



11 September 2018

Public Domain Works Barangaroo South and Central (SSD 7944)

1 INTRODUCTION

1. On 23 July 2018, the NSW Independent Planning Commission (**Commission**) received from the NSW Department of Planning and Environment (**Department**) a State significant development application (SSD 7944) from Lend Lease Millers Point Pty Ltd (**Applicant**) to undertake Public Domain Works Barangaroo South and Central (**Application**).
2. The Commission is the consent authority in respect of the Application under section 4.5(a) of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**) and clause 8A of the *State Environmental Planning Policy (State and Regional Development) 2011* (**SEPP SRD**). This is because:
 - the Application constitutes State significant development under section 4.36 of the EP&A Act as the Application constitutes development within Barangaroo, and has a capital investment value of in excess of \$10 million (see Schedule 2, Clause 3 of the SEPP SRD); and
 - the Department received an objection from the relevant local council.
3. While the Application was submitted prior to 1 March 2018, clause 8A of SEPP SRD nonetheless applies to the Application in accordance with sub-clause 8A(3) of SEPP SRD.
4. Professor Mary O’Kane, Chair of the Commission, nominated John Hann (Chair) and Wendy Lewin to constitute the Commission to determine the Application.

1.1 Site and locality

5. The Department’s Environmental Assessment Report dated 19 July 2018 (**EAR**) provides the following background of the development. Barangaroo is a large 22-hectare (**ha**) development precinct located on the north-western edge of the Sydney Central Business District. The precinct is bounded by King Street Wharf to the south, Hickson Road to the east and the foreshore of Sydney Harbour to both the north and west as shown in **Figure 1** (over page).
6. The Barangaroo precinct is divided into three distinct parts. Barangaroo South which is largely developed, Barangaroo Central which is subject to remediation works but not developed, and Headland Park at the northern end of the precinct which is developed.
7. The site, that is the subject of the Application, includes public domain areas in the northern section of Barangaroo South. A small portion of the Application site is also located within Barangaroo Central. The site surrounds several large development blocks including R4A, R4B and R5, the Crown Sydney Hotel Resort and commercial Block 3C. The total area of the subject site is approximately 29,500m² (**site**).



Figure 1 - Barangaroo development precinct (source: Department's Environmental Assessment Report)

8. The relationship of the site to the Barangaroo precinct and adjoining development blocks is shown in Figure 2.

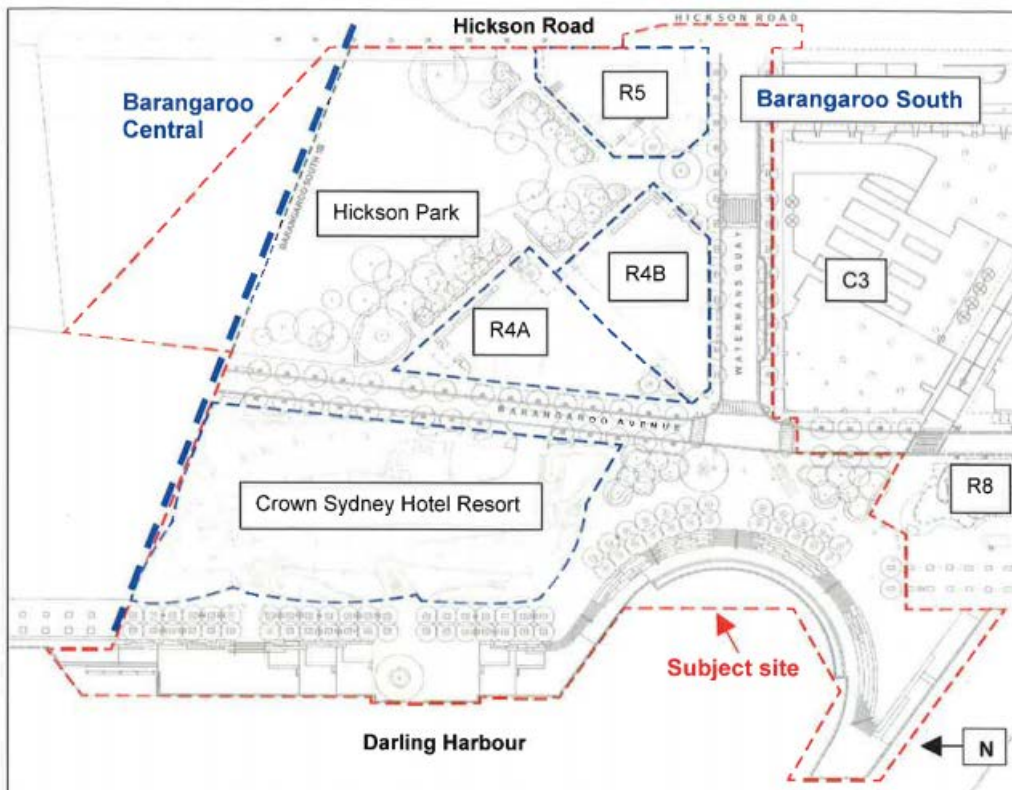


Figure 2 - Barangaroo South Concept Plan blocks, construction stages and public domain area in red (source: Department's Environmental Assessment Report)

