,238m<sup>2</sup>** of commercial floor space **including 1,740m<sup>2</sup> of office lobby**;
  - ~~1,145m<sup>2</sup>~~ **office lobby**;
- allocation of ~~94m<sup>2</sup>~~ **117m<sup>2</sup>** of floor space within basement car park.
- Allocation of ~~1,677m<sup>2</sup>~~ **1,250m<sup>2</sup>** on podium ~~level 3~~ **level 1** for potential use as a child care centre.
- operation and use of car parking spaces (~~175~~ **182** commercial, ~~8~~ **10** for all other uses) allocated to C3 within part of the basement car park.
- ~~401~~ **373** bicycle spaces (~~65~~ **37** temporarily located in the landscaped forecourt adjacent to Hickson Road, and 336 located in the basement car park (the construction of which is subject of the basement Car Park Approval).
- pedestrian and cycle access and circulation arrangements.
- signage zones on the building facade to accommodate building and business identification signage.
- temporary works and uses, including:
  - creation of a temporary forecourt and landscaping along Hickson Road;
  - surfacing of surrounding streets and laneways including part of Globe Street, part of City Walk and part of Shelley Lane;
  - hoardings.
- installation of utility services.

### A2 DEVELOPMENT IN ACCORDANCE WITH PLANS AND DOCUMENTATION

Condition A2 'Development in Accordance with plans' should be modified to reflect the Modification Application, including this Section 75W Environmental Assessment Report and the modified architectural and landscape drawing numbers, issues, and dates.

### B3 DETAILS OF COLOURS, MATERIALS AND FINISHES

(1) External building materials and finishes shall be generally in accordance with details submitted with the project application EA and PPR and generally as depicted in the sample boards of materials and colours, prepared by Rogers Stirk Harbour & Partners (~~November 2011~~ **September 2013**), Tony Car

Architects (Podium Finishes North West, West and South Elevations - ~~February 2012~~ **September 2013**) and PTW Architects (Podium Finishes East, South and North Elevations - ~~February 2012~~ **September 2013**).

(2) ...

#### **B22 NUMBER OF CAR SPACES**

The maximum number of car spaces to be provided for the development shall comply with the table below. Details confirming the parking numbers shall be submitted to the satisfaction of the Certifying Authority prior to the issue of the relevant Construction Certificate:

<b>Car parking allocation</b>	<b>Number</b>
Commercial	<del>475</del> <b>182</b>
All other uses	<del>8</del> <b>10</b>
Share loading dock/spaces	36

#### **B23 NUMBER OF BICYCLE SPACES**

A minimum of ~~401~~ **261 permanent** bicycle spaces are to be provided for the development, ~~of which 336 are to be permanently located~~ within the basement car park, ~~and. An additional 37 bicycle spaces~~ are to be temporarily ~~located provided~~ within the ~~temporary~~ landscaped forecourt fronting Hickson Road ~~indicated on drawing BC3-LD2-00-00-00 I dated 16/09/2013 prior to the issue of an occupation certificate for the building, unless a construction certificate been issued for the permanent buildings or for public domain on this land until such time as the land is development for its permanent use. The temporary public domain shall remain in place until the issue of the first construction certificate for the development of the permanent buildings or for public domain on the land.~~ Details shall be submitted to the satisfaction of the Certifying Authority prior to the issue of ~~a~~ **the** relevant Construction Certificate.

#### **B30 GFA CERTIFICATION**

A Registered Surveyor is to certify that the Gross Floor Area (GFA) of the development of Building C3 at the subject site approved by this major project does not exceed ~~115,448~~ **117,968m<sup>2</sup>**. Details shall be provided to the Certifying Authority demonstrating compliance with this condition prior to the issue of a Construction Certificate.

#### **E2 GFA AND HEIGHT CERTIFICATION**

A Registered Surveyor is to certify that the Gross Floor Area (GFA) and height of the development of Building C3 at the subject site approved by this major project does not, exceed ~~115,448~~ **117,968m<sup>2</sup>** and RL 219 respectively. Details shall be provided to the Certifying Authority demonstrating compliance with this condition prior to the issue of the relevant Occupation Certificate.

#### **E9 CONSTRUCTION OF TEMPORARY PUBLIC DOMAIN WORKS**

The proponent must construct all temporary public domain works identified in drawing numbers BC3-LD2-00-00-00 Revision ~~F~~ **I**, BC3-LSK-PA1-00-00 Revision ~~D~~ **F**, and BC3-LD2-00-00-01 Revision ~~A~~ **B**, prior to the issue of the first Occupation Certificate, ***unless a construction certificate has been issued for the permanent buildings or public domain on the land, or for temporary public domain on the land pursuant to another planning approval.***

## 2.3 Proposed Modifications to the Statement of Commitments

The proposed modifications described above necessitate amendments to the Statements of Commitments included as part of the Approved Project, as set out in the following table. Additionally, a minor modification to the wording of commitment no. 5 is proposed to clarify the requirement for approval of the signage by the Director-General, in order to be consistent with Condition A6 of the existing approval.

Words proposed to be deleted are shown in ~~bold strike-through~~ and words to be inserted are shown in ***bold italics***. A consolidated version of the revised Statement of Commitments is located at **Section 4.0**.

Revised Commitment	Timing	Reason
2. External building materials and finishes will be generally in accordance with the materials schedule included at <del>Appendix J of the Environmental Assessment Report prepared by JBA Planning dated November 2011 at Appendix D of the Section 75W Modification (Mod 2) prepared by JBA dated September 2013.</del>	To be demonstrated by the proponent at the relevant construction certificate stage(s).	To update referenced report.
3. The public domain within the Commercial Building C3 site will be generally in accordance with the Landscape Design Statement prepared by Aspect Oculus included at <del>Attachment K Appendix E</del> and the Public Domain Plan prepared by Aspect Oculus included at <del>Appendix F of the PPR prepared by JBA Planning Appendix F of the Section 75W Modification (Mod 2) prepared by JBA Planning dated September 2013 unless otherwise modified by a another subsequent planning approval.</del>  The final selection of plantings within the framework of the Public Domain Plan and Landscape Design Statement will take into consideration suitability having regard to the potential impacts resulting from the construction of nearby buildings. The Public Domain Plan will be fully integrated with the Barangaroo South Public Domain Guidelines, once finalised by the Technical Working Group.	To be demonstrated by the proponent at the relevant construction certificate stage(s).	To update referenced reports and to provide for the possibility that the public domain may be provided as part of a future application.
4. Temporary landscaping and lighting will be provided within the Commercial Building C3 site generally in accordance with the Temporary Public Realm plans prepared by Aspect Oculus included at <del>Appendix F of the PPR prepared by JBA Planning Appendix F of the Section 75W Modification (Mod 2) prepared by JBA dated September 2013, unless a construction certificate has been issued for the permanent buildings or public domain on the land, or for temporary public domain on the land pursuant to another planning approval.</del> The final selection of plantings within the framework of the Temporary Public Realm Plan will take into consideration suitability having regard to the potential impacts resulting from the construction of nearby buildings.	To be demonstrated by the proponent at the relevant construction certificate stage(s).	To update referenced report and to provide for the possibility that the temporary public domain may be provided as part of Basement Car Parking Modification 6 (see <b>Section 3.4</b> )
5. The Architectural Drawings prepared by Rogers Stirk Harbour + Partners included at <del>Appendix B of the PPR prepared by JBA Planning Appendix C of the Section 75W Modification (Mod 2) prepared by JBA dated September 2013</del> illustrate the maximum extent of signage zones for the tower facades. Within the maximum extent of signage zones: <ul style="list-style-type: none"> <li>■ no more than two (2) building identification and/or business identification signs will be provided at high level on a maximum of two (2) facades of the building; and</li> <li>■ a maximum of two (2) building identification and/or business identification signs will be provided at podium level on a maximum of two facades of the building,</li> <li>■ a maximum of two (2) secondary building identification</li> </ul>	To be demonstrated by the proponent at the relevant construction certificate stage(s).	To update referenced report and provide for additional signage (see <b>Section 3.3.2</b> and Drawings RSHP-A-C3-5200-E-N Rev C, RSHP-A-C3-5200-E-S Rev C, RSHP-A-C3-5200-E-E Rev C and Drawing RSHP-A-C3-5200-

and/or business identification signs will be provided at podium level for each facade of the building. The final form and content of any proposed building and business identification signage will be subject <del>of a separate future application (if required under relevant legislation)</del> to the approval of the Director General.		E-W Rev C).
<b>36. Consultation will be undertaken with the City of Sydney Council prior to the lodgement of a future application for the final public domain works.</b>	<b>Prior to the lodgement of a future application for the final public domain works.</b>	Included in the Statement of Commitments as required by Condition A8.

