

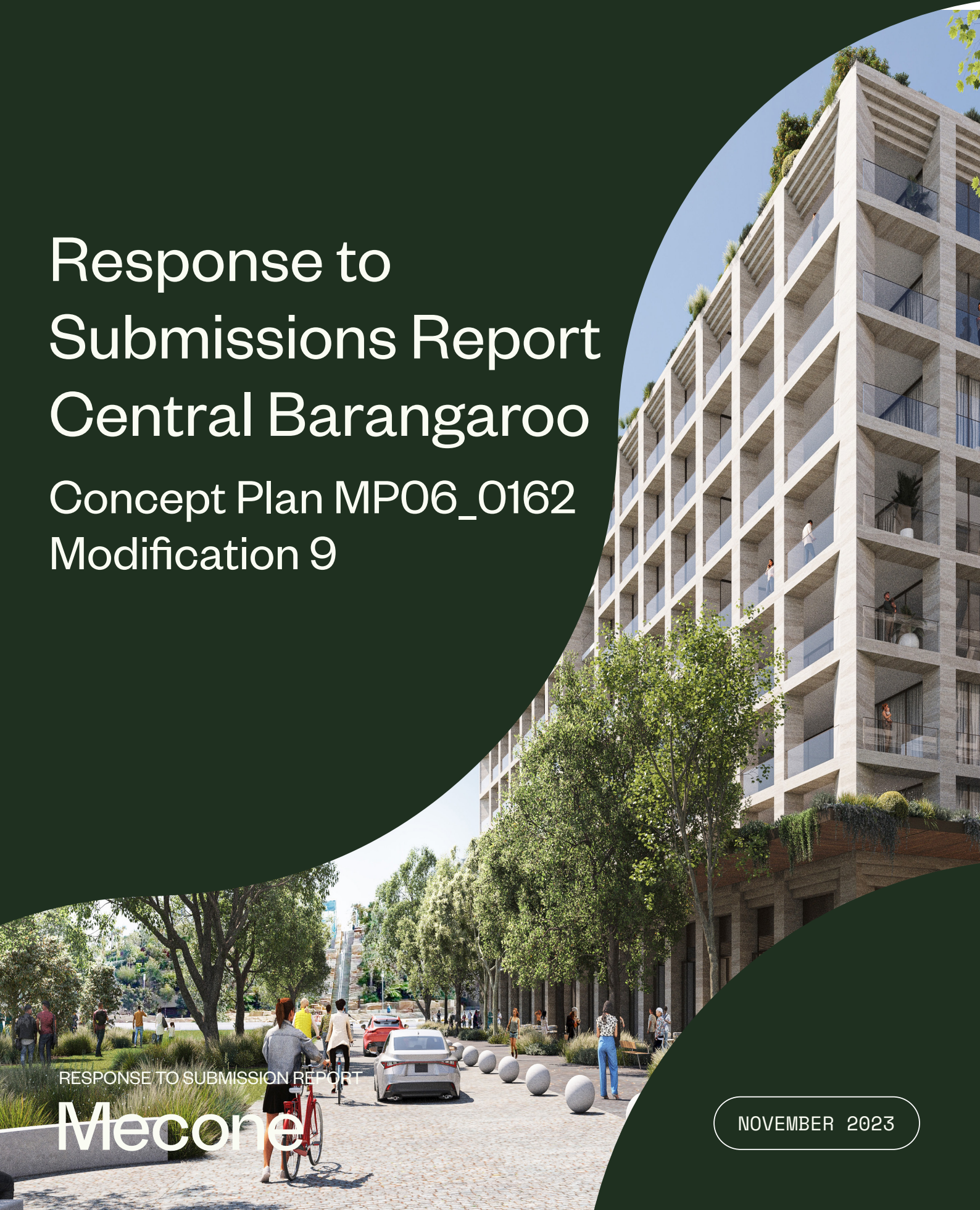


Response to Submissions Report Central Barangaroo Concept Plan MP06_0162 Modification 9

RESPONSE TO SUBMISSION REPORT

Mecone

NOVEMBER 2023



Project Director

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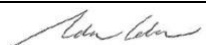
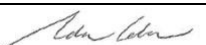
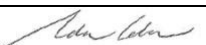
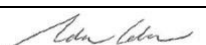
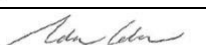
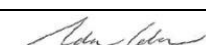
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* This document is for discussion purposes only unless signed and dated by the persons identified.

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Acknowledgment of Country

Mecone acknowledge the traditional custodians of the land on which Central Barangaroo is located, the Gadigal people of the Eora Nation. We pay our respects to their elders past and present, extending that respect to all Aboriginal and Torres Strait Islander people.



Executive Summary

This Response to Submissions Report (**Submissions Report**) has been prepared by Mecone Group (**Mecone**) on behalf of Infrastructure NSW (the **Applicant**) in support of a request to modify the Barangaroo Concept Plan (**MP06_0162**). This Submission Report relates to MP06_0162 MOD 9 (the **project**).

The purpose of this Submissions Report is to provide a detailed response to key issues raised by government agencies, City of Sydney Council (**Council**), organisations and the public and during the exhibition of the project between July and August 2022.



FIGURE 1 – VISUALISATION OF PROPOSED DEVELOPMENT (SJB)

Evolution of the Barangaroo Concept Plan

The Barangaroo Concept Plan was approved on 9 February 2007 under Part 3A of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**). It has been modified several times since 2007.

The key elements of the original Concept Plan included:

- A maximum 388,300m² of gross floor area (**GFA**) comprising a minimum and maximum GFA for residential uses, a maximum GFA for tourist, retail uses and a minimum GFA for community uses,
- Approximately 11 hectares of new open space and public domain including a 1.4km public foreshore promenade,



- 8,500m² GFA for a passenger terminal and 3,000m² of GFA for active uses to support the public domain,
- Built form design principles, maximum building heights and GFA for each development block within the mixed use zone,
- Public domain and landscape outcomes including parks, streets and pedestrian connections,
- Alteration of the existing seawall and creation of a partial new shoreline to the harbour, and
- Retention of the existing Sydney Ports Corporation Port Safety Operations and Harbour Tower Control Operations including employee parking.

The original Concept Plan was facilitated through an amendment to Schedule 3 of *State Environmental Planning Policy (Major Development) 2005* now consolidated into *State Environmental Planning Policy (Precincts – Eastern Harbour City) 2021 (PEHC SEPP)*. The SEPP establishes the land use, height, GFA and other provisions relating to the planning and development of Barangaroo.

The original Concept Plan included an Instrument of Approval, which functions as the consolidated conditions of consent for Barangaroo. The Instrument of Approval includes the following structure as follows:

- **Schedule 1** includes details on the development approval.
- **Schedule 2 Part A – Terms of approval** includes the development description (A1) and approval plans and documents (A2).
- **Schedule 2 Part B Modification Concept Approval** – sets out conditions to amend the approved documents outlined in A2.
- **Part C Conditions** applying to Future Applications (detailed DAs).
- **Schedule 3 – Statement of Commitments.**

The Modifications

Since 2007, there have been several modifications that have progressively altered the planning framework and urban form of Barangaroo. These have included the naturalisation of headland park and Nawi Cove and increased scale of development in Barangaroo South and have been driven by changes in strategic planning policy, the growing recognition of Barangaroo on Sydney CBD as a global city and increased infrastructure investment in the area.

There are a number of modifications that are notably significant in the way they affected the future development potential and land use outcomes for Central Barangaroo.

Modification 3

MOD 3 was approved on 13 November 2011 and modified the approved Concept Plan to facilitate the reinstatement of a headland at the northern end of the site with a naturalised shape and form.

The implications on Central Barangaroo included the deletion of Block 8 (to accommodate the northern cove) and a significant reduction in the size of Block 7. Overall, the MOD 3 saw a compression of the Concept Plan development footprint and resulted in a loss of 18,000m² of GFA.



In approving MOD 3, the Concept Plan was modified such that it reduced the urban extent of Barangaroo and introduced expansive new views, vistas and connectivity to the foreshore from Millers Point and the immediate surrounds.

Modification 8

MOD 8 was approved on 28 June 2016 and represented another major change to the Concept Plan. It responded to key recommendations of the Sussex Penn Review relating to the location of the proposed hotel over the harbour

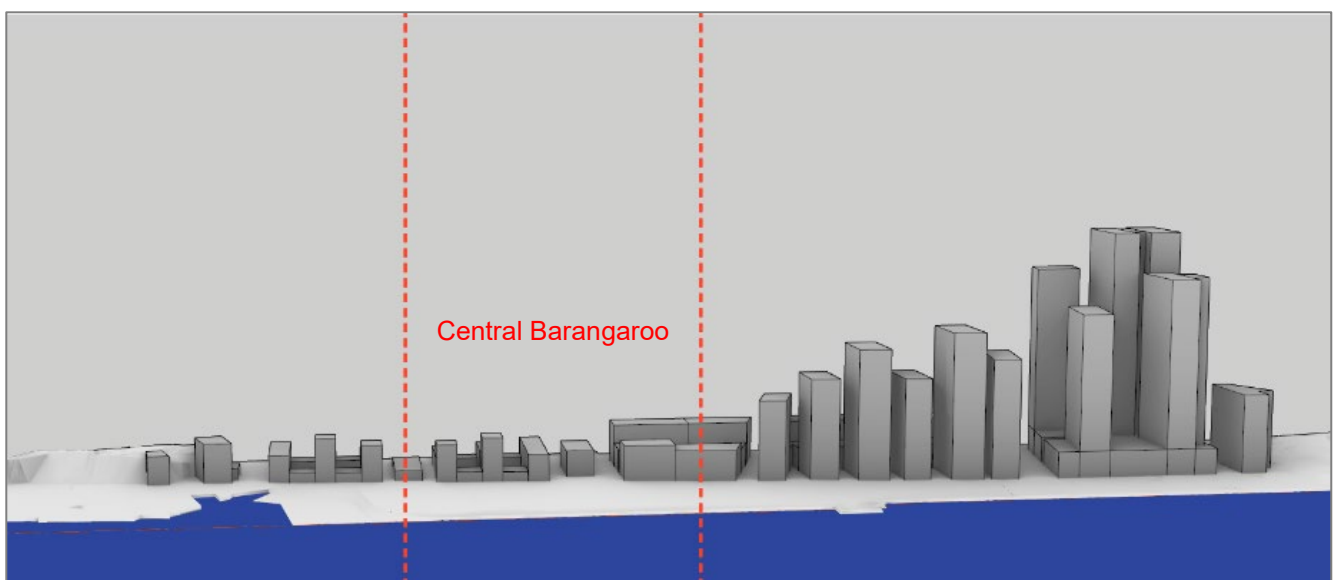
The most notable change as a result of the PAC determination was the reduced development footprint of Block 5 as a consequence of shifting the alignment of the Hickson Park. This was not resolved at the time of the MOD 8 determination and had significant implications on the development outcomes of Central Barangaroo.

Barangaroo Today

The changes introduced by MOD 8 compounded with the amendments made by MOD 3 further compressed, and placed additional pressure, on the future development outcomes of Central Barangaroo to align with increased infrastructure investment and the elevated importance of Barangaroo.

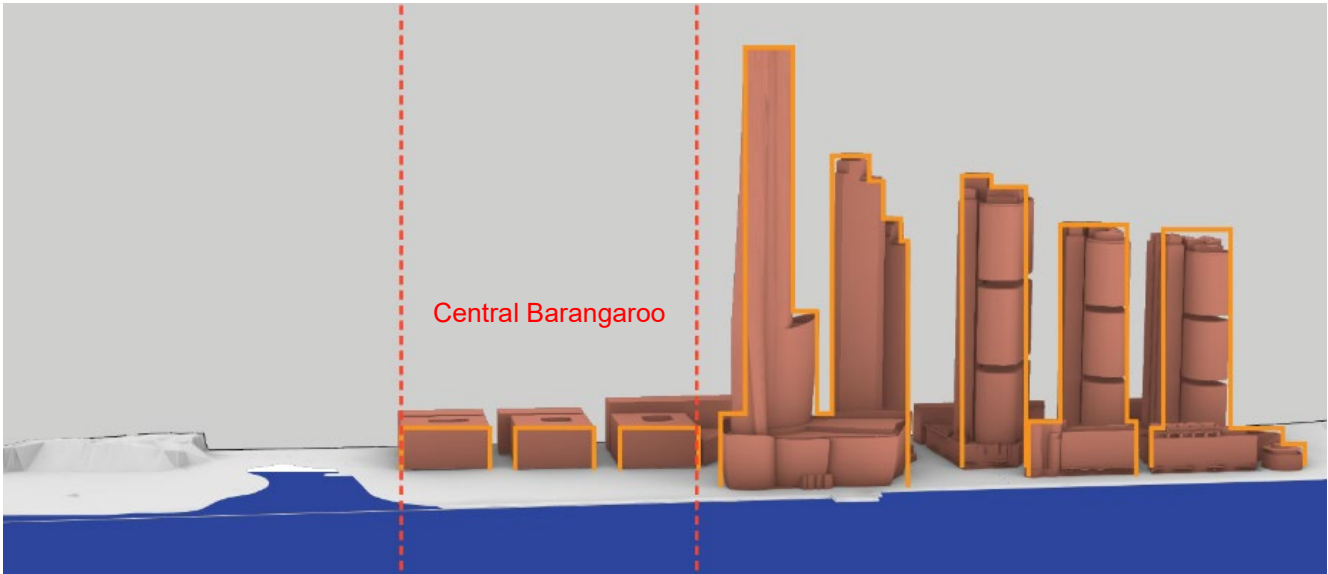
MOD 8 marked a major shift from the original Urban Design Principles established in the Concept Plan relating to the natural transition of height from the southern end to lower scale built forms to the north. The new hotel resulted in a completely new skyline form to Barangaroo South.

Overall, Barangaroo has undergone significant planning framework and built form refinements since 2007 when the original Concept Plan was originally established. The ongoing refinements reflect the culmination of a major urban renewal site being delivered over an extended period of time in response to changing market demands, policy contexts and infrastructure investment (see **FIGURE 2**).



Composite of block controls taken from Section 13.0 – Built Form of EA dated October 2006





Barangaroo developed and built 2023 with proposed reference scheme for Central Barangaroo

FIGURE 2 – COMPARISON OF 2007 CONCEPT PLAN AND BARANGAROO TODAY

The Approved Concept Plan

Following several modifications up to MOD 11, the approved Concept Plan that applies to Barangaroo currently is described in Condition A1 of the Instrument of Approval and is generally summarised to include the following key elements:

- Mixed use development including residential, tourist, retail, active and community uses.
- A maximum of 602,354m² of GFA comprised of:
 - A maximum 191,031m² of residential GFA of which a maximum 162,031m² will be in Barangaroo South,
 - A maximum 76,000m² of GFA for tourist uses of which a maximum 59,000m² will be in Barangaroo South,
 - A maximum 34,000m² of GFA for retail uses of which a maximum 30,000m² will be in Barangaroo South,
 - A maximum 5,000m² of GFA for active uses in the Public Recreation zone of which a maximum 3,500m² will be in Barangaroo South,
 - A minimum of 12,000m² of GFA for community uses.
- Maximum GFA for blocks including:
 - Block 5 – 29,668m² (with a maximum 15,000m² of residential GFA)*,
 - Block 6 – 3,000m², and
 - Block 7 – 15,000m² (with a maximum 14,000m² of residential GFA), and
 - Block 5, 6 and 7 total – 47,668m².

**Condition B4(2) of the Instrument of Approval incorrectly identifies 29,688m²*
- Maximum heights for blocks including:
 - Block 5 – RL 34,



- Block 6 – RL 29, and
 - Block 7 – RL 35.
- Built form design principles within the mixed use zone.
 - Approximately 11 hectares of new public open space/public domain, with a range of formal and informal open spaces serving separate recreational functions and including an approximate 2.2km foreshore promenade.
 - Public domain landscape concept, including parks, streets and pedestrian connections.

Lodgement of MOD 9

The Director General Requirements (**DGRs**) for MOD 9 were issued on 15 April 2014 and remains a transitional Section 75W (**S75W**) project under the EP&A Act. This pathway remains in force by operation of clause 3BA of Schedule 2 of the *Environmental Planning and Assessment (Saving, Transitional and Other Provisions) Regulation 2017 (STOP Regulation)*.

The Environmental Assessment Report (**EAR**) and appended specialist studies were lodged with the NSW Department of Planning and Environment (the **Department**) on 8 April 2022 to satisfy the requirements of the transitional provisions under Part 3A of the EP&A Act.

Extensive consultation was undertaken with key stakeholders prior to and during preparation of MOD 9. These consultation activities are documented in the lodged EAR and included engagement with the following groups.

- The Department on 22 December 2020 and 1 April 2021,
- Transport for NSW/Sydney Metro in June 2020 and December 2020,
- Environmental Protection Authority in September 2021,
- NSW Government Architect during 2020 and in September 2021,
- City of Sydney Council in 2019,
- Museum of Applied Arts and Sciences in August 2021,
- Sydney Water in August 2021,
- Crown Sydney Hotel Resort and developer Lendlease from March 2020 – November 2020,
- National Trust in August 2021,
- Representatives of the Walsh Bay Precinct Management Association on 11 May 2021, and
- Millers Point Residents Action Group on 8 June 2021.

Summary of Project as Lodged

The exhibited project proposed the following amendments to the approved Concept Plan:

- An increase in total permissible GFA from 602,354m² to 708,041m², comprising the following proposed within Central Barangaroo and Barangaroo Reserve:
 - Up to 116,189m² of above ground GFA, mainly within the B4 Mixed Use zone of Blocks 5, 6 and 7 (including a maximum of 28,000m² of residential GFA),
 - Up to 28,166m² of below ground GFA, mainly within the B4 Mixed Use zone of Blocks 5, 6 and 7,
 - A minimum of 2,800m² of Community uses GFA within Blocks 5, 6 and 7,



- A minimum of 6,000m² and maximum of 18,000m² of Community uses GFA within the RE1 Zone of Barangaroo Reserve to allow for future community/cultural facilities located in the Cutaway, and
 - An allocation of 1,000m² GFA for potential community uses within the RE1 Zone.
- A re-adjustment of the Block 5 southern boundary and building envelope towards the previously approved alignment prior to the MOD 8 approval, whilst providing building setbacks to both Barangaroo South and Hickson Park.
 - Modifications to Barangaroo's movement network, including the removal of uncontrolled vehicular traffic from Barangaroo Avenue north of Barton Street adjacent to Blocks 5 and 6 (excluding controlled service vehicle access), and converting Barton Street to a permanent street connecting Barangaroo Avenue with Hickson Road, servicing the wider Barangaroo precinct.
 - Modifications to the approved building envelopes of Blocks 5, 6 and 7 including additional height, block alignments, additional GFA and the distribution of GFA across the blocks.
 - Introduction of Design Guidelines for Central Barangaroo to guide future detailed proposals.
 - Consequential amendments to the PEHC SEPP to support modifications to the Barangaroo Concept Plan (MOD 9) for Central Barangaroo.
 - Modifications to the current Instrument of Approval.
 - Revisions to the Barangaroo Concept Plan Statement of Commitments (**SoCs**).

Exhibition

The project was publicly exhibited for a period of 28 days between 12 July 2022 and 8 August 2022, providing Council, State agencies, organisations and the general public to make submissions on the Project.

During this period, there were 863 submissions received from government agencies, Council, organisations and individuals. These included:

- 14 submissions received from government agencies including 2 submissions from Council,
- 26 submissions received from community organisations, and
- 823 submissions received from the public.

The Department provided a copy of all agency, organisation and public submissions to the Applicant following exhibition. Submissions were collated and key issues identified by Urbis. Mecone subsequently reviewed the submissions and the Urbis' summary, which forms the basis of the issues addressed in this Submissions Report.

A detailed summary of the exhibition analysis and key issues identified is provided in **Section 5** and **Section 7** of this Submissions Report.

A summary of the exhibited MOD 9 Concept Plan building envelope is provided in **FIGURE 3**.



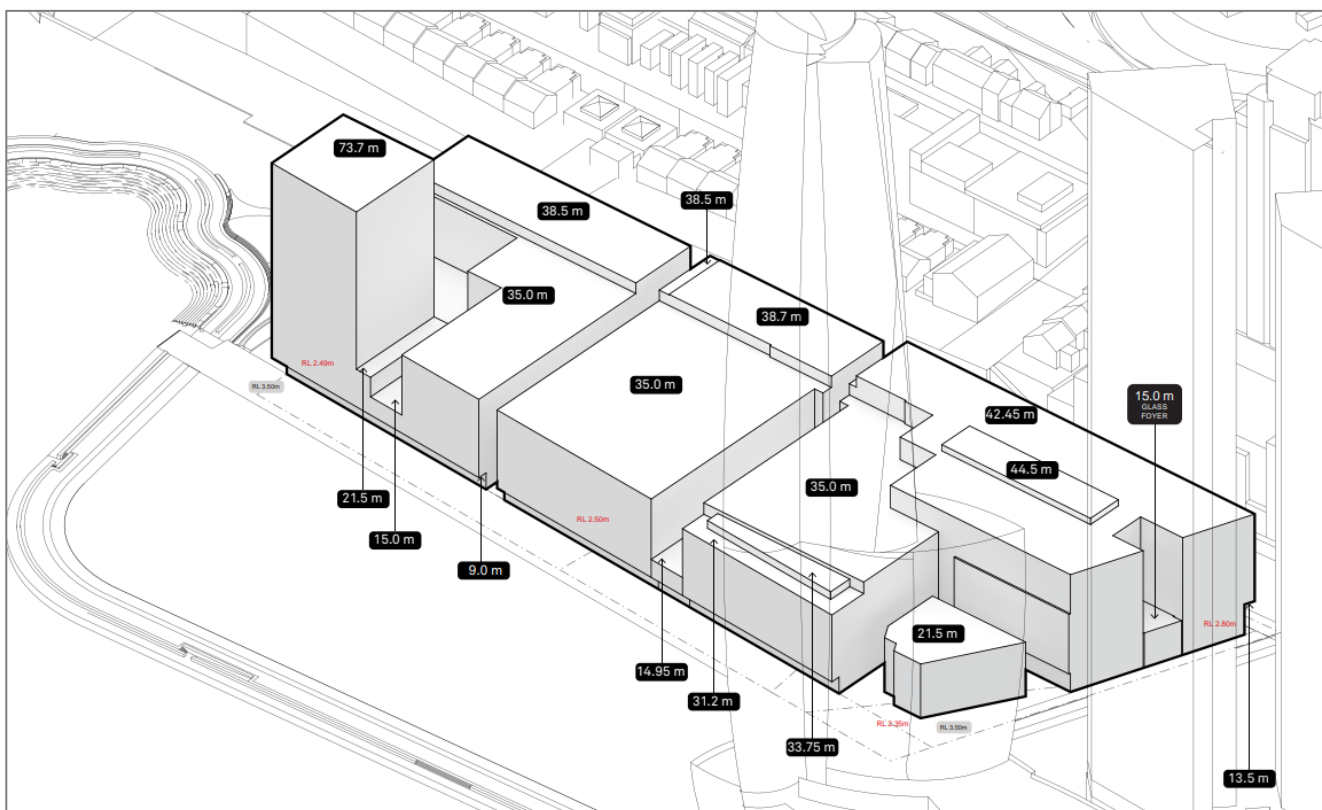


FIGURE 3 – EXHIBITED CONCEPT BUILDING ENVELOPE AXONOMETRIC (HASSELL)

Refinements Post Exhibition

Following exhibition of the project from 12 July 2022 to 8 August 2022 and review of submissions, MOD 9 has been refined by the Applicant.

Extensive engagement has occurred with the Department, GANSW and key stakeholders to review key elements of the project including scale of built form compatibility, open space and public amenity.

Overall, it introduces a simplified building envelope at a reduced scale, including additional public domain offering and the deletion of the previously proposed tower form at Block 7. **FIGURE 4** demonstrates the amended MOD 9 Concept Plan building envelope. **FIGURE 5** compares the amended Concept Plan building envelopes with the exhibited and approved building envelopes.



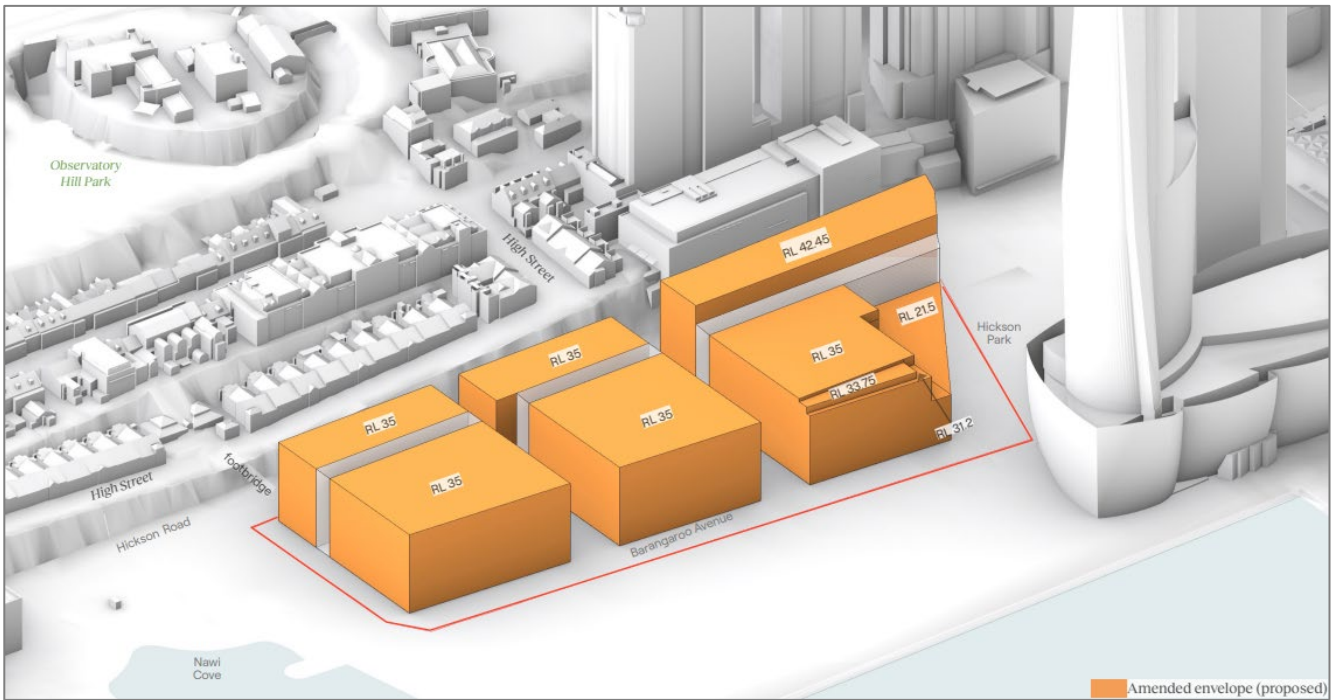


FIGURE 4 – AMENDED CONCEPT BUILDING ENVELOPE AXONOMETRIC (SJB)

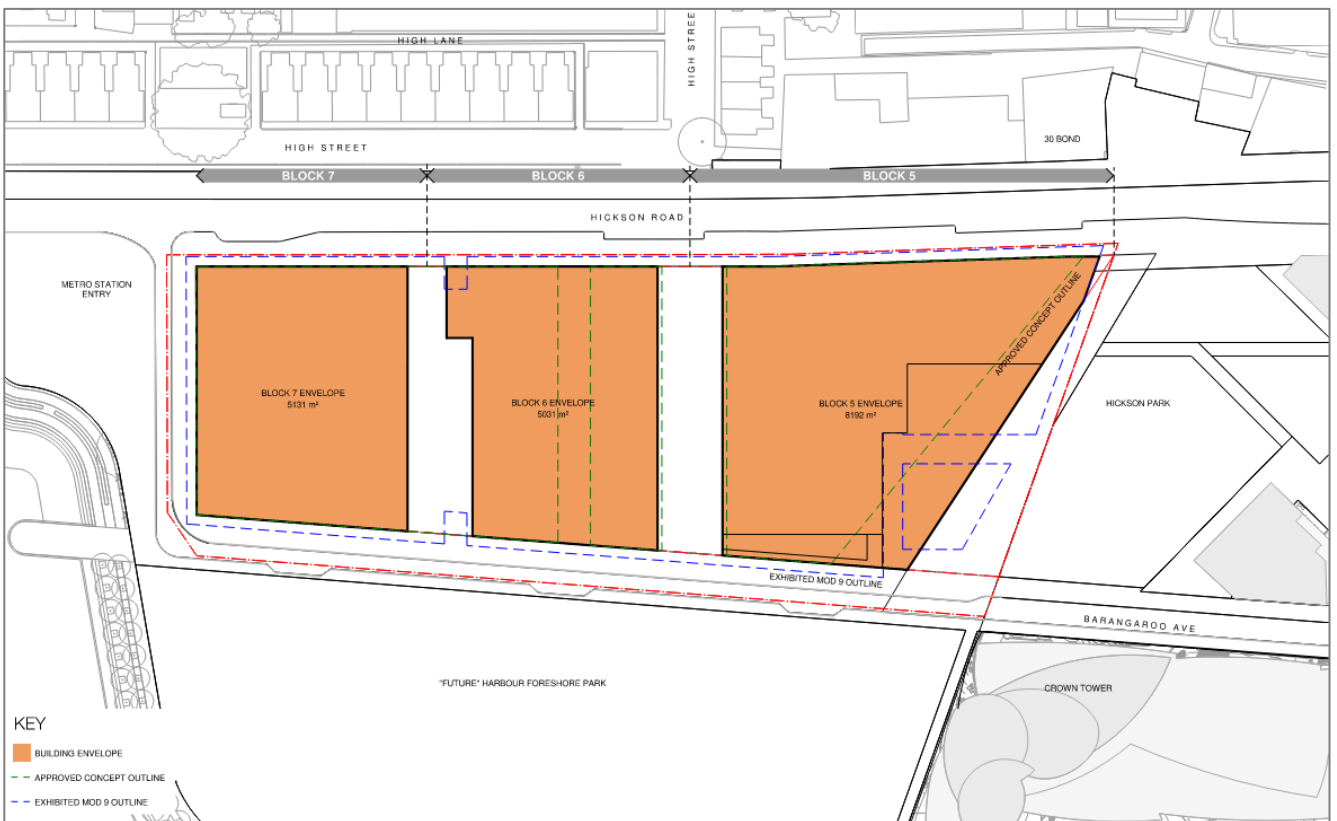


FIGURE 5 – AMENDED CONCEPT BUILDING ENVELOPE (SJB)



A summary of key amendments are provided below.

GFA Amendments

- Reduced total GFA permissible within Blocks 5, 6 and 7 from 144,355m² to 104,000m²,
- Reduced below ground GFA from 28,166m² to 11,092m², and
- Increased maximum residential component cap from 28,000m² to 75,000m²,
- No change to the Cutaway GFA for community uses of up to 24,000m²

Building Envelope Amendments

- Removal of the tower element at Block 7 at RL 73.7,
- Reduced building height with the tallest element located on Block 5 at RL 42.45,
- Amendments to the overall dimension and footprint of Blocks 5, 6 and 7 including new pedestrian connections open to the sky,
- Deletion of building cantilever elements into public domain,
- Refinements to the interface of Block 5 and Hickson Park, and
- Simplified building height and massing across the entire site with only three heights proposed to minimise visual impacts from Observatory Hill and Millers Point.

Open Space and Public Domain Amendments

- Increased provision of publicly accessible open space when compared to the approved Concept Plan,
- New north-south pedestrian link with a minimum width of 8m and open to the sky to facilitate visual links from Hickson Park to Nawi Cove,
- Two east-west pedestrian connections, known as Plaza North and Plaza South up to 20m wide and open to the sky,
- New east-west arcade within Blocks 5 and 6 with a minimum width of 6m, and
- Additional allowance for deep soil zones across the site.

Block Amendments

- Amendments to the overall size and configuration of Blocks 5, 6 and 7 to reflect proposed building envelopes.

Traffic and Access Amendments

- Retain Barangaroo Avenue as a one-way shared street, and
- Deletion of Barton Street as a permanent two way street.

Statutory and Development Control Amendments

- Amendments to the SEPP mapping and provisions to align with amended building envelope GFA, building heights and land uses,



- Deletion of proposed SEPP amendment to allow GFA to extend 25m into the RE1 Public Recreation zone below ground level,
- Deletion of proposed SEPP amendment to allow building facades to extend by an additional 3m above ground and the 650mm façade articulation zone,
- Amended Design Excellence Strategy to be largely consistent with the PEHC SEPP, and
- Amended Urban Design Guidelines to reflect amended building envelope outcomes.

A detailed summary of the amendments to the MOD 9 proposal is provided in **Section 6** of this Submissions Report.

One important consideration that has informed the amendments to MOD 9 post exhibition has been a further appreciation of the trends resulting from the COVID-19 pandemic, which have re-set structural demand for some sectors including retail and commercial office floorspace. This has included improved productivity gains and increased acceptance for flexible work arrangements. These trends had begun during preparation of the submitted MOD 9 proposal and have continued significantly.

Therefore, the amended MOD 9 proposal aims to refine the overall land use framework for Central Barangaroo to facilitate a greater quantum of residential uses and will continue to be capped. This allows the planning framework for Central Barangaroo to remain robust and respond to changing market conditions.

Response to Submissions

Section 7 of this Submissions Report provides a detailed response to key issues raised by the Department of Planning and Environment (the **Department**), agencies and Council.

In addition, and in recognition of the significant number of submissions received from both individuals and organisations, the Applicant has provided additional assessment of the key issues. The key themes that emerged more broadly included:

- Height and massing,
- Visual impacts specific to public spaces and heritage views,
- Heritage impacts,
- Procedural planning matters,
- Solar and public open space impacts to Hickson Park and Harbour Park,
- Traffic and parking,
- Public amenity and benefits, and
- Accuracy of reports and documentation.

The key themes are discussed in detail in **Section 8** of this Submissions Report.

Key Themes and Additional Assessment

In addition to responses to key issues identified by the Department, Council and government agencies, further assessment has been undertaken based on submissions received from organisations and the public. These provide further clarity and discussion on key issues discussed in **Section 7** and address additional matters raised.

Height and Massing



The height and massing of the building envelopes have been scaled back significantly following exhibition. This includes the removal of the previously proposed tower element on Block 7.

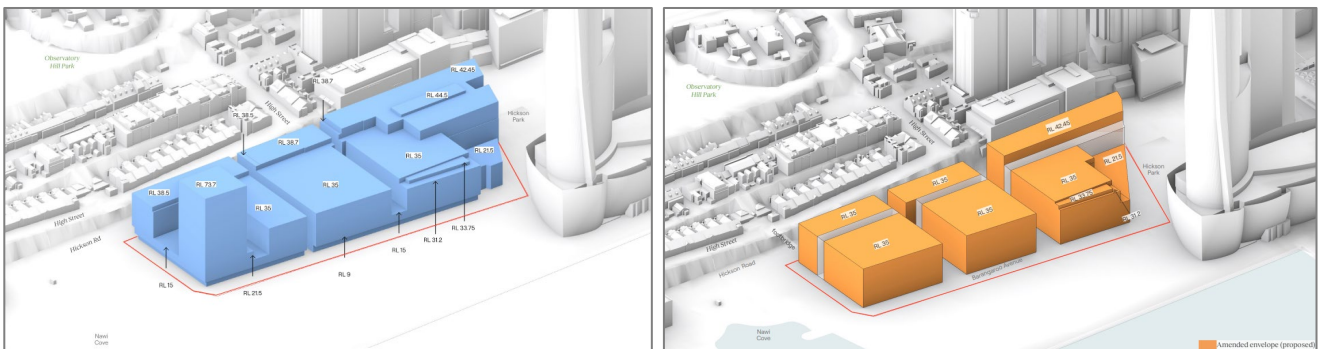


FIGURE 6 – EXHIBITED BUILDING ENVELOPE LEFT AND AMENDED ENVELOPE RIGHT (SJB)

The proposed heights for Block 7 have been amended from RL 73.7 to RL 35 and represents a decrease of 38.7 metres and is now less than half the height that was originally proposed. This reverts the proposed heights for Block 7 back to its original state under the approved Concept Plan and provides a built form transition to Nawi Cove, Headland Park and the Millers Point Heritage Conservation Area.

The proposed heights for Block 6 have been amended from RL 38.7 to RL 35, which represents a decrease of 3.7 metres. Block 6 is defined by a new and generous 20m wide east-west pedestrian link to its north (referred to as Plaza North), and a minor shift of the approved 20m east-west pedestrian link in the south (Plaza South). Both of these spaces will be fully open to the sky and facilitate views from Observatory Hill and Millers Point to the foreshore.

The proposed heights for Block 5 have been amended from RL 44.5 to RL 42.45, RL 35, RL 33.75, RL 31.2 and RL 21.5, which represents a decrease of 2.05 metres. Block 5 represents the tallest building component for MOD 9 and is located in the southeastern portion of the site where it directly interfaces with taller buildings in Barangaroo South. The predominant height of Block 5 is RL 35, which is generally consistent with the approved Concept Plan heights and also includes a lower RL 21.5 building envelope that directly interfaces with Hickson Park.

A key change following exhibition has been the overall reduction and simplification of the proposed building envelope and heights. The amended building heights revert back to a similar level of detail that was conceived under the approved Concept Plan and allow for greater levels of design flexibility and excellence to be explored in future detailed applications.

Overall, the changes made to the height and massing of MOD 9 respond to key issues raised and take into consideration a range of concerns including visual impacts, compatibility with the surrounding heritage context, pedestrian connectivity and public domain amenity.

Procedural Planning Matters

The MOD 9 request to modify the Concept Plan was lodged prior to the 1 March 2018 cut-off date. The MOD 9 request was lodged in March 2014, and DGRs (now **SEARs**) for the Barangaroo Concept Plan MOD 9 (MP06_0162 (MOD 9)) were issued to Infrastructure NSW on 15 April 2014.



Pursuant to clauses 3C(1) and clause 3BA(3) of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2007 (STOP Regulation)*, MOD 9 remains a modification request under S75W of the EP&A Act.

Visual Impacts

An amended View and Visual Impact Assessment (**VVIA**) has been prepared by AECOM (**Appendix D**). It concludes that the proposed changes since exhibition, including reduction of height across Block 6 and 7, removal of the cantilever elements and the additional east-west links, have reduced many of the impact ratings previously assessed for the exhibited MOD 9 proposal.

The removal of the Block 7 tower element enables continuous views to the harbour and the horizon from observer locations to the east and south. The removal of the cantilevered elements reduces the geographical footprint to the east and provides visual relief between Millers Point and Central Barangaroo. Refer to **FIGURE 7**.



Exhibited MOD 9 Envelope



Amended MOD 9 Envelope (current proposal)

FIGURE 7 – VIEW SOUTH WEST CORNER OF OBSERVATORY HILL (AECOM)

The amended MOD 9 Concept Plan building envelope is generally seen to exhibit a High to Moderate level of visual integration into the landscape compared with the approved Concept Plan due to the compositional form, scale, line and massing of the three development blocks, relative to that of towers within Barangaroo South. View



sharing impacts for the Barangaroo South and Kent Street residential towers are predominantly Moderate, with substantial harbour views retained towards the north-west for these observer locations.

Overall, the similar central and northern block heights, stacking of height towards the southern end of Central Barangaroo and additional and relocated separations of amended MOD 9 Concept Plan building envelope over that seen within the approved Concept Plan building envelope were considered to be a positive change with regards to visual amenity of the proposal and surrounds.

Heritage Impacts

A revised Heritage Impact Statement (**HIS**) has been prepared in response to submissions relating to the proposals compatibility and fit with the surrounding heritage context of Millers Point and heritage items.

It considers several new heritage views that have been prepared with the VVIA and provides an assessment of the amended MOD 9 proposal against the approved Concept Plan and exhibited MOD 9 proposal. Relevant views identified in the *Darling Harbour Wharves Site Study* have also been included for review.

The HIS concludes that the amended MOD 9 proposal would not result in any changes in potential impacts to Aboriginal archaeological evidence or historical archaeological evidence within Central Barangaroo from the approved Concept Plan in 2007.

In relation to the amended MOD 9 proposal and its impact on built heritage and views, the HIS notes that notwithstanding the increases in height for Blocks 5 and 6, the proposal is assessed in heritage terms to be more or less consistent with the approved Concept Plan.

Both the approved Concept Plan and the amended MOD 9 proposal are assessed as giving rise to varying degrees of impact on the heritage significance of the Millers Point and Dawes Point Village Precinct, the Millers Point Heritage Conservation Area (**HCA**), and heritage items within these areas and vicinity.

The HIS provides several recommendations for future detailed SSDAs relating to aboriginal archaeology, unexpected finds protocols, development outcomes, advice and the pedestrian footbridge that will be carried over into future stages of development.



Solar and Public Open Space Impacts to Hickson Park and Harbour Park

The interface and impacts to open space and Hickson Park have been considered in greater detail following exhibition. The exhibited proposal intended to reinstate Hickson Park back to its pre-MOD 8 alignment.

In consultation with the Department and GANSW, the amended proposal introduces a revised alignment to Hickson Park. Extensive urban design testing and supporting technical analysis has been undertaken that demonstrates the changes, when compared to the approved Concept Plan, results in improved solar access and pedestrian wind comfort, respecting visual links to Harbour Park and facilitating a high-quality public space.

In addition, the amended alignment to Hickson Park has been offset with additional public domain areas within the Central Barangaroo. This includes a new north-south pedestrian connection (8m wide) that will serve as a key pedestrian and visual connection from Hickson Park to Nawi Cove and the new Metro Station. Other new public spaces include Plaza North (20m wide) and a new east-west arcade (6m wide).

The principle of the originally conceived east-west pedestrian connection under the approved Concept Plan has been retained, with Plaza South being slightly shifted south with a 20m wide link, and the new Plaza North providing a 20m visual link to foreshore at its widest. These two east-west connections break up the massing and building envelopes and facilitate greater public domain and pedestrian access to permeate through the site.

These additional spaces, combined with the refinements to Hickson Park, result in a net increase of 1,264m² of open space across Central Barangaroo. Refer to **FIGURE 8**.

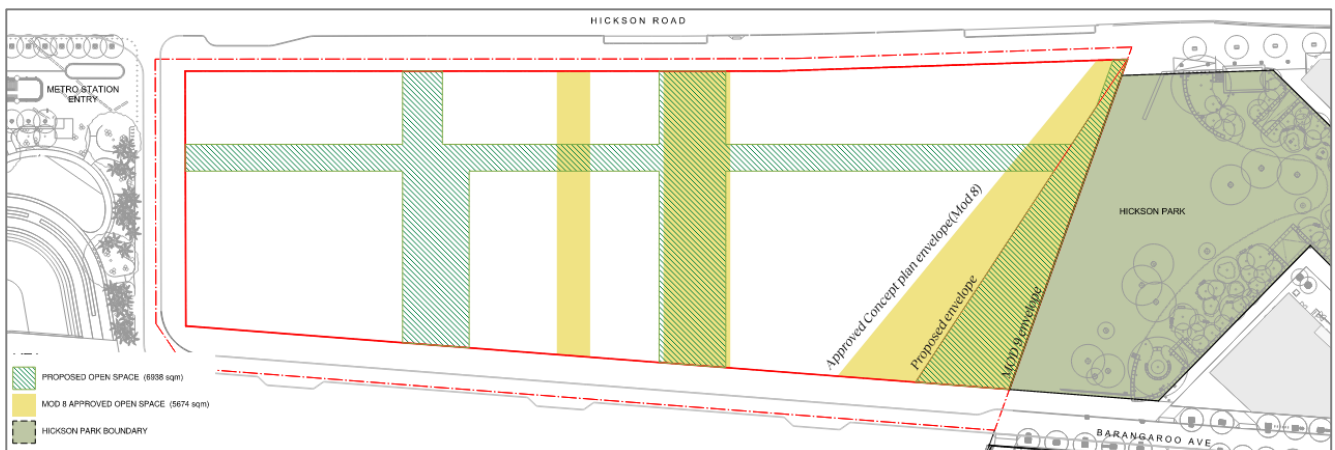


FIGURE 8 – OPEN SPACE AND PUBLIC DOMAIN DIAGRAM (SJB)

Traffic and Parking

The amended MOD 9 proposal is accompanied by an amended Transport Management Accessibility Plan (**TMAP**). The TMAP notes that while MOD 9 represents an increase from the current approved Concept Plan, it reflects a reduction of 149 spaces from what was previously exhibited (proposed 3,768 spaces) based on the revised reference scheme. This includes:

- Reduced on-street parking spaces by 14 (20 exhibited and 6 now proposed),
- Reduced commercial parking spaces by 78 (599 exhibited and 521 now proposed),



- Reduced retail parking spaces by 62 (113 exhibited and 51 now proposed), and
- Reduced residential parking spaces by 145 (2,202 exhibited and 2,057 now proposed).

The reason for the change in anticipated parking provision for Central Barangaroo is a result of the reduced commercial office and retail offering and increase in residential since exhibition based on the reference scheme. It is acknowledged the ultimate land use mix and distribution will be subject to future SSDAs and traffic impacts for each stage will be appropriately assessed.

Overall, and based on the amendments made to MOD 9 post exhibition, the TMAP conclude that the total volume of traffic generated by the entire precinct will be slightly reduced when compared with that previously assessed.

Public Amenity and Benefits

The public benefits for Central Barangaroo were determined between the Central Barangaroo Developer (Aqualand) and INSW (the Applicant) during the bid process. These public benefits were predicated on the site capable of achieving urban renewal outcome in response to the State governments investment into the Sydney Metro City and Southwest project.

The Barangaroo Metro Station was based on the entire precinct being complete. The announcement of the Central Barangaroo bid process in 2015 indicated tenderers would be capable of achieving up to 150,000m² of GFA. This was seen to align with the completion of the station and renewed objectives for the site. It has always been contemplated, through this process, that Central Barangaroo should achieve a level of density that is commensurate and responsive to the new station.

The increase in GFA proposed under MOD 9 is comparable to major CBD renewal projects where planning uplift has been directly informed by the introduction of a new station on the Sydney Metro network. **TABLE 1** provides a summary of the development density of key sites pre-metro and the changes to the planning controls implemented following their announcement/implementation. It indicates the uplift of Central Barangaroo is modest when considered against the approved Concept Plan (which is the subject of this modification).

TABLE 1 COMPARISON OF URBAN RENEWAL

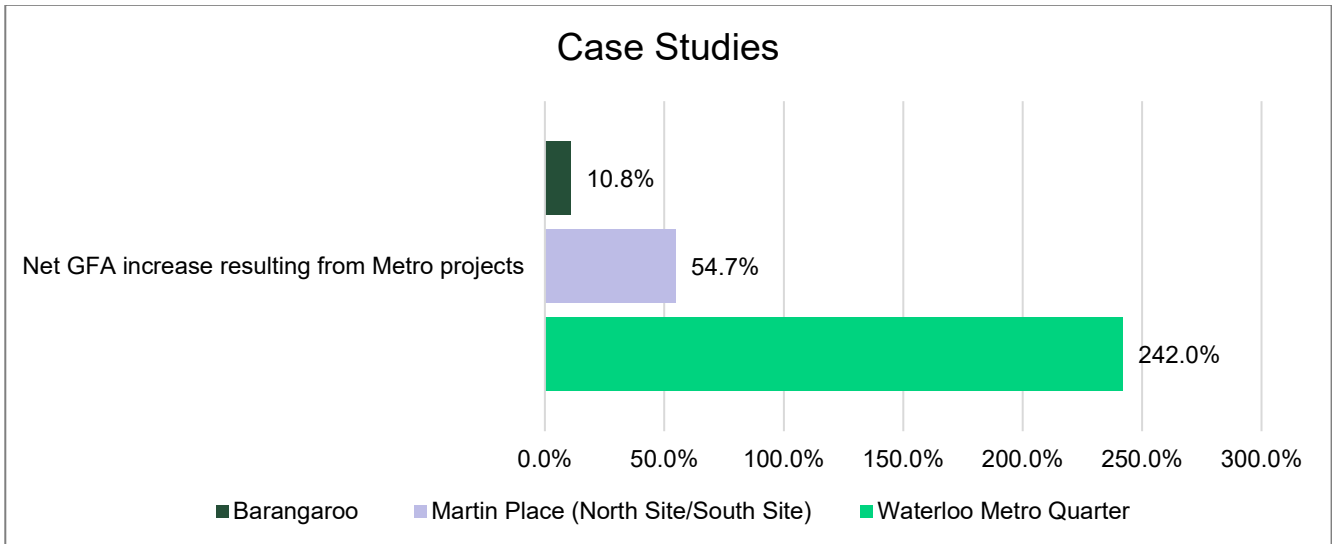
Site	Area	Maximum GFA	Revised GFA (via Metro)	GFA Increase
Barangaroo	22 ha	602,354m ²	667,686m ²	65,332m ² (10.8%)
Martin Place North and South	7,916m ²	98,987m ^{2*}	153,141m ^{2*}	54,154m ² (54.7%)*
Waterloo Metro Quarter	13,100m ²	22,925m ^{2**}	78,600m ^{2***}	55,675m ² (242%)

*Figures extracted from Planning Proposal Report prepared by Ethos Urban dated 27 October 2017

**Based on pre-rezoning FSR of 1.75:1

***Based on post-rezoning FSR of 6:1





The exhibited MOD 9 proposal sought to deliver 144,355m² of GFA in tandem with a range of major public benefits unable to be achieved under the approved Concept Plan. This includes the delivery of up to 19,000m² of cultural and community GFA, which includes allocation of up to 18,000m² of GFA to the Cutaway and 1,000m² for potential community uses within the RE1 zone.

In addition, the exhibited proposal sought to deliver additional community use GFA within Central Barangaroo site itself from 2,000m² (under the approved Concept Plan) to 2,800m².

Following exhibition, the Applicant has made significant reductions in the proposed density for Central Barangaroo from 144,355m² to 104,000m² (a reduction of 40,355m²). Despite this, the Applicant and the Central Barangaroo Developer remains committed to delivering the same established quantum of public benefits that were put forward for the exhibited proposal.

It is important to note that public benefits have been identified holistically throughout the evolution of planning for Barangaroo with agreement that the various benefits will be delivered in different ways in each precinct.

Commitment 35 of the SoCs requires a total of 3% of residential floorspace in Barangaroo South to be allocated to key worker housing.

Barangaroo South remains the primary contributor to affordable housing delivery with 3% of residential floorspace as affordable housing. This includes 0.7% offsite and 2.3% onsite.

Barangaroo Reserve (i.e., the headland) provides 55% of the open space in Barangaroo and accommodates ‘The Cutaway’, a distinctive cultural and arts space. Central Barangaroo is a cultural and arts led precinct, with flexible zoning to accommodate residential, tourism and retail uses. It provides links between the cultural and open spaces of Barangaroo Reserve and Barangaroo South. Development in Central Barangaroo will deliver significant public benefits totalling \$226 million including:

- \$78 million to support cultural facilities and initiatives (financial contribution),
- \$61 million for public domain improvements (in kind),
- \$45 million for the embellishment of Harbour Park to world-class standard, including flexible event spaces to accommodate a range of cultural activities (financial contribution),



- \$8 million for Metro Station Southern entry,
- \$2 million for fit-out for arts and community facilities,
- \$11 million for urban arts contribution,
- \$11 million in development contributions, and
- \$10 million for provision of pedestrian footbridge.

These outcomes are in addition to the net increase of public open space of 1,264m² across Central Barangaroo beyond the approved Concept Plan.

The Cutaway has been used as a temporary event space since 2016. The financial contributions associated with Central Barangaroo will ensure the Cutaway can be developed as one of Sydney's premier cultural facilities housing a range of events for up to 3,500 people.

Furthermore, Central Barangaroo will facilitate financial contributions to Harbour Park and will support an event lawn for hosting community and cultural events with up to 3,000 people, public art installations, winding pathways to explore, extensive native planting and interactive water features.

Overall, the public benefits being delivered through Central Barangaroo will facilitate the creation of world class open space and cultural spaces that could not be realised under the approved Concept Plan.

Consistent with the obligations of the approved Concept Plan, MOD 9 will also continue to ensure the broader public benefits are delivered, which include:

- Delivery of 50% of the overall 22-hectare precinct for open space and public recreation uses.
- Regeneration of a former container terminal and waterfront site not previously accessible to the public.
- Enhanced connectivity to Sydney's CBD and inner harbour through Barangaroo Ferry, Wynyard Walk and two pedestrian bridges over Hickson Road.
- Provision of an expansive open space network, interactive and high quality public domain treatments, community facilities, dining and retail activation.
- Creation of a vibrant mixed-use precinct providing combination of residential, retail, community and commercial opportunities.

Accuracy of Reports and Documentation

The Applicant has undertaken extensive analysis of the Concept Plan and subsequent modifications to determine the approved Concept Plan building envelope for Central Barangaroo as a baseline for assessment. The review has indicated there is no approved set of building envelope plans that accompany the approved Concept Plan.

An approved Concept Plan building envelope has been established for Central Barangaroo, which has been informed by several parameters that have remained consistent throughout the Concept Plan history including the block heights under the PEHC SEPP and development block layouts. Refer to **FIGURE 9**.



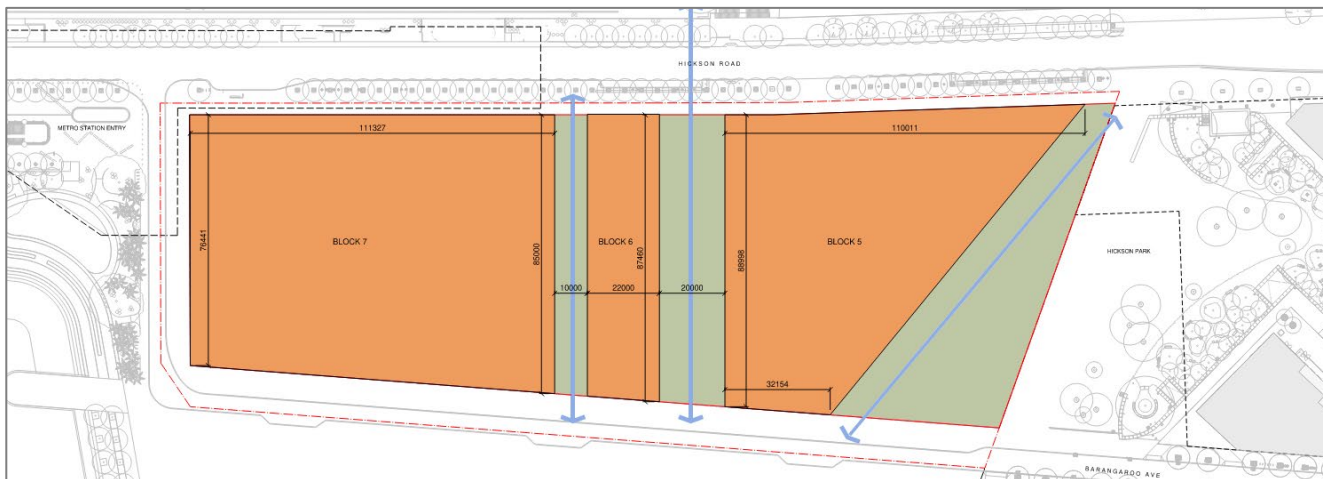


FIGURE 9 – APPROVED CONCEPT PLAN (SJB)

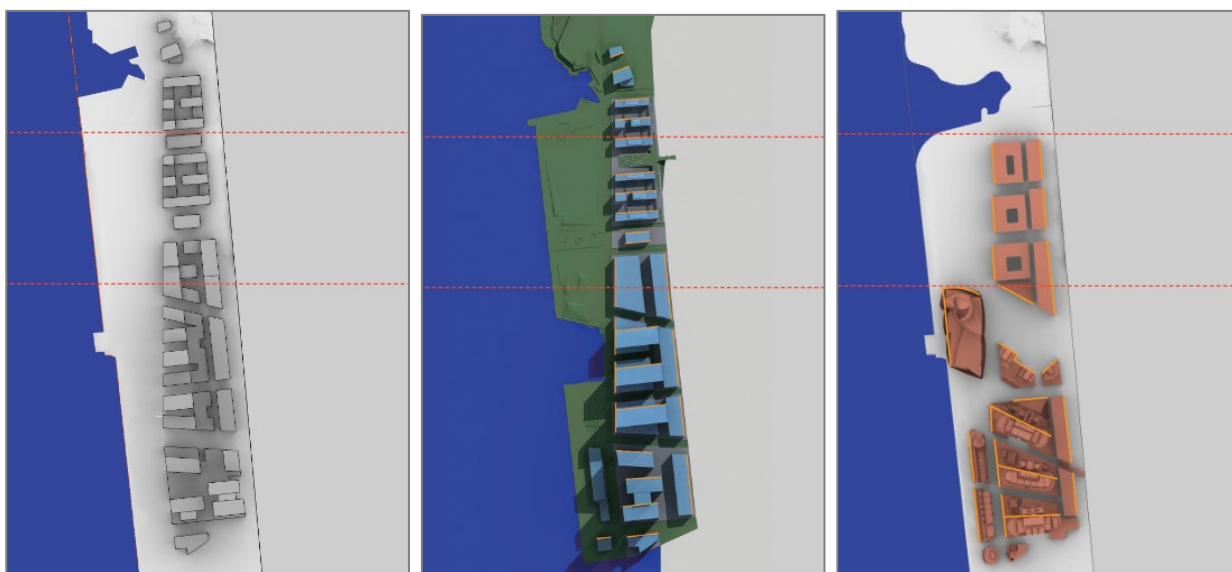
The Applicant has also undertaken a review of concerns raised in relation to establishing an accurate comparison of the proposal against the original Concept Plan Block Controls.

Section 13.0 – Built Form of the original Concept Plan included ‘Block Controls’ for the various blocks within Barangaroo. Under MOD 2, these Block Controls were replaced with eight Built Form Principles and associated massing diagrams.

However, subsequent modifications resulted in neither of these having any statutory function under the current Concept Plan, other than as a matter to be considered in future design competitions (Condition C2(4)(d)). Furthermore, the various modifications to the Concept Plan have altered the original massing that these early massing controls bear little resemblance to either the actual built form of Barangaroo South or the spatial extent of Central Barangaroo.

To contextualise the changes made since the original Concept Plan, the Applicant has composed the Block Controls into an electronic model of the whole of Barangaroo in addition to a composite model of the proposed reference scheme with the built form outcomes already constructed or under construction for the whole of Barangaroo. Both models were then rotated to the same angle as the images illustrating each of the eight Built Form Principles. An example of this analysis is provided in **FIGURE 10**.





Left Composite Block Control of original Concept Plan

Centre MOD 2 Built Form Principle: To provide optimum orientation and transparency across the site and to create a silhouette of slender towers to Globe Street and the waterfront – orientate the long facades of tower forms to the north. However, on Hickson Road, to define the linear nature of this road, generally orientate the long facades to the east

Right Existing forms and current reference design

FIGURE 10 – PRINCIPLE 8 ASSESSMENT (SJB)

The overall comparison demonstrates Barangaroo has evolved significantly from the original Block Controls, and therefore, any further assessment against the Block Controls would be a meaningless exercise. Furthermore, the amended Concept Plan and potential reference scheme for Central Barangaroo maintains a strong alignment with the principles established under MOD 2.

Updated Environmental Assessment

In addition to the discussion on key issues within the Submissions Report, an updated environmental assessment has been provided from technical consultants in response to the amended MOD 9 proposal. This includes a combination of new reports, updated reports, addendum reports and covering letters where applicable.

The updated environmental assessment is provided in **Section 9** of this Submissions Report.

Updated Project Justification

The amended MOD 9 proposal has been refined significantly following exhibition to deliver a built form response at a lower scale that responds to the surrounding context of Millers Point and marks a transition from Barangaroo South to Nawi Cove.

The changes include a revision of the building envelopes and block layouts to be more aligned with the approved Concept Plan, reduced heights and GFA, removal of the tower element at Block 7, increased open space and



public domain. The cumulative effect of the changes is a reduced environmental impact compared to the exhibited MOD 9 proposal.

Overall, the proposed modified building envelopes strike a balance between the site's strategic function and the sensitivities of its context, such as view corridors, heritage precincts, and public areas. In addition, the project delivers commensurate levels of public benefit including provision for new community facilities, increased levels of public open space and a range of financial contributions and works-in kind improvements to support the surrounding public domain.

Having regard for the biophysical, economic and social considerations, including the principles of ecologically sustainable development, MOD 9 is justified and considered to be in the public interest.



1 Introduction

This Response to Submissions Report (**Submissions Report**) has been prepared by Mecone Group (**Mecone**) on behalf of Infrastructure NSW (the **Applicant**) in support of a request to modify the Barangaroo Concept Plan (**MP06_0162**). This Submission Report relates to MP06_0162 MOD 9 (the **project**).

The purpose of this Submissions Report is to respond to submissions raised by government agencies, City of Sydney Council (**Council**), organisations and the public and during the exhibition of the project.

Background to the Project

The Barangaroo Concept Plan was approved on 9 February 2007 under Part 3A of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**). It has been modified several times since 2007, with this request being MOD 9 and the latest being MOD 11.

The Director General Requirements (**DGRs**) for MOD 9 were issued on 15 April 2014 and remains a transitional Section 75W (**S75W**) project under the EP&A Act. This pathway remains in force by operation of clause 3BA of Schedule 2 of the *Environmental Planning and Assessment (Saving, Transitional and Other Provisions) Regulation 2017* (**STOP Regulation**).

The Environmental Assessment Report (**EAR**) and appended specialist studies were lodged with the NSW Department of Planning and Environment (the **Department**) on 8 April 2022 to satisfy the requirements of the transitional provisions under Part 3A of the EP&A Act.

Summary of the Project as Lodged

MOD 9 proposed the following amendments to the Concept Plan:

- An increase in total permissible gross floor area (**GFA**) from 602,354m² to 708,041m², comprising the following proposed within Central Barangaroo and Barangaroo Reserve:
 - Up to 116,189m² of above ground GFA, mainly within the B4 Mixed Use zone of Blocks 5, 6 and 7 (including a maximum of 28,000m² of residential GFA),
 - Up to 28,166m² of below ground GFA, mainly within the B4 Mixed Use zone of Blocks 5, 6 and 7,
 - A minimum of 2,800m² of Community uses GFA within Blocks 5, 6 and 7,
 - A minimum of 6,000m² and maximum of 18,000m² of Community uses GFA within the RE1 Zone of Barangaroo Reserve to allow for future community/cultural facilities located in the Cutaway, and
 - An allocation of 1,000m² GFA for potential community uses within the RE1 Zone.
- A re-adjustment of the Block 5 southern boundary and building envelope towards the previously approved alignment prior to the MOD 8 approval, whilst providing building setbacks to both Barangaroo South and Hickson Park.
- Modifications to Barangaroo's movement network, including the removal of uncontrolled vehicular traffic from Barangaroo Avenue north of Barton Street adjacent to Blocks 5 and 6 (excluding controlled service vehicle access), and converting Barton Street to a permanent street connecting Barangaroo Avenue with Hickson Road, servicing the wider Barangaroo precinct.



- Modifications to the approved building envelopes of Blocks 5, 6 and 7 including additional height, block alignments, additional GFA and the distribution of GFA across the blocks.
- Introduction of Design Guidelines for Central Barangaroo to guide future detailed proposals.
- Consequential amendments to the *State Environmental Planning Policy (Precincts – Eastern Harbour City) 2021 (PEHC SEPP)* to support modifications to the Barangaroo Concept Plan (MOD 9) for Central Barangaroo.
- Modifications to the current Instrument of Approval.
- Revisions to the Barangaroo Concept Plan Statement of Commitments (**SoCs**).

Pre-lodgement Consultation

Extensive consultation was undertaken with key stakeholders prior to and during preparation of MOD 9. These consultation activities are documented in the lodged EAR and included engagement with the following groups.

- The Department on 22 December 2020 and 1 April 2021,
- Transport for NSW/Sydney Metro in June 2020 and December 2020,
- Environmental Protection Authority in September 2021,
- NSW Government Architect during 2020 and in September 2021,
- City of Sydney Council in 2019,
- Museum of Applied Arts and Sciences in August 2021,
- Sydney Water in August 2021,
- Crown Sydney Hotel Resort and developer Lendlease from March 2020 – November 2020,
- National Trust in August 2021,
- Representatives of the Walsh Bay Precinct Management Association on 11 May 2021, and
- Millers Point Residents Action Group on 8 June 2021.

Exhibition

The project was publicly exhibited for a period of 28 days between 12 July 2022 and 8 August 2022, providing Council, State agencies, organisations and the general public to make submissions on the Project.

During this period, there were 866 submissions received from government agencies, Council, organisations and individuals.