1.2 Background to Application

9. On 9 February 2007, the then Minister for Planning (**Minister**) approved the Concept Plan (MP 06_0162) (**Concept Plan**) for the renewal of the Barangaroo site for a mix of uses, including residential, retail, commercial and public recreation.
10. The Concept Plan established nine development blocks, gross floor area (**GFA**) maximums, building height limits and public open space/ public domain areas. The Concept Plan also included a set of built form principles and urban design controls to guide development.
11. The Commission has previously considered matters related to the Concept Plan at Barangaroo. In March 2016 the Commission received a referral to determine Concept Plan Mod 8 (**MOD 8**) and provide advice to the Minister for Planning on associated State Environmental Planning Policy amendments (**SEPP Amendment**). The referral of MOD 8 to the Commission was made under Ministerial Delegation dated 14 September 2011 and was triggered due to objections from two local Councils and more than 25 public submissions by way of objection.
12. On 28 June 2016 the Commission approved Mod 8 which modified the built form and urban design outcomes on the site including:
 - increases to gross floor area, height, car parking within Barangaroo South;
 - changes to site boundaries and urban structure within Barangaroo South;
 - introducing a new set of design guidelines; and
 - amending the layout of land uses including open space and public domain areas.
13. Concurrent with its role determining MOD 8, the Commission was also requested by the then Minister for Planning to provide advice on an associated SEPP Amendment. The SEPP Amendment was required to give effect to zoning and development controls required to permit MOD 8. The Commission's advices dated 1 June 2016 and 21 June 2016 resulted in the following key changes to the SEPP Amendment:
 - Hickson Park extended further north into Barangaroo Central to form its current configuration;
 - boardwalk along the western perimeter extended to provide a 30m unencumbered foreshore promenade area; and
 - increase the percentage of key worker housing for Barangaroo South.
14. The SEPP Amendment and subsequent determination of MOD 8 required the reconfiguration and enlargement of Hickson Park (partially into Barangaroo Central) and the creation of a 30 metre (**m**) wide foreshore promenade.
15. The Application is generally consistent with the reconfiguration and enlargement of Hickson Park and extended foreshore promenade set out in the Commission's approval of MOD 8.

1.3 Summary of Development Application

16. The Application is seeking approval for the construction and use of public domain areas to align with the layout approved under MOD 8 between and around R4A, R4B, R5 and the Crown Sydney Hotel Resort of the Concept Plan within Barangaroo South and on a part of the former Block 5 within Barangaroo Central.

17. The key components of the Application are summarised in **Table 1** and shown in **Figure 3**.

Table 1 - Key Application components (source: Department's Environmental Assessment Report)

Aspect	Description
Early works	<ul style="list-style-type: none"> • Site preparation. • Remediation within declaration area (Blocks 4 and 5) and outside of it.
Building	<ul style="list-style-type: none"> • 75 m² single storey public amenity and storage building within Hickson Park.
Public domain areas	<ul style="list-style-type: none"> • Hickson Park. • Watermans Quay and public pier. • Section of Barangaroo Avenue. • Wulugul Walk. • Watermans Cove and public pier.
Public domain works	<ul style="list-style-type: none"> • Ground treatments and finishes. • Landscaping, including grassed areas and substantial tree planting. • Street furniture and fixtures. • Lighting. • Wayfinding signage. • Civil and stormwater infrastructure and utility services.
Construction	<ul style="list-style-type: none"> • 7 am to 6 pm (Monday to Friday). • 7 am to 5 pm (Saturday). • No works on Sundays or public holidays.
Employment	<ul style="list-style-type: none"> • 150 jobs during construction and 50 during operation.
CIV	<ul style="list-style-type: none"> • \$83 million.

18. The Applicant noted that the proposed design of the building in Hickson Park:

“will be submitted to the Secretary prior to issue of the relevant Construction Certificate, noting that development for the purposes of ‘amenity facilities’ are exempt development at Barangaroo under Clause 58B of the Infrastructure SEPP. The detailed design of the building is intended to be procured through an architectural competition, most likely alongside the Pier Community Facility.”



Figure 3 - Public domain works overview plan (source: Department's Environmental Assessment Report)

19. On 22 January 2018 the Applicant provided a Response to Submissions (**RtS**). The key changes to the Application through the RtS were noted in the EAR including:

- "... installation of security bollards at various places throughout the public domain
- refining the design of the extended boardwalk and floating pontoon
- replacing sandstone edging at the former Spirit of Tasmania Loading Dock with precast concrete
- addition of two trees at the southern end of Watermans Quay
- extending the paving on the western edge of Barangaroo Avenue and the interface of the Crown basement driveway at Watermans Cove
- refinement of some trees species in Watermans Cove and Hickson Park
- structural provision included within the public domain to support a future public artwork in Watermans Cove and Hickson Park
- inclusion of a universally accessible ramp to the lower section of boardwalk in Watermans Cove and the revision of the ramp to Hickson Park..."

1.4 Stated need for proposal

20. In its Environmental Impact Statement dated May 2017 (**EIS**) and RtS, the Applicant stated the Application was justified on the basis that the proposed public domain works would:

- be consistent with the Concept Plan (as modified) and other relevant statutory documents;
- provide public domain facilities to ensure users of Barangaroo South enjoy a high-quality environment;
- provide positive social and economic benefits; and

- represents a key part of the Barangaroo foreshore renewal Application.