### 3.0 Environmental Assessment

This section of the report assesses Modification Application 2. The assessment has been prepared to address the matters relevant to the proposed modified development included in the DGRs (refer to copy included at **Appendix A**). No new DGRs for Modification Application 2 were notified to Lend Lease by the Director-General under section 75W(3) of the EP&A Act.

The development contemplated by Modification Application 2 sits within Block 3 of the Concept Plan (Mod 6) and is informed by the detailed specialist technical reports and assessments that accompanied the original Project Application.

Each of the relevant detailed reports and assessments that support the Approved Project have been reviewed by the relevant specialist consultant to assess whether the findings, conclusions and recommendations within the original reports continue to apply to Modification Application 2. Where the findings, conclusions and recommendations within the original reports need amending as a result of the works proposed under Modification Application 2, amended reports have been provided. The documents include:

- Design Report prepared by Rogers Stirk Harbour + Partners (**Appendix D**).
- Materials Schedule prepared by Rogers Stirk Harbour + Partners (**Appendix D**).
- Landscape Design Statement prepared by Aspect Oculus (**Appendix E**).
- Public Domain and Landscape Plans prepared by Aspect Oculus (**Appendix F**).
- Wind Report prepared by CPP (**Appendix G**).
- Reflectivity Study letter prepared by ARUP (**Appendix H**).
- Access Report update prepared by Morris Goding Accessibility Consulting (**Appendix I**).
- Letter confirming the Fire Engineering Statement prepared ARUP (**Appendix J**).
- Letter confirming the Waste Management Plan Update prepared by ARUP (**Appendix K**).
- Supplementary Transport Management and Accessibility Plan (**Appendix L**).
- Letter confirming the Structural Engineering Report prepared by ARUP (**Appendix M**).

The following specialist technical reports and assessments prepared for the Approved Project do not require revision to accommodate Modification Application 2 and they are relied upon for the purposes of this assessment:

- Geotechnical Report prepared by ARUP dated October 2011.
- Non Indigenous Archaeological Assessment prepared by Casey and Lowe dated June 2010.
- Archaeology Supplementary Letter prepared by Casey and Lowe dated September 2011.
- Aboriginal Archaeological Assessment and Cultural Heritage Assessment prepared by Comber Consultants dated May 2010.
- Aboriginal Archaeological Management Plan and Research Design prepared by Comber Consultants dated May 2010.

- Building Services Report prepared by ARUP dated October 2011.
- Stormwater Management Plan prepared by Cardno dated October 2011.
- Sydney Metro Assessment prepared by ARUP dated October 2011.
- Construction Traffic Management Plan prepared by ARUP dated November 2011.
- Travel Demand Management Plan prepared by ARUP dated October 2011.
- Climate Change and Sea Level Rise prepared by ARUP dated October 2011.
- Ecologically Sustainable Development prepared by ARUP dated October 2011.
- Acoustic Study prepared by Wilkinson Murray dated September 2011.
- Building Code of Australia Assessment prepared by McKenzie Group Consulting dated August 2011.
- Environmental, Construction and Site Management Plan prepared by Cardno November 2011.
- Construction Noise and Vibration Assessment prepared by Wilkinson Murray dated November 2011.
- Utilities Services Infrastructure Plan prepared by Lend Lease dated October 2011.
- Air Quality Impact Assessment prepared by AECOM dated November 2011.

The above reports have been provided to the Department of Planning and Infrastructure as part of the prior applications. However, these reports can be provided again if deemed necessary.

### 3.1 Consistency with Relevant EPIs, Policies and Guidelines

The development as it is proposed to be modified will not affect the Approved Project's consistency with any relevant EPIs, Policies or Guidelines.

#### 3.1.1 Transitional Part 3A Arrangements

As noted in **Section 1.4**, on 1 October 2011 Part 3A of the EP&A Act was repealed. Clause 3 of Schedule 6A of the EP&A Act provides that the provisions of Part 3A, including the modification powers in section 75W continues to apply to "transitional Part 3A projects", including relevantly, approved projects. This means that project approvals, such as the subject MP10\_0044 Commercial Building C3, can still be modified under section 75W of the EP&A Act.

Clause 3 of Schedule 6A of the Act states that any State Environmental Planning Policy or other instrument made under or for the purposes of Part 3A, as in force on the repeal of that Part and as amended after that repeal continues to apply to and in respect of a transitional Part 3A project (as defined).

#### 3.1.2 Major Development SEPP

*State Environmental Planning Policy (Major Development) 2005* (Major Development SEPP) includes Barangaroo as a State Significant Site, providing

a general planning framework and development parameters in addition to the approved Concept Plan.

### Key Provisions

**Table 3** identifies the key provisions of the Major Development SEPP that apply to Commercial Building C3 and demonstrates that the Modified Application will remain consistent with the SEPP (as amended).

**Table 3** – Consistency with key provisions of the Major Development SEPP (as amended)

Clause	Standard	Modified Project	Comment
7. Land Use Zones	Mixed Use	Commercial / retail building	Permissible in the zone
17. Height of Buildings	RL 209	RL 208 (excluding BMU)	Compliant
		RL 213 (including BMU)	Variation sought. See discussion below.
18. GFA Restrictions	428,932m <sup>2</sup> (across Blocks 2, 3, 4A, 4B and 4C.	117,968m <sup>2</sup>	Compliant

### Zone Objectives

The proposed Modification Application 2 does not alter the proposals consistency with the objectives of the B4 Mixed Use zone as it continues:

- to provide a mixture of compatible retail, child care and commercial uses;
- to integrate a suitable development in a highly accessible location, maximising public transport patronage and encouraging a range of alternative transport methods;
- to encourage a range of activities including commercial and retail development;
- to remain consistent with the approved urban design principles and even enhances the relationship of the new development with the public domain;
- to achieve high levels of energy efficiency, with no modification requested to the sustainability credentials of the development;
- to assist in the overall development of Barangaroo which as a Concept Plan supports the retention of key heritage items; and
- to not result in any adverse impacts to residential uses, preserving the quality of life for current and future residents in the area.

### Exceptions to Development Standards

As highlighted in **Table 3**, a variation to the maximum building height is sought under Clause 20 'Exceptions to development standards' of Part 12 of Schedule 3 of Major Development SEPP. This clause enables consent to be granted for development in the event that it contravenes a development standard imposed under the Major Development SEPP. The objectives of this clause are to enable flexibility regarding development standards and also allow for better outcomes to be achieved through this flexibility.

The inclusion of a BMU on the roof of Commercial Building C3 is a critical element in providing ongoing maintenance to the building. The BMU will have a height of five metres and when placed at RL208 it will reach a maximum height of RL213. The relevant provisions contained within Clause 20 of the Major Development SEPP are addressed below.

**Clause 20(3)**

In accordance with Clause 20(3a) of the Major Development SEPP compliance with the development standard in this instance is considered to be unreasonable and unnecessary as:

- the BMU will not result in any adverse environmental impacts;
- it is consistent with the approach of other buildings within Barangaroo South and the Sydney CBD (i.e. a BMU is provided above the otherwise maximum height of the tower building); and
- it will perform a critical function in servicing the building.

As required under Clause 20(3b) the contravention of the development standard is justified on environmental planning grounds. Specifically, the proposed BMU:

- will not result in any discernible additional overshadowing or wind impacts;
- will not result in any additional loss of views or adverse visual impact;
- has been designed to integrate with the overall design of the proposed tower element, including the roof top plant and architectural roof feature; and
- will not detract from the overall appearance or design of the tower form.

The BMU has a maximum height of five metres and does not significantly add to the overall bulk or scale of the tower or result in any visible change in the relationship of the height of Commercial Building C3 within the context of the height of other approved or proposed towers at Barangaroo South (in particular Commercial Building C4 and Commercial Building C5). When not in operation the BMU will be parked in a central location on the roof to ensure it is not visible from the public domain.

As set out in Concept Plan (Mod 6), the inclusion of BMUs is common on roofs of commercial buildings within the Sydney CBD. The scale of the BMU proposed on Commercial Building C3 is minimal in comparison to the overall height of the building and when not in use the BMU will not be readily identifiable from the public domain. This approach of providing a BMU on the roof of the building is identical to that approved in the Commercial Building C4 Project Application.

**Clause 20(4)**

There are no stated objectives of the maximum height development standard under the SEPP. In accordance with Clause 20(4a.ii) of the Major Development SEPP, the provision of the BMU and subsequent height increase do not alter the consistency of the proposal with the objectives of the B4 mixed use zone as illustrated in **Table 4**.