The Department provided a copy of all agency, organisation and public submissions to the Applicant following exhibition. Submissions were collated and key issues identified by Urbis. Mecone subsequently reviewed the submissions and the Urbis' summary, which forms the basis of the issues addressed in this Submissions Report.

A range of amendments have been made in response to submissions raised during exhibition of the project and are highlighted in this report. It should be read in conjunction with the supporting technical information provided within the **Table of Contents**.



Post Exhibition Actions

Following exhibition, the Applicant has continued to engage with the Department, Government Architect NSW (**GANSW**) and other key stakeholders to address key issues raised through exhibition.

The project has been refined to introduce a more simplified building envelope at a reduced scale, including deletion of the previously proposed tower element on Block 7 and improvements to the public domain.

These changes have resulted in a number of refinements to the built form, land use, open space and movement and access network, which are detailed in **Section 6** of this Submissions Report.

Report Structure

While MOD 9 remains a transitional S75W project, this Submissions Report has been prepared generally in accordance with the Department's *State significant development guidelines – preparing a submissions report* dated October 2022 for State Significant Development (**SSD**) projects. We note these guidelines do not strictly apply to transitional S75 projects but have been used to inform the structure of the report, where appropriate.

This Submissions Report is structured as follows:

- **Approved Concept Plan Envelopes (Section 2)** – provides clarity around all of the elements that make up the approved Concept Plan for Central Barangaroo.
- **Evolution of the Barangaroo Concept Plan (Section 3)** – establishes the context for responding to submissions and outlines key changes to the Concept Plan since 2007.
- **Background to Current Application (Section 4)** – provides an overview of the engagement undertaken prior to lodgement of MOD 9 and the exhibited proposal.
- **Analysis of Submissions (Section 5)** – identifies groups and people who made submissions and categorises the issues raised in submissions.
- **Actions Taken Since Exhibition (Section 6)** – summarises refinements to the project made since exhibition and further engagement with stakeholders.
- **Response to Submissions (Section 7)** – provides a summary of the response to the issues raised in submissions including the Department, agencies and Council.
- **Key Themes and Additional Assessment (Section 8)** – provides a detailed assessment of key issues identified from organisational groups and the public during exhibition.
- **Updated Environmental Assessment (Section 9)** – provides additional environmental assessment of the project based on the refinements made since exhibition including a summary of updated specialist reports and addendums.
- **Updated Project Justification (Section 10)** – includes an updated project evaluation of the project as a whole, incorporating relevant issues raised in submissions and the applicant's response to these.



2 Approved Concept Plan

This Section provides an overview of the parameters and elements of the approved Concept Plan (as modified) for Barangaroo.

2.1 Instrument of Approval

The Instrument of Approval, which sets out the planning parameters of the Concept Plan, is structured as follows:

- **Schedule 1** includes details on the development approval.
- **Schedule 2 Part A – Terms of approval** includes the development description (A1) and approval plans and documents (A2)'.
 - **Schedule 2 Part B Modification Concept Approval** – sets out conditions to amend the approved documents outlined in A2.
- **Part C Conditions** applying to Future Applications (detailed DAs).
- **Schedule 3 – Statement of Commitments**.

The approved Concept Plan for Blocks 5, 6 and 7 as it applies to Central Barangaroo is summarised in **Section 3.3**.

2.2 Key Elements of the Approved Concept Plan

The key elements of the approved Concept Plan as it relates to Central Barangaroo, are outlined in Condition A1 and B4 of the Instrument of Approval and are summarised below.

Land Use

- Mixed use development including residential, tourist, retail, active and community uses.

Built Form (GFA, Heights and Design Principles)

- A maximum of 602,354m² of GFA comprised of:
 - A maximum 191,031m² of residential GFA of which a maximum 162,031m² will be in Barangaroo South,
 - A maximum 76,000m² of GFA for tourist uses of which a maximum 59,000m² will be in Barangaroo South,
 - A maximum 34,000m² of GFA for retail uses of which a maximum 30,000m² will be in Barangaroo South,
 - A maximum 5,000m² of GFA for active uses in the Public Recreation zone of which a maximum 3,500m² will be in Barangaroo South,
 - A minimum of 12,000m² of GFA for community uses.



- Maximum GFA for blocks including:
 - Block 5 – 29,668m² (with a maximum 15,000m² of residential GFA),
 - Block 6 – 3,000m², and
 - Block 7 – 15,000m² (with a maximum 14,000m² of residential GFA), and
 - Block 5, 6 and 7 total – 47,668m².
- Maximum heights for blocks including:
 - Block 5 – RL 34,
 - Block 6 – RL 29, and
 - Block 7 – RL 35.
- Built form design principles within the mixed use zone.

Open Space

- Approximately 11 hectares of new public open space/public domain, with a range of formal and informal open spaces serving separate recreational functions and including an approximate 2.2km public foreshore promenade.

Public Domain

- Public domain landscape concept, including parks, streets and pedestrian connections.

Seawall, Partial New Shoreline and Operations

- Alteration of existing seawalls and construction of a partial new shoreline to the harbour,
- Construction, operation and maintenance of a concrete batching plant to supply concrete for construction of future development under this Concept Plan for Barangaroo South, and
- No approval is granted or implied for the future use of a heliport and/or a helipad.



3 Evolution of Barangaroo Concept Plan

The purpose of this Section is to provide a summary of the evolution of the Barangaroo Concept Plan. It provides clarity relating to the interpretation of the approved Concept Plan, noting this was raised as part of submissions. It also describes key built form and development changes that have occurred since 2007 through numerous modifications and how these have impacted Central Barangaroo.

3.1 Original Barangaroo Concept Plan (MP06_0162)

The Concept Plan for Barangaroo was approved in February 2007 by the then Minister for Planning under Part 3A of the EP&A Act and was described in Condition A1 as follows:

Concept approval is granted only to the carrying out of the development solely within the concept plan area as described in the document titled "East Darling Harbour State Significant Site Proposal, Concept Plan & Environmental Assessment (Volume 1 & 2)" prepared by JBA Urban Planning Consultants & SHFA (dated October 2006) including:

- (1) a mixed use development involving a maximum of 388,300m² gross floor area (GFA), comprised of:
(a) a maximum of 97,075m² (or 25%) and a minimum of 60,000m² (or 15%) residential GFA; (b) a maximum of 50,000m² GFA for tourist uses;
(b) a maximum of 39,000m² GFA for retail uses; and
(c) a minimum of 2,000m² GFA for community uses.*
- (2) Approximately 11 hectares of new public open space/public domain, with a range of formal and informal open spaces serving separate recreational functions and including a 1.4km public foreshore promenade.*
- (3) A maximum of 8,500m² GFA for a passenger terminal and a maximum of 3,000m² GFA for active uses that support the public domain within the public recreation zone.*
- (4) Built form design principles, maximum building heights and GFA for each development block within the mixed use zone*
- (5) Public domain landscape concept, including parks, streets and pedestrian connections.*
- (6) Alteration of the existing seawalls and creation of a partial new shoreline to the harbour.*
- (7) Retention of the existing Sydney Ports Corporation Port Safety Operations and Harbour Tower Control Operations including employee parking.*

An extract of the Concept Plan layout that relates to the entirety of Barangaroo is provided in **FIGURE 11**.





FIGURE 11 – CONCEPT PLAN INDICATIVE LAYOUT (HILLS THALIS)

B4. Built Form

The Concept Plan included four (4) conditions under B4. Built Form. This established the maximum GFA for residential, tourist, retail and community uses, the overall maximum GFA and heights for each block as defined by the Concept Plan at the time.

- **Condition B4(1)** set out a maximum GFA of 388,3000m², including maximum GFA's for tourist, retail and community uses. For residential uses, a maximum and minimum target range was applied.
- **Condition B4(2)** set out the maximum GFA, residential GFA and building heights for the development blocks.
- **Condition B4(3)** stated that the specific forms contained in Section 13.0 – Built Form of the EA were not approved as part of the approval (being the *East Daring Harbour State Significant Site Proposal, Concept*



Plan and Environmental Assessment dated October 2006 as set out in Condition A1 and A2 of the Instrument of Approval.

Not approving the building forms was to allow for the evolution of design excellence and concerns with the resultant built form on Hickson Road and Globe Street. An extract of the specific forms referenced in Section 13.0 – Built Form that relate to Central Barangaroo is provided in **FIGURE 12**.

- **Condition B4(4)** stated that despite (2) above future project applications are to provide a comparison, and outline any variations from, the block controls outlined in Section 13.0 – Built Form of the EA.

Section 13.0 – Built Form of the EA was structured along the following lines:

- **13.1 Principles** – Identified eight (8) principles representing the design elements of the Concept Plan
- **13.2 Ground Floor Activation** – Outlined opportunities for ground floor activation and active frontages
- **13.3 Development Block Controls** – Established development block controls for each of the blocks across Barangaroo.

Condition B4(3) was explicit that the built forms contained in the Environmental Assessment (**EA**) were not approved as part of the Concept Plan in order to facilitate evolution of design excellence and address built form outcomes on Hickson Road and Globe Street.

Furthermore, Condition B4(4) stated that comparison against the block controls outlined in Section 13.0 – Built Form of the EA would be subject to future project applications (future DAs). In short, the Concept Plan approved GFA within a broad building height, design principles but no specific built form outcomes.

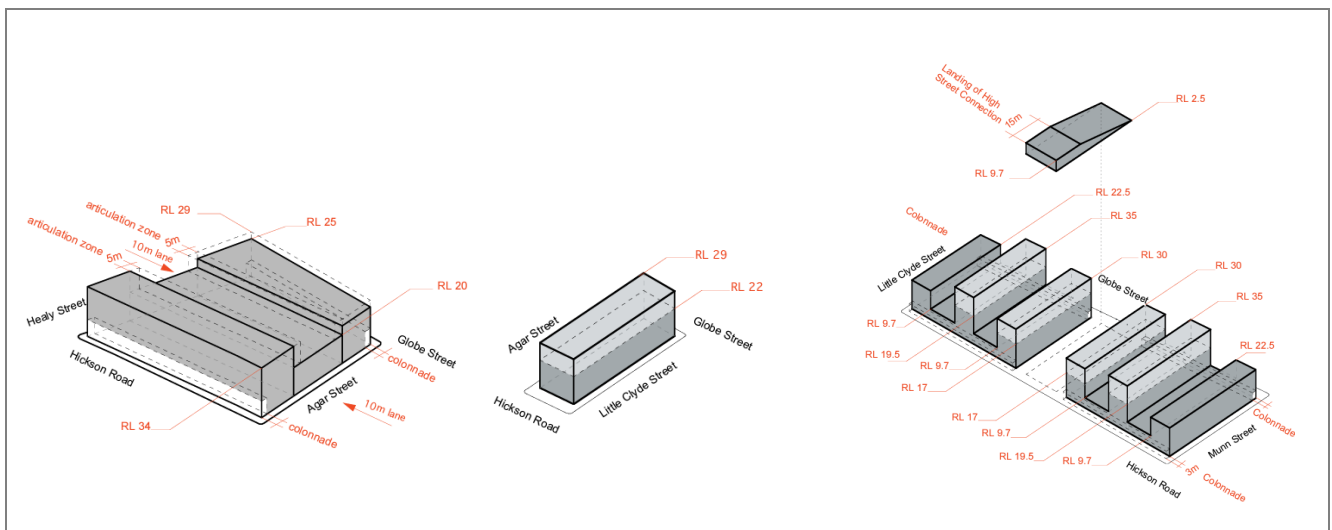


FIGURE 12 – EXTRACT OF DEVELOPMENT BLOCK CONTROLS IN SECTION 13.0 – BUILT FORM OF EA

3.2 Modifications

The Barangaroo Concept Plan MP06_0162 has been modified ten times and the SoCs provided in the approval instrument has been revised accordingly.



An overview of the modifications is provided in the EAR prepared by Urbis dated November 2021 and briefly summarised in **TABLE 2**.

TABLE 2 CONCEPT PLAN APPROVAL HISTORY

MODIFICATION	STATUS	DESCRIPTION
Modification 1	Approved 25 September 2007	Correction of minor typographical errors in the concept plan notice of determination and rewording of design excellence modification
Modification 2	Approved 16 February 2009	Modification to increase the allowable commercial floor space for Blocks 2, 3, 4 and 5 by 120,000m ² .
Modification 3	Approved 11 November 2009	Modification to allow for a reconfigured Northern Headland and Northern Cove.
Modification 4	Approved 16 December 2010	Modification relating to Barangaroo South to allow for a mixed-use development involving a maximum of 563,965m ² GFA within 7 development blocks, an increase in height of a number of the proposed towers within Barangaroo South.
Modification 5	Withdrawn – DGR's lapsed	Modification to clarify wording within the Concept Plan relating to the distribution of total GFA within the Barangaroo site and correct typographical errors in the approval.
Modification 6	Approved 25 March 2014	Modification relating to Barangaroo South to realign Globe Street and block boundaries, revise the urban design controls and modify numerous conditions relating to floor space and car and bicycle parking.
Modification 7	Approved 11 April 2014	Modification to provide for the temporary concrete batching plant use on-site in association with construction of development at Barangaroo that is approved pursuant to the Concept Plan
Modification 8	Approved 26 June 2016	Relocation of the landmark hotel building (Block Y) from extending over the harbour onto land within the site in front of existing Blocks 4A, B and C Increases in GFA and height, increase in tourist GFA, redistribution of GFA and land uses across development blocks, modification to block and building envelopes, reduction in area of the Southern Cove and a redistribution of public domain areas. It is noted that 2,000m ² of community uses must be provided within Central Barangaroo (within Block 6 or 7) pursuant to Condition B7(3) of MOD 8.
Modification 10	Approved 2 September 2020	Modification relating to Barangaroo South including general increase in residential GFA allocations and increased maximum heights.
Modification 11	Approved 22 October 2020	Modification relating to Barangaroo South to allow construction and non-construction vehicles to use Barton Street, amend the timeframe for the delivery of Hickson Park and amend the timeframe for the delivery of Barton Street development.



There are three modifications that are notably significant as a result of their impacts on the future development outcomes for Central Barangaroo. These include:

- Modification 2,
- Modification 3, and
- Modification 8.

Modification 2 – Commercial Floorspace (MOD 2)

MOD 2 was approved 16 February 2009 and modified the approved Concept Plan to increase the total maximum GFA to 508,300m² (an increase of 120,000m² or 31% over the whole site) to accommodate commercial uses.

As outlined below, MOD 2 was significant as it amended the principles contained in Section 13.1 – Built Form of the EA and replaced the reference to the block controls referred to in Section 13.3, with new design controls that only applied to Barangaroo South.

As noted above, Condition B4(4) required future applications provide a comparison against the block controls in Section 13.0 Built Form EA. MOD 2 amended this condition to replace the reference to Section 13.0 with the following:

- Section 7.3.3 of the Barangaroo Part 3A Modification Report dated June 2008, which amended and replaced the design principles contained in Section 13.1 of the original EA, and
- The objectives of the Performance Based Urban Design Controls set out in the Preferred Project Report Barangaroo Part 3A Modification Report dated October 2008.

Section 7.3.3 of the Barangaroo Part 3A Modification Report dated June 2008 outlines eight (8) Built Form Principles for future project applications. These Built Form Principles (which were accompanied by images) included:

1. City's new western façade,
2. Hickson Road as a boulevard,
3. Buildings to define streets,
4. North south pedestrian connection,
5. Tapering built form,
6. Open space within blocks,
7. View sharing, and
8. Orientation of buildings.

Modification 3 – Headland Park and Northern Cove (MOD 3)

MOD 3 was approved on 13 November 2011 and modified the approved Concept Plan to facilitate the reinstatement of a headland at the northern end of the site with a naturalised shape and form (today known as Barangaroo Reserve and Nawi Cove).

This included an enlargement of the northern cove to achieve a greater naturalised shape, form and edges and the realignment of Globe Street (to support the park and cove changes).



The implications on Central Barangaroo included the deletion of Block 8 (to accommodate the northern cove) and a significant reduction in the size of Block 7. Overall, the MOD 3 saw a compression of the Concept Plan development footprint and resulted in a loss of 18,000m² of GFA.

In doing so, the Concept Plan was modified such that it reduced the physical extent of Barangaroo. The reduction in the development blocks provided for an enlarged cove and parkland, which facilitated additional views, vistas and connectivity to the foreshore when viewed from Millers Point and the immediate surrounds.

Despite the significant change in the configuration of the blocks, there was no corresponding amendments to conditions B4, B5 and B9 regarding the application of design principles and controls for Central Barangaroo.

FIGURE 13 depicts the development blocks of the original Concept Plan (Figure 12.1 of the EA) compared to the revised development blocks proposed in MOD 3 (Figure 12 of the EA).

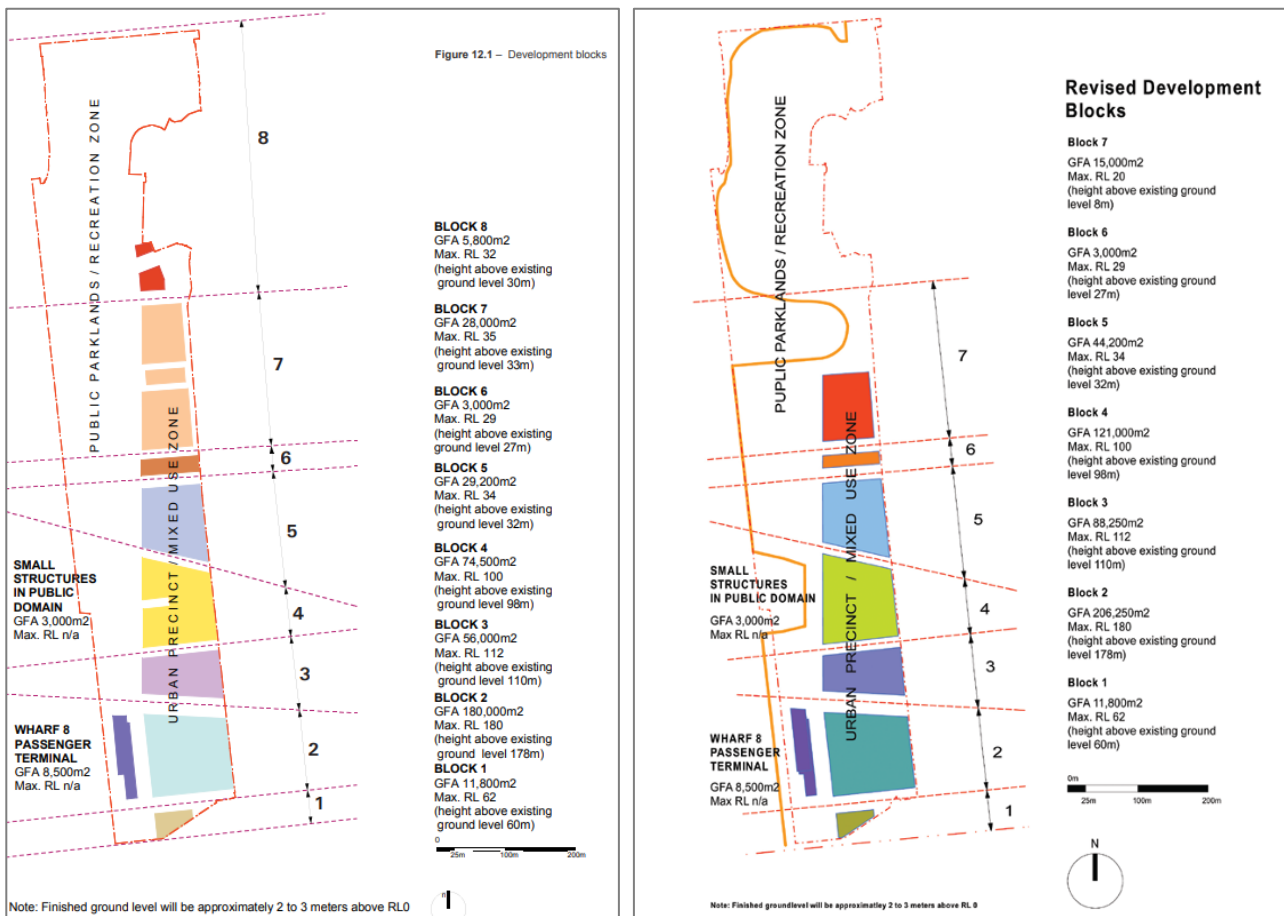


FIGURE 13 – ORIGINAL DEVELOPMENT BLOCKS (LEFT) AND MOD 3 REVISED DEVELOPMENT BLOCKS (RIGHT)

Modification 8 (MOD 8)

MOD 8 was approved on 28 June 2016 and represented another major change to the Concept Plan. It responded to key recommendations of the Sussex Penn Review relating to the location of the proposed hotel over the harbour. It proposed relocation of the hotel from the water to the land, rearrange the approved development envelope, remove one building completely and increase the total GFA.



Key changes included:

- Increase the total GFA of the Concept Plan from 563,695m² to 605,911m²,
- Amend maximum heights of certain blocks at Barangaroo South,
- Amend the Barangaroo South site boundary and urban structure,
- Amend the indicative layout and indicative land use distributions within Barangaroo South, and
- Propose a new set of Design Guidelines to guide future development within Barangaroo South.

The modification was determined by the then Planning and Assessment Commission (**PAC**). While a number of built form and land use changes were proposed relating to Barangaroo South, there were notable implications and impacts of MOD 8 on the future development outcomes on Central Barangaroo that would need to be addressed in future applications.

The most notable change as a result of the PAC determination was the reduced size of Block 5 as a consequence of shifting the alignment of the Hickson Park.

Furthermore, the PAC introduced a condition ensuring no additional overshadowing of Hickson Park between the hours of 12pm and 2pm on 21 June in any year. The PACs recommended changes to Block 5, Hickson Park and the promenade that forms part of the Instrument of Approval is depicted in **FIGURE 14**.



FIGURE 14 – SEPP ADVICE TO THE MINISTER (PAC DETERMINATION REPORT 2016)



Furthermore, MOD 8 marked a major shift from the original Urban Design Principles established in the Concept Plan relating to the natural transition of height from the southern end to lower scale built forms to the north. The new hotel resulted in a completely new skyline form to Barangaroo South.

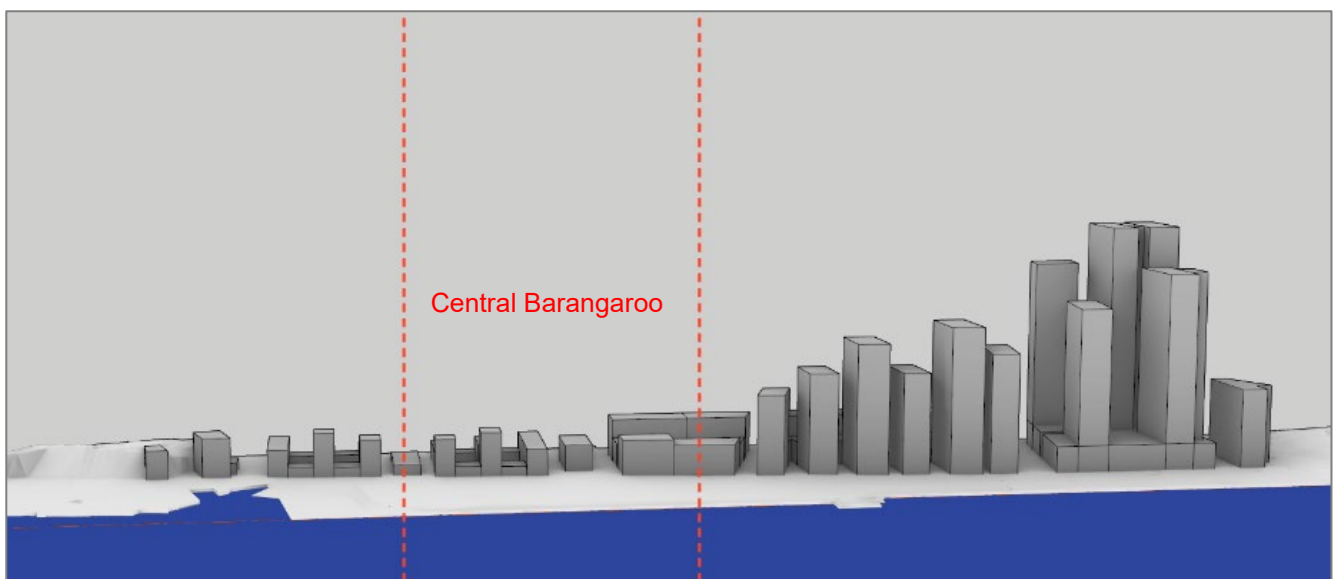
Barangaroo Today

The changes introduced via MOD 8 compounded with the amendments on MOD 3 further compressed, and placed additional pressure, on the GFA and development outcomes of Central Barangaroo. In this respect, the overall development footprint of Central Barangaroo, changed notably from its inception in 2007.

It is worth noting that Barangaroo has undergone significant planning framework and built form refinements since 2007 when the original Concept Plan was originally established. The ongoing refinements reflect the culmination of a major urban renewal site being delivered over an extended period of time in response to changing market demands, policy contexts and infrastructure investment.

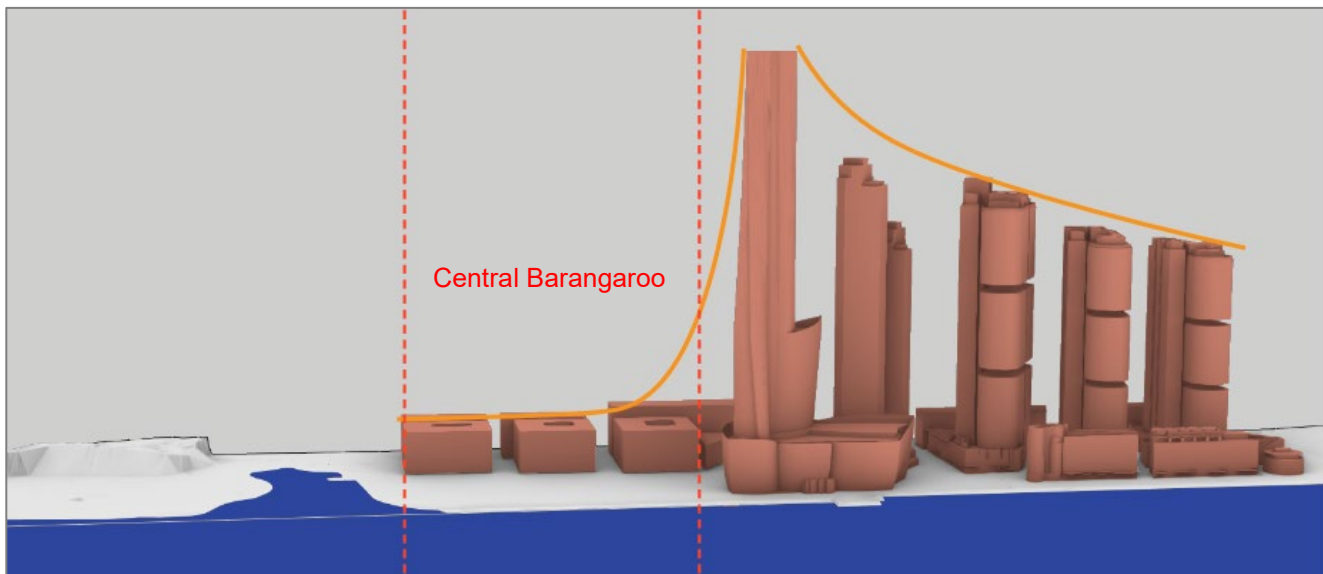
To the point above, the maximum permitted GFA and land use mix by development block expressed in Table 3 of the EA of the original Concept Plan caveated that the final GFA per block may be subject to change during the lifespan of the redevelopment to take into account of major shifts in development economics and priorities.

This is clearly articulated in **FIGURE 15**, which depicts the block controls shown in Section 13.0 – Built Form of the EA under the original 2007 Concept Plan compared to what has been approved today.



Composite of block controls taken from Section 13.0 – Built Form of EA dated October 2006





Barangaroo developed and built 2023

FIGURE 15 – COMPARISON OF 2007 CONCEPT PLAN AND BARANGAROO TODAY

3.3 The Approved Concept Plan for Central Barangaroo

The original Concept Plan does not contain a set of approved plans, which depict the Central Barangaroo concept building envelopes for Blocks 5, 6 and 7 that would ordinarily be provided for a concept development under Part 4 of the EP&A Act. This is generally consistent with the nature of Part 3A concept plan approvals, which enable essential flexibility due to the scale and complexity of Part 3A projects.

The approved concept building envelopes are governed by the following approved Concept Plan elements:

Conditions A1 and A2(1)

Condition A2(1)(c) approves the *Barangaroo Part 3A Modification Report – Headland Park and Northern Cove* prepared by MG Planning Pty Ltd on behalf of Sydney Harbour Foreshore Authority dated January 2009 (MOD 3), which included:

- Development block layout as illustrated in Figure 12 ‘Revised Development Blocks’, and
- Street network as provided in Figure 18 ‘Revised Street Hierarchy’.

The consolidation of the two key parameters produces a building envelope that depicts an accurate and appropriate representation of the approved Concept Plan, which includes the following:

- A 20m wide east-west pedestrian link between Block 5 and 6, and
- A 10m wide east-west pedestrian link between Block 6 and 7.

The realignment of Hickson Park via MOD 8 altered the southern configuration of Block 5 and has been reflected in the concept building envelopes.

Condition B4 Future Built Form



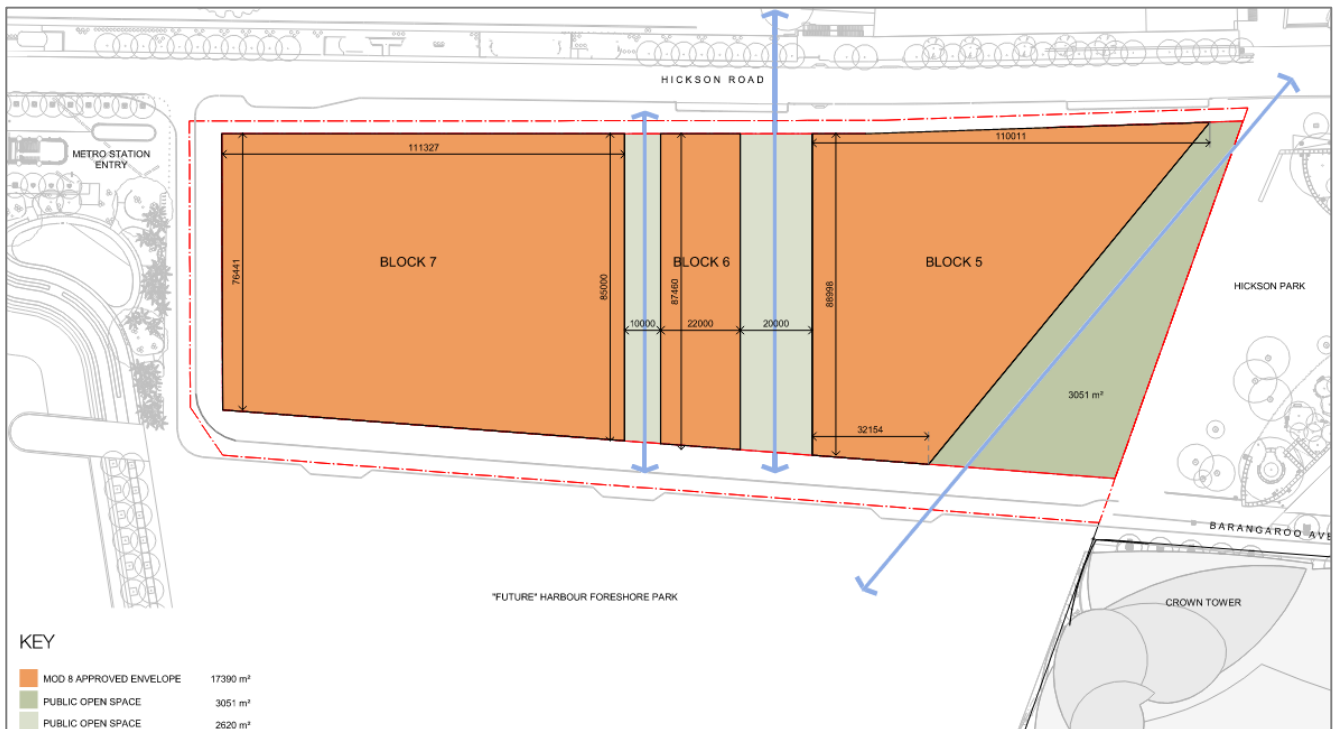
Condition B4(2) sets out the maximum GFA and height for Blocks 5, 6 and 7. These controls are also reflected in the PEHC SEPP 'Gross Floor Area' and 'Height of Buildings' mapping.

A composite of the approved Concept Plan building envelopes, based on the parameters outlined above, is provided in **FIGURE 16**. This has informed the baseline against which MOD 9 is assessed. The approved Concept Plan building envelopes produce the following areas:

- 17,390m² of comprising the envelope area of Blocks 5, 6 and 7,
- 3,051m² of open space comprising of Hickson Park, and
- 2,620m² of open space in the form of two east-west links, 10m and 20m wide.



Axonometric of the approved Concept Plan building envelopes



Site plan of the approved Concept Plan building envelopes

FIGURE 16 – APPROVED CONCEPT PLAN BUILDING ENVELOPES (SJB)



4 Background to Current Application

4.1 Exhibited Project

The modification sought approval for modifications to the approved Concept Plan (as modified by MOD 11) in relation to Central Barangaroo, Barangaroo Reserve (Cutaway only) and Barangaroo South (Barton Street and Hickson Park only).

The submitted EAR sought approval for the following:

- Modification to the approved Concept Plan for Block 5, 6 and 7,
- Revision to the Instrument of Approval and SoCs, and
- Concurrent amendments to the PEHC SEPP .

To facilitate the outcomes for Central Barangaroo, MOD 9 proposed an increase in the total permissible GFA within Barangaroo from 602,354m² to 708,041m², with the following changes relating specifically to Central Barangaroo (Blocks 5, 6 and 7) and Barangaroo Reserve:

GFA Amendments

- Increase the maximum GFA from 47,688m² to 144,355m² (including 116,189m² of above ground GFA and 28,166m² of below ground GFA),
- Increase the minimum GFA for community uses from 2,000m² to 2,800m², and
- Allocate up to 18,000m² of GFA for The Cutaway within Barangaroo Reserve (previously unallocated).

Building Envelope Amendments

- Modification to the approved building envelopes of Blocks 5, 6 and 7 including heights of up to RL 38.7, RL 44.5 and RL 73.7, block alignments, additional GFA and flexible allocation of GFA across the blocks, and
- Re-adjust the Block 5 southern boundary and building envelope towards the alignment prior to the MOD 8 approval, whilst introducing building setbacks to both Barangaroo South and Hickson Park,

Movement and Access Amendments

- Change to Barangaroo's movement network, including removal of vehicular traffic from Barangaroo Avenue north of Barton Street adjacent to Blocks 5 and 6 with controlled service vehicle access only, and
- Convert Barton Street as a permanent street connecting Barangaroo Avenue with Hickson road, servicing the wider Barangaroo area.

Statutory and Development Control Amendments

- Introduction of Design Guidelines for Central Barangaroo to guide future detailed proposals,
- Amendments to the PEHC SEPP to support modifications to the Barangaroo Concept Plan (MOD 9) for Central Barangaroo,
- Modifications to the Instrument of Approval, and



- Revisions to the Barangaroo Concept Plan SoCs.

A summary of the exhibited project building envelopes and heights is depicted in **FIGURE 17** and **FIGURE 18**.

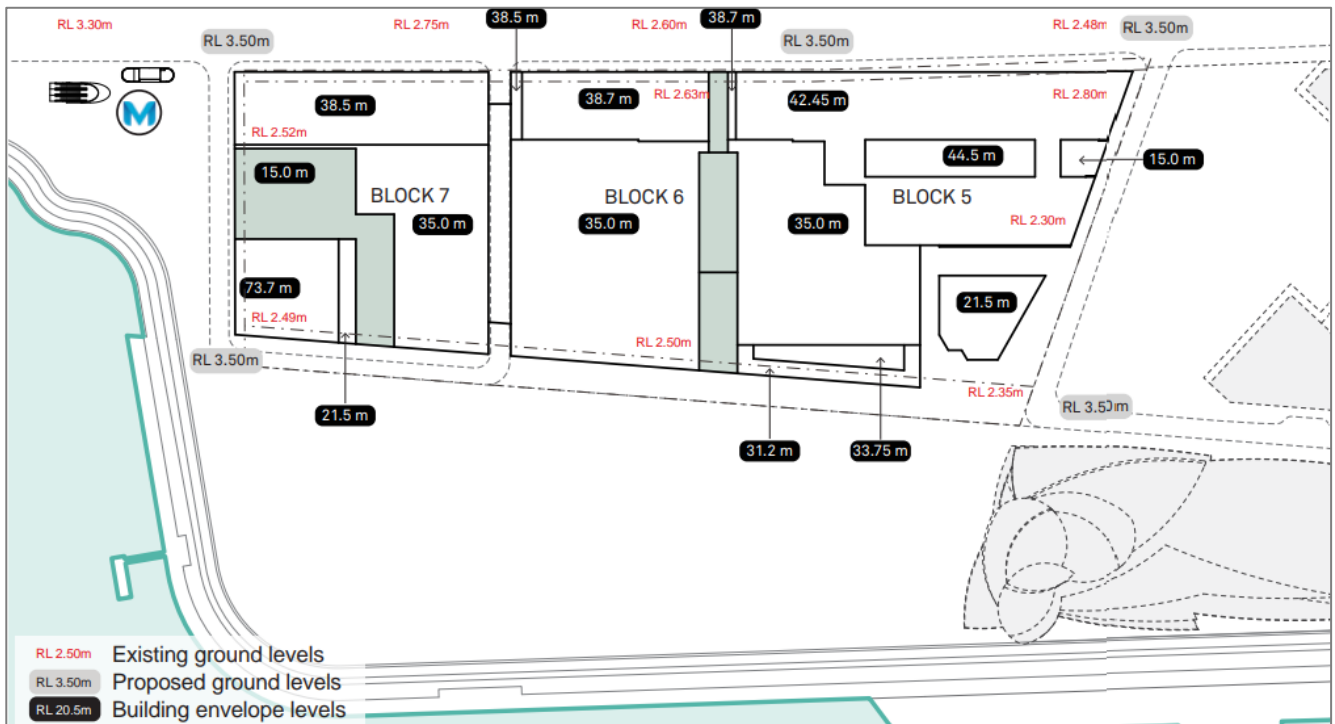


FIGURE 17 – EXHIBITED CONCEPT BUILDING ENVELOPE PLAN (HASSELL)

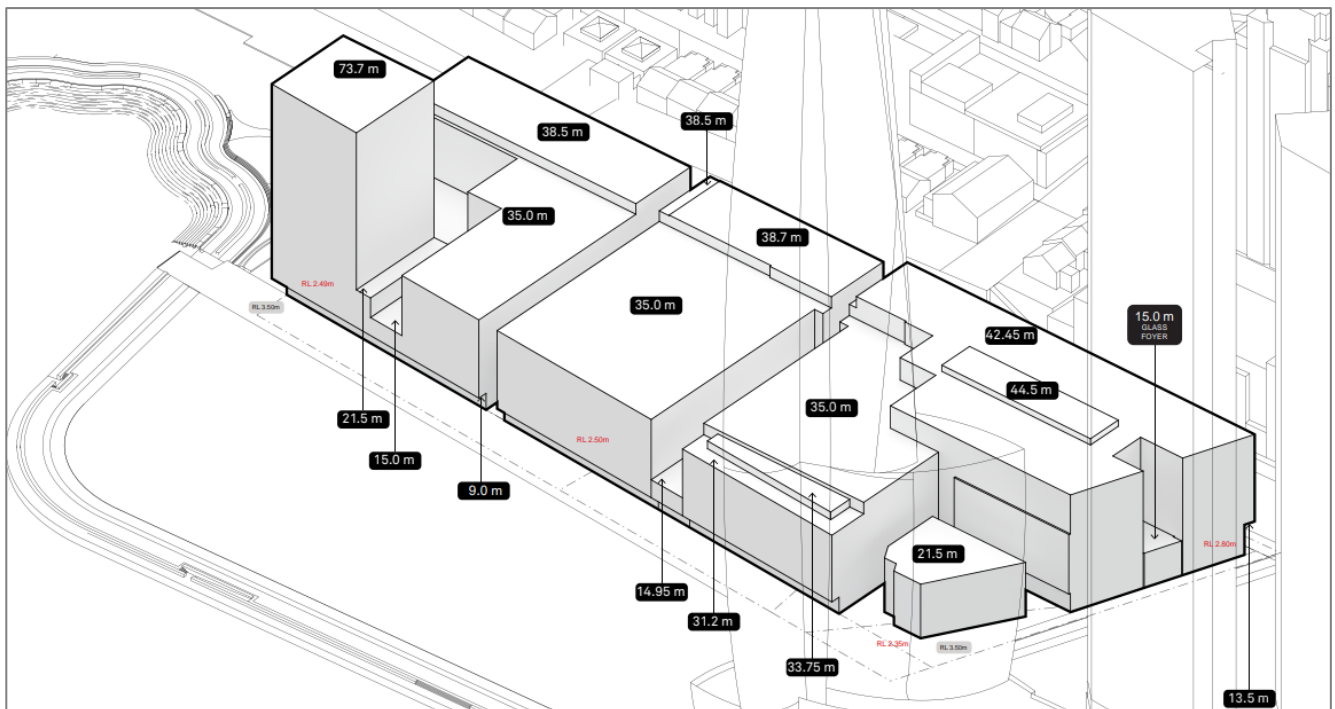


FIGURE 18 – EXHIBITED CONCEPT BUILDING ENVELOPE AXONOMETRIC (HASSELL)



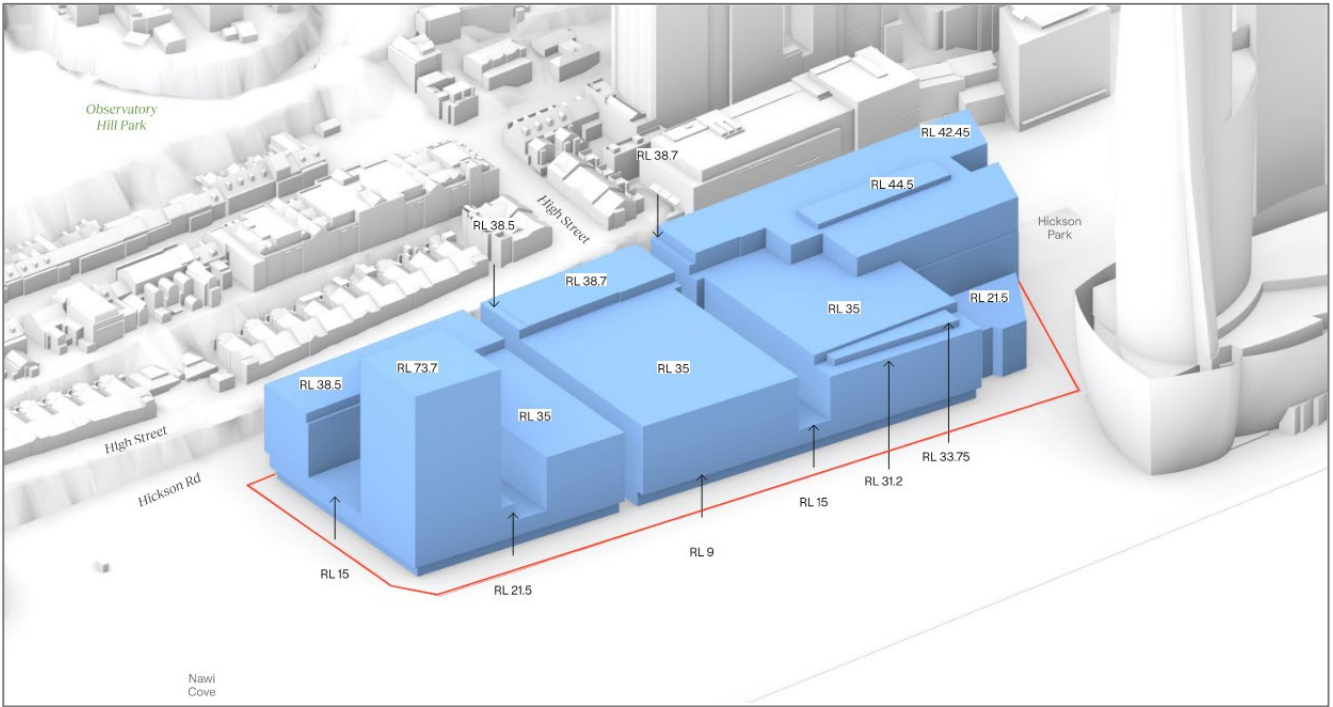


FIGURE 19 – EXHIBITED CONCEPT BUILDING ENVELOPE AXONOMETRIC DEPICTED BY SJB (SJB)



FIGURE 20 – VISUALISATION OF PREVIOUS REFERENCE SCHEME (HASSELL)



Following exhibition, the proposal has been amended as outlined in **Section 6**.

4.1.1 Supporting Documentation

As a result of the changes made to the project since exhibition of the EAR, a range of technical reports and plans have been updated, either in the form of new reports, addendums or statements to re-assess the amended project and determine cumulative environmental impacts.

Due to the nature of the key issues, certain technical reports submitted with the original EAR have not been updated. These have been confirmed by the consultant team as not requiring any additional recommendations or mitigation measures beyond what was originally considered nor require any further response from the Applicant.

It is noted many issues raised were detailed matters that are capable of being adequately addressed as part of future detailed SSD applications for the site.

This Submissions Report is supported by technical reports and documentation outlined in **TABLE 3**.

TABLE 3 SUPPORTING DOCUMENTATION

REPORT	CONSULTANT	UPDATE	APPENDIX
Revised Statement of Commitments	Mecone Group	New Report	Appendix A
Modification to Instrument of Approval	Mecone Group	New Report	Appendix B
Urban Design Report	SJB Architects	New Report	Appendix C
View and Visual Impact Assessment	AECOM + Arterra	Updated Report	Appendix D
Sky View Impact Assessment	AECOM + UNSW	Addendum Report	Appendix E
Pedestrian Wind Study	RWDI	Updated Report	Appendix F
Transport Management and Accessibility Plan	ARUP	Updated Report	Appendix G
Social and Economic Impact Assessment	PWC	Addendum Letter	Appendix H
Utilities and Infrastructure Report	WSce	Addendum Letter	Appendix I
ESD Summary Report	Cundall	Addendum Letter	Appendix J
Remedial Action Plan Suitability Letter	EDP	Updated Report	Appendix K
Site Audit Statement Applicability Letter	Ramboll	Updated Report	Appendix L
Heritage Impact Statement	GML	Addendum Report	Appendix M
Staging Plan	Aqualand	Updated Report	Appendix N
Air Quality Impact Assessment	AECOM	Updated Report	Appendix O



REPORT	CONSULTANT	UPDATE	APPENDIX
Acoustic Assessment	Acoustic Logic	Addendum Report	Appendix P
Preliminary Aeronautical Impact Assessment	Avlaw Aviation Consulting	Addendum Letter	Appendix Q
Barangaroo Community and Cultural Strategy	JOC Consulting	Addendum Letter	Appendix R
Land Use Review	Atlas Economics	New Report	Appendix S
Explanation of Intended Effects	Mecone Group	New Report	Appendix T



5 Analysis of Submissions

This Section provides a summary of the submissions received including a breakdown of respondent type, nature/position and number of submissions received.

5.1 Breakdown of Submissions

The modification to the Barangaroo Concept Plan was publicly exhibited between 12 July 2022 and 8 August 2022. During this period, there were 866 submissions received from government agencies, Council, organisations and individuals.

All submissions were managed by the Department, which included registering and uploading the submissions onto the 'Major Projects website' (**MP06_0162 MOD 9**).

A breakdown of the submissions made by group and issues raised is provided in **TABLE 4** below, with responses provided in **Section 7** and **Section 8**.

TABLE 4 MOD 9 PUBLIC SUBMISSIONS

SOURCE	POSITION	NUMBER OF SUBMISSIONS
Public Authorities		
City of Sydney	Object	2
Civil Aviation Safety Authority	Comment	1
Department of Planning and Environment: Water	Comment	1
Department of Primary Industries: Fisheries	Comment	1
Environment and Heritage Group	Comment	1
NSW Environment Protection Authority	Comment	1
Heritage NSW	Comment	1
Heritage NSW: Aboriginal Cultural Heritage	Object	1
NSW Port Authority	Comment	1
Sydney Airport	Comment	1
Sydney Metro	Comment	1
Sydney Water	Comment	1
Transport for NSW	Comment	1
TOTAL		14



SOURCE	POSITION	NUMBER OF SUBMISSIONS
Community organisations	Support	1
	Comment	0
	Object	25
	Total	26
General public	Support	3
	Comment	3
	Object	817
	Total	823
GRAND TOTAL		863

5.2 Key Themes and Categorisation

A summary of key issues raised is provided in **TABLE 5**.

TABLE 5 CATEGORISING ISSUES RAISED

CATEGORY	MATTER	SUMMARY OF MATTER
Built form	Consistency with surrounding urban form	Consistency of the built form with the locality of Millers Point and Barangaroo has not been adequately justified.
	Density (floor space)	Scale of floor space provided and its suitability for the site and locality.
	Envelope massing	Envelope massing and its visual impact upon the Barangaroo precinct and surrounding locality.
	Height (Tower 7)	Proposed Block 7 tower form building height and its suitability within Central Barangaroo, including its transition and context.
	Building design	Potential building designs within the proposed built form will not be in the public interest.
	Hickson Park realignment	Realignment of Hickson Park would fail to mitigate impacts approved under MOD 8.
	View impact (private)	Preservation of views from private properties to Sydney Harbour.
	View impact (public spaces and Sydney Observatory)	Preservation of views from public spaces and more specifically Observatory Hill and the associated heritage item.



CATEGORY	MATTER	SUMMARY OF MATTER
Place based matters	Residential impact	Impact upon residential amenity within the locality.
	Overshadowing	Potential to overshadow residential properties within Millers Point and the public open spaces within Central Barangaroo.
	Heritage impacts	Impact on heritage sites and conservation areas within the locality including, but not limited to, the Millers Point Conservation Area, Observatory Hill Park and Sydney Observatory Group and Lance Kindergarten.
	Wind	Impact of proposed built form on air flow and the potential creation of wind tunnels.
	Impact on current and future public open space	Impact on existing and proposed public open space amenity including overshadowing.
	Impact on Fort Street Public	Impact on the Fort Street Public School local amenity and safety.
	Light pollution	Illumination and its subsequent impact on light pollution considering the sensitivity of the Sydney Observatory.
Procedural planning matters	Impact on natural environment	Impact on the locality's natural environment and conservation efforts.
	Procedural matters	The misuse of S75W and should constitute a new modification.
	Public Benefit	The proposed modification will not deliver appropriate levels of public benefit.
	Compliance	The proposed modification is not consistent with the approved concept plan and is not compliant with the relevant controls.
	Accuracy of reports	The accuracy and validity of the supporting reports and in particular, visual impacts.
	Precedent	The potential precedent for future developments within Sydney if the proposed modifications were approved.
	Privatisation of public land	Private development of public land for retail and commercial uses.
Movement and transport	Community engagement	The validity of the proposal due to a lack of community engagement.
	Proposed road layout/access arrangement	Impact of the proposed road layout and access arrangement on traffic flow and amenity.
	Pedestrian access	Reduced size of Hickson Park and impact on pedestrian connectivity.
	Parking	Impact upon street parking availability within Barangaroo and the surrounding suburbs.



CATEGORY	MATTER	SUMMARY OF MATTER
Construction and operation	Traffic congestion	Impact of the proposed modification upon traffic congestion within Barangaroo and the surrounding suburbs.
	Construction impact and Noise	Construction impacts on surrounding properties.
	Sustainability	The environmental impact upon Sydney Harbour and the locality.
	Impact on services and infrastructure	Construction impacts on the future metro station and existing public services.

A broad range of issues were raised by the 823 public submissions. The key issues and comments that featured most prominently are summarised in **FIGURE 21**.

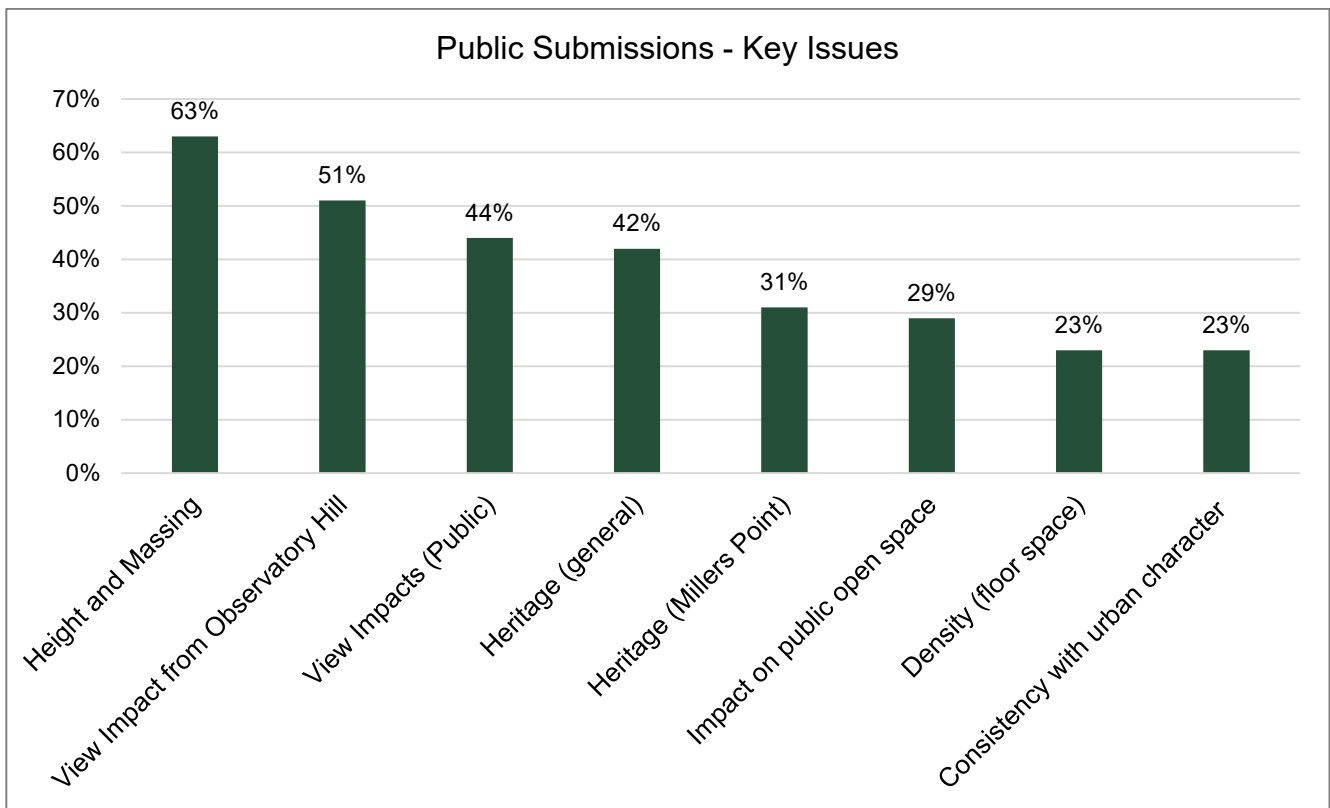


FIGURE 21 – PUBLIC SUBMISSIONS SUMMARY CHART (URBIS MODIFIED BY MECONE)

A broad range of issues were raised by the 26 organisation submission that were similar to those expressed in the public submissions. The key issues and comments that featured most prominently are summarised in **FIGURE 22**.



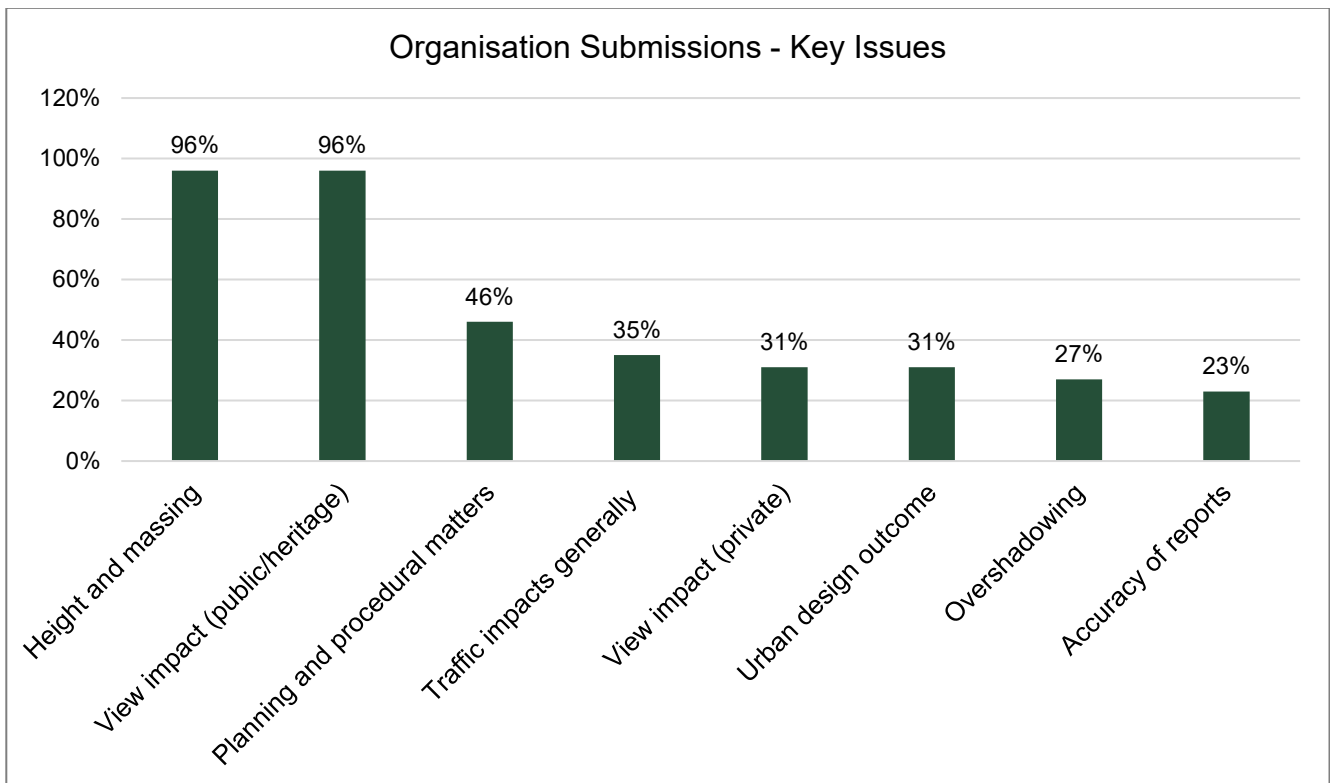


FIGURE 22 – ORGANISATION SUBMISSIONS SUMMARY CHART (URBIS MODIFIED BY MECONE)

A response to the issues raised in the submissions is provided in **Section 7**, **Section 8** and a revised environmental assessment provided in **Section 9**.



6 Actions Taken Since Exhibition

In response to the key issues raised within the submissions, major design refinements and clarifications have been made to the project since public exhibition.

This section summarises the changes that have been made to the project since its public exhibition. It also outlines the additional assessment undertaken to respond to the concerns raised with State agencies, Council, organisations and public submissions outlined in **Section 7** and **Section 8**.

6.1 Refinements to the Project

MOD 9 seeks consent for modifications to the approved Barangaroo Concept Plan MP06_0162 (as modified by MOD 11) in relation to Central Barangaroo, Barangaroo Reserve (Cutaway only) and Barangaroo South (Barton Street and Hickson Park only).

MOD 9 results in modification to the approved Concept Plan for Blocks 5, 6 and 7, updates to the Instrument of Approval and SoCs, and amendments to PEHC SEPP as it applies to Barangaroo.

The project capitalises upon significant State Government investment in public transport infrastructure (Barangaroo Station) and the public benefit opportunities afforded to the site given its harbourside context and existing amenity on the City's foreshore edge.

Following exhibition of the project from 12 July 2022 to 8 August 2022 and review of submissions, MOD 9 has been refined by the Applicant. Extensive engagement has occurred with the Department and GANSW to review key elements of the project including scale of built form and compatibility with the surrounding context, quantum and location of open space and public amenity.

Overall, the amended proposal introduces a simplified building envelope at a reduced scale, including a reduction in the proposed GFA, additional public domain offering and the deletion of the previously proposed tower element located at Block 7. Refer to **FIGURE 25**.





FIGURE 23 – ILLUSTRATION OF NEW PROPOSED BUILDING INTERFACE WITH HARBOUR PARK (SJB)



FIGURE 24 – ILLUSTRATION OF NEW PROPOSED NORTH SOUTH LINK (SJB)



6.1.1 Modified Concept Plan

The key elements that make up the modified Concept Plan following exhibition are summarised in **TABLE 6** with supporting diagrams provided in **FIGURE 25**, **FIGURE 26** and **FIGURE 27**.

TABLE 6 SUMMARY OF MODIFIED CONCEPT PLAN

ELEMENT	EXHIBITED	PROPOSED
Land Use		
Uses	Mixed-use development including retail, tourist, community, commercial and shop top housing	Mixed-use development including retail, tourist, community, commercial and shop top housing
GFA		
Above Ground	Maximum 116,189m ²	Maximum 92,908m ²
Below Ground	Maximum 28,166m ²	Maximum 11,092m ²
Total	Maximum 144,355m ² (with a maximum 28,000m ² for residential)	Maximum 104,000m ² (with a maximum 75,000m ² above ground for residential)
Heights		
Block 5	RL 44.5	RL 21.5, RL 31.2, RL 33.75, RL 35 and RL 42.45
Block 6	RL 38.7	RL 35
Block 7	RL 73.7	RL 35

The exhibited MOD 9 application proposed a GFA of 144,355m² for Blocks 5, 6 and 7 (above and below ground). The amended MOD 9 application reduces this by 40,355m², resulting in a revised GFA of 104,000m² (above and below ground).

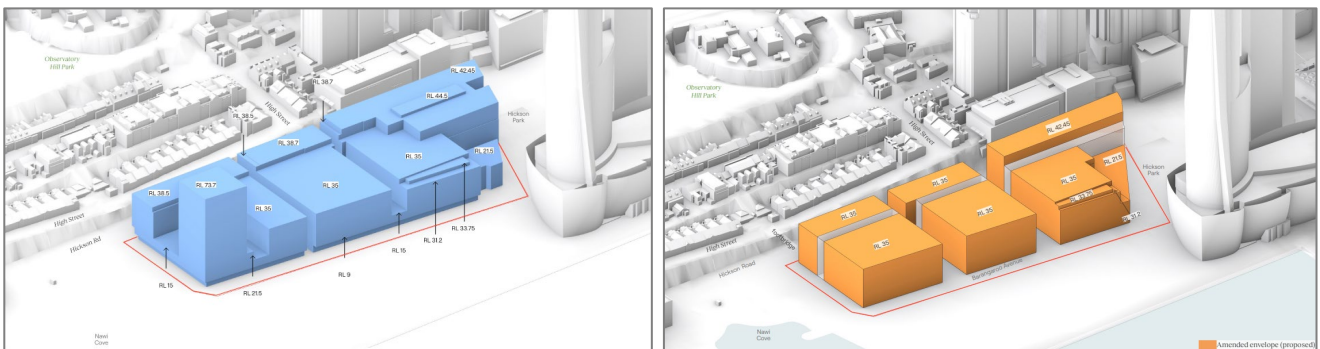


FIGURE 25 – EXHIBITED BUILDING ENVELOPE LEFT AND AMENDED ENVELOPE RIGHT (SJB)



6.2 Modified Concept Plan Development Description

The modifications to the approved Concept Plan require amendments to Schedules of the Instrument of Approval, including the development description and relevant conditions of consent. The Instrument of Approval was last modified as part of MOD 11 on 22 October 2020.

As a result of the amendments previously outlined, the Condition 'A1 Development Description' of the approved Concept Plan for Barangaroo will be modified by MOD 9, as follows:

- (1) *A mixed-use development involving a maximum of ~~602,354~~ 667,686 sqm gross floor area (GFA), comprised of:*
 - (a) *a maximum of ~~191,031~~ 237,031 sqm of residential GFA of which a maximum of 162,031 sqm will be in Barangaroo South;*
 - (b) *a maximum of 76,000sqm of GFA for tourist uses of which a maximum of 59,000 sqm will be in Barangaroo South;*
 - (c) *a maximum of ~~34,000~~ 44,766 sqm of GFA for retail use of which a maximum of 30,000 sqm will be in Barangaroo South;*
 - (d) *a maximum of 5,000sqm of GFA for active uses in the Public Recreation zone of which 3,500 will be in Barangaroo South; and*
 - (e) *a minimum of ~~12,000~~ 14,400sqm GFA for community use.*

6.3 Summary of Concept Plan Refinements

A summary of the amendments since exhibition is provided below:

GFA and Land Use Amendments

- Reduced total GFA permissible within Blocks 5, 6 and 7 from 144,355m² to 104,000m²,
- Reduced below ground GFA from 28,166m² to 11,092m², and
- Increased maximum residential component cap from 28,000m² to 75,000m², and
- No change to community and active GFA (including the Cutaway) of up to 24,000m².