2 THE DEPARTMENT'S CONSIDERATION OF THE APPLICATION

2.1 Key steps in Department's consideration of the Development Application

21. The Department carried out the following key steps in relation to the Application:
 - on 5 October 2016 issued Secretary's environmental assessment requirements;
 - on 5 May 2017 received the Development Application and EIS;
 - publicly exhibited the Development Application and EIS between 18 May 2017 and 19 June 2017. The Department received nine submissions from public agencies and two public submissions, which are summarised in **Table 2** and paragraph 23 below;
 - received the Applicant's response to submissions dated 22 January 2018, containing key design refinements described in paragraph 19 above; and
 - prepared an environmental assessment report (**EAR**) dated 19 July 2018.
22. The submissions from public agencies, received by the Department, are summarised in **Table 2** below.

Table 2 - Summary of public and agency submissions (source: Department's EAR)

City of Sydney Council (Council)
Council objected to the application raising concerns about design of the public domain (focusing on Hickson Park), the need for community facilities, public art and heritage interpretation, predicted wind conditions, wayfinding signage, cultural and social programming, safety and crime prevention, sustainability and marine ecology and biodiversity.
Environment Protection Authority (EPA)
The EPA did not object to the application and made recommendations in relation to management of contamination.
Transport for NSW (TNSW)
TNSW did not object to the application and made recommendations in relation to intersection design and construction traffic management.
Roads and Maritime Services (RMS)
RMS did not object to the application and made recommendations in relation to regulatory maritime signage, navigation safety and vessel traffic management during construction and operation.
Heritage Division
The Heritage Division did not object to the application or raise any significant issues of concern.
Office of Environment and Heritage
OEH advised the proposal does not involve biodiversity, natural hazards or Aboriginal heritage issues.
Department of Primary Industries (DPI)
Requested further information on stormwater pits adjacent to Watermans Cove and along Wulugul Walk.
Port Authority of NSW (PNSW)
PNSW considered the Navigation Impact Assessment recommendations should be implemented.

23. Of the two public submissions received by the Department, one objected and one made a comment on the proposal. A nearby resident of Building R8 objected to the Application due to view loss from trees proposed along the foreshore at Watermans Cove and requested an alternative tree species be selected which, at maturity, will not impact on views to the north-east. The other public submission made comment on the Application noting it is “*worthy of support*” as the design provides an attractive bookend to the Headland Park to the north. The later submission also requested any future modifications of the Concept Plan treat the sun access planes of Hickson Park as an inviolable aspect of the site and the possible use of a local native Fig (*Ficus Rubiginosa*) be investigated for Wulugul Walk (Wulugul Walk is identified on **Figure 3**).

2.2 The Department’s assessment report

24. The Department’s EAR, dated 19 July 2018, identified public domain, traffic access and land contamination as the key impacts associated with the Application.

25. The EAR concluded:

“... The proposed public domain is of a high quality, has been designed by a world-renowned landscape architectural firm and is consistent with the desired future outcomes of the approved Concept Plan. The Department is satisfied the public domain exhibits design excellence and will greatly enhance the amenity and character of Barangaroo and the western edge of the CBD at significant benefit to the State...”

26. And further that:

“... The proposal would result in a wide range of positive social and economic impacts, including helping to grow a stronger and more competitive central business district, helping growth and investment in Barangaroo and providing improved public domain outcomes which will benefit residents, workers and visitors...”

3 THE COMMISSION’S MEETINGS AND SITE INSPECTION

27. As part of its determination, the Commission met with the Department and the Applicant as set out below. The meetings were recorded and copies of the transcript, along with site inspection notes were made available on the Commission’s website.

3.1 Meeting with the Department

28. On 14 August 2018, the Department met the Commission on the Application and its EAR. Key matters for discussion included the Application’s relationship to previous approvals; deep soil areas and tree planting; staging; design and materials; wind impacts; the pontoon structure and consistency with the Concept Plan. A transcript of the meeting was made available on the Commission’s website.

3.2 Meeting with the Applicant

29. On 14 August 2018, the Commission met with the Applicant. The Applicant and their representatives undertook a series of short presentations and the key matters for discussion included staging; exclusions zones; deep soil zones; materials; pontoon design; lighting, pier design and future development scenarios. Copies of the presentations and a transcript of the meeting including a list of attendees were made available on the Commission's website.

3.3 Site inspection

30. On 14 August 2018, the Commission conducted an inspection of the site and surrounds and viewed the site from the upper levels of International Tower One (Commercial Block 3C). The following people attended and observed the site inspection:

- Stewart Verity (Lend Lease)
- John Riordon (Lend Lease)
- Leanne Boyle (Lend Lease)
- Bob Nation (BDA)
- David McCracken (BDA)
- Nicole Robinson (BDA)
- Lise Maddocks (BDA)
- Michael Rowe (Ethos Urban)

3.4 Meeting with Council

31. On 6 August 2018, the Commission wrote to Council and offered to meet. On 9 August 2018 Council staff responded to the Commission and declined the invitation to meet, instead stated that "*The [Council] requests that the Commission consider the written submissions made on the proposal*". The Commission notes Council made a written submission dated 20 June 2017 and a response to the RtS dated 12 April 2018. A copy of both documents was made available on the Commission's website.