**Table 4 – Consistency with zone objectives**

<b>Relevant Objective</b>	<b>Comment</b>
To provide a mixture of compatible land uses	The BMU is a critical element in the maintenance of the approved commercial building.
To encourage a diverse and compatible range of activities through various means, including the following: (i) commercial and retail development (ii) cultural and entertainment facilities (iii) tourism, leisure and recreation facilities (iv) social, education and health services (v) higher density residential development	The BMU directly supports the functioning of Commercial Building C3.
To incorporate contemporary urban design principles in the design of new buildings and the interpretation of their relationship with the public domain	The inclusion of the BMU on the roof of Commercial Building C3 is consistent with the approach taken on other buildings within Barangaroo South and the Sydney CBD and does not inhibit the building achieving the relevant urban design objectives for the site.
To implement the principles of energy efficiency, travel demand management and other sustainable development practices as part of the development assessment process	The BMU directly supports the Commercial Building C3 development which incorporates a range of sustainable measures.
To facilitate the conservation of heritage items	The BMU directly supports the Commercial Building C3 development which in turn contributes to the overall renewal of Barangaroo and conservation of identified heritage items.
To ensure that the nuisance generated by non-residential development, such as that related to operating hours, noise, loss of privacy, vehicular and pedestrian traffic or other factors, is controlled so as to preserve the quality of life for residents in the area.	The BMU will not generate any nuisance and it is not discernible from the public domain and will not result in any adverse environmental impacts to surrounding residential development. The BMU will ensure Commercial Building C3 is maintained efficiently and to a high standard, improving the presentation of the development and preserving the quality of life for residents in the immediate vicinity of the site.

**Clause 20(5)**

The proposed variation to the maximum building height is considered minor and does not raise any state or regional environmental planning matters of significance. The maintenance of the development standard in this instance would also not result in any public benefit, with a clear public benefit attributable to variation of the development standard with the facilitation of the maintenance of the building.

Overall, the inclusion of a BMU is consistent with other buildings in Barangaroo South and the Sydney CBD, and will not result in any adverse impacts, ensuring that the variation is reasonable and acceptable.

## 3.2 Consistency with Concept Plan

An updated assessment of the proposal against the Concept Plan (Mod 4) is provided to demonstrate that the Modification Application complies with the Concept Plan (Mod 4). It is noted that Concept Plan (Mod 6) proposes minor changes to the street grid and composition of Block 3. Commercial Building C3 is located entirely within Block 3 under Concept Plan (Mod 6).

### Numerical Controls

**Table 5** provides a comparison of modified Commercial Building C3's consistency with the Concept Plan (Mod 4) numerical controls.

**Table 5** – Compliance with Concept Plan (Mod 4) Block 3 GFA and Height Controls

Concept Plan (Mod 4) Block 3 control	C3 Approved Project	C3 Modification Application	Comment
Maximum GFA – 142,669m <sup>2</sup>	115,448m <sup>2</sup>	117,968m <sup>2</sup>	Compliant
Maximum height RL 209	RL 208	RL208 excluding the BMU (RL 213 including the BMU)	Compliant excluding the BMU (refer below discussion on BMU)

Within Block 3 under Concept Plan (Mod 4) there are two commercial buildings indicatively noted as C1 and C3. The only building which has currently received approval for floor space is C3, which as illustrated in **Table 4**, is within the maximum GFA for Block 3.

As identified previously, Concept Plan (Mod 6) which is currently being assessed by the DP&I proposes to modify the definition of maximum building height to allow for BMUs above the otherwise stated maximum building height control that applies under the current approved Concept Plan (Mod 4) as follows:

*Despite B4(2) above, future applications for buildings may exceed the maximum approved height but only if the part of the building which protrudes above the maximum approved height comprises communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues, building management units, and the like.*

In consideration of Condition B4(2), the Modification Application does not result in the building breaching the approved maximum height, as only BMUs and a roof feature will be provided above the maximum height. Therefore the proposed design in Modification Application 2 is consistent with Concept Plan (Mod 6).

If it arises that Concept Plan (Mod 6) is not approved, the justification for the maximum height of the BMU above RL 208 is as set out at **Section 3.1.2** above.

### Car Parking

Under Concept Plan (Mod 6) an amendment to Condition C4 is sought to clarify the rate of car parking provided to 'other uses'. Concept Plan (Mod 4) currently provides that car parking for other uses is to be in accordance with 'City of Sydney Council rates'. Since the approval of Concept Plan (Mod 4), the Sydney Local Environmental Plan has changed from *Sydney Local Environmental Plan 2005* (SLEP 2005) to *Sydney Local Environmental Plan 2012* (SLEP 2012).

Car parking rates for other uses under the SLEP 2012 are based on site classifications under a 'Land Use and Transport Integration Map' (LUTI). The Barangaroo site has not been given a LUTI rating, and as such, it has been sought in Concept Plan (Mod 6) that the rates under SLEP 2005 be applied. The SLEP 2005 rate comprises the following formula:

$$\text{Maximum number} = \frac{\text{Total other FSA}}{\text{Total FSA within development}} \times \frac{\text{Site area}}{50}$$

When applying the SLEP 2005 rate to Commercial Building C3, the total amount of spaces to be allocated to the building is 10 spaces. This calculation is based on the following figures:

- Total other FSA – addition of the retail and child care floor space within Commercial Building C3;
- Total FSA – addition of all GFA within Commercial Building C3;
- Site Area – total site area for Commercial Building C3; and
- 50.

It is noted that the site area in Modification Application 2 is slightly larger than the site area under the Approved Project due to the site according with the road realignments proposed under Concept Plan (Mod 6).

As such an allocation of 10 spaces to other uses within Commercial Building C3 is now sought in Modification Application 2.

It should also be noted that the increase in commercial floor space, resulting from the amended podium design and inclusion of lobby areas within the commercial floor space calculation, has necessitated a higher number of car parking spaces to be allocated to Commercial Building C3. An explanation of the calculation of commercial GFA is provided in **Section 3.7** below.

Furthermore, the provision of parking for Commercial Building C3 is in accordance with the Basement and Bulk Excavations Project Approval as it does not result in the total number of parking spaces within the basement exceeding 779 car parking spaces.

### Performance-Based Urban Design Controls

**Table 5** demonstrates that Commercial Building C3 as proposed in Modification Application 2 is consistent with the Urban Design Controls of Concept Plan (Mod 4) (as modified by the Instrument of Approval for Concept Plan (Mod 4)). It is noted that under Concept Plan (Mod 6) a number of changes are proposed to the urban design controls for Block 3. These changes generally relate to allowing for a lower scale built form on the northern part of Block 3 and removing reference to Napoleon Street when addressing street wall heights. The assessment contained within **Table 5** has included the proposed modifications to the urban design controls to ensure the consistency of Modification Application 2 with the most up to date design rationale for the site.

**Table 6 – Consistency with Concept Plan (Mod 4) Urban Design Controls**

<b>Concept Plan (Mod 4) Block 3 Controls</b>	<b>C3 Mod 2</b>	<b>Comment</b>
<b>Control 1 Building Mass and Location</b>		
<i>Objectives</i>		
Adoption of “fanning principle” for siting of buildings.	No change is proposed to the siting of the tower building. The reconfigured podium design does not impact the fanning principle achieved through the orientation of the tower building.	Consistent
To ensure building mass is appropriate within the envelope.	No change is proposed to the tower building mass within the envelope.	Consistent
The northern part of the block shall contain built form of a comparatively lower scale (when compared to the tower forms) as generally indicated in the indicative design.	No change is proposed to the vertical massing of the tower.	Consistent
<i>Standard</i>		
The length of the horizontal floor plate of the North and South elevation of the tower form is to be no more than 85.5m.	Modification Application 2 does not propose material changes to horizontal floor plate length.	N/A
The bulk of building mass is to be set back from the Hickson Road alignment by a minimum of 20m.	37.5m	Consistent
The primary floor plate depth, excluding structure and shading devices of each tower form sits between vertical planes (red), which establishes a 30m zone. Expressed structure and secondary floor plate is allowable outside this dimension.	The depth of the floor plate is 30 metres.	Consistent
Podium to be a minimum predominant height of 3 storeys and a maximum of RL27.	The podium is predominately three storeys and generally 18 metres in height and below a height of RL27.	Consistent
<b>Control 2 Street Wall Establishment</b>		
<i>Objectives</i>		
To establish spaces to articulate and define facades.	No changes are proposed to the general articulation of the facades.	Consistent
Building mass at podium to form a continuous Street Wall with a 1 storey minimum height.	A three storey street wall height is created around the podium, consistent with the Approved Project.	Consistent
Street Wall to define Globe Street and East-West laneways.	The three storey street wall height around the podium is instrumental in defining the adjoining street edges.	Consistent
Podium height shall be determined having regard to compatibility of streetscape form with the surrounding area, and appropriate engagement and framing of the public domain, together with environmental considerations on the public domain and surrounding buildings.	The podium height has been determined with the surrounding streetscape in mind, and also to benefit the future public domain.	Consistent
<i>Standard</i>		
To establish a colonnade along Hickson Road. The width and height of the colonnade along Hickson Road shall be appropriate to encourage its use, and be integrated into the proportions of the buildings of which it is a part.	This Modification Application does not propose to construct a building along Hickson Road.	N/A
Building form to create a Street Wall with a one storey minimum height for most of the public accessible ground floor facade.	A three storey street wall is created.	Compliant
Building mass to define a Street Wall on Globe Street, City Walk and Hickson Road.	Consistent with the Approved Project, Modification Application 2 will provide a street wall on Globe Street and City Walk. No building is proposed to Hickson Road as part of this application.	Compliant