Building Envelope Amendments

- Removal of the tower element at Block 7 at RL 73.7,
- Significant reduction in overall building height, with an overall maximum height of RL 42.45, which is located to the south, within Block 5,
- Amendments to the overall dimension and footprint of Blocks 5, 6 and 7 including new pedestrian connections open to the sky,
- Deletion of building cantilever elements into public domain,
- Refinements to the interface of Block 5 and Hickson Park, and
- Simplified building height and massing across the entire site with only three heights proposed to minimise visual impacts from Observatory Hill and Millers Point.

Open Space and Public Domain Amendments



- Increased provision of publicly accessible open space of 1,264m² when compared to the approved Concept Plan,
- New north-south pedestrian link with a maximum width of 8m and open to the sky to facilitate visual links from Hickson Park to Nawi Cove,
- Retain east-west pedestrian connection, known as Plaza South, which has been shifted slightly south,
- A new east-west pedestrian connection, known as Plaza North, which is up to 20m wide and open to the sky,
- New east-west arcade within Blocks 5 and 6 with a maximum width of 6m, and
- Additional allowance for deep soil zones across the site.

Block Amendments

- Amendments to the overall size and configuration of Blocks 5, 6 and 7 to reflect proposed building envelopes.

Traffic and Access Amendments

- Retain Barangaroo Avenue as a one-way shared street, and
- Deletion of Barton Street as a permanent two way street.

Statutory and Development Control Amendments

- Amendments to the SEPP mapping and provisions to align with amended building envelope GFA, building heights and land uses,
- Deletion of proposed SEPP amendment to allow GFA to extend 25m into the RE1 Public Recreation zone below ground level,
- Deletion of proposed SEPP amendment to allow building facades to extend by an additional 3m above ground and the 650mm façade articulation zone,
- Amended Design Excellence Strategy to be largely consistent with the PEHC SEPP, and
- Amended Urban Design Guidelines to reflect amended building envelope outcomes.

6.3.1 Place Principles

As part of the proposed amendments to MOD 9, the Applicant has developed several Place Principles that build on the extensive body of work already completed for Central Barangaroo. The Place Principles have informed the proposed Urban Design Guidelines that will function as the framework for future detailed SSDAs across the site.

Distinctly Sydney

- Embodying the beauty of the city and its harbour setting, without the need or desire to over-power and dominate,
- Creating a sense of 'the local', that's familiar and comfortable – avoiding a sense of exclusivity and elitism, and
- Forming a new neighbourhood that relates to the grain and texture of Millers Point, with the global reach of Barangaroo and the Harbour City.

Connecting Communities



- Seamlessly integrated streets and spaces that open views and vistas to the harbour,
- Bringing nodes and modes together into cityscape that caters to everyone, but frames the experience around the pedestrian, and
- Opening-up the western edge of the city from The Rocks and Millers Point to the harbour and Headland Parks.

Right Fit

- Spaces and places between the buildings are distinctive and provide relief from the intensity of the city and openness of the foreshore spaces,
- Eroding the monumental scale of the city into a grain and form that feels familiar, comfortable and content, and
- Nestled into the sandstone cliff along Hickson Road to create a 'gully'; cool, contained and calm.

Engage with Nature

- Dynamic spaces and streets catering to the diurnal rhythm of the city, shifting seasons and phases of the harbour life finer grain,
- Deep soil at the edges, providing cool canopies that protect pedestrians and manage privacy, and
- Seamless integration into the Harbour Park, drawing nature into the heart of the precinct through intimate landscaping.

Holding the Edges

- Provide strong edges to Harbour Park, Hickson Park, Hickson Road and Nawi Cove, which are public, active and dynamic. These are the 'front door' of the place,
- The interface at ground will determine the relationship with the place. The publicness of this experience will influence its role in the city, and
- Consider where people wish to move, dwell, sit and enjoy the spaces in and around the site. Slow and fast spaces, controlled through changes in street and space aperture, placement of seating, landscaping and wayfinding.

Beauty and Delight

- Beauty is in the 'eye of the beholder', and should be sought through individual moments, rather than a monumental gesture,
- Each building can offer unlimited and varied outcomes, but should sit comfortably within the fabric of the city - there is no need to yell or shout from ever façade, and
- The beauty of the site and its setting provide the ideal backdrop for framed and reflected views of the park, harbour and city setting.

Future Focused

- The sustainability of the precinct should the legacy of Barangaroo, and surpass the ambitions of the City,
- Targets should be set within the context of global best practice, this is the expectation, and
- Locally, the focus will be on liveability, community well-being, health and amenities - this is the same, whether you are a resident, tenant or visitor.



6.3.2 Built Form

Building Envelope

The Applicant has worked in a consultative fashion with the Department and GANSW to refine the amended building envelopes for MOD 9. The Urban Design Report (**Appendix C**) establishes the amended building envelopes for each of the three development blocks, which responds to key issues raised through exhibition.

The amended building envelopes have been simplified at a reduced scale, including the removal of the previously proposed tower form on Block 7.

The amended building envelope creates three (3) building blocks, defined by two east-west public spaces and a north-south pedestrian link. The predominant height proposed for all blocks is RL 35, with the exception of Block 5 which has a variable height of RL 21.5 up to a maximum RL 42.45.

The amended building envelopes maintain an increase in the overall GFA and height of the approved Concept Plan building envelopes however, scaled back significantly following exhibition.

The exhibited MOD 9 application proposed a GFA increase of 144,355m² for Blocks 5, 6 and 7 (above and below ground). The amended MOD 9 application reduces this by 40,355m², resulting in a revised GFA increase of 104,000m² (above and below ground).

The amended building envelopes will:

- Support the principles of the approved Concept Plan under MOD 2,
- Retain visual and physical east-west connections through the site,
- Facilitate north-south pedestrian connections through the site from Hickson Park to Nawi Cove,
- Reinforce the Hickson Road as a boulevard with a defined street edge,
- Provide an integrated address to Harbour Park, and
- Enable increased height and floorspace appropriate to its context with excellent public transport connectivity (benefitting from the proposed Metro).

FIGURE 28 depicts the amended building envelope overlaid with the exhibited building envelope.



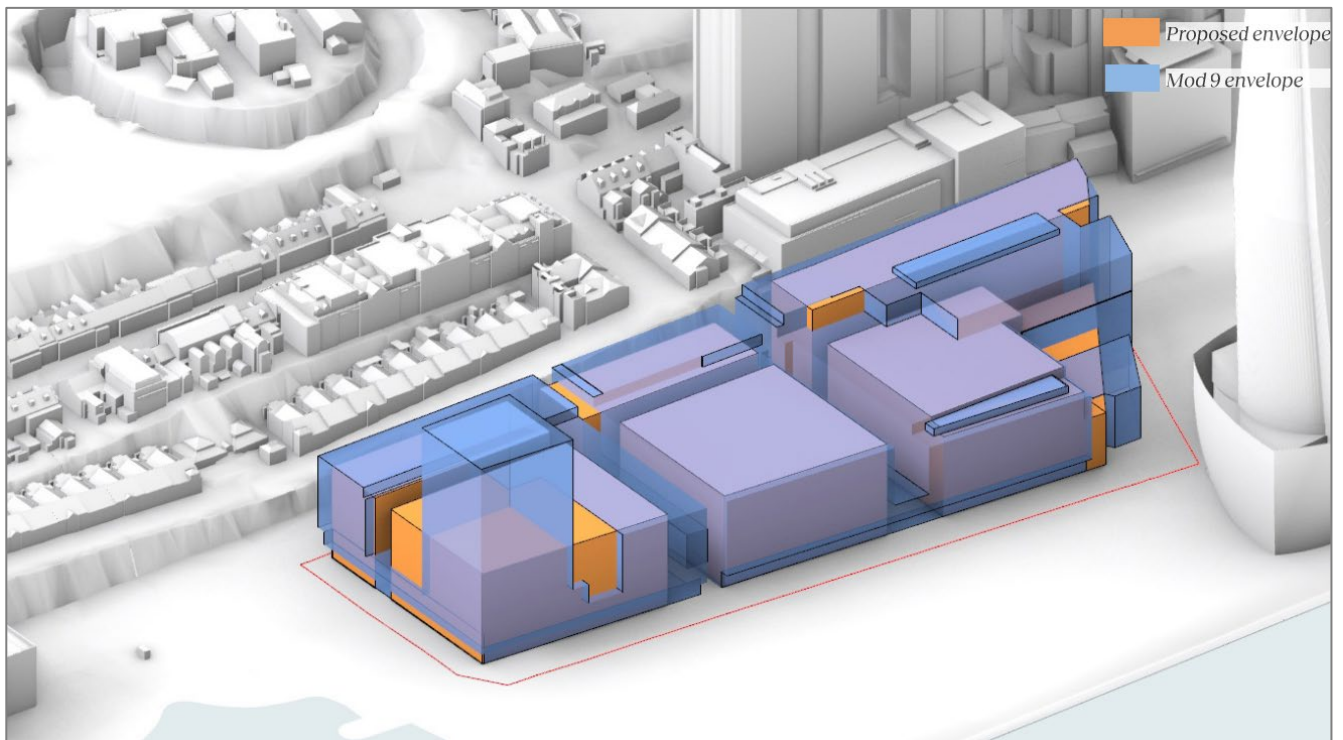


FIGURE 28 – AMENDED CONCEPT BUILDING ENVELOPE WITH EXHIBITED CONCEPT BUILDING ENVELOPE (SJB)

The amended building envelopes have addressed key concerns as follows:

- **Scale** – Reduced the prominent tower element at Block 7 from RL 73.7 to RL 35, which is consistent with the approved Concept Plan building envelope. Additional reductions have also been made to Block 5 with a variable height from RL 21.5 to RL 42.45 and Block 6 at RL 35.
- **Views** – Reduced visual impacts as a result of the reduction and distribution of heights across all blocks, with the only notable component siting above the approved Concept Plan building envelope positioned in the south-east corner of the site where it has no visual impact from Observatory Hill and the surrounding Millers Point view lines.
- **Heritage** – Reduced height improves views to and from Millers Point and Observatory Hill from immediate and wider visual catchments, while the additional public domain and pedestrian links create a more compatible scale to the surrounding heritage context.
- **Solar** – Reduced southern edge of the Block 5 envelope to improve the interface and solar access to Hickson Park and Harbour Park.
- **Public** – Introduction of two large plazas and a series of laneways have been created to increase porosity, views through the site and contribute to an increase in public domain offering for residents and visitors.

An updated visual comparison of the approved Concept Plan building envelope, the exhibited MOD 9 building envelope and the amended building envelope is provided in **Appendix C**.



Building Height

The proposed building heights for MOD 9 have been amended following exhibition to further consider public and private views to the harbour, City and surrounding heritage setting. The changes introduced following exhibition provide an improved contextual response to Millers Point, Observatory Hill and the interface with Barangaroo South.

A comparison of the approved Concept Plan building envelope heights, the exhibited heights and amended heights is provided in **TABLE 7**.

TABLE 7 SUMMARY OF APPROVED, EXHIBITED AND AMENDED BUILDING HEIGHTS

BLOCK REFERENCE	APPROVED	EXHIBITED	AMENDED*	CHANGE**
Block 5	RL 34	RL 44.5	RL 21.5, RL 31.2, RL 33.75, RL 35 and 42.45	Reduced by 2.05 metres
Block 6	RL 29	RL 38.7	RL 35	Reduced by 3.7 metres
Block 7	RL 35	RL 73.7	RL 35	Reduced by 38.7 metres

*Amendments compared against the current Concept Approval (Approval column)

**Changes compared between the exhibited project (Exhibited column) and the amended project (Amended column)

Overall, all building heights across Blocks 5, 6 and 7 have been reduced since exhibition, with the greatest reduction relating to the previously proposed tower form located at Block 7 at RL 73.7.

Another important amendment has been the rationalisation/simplification of the proposed building heights. The exhibited building heights adopted several heights across each block reflecting definitive built form outcomes. The amended building heights revert back to a similar level of detail that was conceived under the approved Concept Plan. This permits greater built form flexibility and the ability to achieve design excellence at detailed SSDA stages.

When compared to the approved Concept Plan, the amended building heights remain largely the same. This is evident for Block 7, where the height remains at RL 35. Nonetheless, the amended building heights continue to necessitate an amendment to the PEHC SEPP Height of Buildings Map.

FIGURE 29 and **FIGURE 30** depict the proposed heights for Central Barangaroo. It demonstrates that the amended building envelopes and heights are modest when compared to the surrounding scale of development in Barangaroo South and sit below Observatory Hill.



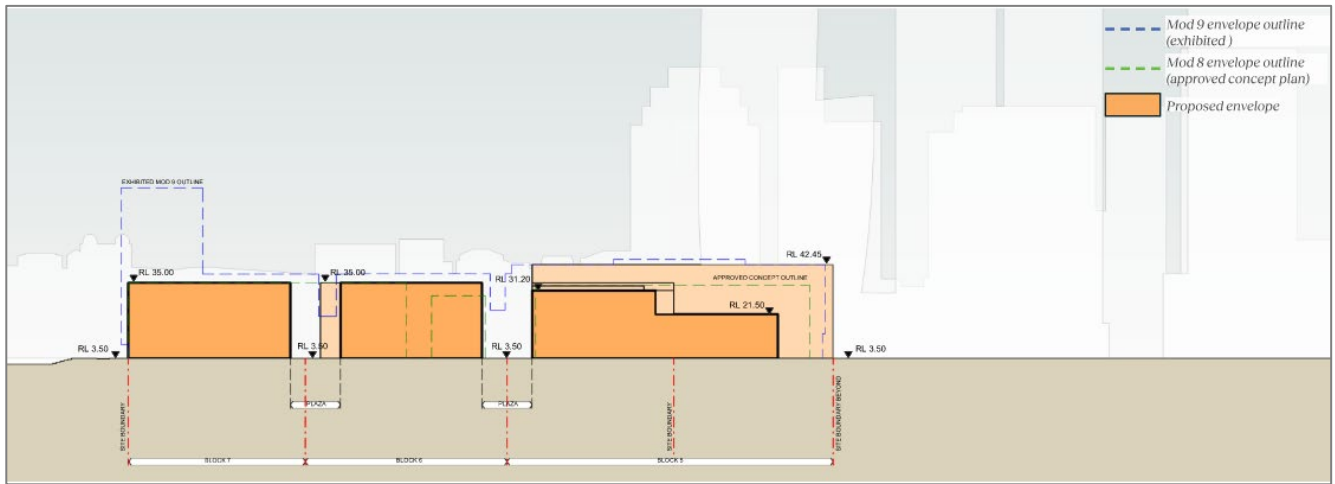


FIGURE 29 – WESTERN ELEVATION COMPARISON (SJB)

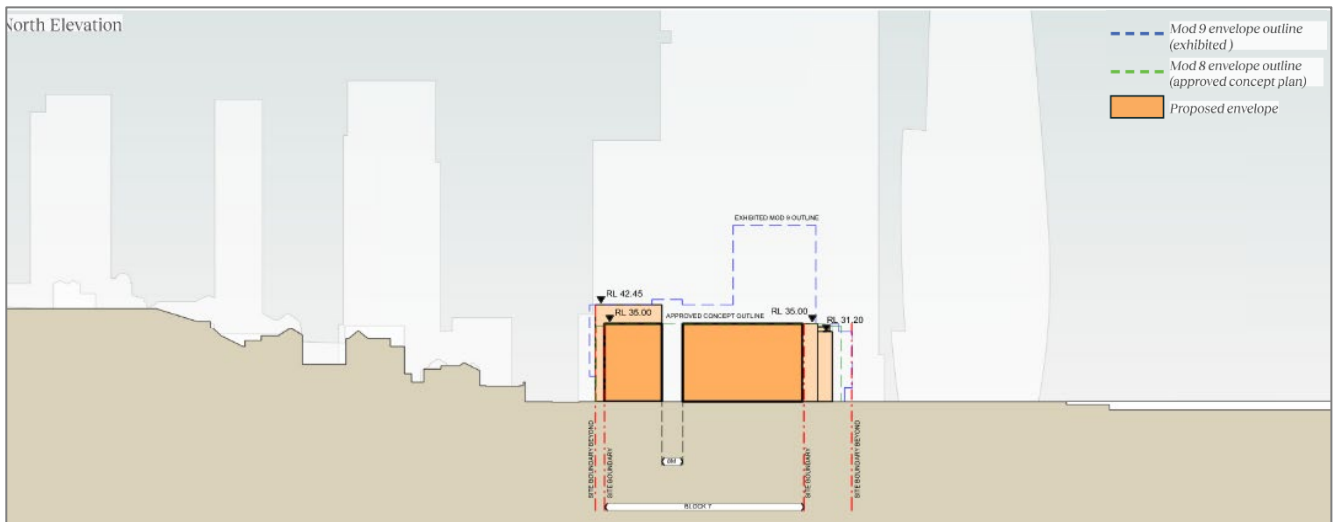


FIGURE 30 – NORTHERN ELEVATION COMPARISON (SJB)

Block Amendments

The proposed block alignment for Blocks 5, 6 and 7 have also been rebalanced to reflect the corresponding changes to the amended building envelopes and heights.

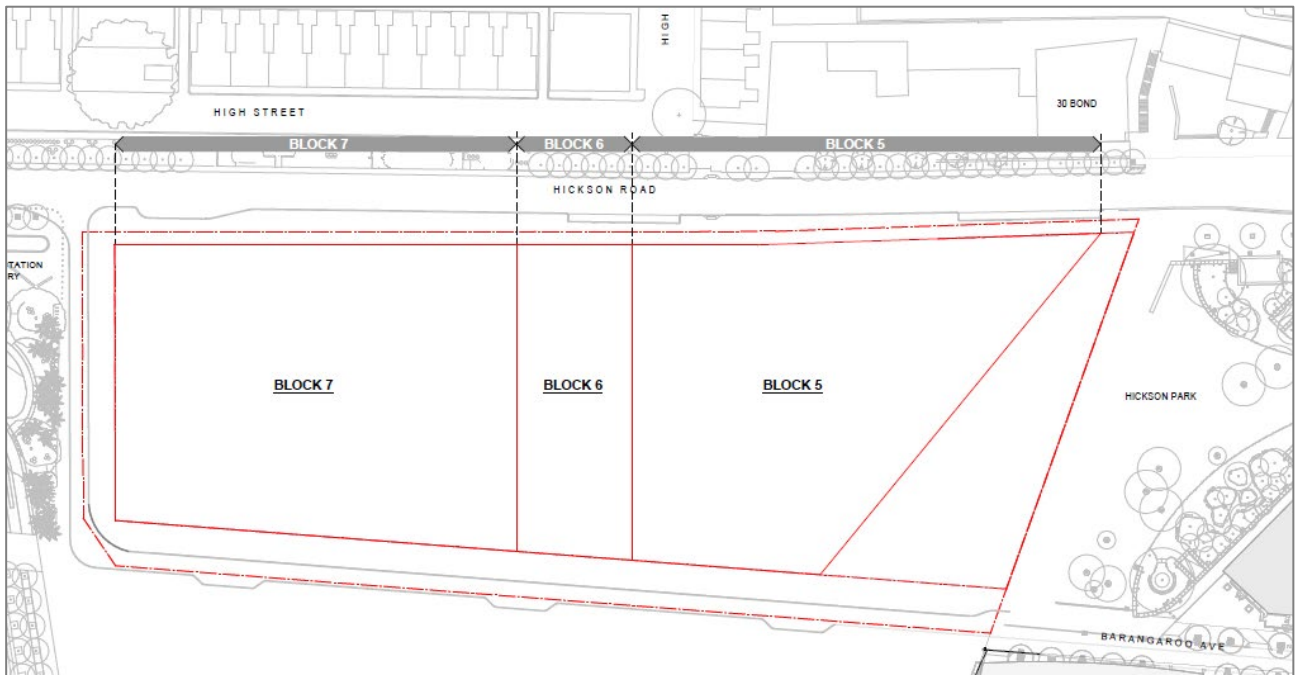
The southern extent of Block 7 has been reduced to accommodate an expanded east-west pedestrian link (Plaza North) and an increase in the size of Block 5.

Block 6 has been expanded in its southern and northern extents and is defined by the two east-west connections from Hickson Road to Harbour Park.

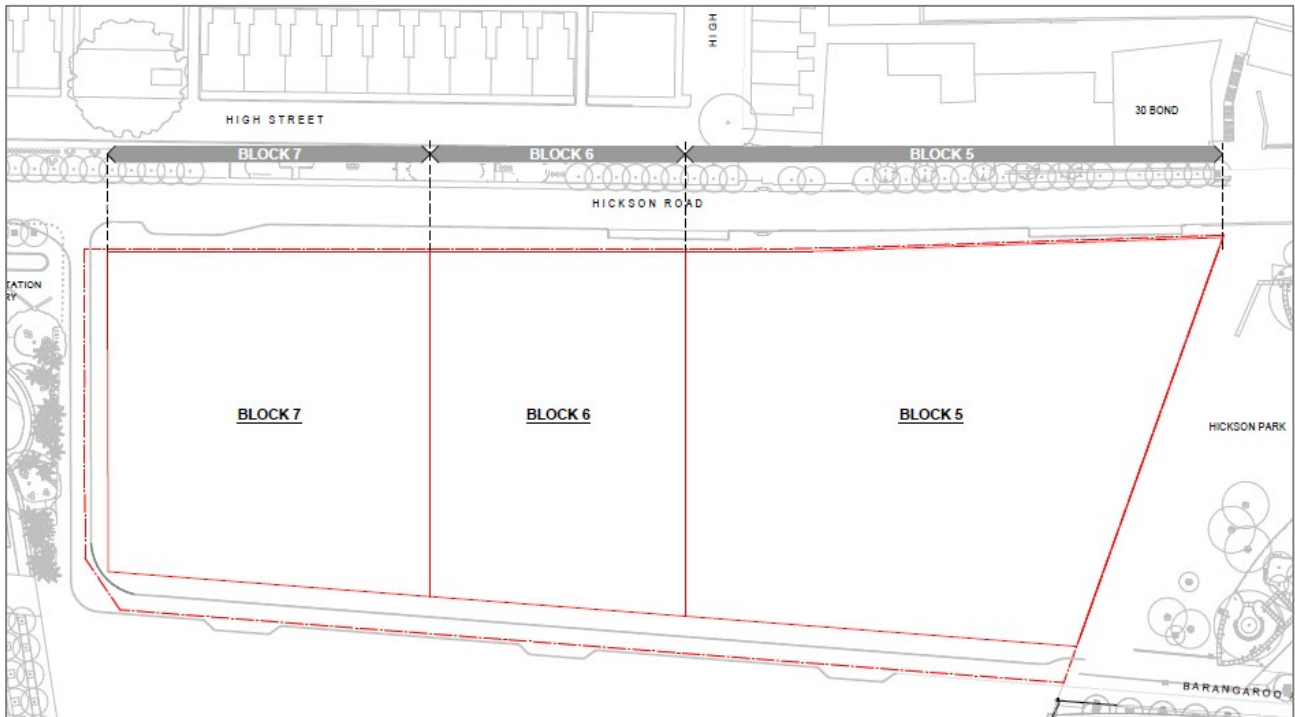
The northern extent of Block 5 has been slightly reduced to accommodate a minor shift in the approved east-west pedestrian link (Plaza South). The southern extent has also been increased to reflect the revised alignment of Hickson Park.



A comparison of block layouts and sizes between the approved, exhibited and proposed block footprints are provided in **FIGURE 31**.

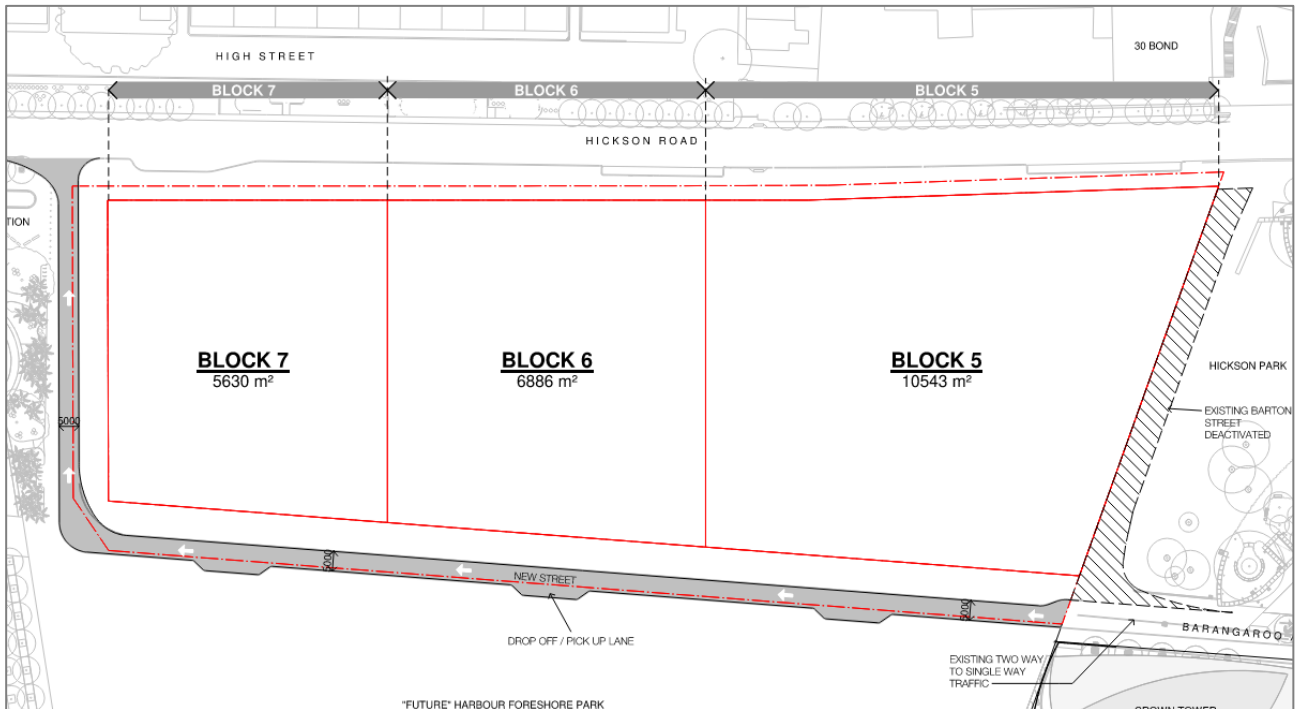


Approved block layout



Exhibited MOD 9 block layout





Proposed MOD 9 block layout

FIGURE 31 – COMPARISON OF BLOCK LAYOUTS (SJB)

A comparison of the amended envelope and block layout from the approved Concept Plan in axonometric view is provided in **FIGURE 32**, while **FIGURE 33** depicts the amended building envelope in plan view.

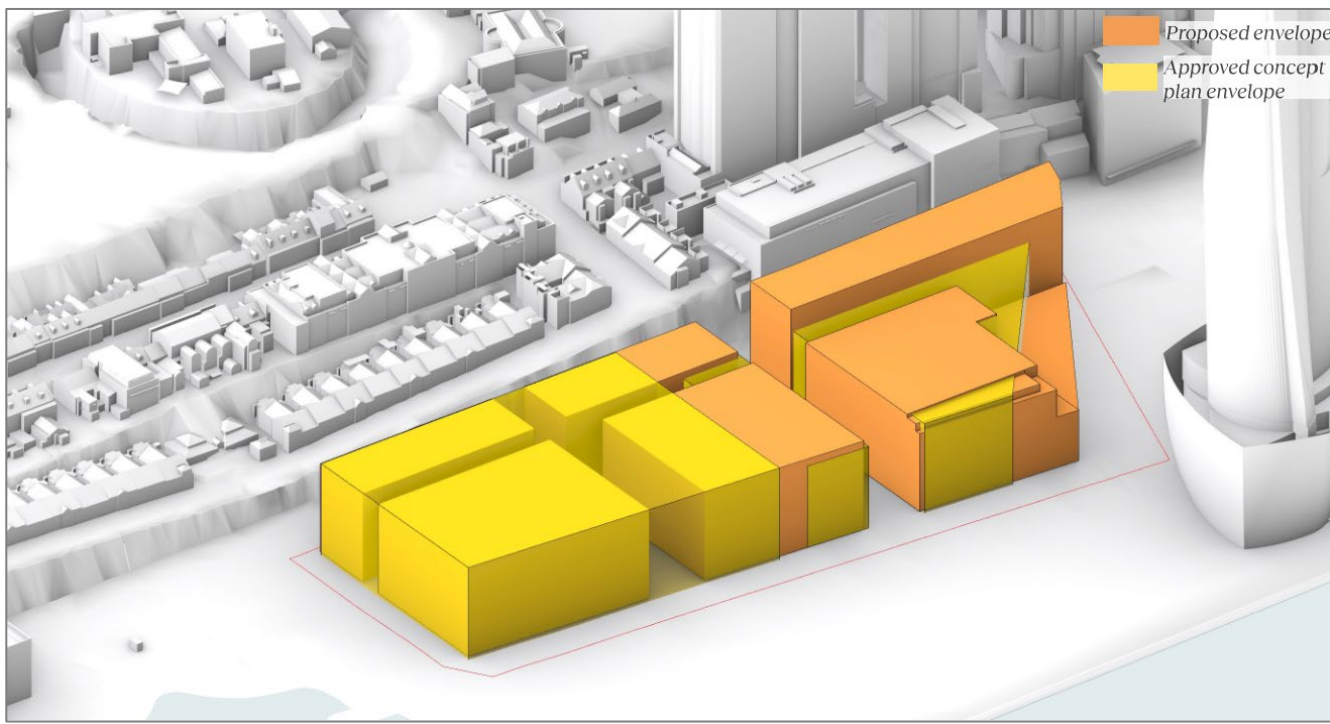


FIGURE 32 – APPROVED AND PROPOSED CONCEPT PLAN BLOCK LAYOUT (SJB)



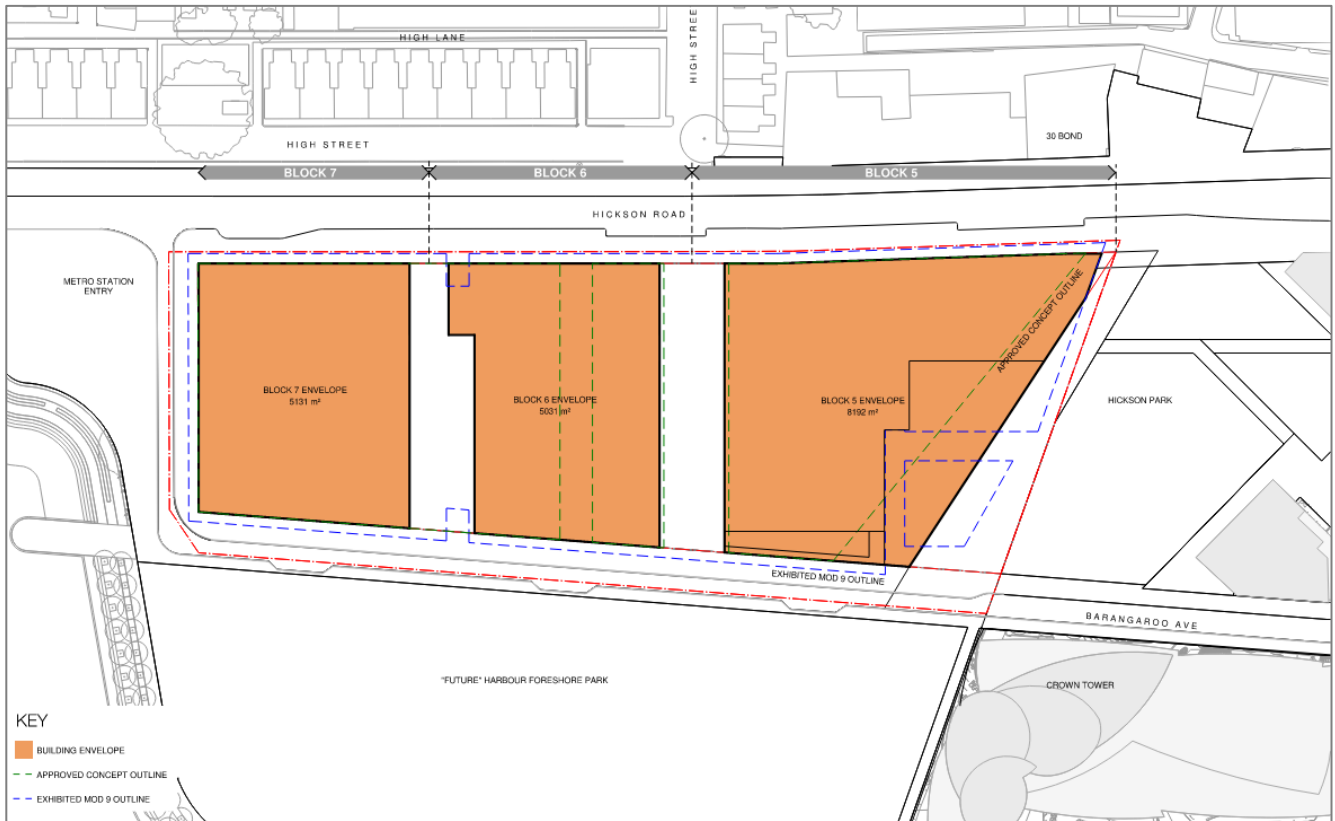


FIGURE 33 – AMENDED ENVELOPE AND BLOCK LAYOUT (SJB)

6.3.3 Gross Floor Area

The exhibited MOD 9 proposal proposed a GFA of 144,355m² for Blocks 5, 6 and 7 (above and below ground). The amended MOD 9 proposal reduces this by 44,302.4m², resulting in a revised GFA of 104,000m² (above and below ground).

The proposed GFA amendments will continue to revitalise and complement Barangaroo as a mixed-use precinct capable of facilitating residential, retail, tourist and commercial uses. The proposed amendments to the GFA since exhibition include:

- A reduction of the proposed GFA within Blocks 5, 6 and 7 from 144,355m² to 104,000m² (above and below ground). This represents a GFA reduction of 40,355m² from exhibited MOD 9 proposal.
- A reduction in the total GFA from 708,041m² to 667,686m².
- A reduction of the exhibited below ground GFA from 28,166m² to 11,092m².
- An Increase of the residential component cap within the total GFA maximum from 28,000m² to 75,000m² in response to changes to market conditions and to provide greater flexibility over the development lifecycle.



- Deletion of below ground GFA to extend approximately 25m into RE1 Public Recreation land PEHC SEPP amendment. No GFA will encroach into any land zoned RE1 Public Recreation.
- Deletion of the building cantilever (3m beyond the boundary) and façade articulation (650mm beyond the boundary) PEHC SEPP amendment. No building cantilever over Barangaroo Avenue or Hickson Road is proposed.

The following elements of the exhibited MOD 9 proposal will continue to apply:

- Maintain a condition in the Terms of Approval to enable the GFA allocated to each block to be flexibly applied, subject to remaining within the total maximum GFA for the three blocks and the building envelope established for the development blocks.
- Maintain a distinction between above ground and below ground GFA to provide greater certainty and definition to the parameters of the Concept Plan.
- Maintain allocation of up to 24,000m² for community and active uses (including the Cutaway).
- Maintain the exclusion of the calculation of 'wintergardens' from the total residential and commercial floorspace, consistent with the approach for residential and tourist GFA in Barangaroo South.

A comparison of the approved Concept Plan GFA, the exhibited GFA and amended GFA for Blocks 5, 6 and 7 is provided in **TABLE 8**.



TABLE 8 SUMMARY OF APPROVED, EXHIBITED AND AMENDED GFA (ABOVE AND BELOW GROUND)

BLOCK REFERENCE	APPROVED	EXHIBITED	AMENDED*	CHANGE**
Block 5, 6 and 7	47,688m ²	144,355m ²	104,000m ²	Reduced by 40,355m ²
Maximum Residential Cap	14,000m ²	28,000m ²	75,000m ²	Increased by 47,000m ²

*Amendments compared against the current Concept Approval (Approval column)

**Changes compared between the exhibited project (Exhibited column) and the amended project (Amended column)

The amended GFA maintains a strong strategic line of sight with State government investment and providing a range of residential and non-residential uses within immediate proximity of Barangaroo Station and existing public transport in Barangaroo South.

6.3.4 Land Use

Consistent with the exhibited proposal, the final mix and distribution of land uses will be subject to future detailed SSDAs. The core principle of delivering a mixed-use precinct as established in the approved Concept Plan is preserved whilst also providing for embedded flexibility within the use configuration to allow for resilience to market conditions and fluctuations. This will ensure viable, and quality urban design outcomes can be provided on the site in response to demand.

The exhibited MOD 9 proposal highlighted the need for retail and commercial uses in close proximity to Barangaroo Station. This was in part, to support the underground retail strategy to be delivered by the Central Barangaroo Retail Developer. The amended MOD 9 proposal reviews the quantum of commercial office, retail and residential uses across the site. This includes reductions to the overall retail GFA and increases in the residential cap.

Since the conception of MOD 9 it has become increasingly clear that the COVID-19 pandemic has structurally changed the way we work and shop and that there is little demand for additional CBD commercial office and retail space.

The preliminary market analysis provided by Atlas Economics (**Appendix S**) demonstrates that from 2020 to 2023, vacancy levels have been rising and remain elevated. The average office incentives in Sydney CBD have increased from 3.5% in 2020 to 11% in 2023. Furthermore, average retail incentives in Sydney CBD have increased from 10% in 2020 to 30% in 2023. Overall, vacancy rate and incentive increases for commercial office and retail commenced in mid-2020.

The take-up of office and retail is expected to be slower moving forward as the market cycles through vacant space amid a shift in the demand for space per capita.

While ground level activating retail will remain a defining feature of Central Barangaroo, there is now little demand for larger, centre based retailing. With demand declining for the very significant supply of commercial office space recently delivered in Barangaroo South, it would not be appropriate to increase this supply in the short term.

While the actual land use mix of each block will be confirmed through detailed demand analysis at SSDA stage, the current modification seeks to provide increased flexibility to permit the proportion of residential development to be increased should the demand for retail and commercial office space not return within the delivery phase of the Central Barangaroo.



Therefore, the Applicant has taken the opportunity as part of the exhibition process and submissions received to recalibrate the potential future mix and revise the maximum land uses set out in Condition B4(1).

As identified in **TABLE 9**, the amended MOD 9 proposal increases the maximum allowance for residential GFA across Central Barangaroo and reduces retail (although still increased from the approved Concept Plan). While the residential maximum GFA cap is proposed to be increased, this will be limited to 75,000m².

TABLE 9 SUMMARY OF APPROVED, EXHIBITED AND AMENDED LAND USE GFA

LAND USE	APPROVED	EXHIBITED	AMENDED*	CHANGE**
Residential (Max)	191,031m ²	190,031m ² (1,000m ² reduction)	237,031m ² (46,000m ² increase)	Increased by 47,000m ²
Tourist (Max)	76,000m ²	76,000m ²	76,000m ²	None
Retail (Max)	34,000m ²	71,800m ² (37,800m ² increase)	44,766m ² (10,766m ² increase)	Reduced by 27,034m ²
Community (Min)	10,000m ² <i>2,000m² within development Blocks 6 and 7</i>	Up to 19,000 max <i>2,800m² within development Blocks 5, 6 and 7</i>	Up to 19,000 max <i>2,800m² within development Blocks 5, 6 and 7</i>	None
Active (Max)	5,000m ²	5,000m ²	5,000m ²	None

*Amendments compared against the current Concept Approval (Approval column)

**Changes compared between the exhibited project (Exhibited column) and the amended project (Amended column)

Despite the change in the retail strategy for Central Barangaroo, it is still anticipated there could be some capacity for retail below ground, such as a supermarket. This has been accounted for in the amended below ground GFA, which has been reduced from 28,166m² to 11,092m². This reduced quantum of below ground GFA also contemplates areas that would typically be defined as GFA including back of house and supporting facilities to complement and support uses above ground.

The flexibility of Central Barangaroo to evolve flexibly over time will be achieved through a provision in the Terms of Approval to enable the GFA allocated to each block to be flexibly applied, subject to remaining within the total maximum GFA for the three blocks and the building envelope established for the development blocks.

6.3.5 Movement and Access

The street network and access hierarchy has been reconfigured following exhibition to reflect the amended building envelopes and public domain strategy. A summary of the exhibited street and pedestrian network and key changes following exhibition is summarised in **FIGURE 34** and **FIGURE 35** and described below.



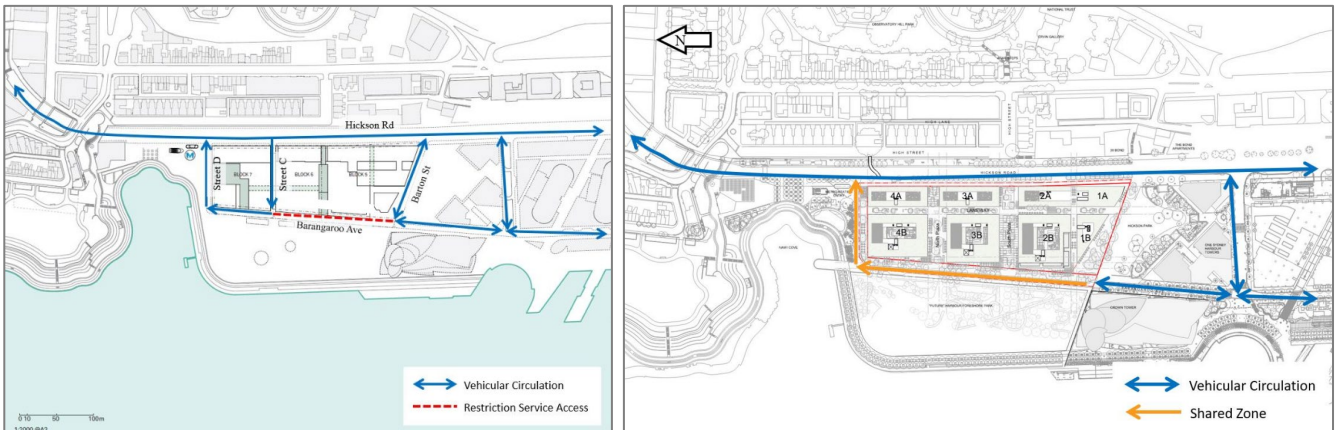


FIGURE 34 – EXHIBITED CIRCULATION LEFT AND AMENDED CIRCULATION RIGHT (ARUP)

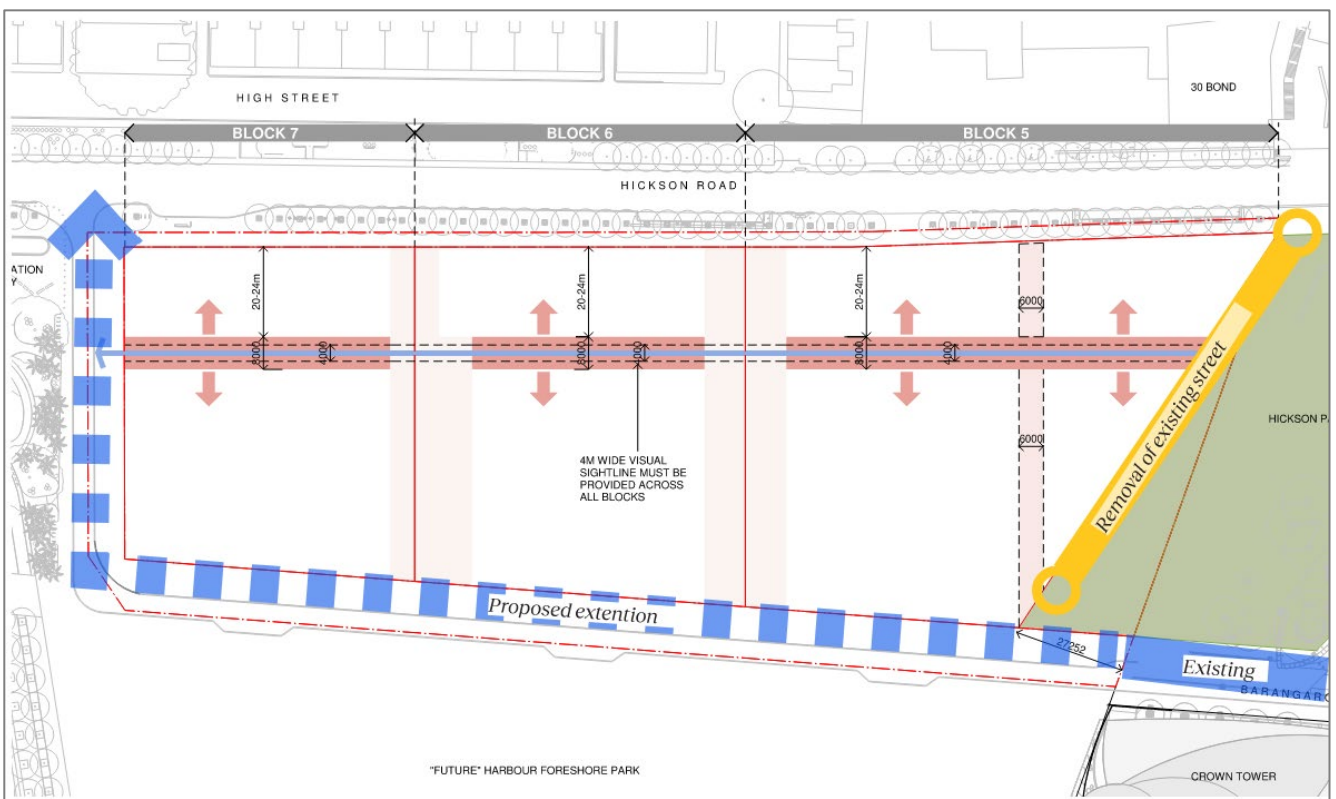


FIGURE 35 – ACCESS AND PUBLIC SPACES DIAGRAM (SJB)

Barton Street

Barton Street is currently constructed as a temporary road to satisfy the requirements of Condition B3(5) and C8 of the approved Concept Plan. The temporary road is intended to provide alternative construction vehicle access to reduce construction traffic congestion prior to the completion and operation of Barangaroo Avenue.

The exhibited MOD 9 proposal aimed to convert Barton Street to a permanent street, which connects Barangaroo Avenue with Hickson Road.



The amended MOD 9 proposal removes Barton Street. Its removal will strengthen the interface of Block 5 with Hickson Park and support pedestrian movement through Hickson Park as a key visual link to Harbour Park.

Barangaroo Avenue

The exhibited MOD 9 proposal aimed to convert Barangaroo Avenue into a pedestrian boulevard between Blocks 5 and 6 and then one way shared pedestrian street zone around Block 7.

The amended MOD 9 proposal converts Barangaroo Avenue into a one-way shared street across the entire length of the site. This will maintain a clear delineation for pedestrians, cyclists and vehicle movement within Central Barangaroo to Harbour Park and surrounding areas, as well as support pedestrian waterfront access.

Pedestrian Bridge

The exhibited MOD 9 proposal maintained the provision of a pedestrian bridge over Hickson Road and identified a potential location at the southern end of Block 6. It also acknowledged the precise location and design would be subject to future SSDAs.

The amended MOD 9 proposal shifts the location of the pedestrian bridge further north towards Barangaroo Station and Nawi Cove at the northern end of Block 7. This will reinstate the historical bridge link and provide a new pedestrian connection from the site directly to residents and users in Millers Point. The revised location of the pedestrian bridge is at the low point of High Street, allowing vertical transport via the natural topography of High Street, rather than extensive reliance on stairs and lifts.

The provision of a pedestrian bridge at this location is seen as an optimal outcome for pedestrians for the following reasons:

- There is existing pedestrian access via stairs at the southern end of Block 5 from High Street to Hickson Road that already provides connectivity. The previous location was seen as too close to this access.
- The location will land at the low point of High Street, utilising a previously used landing point, to provide direct, step-free access between Millers Point and Central Barangaroo.
- The new location provides an immediate and direct link from Millers Point to Barangaroo Station.

Internal Shared Streets C and D (Plaza North)

The exhibited MOD 9 proposal provided minor shifts to Streets C and D to align with proposed development Blocks 6 and 7. These were intended to be pedestrian oriented environments with slow-moving vehicles.

The amended MOD 9 proposal refines the configuration and intent of Streets C and D. Street D now forms an extension of Barangaroo Avenue, while Street C is amended to become an east-west pedestrian connection from Hickson Road to Harbour Park (referred to as Plaza North in the amended Concept Plan).

Plaza North splits Block 7 from Block 6 and will be at-grade and open to the sky, supporting daylight and visual permeability to the foreshore.



Laneway B (Plaza South)

The exhibited MOD 9 proposal provided a dedicated pedestrian laneway, which dissected Block 5.

The amended MOD 9 proposal transforms Laneway B into a 20m wide pedestrian connection from Hickson Road to Harbour Park (referred to as Plaza South in the amended Concept Plan). Similar to Plaza North, Plaza South splits Block 5 from Block 6, will be at-grade and open to the sky to support additional connectivity to the foreshore.

North-South Link

The amended MOD 9 proposal introduces a new north-south pedestrian link, providing new pedestrian connections between Hickson Park and Nawi Cove. The north-south link is proposed to be a minimum 8m wide, with a 4m wide visual sight line to be provided across all blocks. This is discussed below.

6.3.6 Public Open Space and Domain

MOD 9 aims to deliver a range of diverse and high quality public domain elements that integrate with the existing Barangaroo precinct. This includes completion of connectivity to Nawi Cove, Harbour Park and Wulugul Walk.

The exhibited MOD 9 proposed to modify the following public domain components of the approved Concept Plan:

- Two small pavilions will be integrated into the park design to provide amenities within the park and provide opportunities for food and beverage.
- Realignment of the northern boundary of Hickson Park to create an intimate and activated civic space between Block 5, whilst maintaining views and visual connectivity to the foreshore. This was referred to as Barton Plaza.





FIGURE 36 – ILLUSTRATION OF PROPOSED PLAZA SOUTH (SJB)

While the final form and function of open space would be determined in future detailed SSDAs, the exhibited MOD 9 proposal outlined several potential opportunities across the blocks for publicly accessible open space and civic areas including:

- **Nawi Terrace** – located at the northern extent of Block 7 at the northern extent of Central Barangaroo, with the potential to take the form of a publicly accessible elevated terrace offering views to the harbour and provide retail and dining opportunities.
- **Barton Plaza and Hickson Park** – located at the interface of Hickson Park and Block 5, which would be defined by flagship retail building and offer a high degree of pedestrian connectivity. The only change proposed to Hickson Park was the realignment of the northern boundary to where it existed prior to the MOD 8 approval.
- **Barangaroo Steps** – located through Block 5 and 6 to function as a civic gateway for pedestrians from the CBD and Millers Point down to the waterfront and Harbour Park via a series of elevated platforms.

The public open space and domain strategy has been revised to address a range of submissions concerned with the changes to Hickson Park and the perceived reduction of public amenity across Central Barangaroo.

The amended building envelopes propose refinements to the Hickson Park alignment, a new generously sized east-west break (Plaza North), a new east-west laneway arcade and a new north-south pedestrian connection.



The future delivery and design of these will need to be consistent with the Design Guidelines contained within the Urban Design Report at detailed SSDA stages.

FIGURE 37 provides an overview of the proposed public domain and movement networks across the amended MOD 9 proposal.

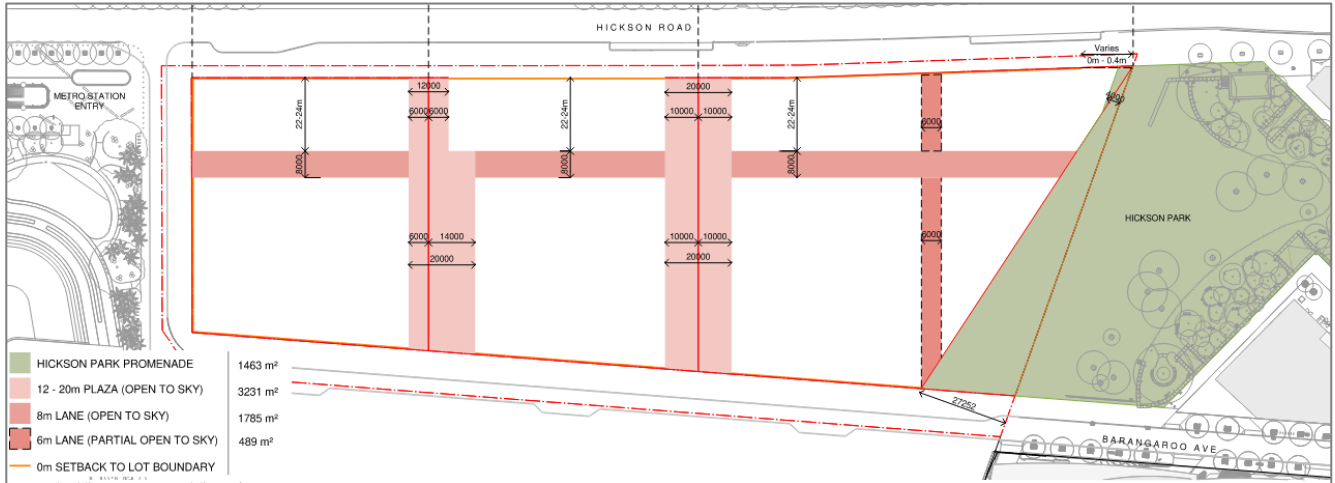


FIGURE 37 – PUBLIC OPEN SPACE AND DOMAIN DIAGRAM (SJB)

Plaza North and Plaza South

The approved Concept Plan contains two east-west links. The southern link is 20m wide and the northern link is 10m. The amended MOD 9 proposal:

- Relocates the existing southern east-west link slightly south, retaining the existing 20m wide connection from Hickson Road to Harbour Park (Plaza South), and
- Relocates the existing northern east-west link further north to provide a widened connection ranging from 12m to 20m wide (Plaza North) from Hickson Road to Harbour Park.

Refer to **FIGURE 38**.

These spaces will create opportunity for stopping and resting within the site without the requirement to engage in retail or paid experiences. Key elements of these spaces include:

- Optimising views and connections to the water and Harbour Park,
- Maintain good visibility into the spaces from the street edges, enhancing legibility, wayfinding and safety,
- Ability to provide a high quality public domain palette that complement the CBD and Barangaroo to reinforce the sense of publicness, and
- Maximise greening of plaza spaces to define varying experiences.



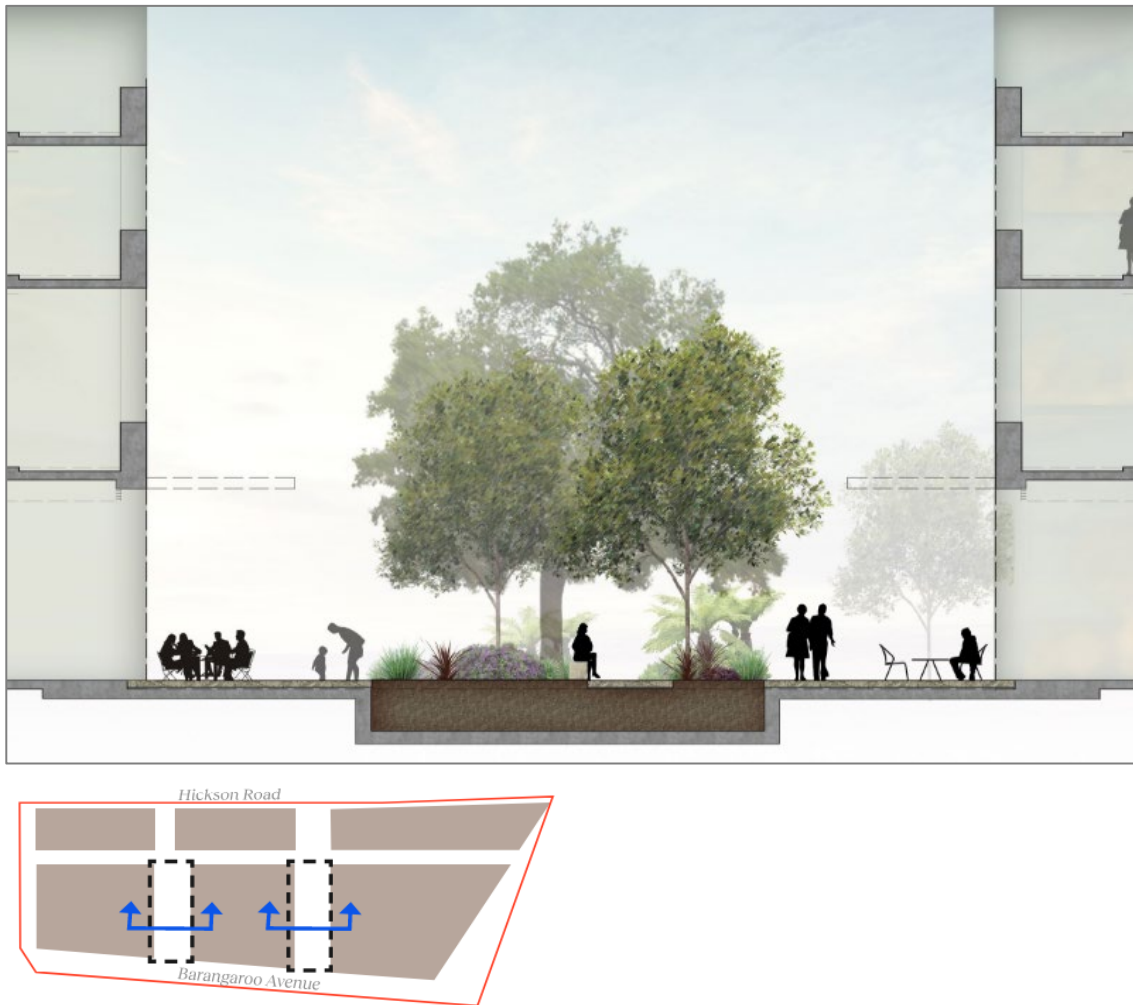


FIGURE 38 – PLAZA NORTH AND PLAZA SOUTH SECTION (SJB)

Lanes and Arcades

The amended MOD 9 proposal introduces two lanes and an arcade (see **FIGURE 39**), being:

- **North-South Pedestrian Lane** – 8m wide, open to the sky and providing a visual link from Hickson Park in the south to Nawi Cove and Barangaroo Station in the north.
- **East-West Pedestrian Lane** – 6m wide, open to the sky and providing a visual link from the internal north-south pedestrian lane to Harbour Park.
- **East-West Pedestrian Arcade** – 6m wide, covered and providing connections from Hickson Road to the internal north-south pedestrian lane.



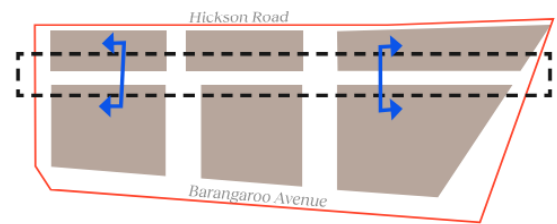


FIGURE 39 – LANES SECTION (SJB)

These lanes will be open to the sky and encourage pedestrian access and visibility through the site. They will intend to serve as a proportioned and intimate space for public movement away from the outer street edges, support outdoor dining and define building entrances. The public domain palette at these locations is to be unique from other spaces in the site.

The arcade will improve the porosity and visibility through the precinct, by providing an alternative yet protected pedestrian pathway to Harbour Park. It is intended this would be open 24-hours and be generous in height to encourage their activation.





FIGURE 40 – ARCADE SECTION (SJB)

Refinements to Hickson Park

As described in **Section 3**, MOD 8 modified the alignment of the northern boundary of Hickson Park, which was previously located entirely within Barangaroo South, into Central Barangaroo.

This had significant impacts on the land use configuration and development outcomes for Central Barangaroo. It further compressed the spatial extent of Central Barangaroo without any consideration of how the future built form was to be arranged within the area. The principles that drove the PACs decision related to general extension of the existing parkland, opening of views to the harbour and retaining solar amenity and was enshrined in Condition B3(1) of the Terms of Approval.

The exhibited MOD 9 proposal intended to reinstate Block 5 and the Hickson Park boundary as it existed prior to the MOD 8 proposal.

The exhibited configuration of Hickson Park was seen to facilitate a distinct city park with a clear connection to Harbour Park with a highly activated and permeable ground plane that generally retained solar access between 12pm and 2pm on the winter solstice that existing prior to MOD 8, while maintaining alignment with the PACs objectives.

Following review of the submissions raised during exhibition, and in consultation with the Department and GANSW, the Applicant revisited the strategy to Hickson Park and its alignment. The revised alignment of public



open space along Hickson park has been redistribution into the site to create an improved urban design outcome and connection to surrounding areas including Harbour Park and Nawi Cove.

Within the site, Hickson Park will be reduced by 1625m². As a whole, the size of Hickson Park has been reduced from 11,414m² under the current Concept Plan to 9,789m², as shown in **FIGURE 41**. The Hickson Park and Block 5 alignment has been amended to deliver the following outcomes:

1. Reduced building envelope areas within the Hickson Park alignment, including reduced height of buildings along the southern boundary ranging from RL 42.45, RL 35, RL 31.2, RL 33.75 and RL 21.5,
2. Ensure an aperture of no less than 32m from the Crown Casino podium and the south-western corner of Block 5,
3. Lower the height of the southern building to a maximum RL 21.5 to provide an active, human-scaled edge to Hickson Park and to prioritise daylight and solar access, and
4. Provide a high quality urban interface to Hickson Park to accommodate outdoor dining zones, protected public circulation paths and landscape elements that optimise amenity, considering wind amelioration and natural shading.

It is proposed to amend Condition B3 to reflect the revised alignment of Hickson Park. Specifically, the area of Hickson Park that can be overshadowed between 12pm and 2pm mid-winter has been reduced from 3,300m² (as exhibited) to 3,000m² (as amended).

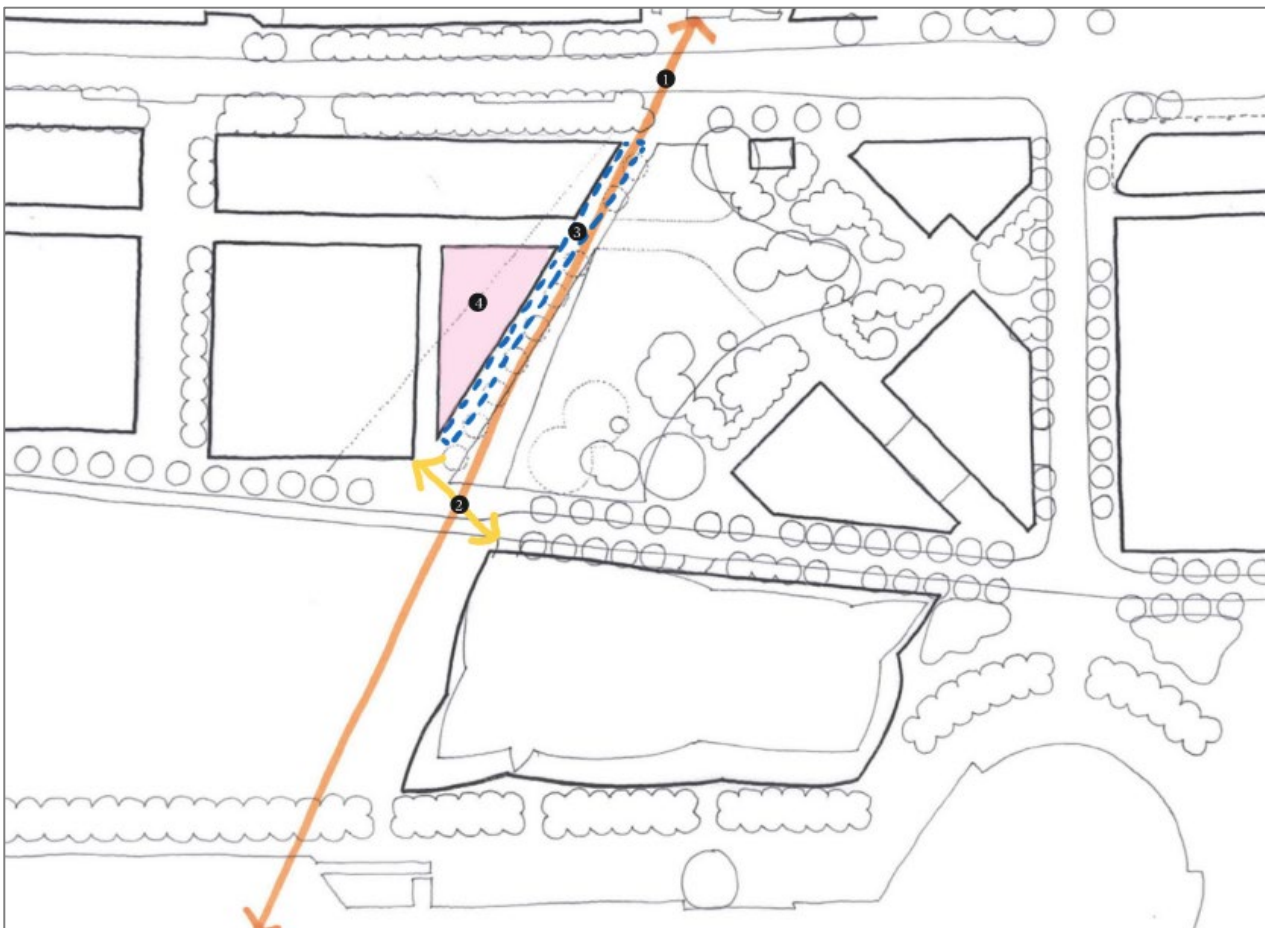


FIGURE 41 – PRINCIPLES FOR HICKSON PARK (SJB)



An assessment of solar impacts of the realigned Block 5 boundary is discussed in **Section 8.5**.