4 ADDITIONAL INFORMATION

32. The Commission received from the Applicant:
- copy of the presentation made to the Commission on 14 August 2018;
 - a plan confirming the distance between the licenced seating areas of the approved Crown Sydney Hotel Resort development and the proposed pontoon structure which is part of the Wulugul Walk extended foreshore promenade;
 - scale drawings of the public domain area, the subject of the Application; and
 - an email and a plan clarifying where the proposed exclusions zones had been documented in the EIS and RTS.
33. The Commission received from the Department via an email dated 29 August 2018:
- clarification of the description of development; and
 - confirmation the wind assessment for the Application provides the mitigation required for R4A and R4B.
34. All of the above correspondence was provided to the Commission after receipt of the

EAR and was made available on the Commission's website.

5 THE COMMISSION'S CONSIDERATION

5.1 Material considered by the Commission

35. In this determination, the Commission has carefully considered the following material (**material**):
- the SSD Application;
 - Concept Plan (MP 06_0162), granted by the Minister on 9 February 2007, as modified including MOD8;
 - the Environmental Impact Statement dated 4 May 2017 and its accompanying appendices, prepared by Ethos Urban;
 - all submissions provided to the Department in respect of the application by the community and, Council and Government agencies;
 - the Response to Submissions dated 22 January 2018 and its accompanying appendices, prepared by Ethos Urban;
 - the Department's assessment report dated 19 July 2018 and its accompanying appendices;
 - copies of the presentations provided by the Applicant at meeting held on 14 August 2018; and
 - additional information provided to the Commission described in paragraphs 32 and 33 above.

5.2 Mandatory considerations

36. In determining the Application, the Commission has taken into consideration the following relevant mandatory considerations, as provided in s 4.15 of the EP&A Act (**mandatory considerations**):
- the provisions of all:
 - environmental planning instruments (**EPIs**); and
 - proposed instruments that are or have been the subject of public consultation under the EP&A Act and that have been notified to the Commission (unless the Secretary has notified the Commission that the making of the proposed instrument has been deferred indefinitely or has not been approved);
 - planning agreements that have been entered into under s 7.4 of the EP&A Act, and draft planning agreements that a developer has offered to enter into under s 7.4;
 - the *Environmental Planning and Assessment Regulations 2000* (**Regulations**) to the extent that they prescribe matters for the purposes of s 4.15(1) of the EP&A Act; and
 - that apply to the land to which the Application relates;
 - the likely impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality;
 - the suitability of the site for development;
 - submissions made in accordance with the EP&A Act and Regulations;
 - the public interest;

5.3 Additional considerations

37. In determining this application, the Commission has also considered the:
- *Greater Sydney Regional Plan – A Metropolis of Three Cities*, which sets out the NSW Government's 40-year vision and establishes a 20-year plan to manage growth and change for Greater Sydney and includes 10 directions;
 - *Eastern City District Plan* which aims to connect local planning with the longer-term metropolitan planning for Greater Sydney; and
 - *Contaminated Land Management Act 1997*, under which the site incorporates part of a 'remediation site' as declared by the EPA (EPA Declaration Area 21122).

5.4 Relevant Environmental Planning Instruments

38. The following EPIs are relevant to the application:
- *State Environmental Planning Policy (State and Regional Development) 2011*
 - *State Environmental Planning Policy (State Significant Precincts) 2005*
 - *State Environmental Planning Policy (Infrastructure) 2007*
 - *State Environmental Planning Policy No. 55 – Remediation of Land*
 - Draft State Environmental Planning Policy for the Remediation of Land
 - *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*
 - *State Environmental Planning Policy (Coastal Management) 2018*
 - Draft Environment State Environmental Planning Policy – Environment.
39. The Commission has carefully considered and accepts the Department's assessment of the relevant EPIs as set out within Appendix D of the EAR. In particular, the Commission finds that the application is:
- State Significant Development as it is development within Barangaroo that is valued in excess of \$10 million;
 - sited on land zoned both B4 Mixed Use and RE1 Public Recreation under State Environmental Planning Policy State Significant Precincts (SSP SEPP) and the works proposed are permissible with consent within both zones.

5.5 Consistency with the terms of approval of the concept plan

40. Clause 3B(2)(d) of Schedule 2 the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017* states that "a consent authority must not grant consent under Part 4 for the development unless it is satisfied that the development is generally consistent with the terms of the approval of the concept plan".
41. The Commission considers the Application is generally consistent with many, but not all, of the terms of approval of the concept plan. For ease of reference each of the relevant terms of approval of the concept plan are discussed below in section 5.6.
42. The Department's EAR concluded that the proposed public domain can be consistent with the terms of approval of the concept plan subject to appropriate conditions.

5.6 Likely impacts of the development on both natural and built environments

43. The Commission has identified the following key issues for this determination:
- deep soil zones and planting;

- exclusion zones for construction of adjoining sites;
- wind impacts;
- Wulugul Walk (pontoon component); and
- materials and finishes.