Shelley Lane to be a minimum of 6m in width with a defined eastern edge parallel to Hickson Road at ground level.	Modification Application 2 does not propose to construct Shelley Lane, however a width >6m can be provided between Commercial Building C3 and Hickson Road to accommodate Shelley Lane.	N/A
<b>Control 3 Building Articulation</b>		
<i>Objectives</i>		
To establish an articulated, well proportioned building mass.	No changes are proposed to the approved building mass.	Consistent
To reduce the impact of the building mass.	No changes are proposed to the approved building mass.	Consistent
<i>Standard</i>		
The building envelope and floor plates are to be articulated and modulated, using a range of architectural components such as prows, corner redents, Vertical Villages, expressed lift cores, bay windows and other structural expression.	Modification Application 2 retains the articulation and modulation of approved Commercial Building C3 through measures such as the expression of the core, curved floorplates and vertical external shading.	Compliant
Tower Form to express sustainability features such as access to natural light.	Modification Application 2 continues to provide a facade design that provides deep daylight penetration. Horizontal and vertical shading devices are also incorporated into the facade design.	Compliant
<b>Control 4 Building Legibility</b>		
<i>Objectives</i>		
Constituent elements of the building need to be articulated.	Modification Application 2 will further express the constituent elements of the building.	Consistent
The elements and structure should be legible at the base of the building.	Modification Application 2 will provide greater legibility at the base of the building.	Consistent
<i>Standard</i>		
The separate primary components of the building will be expressed.	Modification Application 2 will further express the primary components of the building.	Compliant
Visible parts of the towers primary structure are to extend to the ground plane and be expressed as a separate element from the podium.	Visible parts of the towers' primary structure have been extended to the ground plane and expressed as a separate element of the podium.	Compliant
<b>Control 5 Ground Floor Permeability and Accessibility of Public Realm</b>		
<i>Objectives</i>		
To provide permeability and accessibility through Barangaroo South.	Modification Application 2 introduces a new (internal) through-site link, improving permeability and accessibility through the site.	Consistent
To maximise safety in the public realm.	Modification Application 2 will improve the safety of the public realm through the improved podium design.	Consistent
<i>Standard</i>		
Public access around the Block is to be maintained on all edges.	Public access around the Block edges has been maintained and enhanced.	Consistent
Provide two north south primary connections, including the Hickson Road Colonnade and two east west primary connections (City Walk & Globe Street).	Modification Application 2 does not change the primary connections being provided through the block.	Consistent

Provide one north south secondary public access route through the block.	The Approved Project did not provide secondary north south pedestrian connections. Modification Application 2 will provide a secondary north to south connection via the new through site link through the lobby area and therefore improve public access routes through Block 3.	Consistent
Shelley Lane must be not less than 50% open to the sky.	Modification Application 2 does not propose to construct Shelley Lane, which will be subject to a future development application.	N/A
For security purposes the secondary routes may be closed at certain times.	The secondary north south route through the building will be closed to the public outside of normal business hours.	Consistent
<b>Control 6 Ensuring Quality of Rooftops</b>		
<i>Objectives</i>		
The mass at the rooftop shall be articulated and legible.	Modification Application 2 further articulates the mass at the rooftop of the building.	Consistent
<i>Standard</i>		
Roof forms to incorporate architectural elements.	The roof form incorporates an architectural treatment that is compatible with the overall style and massing of the building.	Consistent
Lift shafts, overruns and control rooms are to be extruded above the roof line and used to provide architectural articulation to the roof.	The lift shafts, overruns and control rooms have been extruded above the roof line to provide articulation to the roof.	Consistent
Exposed mechanical equipment is to be avoided.	No exposed mechanical equipment is proposed.	Consistent
The architectural treatment of the roof and its form is to be designed, coordinated and remain sympathetic to adjacent context.	The roof form has been designed in response to its current and future adjacent context.	Consistent
Good quality materials (i.e. durable, hardwearing, sustainable) to be used.	Good quality materials will be used for the roof materials.	Consistent
Roof Design to integrate sustainable features.	The Roof Design integrates PV cells as a sustainable feature.	Consistent
<b>Control 7 Facades</b>		
<i>Objective</i>		
To ensure the architectural quality of the facades.	Modification Application 2 enhances the architectural quality of the podium facades.	Consistent
To articulate the building's functions and massing with appropriate facade design and detailing.	Modification Application 2 articulates the building functions through the modified design.	Consistent
To ensure the facades contribute to the building's articulation and mass.	Modification Application 2 will provide greater articulation through the amended design.	Consistent
To contribute to the "carbon neutral" aims for Barangaroo South.	No change is proposed to the approved sustainability measures in the building.	Consistent
<i>Standard</i>		
Depth and layering of facades is to be achieved through relief and protrusions. Mirrored facades should be avoided.	Relief and protrusions are incorporated into the facade increasing the depth and layering.	Consistent
The choice of appropriate materiality for longevity, durability and flexibility. Materials such as steel, glass, concrete, timber and aluminium.	The proposed materials, which include steel, glass, and concrete, have been chosen for their longevity, durability and flexibility.	Consistent
Environmentally sustainable design is to be incorporated on all facades.	As detailed in the Architectural Design Statement at <b>Appendix D</b> , the Modification Application will enhance the ESD performance of all facades.	Consistent
Facade components such as external shading shall be used to provide light and shade to the building and reinforce Controls 2+3.	Vertical and horizontal external shading elements are provided.	Consistent

Facades longer than 60m are to be modulated above podium level by distinctive and significant architectural elements e.g. as Vertical Villages, cores or external staircases, in the vertical plane.	The north and south elevations which exceed 60 metres are modulated with distinctive architectural elements.	Consistent
There shall be no single plane in the facade having dimensions greater than 60m in length and 60m in height (or equivalent area) without articulation, and change in plane from adjoining building elements, unless otherwise determined by the "Barangaroo Design Excellence Review Panel", to the satisfaction of the Director-General in consultation with the Barangaroo Delivery Authority.	The building does not have any planes greater than 60 metres in length without articulation.	Consistent
<b>Control 8 Active Street Fronts</b>		
<i>Objective</i>		
To ensure a vibrant public domain will be created at street level.	Modification Application 2 will not affect the vibrant public domain at street level approved under the original application.	Consistent
<i>Standard</i>		
At least 60% of the Ground Level is to be active on the primary Street Wall facades.	Over 60% of the ground level will be active on the primary street wall facades.	Consistent
Building entrances to internal areas such as office lobbies, exit ways and service areas or loading docks shall not count toward to 60% requirement.	Noted.	Noted
Building service areas, parking entrances & loading docks will be located on Napoleon Street.	Building service areas have been located on secondary accesses where possible such as Shelley Lane.	Consistent
The width of driveways shall be minimised.	The width of the driveway is consistent with the basement design and has been minimised where possible.	Consistent
<b>Control 9 Signage</b>		
<i>Objective</i>		
To ensure that the location, size, appearance and the quality of the signage on the building is appropriate.	The proposed alternative signage zones are appropriate in terms of their location and size on the building, as discussed in <b>Section 3.3.2.</b>	Consistent
<i>Standard</i>		
High level signage is to be limited to a maximum of 2 separate faces per building.	The plans nominate high level signage zones on three faces of the tower, however, as reflected in the Statement of Commitments, only 2 of the zones will be used for signage at any one time. The location and design of the signs will be finalised once the future tenants requirements are known.	Consistent
Signage is not to exceed 60sqm per sign.	New signage zones have been identified on the plans at the eastern, northern and western ends of the tower roof. The maximum area of each sign will not exceed 60m <sup>2</sup> and high level signage will be limited to a maximum of two building faces.	Consistent
Identity signage only to be incorporated within the building facades/structure.	The new alternate signage zones are incorporated into the plant rooms at roof level.	Consistent
Details of signage to be considered as part of the overall design of the building for the purposes of Design Excellence.	The usage of signage zones as part of the base building stage demonstrates consideration of signage as part of the overall design of the building.	Consistent

Signage shall not be greater than 1 building storey high (between floor slabs).	The signage zones vary in size, with some zones greater than one storey high. However the individual signs within the zones will be able to comply with the control.	Consistent
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### Built Form Principles

Consistent with the Approved Project, Modification Application 2 complies with the approved Concept Plan (Mod 4)'s Built Form Principles. Modification Application 2 will not change the proposal's consistency with these built form principles. It is noted that Concept Plan Mod 6 does not propose any modification to the built form principles.