The changes made post exhibition are also improved by the deletion of Barton Street as a permanent two-way vehicular street, allowing Hickson Park to function primarily as a place for pedestrians.

The amendments to the MOD 8 line will:

- Create a park with a distinct character and function to that of Harbour Park,
- Maintain clear views to the water from within Hickson Park,
- Reduce wind impacts along the northern edge of the park by reducing the aperture of the southwest corner to 32m,
- Allow for high quality planting, materials, lighting and furniture that will be of an intimate scale, encouraging visitors to linger and enjoy the park, and

These key moves are considered to retain and reinforce the previous decisions of the PAC in their decision to realign and increase the size of Hickson Park. In particular, appropriate offsets have been designed elsewhere within the site to provide a net increase of open space across Central Barangaroo compared to the approved Concept Plan as outlined below.

Quantum of Open Space Compared to Approved Concept Plan

The changes improve the quantum of public domain and open space across the site compared to the current approved Concept Plan for Blocks 5, 6 and 7. As shown in **FIGURE 42**, it provides 5,674m² of open space and publicly accessible areas (hatched yellow). These are defined by the two east-west connections from Hickson Park to Harbour Park (10m and 20m wide) and the realigned Hickson Park boundary to the south.

The amended Concept Plan maintains the principles of the originally conceived east-west connections under the approved Concept Plan and expands one of these to be largely 20m wide (Plaza North). In addition, the north-south pedestrian link provides enhanced visual connectivity through the site and facilitates a breakup of the massing and building envelopes.

These additional spaces, combined with the adjustments to the Hickson Park boundary, results in a net increase of 1,264m² of open space across Central Barangaroo (6,939m² total). Furthermore, the interface of Block 5 to Hickson Park has been refined to minimise overshadowing. This is achieved due to the reduced building envelope heights at the southern edge (RL 21.5 and RL 31.2).



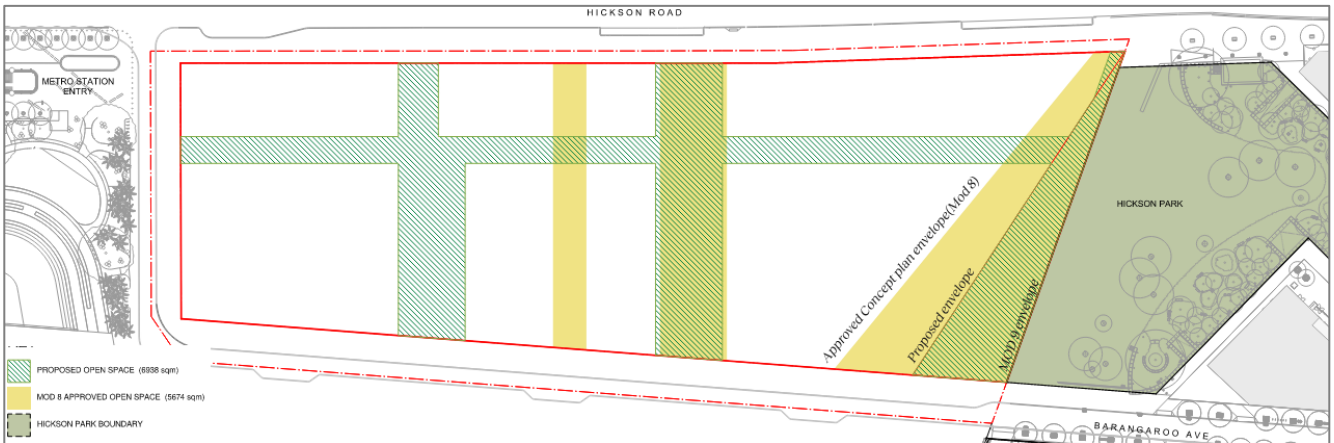


FIGURE 42 – OPEN SPACE AND PUBLIC DOMAIN DIAGRAM (SJB)



FIGURE 43 – ILLUSTRATION OF PROPOSED PLAZA SOUTH (SJB)

Overall, the redistribution of Hickson Park space will have an overall benefit to the larger public domain experience including the:

- Additional public domain that would not otherwise have been provided,



- Different types of public domain that are distinct and complementary to Hickson and Harbour Parks, and
- As distinct types of open space, they contribute to a more varied, interesting and active precinct.

6.4 Amended Urban Design Guidelines

The amended Concept Plan is accompanied by updated Urban Design Guidelines (**Appendix C**), that will be considered in future applications. The Guidelines are underpinned by a vision and complement the amended Design Excellence Strategy to ensure a fine-grain and attractive precinct is created that supports the needs of the local community.

The Design Guidelines provide considerations for both the built form and public domain and will allow designers to create buildings and landscaped areas that exhibit a high level of architectural design.

6.5 Revised Design Excellence Approach

The exhibited MOD 9 proposal sought a waiver to undertake a competitive design process on the basis the architects were considered to satisfy a waiver under Clause 19(4) Appendix 9 of the PEHC SEPP. This waiver was supported by a Design Excellence Strategy.

The amended MOD 9 proposal is supported by an amended Design Excellence Strategy (**Appendix C**), which complies with the general intent of Clause 19(3) of the PEHC SEPP. Key elements of the Design Excellence process include an architectural design competition, curatorial approach and a potential alternative strategy.

Competitive Approach - Competitions in NSW are well established. A detailed brief is prepared, up to 6 architectural teams are invited and paid to participate, and a jury of esteemed architects and property professionals is organised to judge.

It is proposed the competition process and composition of the jury will be developed and agreed in consultation with Infrastructure NSW and GANSW.

Curatorial Approach – A curatorial process is usually contemplated where the project is large and composed of several individual buildings. From a short list of proposed architects, agreed in consultation with Infrastructure NSW and the GANSW, the client group in collaboration with the Design Reviewers agree on the final makeup of the architectural team.

Potential Alternative Approach – Barangaroo Central offers the opportunity to support a dual approach to project procurement. This would represent a hybrid of the curatorial and competition approaches for certain buildings on site. I.e. Block 5 may be suitable for a competition approach, while Block 6 and Block 7 may be suited to a curatorial approach.

6.6 Revised Statement of Commitments

The amended MOD 9 proposal is supported by a revised SoCs (**Appendix A**), which has been updated to reference the updated technical reports and plans that will apply to Central Barangaroo. It will also continue to uphold ongoing responsibilities of the proponent to maintain the amenity of the precinct during construction and operation.



6.7 Revised Instrument of Approval

The amended MOD 9 proposal seeks to update the Instrument of Approval to reflect the changes to the proposed building envelopes for Central Barangaroo. This includes revised amendments to:

- Condition A1 Development Description,
- Condition A2 Development in Accordance with Plans and Documentation,
- Condition B4 Future Built Form,
- Condition B3 Future Built Form and Public Domain,
- Condition B5 Revised Design Principles,
- Condition B7 Community Uses,
- Condition B9 Envelope Amendments and Built Form Controls – Barangaroo Central
- Condition C1 Future Building/s on Block 5, and
- Condition C2 Design Excellence

Refer to **Appendix B**.

6.8 Precincts – Eastern Harbour City SEPP Amendment

As described in the submitted EAR, Barangaroo is identified as a State Significant Site in PEHC SEPP. Part 3 Appendix 5 of the PEHC SEPP sets out the applicable land use zones, height of buildings, GGFA and other relevant provisions relating to the planning of the site.

To facilitate the outcomes of project, the exhibited MOD 9 proposal sought several amendments to the PEHC SEPP (previously State Significant Precinct SEPP at the time of preparation) including:

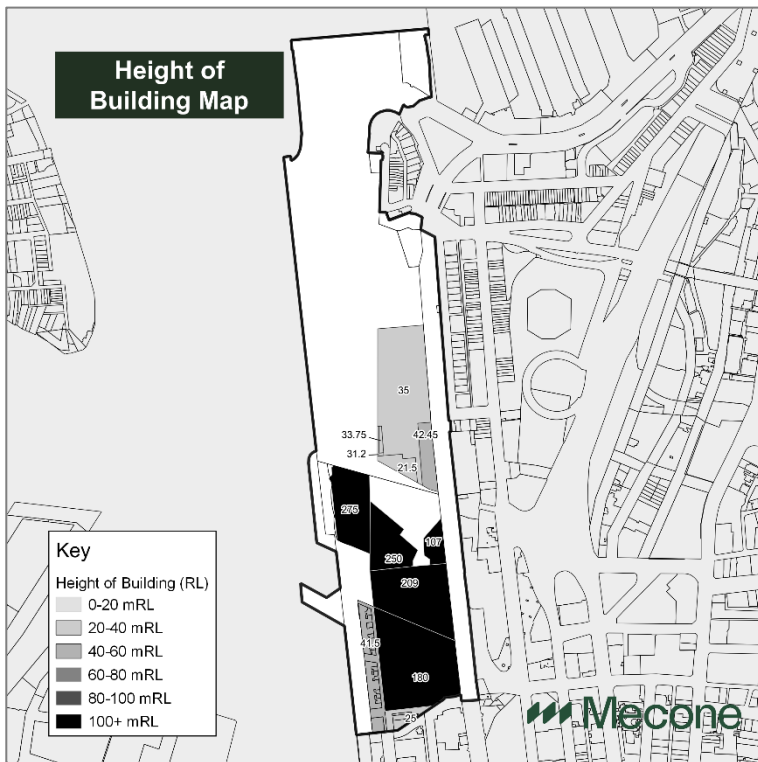
- **Land use zoning** – relocate the boundary of Block 5 to generally align with the Block 5 boundary that existed prior to MOD 8 and move the B4 zone boundary to the south, to align with this boundary.
- **Height of buildings** – Increase the maximum height of buildings across Block 5, 6 and 7 to align with the exhibited building envelope heights.
- **Gross floor area** – Increase the maximum GFA allocated to Blocks 5, 6 and 7.
- **Above and below ground** – introduce a provision to differentiate between above ground and below ground GFA.
- **Development in RE1 Public Recreation** – introduce provision to enable limited development below ground (basement) in the RE1 zone up to 25m.
- **Building overhangs and façade articulation** – introduce a provision to accommodate building overhangs and façade articulation elements outside the block boundaries.

The amended MOD 9 proposal has revised several of these facilitating amendments to the PEHC SEPP that reflect the revised building envelopes and modified Concept Plan. These are summarised in below:



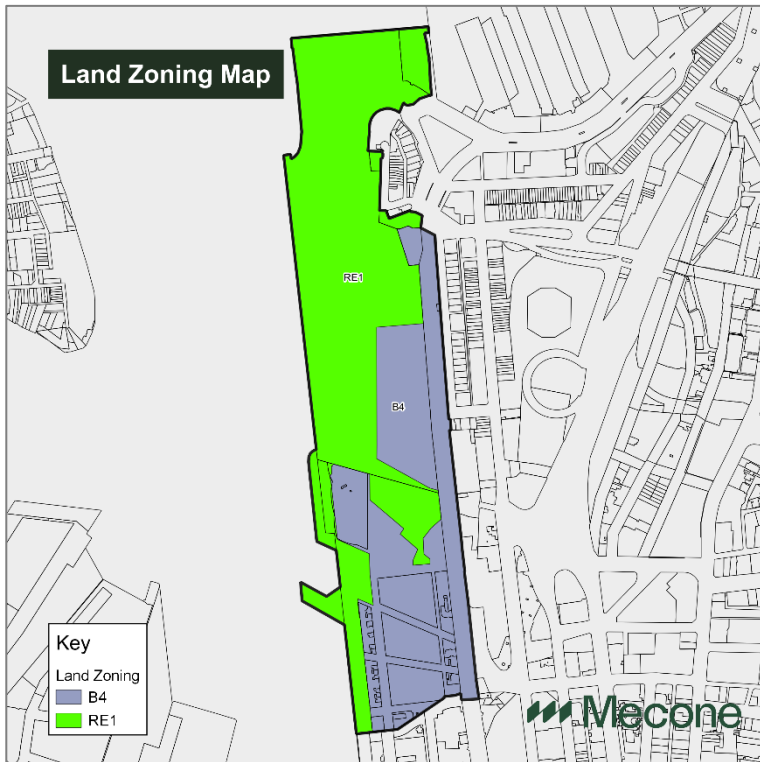
- Amendments to the SEPP mapping and provisions to align with amended building envelope GFA, building heights and land uses.
- Deletion of proposed SEPP amendment to allow GFA to extend 25m into the RE1 Public Recreation zone below ground level.
- Deletion of proposed SEPP amendment to allow building facades to extend by an additional 3m above ground and the 650mm façade articulation zone.

An updated Explanation of Intended Effect (**EOIE**) describing the amendments and accompanying mapping is provided in **Appendix T**.

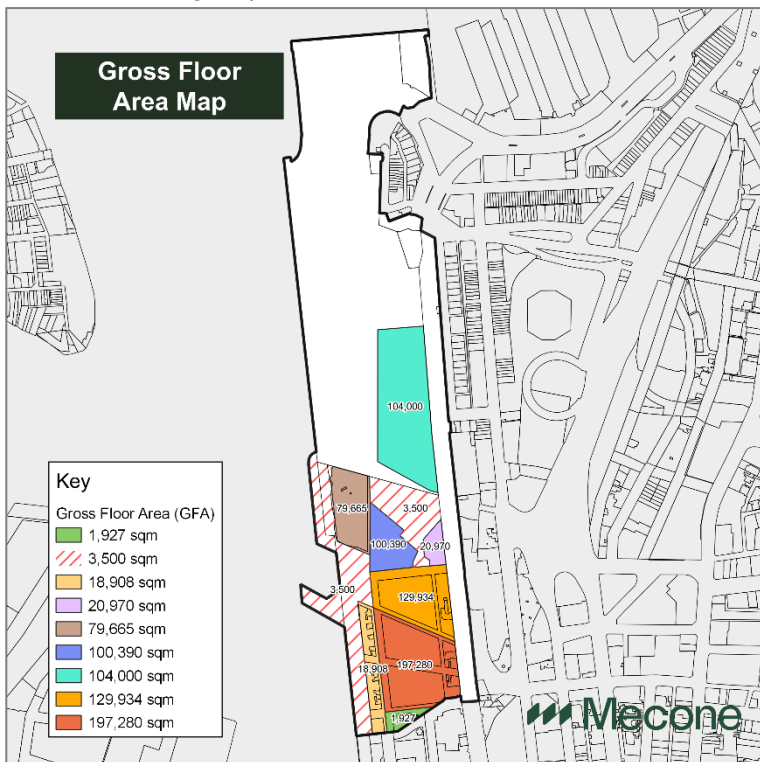


Amended Height of Buildings Map Extract





Amended Zoning Map Extract



Amended Gross Floor Area Map Extract

FIGURE 44 – AMENDED SEPP MAPPING (MECONE)



6.9 Staging

As described in the exhibited EAR, construction, opening and operation of development areas are underpinned by flexibility. All future detailed design and construction of buildings, roads and public spaces will be subject to separate approval process. An amended staging plan has been prepared at **FIGURE 45 (Appendix N)**, which depicts an indicative development staging up to 2029 including:

- Stage 1 – Basement North,
- Stage 2 – Block 7 above ground buildings,
- Stage 3 – Block 6 above ground buildings,
- Stage 4 – High Street pedestrian bridge over Hickson Road,
- Stage 5 – Block 6 and 7 public domain,
- Stage 6 – Basement south,
- Stage 7 – Block 5 above ground buildings,
- Stage 8 – Block 5 public domain,
- Stage 9 – Completion of Barangaroo Avenue and Hickson Road landscaping, and
- Stage 10 – Removal of Barton Street.

Components of the project to be delivered by others include:

- Harbour Park – scheduled for 2027 opening,
- Barangaroo Mero Station – scheduled for 2024 opening, and
- Barangaroo Reserve – fitout of culture land community uses scheduled for 2025 opening.



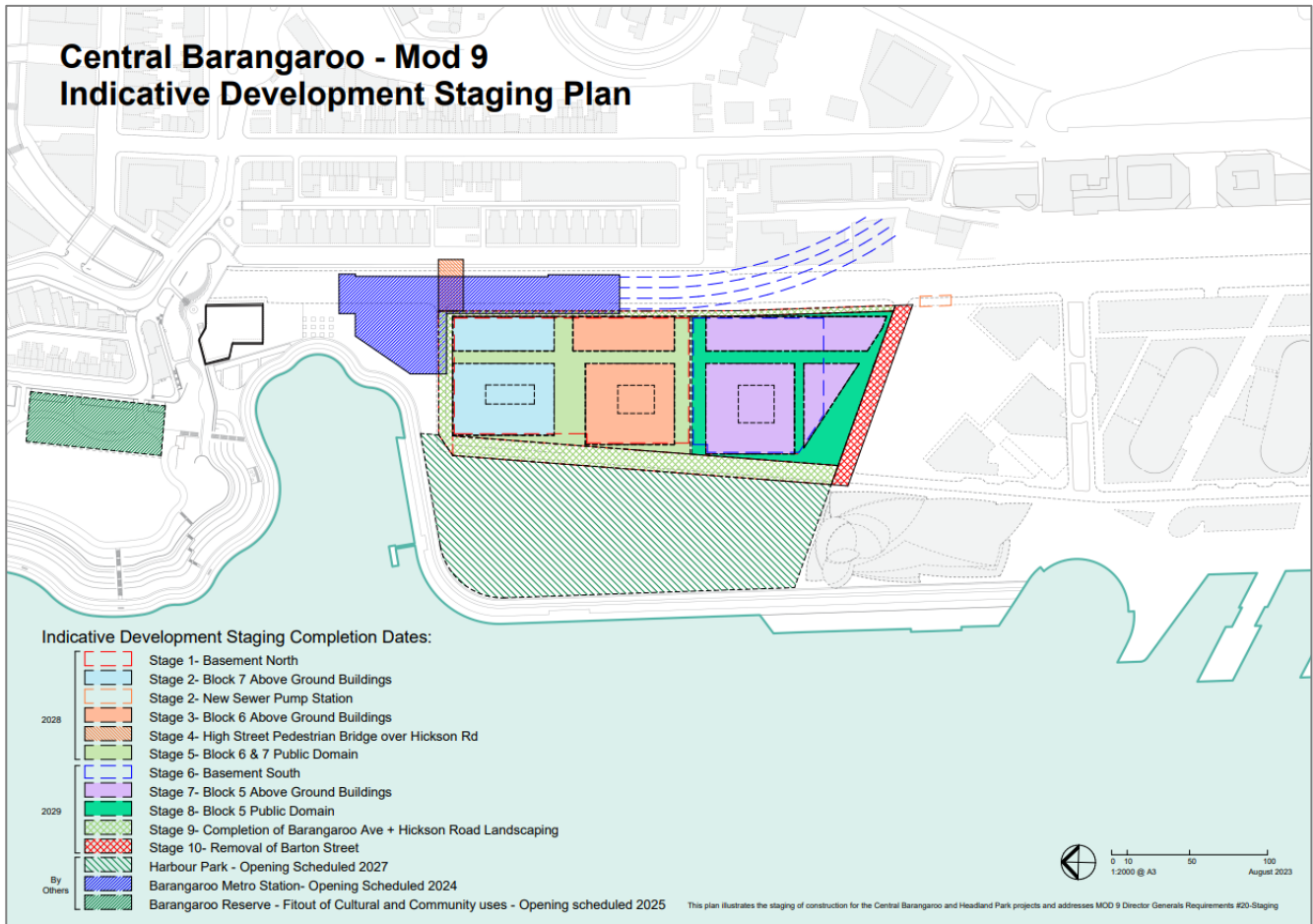


FIGURE 45 – REVISED STAGING DIAGRAM (AQUALAND)

6.10 Reference Scheme

The amended project is supported by a revised reference scheme, which demonstrates a proof-of-concept outcome that can be accommodated within the amended building envelopes. This includes consideration of potential basement layouts, access and loading arrangements, land use distribution and mix and typical floorplate layouts to be explored in future detailed SSDAs. Approval is not sought for the reference scheme.

A summary of the potential land use outcomes and built form of the reference scheme is provided in **TABLE 10** below.

TABLE 10 SUMMARY OF REFERENCE SCHEME

ELEMENT	DESCRIPTION		
	Above Ground	Below Ground	Subtotal
Land Use/GFA			
Residential	67,219m ²	2,581m ²	<u>69,800m²</u>
Retail	10,420m ²	4,346m ²	<u>14,766m²</u>



ELEMENT	DESCRIPTION		
Hotel	14,841m ²	1,057m ²	<u>15,898m²</u>
Community	428m ²	2,372m ²	<u>2,800m²</u>
Commercial		736m ²	<u>736m²</u>
Total	92,908m²	11,092m²	104,000m²

Building Program

Block 5	Three buildings ranging from 4, 8 and 10 storeys including food and beverage, hotel and residential uses
Block 6	Two buildings at 8 storeys including ground level community, retail and upper level residential uses
Block 7	Two buildings at 8 storeys including ground level retail and upper level residential uses
Basement	Vehicular entry via Hickson Road to three levels of basement containing community, recreation and retail uses and back of house. Integration with Barangaroo Metro Station Concourse via Metro Escalators into Block 7 (exact location to be confirmed in detailed applications)

Open Space and Public Domain (within site boundary)

Hickson Park Promenade	1,434m ²
2 x 20m plazas (Plaza North and Plaza South)	3,231m ²
8m north-south link (open to the sky)	1,785m ²
6m east-west lane (partial open to the sky)	489m ²
Total	6,939m²

The reference scheme is not subject to approval in MOD 9. The ultimate detailed design and mix will be the subject of future SSDAs across the site.



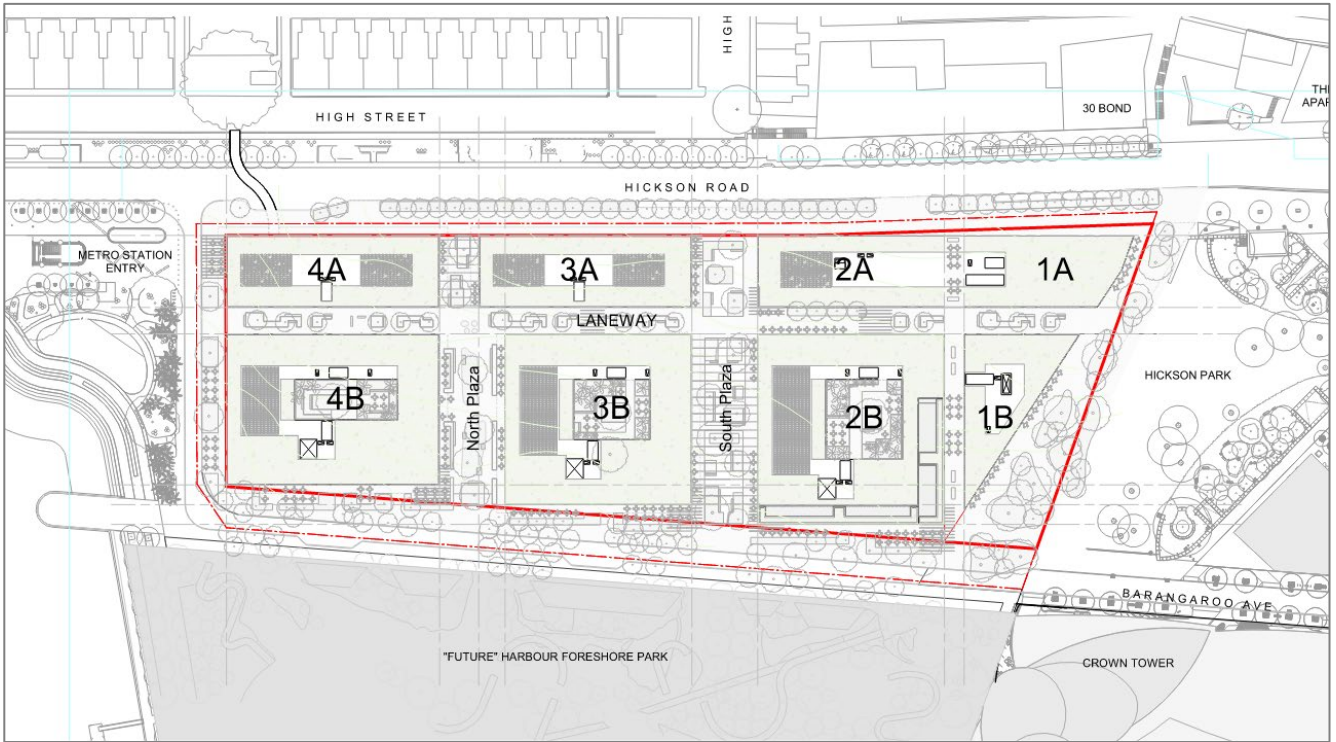


FIGURE 46 – REFERENCE SCHEME DIAGRAM (SJB)



FIGURE 47 – REFERENCE SCHEME LANDSCAPE MASTERPLAN (SJB, COLA STUDIO AND OCULUS)



6.11 Comparison of Changes

A comparative numerical summary of the approved Concept Plan, MOD 9 as exhibited, and as amended is provided in **TABLE 11** below. We note the changes depicted below establish the planning and design parameters that will inform future detailed SSDAs across the site.

TABLE 11 COMPARISON OF CHANGES

COMPONENT	APPROVED	EXHIBITED	AMENDED*	CHANGE**
Overall Development Area				
Project area	22ha	22ha	22ha	None
Maximum Envelope Height				
Block 5	RL 34	RL 44.5	RL 42.45	Reduced by 2.05 metres
Block 6	RL 29	RL 38.7	RL 35	Reduced by 3.7 metres
Block 7	RL 35	RL 73.7	RL 35	Reduced by 38.7 metres
Gross floor area				
Residential (max)	191,031m ²	190,031m ² (1,000m ² reduction)	237,031m ² (46,000m ² increase)	Increased by 47,000m ²
Tourist	76,000m ²	76,000m ²	76,000m ²	None
Retail	34,000m ²	71,800m ² (37,800m ² increase)	44,766m ² (10,766m ² increase)	Reduced by 27,034m ²
Active	5,000m ²	5,000m ²	5,000m ²	None
Community	10,000m ² <i>2,000m² within development Blocks 6 and 7</i>	Up to 19,000 max <i>2,800m² within development Blocks 5, 6 and 7 (800m² increase)</i>	Up to 19,000 max <i>2,800m² within development Blocks 5, 6 and 7 (800m² increase)</i>	None
GFA distribution	Block 5 - 29,688m ² Block 6 - 3,000m ² Block 7 – 15,000m ²	Flexible distribution and allocation permitted for all buildings in Blocks 6, 7 and 8 (below and above ground)	Flexible distribution and allocation permitted for all buildings in Blocks 6, 7 and 8 (below and above ground)	Control retained
Wintergardens	Not applied to Blocks 5, 6 and 7	Wintergardens to be excluded for the maximum residential and commercial GFA for Blocks 5, 6 and 7.	Wintergardens to be excluded for the maximum residential and commercial GFA for Blocks 5, 6 and 7.	Control retained



COMPONENT	APPROVED	EXHIBITED	AMENDED*	CHANGE**
Building overhangs	None	A building overhang up to 3m wide located above ground level, and/or façade articulation elements up to 650mm wide above ground level	None	Control deleted

*Amendments compared against the current Concept Approval (Approval column)

**Changes compared between the exhibited project (Exhibited column) and the amended project (Amended column)

A summary of the key quantitative and qualitative elements and environmental impacts associated with the amendments to the Concept Plan are detailed below.

6.11.1 Quantitative Elements

The Concept Plan as proposed to be modified also retains the essential quantitative elements of the current Concept Plan (as modified), including:

Land Use

- A mixed use precinct with no change to the range of land uses proposed.

Built Form (Design Principles, Heights and GFA)

- A layout derived from the long north south dimension of the site,
- Maximum building heights and GFA specified for each development block, and
- The maximum building heights within Development Block 1, Block 2, Block 3, Block 4A, Block 4B, Block X, Block Y and a variety of small buildings and structures in the public domain.

Open Space

- Approximately 11 hectares of new public open space, with a range of formal and informal open spaces serving separate recreational functions, including the naturalised headland at Barangaroo North, Harbour Park, Hickson Park adjoining Central Barangaroo and a continuous foreshore promenade (Wulugul Walk).

Public Domain

- A public domain framework that incorporates a foreshore promenade, new coves, parks, squares and civic places, streets and pedestrian connections,
- A street pattern and pedestrian connectivity that integrates with Walsh Bay, Millers Point, King Street Wharf and the Western edge of the Sydney CBD,
- The re-introduction of harbour water into the site (Nawi, Marrinawi and Waterman's Coves),
- A street network based upon two primary streets (Barangaroo Avenue and Hickson Road) with a variety of east-west secondary streets and laneways that prioritise movement of pedestrian and cyclists and a variety of pedestrian walkways between streets, and
- Active uses within and fronting the public domain.



The main quantitative differences from a planning perspective between the approved Concept Plan and proposed modifications across Barangaroo are limited to:

- Increase in the maximum total GFA by 65,332m² (10.84%), including:
 - Increase in the maximum residential GFA by 37,382m² (24.07%), though retaining the mixed-use character and the strong focus on employment-generating uses and cultural and community facilities,
 - Increase in the maximum retail GFA by 10,766m² (31.66%),
- Increase building height of Blocks 5, 6 and 7 from a maximum of RL 35 to RL 42.25 though retaining their medium scale appearance in the context of Barangaroo and specially the heights in Barangaroo South - Block Y (RL 275), 4A (RL 250) and 4B (RL 235), and
- Re-alignment of the boundary between Block 5 and Hickson Park to reduce the extent of boundary adjustment imposed at MOD 8, while retaining appropriate levels of solar access to of Hickson Park between 12pm – 2pm on the winter solstice.

6.11.2 Qualitative Elements

The Concept Plan as proposed to be modified also retains the essential qualitative elements of the current Concept Plan (as modified), including:

Key Strategic Drivers and Development Outcome

The proposed modifications do not alter (and do reinforce) the original Barangaroo vision:

“to create a new civic precinct, which reflects the regional and global position, economy and culture of Sydney”.

The proposed modifications will ensure the delivery of this strategic vision is responsive to the evolving land use context, current planning policy and the improved connectivity created by Barangaroo Station.

Overall Urban Structure and Land Use Concept

The modifications do not alter the distinction of three separate precincts (Barangaroo Reserve, Barangaroo South and Central Barangaroo), with the central precinct providing a mid-rise mixed use precinct connecting the very tall buildings of Barangaroo South with the naturalised headland to the north.

Development Footprint, Siting and Predominate Built Form

The footprints of Blocks 5, 6 and 7 will remain concentrated along the eastern edge of Central Barangaroo in alignment with the strong grid patterned of the western City Frame established by Hickson Road and Barangaroo Avenue. The envelopes will continue to frame a built form edge to adjacent public domain areas, providing ground level activity and integration throughout the precinct.

The Core Principle of a Mixed-use Precinct

A mixed-use precinct is maintained whilst also providing for embedded flexibility within the use configuration to allow for resilience to market conditions and fluctuations. This will ensure viable, and quality urban design outcomes can be provided on the site in response to demand.



Sufficient Housing and Community and Social Infrastructure

The proposed increase in the maximum allowance for residential GFA will allow the provision of a sufficient supply of housing in conjunction with a 2,800m² increase in GFA dedicated to community and social infrastructure, which will combine to reinforce the vibrancy of the residential community in this well connected CBD location.

50% of Barangaroo as Public Open Space

The modifications maintain the approved Public Open Space ratio of 50% and the spatial distribution of built form to open space across the precinct, with open space concentrated along the foreshore and headland.

Innovative and world-class approach to environmental sustainability

No change is proposed to the approved Central Barangaroo Sustainability Strategy.

Urban Design Guidelines

The key tenants of the design principles established in the original Concept Plan, and more generally those within the Skidmore, Owings and Merrill (**SOM**) Master Plan Framework are strengthened through the modifications, notwithstanding that these have no statutory weight.

6.11.3 Environmental Impacts

As detailed at **Section 9**, the environmental impacts associated with the proposed modifications will not result in any significant impacts that were not originally contemplated and deemed suitable through the determination of the Concept Plan (as modified). In particular:

Residential Amenity

The proposed envelopes facilitate residential development in accordance with both *State Environmental Planning Policy 65 – Design Quality of Residential Flat Buildings (SEPP 65)* and the accompanying Apartment Design Guide (**ADG**).

Solar Access

The proposed modifications will not significantly affect the solar access afforded any adjoining properties or public spaces, including Barangaroo Avenue, Harbour Park, Wulugul Walk, Hickson Cove and Hickson Park. While the proposed realignment of the boundary between Hickson Park and Block 5 will alter solar access to Hickson Park, such alteration is mitigated by the lowering of the southern building envelope to RL 21.5.

View and Visual Impacts

The built form, mass and scale of Central Barangaroo will be visually subservient to the dramatically taller buildings within Barangaroo South and will provide a transition to the lower scale naturalised forms in the north. The blocks within Central Barangaroo will be demonstrably modulated to provide visual interest and view corridors.



There will be no sky view obstruction from the Sydney Observatory, with no proposed buildings projecting above the land/sky interface.

Due to the low building heights proposed and the highly illuminated surrounding environment, there is not expected to be significant negative impact from the Central Barangaroo development on the ability of the Observatory to view the night sky.

Social and Economic Impact

Retail is still sufficient to service the daily needs of future residential occupants, commercial tenants, and visitors, providing an activated retail base across the precinct and ensuring a genuine mixed-use outcome within the Barangaroo precinct.

Post-COVID work practices have significantly reduced the demand for new commercial office space in Barangaroo. However, the very large quantum of commercial space already provided in Barangaroo South will ensure that Barangaroo remains principally defined by employment based uses.

The modifications will not result in any significant additional social or environmental impacts as previously assessed for the approved Concept Plan.

Other Environmental Impacts

There will be no adverse environmental impacts, including:

- Aeronautical operations,
- Contamination and remediation,
- Wind effects, and
- Traffic.

These are documented in **Section 9**. Stormwater, noise, vibration, air quality and infrastructure and services will be resolved at detailed SSDA stage.

In summary, notwithstanding the proposed modifications and having regard to the essential and material components of the approved development and consideration of the commonalities and differences, the development contemplated by MOD 9 will only result in a modest alteration to the Concept Plan and the Concept Plan subject to MOD 9 will remain substantially the same, on both a qualitative and quantitative basis, as the Concept Plan as last modified (up to and including MOD 11). MOD 9 will also not result in any material environmental, social or economic impacts over and above those previously assessed and considered suitable.

6.12 Further Engagement

Following exhibition of MOD 9, the Applicant has undertaken further consultation with the Department, GANSW and a range of stakeholders, summarised in **TABLE 12**.



TABLE 12 SUMMARY OF ENGAGEMENT

SUBJECT	DATE	ATTENDEES	AGENDA	FORMAT
Central Barangaroo MOD 9 – RTS Key Issues/ Building Envelope	30-Nov-22	KSRA, DPE, GANSW, INSW, AQL, Urbis, SJB	<ul style="list-style-type: none"> • Approved concept plan envelope/massing • Design guidelines comparative analysis 	In person
Central Barangaroo MOD 9 – RTS Key Issues	7-Dec-22	DPE, GANSW, INSW, AQL	<ul style="list-style-type: none"> • State Design Review Panel • Design Team • RTS Brief 	In person
Central Barangaroo MOD 9 – RTS Key Issues	16-Dec-22	DPE, GANSW, INSW, AQL	<ul style="list-style-type: none"> • Approved Concept Plan • Envelope Concept Plan approval • Hickson Park and Barton Street • Cantilevers • Streets and Laneways • Through site links • Barangaroo Avenue • Public Benefit Comms Strategy 	In person
Central Barangaroo - Approach to Mod 9 RTS	4-May-23	DPE	<ul style="list-style-type: none"> • Approach to Mod 9 RTS • Key issues 	In person
General Central Barangaroo Update	17-May-23	DPE, GANSW	<ul style="list-style-type: none"> • MOD 9 design development Key issues: MOD 8 line, view impact analysis. 	In person
General Central Barangaroo Update	31-May-23	DPE	<ul style="list-style-type: none"> • DPE Key Issues #1 - Approved Building Envelope 	Virtual
General Central Barangaroo Update	31-May-23	DPE, GANSW, SJB	<ul style="list-style-type: none"> • SJB presentation and Aqualand proposed approved envelope progress update 	In person
General Central Barangaroo Update	31-May-23	The Hon Steve Kamper MP, Minister for Lands and Property	<ul style="list-style-type: none"> • MOD 9 RTS overview 	In person
General Central Barangaroo Update	20-Jun-23	DPE, AQL, INSW	<ul style="list-style-type: none"> • MOD 9 RTS overview 	In person
General Central Barangaroo Update	29-Jun-23	DPE, GANSW, SJB	<ul style="list-style-type: none"> • MOD 9 design development Key issues: Mod 8 line, view impact analysis 	In person
General Central Barangaroo Update	6-Jul-23	The Hon Steve Kamper MP, Minister	<ul style="list-style-type: none"> • MOD 9 RTS overview 	In person



SUBJECT	DATE	ATTENDEES	AGENDA	FORMAT
		for Lands and Property		
Overview of MOD 9 RTS changes	12-Jul-23	Millers Point Resident Action Group, AQL, SJB	<ul style="list-style-type: none"> • MOD 9 RTS overview • View impact analysis • Heritage considerations • Local traffic and transport 	In person
Overview of MOD 9 RTS changes	13-Jul-23	National Trust, SJB, AQL	<ul style="list-style-type: none"> • MOD 9 RTS overview • View impact analysis • Heritage considerations 	In person
MOD 9 Pre-submission engagement	24-Jul-23	DPE	<ul style="list-style-type: none"> • MOD 9 RTS overview • Envelope comparative analysis 	Virtual
View impact on Highgate building	2-Aug-23	Millers Point Resident Action Group, Highgate Owners Corporation members, SJB	<ul style="list-style-type: none"> • View impact analysis 	In person
Overview of MOD 9 RTS changes	8-Aug-23	Lendlease AQL	<ul style="list-style-type: none"> • MOD 9 RTS overview 	In person
Overview of MOD 9 RTS changes	15-Aug-23	Crown Blackstone AQL	<ul style="list-style-type: none"> • MOD 9 RTS overview • View impact analysis 	In person
Overview of MOD 9 RTS changes	16-Aug-23	Langham Hotel AQL SJB	<ul style="list-style-type: none"> • MOD 9 RTS overview • View impact analysis 	In person
Overview of MOD 9 RTS changes	17-Aug-23	City of Sydney AQL SJB	<ul style="list-style-type: none"> • MOD 9 RTS overview • City of Sydney submission issues • Early works SSD applications 	In person
Overview of MOD 9 RTS changes	18-Aug-23	Sydney Skywatchers Powerhouse Museum AQL SJB	<ul style="list-style-type: none"> • Mod 9 RTS overview • View impact analysis • Heritage considerations • Sydney Observatory views and skywatching 	In person



SUBJECT	DATE	ATTENDEES	AGENDA	FORMAT
Overview of MOD 9 RTS changes, follow up on specific Millers Point issues	21-Aug-23	Millers Point Resident Action Group	<ul style="list-style-type: none"> View impact analysis Heritage considerations Local traffic and transport Hickson Park and public domain Design excellence Retail strategy 	In person
Overview of MOD 9 RTS changes	4-Oct-23	NSW Heritage Council	<ul style="list-style-type: none"> Mod 9 RTS overview View impact analysis Heritage considerations Sydney Observatory views and skywatching 	Virtual
Central Barangaroo MOD 9 RTS	4-Oct-23	Museum of Applied Arts and Sciences (Powerhouse Museum)	<ul style="list-style-type: none"> Overview of revised MOD 9 scheme View impact analysis Heritage considerations 	Virtual

The Applicant intends on undertaking additional consultation with key stakeholders following submission of the amendments to the Department.

6.13 Further Assessment of Impacts

Additional assessment has been undertaken by the Applicant to respond to submissions, outline changes and provide further assessment of the proposed amendments. Additional assessment of key issues raised is provided in **Section 8** of this Submissions Report.

Environmental assessments have also been undertaken in **Section 9**, which provides specialist reviews of the amended Concept Plan in relation to the changes made post exhibition. Additional assessment from specialist consultants is appended to this Submissions Report (refer to **Table of Contents**).



7 Response to Submissions

7.1 Response to the Department

TABLE 13 sets out a response to each issue raised by the Department in their letter dated 6 October 2022. It should be read in conjunction with the specialist information appended to this Submissions Report.

TABLE 13 DEPARTMENT COMMENTS

ISSUE	RESPONSE
Approved Building Envelope	
<p>You are requested to undertake further detailed modelling to ensure:</p> <ul style="list-style-type: none"> The existing Concept Approval is accurately depicted, and it considers the approved GFA, design guidelines, conditions of approval and statement of commitments relating to the site. An accurate comparative assessment of the potential impacts of the modification are provided and make any necessary revisions to the proposal. 	<p>Additional analysis has been undertaken by the Applicant in consultation with the Department to resolve this issue.</p> <p>The Department have acknowledged there is no set of approved plans showing the Concept Plan building envelopes for Central Barangaroo and acknowledges the Design Guidelines apply to future applications. This is discussed in Section 8.8.1.</p> <p>A separate comparative analysis has been prepared that considers the indicative block controls that informed the assessment of the original Concept Plan application and as discussed in Section 8.8.1.</p>
Built Form	
<p>The application has not sufficiently justified the proposed building height and massing (and associated impacts) and does not address the former Planning Assessment Commission findings and reasons for supporting increased height/density in Barangaroo South (MOD 8), in particular that:</p> <ul style="list-style-type: none"> Block Y (Crown) should book end the high-rise development in Barangaroo Central Barangaroo must maintain a building height that is consistent with the built form within the approved Concept Plan Central Barangaroo must be sympathetic to the height that is consistent with the built form within the approved Concept Plan Future development within Block 5 must ensure views are retained from Millers Point and Observatory Hill to the Western Part of Sydney Harbour (imposed under Condition C1) 	<p>The proposal has undergone significant refinement since public exhibition to address building height, massing and the former PAC findings.</p> <p>A summary of the heights for each block as exhibited and amended is provided below:</p> <ul style="list-style-type: none"> Block 5 <ul style="list-style-type: none"> Approved max RL 34 Exhibited max RL 44.5 Amended max RL 42.45 is reduced by 2.05m Block 6 <ul style="list-style-type: none"> Approved max RL 29 Exhibited max RL 37.7 Amended max RL 35 is reduced by 2.7m Block 7 <ul style="list-style-type: none"> Approved max RL 35 Exhibited max RL 73.7 Amended max RL 35 is reduced by 38.7m (no change from current approval) <p>Key changes to the building envelopes include:</p> <ul style="list-style-type: none"> The tower form located at Block 7 has since been removed, providing a height of RL 35 (no change from the existing)



ISSUE

RESPONSE

<p>It is recommended that the proposed height and massing of the proposal be reconsidered, and further options be explored to:</p> <ul style="list-style-type: none">• Better respect the urban form established by the Concept Plan of continuous low scale within Central Barangaroo allowing the headland to have visual prominence, rather than built form• Reduce visual and heritage impacts to Sydney Observatory, Observatory Park and Millers Point and Dawes Point village through better consideration of:<ul style="list-style-type: none">○ Key views to and from the Conservation area○ Views to the Harbour from Observatory Hill and western shores of Darling Harbour and Anzac Bridge○ Iconic views of the Harbour Bridge and Pyrmont and Darling Harbour and other viewpoints	<p>Concept Approval), ensuring Block Y maintains its role as the book end of high-rise development</p> <ul style="list-style-type: none">• The tallest element is situated in the southeastern portion of Block 5 (RL 42.45), which has been sited adjacent to the high density built form of Barangaroo South, which allows heights on Block 6 and Block 7 to maintain general consistency with the approved Concept Approval• As above, the refined heights are more aligned with the approved Concept Plan, notwithstanding the significant contextual changes that have occurred since 2007 <p>The massing ensures that view lines from Observatory Hill, The Bond Apartments and the Crown Podium are retained, with the southwestern portion of Block 5 providing a height of RL 35 largely consistent with the existing Concept Approval RL 34.</p> <p>Additionally, heritage context and vantage points have been considered as part of the refinements.</p> <p>Furthermore, Block 7, notwithstanding the rebalancing of the block size, reverts back to the Concept Approval height of RL 35.</p> <p>Refer to Section 8.1 and Appendix C.</p>
<p>It is recommended that the proposed height and massing of the proposal be reconsidered, and further options be explored to:</p> <ul style="list-style-type: none">• Better respect the urban form established by the Concept Plan of continuous low scale within Central Barangaroo allowing the headland to have visual prominence, rather than built form• Reduce visual and heritage impacts to Sydney Observatory, Observatory Park and Millers Point and Dawes Point village through better consideration of:<ul style="list-style-type: none">○ Key views to and from the Conservation area○ Views to the Harbour from Observatory Hill and western shores of Darling Harbour and Anzac Bridge○ Iconic views of the Harbour Bridge and Pyrmont and Darling Harbour and other viewpoints	<p>As discussed above, the height and massing of the proposal has been amended to align more closely with the approved Concept Plan. In particular:</p> <ul style="list-style-type: none">• The forms are predominantly low rise with heights being RL 35 (eight storeys) and up to RL 42.45 (ten storeys), which provides a transition of height from the Crown Podium and The Bond Apartments towards the headland.• The heights within the blocks have been reconfigured to:<ul style="list-style-type: none">○ Expand the width of the two east-west visual connections from Millers Point to the harbour in the form of Plaza North and Plaza South○ Reduced the height of Block 5 in the southwestern portion to RL 35 to maintain view lines from Observatory Hill to Darling Harbour and Anzac Bridge○ Reduced the height of Block 5 in the southwestern portion to RL 35, RL 33.75, RL 31.2 and RL 21.5 to enable views of the Harbour Bridge above the Crown Podium to be maintained <p>Refer to Section 8.1 and Appendix C.</p>
<p>The proposed building overhangs are considered to set an undesirable precedent, encroach into public space and result in a poor urban design outcome as they would:</p> <ul style="list-style-type: none">• Increase the building bulk and massing• Reduce the visual size of adjacent streets and the parks and appear overbearing from ground level	<p>Following discussion with the Department and GANSW the proposed overhangs and statutory amendments to accommodate these have been removed from the proposal.</p>



ISSUE

RESPONSE

- Increase overshadowing of public spaces including Hickson Road, Hickson Park and Harbour Park and internal east west streets
- Have the effect of privatising the public realm

As such, it is recommended that the proposed overhangs be removed.

The proposal provides enclosed and elevated retail arcades which have the effect of privatising the ground plane, internalising public spaces and creating an inward focused shopping centre environment in place of public streets.

It is recommended that further options be explored to:

- Reduce the extent of the elevated ground plane.
- Maximise public streets which are open to sky.
- Have a well-defined public/civic character.
- Provide visual links between Hickson Road and Harbour Park and between Hickson Park and Nawi Cove.
- Support mature tree planting.

The proposal has been amended to widen/expand the east-west connections under the approved Concept Plan for Blocks 5, 6 and 7, which comprise a 10m wide northern link and a 20m wide southern link open to the sky.

The amended Concept Plan slightly shifts the location of the southern link (Plaza South) and is retained as a 20m wide connection.

The northern link (Plaza North) is shifted further north and its width increased from 10m to 12m from Hickson Road and is then increased up to 20m towards Harbour Park. These will facilitate generous high-quality spaces for future users.

Other improvements from the exhibited proposal include:

- Introduction of the north-south laneway, which is 8m wide and will provide a visual link from Hickson Park to Nawi Cove. To enable flexibility in detailed applications, a flex-zone of 4m is proposed in addition to the 8m to allow the laneway to shift depending on future design and land use configurations. The north-south laneway will be open to the sky.
- As demonstrated in the supporting technical documentation, the proposed laneway and plazas are capable of supporting mature tree planting and a high-quality civic environment

Refer to **Section 6.3.6** and **Appendix C**.

Public Domain

The extension of Hickson Park was secured by the former Planning Assessment Commission to mitigate impacts and rebalance the public benefits accounting for the loss of Harbour foreshore and increased GFA within Barangaroo South in MOD 8. The proposal removes this additional public open space, increases overshadowing, obstructs views between Hickson Park and the water

It is requested that the approved park boundary alignment be retained to ensure the public benefits are secured to offset the impacts of MOD 8 and the park is of an appropriate civic scale, maintains and maximises solar access and enables views from Barton St and Hickson Park to Harbour Park and the Waterfront

Robust analysis and testing have been undertaken in consultation with GANSW to determine an optimal outcome for the future configuration and quality of Hickson Park.

When compared to the approved Concept Plan, the size of Hickson Park has been reduced from 11,414m² to 9,789m².

Significant offsets have been provided within the site to deliver a net increase of public open space of 1,264m² when compared to the approved Concept Plan.

Several design principles have been developed that will need to be satisfied in future applications including an aperture of no less than 32m between the Crown Casino podium and the southwestern building to provide open views to Harbour Park. The interface and design outcome of this space is enshrined in the amended Design Guidelines.

Additional testing has also been undertaken to compare solar access to Hickson Park. The analysis confirms the amendments to MOD 9 provides improved levels of solar access to Hickson Park for up to 2 hours.



ISSUE

RESPONSE

The encroachment of the basement into public streets and parkland limits deep and connected soil volume to support large tree growth and the unfettered flexibility of public land into the future.

It is recommended the extent of basement be reduced so it does not extend past the delivery boundary. It is also recommended that:

- There is significant and connected soil depth above any basement to ensure the longevity of mature street tree growth above.
- All services and emergency egress requirements for the basement areas are accommodated within the above ground envelope.
- Adequate provisions are in place regarding future ownership and management of the street.

The revised configuration of the Hickson Park alignment facilitates an outcome that is consistent with the objectives of the MOD 8 determination as discussed in **Section 8.5** and **Appendix C**.

The amended Concept Plan and reference scheme have been amended to ensure basements to not extend beyond the block boundaries and into the public domain.

Furthermore, the proposed SEPP amendment to allow below-ground retail into the RE1 zone has been deleted from the proposal.

Refer to **Appendix T**.

Public Benefits

The public benefits of the proposal are considered insufficient to support the proposed increase in density and the reduced size of Hickson Park. Existing public benefits of the Concept plan should not be diminished without an appropriate offset and additional public benefits should be provided commensurate with any proposed development uplift

The current area of open space and public domain contained with the approved Concept Plan for Blocks 5, 6 and 7 is 5,674m². This incorporates two east-west connections (10m and 20m wide) and the Hickson Park alignment introduced in MOD 8.

The amended proposal increases open space and public domain to 6,938m² and represents a net increase of 1,264m². The proposal also increases community uses across the site beyond the approved Concept Plan.

The additional public domain offering is considered sufficient to support the increase in density and minor reduction in the size of Hickson Park.

Furthermore, development in the Central Barangaroo will deliver significant public benefits. The contributions totalling \$226 million include:

- \$78 million to support cultural facilities and initiatives (financial contribution)
- \$61 million for public domain improvements (in kind)
- \$45 million for the embellishment of Harbour Park to world-class standard, including flexible event spaces to accommodate a range of cultural activities (financial contribution)
- \$8 million for Metro Station Southern entry
- \$2 million for fit-out for arts and community facilities
- \$11 million for urban arts contribution
- \$11 million in development contributions
- \$10 million for provision of pedestrian footbridge



ISSUE

RESPONSE

Please provide a direct comparison confirming which public benefits proposed under MOD 9 are in addition to public benefits already secured as part of the existing concept approval.

As described above, the amended proposal delivers a net increase of public open space by 1,264m² (22.2% increase) within Central Barangaroo when compared to the approved Concept Plan. The proposal also increases the provision of community uses beyond the approved Concept Plan.

Pedestrianisation of Barangaroo Avenue

The Department considers the removal of through-traffic along Barangaroo Avenue has the potential to:

- Remove the current clear street/circulation structure of the Barangaroo precinct
- Make the park feel privatised as an extension of the proposed shopping centre
- Result in more challenging service access

It is recommended that Barangaroo Avenue be retained as a two-way shared street and ensure the park retains a clear civic and separate public character.

As described in the amended Transport Management and Accessibility Plan (**TMAP**), it is proposed to retain Barangaroo Avenue as a one-way shared street. The Applicant considers this to maintain the principles of a clear street circulation around the site.

The shopping centre has been removed from the reference scheme and broader retail strategy for Central Barangaroo.

Furthermore, residential trips to and from Central Barangaroo will all use Hickson Road, where proposed basement car parking access is located, reducing the perception this will function as a private road.

The proposed traffic outcome for Barangaroo Avenue complements the features of the award winning design for Harbour Park by AKIN (undertaken separately to this approval process).

Design Excellence

It is recommended that the proposed Design Excellence Strategy be revised in consultation with government Architect NSW, to ensure it meets best practice

The Design Excellence Strategy has been revised in consultation with GANSW and has been appended to the Urban Design Report.

Refer to **Appendix C**.

Clarify details of any design review process undertaken for the proposed modification, including details of role/advice/process of engagement with the Barangaroo Design Advisory Panel.

As described throughout this Report, the applicant has engaged with GANSW extensively to refine the design post exhibition.

Design Guidelines

The proposed building envelopes are overly prescriptive and reduce opportunities for future flexibility. The design guidelines should be simplified to allow an appropriately sized envelope which allows for flexibility and provide clear parameters relating to envelope fill, street widths, projections, floorplate sizes etc to guide future detailed design.

The proposal has been amended to provide simplified and reduced building envelopes. This is accompanied by new Design Guidelines to guide future detailed applications.

The Design Guidelines are structured in a simple and clear manner to frame the key parameters and drivers of the Concept Plan.

Refer to **Appendix C**.

Land Use

Clarify how the proposed land use mix has been determined, including an analysis of the feasibility of the proposed quantum of retail and office floorspace in this location.

As described in **Section 6.3.4**, there have been major changes in the demand for commercial and retail uses globally.

The amended MOD 9 proposal increases the maximum allowance for residential GFA across Central Barangaroo and



ISSUE

RESPONSE

	<p>reduces retail (although still increased from the approved Concept Plan).</p> <p>This has been undertaken in response to changing market demand for retail and commercial office floorspace in Barangaroo and Sydney CBD and is supported by a Land Use Justification Report, which identifies how vacancy rates have shifted the use and demand for retail and commercial floorspace.</p> <p>The land use mix has resulted in a revised reference scheme, which demonstrates a proof of concept outcome within the proposed envelopes. It is important to note the reference scheme is not being approved as part of MOD 9.</p> <p>Additional, land use and floor plate option testing has been undertaken within the proposed building envelopes to demonstrate potential outcomes for retail, tourist and residential typologies that could be developed over the project's lifecycle. This demonstrates the building envelopes proposed can be flexibly applied over time and respond to changing market conditions.</p> <p>The modification does not approve the precise quantum or distribution of land uses across Blocks 5, 6 and 7. The ultimate land use mix will be determined in future detailed applications.</p> <p>Refer to Appendix C.</p>
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The future location of any cultural floorspace should be specified and located at Street level to ensure equitable access and contribute to activation and vibrancy of the public streets.

The proposal includes the provision of 2,800m² of GFA to be allocated for community uses.

The reference scheme demonstrates a hybrid allocation of community floorspace at ground (428m²) and below ground (2,372m²).

The precise location and nature of the cultural floorspace will be developed in detailed application stages.

Traffic

Noting the concerns of City of Sydney Council and location of the new metro station, explore options to further reduce car parking across the site

The proposal provides a revised TMAP, which provides an assessment of traffic and parking requirements of the reference design. It is noted parking is governed under the existing Terms of Approval and it is not proposed to alter the approved parking rates for the Concept Plan.

The ultimate car parking quantum will be determined by the various uses considered in future SSDA stages.

Refer to **Appendix G**.

SEPP Amendment

Clarify if it is intended to realign the northern boundary of the proposed built form within the SEPP amendment

The modification will amend the northern boundary as part of the SEPP amendment.

Refer to **Appendix T**.

Update the SEPP amendment to include all changes resulting from your response to submissions.

Changes to the SEPP amendment have been provided including refinements to the height of buildings, GFA and zoning map.

Refer to **Appendix T**.



ISSUE

RESPONSE

Building Envelopes/Proposed Plans

Revised building envelopes plans should include:

- A recognisable scale and include a scale in the legend.
- Annotated dimensions including distance from roads and site boundaries, widths depths and heights

Revised building envelope plans have been provided that provide this information.

Refer to **Appendix C**.

Reference Design

Provide a detailed reference design demonstrating how the proposed GFA fits into the envelopes, noting generous building articulation should be provided and the omission of wintergardens from GFA is not supported

A reference scheme has been prepared by SJB to demonstrate the proposed GFA fits within the envelopes.

We note the reference design depicts one of many potential land use mix outcomes for Central Barangaroo and the ultimate mix will be developed over time through detail applications.

The reference design allows for a 600mm façade articulation zone, which will be facilitated through the Design Guidelines in tandem with additional articulation features including awnings.

It is also proposed to maintain the exclusion of wintergardens from GFA similar to the approach adopted for Barangaroo South under Condition B4(4).

Provide indicative floorplans for any residential units and a detailed assessment against SEPP 65 demonstrating compliance with the apartment design guide

Indicative floor plans for residential apartments based on the reference scheme has been provided, which demonstrates consistency against key ADG criteria. This includes:

- Building separation
- Communal open space
- Natural cross testing
- Solar provision (via solar insolation testing)
- Deep soil

Based on the long-term delivery and potential uses that may change over time, it is not reasonable to undertake detailed ADG testing and compliance of every single building and theoretical land use configuration in detail. In short, it would represent an excessive level of detail for a Concept Approval.

Additional testing against the ADG, including those that relate to detailed building design, will be required in future detailed applications across the site.

Refer to **Appendix C**.

Gross Floor Area

GFA should be provided for each block (rather than an amalgamated total figure)

The amended proposal maintains the flexible application of GFA across all of Block 5, 6 and 7. This will ensure future development responds to changing market demands and creates a vibrant, activated precinct with higher occupancy and public amenity.

Refer to **Appendix C**.



ISSUE	RESPONSE
<p>Confirm the proposed maximum GFA for each block and provide a GFA schedule divided into blocks including:</p> <ul style="list-style-type: none"> Residential Retail Commercial Community floorspace within blocks Community floorspace within RE1 zone 	<p>For the purposes of the reference design a GFA schedule has been provided across each block and specifies the indicative use.</p> <p>The indicative land use distribution and mix that is represented in the reference scheme is not subject of this approval and will form part of separate future SSDAs.</p> <p>Refer to Appendix C.</p>

7.2 Response to Public Authorities

Submissions were received from a number of authorities and are summarised in **TABLE 14** below. It should be read in conjunction with the specialist information appended to this Submissions Report.

TABLE 14 PUBLIC AUTHORITY SUBMISSIONS

ISSUE	RESPONSE
Civil Aviation Safety Authority	
<ul style="list-style-type: none"> No comment – no objection to the proposal 	No further action required.
Department of Primary Industries – Water	
<ul style="list-style-type: none"> To clarify the proposed basement design to manage groundwater interactions To calculate the volumes of groundwater take during construction and operation, and to demonstrate the requirements of the water regulatory framework can be met To clarify triggers and mitigating measures to determine the need for additional waterproofing 	<p>At this stage it is envisaged that the NSW Aquifer Interference policy requirements will be applicable as management of ground water will be required during construction but not end state operation. A Water Access License will be required to facilitate the abstraction and discharge of groundwater.</p> <p>The rate of groundwater abstraction will be determined following a detailed groundwater investigation, monitoring, and analysis assessment. It should be noted as well that the management of the ground water during the construction phase of the project will form part of the contractor's construction management plan, DA requirements, and depending on the rate of ground water abstraction and discharge, the necessary permits will be obtained from the relevant authorities.</p> <p>Additionally, any ground water treatment prior to discharge will also be determined and the extent of treatment will largely depend on the receiving environment and adhering to the relevant authority requirements.</p> <p>Refer to Appendix I.</p>
Environment and Heritage Group	
<ul style="list-style-type: none"> No comment – the proposed modification is not likely to result in additional impacts to biodiversity values or increases in flooding risk at the site 	No further action required.



ISSUE**RESPONSE****Environmental Protection Agency**

- | | |
|---|--------|
| <ul style="list-style-type: none"> • The site is no longer declared under contaminated land management legislation • Interim advice is inappropriately described as a site audit statement • Further risk assessment will be needed as part of any future development assessment | Noted. |
|---|--------|

Department of Primary Industries – Fisheries

- | | |
|--|-----------------------------|
| <ul style="list-style-type: none"> • No comment - the modification application does not trigger the <i>Fisheries Management Act (1994)</i> and offers no further comment. | No further action required. |
|--|-----------------------------|

Heritage NSW

- | | |
|---|---|
| <ul style="list-style-type: none"> • Recommends consultation with the Aboriginal community be undertaken in accordance with the relevant requirements prior to finalisation of the concept plan and preparation of detailed applications • Recommends further assessment be undertaken in consultation with relevant Aboriginal parties | <p>The Engagement Outcomes Summary Report submitted with the EAR acknowledges there has been extensive engagement regarding the evolving Concept Plan for Barangaroo since 2009.</p> <p>MOD 9 does not seek approval for any physical works or buildings and the applicant is committed to undertaking appropriate levels of Aboriginal consultation in accordance with the relevant guidelines at detailed SSDA stage where a SEARs will be issued that specifies this be met prior to lodgement of the EIS.</p> <p>Furthermore, two early works applications are in the process for Central Barangaroo. These include Hickson Road interface (Phase 1 – SSD-39587022) and bulk excavation and site establishment works (Phase 2 – SSD-46922214).</p> <p>The Phase 1 application is accompanied by an Aboriginal Cultural Heritage Assessment (ACHAR) prepared by Urbis dated 1 August 2022, which states:</p> <ul style="list-style-type: none"> • <i>No previously known Aboriginal objects or Aboriginal places have been identified within the subject area and no new Aboriginal objects or Aboriginal places have been identified.</i> • <i>The subject area is located in a Disturbed Terrain landscape and consists of reclaimed land.</i> • <i>As the subject area consists of reclaimed land it is determined to have nil to low potential for the retention of Aboriginal objects. There is therefore little potential for harm to any Aboriginal objects due to the proposed works.</i> • <i>The subject area is assessed as having no Aboriginal cultural significance.</i> <p>The study area that formed part of this report was the Central Barangaroo area including Harbour Park.</p> <p>The applicant is committed to undertaking Aboriginal consultation in accordance with the relevant guidelines and legislation at detailed SSDA stage for the physical works and design of buildings.</p> |
|---|---|



ISSUE	RESPONSE
Heritage NSW (Heritage Council meeting resolution)	
<ul style="list-style-type: none"> Views and visual impact within the heritage setting Height of the tower exceeding the height of the domes of Sydney Observatory 	<p>A detailed response to the heritage matters is provided in the Heritage Impact Statement (HIS) addendum letter prepared by GML (Appendix M).</p> <p>An updated View and Visual Impact Assessment (VVIA) and HIS is provided, which provides an assessment of the amended Concept Plan against additional heritage views.</p> <p>Refer to Appendix D.</p>
Port Authority NSW	
<ul style="list-style-type: none"> No comment 	No further action required.
Sydney Airport	
<ul style="list-style-type: none"> No objection to proposed development 	No further action required.
Sydney Metro	
<ul style="list-style-type: none"> Requests consideration of the <i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i> Compliance with the Sydney Metro Underground Corridor Protection Guidelines Compliance with the existing Barangaroo/Metro Interface Agreement (BMIA) between Sydney Metro and INSW as amended on 2 September 2021, including the TfNSW Design Requirements Consultation with Sydney Metro 	<p>The application seeks approval to the Concept Plan only. It does not seek approval for the construction or excavation of any works.</p> <p>Future detailed applications involving physical works will be required to address compliance with the Sydney Metro Corridor Protection Guidelines.</p> <p>The application maintains compliance with the BMIA.</p> <p>The applicant intends to undertake additional consultation with Sydney Metro at detailed SSDA stages for physical works. It is noted the applicant will be required to engage with Sydney Metro as part of the Phase 2 early works application, which specifically seeks consent for the Sydney Metro interface.</p>
Transport for NSW	
<ul style="list-style-type: none"> Should seek an in-principle approval from Transport for NSW and Council for the proposed works, including traffic control signals, at the intersection of Hickson Road and Barton Street. Assessment of TfNSW Warrants for Provision of Traffic Signals should be completed to ensure that an agreement in principle' (AIP) can be issued by TfNSW 	<p>The delivery of the intersections on Hickson Road to access Central Barangaroo will be investigated and completed prior to the opening of each block within Central Barangaroo.</p> <p>The modification seeks amendment to the Concept Plan only and no physical works are proposed. It is anticipated agreement from TfNSW can be undertaken prior or during detailed applications lodged.</p> <p>The TMAP provides an overview of all transport measures in Central Barangaroo and the anticipated timeframes and responsibilities for implementation.</p> <p>Refer to Appendix G.</p>
Sydney Water	
<ul style="list-style-type: none"> Servicing strategy is required to service the proposed development 	<p>WSCE has been engaged to undertake the Civil Engineering, Hydraulic and Sydney Water Coordinator services. A review of the existing system capacity will be undertaken and servicing</p>



ISSUE	RESPONSE
<ul style="list-style-type: none"> Proposal should engage a hydraulic consultant in consultation with Sydney Water 	masterplan for the precinct will be developed as part of detailed application stages.
<ul style="list-style-type: none"> Develop a concept servicing proposal for water and wastewater services 	Refer to Appendix I .