5.7 Deep soil zones and planting

Concept plan terms of approval

44. The terms of approval of the concept plan include provision B3(1)c) which states Hickson Park is:

“...to support large mature trees, including with the provision of at least 2,500sqm of deep soil with a depth of at least 3m...”.

Public and Council comments

45. The Commission notes the Council raised several concerns that related to deep soil zones and planting in its submissions dated July 2017 and April 2018. Those concerns related to the potential impacts of the Application in relation to the proposed design of the public domain including:

- lack of clarity with design of the northern perimeter (Hickson Park North);
- suggested avoidance of mounding of soil in some planted areas; and
- vehicle protection proposal at east and west edge not supported.

46. A public submission received by the Department stated:

“When mature, the proposed avenue planting (Waterhousea floribunda var. ‘Green Avenue’) and raised planter trees (Corymbia maculata and Corymbia gummifera) will heavily filter, if not completely block these views due to the height of the proposed trees and density of their foliage.”

Applicant’s consideration

47. The Applicant undertook a detailed assessment of the design and location of deep soil zones and planting which was documented in both its EIS and RtS. The Applicant proposed an area of approximately 2050sqm deep soil zone. Soil depths range from 2.68m to 3.12m. The Applicant stated that the soil depths varied due to constraints created by structural elements of the approved basements located immediately below Hickson Park.

48. The Applicant stated in its RtS that:

‘...The location and depth of the deep soil zone has been proposed in order to respond to the requirement and underlying objective of Condition B3 of the Barangaroo Concept Plan, which is to accommodate the growth of mature trees in Hickson Park. The proposed location and depth of the deep soil zone may be constrained by a variety of factors, yet the nature of the proposal is such that the overarching object of the Concept Plan conditions are appropriately satisfied and the consent authority can be satisfied that the proposal is generally consistent with Condition B3...’.

49. At the meeting with the Commission on 14 August 2018, the Applicant provided additional information on deep soil planting to the Commission as part of the presentation, as referred to in paragraph 32.
50. In response to the submission received from the public, the Applicant prepared a view analysis from the public submission's location to determine the extent of the view impact. The Applicant stated in its RtS that the mature trees would not cause significant view blocking however agreed to alter the proposed plant species to be:

“predominantly angophora costata, which is a locally endemic native tree somewhat characterised by limited foliage and a relatively transparent crown. This character will provide for filtered views rather than the total removal or blocking of views, inline with established view-sharing principles”

Department's consideration

51. The Department stated in its EAR that a significant proportion of the larger trees proposed would be located above the deep soil zones. The Department's EAR noted that there are some areas of the deep soil zone which do not meet the 3m soil depth requirements of the Concept Plan. However, these were countered by many other areas being in excess of 3m in depth. The Department's EAR concluded that the proposal is generally consistent with the Concept Plan and the intent for Hickson Park to support large mature trees can be achieved.
52. The Department's EAR noted concerns raised by Council regarding mounding of soil in localised areas adjacent to the shared walkway to R4A and R4B. Council made a recommendation in its submission (paragraph 31) to increase wall heights to minimise the impact of the mounding however the Department's EAR stated that this recommendation would likely result in undesirable design outcomes. The Department's EAR considered the mounding approach acceptable.
53. The Department stated in its EAR that the levels/contouring of Hickson Park needed to be flat enough so views to the Sydney Harbour from Hickson Road are not blocked. The Department's EAR concluded that the Applicant's design of Hickson Park would provide view corridors/connections to Sydney Harbour and achieve the objectives of the terms of approval of the Concept Plan.
54. The Department stated in its EAR that the conclusions of the Applicant's view impact analysis addressing the public submission was acceptable and that the proposed public domain works will greatly enhance the visual character of the site.

Commission's consideration

55. The Commission accepts the Applicant's information that the Concept Plan (as modified) seeks to accommodate the growth of mature trees in Hickson Park. The Commission accepts the response of the Applicant as outlined in paragraph 47 - 49 because the proposed deep soil zone and tree planting will accommodate the growth of mature trees.
56. The Commission accepts the conclusions of the Department outlined in paragraphs 51 - 53 above. The proposed design complies with the objectives of the relevant concept

plan terms of approval.

57. The Commission accepts the Applicant's view analysis information outlined in paragraph 50 identifying that by varying the tree species, view sharing principles of the Concept Plan can still be achieved. The Commission accepts the conclusions of the Department outlined in paragraph 54 above. The proposed design complies with the objectives of the relevant concept plan terms of approval.

5.8 Exclusion zones for construction of adjoining sites

Concept plan terms of approval

58. The terms of approval of the Concept Plan include provisions B3 and B12 which relate to the form and function of Hickson Park and staging. For ease of reference those terms are reproduced below:

"...B3 Built Form and Public Domain

Hickson Park

(1) Hickson Park is:

- a. shown on the map at appendix 1 and generally defined by the boundaries of Block 4A and 4B, Block 5 (as amended in B3(2) below), Hickson Road, Globe Street and Barangaroo Avenue;*
- b. to provide view corridors from Hickson Road to the Harbour;*
- c. to support large mature trees, including with the provision of at least 2,000 sqm of deep soil with a depth of at least 3m;*
- d. not to be overshadowed by built form over more than an average area of 2,500 sqm between the hours of 12:00 and 14:00 on the 21 June each year; and*
- e. to be primarily comprised of soft landscaping, including extensive areas of grass..."*

"...B12. Staging

Prior to the issue of any occupation certificate within Block 4A 4B or Y, the foreshore promenade (to the full extent mapped in the SEPP Amendment), pier, Watermans Cove and Hickson Park (other than temporary construction road on the alignment of the former Barton Street) shall be constructed, landscaped and publicly accessible..."