### Statement of Commitments

The approved Commercial Building C3 satisfied all the relevant Concept Plan (Mod 4) Statement of Commitments. Modification Application 2 will not change the proposal's consistency with the Statement of Commitments.

## 3.3 Built Form

### 3.3.1 Design Excellence

Design excellence continues to be an overriding goal of the design team and the modifications to the podium facades and tower refinements have been subject to a number of formal workshops and reviews with the design team, Lend Lease and the Barangaroo Delivery Authority. Rogers Stirk Harbour + Partners (RSH+ P) directors have overseen the changes to ensure appropriate expertise and experience is brought to the proposed design.

The podium levels have been redesigned by RSH+ P in collaboration with podium architects PTW and Tony Caro Architects. Together with the modifications to the tower, the design changes strengthen the identity of Commercial Building C3 and the dialogue of the three 'sibling' towers, enhancing the legibility of the towers when read from the city, building and human scale.

Consistent with the Approved Project, the Modification Application will continue to exhibit design excellence:

- as world renowned architectural practice RSH+ P has been retained as lead architects on the project;
- a high standard of architectural design, materials and detailing is achieved, appropriate to the building type and location;
- the building form, external appearance and the ground floor plane provide for high amenity and quality of public domain;
- Lend Lease commits to ensuring continuity in the design process and realisation of the Modified Project design in the completed building by ensuring that RSH+ P has direct involvement in the design documentation phase;
- general compliance with the planning framework established for the site;
- utilising Lend Lease's skills and proven track record to deliver an exemplary commercial building; and
- exploring and implementing innovative technical and sustainable solutions, contributing to cutting edge design excellence.

### 3.3.2 Building Design

The fundamental design of the tower in this Modification Application remains unchanged and is underpinned by an articulation of the main tower form into three vertical elements whilst also providing a strong design at the lower levels. As with the approved design, the building form of Commercial Building C3 in the Modification Application comprises an east-west oriented tower element.

The key design modifications to Commercial Building C3 are a redesigned podium, refinement of the tower facades and amended roof form. These changes are discussed below and detailed in the Design Report at **Appendix D**.

#### Lobbies and Podium Levels

The addition of the new North Lobby provides a second entrance which will improve accessibility into the building. The North Lobby entry has been designed as a double height transparent glass pavilion, signifying the gateway to the commercial precinct of Barangaroo South. The glazed lobby has sun shading supported by a slender steel framed structure. The steel supports align with the adjoining podium fascia, continuing the street edge along Globe Street.

At the South Lobby the façade glazing has been set back to align with the column's centreline, enabling the expansion of the public realm (see **Figure 6**).

The multifaceted façade responds directly to the location and orientation of Commercial Building C3, inviting pedestrians into the building from the east and acting in a solar shading function to sunlight from the west.

A new internal through site link in the Commercial Building C3 lobby, separate to the main lobby entries will create improved public access and connectivity between City Walk and Globe Street and essentially into the commercial precinct of Barangaroo South.



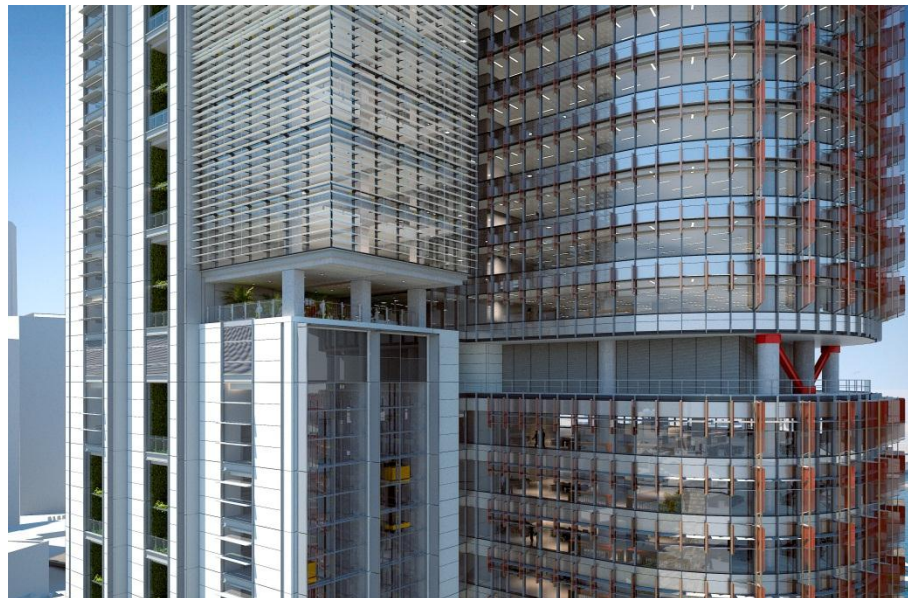
Figure 6 – View of through site link looking south

The commercial annex space on Level 3 has been deleted. This office space was not well integrated with the other office areas and had limited functionality. This space has been replaced with an expanded outdoor terrace area, which will be activated by tenant breakout spaces.

### Tower

The brace systems on the mid-rise plant floors (levels 18 and 34) are to be amended from a “K-brace” to a “V-brace”. The change in configuration from a K-brace to a V-brace is required to provide improved structural stability, reduced building sway and has the benefit of reducing the size of the tower perimeter columns.

The approved concept for the floorplate solar shading elements has been refined to better express key elements of the design including the verticality and legibility of the tower. The use of ceramic frits, large vertical fins and smaller horizontal shading elements contribute to achieving verticality in the building form. A slightly refined colour scheme will highlight the different elements and enhance the overall language of the building (see **Figure 7**).



**Figure 7** – View of the refinements to the tower facade

### Roof

An amended roof form is proposed to provide a stronger termination point, enhancing its legibility and re-organising roof plant (see **Figure 8**).

The new plant enclosures above the vertical villages are necessary to service the vertical villages and create a stronger termination of the north core. The main roof plant has been organised into a system of bays with structural framing. A double storey core plant box is proposed which will integrate the exhaust in the plant box. The alignment of this integrated upper plant box serves to accentuate the served and servant relationship of north and south cores, whilst adding to the sibling relationship across all 3 towers. Louvred end bays reflect the form of the plant box as distinct to the profile of the tenant floors below.

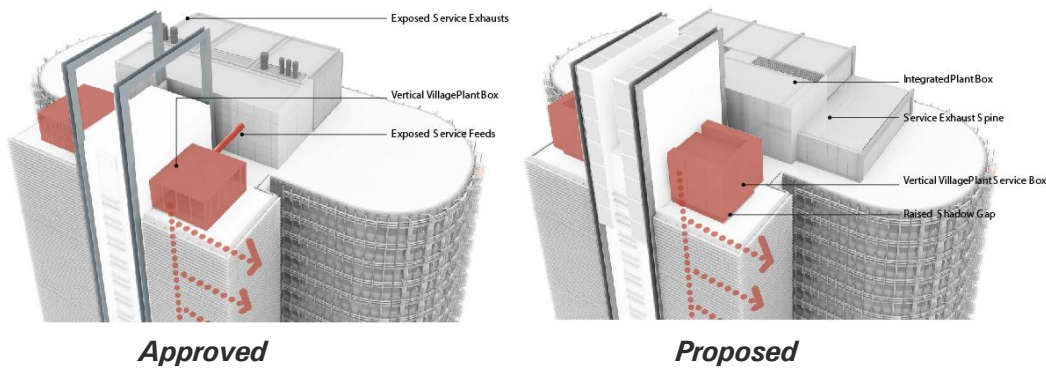


Figure 8 – Approved and modified roof form

### Signage

The increased size of the plant enclosures for the vertical villages and reconfiguration of the roof top plant provides for new opportunities for building signage (see Figure 9). The alternative locations provide an appropriate zone for the future building identification signage and assists with the articulation of the service elements of the tower and screening of necessary plant. The previous approved signage zones on the tower plant room have been removed. Slight amendments have been made to the podium signage zones to account for the amended podium design.

The location and size of these podium signage zones is generally consistent with the currently approved zones.