7.3 Response to Council

Two submissions were received from Council, one on 8 August 2022 and on 24 August 2022. Comments are summarised in **TABLE 15**. It should be read in conjunction with the specialist information appended to this Submissions Report.

TABLE 15 RESPONSE TO COUNCIL

ISSUE	RESPONSE
Requests referral to the Independent Planning Commission (IPC)	
Council rejects the MOD 9 in its current form and requests that it be referred to the IPC.	Noted. It is at the discretion of the Minister to determine whether advice is sought from the IPC.
1. Objects to the height, scale and GFA of the site compared to the approved Concept Plan	
<p>1.1 Unacceptable visual impacts to and from Millers Point and Observatory Hill:</p> <ul style="list-style-type: none"> Narrow existing views from High Street Misleading comparison between MOD 8 and MOD 9 envelopes in the VVIA Condition C1 not supported with reference to PAC determination under MOD 8 to retain views from Millers Point and Observatory Hill to the western part of Sydney Harbour 	<p>The overall form and scale of the proposal has been reduced significantly. The tower form at Block 7 has been removed with the height of Block 7 remaining unchanged from the existing Concept Approval at RL 35.</p> <p>An updated VVIA has been prepared (Appendix D), which provides an assessment of additional views from the immediate and wider context.</p> <p>The proposal has been refined to increase the view corridor from Hickson Park to Harbour Park.</p> <p>The proposal has been amended to widen/expand the east-west connections under the approved Concept Plan, which comprise a 10m wide northern link and a 20m wide southern link.</p> <p>The amended Concept Plan slightly shifts the location of the approved Concept Plan southern link (Plaza South) and is retained as a 20m wide connection.</p> <p>The northern link (Plaza North) is shifted further north, and its width increased from 10m to 12m from Hickson Road and is then increased up to 20m towards Harbour Park.</p> <p>The view from High Street has been significantly improved with the increased widths of the east-west links.</p> <p>Extensive analysis has been undertaken in relation to the form, function and quality of the amended Hickson Park alignment. It demonstrates the amended MOD 8 line preserves views, maintains solar access and improves pedestrian wind comfort.</p> <p>Refer to Section 6.1 and Appendix C.</p>



ISSUE**RESPONSE**

1.2 Impacts to the legibility of surrounding built form. The 74m tower is at odds with surrounding landform as it is located at the low point of the cliff wall

The tower form at Block 7 has been removed.

The height of Block 7 has been reduced from RL 73.7 and RL 38.7 to RL 35, which is consistent with the existing Concept Approval.

1.3 Impacts to the city skyline and inconsistency with the city morphology, which transitions from the city centre to the Millers Point heritage area

The proposed envelopes and development blocks have been refined to provide an appropriate city skyline transition and tapering of built form from Crown Casino to Nawi Cove.

The tallest building envelope is located in the southeastern portion of the site in Block 5 at RL 42.45, which responds to the higher point of the cliff wall and taller built form at this location. The envelope then steps down at Blocks 6 and 7 to RL 35.

The revised building envelopes and blocks provide a framework for development to sit within the context of the city's morphology and sandstone cliffs along Hickson Road. The heritage considerations of this are discussed in **Section 8.3**.

1.4 Impacts of the 3m cantilever design over the public domain on Hickson Road, Street D, Barangaroo Avenue and Barton Street and associated visual impacts and transition between public and the private domain.

The proposed 3m cantilever design has been removed. No built form will encroach into the public domain.

A 600mm façade articulation zone is proposed however, will not contain GFA and is documented in the Design Guidelines. These are considered acceptable to facilitate improved building design and treatments at detailed stages of design and will be reviewed in context of the amended Design Guidelines.

Refer to **Appendix C**.

1.5 Additional height and GFA resulting in increased overshadowing to public spaces (Harbour Park and Hickson Park).

Shadow diagrams are provided, which demonstrates the overshadowing to Harbour Park and Hickson Park.

In relation to Hickson Park, Condition B3 stipulates that the amount of overshadowing of future built forms of Block 5 to Hickson Park is limited to a maximum of 2,500m² between 12pm and 2pm mid-winter.

To ensure detailed building designs are more closely aligned with the overshadowing levels identified in the amended Concept Plan building envelope, it is proposed to amend Condition B3 to increase the area allowed to be overshadowed from 2,500m² to 3,000m².

Refer to **Section 8.5.1**.

1.6 Proposed residential tower exacerbates wind impacts to the south. Further wind tunnelling is required to ensure open spaces are suitable for people to dwell and enjoy.

Additional wind modelling has been undertaken by RWDI with respect to the amended envelope.

The testing demonstrates the amended Concept Plan building envelopes achieve improved wind conditions along Hickson Park and internally when compared to the approved Concept Plan.

Refer to **Section 9.4** and **Appendix F**.

1.7 Does not support the exclusion of wintergardens from GFA calculations.

The proposal continues to seek exclusion of wintergardens from GFA for residential and commercial uses.

This approach was introduced via MOD 8 in Barangaroo South for residential and tourist uses. It is proposed to continue this approach to Central Barangaroo.



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RESPONSE

Wintergardens will be assessed on merit in future applications, having regard their objectives and design standards.

1.8 Height increases of 3-10m are not commensurate to the extent of GFA proposed above ground.

An Urban Design Report has been prepared by SJB, which demonstrates the distribution of above ground GFA within the reference design.

Refer to **Appendix C**.

2. Heritage Impacts

2.1 Additional visual assessment is required of Millers Point Conservation Area and Millers Point and Dawes Point Village Precinct.

An updated VVIA and HIS has been prepared that provides additional assessment from heritage views and the wider catchment.

The assessment on the distant views in the catchment area is inadequate and further tests should be carried out.

Refer to **Appendix D Appendix M**.

2.2 Cantilevered built form along Hickson Road and encroachment into the Millers Point Conservation Area.

As described in point 1.4, the proposed cantilevered built form has been removed from the proposal and the SEPP amendment has been deleted from the amended MOD 9 proposal.

2.3 Preference for a pedestrian bridge at the lowest point of High Street from a heritage and visual perspective.

The proposal has been revised to provide a pedestrian bridge at the lowest point of High Street (northern end of Block 7).

The proposed design of the bridge will be subject to future applications.

2.4 A proper diagnosis and conservation to the wall of Hickson Road should be carried out when works are undertaken as well as Hickson Steps being repaired.

This will be considered as part of future applications.

Residential Land Use Conflict

The residential tower in the north-western corner introduces a sensitive land use that is likely to prejudice the operation of the adjoining retail and food and drink premises as well as the use of Harbour Park, The Cutaway and Star Gazers lawn.

The residential tower would diminish the enjoyment of the foreshore precinct as a public asset for leisure, recreation, entertainment, culture and education.

The proposal has been revised to remove the tower form at Block 7 to RL 35 consistent with the heights currently approved under the Concept Plan.

MOD 9 does not seek approval for the distribution of land uses across Blocks 5, 6 and 7. These will be developed as part of future applications across the site.

Nonetheless, the proposed land use mix is not considered to prejudice the operation of adjoining retail, food and drink and users of harbour park or give rise to any unreasonable conflicts.

The approved Concept Plan already allows for the types of uses proposed to occur over time. To achieve a true mixed use outcome for the Project, these uses will support the activation, critical mass and vibrancy of the Project.

Any future applications for food and drink premises and retail will be required to address any potential amenity impacts and adopt appropriate mitigation measures, including a Plan of Management.

3. Extent and Location of Retail



ISSUE

Question the extent of retail given existing retail in Barangaroo South and whether internalised retail strategy is appropriate.

Concerns over clarity around final mix of uses being subject to future detailed applications.

RESPONSE

The ability to deliver the significant underground retail component originally planned by the Central Barangaroo Retail Developer has been impacted by a range of external factors following lodgement of MOD 9.

The amended MOD 9 proposal increases the maximum allowance for residential GFA across Central Barangaroo and reduces retail (although still increased from the approved Concept Plan). This has been undertaken in response to changing market demand for retail and commercial office floorspace in Barangaroo and Sydney CBD.

While the residential maximum GFA is proposed to be increased, this will remain as a cap at 75,000m².

The underground and internalised retail strategy has been revised significantly, with the overall below ground GFA being reduced from 28,166m² to 11,092m². The revised below ground GFA still contemplates some local retail being provided to support new residents and workers and will supplement the existing retail offering in Barangaroo South.

In relation to final mix of uses being subject to future applications, it is standard practice for concept approvals in the City of Sydney to not approve the proportion of land uses, precise total quantum of floor space and indicative floor layouts. It is acknowledged these are matters for detailed applications.

4. Changes to Hickson Park

While the conversion of Barton Street into a permanent street is generally supported, Council is opposed to the reduction in size to Hickson Park.

Detailed testing and analysis has been undertaken in consultation with GANSW in relation to the size, form and quality of Hickson Park. The outcome is an alternative alignment from that of the exhibited MOD 9 proposal and approved Concept Plan.

When compared to the approved Concept Plan, the size of Hickson Park has been reduced from 11,414m² to 9,789m². Based on the approved Concept Plan, the park is overshadowed by 3,836m² between 12pm and 2pm mid-winter.

The analysis undertaken demonstrates the revised built form massing of Block 5 will result in 2,561m² of Hickson Park overshadowed (26.1%). This represents an improvement of 7.5% when compared to overshadowing under the approved Concept Plan (33.6%).

Furthermore, the quantum of open space compared to the approved Concept Plan has increased, allowing for increased public amenity and accessible spaces and an appropriate offset for the minor reduction in area to Hickson Park. The amended proposal increases open space and public domain within the site to 6,938m² and represents a net increase of 1,264m².

The form and function of Hickson park will be assisted by Barton Street being a temporary street and will be removed.

In reviewing this approach, the principles of the PACs determination were used as a benchmark to determine its appropriateness.

Refer to **Section 8.5** and **Appendix G**.



ISSUE**RESPONSE****5. Public Domain**

6.1 The proposal to underground and internalise streets and connect them with the Metro station may hinder street activation and public life at ground level.

Pedestrian volumes, footpath widths, and vertical connections need to be carefully assessed and coordinated to ensure efficient and accessible navigation and clear sight lines.

The overall underground retail strategy has been reconsidered following exhibition. There is no longer an internalised below ground retail offering proposed, which supports the activation of the ground plane.

The overall below ground GFA has been reduced from 28,166m² to 11,096.8m². This may allow for some local convenience retail and to accommodate back of house and ancillary support areas for future uses.

Pedestrian volumes have been carefully considered in the updated TMAP prepared by ARUP (**Appendix G**).

The amended building envelopes have responded to ongoing discussions with ARUP to ensure public spaces are dimensioned to support pedestrian movements and support different functions.

The amended movement network, including an expanded east-west plaza, laneway and north-south link, will reinforce activation and public life at ground level.

6.2 Additional Crime Prevention Through Environmental Design (**CPTED**) objectives are required in relation to target hardening and hostile vehicle mitigation measures (**HVM**)

Additional CPTED principles are capable of being addressed in future detailed SSDAs to address surveillance, territorial reinforcement, activity/space management and access. This will be captured in detailed SSDA stages based on the proposed landscaping design at the time.

6.3 General support for a bridge to connect Barangaroo Central to the City. Concerns around parking in Millers Point. Council seeks involvement in the selection of location and design process of the bridge.

The location of the bridge is proposed to be shifted further north in alignment with the historic Millers Point bridge. The applicant will engage with the Council in relation to the bridge design at the relevant stage of delivery.

6.4 Nawi Terrace and Barangaroo Steps design concerns:

- Potential conflict of uses along Nawi Terrace
- Accessibility between the Metro Station upstairs to Nawi Terrace to be improved
- Location of cultural interfaces to be located on the street and not elevated to terraces
- Commercial and managed nature of Nawi Terrace and the cultural heart is inappropriate

The public domain and open space areas of MOD 9 have been revised to reflect a new hierarchy and function of spaces. These correspond with the amended building envelopes.

- All pedestrian connections will be at-grade
- Cultural interfaces will be located at street

The elevated terrace (Nawi Terrace) has been deleted.

6.5 If Barton Plaza is to be a public plaza, escalators and vertical transport must be integrated into buildings and not occupy public space.

The space previously known as Barton Plaza (Hickson Park interface) is capable of accommodating vertical transport into the building design as part of detailed applications.

6.6 General comments on Barton Street:

- Further information on the qualities of Barton Park
- Recommended size of pedestrian crossing be increased
- Clarification around cycleway connections along Barton Street

Barton Street is proposed to be removed from the amended MOD 9 proposal.



ISSUE	RESPONSE
<p>6.7 Harbour Park general comments including:</p> <ul style="list-style-type: none"> • Integration of plaza and wind conditions • Programming of spaces and tree canopy provision • Size of the open turf area • Clarification of GFA in harbour park in the form of a pavilion structure 	<p>The design and approval of Harbour Park is subject to a separate approval process and has recently been the subject of a design competition.</p> <p>Two small pavilions will be integrated into the park design to provide amenities within the park and provide opportunities for food and beverage.</p>
<p>6.8 Impact of increased heights and cantilevered forms on Hickson Road and the amenity use by the public. Request clear footprints and studies into the public domain along Hickson Road including street tree provision and how they relate to the building overhangs.</p>	<p>The cantilevered 3m building overhang has been removed and the SEPP amendment to facilitate this has been deleted.</p>
<p>6.9 Planning for the provision of stormwater infrastructure, impact of any flooding on building and underground thresholds, coordinated with the works underway in Hickson Road must be shown.</p>	<p>The amended proposal has been aligned with the works in Hickson Road.</p> <p>Separate applications for Hickson Road early works have been prepared. These include:</p> <p>SSD-39587022 – Early works – Hickson Road Interface – seeks consent for Sydney Metro/Hickson Road interfaces, relocation of stormwater and other services, excavation of land, partial demolition of existing spring wall capping beam along Hickson Road and localised remediation.</p> <p>SSD-46922214 – Central Barangaroo Early Works Phase 2 – proposes to undertake bulk excavation and site establishment works for the installation of the perimeter retention wall, and conduct remediation and archaeological investigations within the site. This will support a future basement structure, consistent with the parameters of the Concept Approval.</p>
<p>6.10 Ensure consistent public domain treatments similar to the rest of Barangaroo and in line with Council’s palette of materials and street furniture for the CBD.</p>	<p>Noted.</p> <p>Future applications can demonstrate consistency with this requirement an in line with the Design Guidelines, where relevant.</p>
<p>6. Landscape</p>	
<p>7.1 Remediation Action Plan does not confirm the locations in plan of vegetation at grade and VENM soil depths to support tree and plant maturity.</p> <p>Clarification on location and proposed soil depths.</p>	<p>A Remedial Action Plan (RAP) will be required at detailed SSDA stage for individual buildings/blocks when considering deep soil and their location.</p> <p>Nonetheless, the reference scheme submitted with the amended proposal indicates potential for deep soil pockets along the western boundary adjacent to Barangaroo Avenue and within Hickson Park.</p>
<p>7.2 40% green cover and 27% canopy cover.</p> <p>Planters to be designed in accordance with Landscape Code Volume 2.</p>	<p>Noted.</p> <p>Compliance with Landscape Code Volume 2 will be considered at detailed SSDA stage.</p>
<p>7.3 Design must allow for communal open space for 25% of the block area with solar and high quality communal uses.</p>	<p>The submitted reference schemes indicate potential for communal open space within future building forms and will be the subject of detailed applications.</p>



ISSUE	RESPONSE
<p>7.4 Interface of Hickson Road and Metro entries:</p> <ul style="list-style-type: none"> • Ensure awnings do not impact on delivery of Hickson Road footpath, avenue of street trees and street furniture at the western edge • Ensure universal access on new footpath and station entries to Council standards • Reduce reliance on hostile barriers at entries and Hickson Road carriageway • Public access and legibility of metro station entry from Hickson Park and Wurrugal Walk 	<p>Refer to Appendix C.</p> <p>Capable of being achieved subject to detailed design as part of future applications. The supporting reference scheme indicates the potential location of the Metro entries and the Hickson Road pedestrian bridge.</p>
<p>7.5 Additional comments regarding deep soil, Water Sensitive Urban Design, materials and hardscape, wayfinding and legibility, plant species, drainage and rainwater harvesting will be outlined in Council's further detailed submission to be provided.</p>	<p>These matters are capable of being achieved as part of future applications and in accordance with the revised Design Guidelines.</p>
<p>7. Transport and access</p>	
<p>8.1 Little information in relation to cycling provision or integration with surrounding open space.</p>	<p>The amended TMAP provides an overview of cycle routes and their integration with the public domain.</p> <p>As part of the SoC, a Public Domain Plan will be required to include further information relating to bicycle lanes and routes.</p> <p>Refer to Appendix G.</p>
<p>8.2 To address community concerns about demand for car parking with the extent of retail proposed, the proposal should design the retail strategy around a no-drive approach.</p>	<p>An amended TMAP has been provided, which provides an assessment of the traffic generation and impacts associated with the amended MOD 9 proposal.</p> <p>The overall findings of the amended TMAP indicated traffic volumes will be slightly lower when compared with was assessed for the exhibited MOD 9 proposal.</p> <p>It is important to note the changes since lodgement have amended the broader retail strategy for Central Barangaroo and that future detailed SSDAs will consider measures to promote public transport to minimise retail journeys.</p> <p>Refer to Appendix G.</p>
<p>8.3 Strongly encourage a commitment to a shared / consolidated basement to minimise traffic within the development and surrounding street network as part of the modification.</p>	<p>Noted.</p> <p>The indicative reference scheme identifies the ability for the basement in Central Barangaroo to be consolidated. The overall footprint and configuration of the basement will be subject to future detailed SSDAs.</p>
<p>8.4 Barton Street is generally supported as a permanent two-way street and Laneway B supported as a pedestrianised laneway.</p> <p>Barangaroo Avenue should be a pedestrianised boulevard only, without timed service vehicle access.</p>	<p>It is proposed that Barangaroo Avenue is a shared zone. It is anticipated that the volume of vehicles using Barangaroo Avenue will be low, due to:</p> <ul style="list-style-type: none"> • Residential trips to and from Central Barangaroo will all use Hickson Road, where proposed basement car parking access is located,



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RESPONSE

	<ul style="list-style-type: none">• Trips to Crown Hotel will be accessed from Watermans Quay intersection – these numbers are expected to be low and predominantly taxis, and• Service vehicles undertaking deliveries to retail shops are expected, but these will occur early in the mornings and the volume of vehicles is expected to be low. <p>Future applications will confirm the specific elements and operation of the shared zone.</p> <p>Refer to Appendix G.</p>
<p>8.5 Walking assessment should use the methodology set out in TfNSW's <i>Walking Space Guide</i> (2020) rather than Fruin which is only suitable for within constrained interchanges.</p>	<p>The TMAP has been amended to provide a high-level pedestrian assessment using the <i>Walking Space Guide</i> (2020).</p> <p>The assessment concludes the proposed pedestrian routes have significant levels of capacity and will be able to accommodate high levels of activity and trips generated by the Metro and Central Barangaroo.</p> <p>Refer to Appendix G</p>
<p>8.6 Cycle parking and end of trip facilities for all land uses, including visitor parking, should meet the Sydney DCP rates.</p>	<p>The SoCs outlines a minimum quantum of off-street bicycle parking and shower facilities to be provided with development. Future SSDAs will be required to demonstrate consistency with the SoCs.</p> <p>Refer to Appendix G</p>
<p>8.7 Sydney DCP car share rates should be applied. The applicant should consider the balance between providing the car share bays on-street and off-street.</p>	<p>The TMAP has been amended to address car share rates.</p> <p>Based on the indicative reference scheme, approximately 40 car shares spaces would be required. We note however, Condition C4 does not specify a requirement for car share rates.</p> <p>Additional considerations have been made to a reduction in on-street parking within the site, with the amended proposal indicating a reduction of 14 spaces compared to the previously exhibited proposal.</p>
<p>8.8 Commit to providing adequate charging facilities for electric vehicles.</p>	<p>The TMAP has been amended to allow for the installation of EV charging points. This will be considered at detailed SSDA stages.</p>
<p>8.9 Consider the likely demand for kayak storage and provide adequate facilities.</p>	<p>Facilities for kayak storage, including their location, will be considered as part of detailed application stages.</p>

8. Public art

A future public art strategy for should be developed that supports the implementation of projects identified in the Barangaroo Public Art and Cultural Plan.

Consistent with the aims of the Barangaroo Public Art and Cultural Plan and the City of Sydney's broader aims for the Eora Journey: Recognition in the Public Domain Program and Yananurala | Walking on Country (Harbour Walk), and the projects outlined in the Harbour Walk Storytelling Report endorsed by Council in December 2019.

Requirements for a Public Domain Plan are identified in the amended SoCs. This is to incorporate a Public Art Strategy.



ISSUE**RESPONSE****9. Public benefit**

Lack of increased public benefit that is commensurate with the proposed uplift within Central Barangaroo, and no affordable housing is provided.

Public benefits have been identified holistically throughout the evolution of planning for Barangaroo with agreement that the various benefits will be delivered in different ways in each precinct. The contribution of \$226 million provided by Central Barangaroo is significant and will complement the vision for Barangaroo.

Central Barangaroo is a cultural and arts led precinct, with flexible zoning to accommodate residential, tourism and retail uses. It provides links between the cultural and open spaces of Barangaroo Reserve and Barangaroo South. Development in Central Barangaroo will deliver significant public benefits totalling \$226 million include:

- \$78 million to support cultural facilities and initiatives (financial contribution)
- \$61 million for public domain improvements (in kind)
- \$45 million for the embellishment of Harbour Park to world-class standard, including flexible event spaces to accommodate a range of cultural activities (financial contribution)
- \$8 million for Metro Station Southern entry
- \$2 million for fit-out for arts and community facilities
- \$11 million for urban arts contribution
- \$11 million in development contributions
- \$10 million for provision of pedestrian footbridge

The proposal also continues to increase the permissible community and active use GFA up to 24,000m² including allocation of up to 18,000m² of potential community uses to the Cutaway, 1,000m² of potential community uses in the RE1 zone and retention of 5,000m² GFA for active uses in the RE1 zone. Despite a reduction of GFA following exhibition, the public benefits remain unchanged.

Commitment 35 of the SoCs requires a total of 3% of residential floorspace in Barangaroo South to be allocated to key worker housing.

Barangaroo South remains the primary contributor to affordable housing delivery with 3% of residential floorspace as affordable housing. This includes 0.7% offsite and 2.3% onsite.

Barangaroo Reserve (i.e., the headland) provides 55% of the open space in Barangaroo and accommodates 'The Cutaway', a distinctive cultural and arts space.

10. Lack of information to confirm that a Section 75W request is valid

There is no further information provided to confirm that Section 75W is available for Modification 9. Council requests confirmation that the requirements of the

Pursuant to clauses 3C(1) and clause 3BA(3), MOD 9 remains a modification request under Section 75W of the EP&A Act.

This is discussed in **Section 8.4.1**.



ISSUE**RESPONSE**

STOP Regulation have been met and that the Section 75W request is valid.

24 August 2022 additional matters

1. Provision of affordable housing given the uplift being proposed.

The provision of affordable housing is only one of a suite of public benefits being delivered across Barangaroo. The total package of public benefits has been identified holistically throughout the evolution of planning for Barangaroo with agreement that the various benefits will be delivered in different ways in each precinct.

Barangaroo South is the primary contributor to affordable housing delivery with 3% of residential floorspace as affordable housing (0.7% offsite and 2.3% onsite).

Central Barangaroo is a cultural and arts led mixed use precinct and the proposed modifications including an increase in the provision of GFA dedicated solely to community use by 2,800m² within Central Barangaroo.

While no affordable housing is proposed within Central Barangaroo, the significant other public benefits specifically related to Central Barangaroo have a total value of \$226 million.

2. Consider Council's 10 community, recreational and cultural needs recommendations for Barangaroo Central.

Noted. The cultural needs identified are capable of being considered as part of a future applications for Central Barangaroo. These could incorporate a range of elements including indoor courts, flexible indoor/outdoor spaces, rehearsal studios, live music, multi-purpose community facilities, children play spaces.

An addendum to the previously submitted Community and Cultural Strategy Assessment has been prepared, which confirms that the amended Concept Plan is capable of meeting the suggested items.

Refer to **Appendix R**.

3. Clarification on the role of the Design Guidelines and building envelopes proposed in relation to the GFA.

The amended Concept Plan is supported by refined Design Guidelines, which support the desired built form outcomes explored as part of the amended building envelopes.

The Design Guidelines have purposefully remained objective based to facilitate detailed design within the building envelopes during detailed SSDA stages.

The amended building envelopes support the GFA being proposed, as evidenced by the reference scheme demonstrating a proof-of-concept outcome within the building envelopes.

Refer to **Appendix C**.

4. Additional landscape matters including:

- Deep soil is to be provided in consolidated zones in public areas and outside of the basement to support medium to large trees. Extent of basement not supported.
- Contribute to canopy targets by 2050 and provide higher proportion of medium to large sized canopy trees

The proposal has been amended to incorporate capacity for deep soil across the site. These include deep soil zones along the western boundary adjacent to Harbour Park and in the northern boundary of Hickson Park.

The indicative deep soil plans submitted in the Urban Design Report (**Appendix C**) indicate potential for deep soil.

In relation to canopy targets, the amended building envelopes and through-site links that are open to the sky, have capacity to



ISSUE	RESPONSE
<ul style="list-style-type: none"> Clarity required on communal open space provision and role of open space in the Design Guidelines. Green roof requirements and further detail. 	<p>support additional mature tree planting. The east-west through-site links depict a 6m wide hard/soft landscaping zones over basement to support mature trees and plantings.</p> <p>Specific details relating to the green roofs will be provided at detailed application stages. Nonetheless, the indicative reference scheme shows potential for solar panels and green roofs.</p>
<p>5. Additional transport and access matters:</p> <ul style="list-style-type: none"> All internal streets should be designed for low speed vehicle movements. Concerns relating to car parking provision and impacts on Millers Point Clarity required on number of on-street parking spaces <i>TfNSW Walking Space Guide (2020)</i> and inclusion of background pedestrian flows 	<p>All internal streets are capable of being designed for low speed vehicle movements and will be explored in further detailed design stages.</p> <p>As described in the submitted TMAP, the updated reference scheme provides a reduction in car parking as a result of changes to the underground retail strategy.</p> <p>20 on-street parking spaces are proposed on Hickson Road. This is based on the draft Hickson Road masterplan design.</p> <p>A high level assessment of the <i>Walking Space Guide (WSG)</i> has been provided to ensure sufficient walking space in the street design and to allow for interactions between people walking and vehicles</p> <p>The assessment confirms the routes have significant levels of capacity to accommodate high levels of activity and trips generated by the Metro and Central Barangaroo.</p>
<p>6. The proposal and has not been adequately addressed in the sky view impact assessment.</p>	<p>An amended Sky View Impact Assessment has been prepared (Appendix E) that addresses this issue.</p>

7.4 Response to Specialist Planning Submissions

TABLE 16 provides a response to issues raised by specialist planning. It should be read in conjunction with the specialist information appended to this Submissions Report.

TABLE 16 SPECIALIST PLANNING SUBMISSIONS

ISSUE	RESPONSE
<p>Hills Thalís</p> <p>The proposal fails to include public open space. In turn, there is no connection with the scale in Barangaroo Central. Hickson Park now takes the form of an isolated and inset public open space area that has poor edge definition and is burdened by a fourth storey private car park beneath.</p>	<p>The amended Concept Plan provides a total of 6,939m² of open space. This includes 1,434m² of space that interfaces to Hickson Park, and 5,505m² that sits between the proposed envelopes.</p> <p>This represents an increase of 1,264m² of publicly accessible open space compared to the approved Concept Plan.</p> <p>The Hickson Park alignment has been amended following exhibition to support improved integration with Central Barangaroo. In particular, the provision of a new north-south pedestrian link will provide access from Hickson Park to Nawi Cove and establish a visual link through the site.</p> <p>Basement parking is not subject of the MOD 9 application. The reference scheme demonstrates no basements will be located below Hickson Park.</p>



ISSUE**RESPONSE**

Refer to **Appendix C**.

The proposal will overshadow Hickson Park. The shadow analysis omits the impacts caused by the Crown Casino. The park will be heavily overshadowed in mid-winter.

Overshadowing analysis has been provided, which considers impacts generated by development in Barangaroo South.

Due to the siting of Hickson Park in relation to the site and surrounding development on the eastern side of Hickson Road, overshadowing is unavoidable.

However, the amended Concept Plan results is significantly less overshadowing compared to the exhibited Concept Plan and also reduces morning shadows to Harbour Park.

Refer to **Appendix C**.

The proposal is excessive in bulk and scale.

The proposal has been refined to provide a significantly reduced bulk and scale. The design moves that have contributed to this include:

- The tower form located at Block 7 has since been removed, providing a height of RL 35 (no change from the existing Concept Approval), ensuring Block Y maintains its role as the book end of high-rise development
- The tallest element is situated in the southeastern portion of Block 5 (RL 42.45), which has been sited adjacent to the high density built form of Barangaroo South, which allows heights on Block 6 and Block 7 to maintain general consistency with the approved Concept Approval
- Expanding the width of approved east-west links and the creation of a new north-south pedestrian connection to break up the mass
- Removal of the 3m cantilever/building overhang forms

Additionally, heritage context and vantage points have been considered as part of the refinements.

Refer to **Appendix C**.

The proposal prioritises 'view capture' as opposed to the maintenance of visual links from the city to the harbour. The proposed increase in height to Blocks 5, 6 and 7 severs the relationship between the harbour and Observatory Hill. The sightlines between Observatory Hill and the surrounds will be impacted by the proposal.

The massing ensures that view lines from Observatory Hill are retained, with the southwestern portion of Block 5 providing a height of RL 35 largely consistent with the existing Concept Approval RL 34.

An updated VVIA has been provided, which demonstrates views from Observatory Hill to the harbour have been improved following design changes from exhibition.

The amended proposal now provides a 'Moderate' view impact rating, compared to 'Moderate to High' of the previously exhibited proposal.

Refer to **Appendix D**.

The sightline between Observatory Hills and White Bay will be blacked and views to Observatory Hill from the west would be lost.

As described above, the amended Concept Plan will maintain extensive harbour views from Observatory Hill. This is a result of reduced heights of the Concept Plan and in particular, removal of the tower form at Block 7.

The design outcome for Hickson Road is poor because it prioritises inwards focused activity (typical of a large

The amended Concept Plan provides a fine-grain urban treatment, created through the range of new pedestrian connections and plaza spaces. The building envelopes that are



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shopping centre) rather than focusing on active frontages.

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created around these spaces has the potential to support improved activation around all site edges.

Hickson Road presents the only viable location for basement access and loading areas. The reference scheme indicates a consolidated loading zone to minimise blank zones and prioritise active uses on the edges.

This will be further explored in detailed DA stages.

The underground shopping centre and broader retail strategy envisaged under the originally submitted MOD 9 proposal has been removed.

The proposal represents a monolithic singular development rather than an urban framework that benefits from articulation and varying forms. The alignment of Barangaroo Avenue is impacted by the 3m deep multiple storey overhang. No enclosed floor space should be permitted to overhang Barangaroo Avenue. Barangaroo as modified by the proposal will contribute poorly to the urban design of the precinct.

The 3m building overhang zone has been removed following exhibition. As a result, no floorspace is capable of being proposed over Barangaroo Avenue.

There is little transparency surrounding the details of the design excellence process and Scentre Group's role in the selection of the final design. The achievement of design excellence is questionable given there is little variety in the schemes that competed in the design competition, with priority given to an outdated monolithic shopping centre model. The proposed quantity of community floor space is inadequate relative to the scale of the development and Barangaroo as a whole.

As described earlier, Scentre Group has been removed as the retail architect. The architecture at ground level will now be the responsibility of the individual building architects, which will be selected in consultation with INSW and GANSW.

The exhibited Design Excellence Strategy will be amended to reflect changes to the scale, character and mix of the development, and in response to feedback provided by DPE and GANSW.

The Central Barangaroo Developer intends to explore a range of alternative design strategies in consultation with GANSW and INSW and not rule out a non-traditional approach that promotes a highly coordinated process to create an integrated precinct that supports architectural diversity and design excellence outcomes. The process to be considered may include:

- Competition Approach
- Curatorial Approach
- Hybrid of Competition and Curatorial Approach

Given the nature of the project we believe that the site could benefit from a curatorial and limited competition approach. The curatorial approach would be used to deliver buildings for sites 3A, 3B, 4A and 4B. A competition would be used for the procurement of buildings 1A/2A, 1B and 2B.

Refer to **Appendix C**.

The Planning Lab on behalf of Mr Greg Gav, the owner of 135 Point Street, Pyrmont

The proposal relies on the transitional provisions under Clause 3BA of the STOP Regulation which permits the submission of a S75W. This pathway is invalid.

The STOP Regulation makes provision for Clause 3BA, Schedule 2 which states that the Concept Plan may continue to be modified by only if the Minister is satisfied that the modification is to 1) correct a minor

Pursuant to clauses 3C(1) and clause 3BA(3), MOD 9 remains a modification request under Section 75W of the EP&A Act.

Accordingly, MOD 9 is made under the former S75W of the EP&A Act to which the 'substantially the same development' test does not apply.



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error, misdescription or miscalculation; 2) the modification is of minimal environmental impact; and 3) the modification results in a development that is substantially the same as the Concept Plan (including any modifications previously made under S75W).

The proposal does not satisfy any of these three requirements. It has not been made to correct a minor error. It provides a 203% GFA increase and significantly increases the heights. For Block 7, the proposed height is more than double the approval.

The GFA increase must be considered within the context of the entire approved Concept Plan for Barangaroo. In this respect, the maximum total GFA is increased from 602,354m² to 667,686m². This represents a net increase of 65,332m² or 10.84% from the approved Concept Plan.

The resultant environmental impacts from the excess bulk and scale cannot reasonably be as minimal, particularly in relation to the impacts to Hickson Park. The proposal therefore fails to substantially the same development test established by the STOP Regulation. The proposal's impacts are inconsistent with the Statement of Commitments which seeks to minimise view impacts.

The amended Concept Plan is supported by amended and revised technical reports and plans, which confirm the proposed modifications will not result in any significant impacts that were not originally contemplated and deemed suitable through the determination of the Concept Plan (as modified).

This includes consideration of visual impacts, the built form, mass and scale of Central Barangaroo will be visually subservient to the dramatically taller buildings within Barangaroo South and will provide a transition to the lower scale naturalised forms in the north.

This largely attributed to the removal of the tower element at Block 7 and reinstating the approved Concept Plan heights at this location.

Refer to **Appendix C**.

The proposal will have detrimental impacts to view corridors towards Observatory Hills, including views from Pirrama Park and will also impede view corridors towards Millers Point from the adjacent foreshore areas. Under the Concept Plan approval, select building elements were approved despite resulting in view impacts because they resulted in a positive outcome. These elements are to be removed by the modification.

The amended Concept Plan is supported by an updated VVIA. The VVIA concludes that the proposed changes since exhibition, including reduction of height across Block 6 and 7, removal of the cantilever elements and the additional east-west links, have reduced many of the impact ratings previously assessed for the exhibited MOD 9 proposal.

In particular, the removal of the Block 7 tower element enables continuous views to the harbour and the horizon from Observatory Hill and surrounding observer locations.

Refer to **Appendix D**.

The proposed shadow impacts to Hickson Park are excessive. The proposed modification to Concept Plan Condition B3(2) which seeks to minimise overshadowing to Hickson Park should not be permitted.

While it is proposed to maintain amendments to Condition B3(2) to reflect the MOD 9 building envelope, several considerations have been tested to ensure the proposal delivers an exemplar public domain outcome for Hickson Park.

This includes maintaining visual connectivity to the foreshore from within the park, retention of a 32m wide aperture between the Crown Casino podium and Block 5, additional east-west connections.

Gyde (including attachments) prepared for the Langham

The modification application erroneously represents the form of the approved building envelope at Barangaroo Central by presenting a uniform maximum permissible building height and ignoring the wide range of design principles, design requirements and development controls that are given in the approved Concept Plan

There are two elements to this response including:

- The role of Section 13.0 – Built Form of the EA in establishing a building envelope, and
- The interpretation of the approved Concept Plan building envelope.



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(Section 13.0 of the EDH *State Significant Site Proposal and Concept Plan*).

These guiding principles and development controls articulate the building envelope of Blocks 5, 6 and 7 in contrast to the uniform overall maximum building height given in the Eastern Harbour SEPP.

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Section 13.0 Built Form

Section 13.0 – Built Form of the EA from the original Concept Plan contained Block Controls for each block within Barangaroo. These Block Controls were referenced in the original Concept Plan under Condition B4(3) and Condition B4(4), which operated in the following manner:

- Condition B4(3) stated that the specific forms contained in Section 13.0 – Built Form of the EA were not approved as part of the approval (being the *East Darling Harbour State Significant Site Proposal, Concept Plan and Environmental Assessment*)
- Condition B4(4) stated that despite (2) above future project applications are to provide a comparison, and outline any variations from, the block controls outlined in Section 13.0 – Built Form of the EA

Condition B4(3) was explicit that the built forms contained in Section 13.0 of the EA were not approved as part of the Concept Plan.

Furthermore, Condition B4(4) was clear that comparison against block controls in Section 13.0 – Built Form of the EA would be subject to future project applications (future DAs). In short, the Concept Plan approved GFA within a broad building height, design principles, but no specific built form outcomes.

Furthermore, MOD 2 was significant as it amended the principles contained in Section 13.1 – Built Form of the EA and replaced the reference to the block controls referred to in Section 13.3, with new design controls that only applied to Barangaroo South.

MOD 2 amended Condition B4(4) with:

- Section 7.3.3 of the Barangaroo Part 3A Modification Report dated June 2008, which amended and replaced the design principles contained in Section 13.1 of the original EA
- Objectives of Performance Based Urban Design controls set out in the Preferred Project Report Barangaroo Part 3A Modification Report dated October 2008

Furthermore, MOD 8 entirely reframed the Built Form Principles in accordance with the approval of a significantly revised built form massing concept for Barangaroo. However these revised principles only related to the massing of Barangaroo South and provided no guidance as to the appropriate massing in Central Barangaroo.

Based on our review of the evolution of the Concept Plan Approval, there are therefore no currently applicable Built Form Principles relevant to Central Barangaroo.

Refer to **Section 3** and **Section 8.8.1**.

Approved Concept Plan Building Envelope

As there are no set of approved plans the Applicant has established building envelopes governed by approved Concept Plan building elements including:

- Condition B4(2) – maximum heights for Blocks 5, 6 and 7



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- Condition A2(1)(c) – approves the Barangaroo Part 3A Modification Report – Headland Park and Northern Cove including the development block layout (Figure 12) and street network (Figure 18)

Refer to **Section 3.3** and **Section 8.8.1**.

The assessment of impacts is based on a flawed comparison. Key reports most seriously infected by the error are the Environmental Assessment Report, Explanation of Intended Effect, Urban Design Report, View and Visual Impact Report, Heritage Assessment and Impact Statement and Design Excellence Strategy.

As described above, the original Concept Plan does not contain a set of approved plans that depict building envelopes for Central Barangaroo.

The Applicant has generated a building envelope, which reflects the approved maximum height and development footprint. These provide an accurate representation of the approved Concept Plan for Blocks 5, 6 and 7.

This approved Concept Plan building envelope has informed the basis of environmental assessment that underpins the amended MOD 9 proposal. These are reflected in addendum and updated technical reports.

Refer to **Section 3.3** and **Section 8.8.1**.

The proposed changes sought by the current proposal do not constitute an amended because of the substantial scale of the variation sought meaning that the correct approach would be preparation of a fresh modification application.

The MOD 9 request to modify the Concept Plan was lodged prior to the 1 March 2018 cut-off date. The MOD 9 request was lodged in March 2014, and DGRs (now SEARs) for the Barangaroo Concept Plan MOD 9 (MP06_0162 (MOD 9)) were issued to Infrastructure NSW on 15 April 2014.

Pursuant to clauses 3C(1) and clause 3BA(3), MOD 9 remains a modification request under S75W of the EP&A Act.

Refer to **Section 8.4.1**.

The building envelope that would be permissible under MOD 9 removes all harbour and foreshore views from The Langham Hotel and its surrounds in the following ways:

- The proposed building envelope significantly exceeds the modulated heights given in the Concept Plan and removes all view corridors to the harbour and foreshores.
- The proposed envelope would obstruct views that are currently available from Millers Point locality, and which support the overall success of the area's high quality commercial and tourism offerings.
- Not adequately dealt with view sharing principles given in *Tenacity Consulting v Warringah Council [2004] NSWLEC 140*.
- The VVIA shas inadequately and incorrectly addressed view loss impacts.

The impacts stated assume that Section 13.0 – Built Form of the EA are applied as the base case of the approved Concept Plan.

As described previously, and throughout this Submissions Report, Section 13.0 via Condition B4(4) was explicit in relating to future project applications and was subsequently removed as a consideration under Condition B4 via MOD 2.

Nonetheless, an updated VVIA has been provided based on a representation of the approved Concept Plan informed by a number of approved elements that have remained consistent throughout its history.

The DGRs (now SEARs) do not stipulate that an assessment of view sharing principles against *Tenacity v Warringah Council [2004] NSWLEC 140* is required. It is anticipated these are capable of being addressed in SSDA stages relating to specific resolution of built form and detailed design.

Refer to **Appendix D**.

The proposal does not appropriately consider the impact of the proposed building envelope upon the broader historic cultural landscape of Millers Point. Heritage significance in the setting includes three HCAs including:

- Millers Point and Dawes Point Village Precinct

A HIS addendum has been prepared by GML, which provides an updated assessment of the amended Concept Plan against the surrounding heritage conservation areas and heritage items.

GML state that the amended Concept Plan is assessed in heritage terms to be more or less consistent with approved Concept Plan. Both give rise to varying degrees of impact on the



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- Millers Point and Dawes Point Conservation Area
- Walsh Bay Wharves Precinct

The proposed building envelope would adversely impact the significance of numerous heritage items and HCAs.

heritage significance of the Millers Point and Dawes Point Village Precinct, HCAs and heritage items within these areas and in the vicinity.

Potential impacts are capable of being mitigated through detailed SSDAs stage including careful consideration of materials to achieve a sympathetic visual setting from and within the heritage precincts.

Refer to **Appendix M**.

The proposed building envelope is of a bulk and scale that exceeds the height controls of the Eastern Harbour SEPP, resulting in unreasonable obstruction of significant views to and from the historic precinct of Millers Point and Observatory Hill.

Additional views have been prepared by AECOM in the supporting VVIA and assessed by GML from key heritage places and settings including Observatory Park, High Street, Darling Harbour and Hickson Road.

Refer to **Section 8.3.2** and **Appendix M**.

The proposal disregards long-standing protective Commitments designed to respect the unique and highly valuable significance of the Millers Point context. These include Commitment 57, 58, 59 and 61.

Commitment 57 and 58 relates to future development from public spaces opposite foreshores to Observatory Hill Park will be retained. It also requires panoramas from Observatory Hill from Pymont Park to the Harbour Bridge are to be retained.

The amended Concept Plan building envelope ensures views from opposite foreshores will retain views to Observatory Hill. Refer to OL 10, 11 (Pirrama/Pymont Park), 12. The reduced height of Block 7 ensures panoramic views from Harbour Bridge to the water's edge of Pymont Bay are retained. In this respect, Commitment 57 and 58 will be maintained.

Commitment 59 relates to providing adequate view corridors over and between new built form to maintain the key attributes of Millers Point. These include views to the water, junction of Darling Harbour and the harbour proper, opposite foreshores, panoramic qualities of existing views and most distinctive views to landmark structures.

The amended Concept Plan building envelope preserves views from Observatory Hill looking west including land and water interfaces. Furthermore, expansion of existing approved east-west links has been provided to enhance views to the water and opposite foreshores. In this respect, Commitment 59 will be maintained.

Commitment 61 relates to retaining the ability to appreciate Millers Point and the roofscape of terrace houses when viewed from public spaces on opposite foreshores. As shown in OL 11, 12, and 40 these roofscapes and terraces are visible from opposite foreshores. In this respect, Commitment 61 will be maintained.

Refer to **Appendix D**.

MOD 9 proposal inaccurately details the baseline built form and inconsistent with detailed urban design principles and controls set out by the approved Concept Plan

The approved elements of the Concept Plan that have informed the approved Concept Plan building envelope are discussed earlier in this Table.

Details of the proposed building envelope and residential tower appear to reflect a design seeking to maximise yield at the expense of numerous adverse impacts.

The amended MOD 9 proposal has undergone major refinement post exhibition to provide a reconsidered building envelope. This is described in **Section 6.3**.



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The proposed residential tower location represents a very poor urban design outcome for the entire Barangaroo site, the Millers Point precinct and the wider context of the Sydney Harbour foreshore

The tower element has been removed from the application. The maximum height of Block 7 has been reinstated to the height currently approved at RL 35. Refer to **Appendix C**.

The northernmost location is in direct conflict with a number of design principles and commitments detailed throughout the approved Concept Plan, which requires development at Barangaroo to 'reduce towards the northern end of the site'.

The amended MOD 9 proposal respects the principles of tapering built form towards Nawi Cove and Headland Park. The height of Block 7 reverts back to the current approved height of RL 35.

The tallest built form elements are positioned in the south east corner of the site adjacent to high-rise development in Barangaroo South.

The EA provides a weak justification for such an inappropriately large and poorly located tower form.

As discussed in this Submissions Report, the tower element has been removed from the application.

No justification is given to support the increased quantum of residential floorspace.

The overall GFA proposed has been reduced since exhibition from 144,355m² to 104,000m² and represents a reduction of 40,355m².

Following exhibition, the amended MOD 9 proposal increases the maximum allowance for residential GFA across Central Barangaroo and reduces retail (although still increased from the approved Concept Plan). While the residential maximum GFA cap is proposed to be increased, this will be limited to 75,000m².

While flexibility is being sought as part of the approval, the actual land use mix for each block will be confirmed through the SSDA process over time.

Refer to **Section 6.3.4**.

The supporting *Housing Strategy for Central Barangaroo* does not propose any affordable housing provision on site (as has been provided in other parts of the Barangaroo Precinct).

Public benefits have been identified holistically throughout the evolution of planning for Barangaroo with agreement that the various benefits will be delivered in different ways in each precinct.

Barangaroo South remains the primary contributor to affordable housing delivery with 3% of residential floorspace as affordable housing. This includes 0.7% offsite and 2.3% onsite.

Development in Central Barangaroo will deliver significant public benefits totalling \$226 million to support embellishment of Harbour Park, public domain improvements, support cultural facilities, allowance for a pedestrian footbridge, and fit-out for arts and community facilities.

The public benefits are committed, despite a reduction of floorspace following exhibition from 144,355m² to 104,000m².

Consultation has been undertaken primarily with other government agencies, with limited community consultation.

Appropriate levels of stakeholder consultation have been undertaken throughout the preparation of MOD 9 and post exhibition stages. The Applicant will continue to engage with stakeholders throughout all stages of the approval process.

The MOD 9 application proceeded without consultation with neighbouring stakeholders, including The Langham Hotel.

Consultation has been undertaken in accordance with the DGRs (now SEARs). The Applicant will work with stakeholders throughout the process to resolve additional matters, as appropriate.



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Consultation only occurred remotely and after the proposal was finalised leaving no possibility for stakeholder concerns to be addressed.	Consultation has been undertaken in accordance with the DGRs (now SEARs) and additional consultation sessions have been undertaken post exhibition.
MOD 9 public consultation includes misleading information and erroneous representations of the approved building envelope.	This has been discussed throughout this Submissions Report and in this Table. The amended Concept Plan provides an accurate representation of the approved Concept Plan building envelope and has informed updated technical reports.
Effective public consultation of this proposal has been significantly compromised by the exhibition processes adopted.	This is a matter for the Department to address.
The Biodiversity and Conservation SEPP applies to the modification application project. The proposed modification has no evident regard to any of these requirements.	An assessment against the relevant provisions of the SEPP are provided in Section 8.4.2 .

7.5 Response to Organisations and Public Submissions

As a result of the substantial volume of submissions received, with some individual submissions exceeding 100 pages with supporting technical studies, the submissions have been distilled into the top ten key themes. We note each individual submission has been thoroughly reviewed in detail to ensure a comprehensive understanding of the key issues made.

The 823 public submissions raised a range of issues, with the top ten themes summarised in **TABLE 17** below.

TABLE 17 PUBLIC SUBMISSIONS TOP ISSUES

ISSUE	REFLECTED IN SUBMISSIONS (%)
Height and massing	63%
Visual impact (Observatory)	51%
Visual impact (public spaces)	44%
Heritage on surrounding items	42%
Heritage (specific to Millers Point)	31%
Accessibility and amenity on public open space	29%
Density (floor space)	23%
Context, setting and consistency with urban character	23%
View impact (private)	20%
Overshadowing	17%



ISSUE**REFLECTED IN SUBMISSIONS (%)**

The top ten themes raised from the organisation submissions were similar to those raised in public submissions and are outlined in **TABLE 18**.

TABLE 18 ORGANISATION SUBMISSIONS TOP ISSUES

ISSUE	REFLECTED IN SUBMISSIONS (%)
Height and massing (bulk and scale including tower in Block 7)	96%
View impact (public and heritage views)	96%
Planning process and procedural matters	46%
Traffic generally (parking, congestion and road layout)	35%
Heritage (general and specific to Millers Point)	31%
View impact (private)	31%
Urban design (poor outcome including overhangs)	31%
Planning compliance	31%
Public interest/public benefit	31%
Overshadowing	27%

A detailed discussion on the key themes is provided in **Section 8** of this Submissions Report.



8 Key Themes and Additional Assessment

This section provides a detailed summary of the applicant's response to key issues raised in the submissions.

8.1 Height and Massing

8.1.1 Tower of Block 7

Issue

One of the main issues raised during exhibition was the appropriateness and justification of the proposed tower form located in the north western corner of Block 7 and its subsequent impacts with respect to compatibility with surrounding built form, consistency with the outcomes of the approved Concept Plan, heritage context and views.

Response

As described in **Section 6**, the refinements made to the exhibited MOD 9 proposal have removed the tower form from Block 7.

The exhibited MOD 9 proposal put forward a specific massing outcome on Block 7 by proposing varied heights across the block ranging from RL 15, RL 21.5, RL 35, RL 38.5 and RL 73.7.

In response to submissions, the height of this block has been reduced to the current approved height of RL 35. This represents a significant reduction of 38.7m at its greatest. The form and detail of the proposed building envelope is more consistent with the approved Concept Plan and will enable flexibility and a more robust design excellence outcome at detailed design stages.

FIGURE 48 provides a comparison of the approved Concept Plan envelope against the exhibited and amended MOD 9 envelope looking south east from Barangaroo Reserve. **FIGURE 49** provides a comparison of the approved Concept Plan envelope against the exhibited and amended MOD 9 envelope looking west from Observatory Hill.





Approved Concept Plan Envelope



Exhibited MOD 9 Envelope



Amended MOD 9 Envelope (current proposal)

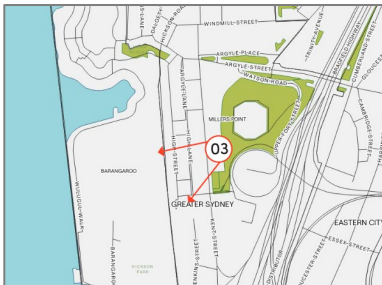


FIGURE 49 – VIEW FROM OBSERVATORY HILL (AECOM)



The reduced height for Block 7 would facilitate a building up to eight (8) storeys and maintain the heights applying under the approved Concept Plan and provides a transition to Nawi Cove. The changes will also improve the interface of development to the Nawi Cove and Harbour Park, minimise visual bulk when viewed from Observatory Hill and Millers Point and respond to the heritage setting within the immediate vicinity. The heritage impacts of the amended MOD 9 proposal are discussed in **Section 8.3**.

The amended MOD 9 proposal is more consistent with the topography and skyline of Millers Point. Proposed density is carefully located in Block 5 at the southern end of Central Barangaroo where it adjoins higher density development in Barangaroo South.

This area is adjacent to the high point of High Street and is predominantly read against the backdrop of the CBD when viewed from the west. Blocks 6 and 7 are particularly sensitive to additional height, which is largely consistent with the approved Concept Plan. Refer to **FIGURE 50**.

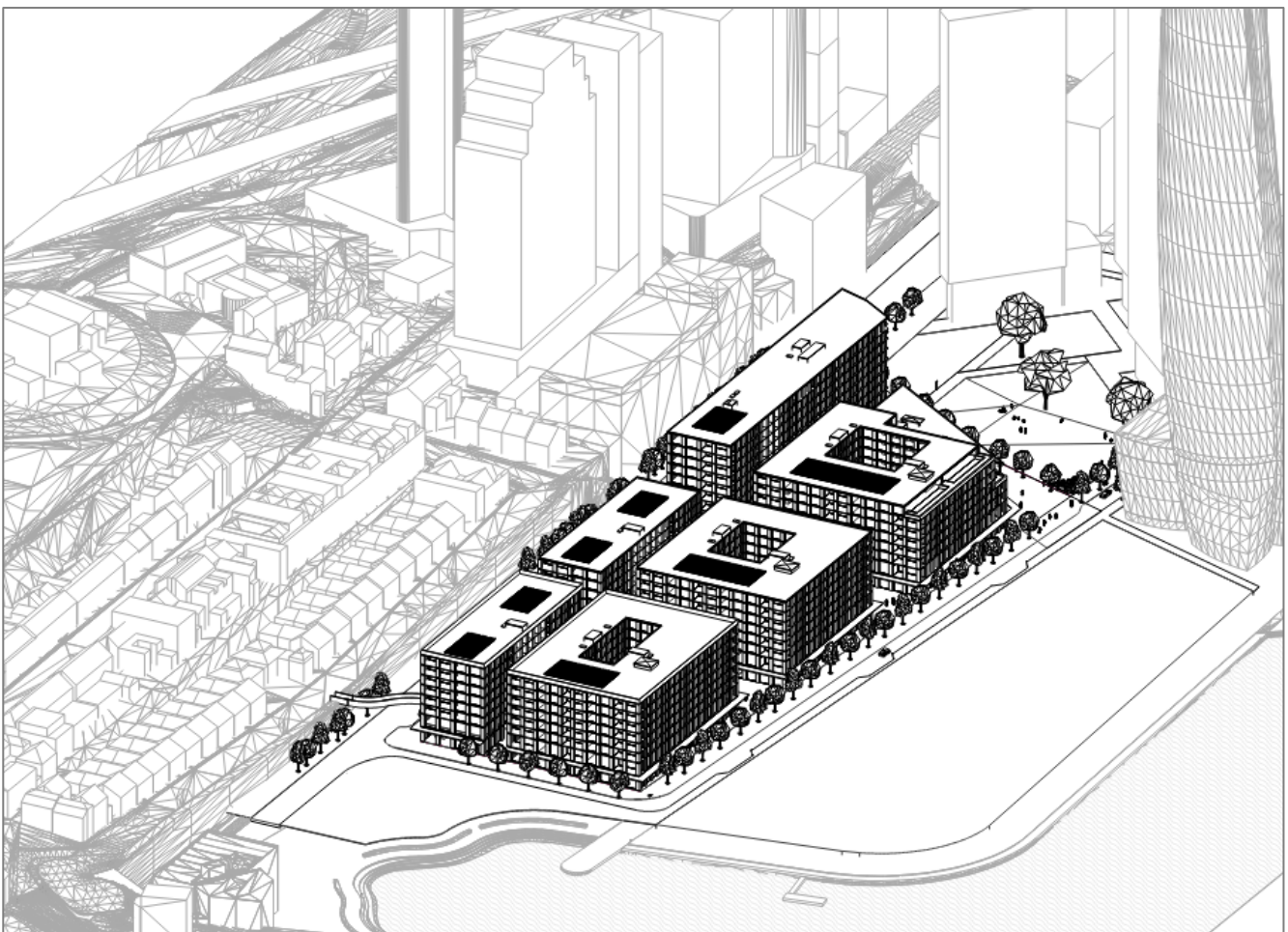


FIGURE 50 – AXONOMETRIC OF REFERENCE SCHEME IN CONTEXT OF BARANGAROO SOUTH AND THE CBD

The amended MOD 9 proposal provides reduced visual impact when compared to the exhibited proposal.



Furthermore, the redistribution of development blocks into three even building envelopes will ensure continuity of built form across the site, particularly from Blocks 6 and 7. This will safeguard panoramic views to and from Millers Point with incursions by built forms over a certain height in comparison to the exhibited MOD 9 proposal.

Overall, the heritage impacts are reduced however, will still have an impact on the conservation of Millers Point. This is predominantly considered through visual and setting impacts. Assessment of the amended height and massing in relation to visual and heritage impacts are described in **Section 8.2** and **Section 8.3**.

8.1.2 Bulk and Scale

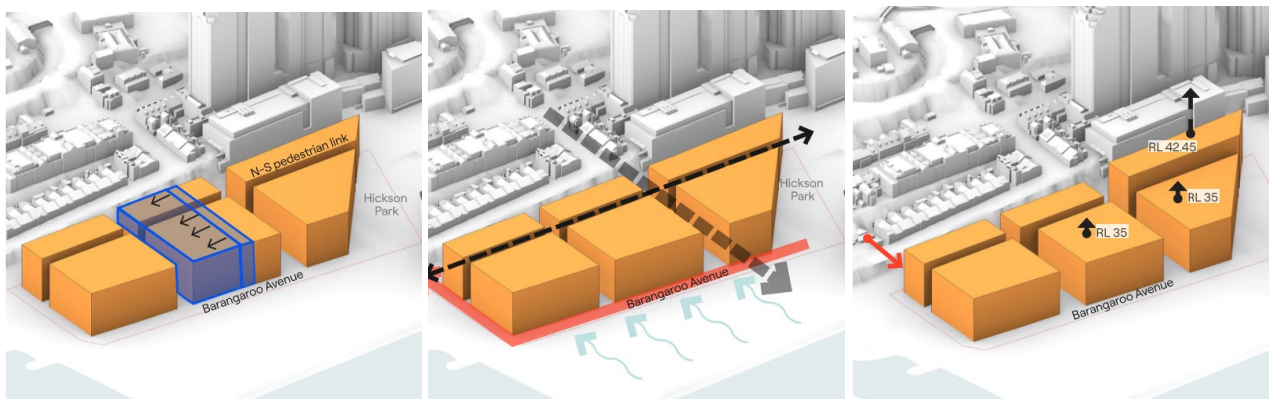
Issue

Submissions raised concerns with the general bulk and scale of the development.

Response

As described in previous sections of this Submissions Report, the design has undergone major refinement following exhibition and is underpinned by a revised urban design strategy and building envelopes. These design strategies are summarised in **FIGURE 51** and include:

- Maintain High Street, extend Scotch Row via a north-south pedestrian link and extend Barangaroo Avenue around the site,
- Rebalance development parcels and public interface with the water by widening the northern east-west link and increase view corridors to the harbour,
- Reinstate historic footbridge link to the northern end of Block 7
- Increase height in zones to the southeastern corner of Block 5 without adverse impact,
- Adjust southern edge of Block 5 to obtain consistent block structure, and
- Reduce block height to respond to Hickson Park.



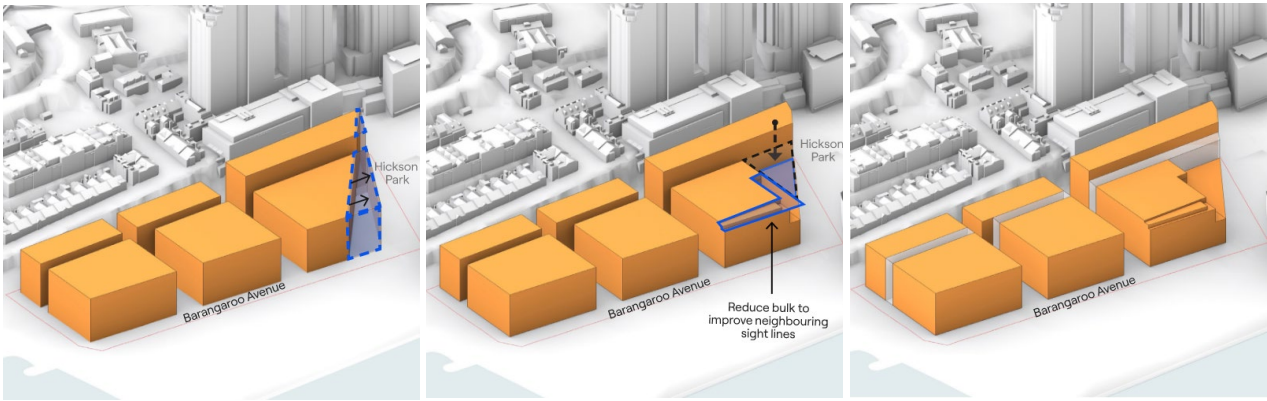


FIGURE 51 – PROPOSED ENVELOPE AMENDMENTS (SJB)

The amended building envelopes have addressed key concerns as follows:

- **Scale** – Remove the Block 7 tower form by reducing height from RL 73.7 to the existing height of RL 35 applying under the existing Concept Plan.
- **Views** – Reduced heights across all blocks, with the tallest built form positioned in the south-east corner of the site where it has no visual impact from Observatory Hill and the surrounding Millers Point view lines. Additional reductions in height have been made to Block 6 to RL 35 (reduced by 3.7 metres).
- **Heritage** – Reduced height mitigates impact to Millers Point and Observatory Hill, while the additional public domain and pedestrian links create a more compatible scale to the surrounding heritage context.
- **Solar** – Reduced scale of development on the southern edge of the Block 5 to improve the interface and solar access to Hickson Park.
- **Public** – Expansion of the northern east-west link to a variable width of 12-20 metres and a series of laneways have been created to increase porosity, views through the site and contribute to an increase in public domain offering for residents and visitors.





FIGURE 52 – ILLUSTRATION OF PROPOSED BUILT FORM INTERFACE WITH BARANGAROO AVENUE (SJB)

The amended MOD 9 proposal is supported by an amended Design Excellence Strategy (**Appendix C**), which complies with the general intent of Clause 19(3) of the PEHC SEPP. Key elements of the Design Excellence process include an architectural design competition, curational approach and a potential alternative strategy.

Future detailed SSDAs, in tandem with the amended Design Guidelines, will ensure future built form and public domain exhibits a high level of architectural design.