Applicant's consideration

59. The Applicant stated in its EIS and RtS that it is seeking consent for a series of exclusion zones to support the construction of the adjoining residential sites. The extent and location of these proposed exclusion zones is shown in Figure 4 below.
60. The Applicant stated in its RtS that staged construction for Hickson Park and associated public domain was also being sought by the Application. The Applicant further noted this was to allow exclusion zones to be established and maintained until completion of R4A, R4B and R5, which based on their current program will not occur before 2023. Once construction of the three residential buildings is completed the remainder of Hickson Park, including most of the mature planting would be delivered.
61. **Figure 4** (over page) is extracted from the Applicant's Public Domain Works Overview

Plan and illustrates proposed utilisation of three streets and 12-16 metres of Hickson Park as exclusion zones. The figure also illustrates the extent of mature planting that would be deferred as a result of creating and/or maintaining the exclusion zones.

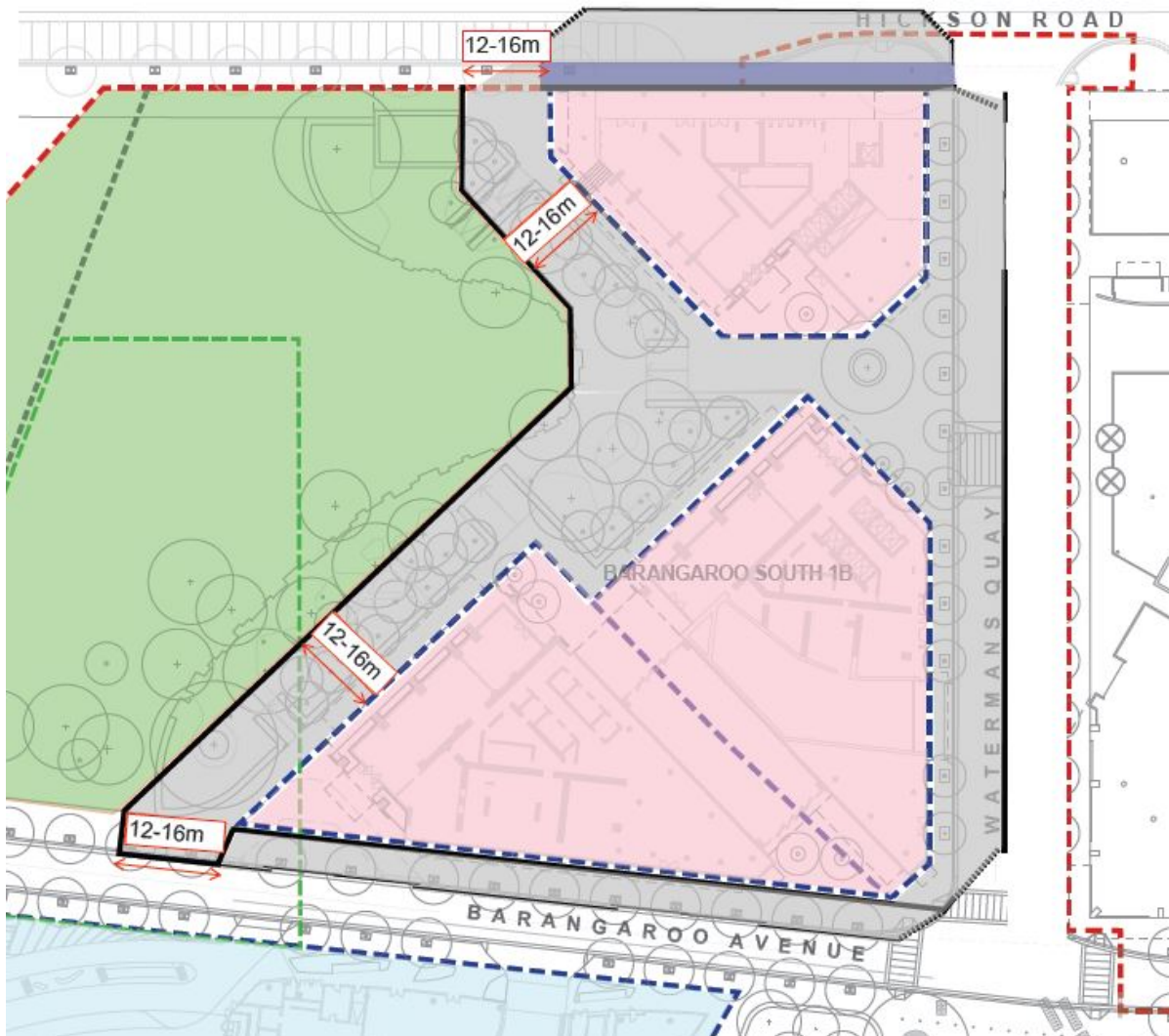


Figure 4 - Public domain works overview plan (source: Department's Environmental Assessment Report)