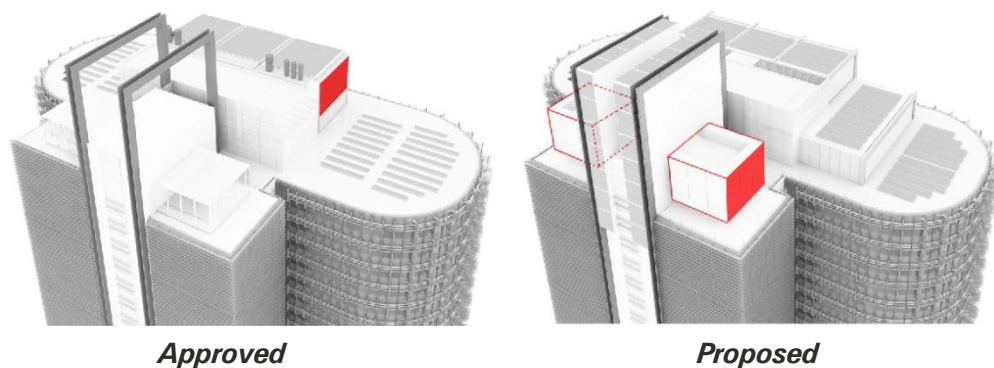


Figure 9 – Approved and modified tower signage zone locations

### 3.3.3 Overshadowing

The proposed modification to the roof form results in a negligible increase to the shadow cast by the building. Updated shadow diagrams are appended to the Design Report at **Appendix D**.

### 3.3.4 Visual Analysis

There are a number of principles embodied within the Concept Plan (Mod 4) which direct the location, height, scale, bulk, massing and general configuration of the future floor space predominantly within Barangaroo South, including within Block 3.

The Approved Project and this Modification Application deliver a built form that is consistent with the Concept Plan and appropriate to the site's context and to the desired urban form and scale for the western boundary of the Sydney CBD. The project, as proposed to be modified is also compatible with the intended changes to the urban form and scale of the site, as expressed in proposed Concept Plan Modification 6.

With the exception of the refinements to the roof room, this Modification Application does not amend the overall height and scale of the building, it slightly reduces the perceptible bulk, or massing of the tower, and the configuration of the podium and floorspace remains generally consistent with the Approved Project. The modified built form reinforces the landmark significance of the site, enhances the gateway nature of Commercial Building C3 and maintains significant view corridors within the site and from the public domain.

As demonstrated by the architectural plans and updated Visual Impact Analysis relating to this Modification Application (see **Appendices C and D**), the façades of Commercial Building C3 remain highly articulated and will make a positive contribution to the visual quality of the site and the city skyline. The colour scheme proposed for the building will integrate conceptually with the design and colour scheme for adjacent buildings C4 and C5.

Consistent with the Approved Project, the building remains at the northern end of Block 3 with frontages to the Globe Street, City Walk and Shelley Lane. The building, along with Commercial Buildings C4 and C5 will largely form an extension to the CBD from the east and the west. Commercial Building C3 will be viewed as a new addition to the existing CBD tower context and backdrop. The height of the Approved Project is within the approved Concept Plan building envelope and the building will sit generally within the existing silhouette of the CBD when viewed from both the east and west. It is considered that no adverse impact to the city skyline or CBD views will result from the proposal.

The view impacts of this Modification Application are no different than those already considered under the Approved Project and Concept Plan (Mod 4). Further, the view impacts assessed as part of the Concept Plan (Mod 4) were based on the maximum extent of the permissible block envelopes within Barangaroo South. This Modification Application does not fill out the full envelope permitted under the Concept Plan (Mod 4), particularly when viewed from the east and west.

Key views, view corridors, and vistas internal to the site as established by the approved Concept Plan (Mod 4) and the Approved Project, will not be impacted upon by this Modification Application as there is no change in the location or general scale of Commercial Building C3.

### 3.4 Landscaping

A revised Landscape Design Statement has been prepared by Aspect Oculus and is included at **Appendix E**. Updated Temporary Public Domain and Landscape Plans are included at **Appendix F**.

Consistent with the Approved Project, the amended landscape plans detail the temporary landscape works for the public domain areas of Commercial Building C3, which will be provided in the absence of other approved works in that location. The landscaping of areas within Commercial Building C3 are also included in the revised Landscape Plans, such as the roof terrace on level one, the roof gardens on level three and landscaped balconies on various levels. These areas will significantly enhance the amenity of the development for future occupants.

The treatment of the public domain areas surrounding C3 is consistent with landscaping works in the Approved Project. The final landscape treatment of

the public domain areas will also be in accordance with the Barangaroo Delivery Authority's site-wide public domain guidelines.

It is noted that Basement Car Park (Mod 6), which will be concurrently assessed by the Department (see **Section 1.3**), seeks to provide temporary public domain within the area of the temporary public domain approved as part of the Commercial Building C3 Approval. Should the temporary public domain be provided as part of the Basement Car Parking works it will not be provided as part of the Commercial Building C3 works. Condition E9 and the relevant Statement of Commitments have been modified (see **Sections 2.2 and 2.3**) to reflect this possibility.

### 3.5 Wind

A Wind Tunnel Study was prepared by Cermak Peterka Petersen (CPP) as part of the Approved Project (see Appendix P of that EAR). The Wind Tunnel Study modelled the then proposed Commercial Building C3 to assess pedestrian wind comfort in isolation to other developments within Barangaroo.

The study found that, when tested in isolation, without appropriate ameliorative measures wind conditions at certain locations around Commercial Building C3 would only be acceptable for able-bodied pedestrian access. CPP has assessed the design changes proposed in the Modification Application, including the increased size of the Commercial Building C3 podium and the realignment of Globe Street under Concept Plan (Mod 6) (refer to **Appendix G**).

The revised Study concludes that the increase in podium size is expected to improve wind conditions to the north of Commercial Building C3 through reducing downwash.

The ground level wind conditions are not expected to alter with the regular street grid of Concept Plan (Mod 6) due to the rising topography of the site, with all pedestrian walking remaining suitable.

Overall, the proposed modifications are expected to have a beneficial impact and ground level locations will meet the relevant pedestrian walking comfort criterion.

### 3.6 Reflectivity

A Reflectivity Study was prepared by ARUP for the original Project Application. The report assessed the impact of potential reflections off the building facades and found that these would not exceed limits of acceptability.

ARUP has assessed the facade design changes proposed for this Modification Application (refer to **Appendix H**). The proposed facade design modifications that introduce changes or additions to reflective facade planes, such as the glazing to the north entrance of the podium and the added PV roof element, have been found to not produce reflections in excess of acceptable limits for any materials within the allowable maximum of 20% external reflectivity.

The reorientation of Globe Street under Concept Plan (Mod 6) results in different observer heading directions. These new observer heading directions are impacted by the new north facade glazing plane in March and September after 4:30pm for up to one hour. ARUP have confirmed, however, that the impact of these reflections is unlikely to increase glare as the reflections are at shallow glancing angles and direct sun will also be visible at the same time.

ARUP conclude that the proposed modification will not result in any glare impact or facade reflections in addition to that identified within the original Reflectivity Study Report.

### 3.7 Transport Management and Accessibility Plan

Traffic, access and parking impacts were addressed in the following reports prepared by ARUP submitted with the Approved Project EAR:

- Supplementary Transport Management and Accessibility Plan (TMAP) at Appendix D;
- Sydney Metro Assessment at Appendix S;
- Construction Traffic Management Plan at Appendix T; and
- Travel Demand Management Plan at Appendix U.

ARUP has prepared an updated supplementary Transport Management and Accessibility Plan (TMAP) which is included at **Appendix L**.

#### Access and Circulation

As part of the approved modification to the Basement Car Park design in MP10\_0023 (Mod 6), the vehicular access points to the basement that services the Approved Project have been changed. The basement access points now comprises:

- A shared access point for commercial and service vehicles on Globe Street north; and
- An exit only for commercial vehicles at the Hickson Road / Napoleon Street intersection.

Temporary access to the Globe Street shared access point has been approved under MP10\_0023 (Mod 5), whilst temporary paving will be provided as part of the C3 Approved Project to facilitate the Hickson Road/Napoleon Street exit. Alternatively, the temporary public domain works to facilitate the Hickson Road/Napoleon Street exit may be constructed under a separate application, as envisaged in the proposed modification to Condition E9 above. The permanent public domain works will be constructed as part of a future application.

#### Traffic Generation

The minor increase in GFA proposed as part of this Modification Application will result in an increased traffic generation of three vehicle trips during the peak periods. ARUP have determined that this will result in a negligible impact.

## Car Parking

The Modification Application increases the maximum number of commercial parking spaces from 175 to 182 and other uses spaces from 8 to 10. It provides for the allocation of car spaces based on the modified distribution of retail / commercial uses in accordance with the approved Concept Plan (Mod 4) car parking rates with 182 spaces allocated to the commercial development and the remainder to the retail component of the proposal. The allocation of car spaces for other uses has been based on the amended rate sought under Concept Plan (Mod 6), as outlined in **Section 3.2**.