8.2 Visual Impacts

Issue

One of the main issues raised during exhibition was the visual impacts, which are summarised as:

- The height and massing of the proposal, especially in relation to the proposed Block 7 tower form,
- The visual impacts to heritage items and Heritage Conservation Areas, and
- Appropriateness of the methodology of the VVIA and Sky View Assessment

In response, an amended VVIA has been prepared by AECOM (**Appendix D**), which provides a visual assessment of the amended building envelopes prepared by SJB.

8.2.1 Height and Massing of the Proposal



Response

In response to feedback from the previous MOD 9 - exhibited design, the amended MOD 9 proposal has been amended to simplify the form, reduce height and provide increased separation between the blocks. Changes include removal of the Block 7 tower and removal of the cantilevers.

These changes have reduced the overall impact of the proposed modification on views, including to and from heritage items and HCAs, as raised by the submissions. The amended MOD 9 building envelope proposes the following maximum heights for the Central Barangaroo blocks:

- Block 5—RL 42.45 (previous RL 44.5),
- Block 6—RL 35 (previous RL 38.7), and
- Block 7—RL 35 (previous RL 73.7).

The revised block heights are now closer to the approved Concept Plan.

8.2.2 Impacts to Heritage Items and Heritage Conservation Areas

Response

The removal of the Block 7 tower from the proposed design reduce the impact on views to and from Millers Point and Dawes Point. Importantly, the continuity of the view to the horizon from Observatory Hill is now maintained.

The amended MOD 9 proposal provides more evenly spaced and larger separations (minimum 12m, maximum 20m) between the blocks than the approved Concept Plan, which would assist in maintaining visual connection to the water from locations within Millers Point. Although these would only provide glimpse views, the visual connection with the harbour would help to provide orientation and maintain the historic connection between Millers Point and the harbour.

The separations also affords viewing windows to and from High Street and assist in a visual 'reading' of the topography of the HCA to the east of Central Barangaroo when directly across the harbour. From other locations to the west across the harbour, the amended MOD 9 proposal would be visually similar to the approved Concept Plan, screening views to a section of Millers Point HCA. In both the approved Concept Plan and the amended MOD 9 proposal, the horizon remains visually intact, including providing unimpeded views to the Sydney Observatory, the Observatory Hill Park fig trees, and the Sydney Harbour Bridge from the western edge of the harbour.

The amended MOD 9 proposal is also more consistent with the topography and skyline of Millers Point in comparison to the previous exhibited proposal. The proposed increase in height from the approved Concept Plan is more appropriately nestled with other significantly taller elements in the south, with much of the height increase seen in Block 5 adjacent to Barangaroo South. Blocks 6 and 7 align more sensitively to the topography of Millers Point. They are proposed at a constant height of RL 35, which does not reflect the underlying fall of topography running north along High Street, however, is lower than Observatory Hill.

The proposed bridge between the development and Millers Point has been relocated to its historic location at the low point on High Street. This element is not included in this application and will therefore not be assessed in this report. It is acknowledged that the amended MOD 9 proposal would sit against a backdrop of landform and built



form and therefore would likely be more visually recessive with considered material choices, than the previous position in the MOD 9 - exhibited design pedestrian bridge location proposal.

8.2.3 Appropriateness of Methodology

Response

Submissions took issue with the use of a development envelope over the master plan design as the Approved Concept Plan base line for analysis and the field of view in the visualisations.

The previous VVIA assessed the change between the worst-case scenarios for MOD 8 and MOD 9, showing the maximum allowable building envelopes. When approved in 2007, the Barangaroo concept plan was subject to development controls in Section 13 of the Environmental Assessment. These controls modulated the permissible built form and heights within the building block envelopes of Barangaroo. Subsequent base line analysis within this report uses the envisioned master plan arrangement.

Best practice methodology for a visual impact assessment is to assess the impact on the view as seen by the human eye. The industry standard is to provide 124 degrees of view to represent a person's practical field of view. For consistency, the same viewing angle is used for every location to be able to compare affects appropriately and qualitatively on views from various locations.

Although it is noted that views in the literature are panoramic, the VVIA must follow a consistent methodology. Discussion has been provided to consider the impacts on panoramic views, however, these discussions tend to dilute the impact of the change with the change appearing smaller in a larger context. Focused views provide a worst case scenario. At no location would the proposal require more than 124 degrees to view the full change.

The Sky View Assessment issues have been resolved by the removal of the Block 7 tower form being removed.

8.3 Heritage Impacts

The HIS addendum submitted with this Submissions Report provides a comprehensive and detailed response to a range of heritage related comments raised by organisations, the public, Council and government agencies. It serves as an addendum to the Heritage Assessment Impact Statement (**HAI**S) dated November 2021. A summary of key themes should be read in conjunction with the addendum at **Appendix M**.

8.3.1 Impacts on Surrounding Heritage Conservation Areas

Issue

Submissions stated the proposal would adversely impact the heritage significance of Millers Point Heritage Conservation Area and Millers Point and Dawes Point Village Precinct.

Response

The amended MOD 9 proposal has partially mitigated some of the visual impacts on the Millers Point and Dawes Point HCAs, and the heritage listed terraces on High Street. This includes reducing the height of the building envelopes and expanding the east-west links.



The HIS addendum provides a discussion on the amended MOD 9 proposal and its impact on surrounding heritage conservation settings. In relation to Millers Point Conservation Area and Millers Point and Dawes Point Village Precinct, GML state there will be a moderate adverse impact based on the following conclusions.

- The amended MOD 9 proposal will not give rise to any direct heritage impact on significant historic fabric associated with the Millers Point Heritage Conservation Area and Millers Point and Dawes Point Village Precinct.
- Blocks 6 and 7 would visually impact part of the harbourside setting of Millers Point – a significant historical maritime precinct and suburb.
- Blocks will screen views to the terraces on High Street and Kent Street from the west, southwest and potentially northwest. The historical landform modification between the waterside and the ridgeline of Victorian-era workers housing and parkland will also be obscured.
- Similarly, views (including panoramic, filtered and glimpse views) from High Street and Kent Street will be impacted.
- The unimpeded views, especially from High Street, created by the change in use and redevelopment of Barangaroo, would have previously been obscured by maritime industrial buildings. At different times, maritime development would have blocked views from some areas throughout the precinct's history. This was part of the historical working harbour and demonstrated a functional interrelationship between the nearby workers' housing and industrial worksite, accessible via stairs created alongside the development of Hickson Road.
- The approved Concept Plan and building plan envelopes are in excess of the height of historical former maritime buildings, and as such will have an impact to views and setting.
- Block 5 exceeds the approved Concept Plan RL 34 by 8.45 metres, while Block 6 exceeds the approved Concept Plan RL 29 by 6m as part of the amended MOD 9 proposal. The additional height will give rise to a greater degree of heritage impact on the historical setting of the HCAs and a higher degree of visual impact than the approved Concept Plan.
- City Plan's 2006 assessment assumed Section 13 – Built Form of the original Concept Plan EA applied, which mitigated some of the visual impacts arising from the proposal through built form modulation of bulk, height and mass.

When compared to the original Concept Plan approval in 2007, GML consider the heritage impacts arising from the amended MOD 9 proposal to be greater than moderate adverse. However, the amended MOD 9 proposal is more consistent with the topography and skyline of Millers Point and represents an improvement from the exhibited scheme.

Overall, the heritage impacts are reduced however, will still have an impact on the conservation of Millers Point. This is predominantly considered through visual and setting impacts. Further detailed SSDAs will be required to provide an appropriate design response with respect to the surrounding heritage fabric through landscaping and materials.



8.3.2 Updated Heritage View Analysis

Issue

Submissions stated the proposal has not appropriately considered the visual amenity of surrounding foreshore areas and the obstruction of important views to Millers Point.

Response

The VVIA has been updated to include additional views of the surrounding heritage context. Views from the east and northeast in Observatory Park and High Street and expansive views from the west have also been included. These views have been considered in the HIS.

The new views that have been included for consideration as part of the assessment are provided below. The numbering follows the updated VVIA referencing. Refer to **TABLE 19**.

TABLE 19 ADDITIONAL VIEWS

NO.	OBSERVOR LOCATION
31	Darling Harbour – Pyrmont Bridge*
32	Darling Harbour – Australian National Maritime Museum*
33	Sydney Observatory Hill Park – south path
34	Sydney Observatory – south west
35	National Trust carpark
36	High Street – north
37	High Street – south
38	Hickson Road – corner of Watermans Quay
39	James Watkinson Reserve
40	Giba Park
41	Corner of Grafton Street and Grafton Lane

*These views were included in the original VVIA but not in the HAIS (GML November 2021)

FIGURE 53 provides an overview of the locations of the original and additional views considered for assessment.

Relevant views identified in the *Darling Harbour Wharves Site Study 2006* prepared by Hill Thalys Architecture and Urban Projects are included, including views looking west and north from High Street. Many views are west over Barangaroo Reserve or through South Barangaroo, in which Central Barangaroo is only peripheral or not captured at all.





FIGURE 53 – UPDATED OBSERVOR LOCATIONS AND DARLING HARBOUR WHARVES STUDY (AECOM)

The HIS provides an updated heritage view assessment of the original 15 views to and from heritage items within the vicinity of Central Barangaroo. **TABLE 20** provides a summary of the impacts of the amended MOD 9 proposal on the additional views and vistas identified above.

TABLE 20 ADDITIONAL HERITAGE VIEW ASSESSMENT

NO.	OBSERVOR LOCATION	CITY PLAN ASSESSMENT	GML ASSESSMENT
31	Darling Harbour – Pyrmont Bridge	Not assessed.	<p>Updated heritage impact</p> <p>Minor adverse</p> <p>Degree of change in impact from approved Concept Plan</p> <p>No change</p>
32	Darling Harbour – Australian National Maritime Museum*	Not assessed.	<p>Updated heritage impact</p> <p>Minor adverse</p>



NO.	OBSERVOR LOCATION	CITY PLAN ASSESSMENT	GML ASSESSMENT
			<p>Degree of change in impact from approved Concept Plan</p> <p>No change</p>
33	Sydney Observatory Hill Park – south path	Not assessed.	<p>Updated heritage impact</p> <p>Minor adverse</p> <p>Degree of change in impact from approved Concept Plan</p> <p>No change</p>
34	Sydney Observatory – south west	Identified as an important panoramic view from Observatory Hill Park to the west and over the East Darling Harbour site, including the roofline of the Palisades Hotel.	<p>Updated heritage impact</p> <p>Moderate adverse</p> <p>Degree of change in impact from approved Concept Plan</p> <p>No change</p>
35	National Trust carpark	<p>The 2006 assessment notes the location of the S.H. Ervin Gallery and National Trust Building but does not incorporate it into its assessment.</p> <p>While it is relevant in respect of proximity, landform and siting negated the need to assess impacts.</p>	<p>Updated heritage impact</p> <p>Minor adverse</p> <p>Degree of change in impact from approved Concept Plan</p> <p>No change</p>
36	High Street – north	<p>View H2: south along High Street cutting and terraces.</p> <p>The views to and from the High Street terraces were impacted by this proposed but the views were assessed as not historically significant. Consistency of rooflines.</p>	<p>Updated heritage impact</p> <p>Moderate adverse</p> <p>Degree of change in impact from approved Concept Plan</p> <p>No change</p>
37	High Street – south	<p>View H3: to and from High Street cutting and terraces.</p> <p>View west from northern end of High Street over, warehouse roof that limited distant westerly views has since removed.</p>	<p>Updated heritage impact</p> <p>Moderate adverse</p> <p>Degree of change in impact from approved Concept Plan</p> <p>No change</p>
38	Hickson Road – corner of Watermans Quay	Not assessed.	<p>Updated heritage impact</p> <p>Minor adverse</p> <p>Degree of change in impact from approved Concept Plan</p> <p>No change</p>



NO.	OBSERVOR LOCATION	CITY PLAN ASSESSMENT	GML ASSESSMENT
39	James Watkinson Reserve	Not assessed.	<p>Updated heritage impact Moderate adverse</p> <p>Degree of change in impact from approved Concept Plan No change</p>
40	Giba Park	View H8: includes Giba and Pirrama Park (also Pirrama Park).	<p>Updated heritage impact Minor adverse</p> <p>Degree of change in impact from approved Concept Plan No change</p>
41	Corner of Grafton Street and Grafton Lane	Not assessed.	<p>Updated heritage impact Minor adverse</p> <p>Degree of change in impact from approved Concept Plan No change</p>

Overall, the additional views identify no change when considered in the context of the approved Concept Plan. Notwithstanding the increases in height for Blocks 5 and 6, the proposal is assessed in heritage terms to be more or less consistent with the approved Concept Plan.

8.4 Procedural Planning Matters

8.4.1 Validity of the Section 75W Pathway

Issue

Submissions state that the proposal relies on the S75W pathway of the now repealed Part 3A of the EP&A Act 1979. Submissions state the application was withdrawn in 2016 and should therefore not be eligible for the S75W Pathway.

Response

The former Section 75W of the EP&A Act provided a mechanism by which the proponent of a Part 3A project (including transitional projects) may request the modification of, and the Minister may modify, that project.

S75W(2) of the EP&A Act set out the right of a proponent to request a modification:

The Proponent may request the Minister to modify the Minister's approval for a project...

S75W(3) provided that:



The request for the Minister’s approval is to be lodged with the Director-General. The Director- General may notify the proponent of environmental assessment requirements with respect to the proposed modification that the proponent must comply with before the matter will be considered by the Minister.

S75W(4) of the EP&A Act provided the Minister with the power to “*modify the approval (with or without conditions) or disapprove of the Modification*”.

The Concept Plan for Barangaroo is a transitional Part 3A project and under clause 3C(1), and subject to clause 3BA of the STOP Regulation, may continue to be modified under the former S75W of the EP&A Act. Clause 3BA(2) of the STOP Regulation provides that an approved project or a concept plan cannot be modified under S75W on or after the cut-off date, except as provided by clause 3BA.

However, clause 3BA(3) provides that clause 3BA(2) (and accordingly also clause 3BA(5) of the STOP Regulation), does not apply to a request to modify a transitional Part 3A concept plan under S75W which was lodged before the cut-off date of 1 March 2018.

The MOD 9 request to modify the Concept Plan was lodged prior to the 1 March 2018 cut-off date. The MOD 9 request was lodged in March 2014, and DGRs (now **SEARs**) for the Barangaroo Concept Plan MOD 9 (MP06_0162 (MOD 9)) were issued to Infrastructure NSW on 15 April 2014.

Pursuant to clauses 3C(1) and clause 3BA(3), MOD 9 remains a modification request under S75W of the EP&A Act.

Accordingly, MOD 9 of MP06_01620 is made under the former S75W of the EP&A Act to which the ‘substantially the same development’ test does not apply.

8.4.2 Assessment against Biodiversity and Conservation SEPP

Issue

Submissions state that the proposal has not undertaken adequate assessment of *State Environmental Planning Policy (Biodiversity and Conservation) 2021 (B&C SEPP)*.

Response

B&C SEPP contained the provisions transferred from a range of former SEPPs. In relation to water catchment matters, the former SEPPs transferred into B&C SEPP included the following:

- *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011,*
- *Sydney Regional Environmental Plan No 20 – Hawkesbury-Nepean River (No 2 – 1997),*
- *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005, and*
- *Greater Metropolitan Regional Environmental Plan No 2—Georges River Catchment.*

On 21 November 2022, an amendment to the water catchment provision was introduced via *State Environmental Planning Policy (Water Catchments) 2022*, which omitted Chapters 6-12 of the SEPP B&C. Chapter 10 previously established provisions for the Sydney Harbour Catchment Area.



The SEPP Water Catchments inserted a new consolidated Chapter 6 establishing all water catchment matters and applying to land in the following catchments:

- the Sydney Drinking Water Catchment,
- the Sydney Harbour Catchment,
- the Georges River Catchment, and
- the Hawkesbury-Nepean Catchment.

Section 6.65 of the B&C SEPP contains a savings and transitional provision. The savings and transitional provision means the new Chapter 6 does not apply to development applications lodged but not finally determined before 21 November 2022. Therefore, the historical provisions of Chapters 6-12 as they existed prior to 21 November 2022 continue to apply.

An assessment against the relevant matters under Chapter 10 are provided in **TABLE 21**.

TABLE 21 SEPP BIODIVERSITY AND CONSERVATION – CHAPTER 10 AIMS

PROVISION	ASSESSMENT
(1) This Chapter has the following aims with respect to the Sydney Harbour Catchment—	
a) to ensure that the catchment, foreshores, waterways and islands of Sydney Harbour are recognised, protected, enhanced and maintained— (i) as an outstanding natural asset, and (ii) as a public asset of national and heritage significance, for existing and future generations,	The proposal will continue to ensure Sydney Harbour is enhanced as an outstanding natural asset and as a public asset of national heritage significance.
(b) to ensure a healthy, sustainable environment on land and water,	The proposal will facilitate an exemplar sustainable outcome through initiatives and targets. This comprises environmental parameters with a focus on materials, waste, water, landscape, amenity, transport and micro-climate. This will maintain consistency with the aims of a healthy, sustainable development on land and water.
(c) to achieve a high quality and ecologically sustainable urban environment,	The proposal will continue to achieve an ecologically sustainable urban environment uphold the reputation of Barangaroo as one of the world’s leading sustainable urban developments. Future detailed SSDAs will be required to address the relevant SoCs relating to ESD outcomes.
(d) to ensure a prosperous working harbour and an effective transport corridor,	The aim to ensure a prosperous working harbour and effective transport corridor is not directly applicable to the role of Barangaroo today as a mixed-use precinct and as conceived under the original Concept Plan.
(e) to encourage a culturally rich and vibrant place for people,	The proposal is capable of facilitating community and cultural facilities, retail, residential, commercial and tourism uses. These uses have the potential to create a culturally rich and vibrant place for people on the waterfront of Sydney Harbour.
(f) to ensure accessibility to and along Sydney Harbour and its foreshores,	The proposal provides widened and additional pedestrian connections to the foreshore via Plaza North, Plaza South, a



PROVISION	ASSESSMENT
	southern laneway and north-south pedestrian link. These will ensure accessibility to and along the foreshore is maintained.
(h) to provide a consolidated, simplified and updated legislative framework for future planning.	Noted.

Consideration of relevant planning principles is provided in **TABLE 22**.

TABLE 22 SEPP BIODIVERSITY AND CONSERVATION – CHAPTER 10 PRINCIPLES

PROVISION	ASSESSMENT
The planning principles for land within the Sydney Harbour Catchment are as follows—	
(b) the natural assets of the catchment are to be maintained and, where feasible, restored for their scenic and cultural values and their biodiversity and geodiversity,	When compared to the approved Concept Plan, the impacts to natural assets of the catchment are considered not significantly impacted.
(c) decisions with respect to the development of land are to take account of the cumulative environmental impact of development within the catchment,	The proposal has undertaken appropriate levels of technical reporting and environmental assessment in accordance with the DGRs. Particular consideration has been made to view and visual impacts to determine the cumulative effect within the context of Barangaroo South.
(f) development that is visible from the waterways or foreshores is to maintain, protect and enhance the unique visual qualities of Sydney Harbour,	There would be predominantly no additional loss of views to Sydney Harbour from observer locations as a result of the amended MOD 9 proposal in comparison to the approved Concept Plan.
(g) the number of publicly accessible vantage points viewing Sydney Harbour should be increased.	MOD 9 will provide expanded east-west visual links from Hickson Road to the harbour, and is of a scale that maintains views from vantage points (Observatory Park).
The planning principles for land within the Foreshores and Waterways Area are as follows—	
(a) development should protect, maintain and enhance the natural assets and unique environmental qualities of Sydney Harbour and its islands and foreshores,	When compared to the approved Concept Plan, the development will continue to maintain and enhance natural assets and unique environmental qualities of Sydney Harbour and its islands and foreshores. The proposal is consistent with the urban renewal vision of Barangaroo and will provide a range of uses to support ongoing enhancement of the foreshore.
(b) public access to and along the foreshore should be increased, maintained and improved, while minimising its impact on watercourses, wetlands, riparian lands and remnant vegetation,	The proposal supports public access to Harbour Park and surrounding spaces along the foreshore through additional through-site connections.
(d) development along the foreshore and waterways should maintain, protect and enhance the unique visual qualities of Sydney Harbour and its islands and foreshores,	The amended MOD 9 proposal is of a scale that ensures views to the harbour from key vantage points are respected, while also maintaining views to Millers Point and surrounds from opposite foreshore areas.



When compared to the approved Concept Plan, the proposal does not result in any notable inconsistency or departure with the relevant aims and principles of the B&C SEPP.

8.5 Solar Access and Public Open Space Impacts

8.5.1 Impacts to Hickson Park

Issue

Submissions stated the overshadowing impacts to Hickson Park and its realignment would be inconsistent with the PACs determination in MOD 8 to increase open space.

Response

Condition B3(1) of the approved Concept Plan requires that Hickson Park:

- Is defined by the boundaries of Block 4A and 4B, Block 5 (as amended by B3(2)), Hickson Road, Globe Street and Barangaroo Avenue,
- Provides view corridors from Hickson Road to the harbour,
- Supports large mature trees, including 2,000m² of deep soil,
- Is not to be overshadowed by built form over more than an average area of 2,500m² between 12pm and 2pm on 21 June each year, and
- Is to be primarily comprised of soft landscaping.

Condition B3(2) also states for Block 5:

- The footprint is to be reduced to remain within the B4 zoned land, and
- Minimise overshadowing ensuring no more than an average of 2,500m² is overshadowing by above ground buildings in Block 5 between 12pm and 2pm on 21 June each year (this repeats the control set out in B3(1)).

Several design considerations informed the revised treatment to Hickson Park and the Block 5 boundary, which will maintain the original considerations made by the PAC in their MOD 8 determination. These include:

- Ensure a view corridor from Hickson Road to the harbour edge is maintained. Consider design levels and landscape treatments to create a clear line of site along the northern edge of Hickson Park.
- Ensure an aperture of no less than 32m is maintained between the Crown Casino podium and the south-western corner of Block 5. This is to ensure views and a visual connection within Hickson Park to the harbour are maintained.
- Provide protection for east-west movement from Hickson Park to Harbour Park.
- Lower the height of the southern building at Block 5 to RL 21.5 to provide an active, human-scaled edge and prioritise solar access and daylight.



- Provide a high quality urban interface that accommodates outdoor dining zones, protected public circulation paths and landscape elements that optimise amenity, wind amelioration and natural shading.

In response to submissions, several areas have been explored to enhance the amenity of Hickson Park, including solar performance of the building envelope, wind conditions, visual connectivity and deep soil capacity.

Solar Insolation

As set out in Condition B3, the amount of overshadowing to Hickson Park from Block 5 is limited to a maximum of 2,500m² between 12pm and 2pm mid-winter. Future SSDAs specifying the detailed built form at Block 5 would be required to meet this control.

Based on solar insolation testing, the approved Concept Plan building envelope results in a shadowed area of 3,863m² to Hickson Park between the hours of 12pm and 2pm on 21 June mid-winter. This represents 1,363m² of additional overshadowing to Hickson Park. Refer to **FIGURE 54**.

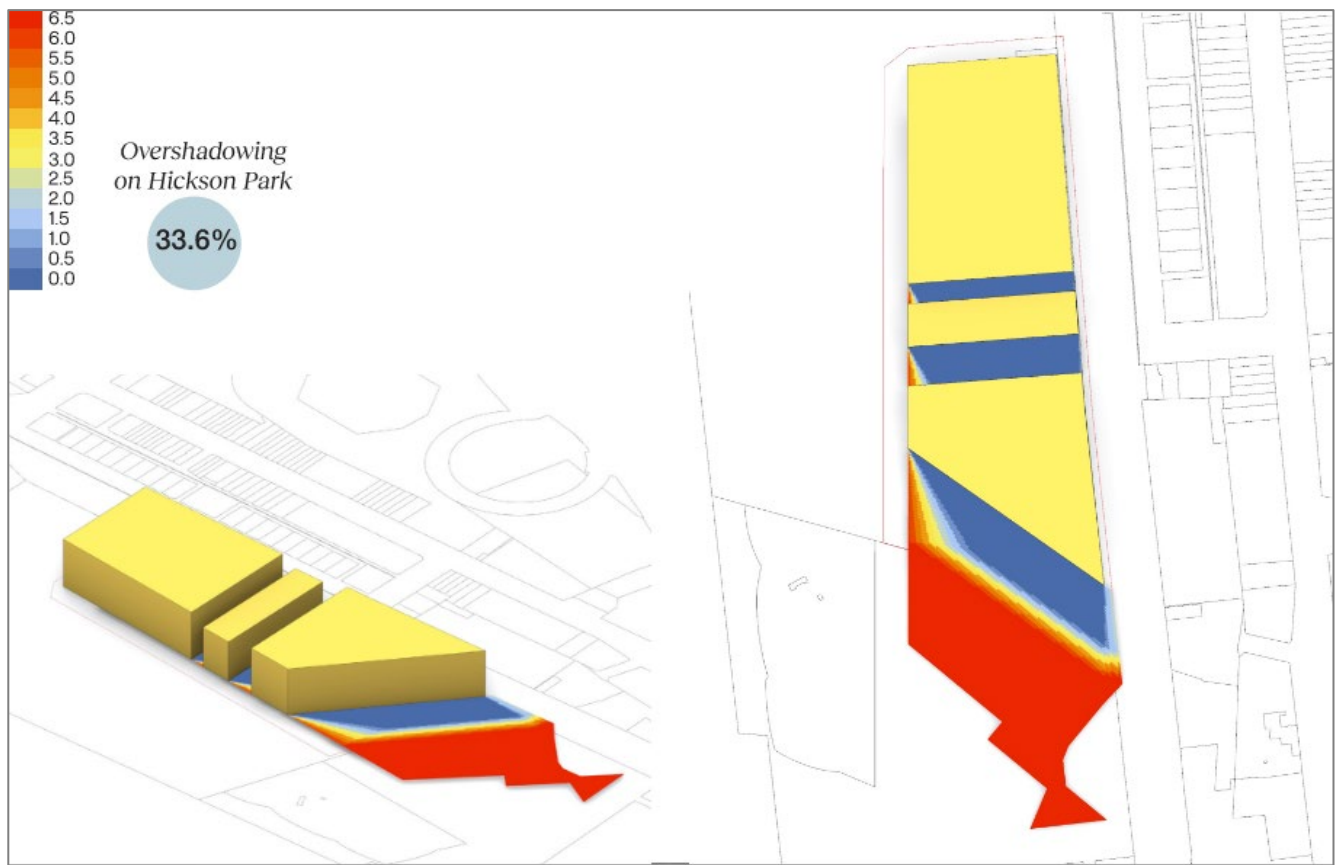


FIGURE 54 – APPROVED CONCEPT PLAN BUILDING ENVELOPE SOLAR ANALYSIS

The amended Concept Plan building envelopes retains solar access to Hickson Park, despite the reconfigured size of the park from 11,414m² to 9,789m².

The refinements to MOD 9 Concept Plan building envelope result in an overshadowed area of 2,561m² to Hickson Park between 12pm and 2pm on 21 June mid-winter. This represents a reduction in overshadowing of



the approved Concept Plan building envelope by 1,275m². This is achieved in part by lowering the Block 5 southern building envelope to RL 21.5 and RL 31.2. Refer to **FIGURE 55**.

To ensure detailed building designs are aligned with the overshadowing levels identified in the amended Concept Plan building envelope, it is proposed to amend Condition B3 to increase the area allowed to be overshadowed from 2,500m² to 3,000m².

Overall, the solar performance of Hickson Park is not significantly impacted despite the alterations to its size. Furthermore, the amended MOD 9 proposal provides an overall increase in open space and public domain across the site as an offset to the alignment at this location.

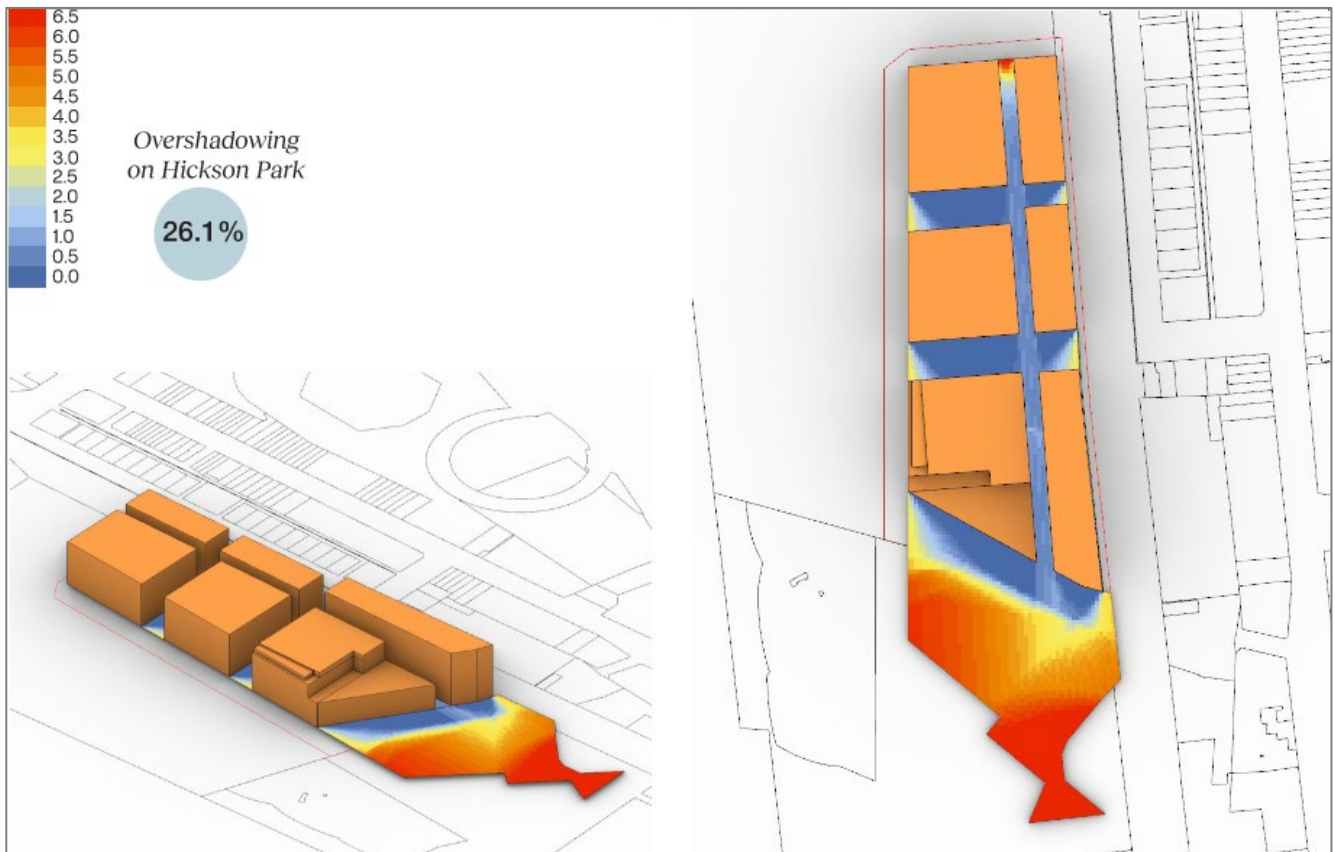
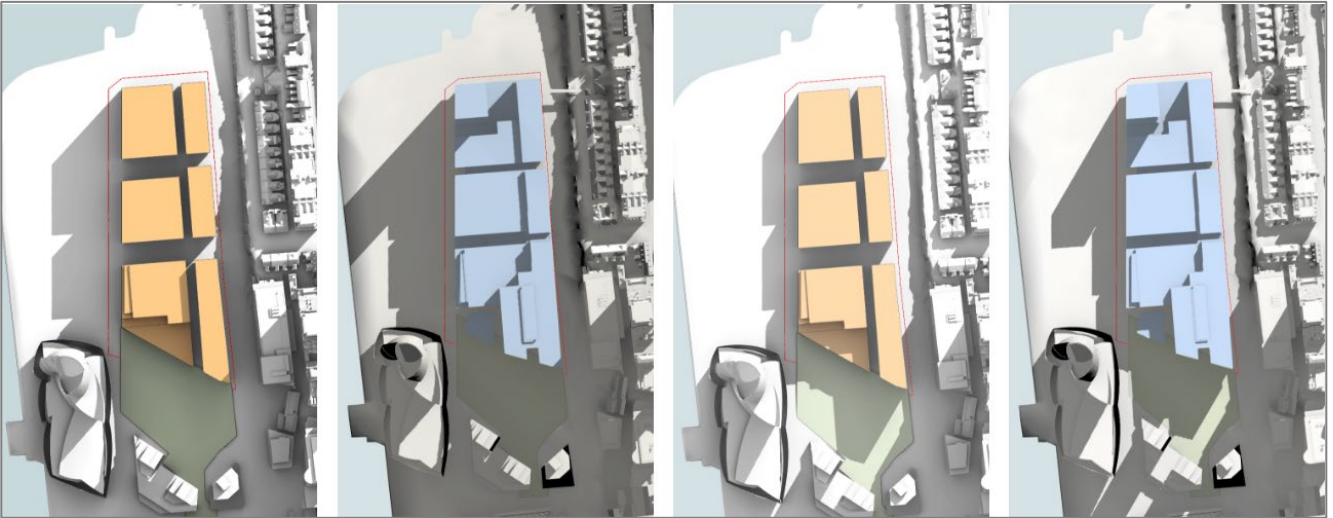


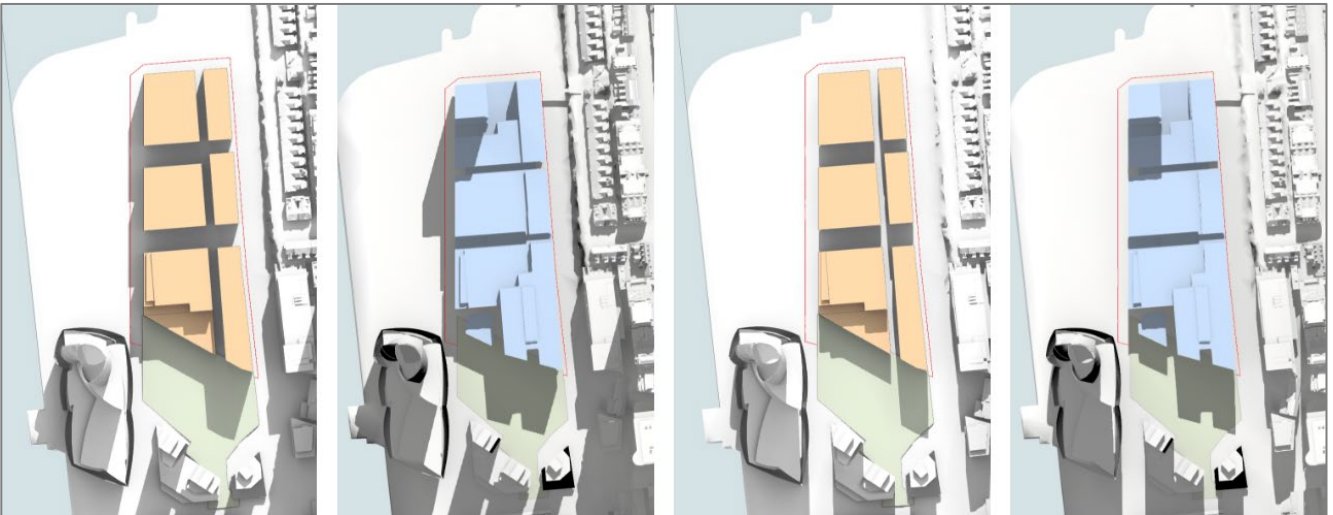
FIGURE 55 – PROPOSED CONCEPT PLAN BUILDING ENVELOPE SOLAR ANALYSIS

An overshadowing assessment has been prepared, which compares the exhibited building envelope with the amended building envelope. The shadow analysis depicted in **FIGURE 56** demonstrates that the proposed amended Concept Plan building envelope results in reduced overshadowing impact compared to the exhibited MOD 9 building envelope.

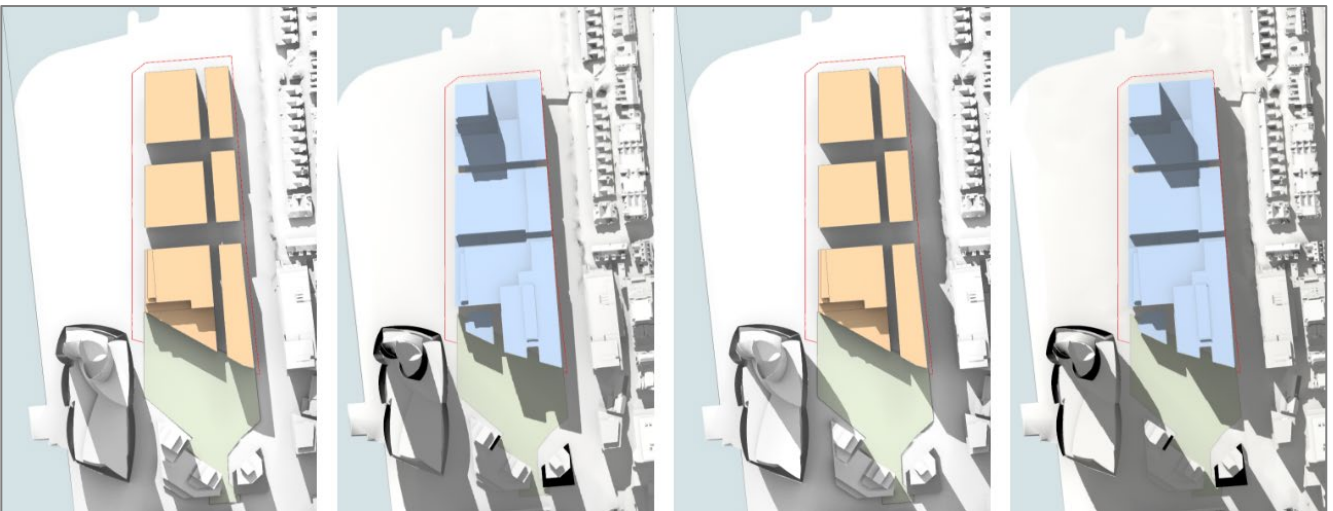




Overshadowing between 9am and 10am



Overshadowing between 11am and 12pm



Overshadowing between 1pm and 2pm

FIGURE 56 – OVERSHADOWING ANALYSIS BETWEEN 9AM AND 2PM MID-WINTER (SJB)



Wind Analysis

In addition, RWDI have undertaken a wind analysis of the approved Concept Plan. This revealed that the current alignment of Hickson Park would be subject to strong westerly winds, providing an uncomfortable environment for users.

The amendments to the building envelope demonstrate a decrease wind washing effects along the southern edge and provides a greater level of pedestrian comfort. This is achieved by slightly reducing the aperture/opening of the south western corner of Block 5 and is depicted in **FIGURE 57**.

The amended building envelope also provides greater areas for pedestrian comfort in the public domain by proposing the north-south pedestrian link, which will be protected by westerly winds.

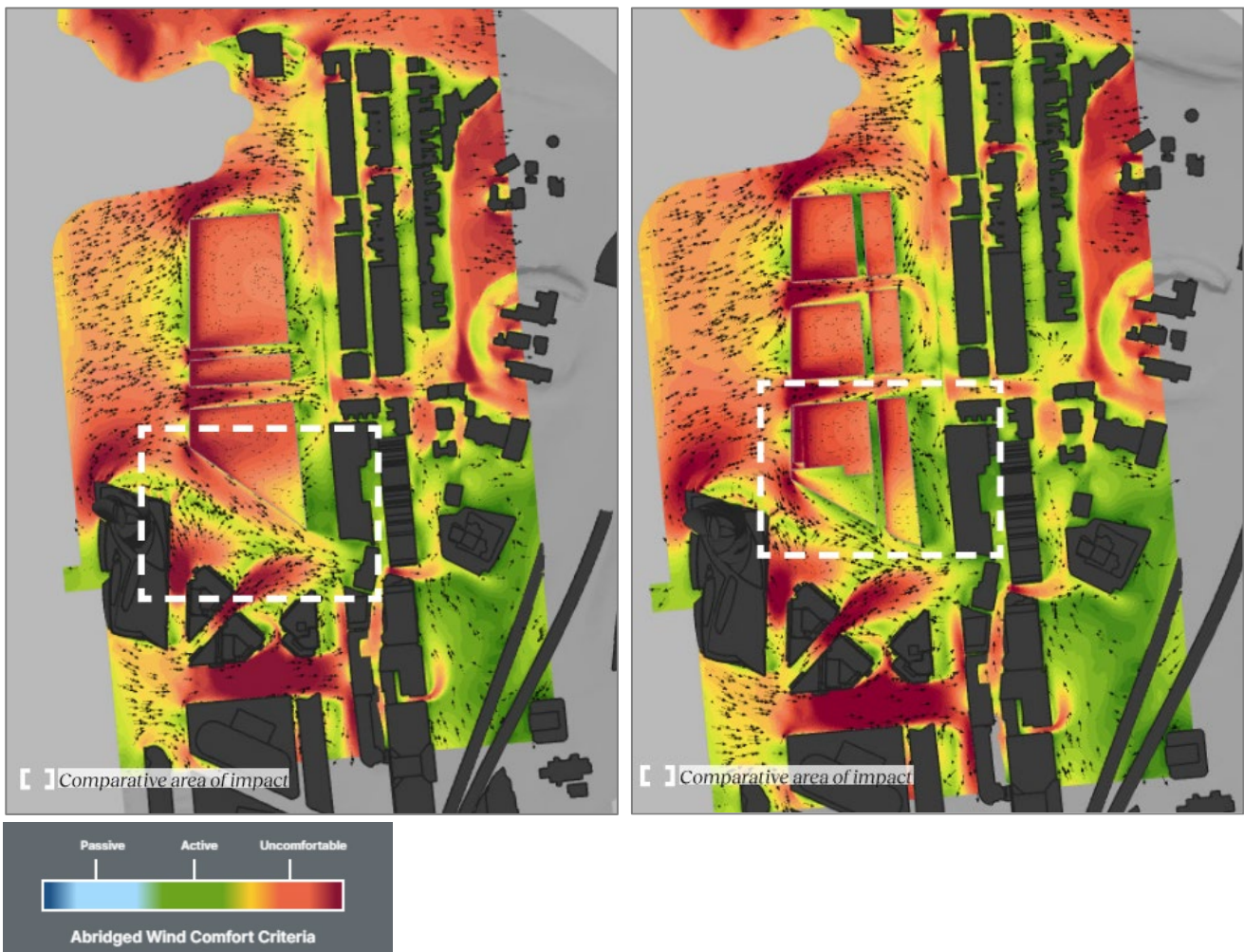


FIGURE 57 – WIND ANALYSIS OF APPROVED CONCEPT PLAN AND PROPOSED CONCEPT PLAN (RWDI)

Visual Assessment

Section 6.8.4 of the VVIA prepared by AECOM (**Appendix D**) provides a visual assessment of the proposed Concept Plan building envelope amendments in relation to observer locations towards Hickson Park.



FIGURE 58 depicts views in front of 36 Hickson Road, adjacent to Barton Street looking north and Barangaroo South to the west. This location represents the interface of Hickson Park and Block 5 and establishes a visual corridor from Hickson Road to Harbour Park. A small portion of Block R5 is also visible and the Crown Casino within Barangaroo South.

The approved Concept Plan splits the low, visually open view across Central Barangaroo into two more axial views along Hickson Road to the north and Barton Street to the north-west. Along the narrower view along Hickson Road, a substantial portion of the southern elevation of the Dalgety Bond Store is lost to view behind the development envelope. The visible portion is considered sufficient to highlight the historic nature of the building and will be gradually revealed as people walk north along Hickson Road. The width of the view corridor is considered sufficient to obtain a reasonable understanding of the breadth of the view beyond.

By contrast, the exhibited MOD 9 building envelope reduced the extent of the harbour/inner western suburbs view from this location by slightly more than half. The ground plan section of the view between the envelopes would still contain the key elements of Darling Harbour, Balmain East and low Cumberland Plain horizon. This would comprise a reduced view, but still sufficient to understand of the breadth of the view beyond. The building envelope is substantially larger relative to the approved Concept Plan and would be more imposing along the Hickson Road streetscape.

The amended MOD 9 building envelope pulls the development envelope back to the approved Concept Plan extent along the Hickson Road, more appropriately mirroring the flat face of the Hickson Road cutting. The building envelope is set back from Hickson Road similar to that of the approved Concept Plan, removing the cantilevered overhang seen in the exhibited MOD 9 building envelope. Block 5 is taller, and therefore more visually imposing than the approved building envelope, however, the envelope steps down towards the west within Block 5 to the lower harbour and parkland surrounding it.

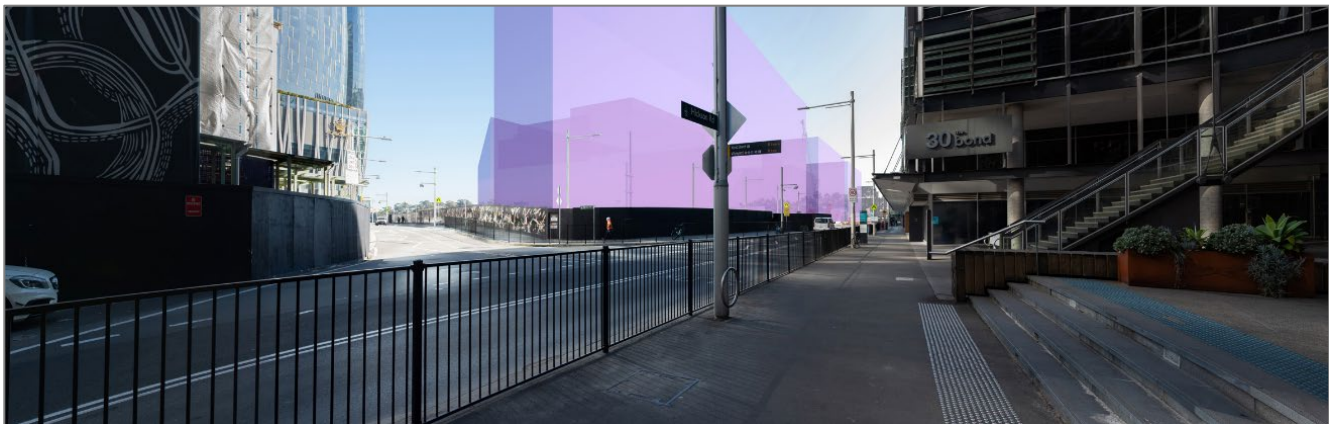




Approved Concept Plan building envelope



Exhibited MOD 9 Concept Plan building envelope



Amended MOD 9 Concept Plan building envelope (current proposal)

FIGURE 58 – VISUALISATION COMPARISON AT HICKSON ROAD (AECOM)



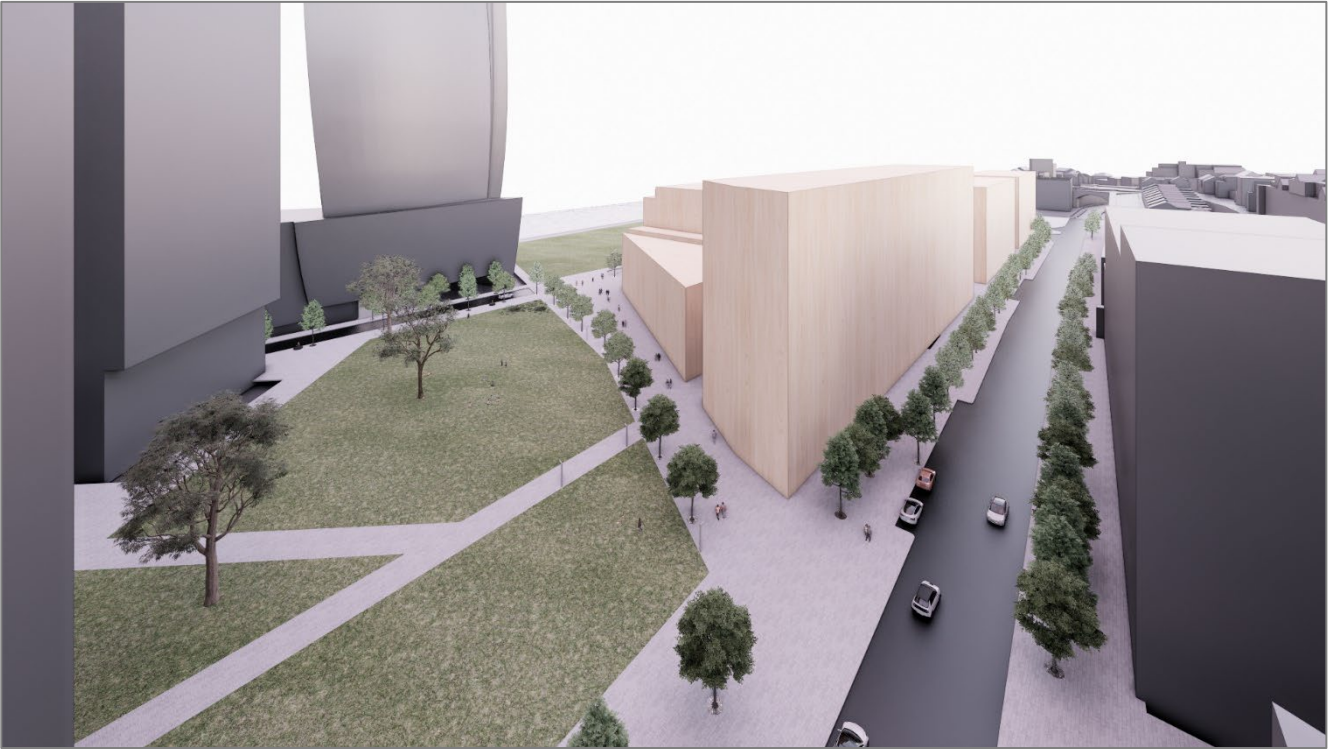


FIGURE 59 – ILLUSTRATION OF GROUND LEVEL VIEW FROM HICKSON PARK TO SYDNEY HARBOUR (SJB)



FIGURE 60 – ILLUSTRATION OF GROUND LEVEL VIEW FROM HICKSON PARK TO SYDNEY HARBOUR (SJB)



Landscape Outcomes

The amended Concept Plan building envelope is supported by additional analysis and a reference scheme that demonstrates deep soil and a combination of hard and soft landscaping is capable of being achieved across the site and within Hickson Park. Furthermore, the amended Design Guidelines establish a number of objectives to support canopy coverage and deliver shaded spaces. **FIGURE 61** illustrates the potential landscaping quality and character of Hickson Park and Block 5.

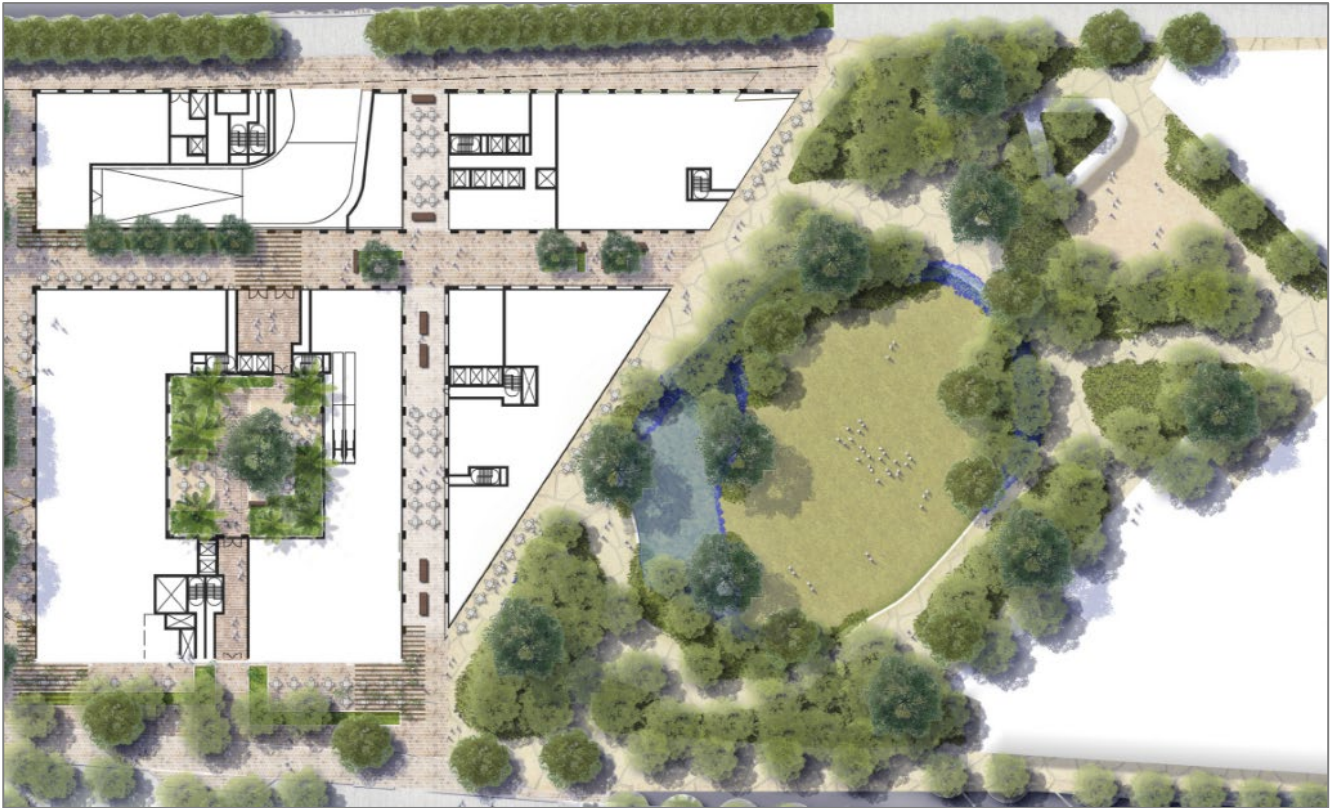


FIGURE 61 – HICKSON PARK AND BLOCK 5 LANDSCAPING OUTCOME (SJB, COLA STUDIO AND OCULUS)

The precise location of deep soil, and the overall treatment of Hickson Park, will be subject to detailed SSDAs.

Overall, when considering the changes to Hickson Park made by the PAC in MOD 8 and referenced in Conditions B3(1) and B3(2), the amended Concept Plan building envelope:

- Improves solar performance to Hickson Park, with approximately 26.1% of the park overshadowed compared to 33.6% in the nominated periods and despite the reconfigured park size,
- Ameliorates westerly winds and provides greater levels of pedestrian comfort along the southern boundary and also within the site itself,
- Maintains clear visual connectivity to the harbour from Hickson Road, and
- Demonstrates capacity for deep soil and soft landscaping to be achieved, which will be supported by reduced impact of westerly winds, and
- The accompanying Design Guidelines will provide a robust framework to ensure a high quality landscaping outcome is achieved in tandem with active edges.



The redistribution of Hickson Park space will have an overall benefit to the larger public domain experience including the:

- Additional public domain that would not otherwise have been provided,
- Different types of public domain that are distinct and complementary to Hickson and Harbour Parks, and
- As distinct types of open space, they contribute to a more varied, interesting and active precinct.



FIGURE 62 – ILLUSTRATION OF PROPOSED INTERFACE WITH HICKSON PARK (SJB)

8.5.2 Overshadowing to Public Open Spaces

Issue

Submissions stated that MOD 9 would have unacceptable overshadowing impacts to Harbour Park, Hickson Park and the wider public domain areas.

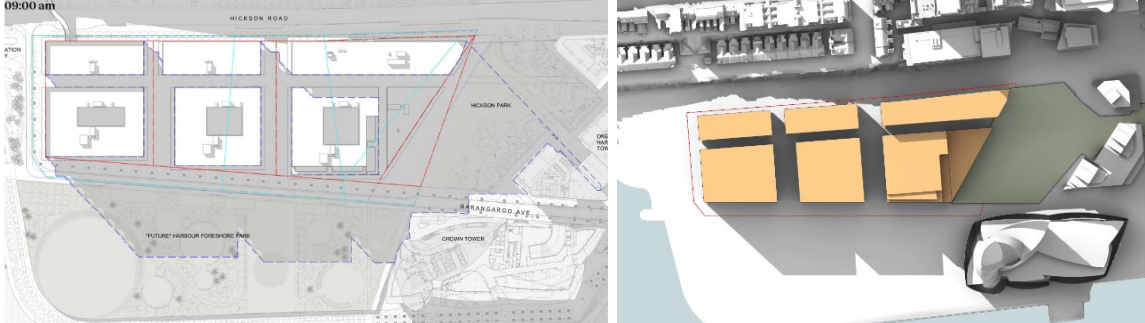
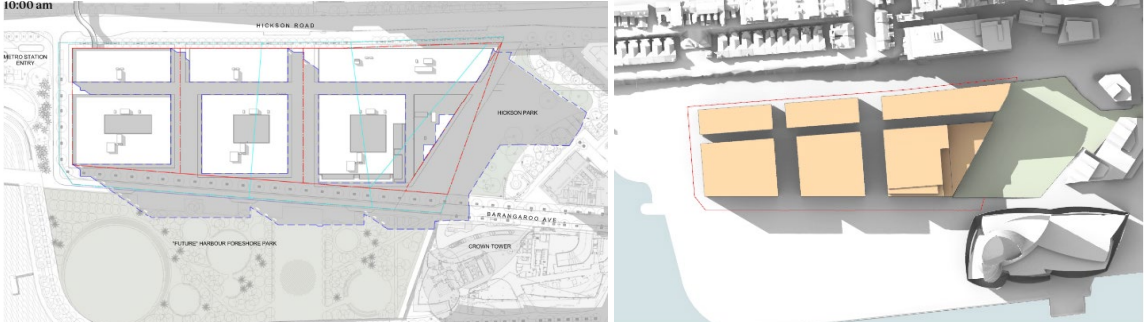
Response

An analysis has been prepared that explores the overshadowing impacts of the proposed reference scheme on Hickson Park, Harbour Park and surrounding public domain areas. This has been undertaken in the form of conventional overshadowing diagrams in plan view and view from the sun diagrams.



An assessment of overshadowing impact is summarised in **TABLE 23**.

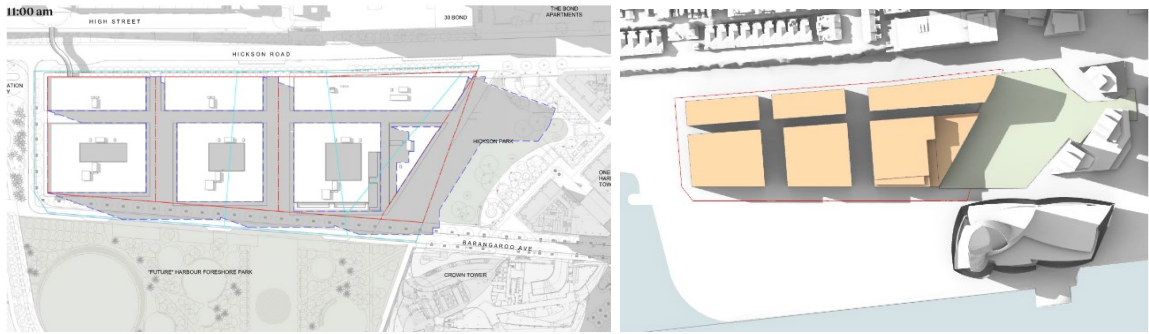
TABLE 23 OVERSHADOWING ASSESSMENT

TIME	REFERENCE
9am	 <p data-bbox="272 741 1422 965"> At 9am, the proposal will cast shadow to the central and southern portions of Harbour Park. Areas of open space directly adjacent to the foreshore and Nawi Cove will receive sunlight. The northern and central portions of Hickson Park will be overshadowed, with additional shadow cast by surrounding built form on the opposite side of Hickson Road. All internal open spaces within the site will be overshadowed by proposed built form. Areas around the pedestrian entrances and gaps between buildings along Hickson Road and on the northern boundary receive sunlight. </p>
10am	 <p data-bbox="272 1341 1422 1563"> At 10am, the proposal will cast shadow to the eastern portions of Harbour Park and Barangaroo Avenue. A large portion of the park will receive sunlight. Areas of Hickson Park to the south west and south east adjacent to built form will receive sunlight. The central and southern portions of Hickson Park will be partially overshadowed. All internal open spaces within the site will continue to be overshadowed by proposed built for. Areas around the pedestrian entrances and gaps between buildings along Hickson Road and on the northern boundary start to receive additional sunlight. </p>



TIME REFERENCE

11am

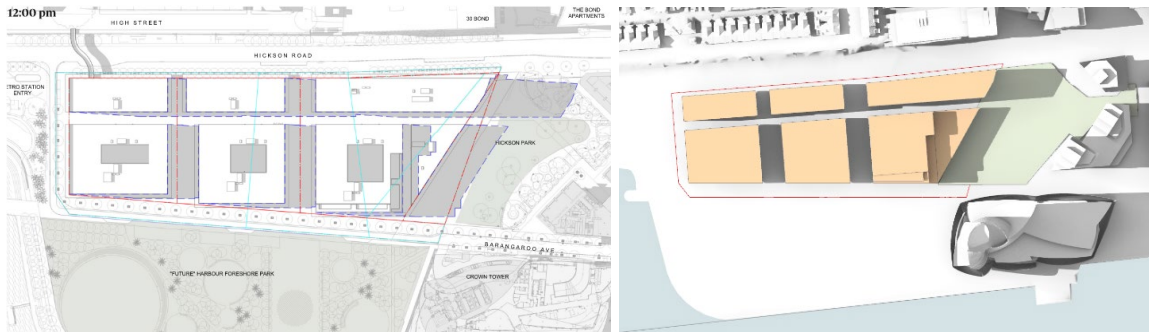


At 11am, the proposal will cast shadow to Barangaroo Avenue. All of Harbour Park will receive sunlight.

Areas of Hickson Park in the south west will receive sunlight. The north and east portions of Hickson Park will be partially overshadowed.

All internal open spaces within the site will continue to be overshadowed by proposed built form. Areas around the pedestrian entrances and gaps between buildings along Hickson Road and on the northern boundary receive sunlight.

12pm

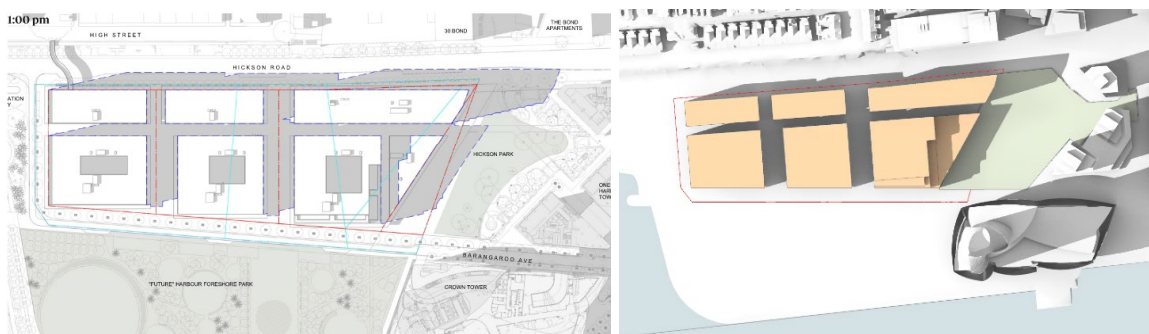


At 12pm, the north-south pedestrian link, Barangaroo Avenue and Harbour Park will receive sunlight.

Large portions of Hickson Park will receive sunlight. The area of park immediately directly adjacent to Block 5 and the south east portions of the park will be partially overshadowed.

The two east-west pedestrian links (Plaza North and Plaza South) will be overshadowed.

1pm



At 1pm, the northern extent of the north-south pedestrian link, Barangaroo Avenue and Harbour Park will receive sunlight.

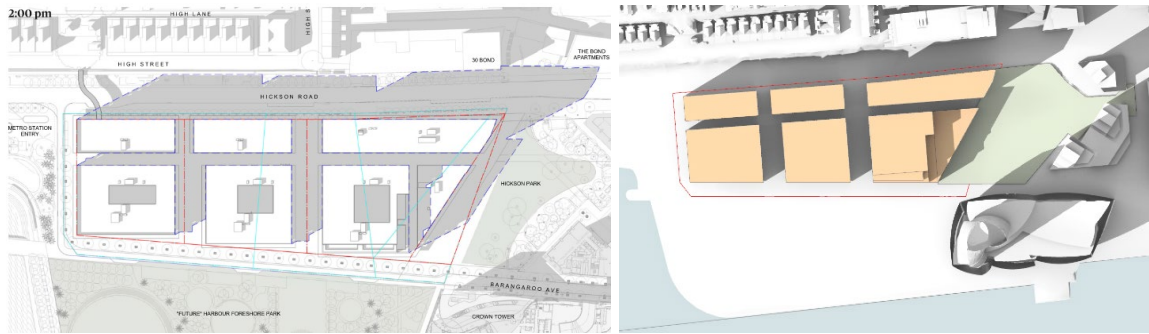
Large portions of Hickson Park will receive sunlight. The area of park immediately interfacing with Block 5 will be partially overshadowed.