62. The Applicant's RtS also noted the following justification for the proposed exclusion zones proposed to be created within Hickson Park:
- required for entire construction period of R4A, R4B and R5 (identified in **Figure 2**) until at least 2023;
 - R4A, R4B and R5 are expected to remain under construction beyond current completion date of Crown Sydney Hotel Resort in late 2020;
 - public safety;
 - construction logistics; and
 - inefficient and unnecessary to construct park until residential towers completed.
63. The Applicant's RTS also sought a specific condition be included in any consent. The proposed condition stated:

"...(XX) Hickson Park may be constructed and occupied in stages to provide for temporary exclusion zones required for the construction of residential

buildings R4A, R4B and R5. The area of Hickson Park and public domain adjacent to each building must be completed prior to the issue of the final Occupation Certificate for each respective building and prior to the issue of the final Occupation Certificate for the public domain...”.

64. The Applicant stated in its RTS that the proposed approach is generally consistent with the requirements of the concept plan terms of approval B12 and the intent of the terms of approval would be achieved. Furthermore, the Applicant noted the proposed exclusion zones would be established instead of the temporary construction zone in the location of Barton Street which is contemplated by term of approval of the concept plan B3(5).

“... Therefore, despite not explicitly contemplating the exclusion zone around the buildings, provision for the Barton Street temporary construction road corridor in Condition B12 does illustrate that the condition specifically contemplates the potential for temporary construction work zones and the potential that a similar percentage of the Park would not be available at the time of the first OC...”.

65. During the meeting on 14 August 2018 the Applicant outlined a series of reasons to support the proposed exclusion zones and staged delivery of Hickson Park. The transcript of this meeting was published on the Commission’s website. The reasons noted by the applicant included the matters outlined previously in paragraph 62 and in addition:
- 85% of the area of Hickson Park could be delivered;
 - 12-16m exclusion zones for clear accessible entry;
 - exclusions zones would allow for off street deliveries;
 - seeking to allow simultaneous construction of R4A R4B and R5;
 - building R5 is yet to be approved; and
 - avoids unnecessary rework from completing then removing the Hickson Park works.

Department’s consideration

66. The Department stated in its EAR that establishment and retention of exclusions zones within Hickson Park may create a scenario whereby Crown Sydney Hotel Resort is complete but cannot be occupied. Alternatively, for it to be occupied the staging requirements of the concept plan ‘...would not strictly be met...’.
67. The Department’s EAR concluded that the Applicant may need to relocate the proposed exclusion zones or seek some form of modification to the Concept Plan staging requirements. The Department’s EAR considered the Application’s consistency with terms of approval B3 and B12 of the Concept Plan. Specifically, in relation to B3(5) it was noted that:

“...Barton Street is no longer proposed. The area previously proposed as Barton Street now forms a part of Hickson Park...”.

68. The Department’s EAR further concluded the staging of the site would be satisfactory, subject to a condition.

“...The Department therefore considers that it is prudent for the Applicant to

consider alternative future construction exclusion zones outside of Hickson Park in association with the construction of buildings R4A, R4B and R5, to ensure Hickson Park can be completed and accessible. The Department has recommended a condition to this effect...”.

69. The Department’s recommended condition is part of a broader condition relating to preparation of a Construction Environmental Management Plan (CEMP). The proposed condition stated the CEMP must “...detail construction exclusion zones, including alternate locations outside Hickson Park should they be required...”

Commission’s consideration

70. The Commission accepts the conclusions of the Department’s EAR as discussed in paragraph 66 above.
71. The Commission notes the Applicant’s proposed exclusion zones would defer establishment of most of the mature planting within Hickson Park until at least 2023. There is no certain timeframe for when the exclusion zones might be relinquished as they are proposed to stay in place until all three residential buildings are completed, one of which does not yet have development consent as outlined in paragraph 60.
72. The justifications for the Applicant’s proposed exclusion zones are those outlined in paragraphs 62 - 65. The Commission acknowledges commercial efficiencies would arise from construction of all three buildings simultaneously. However as outlined in paragraph 64, the privatisation of public space also brings impacts in the form of delayed delivery of open space amenity. It is further noted that there are no provisions within the concept plan terms of approval that promote simultaneous construction of R4A, R4B and R5, or prioritise it over the establishment of Hickson Park.
73. The Commission acknowledges that the terms of approval B3(5) and B12 permit a temporary construction road corridor in the location of Barton Street. Importantly, the Commission notes nothing can be required, by any approval of this Application, to prevent that from occurring. Whilst both the Applicant’s RTS and the Department’s EAR state the Barton Street temporary construction zone is no longer proposed, there is no proposal to formally relinquish the rights established by terms of approval B3(5) and B12 of the Concept Plan for a temporary construction road corridor.
74. Therefore, the Commission concludes the Applicant’s statements that the proposed exclusion zones are in lieu of Barton Street cannot be relied on. The Commission concludes that such a proposition could only be contemplated through a formal modification to the terms of approval of the Concept Plan. Any such modification would require a full and proper assessment and the Commission makes no comment on the likely merits of any such proposal.
75. The Commission notes that the exclusion zones would also have the effect of privatising approximately 15% of Hickson Park whilst they are in place. The Commission finds that deferring most of the large mature tree planting and reducing the publicly available space and amenity is not consistent with the terms of approval of the concept plan, in particular B3(1)c).
76. The Commission acknowledges that construction of similar scale building in equally dense public areas is common practice without the use of extensive exclusion zones.