It is noted that in undertaking its original assessment of the approved Commercial Building C3, the Department excluded the quantum of commercial lobby GFA from the commercial GFA for the purpose of calculating car parking and instead applied the 'Other Uses' formula under LEP 2005 to this area.

Under LEP 2005, the 'other uses' rate applied to commercial GFA. However, as the approved Concept Plan (Mod 4) specifies a different rate be applied to commercial GFA, it is considered appropriate that the commercial lobby GFA, which is otherwise defined as commercial GFA, be included in the measure of total commercial GFA for the purposes of calculating car parking allocation.

The principle of including the lobby GFA as part of the total commercial GFA for the purposes of calculating commercial car parking was adopted for Commercial Building C4 and is consistently applied across the Sydney metro area, including the areas of the City of Sydney where parking is not determined by site area.

The TMAP, which underpins the Concept Plan used the maximum commercial GFAs for the purpose of assessing the traffic impacts of the development. As the lobby GFA is considered to be commercial GFA and that GFA was used to assess the traffic impacts, then it is appropriate that it equally be included for the purpose of calculating car parking.

Accordingly, the commercial lobby space has been included in the total commercial area for the purpose of determining the car parking provision.

## Bicycles

The number of visitor bicycle spaces in the temporary public domain is sought to be reduced from 65 to 37 spaces based on the revised temporary public domain plans (see **Appendix F**). The originally proposed number of visitor bicycle parking spaces to be located in the temporary public domain had limited technical basis. Since that time, and as part of the design development of the temporary public domain, Lend Lease has liaised with the Green Building Council of Australia to determine the number of visitor parking spaces that are needed to be provided in and around the Barangaroo South buildings in order to obtain Green Star credits.

The agreed basis for obtaining Green Star credits is as follows:

- 15 visitor bicycle parking spaces in the public domain per commercial tower building; and
- 16 visitor bicycle parking spaces per residential building.

As such, the minimum number of visitor bicycle spaces which would need to be provided for Commercial Building C3 to achieve the desired Green star credits is 15 spaces.

The proposed total of 37 spaces is substantially in excess of this minimum and is considered more than appropriate to cater to the visitor demand during the

interim period before the Barangaroo site is developed in totality. It is noted that clarification is also proposed to be included in Condition B23 of the Project Approval to reflect where and when the temporary bicycle spaces are to be provided.

The amended wording of Condition B23 ensures that in the event another application has not provided these temporary spaces, or a building is not yet under construction in the forecourt fronting Hickson Road, that the temporary bicycle spaces will be provided before the Occupation Certificate is issued for Commercial Building C3.

### 3.8 Waste Management

A Waste Management plan was prepared by ARUP (see Appendix L of the original EAR for the Approved Project). The Waste Management Plan addressed operational waste management for the various uses in Commercial Building C3. This Modification Application proposes less retail floor space and more commercial floor space than the Approved Project, which has resulted in a changed bin configuration and reduced space allocation. However, the waste targets and strategies for Commercial Building C3 remain valid for the Modification Application (refer to **Appendix K**).

### 3.9 Accessibility

An Accessibility Report was prepared by Morris Goding Accessibility Consulting as part of the Approved Project (see Appendix AA of that EAR).

Morris Goding has assessed the design changes proposed for the Modification Application (refer to **Appendix I**) and concluded that their original assessment and recommendations remain relevant and that the design amendments comply with the DDA requirements and the relevant Australian Standards. As such no further commentary or additional supporting information is deemed necessary.

### 3.10 Fire Engineering

A Fire Engineering Statement was prepared by ARUP (see Appendix N of the original EAR for the Approved Project). The report identified performance based fire engineering solutions for the building. ARUP have reviewed the proposed modifications and confirmed they will not result in any additional impact on the fire engineering solutions for the building (refer to **Appendix J**).

### 3.11 Structural Engineering

A Structural Engineering Report was prepared by ARUP (see Appendix BB of the original EAR for the Approved Project). ARUP has reviewed the proposed modifications, including the refinements to the perimeter bracing, and confirmed that the design and strategies for the building remain valid for the Modification Application (refer to **Appendix M**).

## 4.0 Revised Statement of Commitments

As part of the Approved Project Lend Lease made a number of commitments to manage and minimise the potential impacts arising from the proposal. These commitments were included at Schedule 3 of the Project Approval and form part of the Approved Project. As detailed in **Section 2.3**, the proposed modifications necessitated some amendments to the Statement of Commitments. The following table provides a consolidated final version of the revised commitments.

Commitments and Requirement	Responsibility / Timing
<b>Design</b>	
1. Lend Lease commits to ensuring continuity in the design process and realisation of the submitted Commercial Building C3 design in the completed building by ensuring that Rogers Stirk Harbour + Partners has direct involvement in the design documentation phase.	Proponent, ongoing.
2. External building materials and finishes will be generally in accordance with the materials schedule included at Appendix D of the Section 75W Modification (Mod 2) prepared by JBA dated September 2013.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
3. The public domain within the Commercial Building C3 site will be generally in accordance with the Landscape Design Statement prepared by Aspect Oculus included at Appendix E and the Public Domain Plan prepared by Aspect Oculus included at Appendix F of the Section 75W Modification (Mod 2) prepared by JBA Planning dated September 2013 unless otherwise modified by a subsequent planning approval.  The final selection of plantings within the framework of the Public Domain Plan and Landscape Design Statement will take into consideration suitability having regard to the potential impacts resulting from the construction of nearby buildings. The Public Domain Plan will be fully integrated with the Barangaroo South Public Domain Guidelines, once finalised by the Technical Working Group.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
4. Temporary landscaping and lighting will be provided within the Commercial Building C3 site generally in accordance with the Temporary Public Realm plan prepared by Aspect Oculus included at Appendix F of the Section 75W Modification (Mod 2) prepared by JBA dated September 2013, unless a construction certificate has been issued for the permanent buildings or public domain on the land, or for temporary public domain on the land pursuant to another planning approval. The final selection of plantings within the framework of the Temporary Public Realm Plan will take into consideration suitability having regard to the potential impacts resulting from the construction of nearby buildings.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
5. The Architectural Drawings prepared by Rogers Stirk Harbour + Partners included at Appendix C of the Section 75W Modification (Mod 2) prepared by JBA dated September 2013 illustrate the maximum extent of signage zones for the tower facades. Within the maximum extent of signage zones: <ul style="list-style-type: none"> <li>no more than two (2) building identification and/or business identification signs will be provided at high level on a maximum of two (2) facades of the building; and</li> <li>a maximum of two (2) building identification and/or business identification signs will be provided at podium level on a maximum of two facades of the building,</li> <li>a maximum of two (2) secondary building identification and/or business identification signs will be provided at podium level for each facade of the building.</li> </ul> The final form and content of any proposed building and business identification signage will be subject to the approval of the Director General.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
6. External and internal lighting will be provided around and throughout the building in accordance with AS 1680 and the BCA.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
7. Internal light fittings within the commercial and retail areas will comply with NABERS and Green Star targets.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
8. Specialist lighting will be provided within the building's entrance lobby to enhance the visual environment at ground level.	To be demonstrated by the proponent at the relevant construction certificate stage(s).