The two east-west pedestrian links (Plaza North and Plaza South) receive sunlight at the interface of Harbour Park.



TIME	REFERENCE
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2pm



At 2pm, Barangaroo Avenue and Harbour Park will receive sunlight. Hickson Road will be largely overshadowed.

Large portions of Hickson Park will receive sunlight. The area of park immediately interfacing with Block 5 will be partially overshadowed however, this is limited.

The two east-west pedestrian links (Plaza North and Plaza South) continue to receive additional sunlight at the interface of Harbour Park.

Overall, the overshadowing assessment concludes that Harbour Park, Hickson Park, Barangaroo Avenue will receive sufficient levels of solar access. The removal of the tower form from the exhibited MOD 9 proposal, deletion of the 3m cantilevered zone above ground and general reductions in height across all blocks improves solar access to surrounding public spaces.

8.6 Traffic and Parking Impacts

Issue

Submissions state that MOD 9 will increase traffic impacts within the surrounding areas such as Millers Point and will increase the demand for on-street parking, which exacerbate existing traffic and parking issues.

Response

There are two considerations with respect to this issue. The first is the increased traffic impacts of MOD 9 on the surrounding area. The second issue is the increased demand for on-street parking as a result of MOD 9.

It is also important to note that MOD 9, either exhibited or as amended, does not propose a final quantum of car parking for Central Barangaroo. The car parking provision is set out in the existing Instrument of Approval under Condition C4 and there is no change to this. The approved rates are:

- Commercial: 1 space/600m² GFA,
- Residential,
 - 1 bedroom/bedsitter unit: 1 space/2 units,
 - 2 bedroom unit: 1.2 spaces/unit,
 - 3 + bedroom unit: 2 spaces/unit,
- Other Uses: City of Sydney Council rates, and
- Hotel: City of Sydney Council rates or as otherwise approved by the relevant delegate or the Minister.



The estimated car parking numbers and associated traffic generation is based on the land use mix in the indicative reference scheme, which is not subject to approval in this application but is used to inform the traffic assessment of the proposal. Future detailed SSDAs will be submitted over the course of the project lifecycle in staged manner, which will specify the parking requirements based on the proposed land use mix at that time.

Therefore, any reference to the provision of car parking numbers in this Submissions Report or the TMAP relates to the indicative car parking requirements and generation of the reference scheme.

Increased Traffic Impacts

In relation to the first issue, the amended MOD 9 proposal is accompanied by a revised TMAP (**Appendix G**), which notes the amended MOD 9 proposal reference scheme will result in an increase in total number of parking spaces by 17 spaces from the approved Concept Plan.

The TMAP outlines the amended MOD 9 proposal reference scheme would result in an increase in total number of parking spaces by 17 spaces, which reflects a reduction of 176 spaces from what was previously exhibited (proposed 3,768 spaces).

It is also noted the changes to car parking since the exhibited MOD 9 proposal as a result of the amended reference scheme include:

- Reduced on-street parking spaces within Central Barangaroo by 19 (25 exhibited and 6 now amended),
- Reduced commercial parking spaces by 78 (599 exhibited and 521 now amended),
- Reduced retail parking spaces by 62 (113 exhibited and 51 now amended), and
- Reduced residential parking spaces by 145 (2,202 exhibited and 2,057 now amended).

The reason for the change in anticipated parking provision for Central Barangaroo is a result of the reduced commercial office and retail offering and increase in residential since exhibition. As discussed above, it will ultimately be future SSDAs that determine the quantum of parking in accordance with Condition C4 of the Instrument of Approval.

The reduction in on-street parking along Hickson Road is continued to be based on the draft Hickson Road masterplan. The reduction in on-street parking broadly within Central Barangaroo is attributed to the closure of Barton Street as a permanent two-way street and general refinements to parking bays along Barangaroo Avenue.

Furthermore, the results of the traffic modelling forecast minor changes in the operation of key intersections as a result of the currently approved Concept Plan when compared with performance under MOD 11. Changes in vehicle delays are relatively minor for most parts of the network in both AM and PM peak commuter hours. This indicates the road network can accommodate the modification with performance remaining at acceptable levels.

Overall, and based on the amendments made to MOD 9 post exhibition, ARUP conclude that the total volume of traffic generated by the entire precinct will be similar when compared with that previously assessed.

Refer to **Section 9.3** for further detail.

Parking Impacts



In relation to the second issue, Barangaroo was founded on principles of high public transport usage, walking and cycling as a method of travelling to work. This pre-dates the opening of the CBD and South East Light Rail and announcement of the Metro CBD project.

This underlying principle is reinforced by the forthcoming Metro Station, which will ensure Central Barangaroo capitalises on significant State government investment and becomes a highly accessible place.

The Metro Station was announced in June 2015 as part of the Sydney Metro CBD and Southwest project, which is under construction and scheduled for completion in 2024.

The new Metro Station will optimise land use and transport planning to support the principles of a 30-minute city. It will substantially increase rail capacity serving rail Barangaroo and Millers Point and provide a convenient and feasible alternative to access the area by private vehicles and the reduce the dependency of car ownership within the wider precinct.

The site, and Barangaroo more broadly, is located within a transport rich environment and provides rail, ferry, bus, light rail service within walking distance. In this respect, it is anticipated future SSDAs will be required to prepare Travel Demand Management Plans (**TDMs**) that provide objectives to reduce car journeys, support sustainable transport options, ensure facilities are provided to support sustainable travel and raise awareness of transport options. This has already been applied and prepared by occupants in Barangaroo South.

8.7 Public Amenity and Benefits

The public benefits for Central Barangaroo were determined between the Central Barangaroo Developer (Aqualand) and INSW (the Applicant) during the bid process. These public benefits were predicated on the site capable of achieving urban renewal outcome in response to the State governments investment into the Sydney Metro City and Southwest project.

The Barangaroo Metro Station was based on the entire precinct being complete. The announcement of the Central Barangaroo bid process in 2015 indicated tenderers would be capable of achieving up to 150,000m² of GFA. This was seen to align with the completion of the station and renewed objectives for the site. It has always been contemplated, through this process, that Central Barangaroo should achieve a level of density that is commensurate and responsive to the new station.

The increase in GFA proposed under MOD 9 is comparable to major CBD renewal projects where planning uplift has been directly informed by the introduction of a new station on the Sydney Metro network. **TABLE 1** provides a summary of the development density of key sites pre-metro and the changes to the planning controls implemented following their announcement/implementation. It indicates the uplift of Central Barangaroo is modest when considered against the approved Concept Plan (which is the subject of this modification).

The exhibited MOD 9 proposal sought to deliver 144,355m² of GFA in tandem with a range of major public benefits unable to be achieved under the approved Concept Plan. This includes the delivery of up to 19,000m² of cultural and community GFA, which includes allocation of up to 18,000m² of GFA to the Cutaway and 1,000m² for potential community uses within the RE1 zone.

In addition, the exhibited proposal sought to deliver additional community use GFA within Central Barangaroo site itself from 2,000m² (under the approved Concept Plan) to 2,800m².



Following exhibition, the Applicant has made significant reductions in the proposed density for Central Barangaroo from 144,355m² to 104,000m² (a reduction of 40,355m²). Despite this, the Applicant and the Central Barangaroo Developer remains committed to delivering the same established quantum of public benefits that were put forward for the exhibited proposal.

It is important to note that public benefits have been identified holistically throughout the evolution of planning for Barangaroo with agreement that the various benefits will be delivered in different ways in each precinct.

Commitment 35 of the SoCs requires a total of 3% of residential floorspace in Barangaroo South to be allocated to key worker housing.

Barangaroo South remains the primary contributor to affordable housing delivery with 3% of residential floorspace as affordable housing. This includes 0.7% offsite and 2.3% onsite.

Barangaroo Reserve (i.e., the headland) provides 55% of the open space in Barangaroo and accommodates ‘The Cutaway’, a distinctive cultural and arts space. Central Barangaroo is a cultural and arts led precinct, with flexible zoning to accommodate residential, tourism and retail uses. It provides links between the cultural and open spaces of Barangaroo Reserve and Barangaroo South. Development in Central Barangaroo will deliver significant public benefits totalling \$226 million including:

- \$78 million to support cultural facilities and initiatives (financial contribution),
- \$61 million for public domain improvements (in kind),
- \$45 million for the embellishment of Harbour Park to world-class standard, including flexible event spaces to accommodate a range of cultural activities,
- \$8 million for Metro Station Southern entry,
- \$2 million for fit-out for arts and community facilities,
- \$11 million for urban arts contribution,
- \$11 million in development contributions, and
- \$10 million for provision of pedestrian footbridge.

The Cutaway has been used as a temporary event space since 2016. The financial contributions associated with Central Barangaroo will ensure the Cutaway can be developed as one of Sydney’s premier cultural facilities housing a range of events for up to 3,500 people.

Furthermore, Central Barangaroo will facilitate financial contributions to Harbour Park and will support an event lawn for hosting community and cultural events with up to 3,000 people, public art installations, winding pathways to explore, extensive native planting and interactive water features.

Overall, the public benefits being delivered through Central Barangaroo will facilitate the creation of world class open space and cultural spaces that could not be realised under the approved Concept Plan.

Consistent with the obligations of the approved Concept Plan, MOD 9 will also continue to ensure the broader public benefits are delivered, which include:

- Delivery of 50% of the overall 22-hectare precinct for open space and public recreation uses.
- Regeneration of a former container terminal and waterfront site not previously accessible to the public.



- Enhanced connectivity to Sydney’s CBD and inner harbour through Barangaroo Ferry, Wynyard Walk and two pedestrian bridges over Hickson Road.
- Provision of an expansive open space network, interactive and high quality public domain treatments, community facilities, dining and retail activation.
- Creation of a vibrant mixed-use precinct providing combination of residential, retail, community and commercial opportunities.

8.8 Accuracy of Reports and Documentation

8.8.1 Depiction of the Approved Concept Plan

Issue

Submissions state there is a methodological error in the way the approved building envelope has been established for Central Barangaroo which ignores design principles, requirements and development controls under the previously approved Concept Plan.

In doing so, submissions state this questions the validity of technical assessments including, but not limited to, heritage, visual impact and urban design.

Specifically, submissions refer to the Section 13 of the EA, which establish a range of design requirements and development controls that were intended to guide built form at Barangaroo.

Response

An extensive review has been undertaken of the approved building envelopes for Block 5, 6 and 7 under the approved Concept Plan.

The original Concept Plan does not contain a set of approved plans, which depict the Central Barangaroo concept building envelopes for Blocks 5, 6 and 7 that would ordinarily be provided for a concept development under Part 4 of the EP&A Act. This is generally consistent with the nature of Part 3A concept plan approvals, which enable essential flexibility due to the scale and complexity of Part 3A projects - refer to **Section 3.3**.

Nonetheless, it is appropriate to consider a building envelope to be generated, which reflects the approved maximum height, GFA and development footprint (development block layout and street network). We consider these to provide an accurate representation of the approved Concept Plan building envelope for Blocks 5, 6 and 7.

The approved concept building envelopes are governed by the following approved Concept Plan elements.

- **Condition B4(2)** sets out the maximum GFA and height for Blocks 5, 6 and 7. These controls are also reflected in the PEHC SEPP ‘Gross Floor Area’ and ‘Height of Buildings’ mapping (**FIGURE 63**).





FIGURE 63 – PEHC SEPP BARANGAROO HEIGHT OF BUILDINGS MAP (SHEET HOB 001)





FIGURE 64 – PEHC SEPP BARANGAROO GFA MAP (SHEET GFA 001)

- **Condition A2(1)(c)** approves the *Barangaroo Part 3A Modification Report – Headland Park and Northern Cove* prepared by MG Planning Pty Ltd on behalf of Sydney Harbour Foreshore Authority dated January 2009 (MOD 3), which included:
 - Development block layout as illustrated in Figure 12 ‘Revised Development Blocks’, and
 - Street network as provided in Figure 18 ‘Revised Street Hierarchy’.

Refer to **FIGURE 65**.



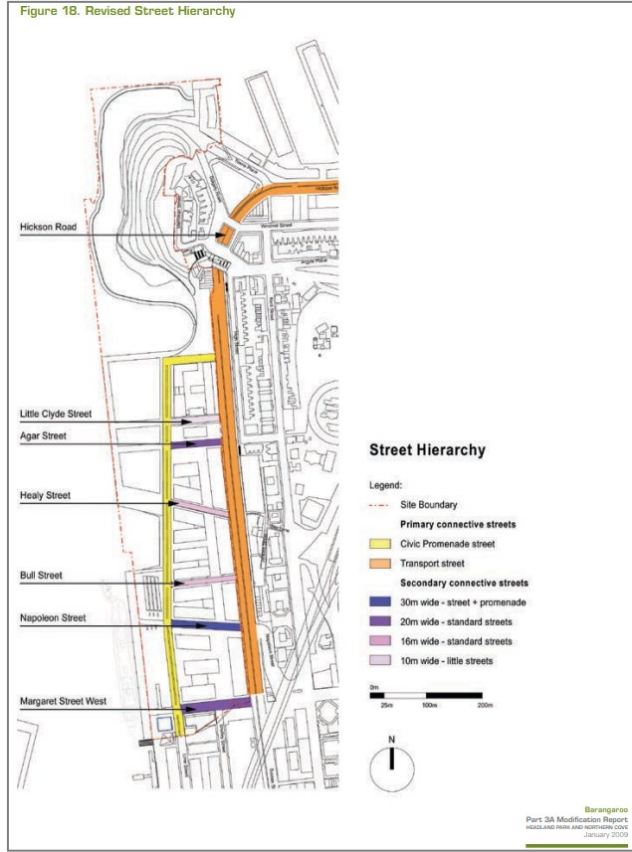
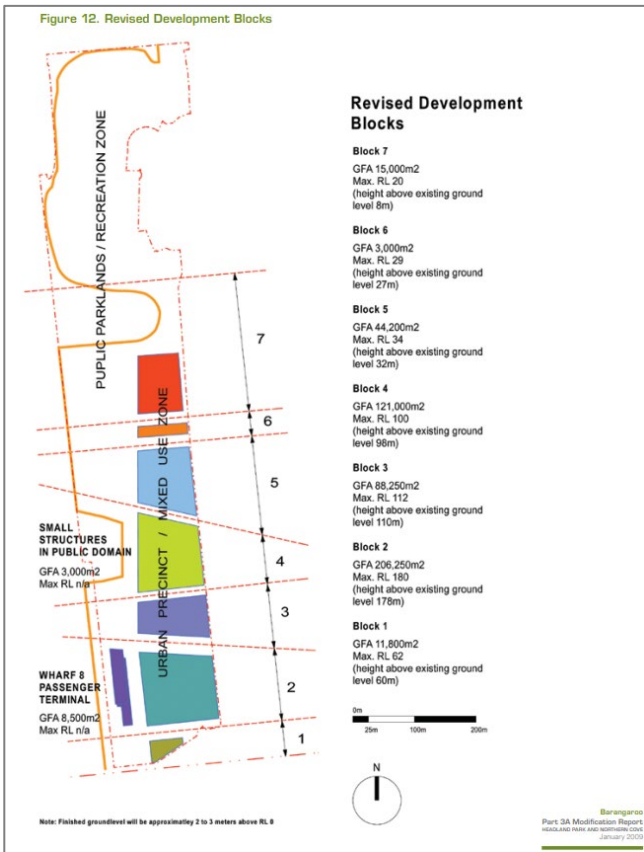


FIGURE 65 – BARANGAROO PART 3A MODIFICATION REPORT EXTRACTS (MG PLANNING)

Based on these elements, the updated approved Concept Plan building envelopes adopt the basis of the comparative analysis the Department have requested.

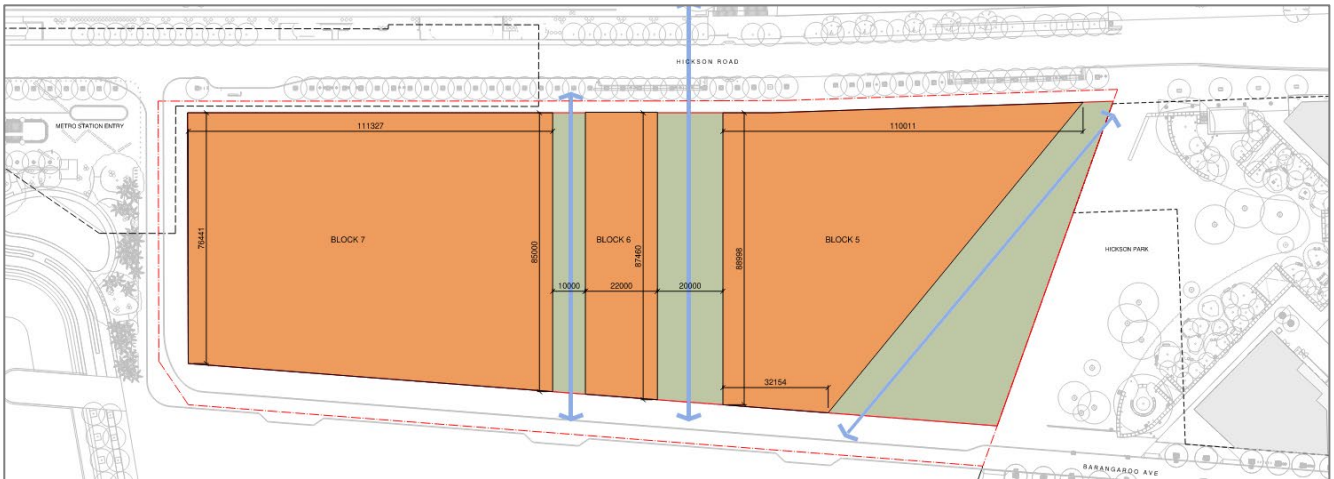


FIGURE 66 – APPROVED CONCEPT PLAN (SJB)



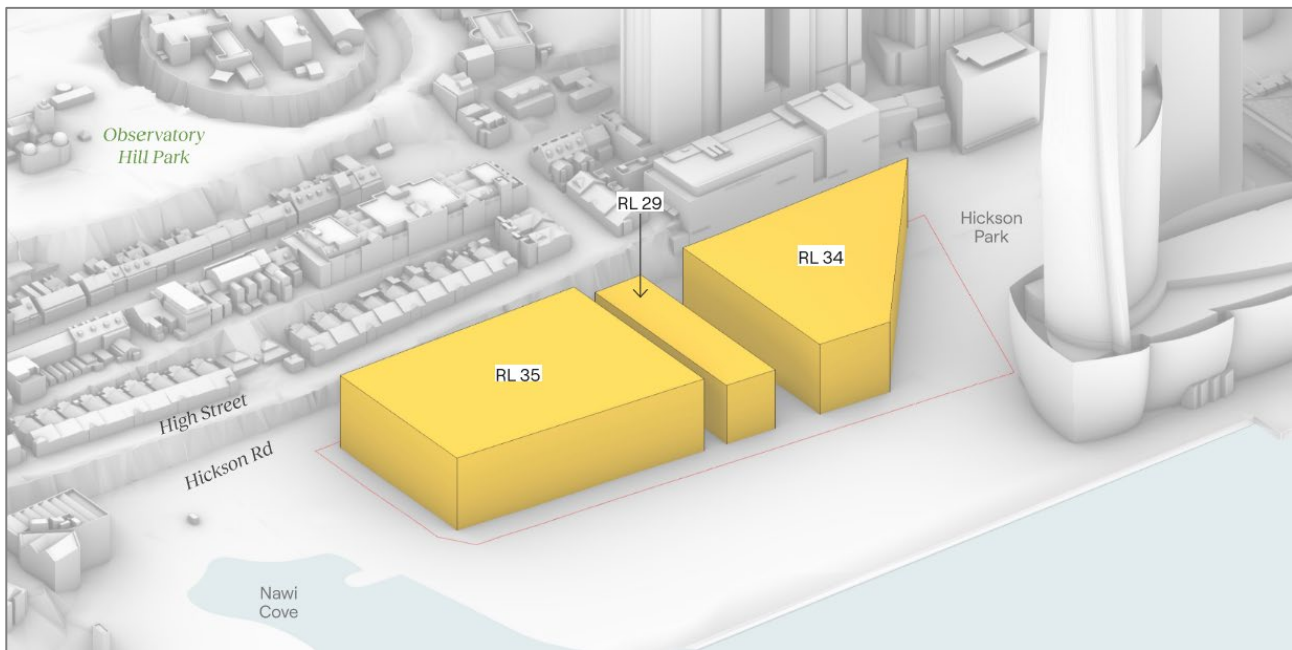


FIGURE 67 – APPROVED CONCEPT PLAN IN 3D (SJB)

We note the current Concept Plan contains a larger volume than would normally be expected from the approved GFA. The amended MOD 9 proposal intends to increase the GFA to more accurately reflect the approved envelope, while retaining a 20-30% buffer for design excellence and articulation as demonstrated in the reference scheme.

Submissions refer to Section 13.0 – Built Form of the EA of the original Concept Plan as the starting point for a comparative analysis. Our review indicates that these would result in an overly prescriptive building envelope, which would be inconsistent with Part 3A approvals and the specific terms of the approved Concept Plan itself.

Section 13.0 – Built Form of the EA to the original Concept Plan contained ‘Block Controls’ for each Block within Barangaroo. In order to allow for the evolution of design excellence, the original wording of Condition B4(3) was explicit that the specific forms were not approved as part of the approval.

However, Condition B4(4) required that future project applications (not Concept Plan modification applications) are to provide a comparison with these Block Controls. Condition C2(4)(d) also required that the briefs for future design competitions for individual blocks also require a comparison of the proposed development against the Block Controls.

The determination of MOD 2 modified this Condition B4(4) to instead require future project applications to consider the ‘Built Form Principles’ and associated diagrams in Section 7.3.3 of the MOD 2 Modification Report of June 2008.

MOD 8 entirely reframed the Built Form Principles in accordance with the approval of a significantly revised built form massing concept. However these revised principles only related to the massing of Barangaroo South and provide no guidance as to the appropriate massing in Central Barangaroo. There are therefore no currently applicable Built Form Principles relevant to Central Barangaroo.



Furthermore, Condition B9(1) specifies podium, street wall heights, minimum setbacks and tower separations for Block 5. However, this condition applies as part of detailed built form controls applicable for future applications lodged for Block 5, and not a Concept Approval envelope control. It is proposed to maintain deletion of Condition B9(1) of the Instrument of Approval.

DPE's Key Issues Letter (see **Section 7.1**) requested comparison of the currently proposed massing with the Block Controls and the Eight Built Form Principles outlined in Section 13 of the EA with the original Concept Plan in 2007. Such comparison is problematic, as the Block Controls were expressed as separate envelope diagrams for each Block, while the Built Form Principles were expressed conceptually for the entirety of Barangaroo, with each supported by a written statement (which were subsequently modified).

In order to provide for coherent comparison, SJB composed the Block Controls into an electronic model of the whole of Barangaroo in addition to a composite model of the proposed reference scheme with the built form outcomes already constructed or under construction for the whole of Barangaroo. Both models were then rotated to the same angle as the images illustrating each of the eight Built Form Principles. While no longer part of the approved Concept Plan, as requested by the Department, these two massing concepts are compared to the current proposal below.

While Condition C2(4)(d) still requires the briefs for future design competitions to provide a comparison of the proposed development against the Block Controls, the subsequent modifications to the Built Form Principles, the actual project approvals for development now constructed within Barangaroo South and the modified footprint of Central Barangaroo will render any such comparison impracticable and somewhat meaningless, as detailed below.

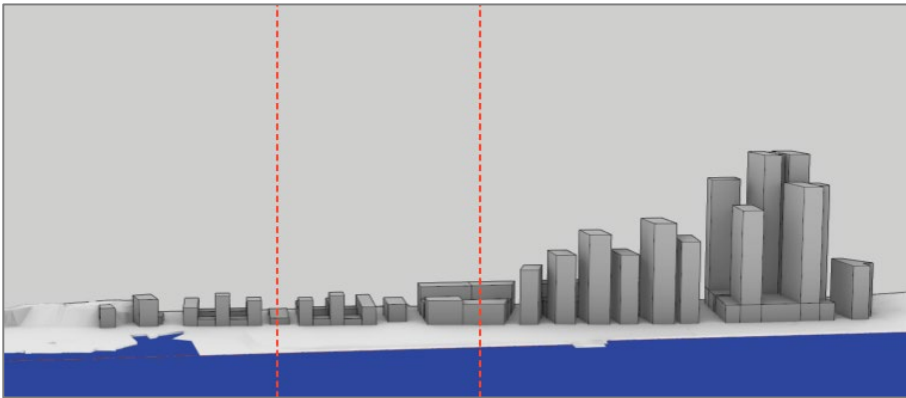
The Eight Built Form Principles are:

- Principle 1: City's New Western Façade
- Principle 2: Hickson Road as a Boulevard
- Principle 3: Buildings to Define Streets
- Principle 4: North-South Pedestrian Connection
- Principle 5: Tapering of Built Form
- Principle 6: Open Space Within Blocks
- Principle 7: View Sharing
- Principle 8: Orientation of buildings

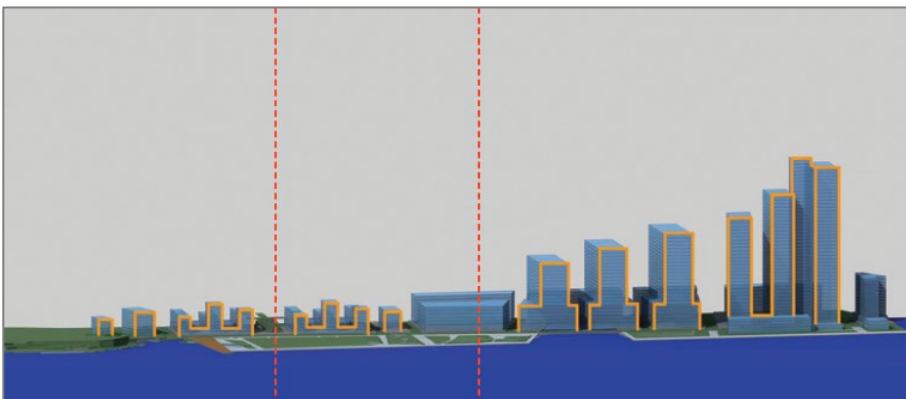
The comparisons below show the approximate extent of Central Barangaroo between red dotted lines. It is important to note that the northern and southern extent of Central Barangaroo have been significantly reduced since the Principles were drafted, requiring the original building spacing to be compressed, with Block 8 deleted and Block 7 partially reconfigured to accommodate Nawi Cove.



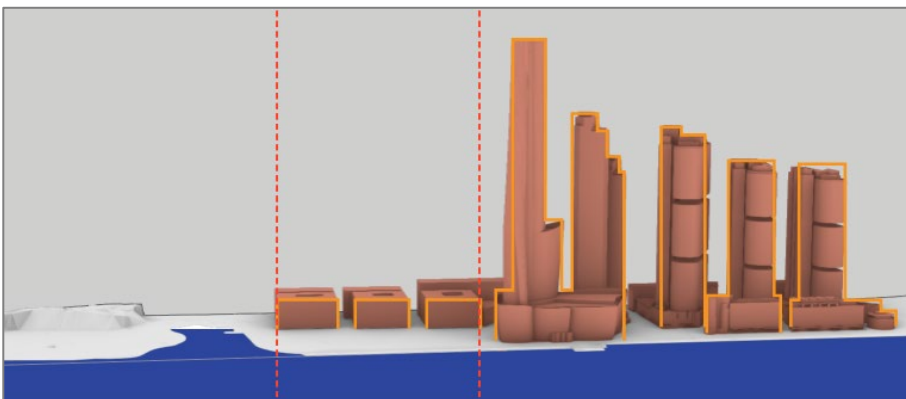
Principle 1. City's New Western Façade



Representation of Composite Block Control of original Concept Plan (not approved)



MOD 2 Built Form Principle: To create an integrated new western frontage to the city centre, orient the slender ends of buildings to the waterfront to define an open silhouette



Existing forms and current Mod 9 reference design

FIGURE 68 – PRINCIPLE 1 ASSESSMENT (SJB)

Consideration of Principle 1

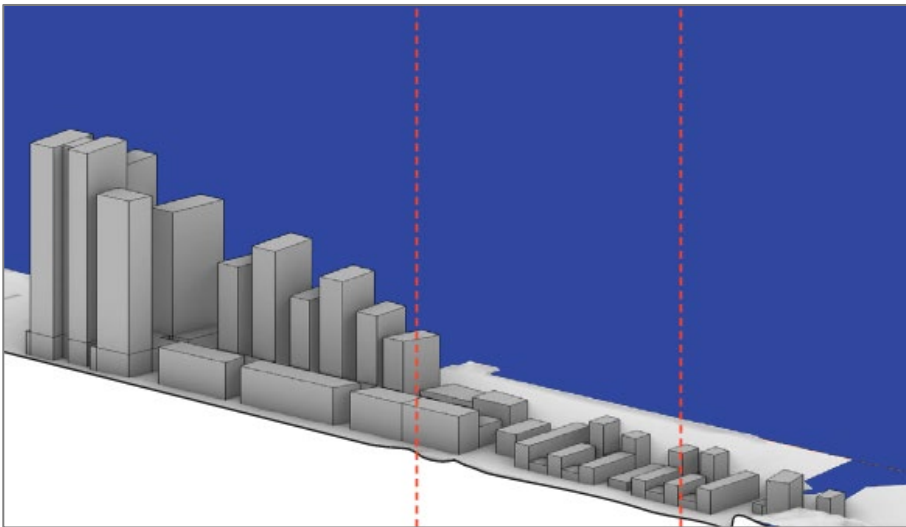
The Central Barangaroo area has been compressed, with Block 8 deleted and Block 7 partially reconfigured to accommodate Nawi Cove.

Furthermore, in Barangaroo South only the tower elements have been constructed with the slender ends of buildings oriented to the waterfront. These towers sit above long north-south podium elements which have a

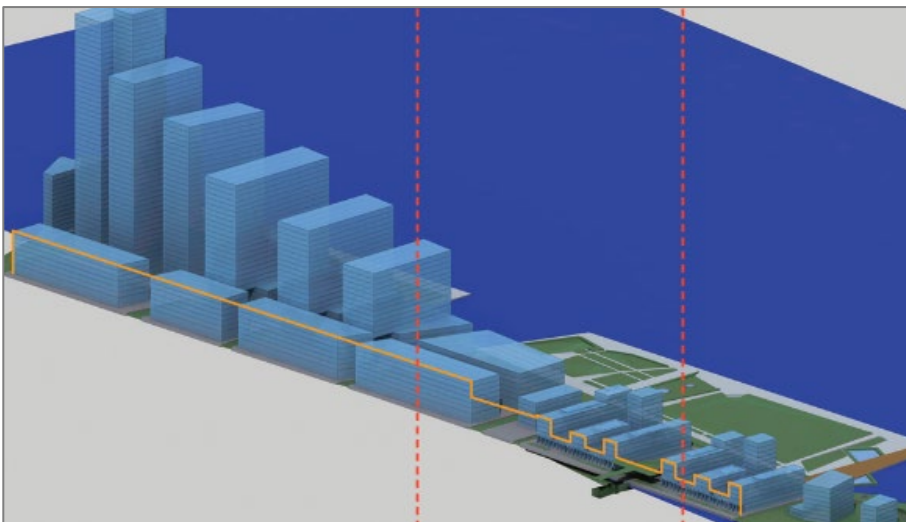


similar height, proportion and spacing to development now proposed at Central Barangaroo (see also consideration of Principle 8).

Principle 2. Hickson Road as a Boulevard



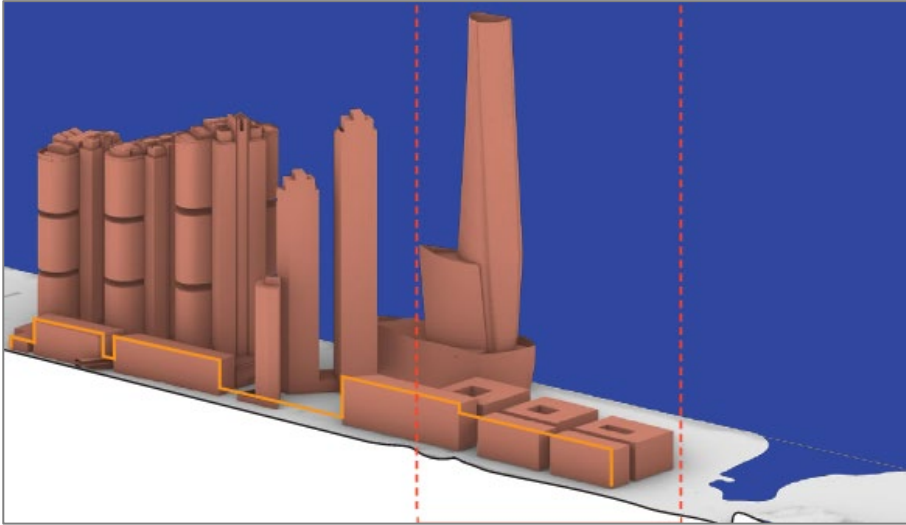
Representation of Composite Block Control of original Concept Plan (not approved)



MOD 2 Built Form Principle: To promote a scale of Hickson Road as a grand boulevard, buildings are to provide consistent street wall and form to Hickson Road and Globe Street, and use a palette of consistent and natural



materials that are complementary to the sandstone nature of the headland



Existing forms and current Mod 9 reference design

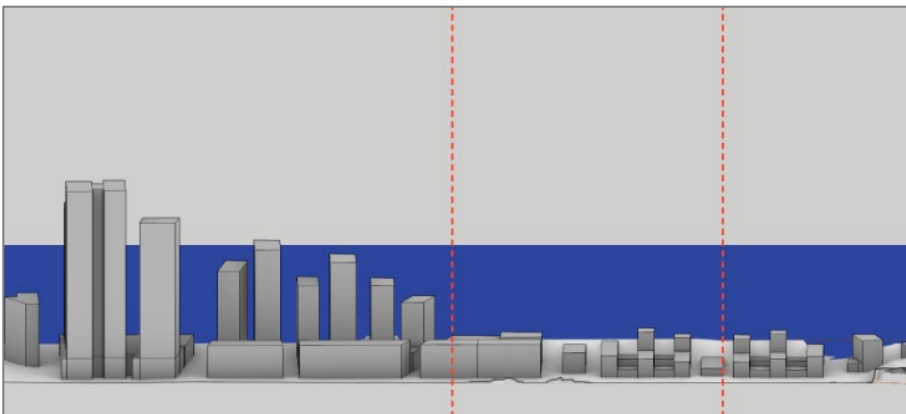
FIGURE 69 – PRINCIPLE 2 ASSESSMENT (SJB)

Consideration of Principle 2

Barangaroo South has been built generally in accordance with this principle of long, street-wall buildings framing a ‘grand boulevard’ along Hickson Road. This will continue to extend across Block 5, but with a significant gap created by the Hickson Park realignment. However, it is now proposed that this principle be extended into Blocks 6 and 7 to accommodate the north-south compression of the precinct.

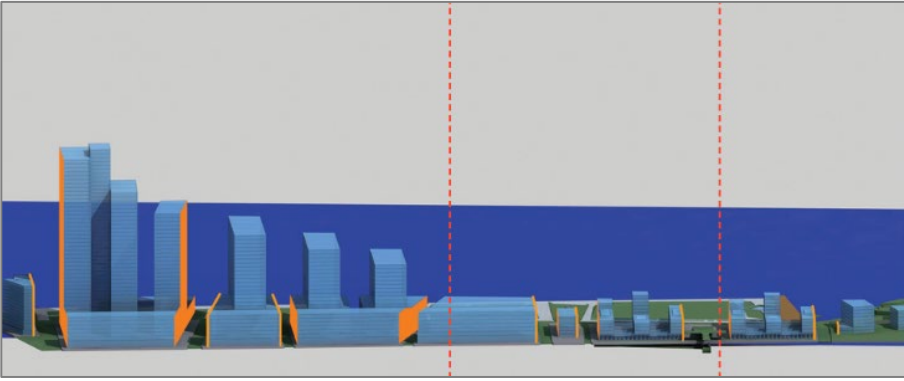
The proposed modification is therefore more effective in achieving the intent of the Principle than the historic Block Controls and Principle Diagram and reinforces the continuation of Hickson Road as a ‘grand boulevard’ with a consistent street wall height

Principle 3. Buildings to Define Streets

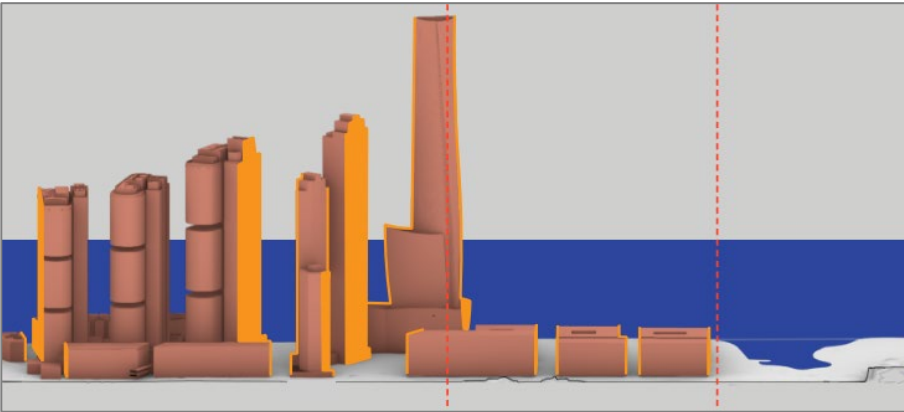


Representation of Composite Block Control of original Concept Plan (not approved)





MOD 2 Built Form Principle: To define the public space of the street, all building façades are to be set to the street alignment with respect to the differing characters, scales and activation of the streets



Existing forms and current Mod 9 reference design

FIGURE 70 – PRINCIPLE 3 ASSESSMENT (SJB)

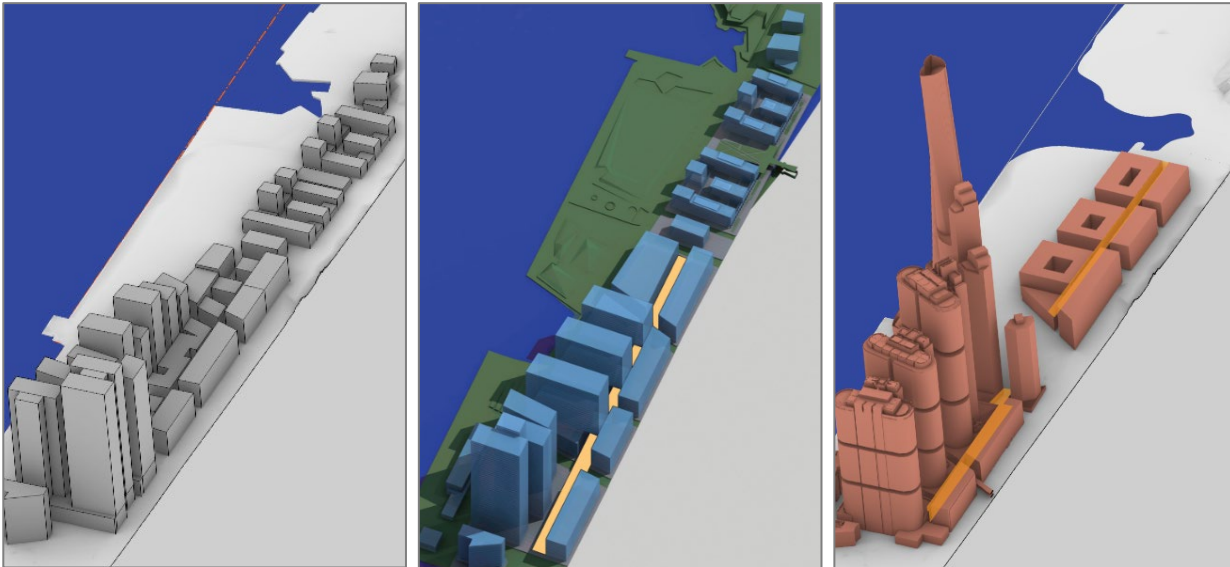
Consideration of Principle 3

Barangaroo South has been built generally in accordance with this principle of long, street edge blocks to Hickson Road, articulated by east-west streets.

It is now proposed that this principle be extended into Central Barangaroo, with buildings defining future east-west and north south streets.



Principle. 4 North South Pedestrian Connection



Left Representation of Composite Block Control of original Concept Plan (not approved) (left)

Centre MOD 2 Built Form Principle: To promote pedestrian connectivity and to encourage diversity in open space uses and to allow mid-day sun penetration within more dense blocks. On Blocks 2 to 5 a continuous mid block pedestrian connection at ground level which is not less than 20m wide and is a minimum of 7 storeys high (not less than 50% open to the sky) (centre)

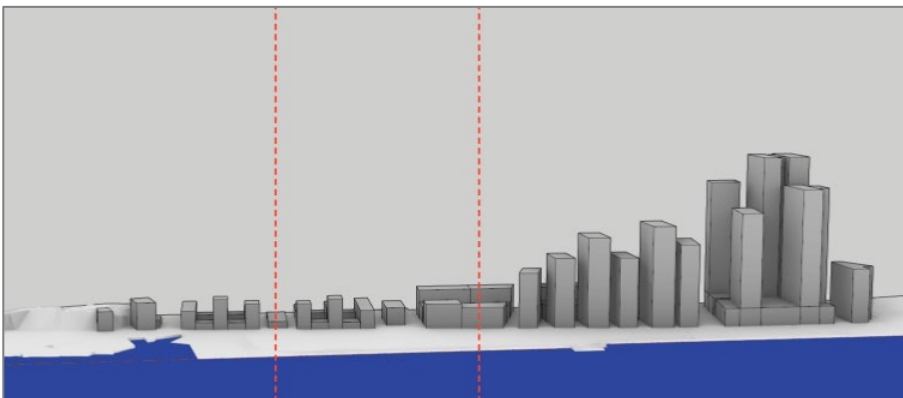
Right Existing forms and current Mod 9 reference design (right)

FIGURE 71 – PRINCIPLE 4 ASSESSMENT (SJB)

Consideration of Principle 4

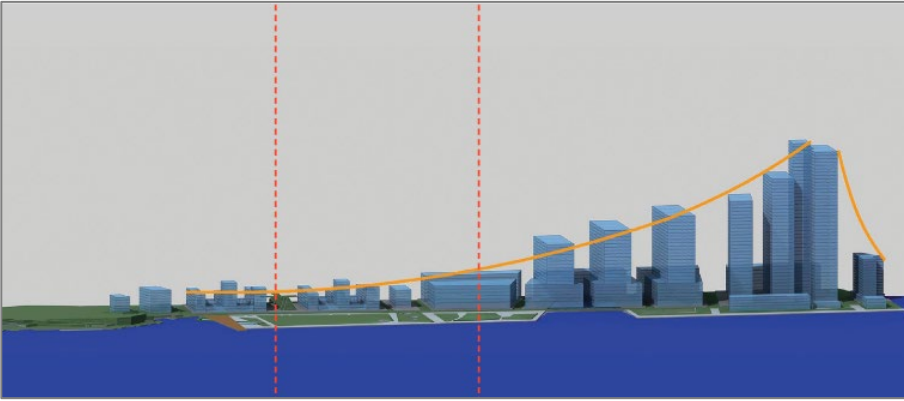
While this principle did not apply to block 6 or 7 of Central Barangaroo, the currently proposed modification extends the envisaged mid-block pedestrian connection north through the entirety of Central Barangaroo, through an 8m wide north-south pedestrian connection from Hickson Park through to Nawi Cove and the Metro Station to encourage additional connectivity within and through the precinct.

Principle 5. Tapering of Built Form

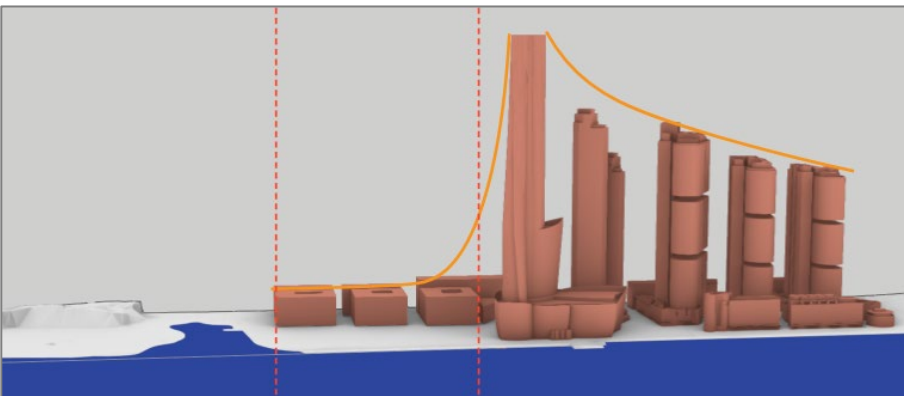


Representation of Composite Block Control of original Concept Plan (not approved)





MOD 2 Built Form Principle: To continue a built form dialogue with the adjoining city, building heights across the site are to generally taper towards the north, with the highest forms concentrated in the block in front of Napoleon Street



Existing forms and current Mod 9 reference design

FIGURE 72 – PRINCIPLE 5 ASSESSMENT (SJB)

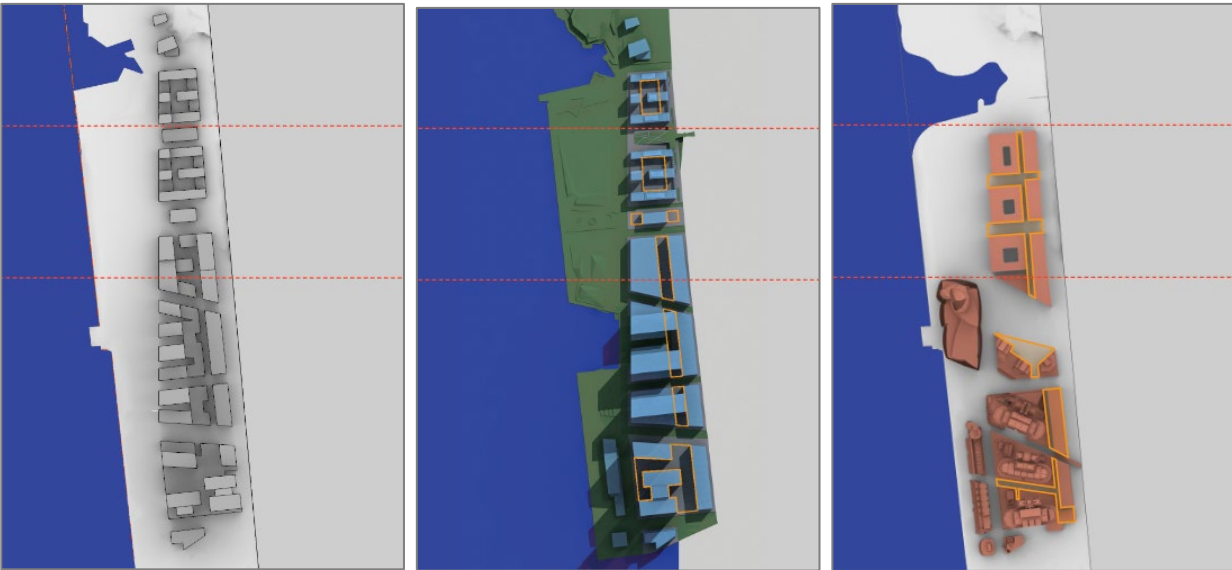
Consideration of Principle 5

The tapering built form principle was entirely abandoned for Barangaroo South at MOD 8, reversing it such that the tallest built form is located in the centre of the precinct – adjacent to Central Barangaroo, and not toward the south. This creates a hard edge disjoint down to Central Barangaroo.

While the general scale of buildings now proposed in Central Barangaroo remains consistent with the general scale illustrated in the image, the stated massing principle is directly inconsistent with the actual massing approved at Barangaroo South.

Principle 6. Open Space Within Blocks





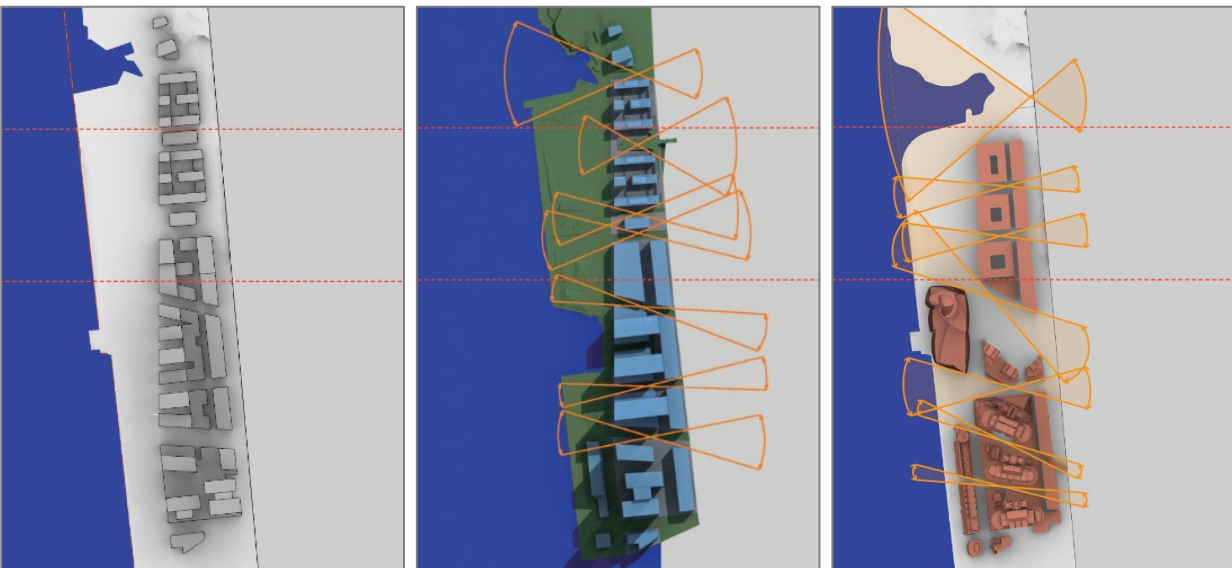
Left Representation of Composite Block Control of original Concept Plan (not approved) (left)
Centre MOD 2 Built Form Principle: To create hollow blocks permeated with open public spaces, courtyards, walkways and gardens. Interrelate the central band of the accessible roof valley with the ground plane and intermediate levels (centre)
Right Existing forms and current Mod 9 reference design (right)

FIGURE 73 – PRINCIPLE 6 ASSESSMENT (SJB)

Consideration of Principle 6

The proposed modification facilitates the envisaged ‘hollow block’ form containing central plazas and courtyards in accordance with this principle, along a stronger, interconnecting, north-south pedestrian spine.

Principle 7. View Sharing



Left Representation of Composite Block Control of original Concept Plan (not approved) (left)



Centre MOD 2 Built Form Principle: To promote the equitable access to views towards the harbour, arrange the built form to define the street corridors and to allow view corridors from the existing private buildings to the east (centre)

Right Existing forms and current Mod 9 reference design (right)

FIGURE 74 – PRINCIPLE 7 ASSESSMENT (SJB)

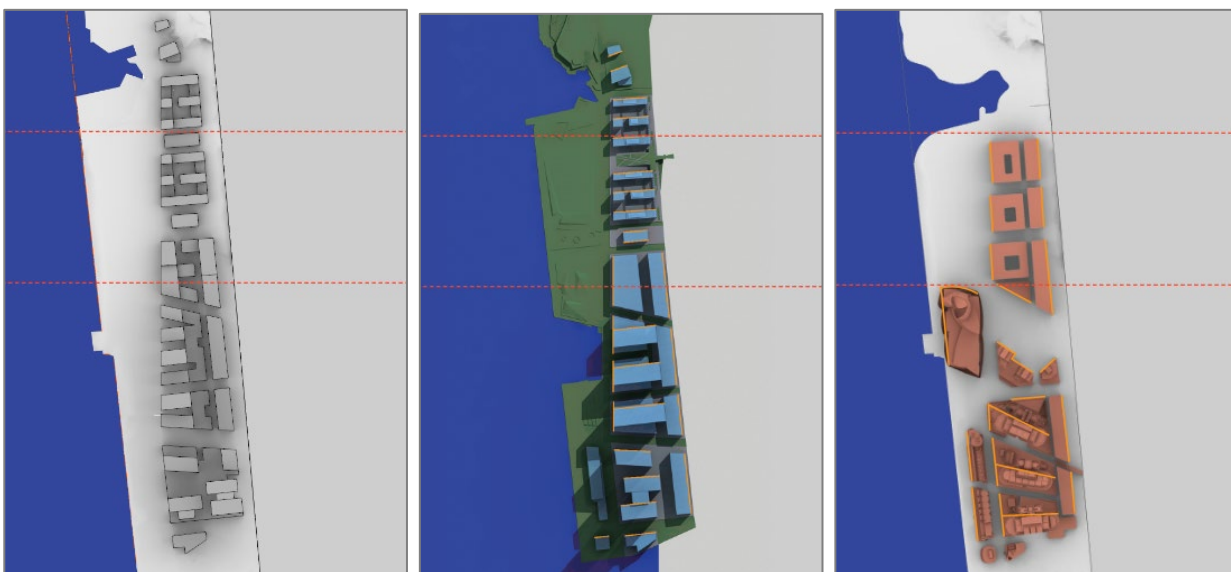
Consideration of Principle 7

Barangaroo South has provided three narrower corridors in place of the two southern most corridors identified on the image to this principle, along a modified east-west alignment.

The third corridor from the south has been significantly expanded through the creation of Hickson Park.

The two northern corridors have been dramatically consolidated into a single larger corridor with more expansive views, achieved by the removal of Block 8 and partial reconfiguration on Block 7 and the creation of Nawi Cove. The two corridors that pass through Central Barangaroo are maintained along the two proposed east-west streets. While not on the identical alignment, the southern corridor preserves western views along the east west aligned section of High Street, with the other corridor moved north to more evenly distribute the corridors.

Principle 8. Orientation of Buildings



Left Representation of Composite Block Control of original Concept Plan (not approved) (left)

Centre MOD 2 Built Form Principle: To provide optimum orientation and transparency across the site and to create a silhouette of slender towers to Globe Street and the waterfront – orientate the long facades of tower forms to the north. However, on Hickson Road, to define the linear nature of this road, generally orientate the long facades to the east (centre)

Right Existing forms and current Mod 9 reference design (right)

FIGURE 75 – PRINCIPLE 8 ASSESSMENT (SJB)



Consideration of Principle 8

This principle appears to be focused upon Barangaroo South. However, with regard to Central Barangaroo, no towers are proposed and the proposed orientation of long mid-rise façades to the east along Hickson Road is more consistent with the principle than the included image.

Conclusion

In conclusion, the intent of all of the 8 principles are still able to be fulfilled. Notably, Principles 2 (Hickson Road as a Boulevard), 3 (Buildings to Define Streets) and 4 (North-South Pedestrian Connection) are to be extended into blocks 6 and 7 where they did not previously apply. This will create a more cohesive response across the Barangaroo precinct which represents a positive development outcome.

Another positive outcome is that with regard to Principle 7 (View sharing) MOD 9 proposes significant view improvements, with more expansive, and consolidated viewpoints in key locations.

Whilst Principle 5 has been virtually abandoned, the proposed scale of Central Barangaroo remains consistent with the general illustration.



9 Updated Environmental Assessment

9.1 View and Visual Impact

A VVIA was prepared by AECOM as part of the exhibited MOD 9 proposal. Following exhibition, AECOM have prepared an updated VVIA, which supersedes the exhibited report. The updated VVIA provides additional views from the surrounding heritage context and the wider visual catchment across the harbour.

A full response to visual issues is provided in Appendix B of the VVIA.



FIGURE 76 – UPDATED OBSERVER LOCATIONS (AECOM)

9.1.1 Summary of Changes from Exhibition

The exhibited MOD 9 proposal was exhibited between July and August 2022. It has subsequently been refined by the Applicant. Extensive engagement has occurred with the Department and GANSW to review key elements of the project including scale of built form compatibility, open space and public amenity.

The amended MOD 9 proposal comprises a more simplified building envelope, reducing the scale to better compliment the scale of the surrounding heritage context. Additional public domain is provided and removal of the previously proposed tower form at Block 7 and removal of the cantilever over Hickson Street in response to submissions.



The additional Block 5 height remains, set against the backdrop of the Barangaroo South towers and taller built form on Hickson Road and Kent Street. A series of wide separations bisect the blocks in an east-west and north-south direction, creating a more modulated form for the development.

These changes have reduced many of the impact ratings seen in the exhibited MOD 9 proposal. The removal of the Block 7 tower element has removed the built form anomaly from within the view, which previously interrupted continuous views to the harbour and the horizon from observer locations to the east and south.

The removal of the cantilever along Hickson Road reduces the geographical footprint to the east and provides a visual 'breathing space' between the Millers Point HCA and the site. The flat face of the eastern edge more appropriately reflects the flat face of the Hickson Road cutting. The long north-south separation between the blocks establishes a linear composition of buildings along Hickson Road and a parallel pedestrian avenue which responds well to the urban form.

9.1.2 Summary of Approved and Amended Proposal

The key views identified in the planning and background documents (including DGRs) as relevant to the Central Barangaroo development are outlined in Chapter 3 of the VVIA. The key views to be protected can be summarised as:

- Views from the Millers Point Conservation Area,
- Views from the west looking towards Central Barangaroo, and
- Views from Barangaroo South looking north, north-east towards the Sydney Harbour Bridge and the Sydney Opera House.

The majority of views west to Darling Harbour and beyond from Millers Point and east from Pyrmont and Balmain East looking back towards Millers Point, have already been lost to the approved Concept Plan, with amended MOD 9 proposal marginally increasing height at the southern end of Central Barangaroo adjacent to the much taller South Barangaroo and Sydney CBD high-rise buildings.

Extensive harbour views are still available north of Central Barangaroo from sensitive viewing locations within Millers Point, including from Observatory Hill Park, High Street, the north end of Merriman Street, and Dalgety's Road. A substantial and visually cohesive component of the Millers Point HCA remains visible from observer locations along the western shore of Darling Harbour, including an additional view through to the topography of High Street behind (east of) Central Barangaroo.

AECOM state the amended MOD 9 proposal is generally seen to exhibit a High to Moderate level of visual integration into the landscape compared with the approved Concept Plan due the compositional form, scale, line and massing of the three development blocks, relative to that of towers within Barangaroo South.

The views from Barangaroo South to Sydney Harbour Bridge and the Sydney Opera House landmarks are not obstructed by the amended building envelope.

Overall, the key driver of High to Moderate ratings arose from the sensitivity of visual receptors to proposed change rather than the magnitude of change between the approved Concept Plan and amended MOD 9 proposal.

For views from the public domain, sensitivity was the key driver of High to Moderate ratings of visual impact, with most ratings of magnitude of change falling within the range of Moderate and Low/Negligible. For views from the



private domain, all locations were deemed to have a High sensitivity to change. Two of the thirteen private domain views were assigned a magnitude of Moderate, with the remainder being Low.

9.1.3 Extent of Change

The degree of change between the Approved Concept Plan and amended MOD 9 proposal is reflected in the magnitude rating illustrated in Table A of the VVIA and summarised in **TABLE 24**. Overall, ratings previously considered in the exhibited proposal have been reduced at key observer locations.

TABLE 24 SUMMARY OF VISUAL IMPACT RATINGS

LOCATION	EXHIBITED PROPOSAL	AMENDED PROPOSAL
OL 1 – Sydney Observatory Hill Park	Moderate to High	Moderate
OL 2 – Sydney Observatory	Moderate to High	Moderate
OL 3 – High Street (South)	Low to Moderate	Low to Moderate
OL 4 – Munn Reserve	Moderate	Moderate
OL 5 – Clyne Reserve	Moderate	Negligible
OL 6 – Barangaroo Reserve – Wulugul Park	High	Moderate
OL 7 – Barangaroo Reserve – Stargazer Lawn Park	Moderate to High	Negligible
OL 8 – Hickson Road	Low to Moderate	Low to Moderate
OL 9 – Gas Lane	Low	Moderate
OL 10 – Ballarat Park	Moderate to High	Moderate
OL 11 – Pirrama Park	Moderate to High	Moderate
OL 12 – Balmain East – Illoura Reserve	Low to Moderate	Moderate
OL 13 – Balls Head	Low to Moderate	Negligible
OL 14 – Blues Point	Low to Moderate	Negligible
OL 15 – Sydney Harbour Bridge	Low	Negligible
OL 16 – Langham Hotel – Level 3	Moderate to High	Moderate to High
OL 17 – Highgate – Level 15	High	Moderate
OL 18 – Highgate – Level 25	Moderate to High	Moderate
OL 19 – The Georgia – Level 15	High	Moderate



LOCATION	EXHIBITED PROPOSAL	AMENDED PROPOSAL
OL 20 – The Georgia – Level 25	Moderate to High	Moderate
OL 21 – Stamford Marque – Level 15	High	Moderate
OL 22 – Stamford Marque – Level 25	Moderate to High	Moderate
OL 23 – Stamford on Kent – Level 15	High	Moderate
OL 24 – Stamford on Kent – Level 25	Moderate to High	Moderate
OL 25 – 189 Kent Street – Level 15	Moderate to High	Moderate to High
OL 26 – One Sydney Harbour – Level 9	High	Moderate to High
OL 27 – Crown Sydney Hotel 0 Level 13	High	Moderate
OL 28 – Crown Sydney Apartments – Level 34	Moderate to High	N/A
OL 29 – Shelley Street (from King Street Bridge)	N/A	N/A
OL 30 – Lime Street	N/A	N/A
OL 31 – Darling Harbour (Pyrmont Bridge)	N/A	N/A
OL 32 – Darling Harbour – Australian National Maritime Museum	Negligible	N/A
OL 33 – Sydney Observatory Hill Park – South Path	Not previously assessed	Moderate
OL 34 – Sydney Observatory – South West	Not previously assessed	Moderate
OL 35 – National Trust Car Park	Not previously assessed	N/A
OL 36 – High Street – North	Not previously assessed	Moderate
OL 37 – High Street – South	Not previously assessed	Moderate
OL 38 – Hickson Road – Corner of Watermans Quay	Not previously assessed	Low to Moderate
OL 39 – James Watkinson Reserve	Not previously assessed	Negligible



LOCATION	EXHIBITED PROPOSAL	AMENDED PROPOSAL
OL 40 – Giba Park	Not previously assessed	Low to Moderate
OL 41 – Corner of Grafton Street and Grafton Lane	Not previously assessed	Low to Moderate

As part of this process, context is provided with regard to the development that was in place prior to the bringing into existence of Barangaroo to assist in understanding the cumulative changes seen. The pre-Barangaroo development of East Darling Harbour Wharves facilitated effectively unimpeded views from the Millers Point HCA, including Sydney Observatory and Observatory Hill Park, across Darling Harbour to the inner western suburbs (OLs 01, 02, 03, 04, 09, 33 and 34 shown in Figure A of the VVIA), and conversely, effectively unimpeded views back to the Millers Point HCA from the western shores of Darling Harbour (OLs 10, 11, 12, 13, 14, 39, 40 and 41 shown in Figure A of the VVIA).

The approved Concept Plan incorporates the completed towers within Barangaroo South, and a long, relatively low development envelope within Central Barangaroo of between about 8-10 storeys in height. The Central Barangaroo development envelope extends across the southern face of the Millers Point HCA, from midway along the length of the State Heritage Register listed terraces on High Street, to the south beyond the Highgate residential tower on Kent Street. It projects above both the High Street terraces and the more elevated terraces behind on Kent Street.

This effectively results in full view loss across Darling Harbour from these terraces (OL 08 shown in Figure A of the VVIA), and conversely, effective full view loss from locations on the western shores of Darling Harbour (OLs 10, 11, 12, 13, 14, 32, 39, 40 and 41 shown in Figure A of the VVIA) to the southern end of the Millers Point Heritage Conservation Area (including the terraces).

Existing views from the Langham Hotel (OL 16 shown in Figure A of the VVIA) to the west are effectively blocked by the approved Concept Plan. Views to the harbour from Sydney Observatory and Observatory Hill Park are predominantly obscured by the development. The view to the horizon is maintained, with all the Block heights within the development sitting below the Sydney Observatory domes.

View sharing impacts for the Barangaroo South observer locations and the Kent Street residential towers (OL 17 to OL 25 shown in Figure A of the VVIA) are predominantly Low, with substantial harbour views and view to points of interest retained towards the north-west for these residences. Fractional removal of views to Millers Point HCA for two OL's result in a Moderate impact.

The key driver of the High to Moderate overall visual impact ratings is the sensitivity of visual receptors to the proposed change, rather than the magnitude of change.

The amended MOD 9 proposal exhibits a High level of visual absorption capacity within the surrounding landscape compared with the approved Concept Plan due the compositional form of the three development blocks, relative to that of towers within Barangaroo South.

Overall, the similar central and northern block heights, stacking of height towards the southern end of Central Barangaroo and additional and relocated separations of amended MOD 9 proposal over that of the approved Concept Plan building envelope is considered to provide a positive outcome with regards to the impact to the visual amenity of the proposal in the landscape surrounds.



9.2 Heritage Assessment

A HAIS was prepared by GML Heritage as part of the exhibited MOD 9 proposal. GML have prepared an addendum report to their HAIS, which supersedes Sections 6 – 9 of the HAIS dated November 2021 in response to the amended proposal and is structured along the following lines:

- Section 2 – Updated views and vistas,
- Section 3 – Amended proposal,
- Section 4 – Updated heritage and archaeological impact assessment,
- Section 5 – Revised conclusions and recommendations, and
- Appendix A – Heritage response to submissions.

Refer to **Section 8.3** for additional discussion on heritage view assessment and impacts.

9.2.1 Aboriginal Archaeology

The GML addendum finds that the amended MOD 9 proposal would not result in any changes in potential impacts to Aboriginal archaeological evidence within Central Barangaroo from the original Concept Plan in 2007.

9.2.2 Historical Archaeology

The GML addendum finds that the amended MOD 9 proposal would not result in any changes in potential impacts to historical archaeological evidence within Central Barangaroo from the original Concept Plan in 2007.

9.2.3 Built Heritage and Views

Refer to further discussion at **Section 8.3** of this report. The GML addendum finds that the amended MOD 9 proposal has the following effect:

- The approved Concept Plan assumes the opportunity for urban development within Central Barangaroo, noting that a range of macro social, industrial and economic factors have contributed to the urban renewal.
- Generally, and notwithstanding the proposal building heights for Blocks 5 and 6 and selected impacts to the setting, historic visual connections, views and vistas, the amended proposal is generally assessed in heritage terms to be consistent with the approved Concept Plan.
- Both the approved Concept Plan and the amended proposal will give rise to varying degrees of impact on the appreciation of the modified landform setting and the dominant horizontal planes of historic development along the waterfront associated with the state listed Millers Point and Dawes Point village precinct, the Millers Point heritage conservation area, and the listed heritage items. This also includes the historic laneways and the historic and eminence of the Sydney Observatory, sited on the highest point in Sydney Harbour.



- Central Barangaroo will cause some former maritime buildings, such as the Grafton Bond Store and the MSB Stores, to be increasingly isolated from the water's edge – this is part of the historical significance of these buildings.
- Direct physical impacts potentially arising from the amended proposal are assessed to be associated with the design and construction of the Hickson Road footbridge.
- Detailed design development should explore options to optimise the retention of views, respecting the heritage significance of the setting, heritage listed areas and listed heritage items. This can be mitigated through innovative design, guided by consultation with heritage advisors.
- Future development should specify building forms, landscaping and materials that are visually recessive and sympathetic to the character of Millers Point so that the foreground built form does not visually compete with, and overwhelm views, to and from listed conservation areas and heritage items.

9.2.4 Recommendations and Mitigation Measures

Based on the revised assessment, GML outline several recommendations and mitigation measures that could be adopted in future SSDAs across the site. These are summarised below and include:

- **Aboriginal archaeology** – In the event that any Aboriginal archaeological evidence or objects were to be discovered at the site, all works in the affected area/s must cease, Heritage NSW notified of the find, and a suitable procedure for investigation must be negotiated. Further assessment or documentation may be required before site works could recommence in the affected area/s.
- **Unexpected finds protocol** – A suitably qualified archaeologist with experience in Sydney maritime archaeology should be on call for any unexpected archaeological finds across the site.
- **Future development** – Heritage impacts could be minimised/mitigated at the design development phase, through innovative design guided in consultation with heritage advice.
- **Heritage advice** – A suitably qualified and experienced heritage consultant/heritage architect should provide ongoing heritage advice and input into the design for any future development application at Central Barangaroo. The objective of this heritage advice will aim to minimise adverse heritage impacts on nearby heritage items and their setting.
- **Hickson Road Footbridge** – The Hickson Road footbridge should be constructed in the historical location of the former bridge, between the two sandstone posts of the palisade fence. This area contains infill fabric installed after the bridge was removed in the 1960s. Note that the precise location of the footbridge will be subject to future SSDA's on the site.
- **Palisade Fence with High Steps Conservation** – Construction of the Hickson Road footbridge should include conservation works to the surrounding Palisade Fence.
- **Interpretation** – Proposed works should include heritage interpretation of First Nations people's connections to the area and the former maritime industries and workers that played a key role in the history of Millers Point foreshore at Central Barangaroo. This should be undertaken and implemented in accordance with the applicable Heritage NSW guidelines and considered at the early stages for integration into design development.



9.3 Traffic Management and Accessibility

An updated TMAP has been prepared by ARUP (**Appendix G**), which addresses changes that have occurred since exhibition including amendments to the road network, land use and car parking.

It provides an assessment of the traffic generation and resulting road network in order to understand the capacity of the surrounding road network to accommodate additional vehicle movements resulting from the amended MOD 9 proposal.

The assessment methodology used in the originally submitted TMAP remains unchanged – and is informed by the quantum's of the proposed reference scheme.

9.3.1 Mode Share Targets

Initial planning for Barangaroo was based on achieving high adoption of active and public transport options as a method of travel to work. Journey to work mode share by car were targeted at 4%, which will be achieved through minimal on-site parking and promotion of travel demand management plans. These were adopted in the *Barangaroo Integrated Transport Plan*.

The overall mode split targets have been retained for Barangaroo from the MOD 8 TMAP. MOD 10 and MOD 11, which have cumulatively resulted in an increase of GFA, did not change the overall mode split assumptions.

The adopted journey to work and mode share targets for MOD 9 are provided in **TABLE 25** below. Travel demand will be split evenly between heavy rail and the Metro once the Metro opens in 2024.

TABLE 25 MODE SHARE TARGETS FOR JOURNEY TO WORK

MODE	TMAP MOD 8/10 (AM OR PM PEAK)		TMAP MOD 9 (AM OR PM PEAK)		DIFFERENCE
	Target	Number of Trips	Target	Number of Trips	
Car	4%	775	4%	773	-2 (0.25%)
Bus/Light Rail	19%	3,681	19%	3,672	-9 (0.24%)
Metro	0%	0	31%	5,991	-28 (0.23%)
Train	61%	11,817	60%	5,798	
Ferry	4%	775	4%	773	-2 (0.25%)
Other (pedestrian, cyclists, motorcyclists, taxis)	12%	2,325	12%	2,319	-6 (0.25%)
TOTAL	100%	19,732	100%	19,325	-47 (2%)



9.3.2 Traffic Generation

A comparison of traffic generation forecast under the MOD 8 TMAP as amended by MOD 10 and the proposed MOD 9 application is summarised in **TABLE 26**. These are based on similar assumptions in the exhibited MOD 9 TMAP and include:

- The indicative quantum of apartments depicted in the reference scheme,
- Residential trips split 80% out and 20% in during AM and 80% in and 20% out during PM, and
- Public use parking at Barangaroo Reserve assumed to generate at retail rate during PM peak hour and at 10% of that level during AM peak hour.

Key changes to the traffic generation assumptions are mainly focused on forecast bus numbers, minor parking changes as well as how residential trips are calculated.

TABLE 26 TRAFFIC GENERATION COMPARISON

TIME PERIOD	DIRECTION	MOD 8/10	MOD 9	CHANGE
AM Peak Hour	In	364	328	-18
	Out	355	353	-2
	Two-way	701	687	-14
PM Peak Hour	In	415	434	19
	Out	395	393	-2
	Two-way	810	827	17

Overall, the total volume of traffic generated by the entire precinct will be approximately the same when compared with that previously assessed in the MOD 8 TMAP. This is due to the following reasons:

- Adjustment in traffic generation due to the decrease in commercial (including retail) and increase in residential GFA,
- The introduction of a new Metro Station in Central Barangaroo, and
- The revision in future bus numbers on Hickson Road.

The volume of traffic forecast under MOD 9 is commensurate with that forecast under the MOD 2 TMAP. This is important to note as the traffic modelling and road network analysis contained in the MOD 2 TMAP underpinned the development of the 4% car mode share for the site.

9.3.3 Road Network Modelling

The results of the traffic modelling forecast minor changes in the operation of key intersections as a result of the currently approved Concept Plan when compared with performance under MOD 8 (therefore MOD 10 and MOD 11). Changes in vehicle delays are relatively minor for most parts of the network in both AM and PM peak commute hours.



A summary of intersection modelling results comparing MOD 8/MOD 10 to MOD 9 are provided in **TABLE 27**.

TABLE 27 TRAFFIC MODELLING RESULTS

PERIOD	INTERSECTION	MOD 8/10			MOD 9		
		LOS	DOS	AVD	LOS	DOS	AVD
AM	Sussex Street / Erskine Street	B	0.60	27	C	0.87	35
	Hickson Road / Napoleon Street	E	1.00	69	E	1.14	58
	Hickson Road / Watermans Quay	B	0.62	16	B	0.5	19
	Kent Street / Margaret Street	B	0.77	26	C	0.88	32
PM	Sussex Street / Erskine Street	D	0.97	55	C	0.98	41
	Hickson Road / Napoleon Street	D	0.92	43	E	1.17	70
	Hickson Road / Watermans Quay	A	0.47	11	B	0.88	21
	Kent Street / Margaret Street	B	0.75	23	C	0.89	33

LOS = Intersection Traffic Level of Service, DOS – Degree of Saturation, AVD – Average Delay per vehicle

The results of the traffic modelling forecast minor changes in the operation of key intersections as a result of the currently approved MOD 9 when compared with performance under MOD 8 (and therefore MOD 10 and 11). Changes in vehicle delays are relatively minor for most parts of the network in both the AM and PM commuter peak hours.

In the PM peak hour Hickson Road / Napoleon Street intersection is showing that it is operating at capacity with LOS E. Changes to the road network layout and the lane assignment on Hickson Road has resulted in Napoleon Street operating slightly worse than MOD 8. At the Hickson Road/Watermans Quay intersection on the northern leg the short lane was the right turn lane. The latest arrangement has the straight through lane as the short lane. This is causing the Napoleon Street intersection to operate with a worse LOS.

Given the results are consistent with the previously approved TMAPs, this indicates the road network can accommodate both development modifications with performance remaining at acceptable levels. This implies the trips generated by the increase in residential floorspace are offset by the removal of commercial uses (including retail) and reduction in bus volumes along Hickson Road.

9.3.4 Car Parking

A revised car parking assessment has been undertaken based on the parking rates consistent with the Instrument of Approval to identify potential parking needs of MOD 9. There is no change proposed to the car parking rates set out in Condition C4 of the Instrument of Approval.

The parking numbers identified are based on the indicative GFA mix and land use composition identified in the amended reference design. Actual parking numbers may vary from those presented in the TMAP and will be



subject to future SSDAs, which will identify and assess car parking provisions for each future development proposal.

TABLE 28 depicts the overall indicative parking spaces within Barangaroo combining the Central Barangaroo reference scheme with parking numbers for South Barangaroo and Barangaroo Reserve which have been deduced from approved GFA's, comparing MOD 8/10 and MOD 9.

TABLE 28 PARKING RATES WITHIN BARANGAROO

LAND USE	SOURCE	PARKING RATE	SPACES IN MOD 8	SPACES IN MOD 9 EXHIBITED	SPACES IN MOD 9 AMENDED
Commercial	Reference Scheme	1 space / 600m ² GFA	571	599	521
Retail	Reference Scheme	1 space / 600m ² GFA	48	113	51
Residential	Reference Scheme	1 bed: 0.5 spaces/dwelling 2 bed: 1.2 spaces/dwelling 3+ bed: 2 spaces/dwelling	2,018	2,202	2,057
Hotel	Reference Scheme	N/A	500	500	650
Hickson Road on-street parking	N/A	N/A	125	20	20
On-street parking within Central Barangaroo	N/A	N/A	40	25	6
Barangaroo Reserve parking	N/A	N/A	300	300	300
Total			3,602	3,795	3,619

As identified above, the TMAP outlines the amended MOD 9 proposal would result in an increase in total number of parking spaces by 17 spaces, which reflects a reduction of 176 spaces from what was previously exhibited (indicative provision of 3,768 spaces).

It is also noted the changes to car parking since the exhibited MOD 9 proposal include:

- Reduced on-street parking spaces within Central Barangaroo by 19 (25 exhibited and 6 now amended),
- Reduced commercial parking spaces by 78 (599 exhibited and 521 now amended),
- Reduced retail parking spaces by 62 (113 exhibited and 51 now amended), and
- Reduced residential parking spaces by 145 (2,202 exhibited and 2,057 now amended).



The reason for the change in indicative parking provision for Central Barangaroo is a result of the reduced commercial office and retail offering and increase in residential GFA since exhibition.

The reduction in on-street parking along Hickson Road is continued to be based on the draft Hickson Road masterplan. The reduction in on-street parking broadly within Central Barangaroo is attributed to the closure of Barton Street as a permanent two-way street and general refinements to parking bays along Barangaroo Avenue.

EV Charging and Car Share

The amended MOD 9 proposal has considered the ability to incorporate EV charging and car share spaces as part of future detailed SSDAs.

In accordance with *Sydney Development Control Plan 2012 (SDCP 2012)*, car parking areas in non-residential developments are to be constructed to enable EV charging points to be installed. The location and quantum will be provided and considered as part of future applications.

SDCP 2012 also states that provision for a car sharing scheme within the development should be considered. These should be provided in addition to the maximum number of spaces permitted. Based on the indicative land use mix and reference scheme, MOD 9 would require approximately 40 car share spaces based on 2,057 residential parking spaces (6 of which would be provided in Central Barangaroo).

9.3.5 Vehicular Site Access and Circulation

The broader vehicular access and site circulation for Central Barangaroo (**FIGURE 77**) includes:

- Barangaroo Avenue (north of the Crown Hotel) and Street D are one way shared zones, where pedestrians are prioritised,
- Watermans Quay will be established as the main access and two way connection between Barangaroo Avenue and Hickson Road,
- Barangaroo Avenue outside the Crown will remain a two-way and will act as the main access point to the site, and
- A north-south pedestrian link is proposed to extend Scotch Row and connect to Nawi Cove from Hickson Park.



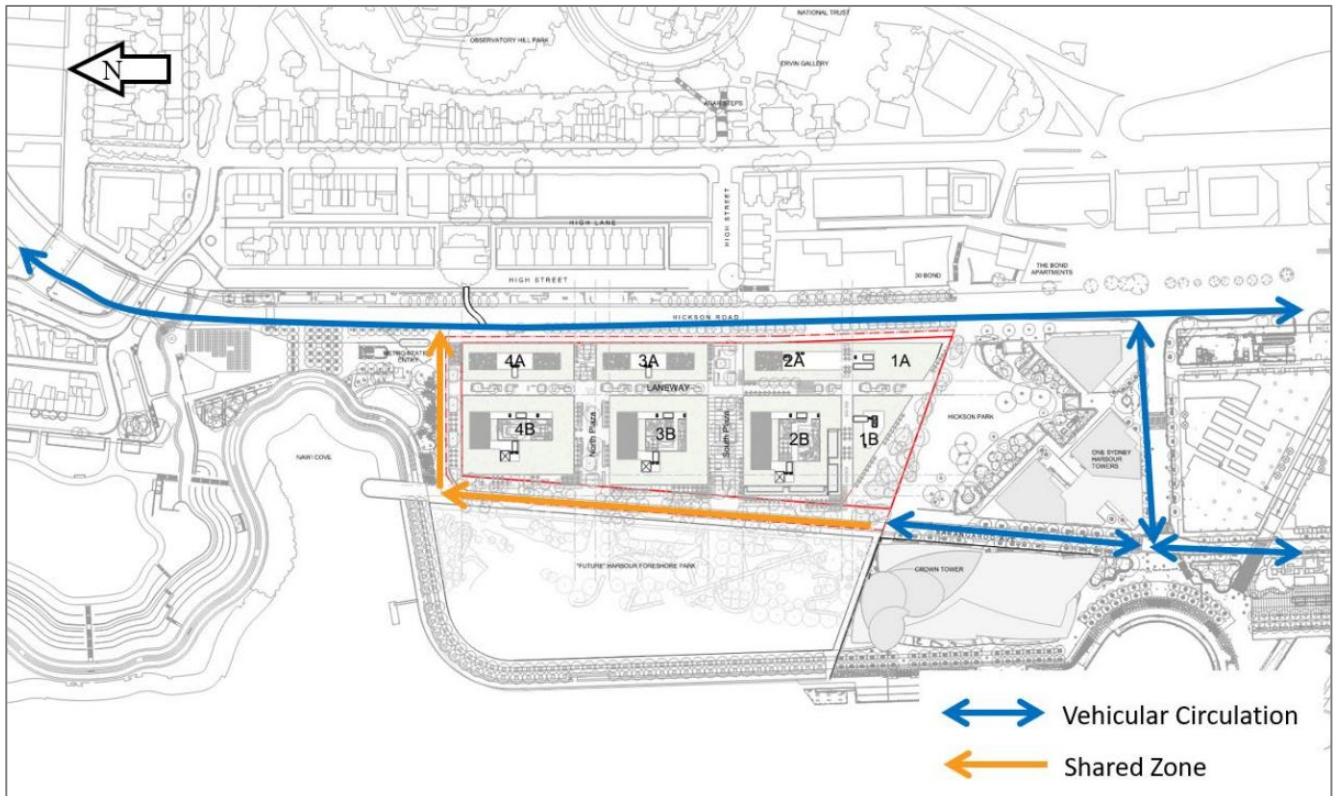


FIGURE 77 – CENTRAL BARANGAROO CIRCULATION STRATEGY (ARUP)

The exhibited MOD 9 proposal proposed Barangaroo Avenue as a pedestrian boulevard from Barton Street to Street C. This was followed by a one way shared street from Block 6 to Block 7.

Following exhibition, Barangaroo Avenue, north of Crown Hotel, is proposed as a shared zone. It is anticipated the volume of vehicles using this will be low. This is also subject to the overall outcome of the Harbour Park design and traffic generated by activities at the park.

Key reasons for expanding the shared zone include:

- Residential trips to and from Central Barangaroo will all use Hickson Road as this is where the basement car parking access will be located.
- Trips to the Crown Hotel will access via Watermans Quay intersection and only northbound trips from the hotel are likely to use the shared zone. These numbers are expected to be low and will be mostly taxis.
- Deliveries to the retail shops in Central Barangaroo are expected but these are anticipated to occur early in the morning and the volume of vehicle traffic is expected to be low.

Detailed design will be required to confirm elements and operation of the shared zone. This is expected to include surface treatments, signage and speed restrictions (10km/hr).

9.3.6 Pedestrian Accessibility



The amended MOD 9 proposal introduces a number of pedestrian connections (**FIGURE 78**) to service Central Barangaroo and includes:

- Extension of Scotch Row connecting Nawi Cove to Hickson Park,
- Southern east-west arcade between Block 5 and Block 6,
- Expanded east-west connection between Block 6 and 7, and
- Expanded east-west connection between Block 5 and 6.

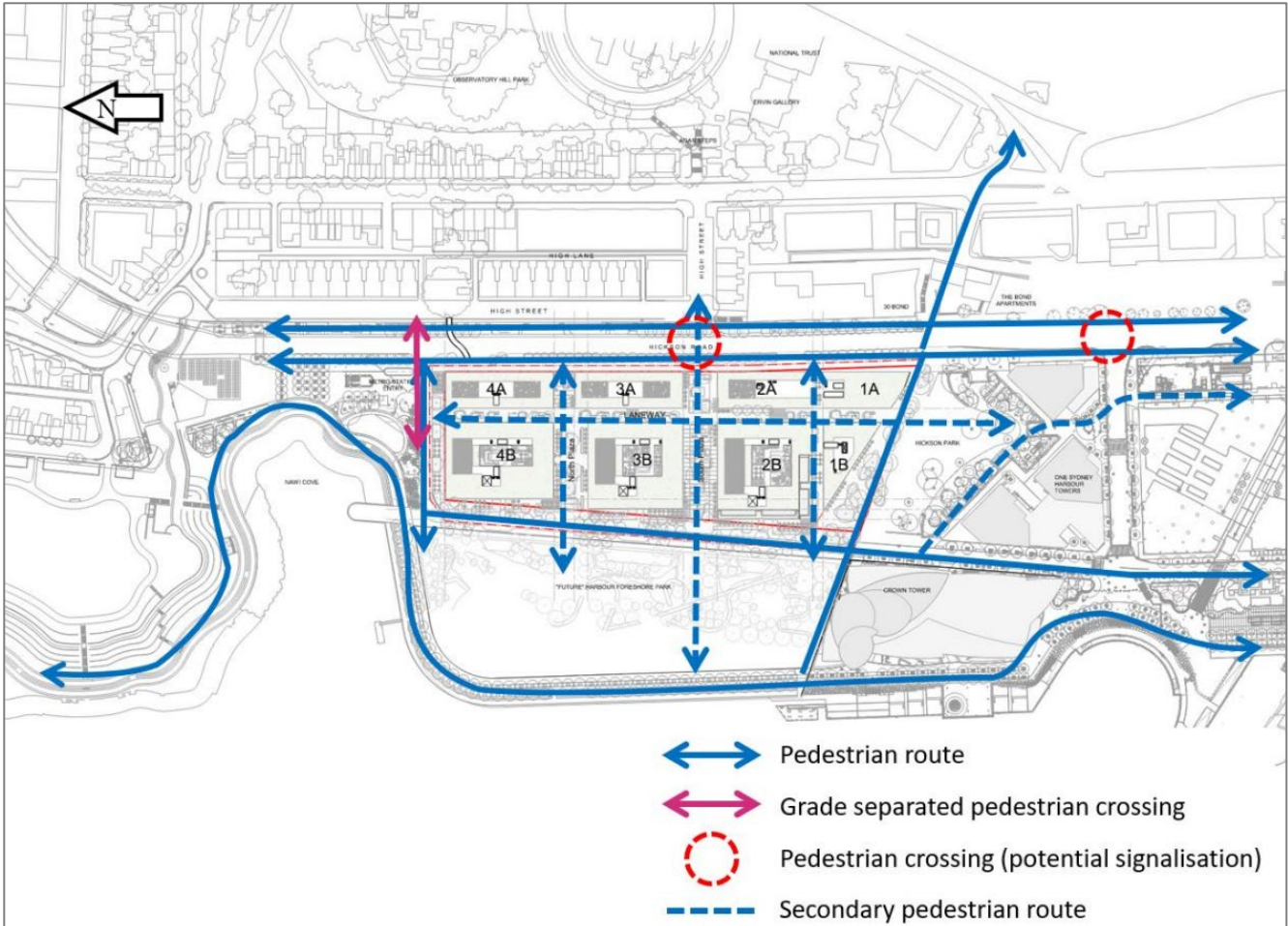


FIGURE 78 – PEDESTRIAN ROUTES (ARUP)

A high-level pedestrian assessment, using the *NSW Walking Space Guide* has been undertaken. The overall aim of the assessment is to allow for sufficient walking space in the street design, and to allow for interactions between people walking and vehicles.

To inform the assessment, a minimum of 3.9m (walking space) is considered to be an appropriate starting point to assess the proposed building envelopes. The narrowest part of each route has been used to determine the overall available width for walking space and non-walking space (obstructions).

Using the 3.9m walking space previously identified, the remaining space has then been calculated to provide the maximum space that could be used for elements considered obstructions.



Based on the WSG assessment, ARUP conclude the proposed routes have significant capacity and will be able to accommodate high levels of activity and trips generated by the Metro and Central Barangaroo. This is achieved through:

- The extended north-south pedestrian link from Nawi Cove to Hickson Park, which is expected to be attractive for people traveling north-south.
- The provision of Barangaroo Avenue as a shared-zone with a low-speed and low traffic volume environment.
- The generous east-west links between 12m and 20m providing permeable routes connecting pedestrians from Harbour Park to Hickson Road.

9.3.7 Cycling

The amended MOD 9 proposal has further considered the provision of bicycle parking and how the proposal integrates with the broader cycleway network (**FIGURE 79**). The promotion of active transport and bicycles will be improved by:

- Connections throughout Barangaroo to Barangaroo Avenue and the foreshore walk (Wulugul Walk), using the route previously occupied by Barton Street.
- Providing bicycle locking facilities within public spaces for visitors, retail customers and tourists.
- Incorporating generous bicycle parking in residential buildings.
- Reducing the maximum speed of internal bicycle connections by 30km/hr.

In relation to the provision of bicycle parking, Sydney Metro is providing bicycle racks at the northern entrance of the Barangaroo Station and also on the eastern side of Hickson Road opposite the station. Off street bicycle parking will be provided within buildings, which are capable of accommodating the required spaces set out in the Terms of Approval.

A small quantum of visitor bicycle parking will be considered in the public domain as required and capable of being increased if demand increases. It is noted further details on bicycle parking provision will be completed at SSDA for individual development stages.



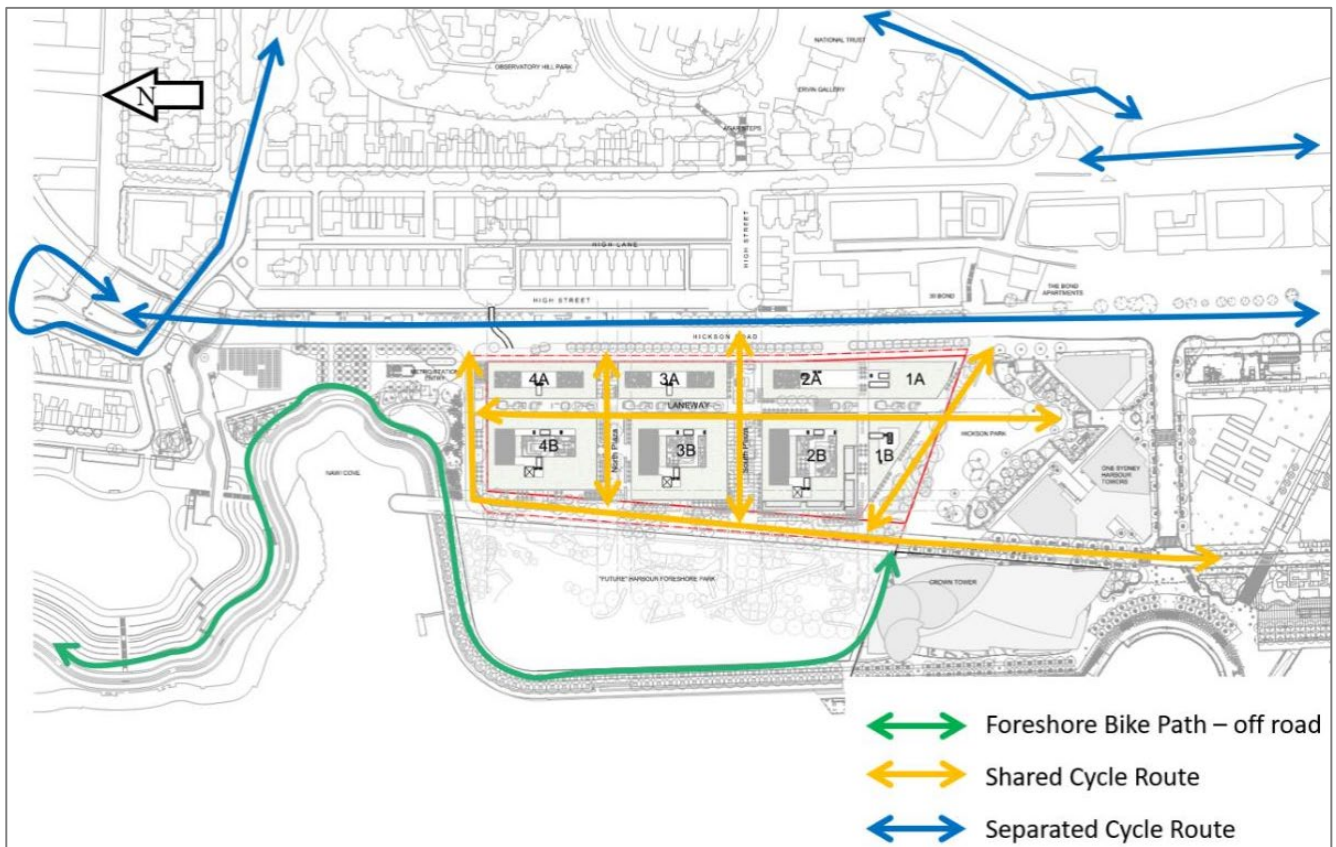


FIGURE 79 – SUPPORTING CYCLEWAY NETWORK (ARUP)

9.4 Pedestrian Wind

An updated Pedestrian and Wind Environment Study has been prepared by RWDI (**Appendix F**) in response to the amendments made post exhibition.

The wind conditions at the pedestrian-level on and around the proposed development were predicted using the results from a boundary-layer wind tunnel test combined with historical meteorological wind records for the area. Wind speeds have been evaluated against the RWDI pedestrian wind comfort criteria for pedestrian wind comfort and the AWES wind safety criterion for pedestrian safety, similar to earlier studies that have been undertaken for the site and surrounding precinct.

9.4.1 Background and Approach

Wind Tunnel Study Model

To assess the local wind environment within and around the amended proposal, a 1:400 scale model of the site and surrounding context was constructed for the wind tunnel tests featuring the following configurations:

- **Existing Configuration** – Site with existing surrounding buildings, and
- **Indicative Reference Scheme Configuration** – Site with proposal and surrounding buildings.



Refer to **FIGURE 80**.

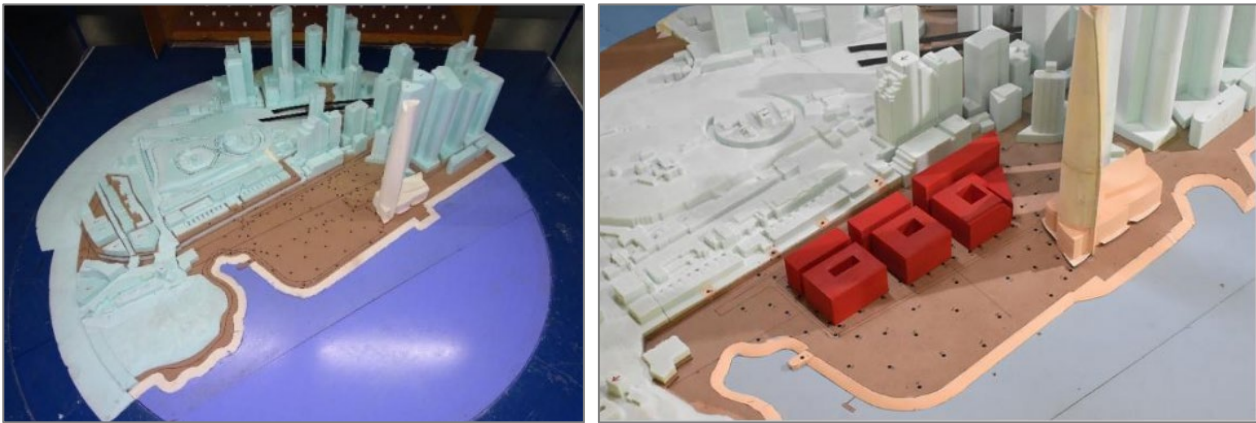


FIGURE 80 – EXISTING AND REFERENCE SCHEME CONFIGURATION (RWDI)

The wind tunnel model included all relevant surrounding buildings and topography within an approximately 480m radius of the study site. The wind and turbulence profiles in the atmospheric boundary layer beyond the modelled area were also simulated in RWDI's wind tunnel. The wind tunnel model was instrumented with 126 specially designed wind speed sensors to measure mean and gust speeds at a full-scale height of approximately 2m above local ground in pedestrian areas throughout the study site. Wind speeds were measured for 36 directions in 10-degree increments.

The measurements at each sensor location were recorded in the form of ratios of local mean and gust speeds to the mean wind speed at a reference height above the model. The placement of wind measurement sensors was based on a qualitative understanding of the pedestrian usage for the site and initial CFD assessments undertaken for the project site.

The wind tunnel test procedure exceeds the guidelines set out in the Australasian Wind Engineering Society Quality Assurance Manual (AWES-QAM-2019).

Pedestrian Wind Comfort and Safety Criteria

Pedestrian wind comfort was assessed using Gust Equivalent Mean (**GEM**) wind speeds. GEM quantifies the combined impact of mean and gust speeds on pedestrian comfort making it a reliable predictor for assessing wind conditions in built-up environments where higher turbulence is expected. It should be noted that factors such as regional wind climate, thermal conditions, age, health, and clothing can influence an individual's perception of the wind climate. Therefore, a comparison of wind speeds between the existing and proposed building configurations provides an objective assessment of local pedestrian wind conditions.

9.4.2 Results

Existing Pedestrian Safety and Comfort

Existing pedestrian and safety comfort is summarised as follows:



- Existing site conditions are characterised by exposure to the regional prevailing winds from the south and west throughout the year. Areas closer to the waterfront are noted to be windier and wind speeds exceeding the safety thresholds are observed along Wulugul Walk near the Crown Tower base, within the Barangaroo Harbour Park and the Hickson Park.
- Wind comfort conditions within the existing site generally remain consistent throughout the year. The eastern and northeastern ends experience lower wind speeds suitable for long-duration activities while the western and southwestern ends closer to the waterfront have higher wind speeds making most of these areas comfortable for active use.
- At the northwest corner of Crown Tower and Wulugul Walk, high wind speeds that will be perceived as uncomfortable are noted year-round. It is essential to note that the assessment represents the worst-case scenario without any landscaping.

Proposed Pedestrian Safety and Comfort

Proposed pedestrian and safety is summarised as follows:

- The overall wind microclimate generally remains consistent with the existing site conditions with the inclusion of the proposed massing for Central Barangaroo.
- High winds exceeding the safety criterion persist around Wulugul Walk and at the base of Crown Tower. While the safety exceedances in Hickson Park are resolved, exceedances occur in the North and South Plaza within the site due to westerly wind channelling between blocks and at the northwest end of the site (note that this is generally unchanged from the concept approval). It is recommended to incorporate awnings and corner articulation for Buildings 3B, 4B, and 2B to mitigate the gusty winds. Additional elements such as artwork / screening might also be required to mitigate the winds.
- Wind comfort conditions are expected to remain largely consistent with the existing site. Most areas are likely to be comfortable for sitting through to strolling use. However, high wind areas around Crown Tower and northwestern Hickson Park still persist and will likely be uncomfortable. Wind comfort conditions are generally favourable around lobby entrances and the plazas during summers, but winter winds could impact the west end of the South Plaza. Desirable wind conditions for sitting or standing use are expected in public parklands, particularly when considering the impact of landscaping within the parks.



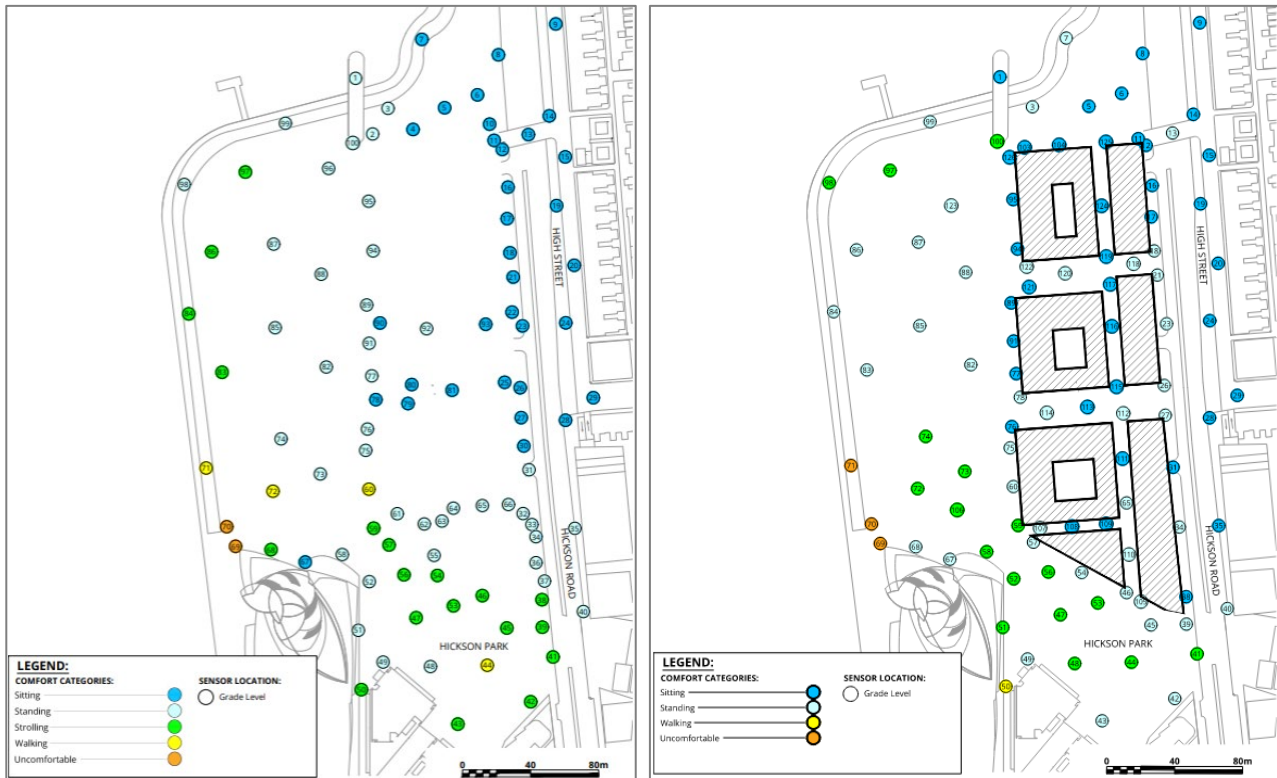


FIGURE 81 – EXISTING AND PROPOSED WIND COMFORT CONDITIONS IN SUMMER (RWDI)

9.5 Sky View

A Sky View Impact Assessment Addendum has been prepared by AECOM and UNSW – Unisearch Expert Opinion Services (**Appendix E**). The report provides a revised assessment of the sky view impacts associated with the amended Concept Plan following exhibition.

To inform the revised assessment, AECOM and UNSW were provided with a set of drawings illustrating the proposed building envelopes, which depict the following heights for the proposed Concept Plan building envelopes:

- Block 5 – RL 42.45, RL 35, RL 33.75, RL 31.2 and RL 21.5,
- Block 6 – RL 35, and
- Block 7 – RL 35.

The report considers the effect of the building envelopes on the sky view from Sydney Observatory. It assumes no trees are present in the Observatory Hill Park.

As sea, the altitude angle of the horizon (located at As sea, the altitude angle of the horizon (located at ~26.5km when viewed from an altitude of 54m (the altitude of the observing deck between the domes at the observatory) is approximately -0.1° . Refer to **FIGURE 82**.





FIGURE 82 – AERIAL OF OBSERVING DECK (MECONE MOSAIC)

However, the actual horizon looking west from the observatory is higher than this due to intervening buildings and landforms. Refer to **FIGURE 83**.



FIGURE 83 – VIEW FROM SYDNEY OBSERVATORY LOOKING WEST TOWARDS THE NORTH DOME (UNSW)

The distance from the building envelopes at Block 5 (RL 42.45 and RL 21.5) to the Observatory is approximately 230m. The difference in height between the observing deck linking the two domes at the Observatory and rooftops of the above building RLs is $54 - 42.45 = 11\text{m}$.



Using trigonometry, the report calculates the elevation angle subtended by the roof line of buildings 1A and 2A (at Block 5) from the observing deck at the observatory as -2.9° , which is 2.8° below the nominal horizon (i.e. where sea level would normally be). Refer to **FIGURE 84**.

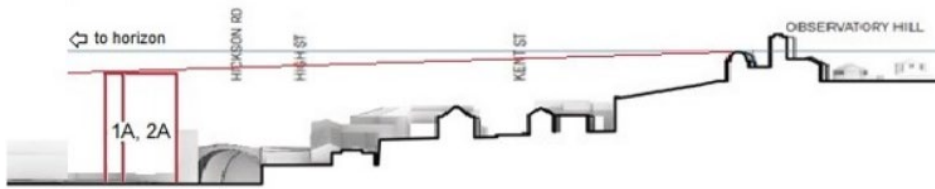


FIGURE 84 – THE SIGHT LINE FROM SYDNEY OBSERVATORY OBSERVING DECK TO THE ROOFTOP OF BUILDINGS AT BLOCK 5 RL 42.45 (UNSW)

This demonstrates that the buildings associated with the amended Concept Plan building envelopes do not obstruct the view from the Observatory to the nominal horizon. With respect to light spillage, the amended MOD 9 building envelope is significantly lower than the exhibited MOD 9 building envelope. As such, any light spillage would be much reduced when viewing targets above the horizon.

Overall, the report concludes that the rooftops of all buildings of the amended MOD 9 proposal are well below the nominal horizon. Therefore, the amendments will not obstruct any part of the sky view, as seen from the Observatory.

9.6 Acoustic

An Acoustic Assessment Addendum has been prepared by Acoustic Logic (**Appendix P**) in relation to the amended Concept Plan. Acoustic Logic have reviewed the amended Concept Plan with respect to traffic noise intrusion and operational noise and traffic noise impacts on nearby properties.

The amendments to the Concept Plan do not result in any changes on initial impacts made with respect to traffic noise intrusion. Traffic noise intrusion into the development (primarily from Hickson Road and the Western Distributor) is capable of being mitigated and managed by adopting appropriate façade construction and providing alternative ventilation to habitable spaces. Traffic noise impacts for all proposed uses can be adequately mitigated as previously developed.

The amendments to the Concept Plan do not result in any changes to operational and traffic noise impacts on nearby properties and in particular:

- There is no change with respect to anticipated impacts from food and beverage outlets, the range of uses contemplated from the originally submitted MOD 9 application and as amended would be mitigated through assessment and application of physical controls and management of activities in accordance with a Plan of Management (**PoM**).
- There is no change with respect to anticipated impacts from mechanical plant and equipment. The amended Concept Plan is capable of mitigating noise emissions and plant and equipment through appropriate siting, selection and treatment, which will be developed as part of future detailed applications



across the site. The cumulative noise level from the site should not exceed criteria established using the EPA *Noise Policy for Industry Guideline (NPfi)*.

- There is no change with respect to anticipated impacts arising from increased traffic generation. The amended Concept Plan and supporting reference scheme indicates a reduction of car parking and traffic generation across the site.

In relation to construction noise and vibration emissions, Acoustic Logic state this could be managed in accordance with technical guidelines associated with Sydney Metro Corridor Protection and impacts mitigated through project-specific Construction Noise and Vibration management Plans (**CNVMP**) at detailed application stages.

There is no change in relation to Metro noise and vibration impacts on the proposal development. The 'at track' treatment proposed to be installed will likely fully mitigate ground borne vibration impacts for all expected uses.

Overall, Acoustic Logic confirm the impacts associated with the amended Concept Plan are the same or lower than the exhibited MOD 9 proposal. The potential impacts identified can be adequately mitigated through the implementation of site-specific management plans that would be considered in future detailed application stages.

9.7 Housing Strategy

The MOD 9 amendments since exhibition include an increased residential component GFA cap from 28,000m² to 75,000m². This brings total permitted residential floor space in the precinct to 237,031m².

9.7.1 Policy Changes Since 2021 Exhibited Strategy

Since the preparation of the exhibited Mod 9 Housing Strategy, there have been changes to the strategic policy and planning framework. These include:

- *NSW State Housing Strategy 2041*, with a focus on the four pillars of supply, affordability, diversity and resilience.
- *Six Cities Discussion Paper*, which prioritises quality housing that is connected, resilient, affordable and diverse to meet peoples changing needs over time. The Discussion Paper also prioritises locating housing in places with supporting infrastructure – existing or planned, growing knowledge economies and local jobs and climate-resilient green cities.
- *State Environment Planning Policy (Housing) 2021 (Housing SEPP)* which encourages the supply of a diversity of housing typologies, including new typologies such as build-to-rent and co-living housing and supports the delivery of affordable and social housing through planning incentives.
- Amendments to the *Sydney Local Environmental Plan 2012 (SLEP 2012)* to introduce an affordable housing contribution for Central Sydney. The current rate is 3% for residential floor area and 1% for non-residential floor area.



- *Central Sydney Development Contributions Scheme 2020*, which increases the development contribution for development valued at over \$1 million. The increased rate has been phased in and is set at 3% of the value of development.

9.7.2 Demographic Changes Between 2016 and 2021

The results of the 2021 Census highlight changes within Barangaroo and the City of Sydney. These include:

- Growth in the number of dwellings in Barangaroo, providing premium accommodation options for households mainly comprised of one person and couples without children.
- Increasing supply of 1-bedroom dwellings in the Sydney LGA in response demand by smaller households.
- A concentration of employment in the professional and financial sectors by residents of Sydney LGA. This is a response to the concentration of these jobs in the CBD and reflects the high cost of housing the CBD and surrounds and the accessibility of these locations to the CBD.
- Increasing representation of managers and professionals in Barangaroo, consistent with its premium location and amenity offerings.

9.7.3 Housing Demand

Analysis of rent and sales prices, vacancy rates and gross rental yield indicated that housing demand in Sydney is strong, with rents increasing faster in postcode 2000 than the City of Sydney overall. The market reaction to COVID-19 resulted in sharp increases in vacancy rates in the City of Sydney and postcode 2000. This indicates the strong global links of the CBD and the importance of premium housing offerings for talent attraction and the global competitiveness of the City of Sydney.

Affordable housing is becoming increasingly important, with rising levels of housing stress, especially rental stress in the City of Sydney. Although not applicable to the Barangaroo precinct, the City of Sydney requires an affordable housing contribution of 3% of residential floor area and 1% of non-residential floor space. Barangaroo South has provided 2.3% of all approved residential GFA as key worker housing (50 dwellings) on site in Block R5 and 0.7% offsite.

9.7.4 Implications for Housing Priorities

The changing policy positions highlight the need for increased housing supply and affordable housing. Although the priorities in the Housing Strategy 2021 were determined earlier, they still remain relevant and are aligned with these policy changes. A review of the priorities and their relevance to the amended MOD 9 proposal is provided below.

Priority 1: Maximise employment land and other economic generator delivery in locations with premium transport accessibility

The proximity of Wynyard Station, Barangaroo metro station and the direct accessibility to Sydney CBD makes Barangaroo a desirable location for globally connected businesses and premium employment opportunities. An



appropriate mix of land-uses is critical to ensuring that Barangaroo can viably deliver a vibrant built environment with quality public benefit offerings.

Commercial floorspace is the largest component of the land use mix in Barangaroo, concentrated in Barangaroo South. Premier global companies occupy much of this premium commercial space. This is supported by a range of retail shops and restaurants which also attract tourists and visitors to Barangaroo.

Retail development is concentrated in Barangaroo South, with some retail floor space in Central Barangaroo. The proposed retail floor space within Central Barangaroo is less than what was exhibited in MOD 9. This is a response to structural economic changes and the changing face of retail, especially following the COVID-19 pandemic, which shifted shopping online and has reduced the demand for physical retail floor space.

The land use mix in Central Barangaroo should reflect these structural economic changes and provide flexibility for an optimal land use mix and changes in response to prevailing market conditions over time.

Priority 2: Deliver appropriate levels of diverse housing at Barangaroo without compromising the potential for globally-significant economic opportunity

NSW and City of Sydney strategic planning directions support the global competitiveness of the Sydney CBD and activation of precincts. They also focus on increasing housing supply, diversity, affordable housing and resilience. The Barangaroo precinct offers the opportunity to provide premium housing options to attract global talent.

The housing options in Barangaroo will include a mix of apartments sizes. One and two bedroom apartments comprise almost 60% of the apartments in Barangaroo South. Residential floor space in Central Barangaroo will focus on luxury apartments, offering design, amenity and fittings targeted to global talent and the high-end residential market.

The provision of affordable housing in Barangaroo was negotiated as part of an extensive package of contributions delivering public benefit. This included affordable housing provision at a rate that was comparable with requirements in other renewal precincts e.g. Green Square and Redfern-Waterloo. The affordable housing contribution is being delivered in Barangaroo South.

Priority 3: Deliver a broad range of public benefits suited to the context of the three precincts within Barangaroo

The range of public benefits to be provide across the three precincts includes public open space and public domain, cultural space, the harbourside walk, affordable housing and a carbon neutral precinct. Delivery of these is reliant on a viable mix of land uses.

The public benefits have been identified throughout the evolution of planning for Barangaroo with agreement that these will be delivered in different ways in each precinct. Barangaroo Reserve provides 55% of the open space in Barangaroo and accommodates ‘The Cutaway’, a distinctive cultural and arts space.

Central Barangaroo is a cultural and arts led precinct, with flexible zoning to accommodate residential, tourism and retail uses. It provides links between the cultural and open spaces of Barangaroo Reserve and Barangaroo South. Development in Central Barangaroo will deliver significant public benefits. The contributions totalling \$226 million include:

- \$78 million to support cultural facilities and initiatives (financial contribution),



- \$61 million for public domain improvements (in kind),
- \$45 million for the embellishment of Harbour Park to world-class standard, including flexible event spaces to accommodate a range of cultural activities (financial contribution),
- \$8 million for Metro Station Southern entry,
- \$2 million for fit-out for arts and community facilities,
- \$11 million for urban arts contribution,
- \$11 million in development contributions, and
- \$10 million for provision of pedestrian footbridge.

Barangaroo South is characterised by larger scale commercial, residential and tourist accommodation uses. The public benefits provided by this precinct comprise an embellished public domain, affordable key worker homes and financial funding contributions for Barangaroo Reserve and the Barangaroo Public Art and Cultural Plan.

Priority 4: Deliver social and environmental sustainability

Barangaroo is an exemplar of environmentally sustainable design and will deliver a suite of great places for community, civic and cultural activities. This priority, as defined in the Barangaroo Housing Strategy by Elton 2021, remains relevant.

9.8 Air Quality

An amended Air Quality Impact Assessment (**AQIA**) has been prepared by AECOM (**Appendix O**), which identified the potential impacts to air quality at nearby existing and future sensitive receptors during construction and operation.

Potential dust generating impacts (and associated minor impacts from soil contaminants) during construction; particularly during excavation activities pose the greatest potential air quality impacts from the project to nearby receptors. There is also the potential for cumulative impacts associated with construction of Barangaroo Station and other development projects within Barangaroo.

Dust generating impacts from individual development applications within the Central Barangaroo site would need to be assessed in accordance with the EP&A Act with the level of assessment dependant on the nature of the works involved at the detailed application stages.

Other potential air quality impacts during construction would include fuel combustion from mobile and stationary plant equipment which may be managed appropriately by maintaining equipment and using standard management practices. There is also the potential for minor odour impacts during operation of the water treatment plant.

Potential operational impacts may include minor air quality impacts from commercial properties and vehicle emissions from traffic generating development, particularly along Hickson Road and to a smaller extent Barangaroo Avenue. These may be managed with appropriate planning and design considerations and current traffic generation estimates predicted slightly lower vehicle numbers for the proposed modification when compared to previous estimates for MOD 10. The amended MOD 9 proposal also allows for the provision of large landscaped areas and green roofs which would have potentially beneficial impact on local air quality by reducing air pollutant concentrations through both direct and indirect pathways.



In conclusion provided that a detailed AQIA for each individual detailed applications specific to the Central Barangaroo is undertaken and appropriate project-specific mitigation strategies are implemented, no adverse effects on local air quality are expected to occur as a result of the propose modifications to the Concept Plan.

9.9 Other Assessments

9.9.1 Sustainability

A Sustainability Letter has been prepared by Cundall (**Appendix J**) to provide a review of the amended Concept Plan and any changes proposed to the originally submitted ESD report with respect to sustainability initiatives of the proposal.

Cundall conclude the amended Concept Plan do not result in any significant changes to proposed ESD initiatives that will be explored in subsequent detailed DA phases.

9.9.2 Remedial Action Plan

A Remedial Action Plan (**RAP**) Suitability Letter has been prepared by EDP Consultants (**Appendix K**) that reviews the amended Concept Plan to determine if the remedial strategy in the existing and approved Central Barangaroo JBS 2013 RAP are applicable.

With respect to contaminated land, the primary component of interest is the basement extent, its construction and if there are any alterations of such significance that the overarching principles in the RAP would be undermined, which couldn't be addressed in a subsequent RWP for the development.

Previous letters prepared by EDP and the Site Auditor provided in detailed cross reference of the MOD 9 Concept Plan to the RAP assumptions and requirements, and determined the RAP was still appliable and suitable for the proposal.

In review of the amended Concept Plan EDP state:

- The proposed amended 9 basement construction is three levels, with the Metro interface at the North East Corner of the site and comparable the nominal basement RL in the exhibited MOD 9 proposal.
- Mixed use of residential, retail and hotel land use for the basement and buildings is still proposed in the amended MOD 9 proposal, which was contemplated and considered comparable to the exhibited MOD 9 proposal.
- No new basement wall designs or thickness have been suggested and is assumed the risk assessment parameters on wall construction in the RAP will be met or improved. However, variability to the RAP assumptions around wall construction, even if not considered equivalent or better, can be addressed through subsequent risk assessment in the corresponding RWP.

In summary, the amended proposal is adequately captured under the overarching remedial principles in the RAP.

9.9.3 Suitability of Remedial Action Plan



An updated RAP Suitability Letter has been prepared by Ramboll Australia (**Appendix L**) that reviews the applicability of the JBS RAP and Central Barangaroo Site Audit Statement to the amended MOD 9 proposal.

As described above, the refined Concept Plan varied from the originally submitted MOD 9 application through reduction of the basement floor RL to -12.5m compared to -15m. Proposed land uses remain unchanged.

Ramboll note that EDP were engaged to undertake a review of the amended Concept plan and if the remedial strategies and action plan in the JBS RAP are still applicable. Based on review of the EDP letters (26 July 2021 and 4 July 2023) and review of the amended Concept Plan, the Auditor agrees with EDP's conclusion.

The conclusions and recommendations of the Auditor's review (dated 15 November 2021) of the originally submitted MOD 9 Concept Plan (as discussed in Section 3) remain valid, and the requirements of *State Environmental Planning Policy – Resilience and Hazards 2021 (RH SEPP)* (formerly SEPP 55) can be addressed in future stages of the development application and site audit process.

9.9.4 Aviation

A Preliminary Aeronautical Impact Assessment Addendum has been prepared by Avlaw Aviation Consulting (**Appendix Q**) to provide a review of the aeronautical assessment that was submitted with the MOD 9 application in November 2021 against the refinements made to the Concept Plan.

The conclusion of the original assessment found that only crane activity would be a controlled activity approval as it would penetrate the Obstacle Limitation Surface (**OLS**) over the site, which is a horizontal plane a 156m AHD.

Avlaw advised that approval would be given based on the significantly taller structures in the immediate vicinity of Central Barangaroo. This conclusion was supported by the Civil Aviation Safety Authority (**CASA**) who have noted in their agency submission that they did not object to original concept plan.

Updated crane heights were not provided to Avlaw, however if the equivalent reduction in building height was applied to the crane height provided in November 2021, this would result in a crane elevation of 132.5m AHD, thus reducing the height below the OLS.

Although unlikely, even if the crane heights remained unchanged, Avlaw's conclusion from November 2021 that approval should be given remains unchanged and no further assessment is deemed necessary.

9.9.5 Community and Cultural Strategy

JOC Consulting have reviewed the amended Concept Plan and supporting plans to ensure the proposed community and cultural initiatives of the proposal are retained and capable of being delivered in future SSDAs. JOC Consulting conclude that the proposal is capable of meeting the suggested items raised by Council in their submission dated 24 August 2022. Refer to **Appendix R**.

9.9.6 Social and Economic Impacts

Social and Economic Impacts



The amended Concept Plan was supplied to PWC to consider if the amended scheme and accompanying reference scheme resulted in any changes to the outcomes or findings contained within the previously submitted Economic Impact Assessment (**EIA**) and Social Impact Assessment (**SIA**).

PWC have reviewed this amended envelope and plans within the context of the originally submitted reports and can confirm that the nature of social and economic impacts previously identified have not materially changed.

That is, while the quantum of the social and economic impacts will vary with changed construction costs and the scale of GFA by use, the findings and conclusions of the originally submitted reports remain relevant for the purposes of the application. Refer to **Appendix H**.

Land Use Shifts

It is acknowledged that the exhibited MOD 9 proposal and the amended MOD 9 proposal present a different land use configuration, expressed by the amendments proposed to the Instrument of Approval. This includes an increase in the residential cap allowed in Central Barangaroo. It also includes a reduction in the quantum of total retail floorspace proposed however, is still an increase from the approved Concept Plan.

These changes are supported by a Land Use Review, undertaken by Atlas Economics (**Appendix S**) which considers the issues relevant to a viable and sustainable land use mix at Central Barangaroo. Since 2020, office and retail markets have faced headwinds on a number of structural fronts, resulting in the re-setting of demand for office and retail floorspace respectively. This includes:

- Productivity gains, which means occupiers today can do more with less office space, and
- Hybrid working, which refers to a working arrangement in which office-based workers split their working week between the office, home and in some cases a co-working spaces (library or coffee shop).

The average Australian workers now spends more than a quarter of their working week (27%) outside the office.

Trends resulting from the COVID-19 pandemic have 're-set' structural demand for some sectors - notably for retail and commercial office floorspace. The re-setting of demand is evident in market indicators with vacancy and incentive levels staying elevated since 2020.

The influence of economic conditions on property markets is nuanced and therefore more work will be required to understand how these structural trends impact on various sub-markets and assets.

FIGURE 85 illustrates the movement of office vacancy and incentive levels in the Sydney CBD and the Parramatta CBD. **FIGURE 86** illustrates the pattern of movement of incentives in Sydney CBD retail.



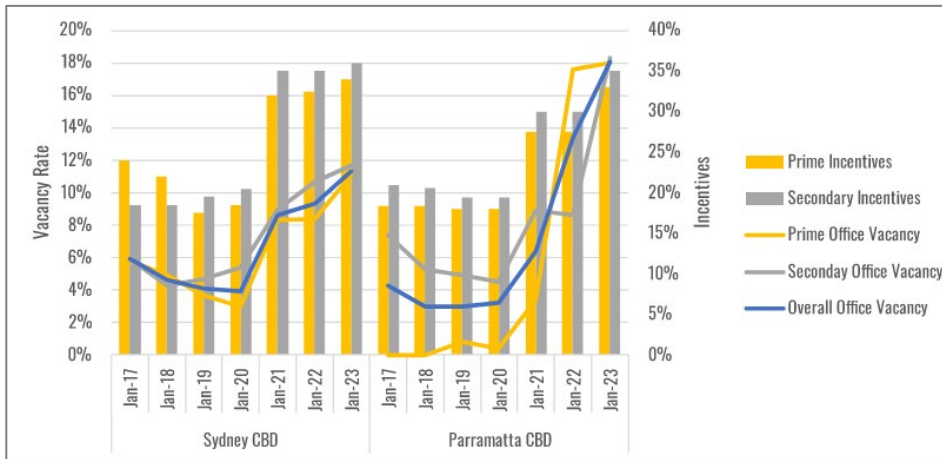


FIGURE 85 – SYDNEY CBD OFFICE VACANCY 2017-2023 (PCA, KNIGHT FRANK)



FIGURE 86 – SYDNEY CBD RETAIL INCENTIVES (COLLIERS)

Overall, Atlas conclude the re-setting of structural demand for floorspace has direct implications for how sites are planned for future development. The take-up of office and retail space is expected to be slower moving forward as the market cycles through vacant space amid a shift in the demand for space per capita. Further, new and imminent completions are relevant to the overall supply and competitive context of the Sydney CBD.

Overall, the findings substantiate a change in land use mix for Central Barangaroo and further enable the flexibility for various uses to be explored as the project progresses



10 Updated Project Justification

This Submissions Report has responded to the key issues raised during exhibition for the Central Barangaroo Project and accompanied by a comprehensive package of reviewed technical reports and information.

The report and supporting documents have been informed by additional consultation with the Department and GANSW.

10.1 Updated Evaluation of the Proposed Development

This Submissions Report supports the S75W modification application MOD 9 to modify the Concept Plan MP06_0162 in relation to Central Barangaroo.

Specifically, this will result in amendments to the approved Concept Plan for Blocks 5, 6 and 7, revision to the Instrument of Approval and SoCs, and amendments to the PEHC SEPP as it applies to Barangaroo.

The amended MOD 9 proposal has been refined significantly following exhibition to deliver a built form at a lower scale that responds to the surrounding context of Millers Point and marks a transition from Barangaroo South to Nawi Cove.

The key changes include a complete revision of the building envelopes and block layouts to be more aligned with the approved Concept Plan, reduced heights and GFA, removal of the 20 storey tower, increased public open space and public domain. Overall, the proposed modified building envelopes strike a balance between the site's the strategic function and the sensitivities of its context, such as view corridors, heritage precincts, and public areas

The proposals suitability has been confirmed by the original Concept Plan and is further enhanced by Barangaroo Metro Station, Nawi Cove and other changes since 2007. This has necessitated a renewed vision for the site that is compatible with the surrounding context whilst optimising the benefits of transport investment.

The unique physical, social and environmental characteristics of Central Barangaroo establish the suitability of site to accommodate the amended MOD 9 and satisfy the requirements of Section 4.15 of the EP&A Act.

Having regard for the biophysical, economic and social considerations, including the principles of ecologically sustainable development, MOD 9 is justified and considered to be in the public interest for the following reasons:

- The amended building envelopes have been refined and rebalanced across the site to respond to varying sensitivities in the surrounding area. In particular, the refined massing represents a sensitive and suitable transition of height and scale from the southern end towards Nawi Cove.
- The additional GFA proposed will support the demand and critical mass of Barangaroo Station, maximising government investment. The flexible distribution of GFA across all blocks will respond to future market demands, creating a lively precinct with excellent amenity.
- The proposed land uses are generally aligned with the Concept Plan approval and maintain the principle of a mixed-use precinct for Barangaroo more broadly. The amended MOD 9 proposal will ensure Central



Barangaroo will provide potential for a range of residential, commercial, community and retail to function in a complementary manner and support the role of Sydney CBD.

- The improved reconfiguration of generous open spaces and civic links proposed by MOD 9 will support improved pedestrian amenity and connectivity to Harbour Park and Hickson Park.
- The amended Design Excellence Strategy, in consultation with GANSW, and the proposed Urban Design Guidelines will deliver robust design outcomes for the site and support a coordinated and cooperative approach to design.
- The amended MOD 9 proposal maintains its objective to be a globally recognised exemplar sustainable urban precinct.
- The proposed amendments to the southern boundary of Block 5 have been driven through a consultative process with GANSW to deliver an optimal public domain outcome that facilitates a dynamic and diverse public space that facilitates functional and visual connections from Hickson Park to Harbour Park.
- A robust design exercise and assessment has been undertaken by the design team to ensure the principles of the PAC MOD 8 determination have been achieved despite the reconfiguration to Hickson Park. The proposal will support additional open space and diverse public spaces beyond the current Concept Plan and support solar access and preserve view corridors to Harbour Park.
- The realignment of Hickson Park is appropriately offset by increased provision of public domain and open space within the site in the form of new east-west connections to the foreshore and north-south connections to Nawi Cove.
- The amended MOD 9 proposal will ensure Hickson Park will receive solar access between 12pm and 2pm mid-winter.
- The amendments are supported by updates to specialist technical reports, either in the form of updated reports or addendums. These have determined that amenity impacts are largely similar or reduced when compared to the approved Concept Plan (e.g. traffic, wind, noise, air quality, heritage and aviation).
- Mitigation of environmental impacts associated with the amended proposal will be delivered through measures identified in the relevant technical reports as required, the revised SoCs and during detailed application stages.
- The amended proposal maintains a commitment to delivering public benefit, community and cultural spaces.



Appendices

Revised Statement of Commitments

Modification to Instrument of Approval

APPENDIX C

Urban Design Report

View and Visual Impact Assessment

Sky View Impact Assessment

Pedestrian Wind Study

Transport Management and Accessibility Plan

Social Impact and Economic Impact Assessment

APPENDIX I

Utilities and Infrastructure Letter

ESD Summary Report

Remedial Action Plan Suitability

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Site Audit
Statement
Applicability Letter

Heritage Impact Statement

Staging Plan

Air Quality Impact Assessment

Acoustic Assessment

Preliminary Aeronautical Impact Assessment

Barangaroo Community and Cultural Strategy

Land Use Review

Explanation of Intended Effects