9. External building lighting will be installed to provide interest, highlighting architectural features. No light beam will be directed beyond the site's boundaries or upwards without falling directly on a surface to minimise light pollution. Lighting will be controlled by photoelectric cells or time switches.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
10. Photovoltaic arrays will be provided at the roof level of the building	To be demonstrated by the proponent at the relevant construction certificate stage(s).
11. A complete electronic security system will be provided for the base building including a central supervisory system, access control system, CCTV system, intruder alarm system and intercommunication system.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
12. The detailed design of Commercial Building C3 will address the recommendations of the Wind Report prepared by CPP included at Appendix P of the Environmental Assessment Report prepared by JBA Planning dated November 2011.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
13. The design of any temporary structures that may be required (depending on the construction staging of the adjoining future buildings within Block 2 of Barangaroo South) to mitigate wind impacts will be submitted prior to the issue of a Construction Certificate relating to works at the ground plane.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
<b>Future separate applications</b>	
14. Future planning approvals will be sought for the following where required: <ul style="list-style-type: none"> <li>Fit out of the commercial office space;</li> <li>Fit out and operation of the retail units;</li> <li>Fitout and use of the child care centre; and</li> <li>Installation of any site wide infrastructure.</li> </ul>	Proponent, ongoing.
<b>Public art</b>	
15. Opportunities to implement art work within the Commercial Building C3 development will be further explored in accordance with the Public Art Strategy for Barangaroo South.	Proponent, ongoing.
<b>Ecologically sustainable development</b>	
16. Commercial Building C3 will be designed to achieve a 6 Star Green Star Office Design rating. In order to achieve a 6 Star Green Star Office Design rating, Lend Lease will target the initiatives set out in the ESD Report prepared by ARUP included at <b>Appendix W</b> of the Environmental Assessment Report prepared by JBA Planning dated November 2011.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
17. Commercial Building C3 will achieve the ESD Performance Indicators for potable water consumption, reduction in flow to sewer, reductions in Greenhouse Gas emissions, use of renewable energy, micro climate, landscaping, transport, and waste as detailed in the approved Concept Plan (Mod 4) Statement of Commitments.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
<b>Operational waste management</b>	
18. Commercial Building C3 operational waste will be managed generally in accordance with the methodology outlined in the Waste Management Plan prepared by ARUP included at <b>Appendix L</b> of the Environmental Assessment Report prepared by JBA Planning dated November 2011.	Proponent, ongoing.
<b>Building Services and Fire Safety</b>	
19. Electrical services will be completed in accordance with the relevant standards and applicable statutory requirements.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
20. The detailed design of mechanical services will satisfy the relevant requirements of AS 1668.1-1998 and AS1688.2 – 1991 as applicable.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
21. Fire detection, emergency warning and fire protection systems will be installed to comply with BCA requirements and other relevant legislation, generally in accordance with the measures outlined in Section 6 of the Building Services Report included at <b>Appendix M</b> of the Environmental Assessment Report prepared by JBA Planning dated November 2011.	To be demonstrated by the proponent at the relevant construction certificate stage(s).

22. A detailed Fire Safety Strategy will be prepared and submitted as part of the relevant Construction Certificate documentation. The Fire Safety Strategy will be prepared in consultation with the NSW Fire Brigade, building certifiers, and relevant stakeholders.	To be prepared and submitted as part of the documentation for the relevant Construction Certificate (s).
<b>Infrastructure and Services</b>	
23. Appropriately sized new sewer and water connections will be provided to the building in consultation and agreement with Sydney Water.	To be demonstrated by the proponent prior to release of any occupation certificate.
24. Stormwater discharge will be generally in accordance with the Stormwater Management Plan prepared by ARUP included at <b>Appendix O</b> of the Environmental Assessment Report prepared by JBA Planning dated November 2011.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
25. A suitably sized rainwater tank is to be provided for the collection and re-use of rainwater flows from the building's roof areas.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
<b>Accessibility</b>	
26. The detailed design of Commercial Building C3, including access, emergency egress, paths of travel, lifts, ramps, stairs, accessible toilets, accessible parking, lighting and signage, will generally comply with the recommendations set out in the Accessibility Report prepared by Morris-Goding Accessibility Consulting included at <b>Appendix AA</b> of the Environmental Assessment Report prepared by JBA Planning dated November 2011.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
<b>Building Code of Australia</b>	
27. The detailed design of Commercial Building C3 will comply with all relevant BCA requirements and Australia Standards generally in accordance with the recommendations of the BCA Assessment prepared by McKenzie Group Consulting included at <b>Appendix Z</b> of the Environmental Assessment Report prepared by JBA Urban Planning Consultants dated November 2011.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
<b>Operational Noise and Vibration</b>	
28. Operational noise emissions from the site will comply with the noise limits and amenity and intrusiveness criteria detailed in Wilkinson Murray's Operational Acoustic Study included at <b>Appendix Y</b> of the Environmental Assessment Report prepared by JBA Planning dated November 2011.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
29. Commercial Building C3 will be designed in accordance with Australian Standard 2107 Internal Design Sound Levels to ensure appropriate internal amenity is achieved.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
30. The detailed design of Commercial Building C3 will meet the vibration levels specified in the DECCW Assessing Vibration technical guideline.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
<b>Travel Demand</b>	
31. Lend Lease will prepare a Work Place Travel Plan for Commercial Building C3 to be completed prior to the first occupation certificate for the commercial tenant occupation.	To be prepared by the proponent prior to the first occupation certificate for the commercial tenant occupation.

<b>Geotechnical and Structure</b>	
32. Further detailed geotechnical site testing will be undertaken in accordance with the requirements of Australian Standard 2159 Piling – Design and Installation and Australian Standard 3600 – Concrete Structures, to determine the exposure classification and durability design requirements. The further detailed geotechnical testing will be used to inform the detailed structural design and documentation of Commercial Building C3.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
33. The structural design and documentation of Commercial Building C3 will comply with all relevant Australian Standards and the BCA as outlined in the Structural Engineering Report prepared by ARUP included at <b>Appendix BB</b> of the Environmental Assessment Report prepared by JBA Planning dated November 2011.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
<b>Environmental, Construction and Site Management</b>	
<p>34. Construction and site management relating to the construction of Commercial Building C3 will be in generally accordance with the Environmental, Construction and Site Management Plan prepared by Cardno &amp; Lend Lease included at <b>Appendix CC</b> of the Environmental Assessment Report prepared by JBA Planning dated November 2011 including the following:</p> <ul style="list-style-type: none"> <li>■ Construction Noise and Vibration Assessment prepared by Wilkinson Murray, which addresses the noise and vibration impacts on and off site (refer to <b>Appendix EE</b> of the EAR);</li> <li>■ Construction Traffic Management Plan prepared by ARUP, which addresses construction traffic impacts (refer to <b>Appendix T</b> of the EAR);</li> <li>■ Air Quality Impact Assessment prepared by AECOM, which addresses air quality and odour impacts (refer to <b>Appendix FF</b> of the EAR); and</li> <li>■ Waste Management Plan prepared by ARUP which addresses construction waste management (refer to <b>Appendix L</b> of the EAR).</li> <li>■ A requirement for preparation of a site wide strategy relating to the preparation of post construction dilapidation reports that includes a requirement for the Proponent to engage a suitably qualified person to prepare a post-construction dilapidation report: <ul style="list-style-type: none"> <li>- At the completion of all excavation and piling works associated with the construction of the basement, Commercial Building C3, Commercial Building C4 and Commercial Building C5 works; and</li> <li>- At the completion of all construction works associated with the construction of the basement, Commercial Building C3, Commercial Building C4 and Commercial Building C5 works.</li> </ul> </li> <li>■ In the event that barging of soil is undertaken, requirements for: <ul style="list-style-type: none"> <li>- Management of Spillage of spoil during loading / movement of barges;</li> <li>- Procedures in the event of an incident (such as a fuel spill or collision with structures / vessels on the water); and</li> <li>- Reporting of any incidents, (such as a fuel spill) on the water.</li> </ul> </li> <li>■ A requirement that Lend Lease notify and consult with the Harbour Master prior to material being loaded for transport via the water from the site, particularly in relation to vessel movements.</li> </ul>	Proponent, ongoing
35. Lend Lease commits to providing high quality hoardings around the site, including along the foreshore walk. Hoardings will be treated with graphics and other designs consistent with an overall coordinated high quality Barangaroo communications strategy to be endorsed by the Barangaroo Delivery Authority and submitted to the Director-General.	Proponent, ongoing
<b>Consultation</b>	
36. Consultation will be undertaken with the City of Sydney Council prior to the lodgement of a future application for the final public domain works.	Prior to the lodgement of a future application for the final public domain works.
37. Lend Lease will continue to undertake consultation in relation to the proposed Commercial Building C3 in accordance with the methodologies identified at Table 2 of the Environmental Assessment Report prepared by JBA Planning dated October 2011.	Proponent, ongoing

<b>Piling and associated works</b>	
38. The Commercial Building C3 Project Application works will be carried out in accordance with the Remedial Action Plan – Other Remediation Works (South) Area prepared by AECOM (including any RAP addendums that are proposed to be prepared and remedial work plan(s) as proposed to be prepared in conformance with these RAPs).	To be demonstrated by the proponent at the relevant construction certificate stage(s).
39. Lend Lease will obtain a Section A Site Audit Statement from the Site Auditor prior to the issue of an Occupation Certificate for Commercial Building C3.	To be demonstrated by the proponent at the relevant construction certificate stage(s).
<b>Rail Corp 33kV Power Line</b>	
40. Detailed plans demonstrating that the proposed development will have no impact on RailCorp 33KV power cable will be provided to RailCorp.	To be demonstrated by the proponent at the relevant construction certificate stage(s).



## 5.0 Conclusion

This Modification Application 2 seeks to modify the Approved Project to make further design refinements to the building facade, podium and lobby areas and roof form.

Where relevant revised technical assessments have been undertaken for the modified development and demonstrate that the modifications will have no adverse environmental impacts that cannot be managed or mitigated. The proposed modifications will enhance the Approved Project and will ensure the proposal remains within the public interest.

We therefore request that the Minister or his delegate approve this Modification Application 2.