77. The Commission does not accept the evidence provided by the Applicant to justify the exclusions zones referred to in paragraphs 62 - 65 because it lacks sufficiently detailed analysis of alternate options for construction staging of R4A, R4B and R5.
78. Based on the material, the Commission finds that the proposed exclusions zones should not be permitted, for the reasons outlined in paragraphs 74 - 78.

5.9 Wind impacts

Public and Council comments

79. The Commission notes the concerns from Council regarding the impacts of the Application in relation to wind, particularly Hickson Park. These concerns included:
- the 7.5m/s criteria is not appropriate in a public park;
 - design target wind speeds should be 4m/s not 7.5m/s as proposed; and
 - reliance on structures not subject of this application to mitigate wind impacts.

Applicant's consideration

80. Contained in its EIS and RtS the Applicant undertook a range of technical assessments, design work and identified possible mitigation strategies in support of the application. The EIS and RtS concluded the wind conditions would be acceptable, noting the prevailing site conditions and subject to mitigation measures being in place.
81. The Applicant noted in its RtS the 4m/s controls sighted by Council are contained within Development Control Plans and such controls do not apply to the Application. The Applicant's RtS also noted the 7.5m/s criteria supported comfortable walking and *"...is an acceptable wind criterion for Hickson Park within the circumstances of the site and the existing conditions. Under this criterion, the probability of exceedance in all locations was no greater than 5% (approximately once per week)..."*
82. The Applicant's RtS further noted a range of measures will mitigate wind impacts for much of Hickson Park. These measures include:
- continuation of street tree planting northwards along Barangaroo Avenue;
 - development of Central Barangaroo landscape concept; and
 - development of final built form for Central Barangaroo.
83. The Applicant's RtS further noted in relation to wind impacts on Hickson Park:
- "...The southerly winds were found to funnel along Barangaroo Avenue creating some impact at the western aspect of the park..."* and *"...The westerly winds were noted to impact the northern aspect of the park due to the exposure and funnelling along Barangaroo Avenue from over the exposed Watermans Cove..."*
84. The Applicant's RtS noted the wind impacts would be mitigated by extension of street tree planting northwards along Barangaroo Avenue:

"...The continuation of the street tree planting along Barangaroo Avenue further to the north, as well as future landscape concept in Barangaroo Central will further enhance these conditions and assist in mitigating the

winds from the west. While this scenario is not specifically modelled, it is considered that a probability of exceedance of approximately 5% will be achieved for the majority of this area...”.

85. The Applicant's RtS assessment concluded:

“...it is considered that whilst the proposed 7.5m/s wind criterion is acceptable for the intended use of Hickson Park, the wind conditions in the Barangaroo Public Domain more generally are expected to improve with the development of Central Barangaroo in the future, both in the waterfront and Block 5 areas, with a 5.5m/s criterion able to be achieved the majority of the time...”.

86. During the meeting on 14 August 2018, the Applicant stated tree planting (two rows) along the future extension of Barangaroo Avenue was part of the future development within Central Barangaroo and had been modelled for the Application. The Applicant noted this tree planting would mitigate some of the wind impacts. In the meeting the Applicant noted it has also undertaken solar studies that show significant additional tree planting within the north-west corner of the park reduce solar access in winter.

Department's consideration

87. The Department considered the views of the Council and the Applicant in its EAR. It concluded that:

“...The Department recognises Hickson Park is exposed to wind due to its harbour location and the absence of development in Barangaroo Central...”. and further *“...The Department therefore considers the 7.5m/s criterion to be acceptable over the short-term until the development of Barangaroo Central occurs, after which wind conditions in the public domain should improve significantly...”.*

Commission's consideration

88. The Commission notes that studies show a reduction in solar access from permanent tree planting in the north-west corner of Hickson Park.

89. The Commission accepts the Applicant's assessments outlined in paragraph 80 - 81. Further it notes the information in paragraph 85 regarding tree planting that was modelled in the wind assessment contradicts the evidence in the RtS.

90. The Commission also accepts the conclusions of the Department outlined in paragraph 87 that *“Hickson Park is exposed to wind due to harbour location and the absence of development in Barangaroo Central”*. However, the Commission notes there is uncertainty as to the timing for the development of Barangaroo Central and its public domain works. Therefore, the Commission finds that it may not eventuate that the wind impacts only occur over a *‘short-term’* scenario.

91. The Commission accepts the material provided by the Applicant in the RtS as outlined in paragraphs 82 - 85. Based on this evidence the predicted wind impacts at the north-western corner of the proposed Hickson Park are not completely mitigated until street tree planting is extended. Future outcomes would see Barangaroo Avenue and associated street tree planting extended northwards through Barangaroo Central.

Future street tree planting will have a positive mitigating effect on wind conditions within Hickson Park. However, the Commission finds there is no evidence of a timing commitment for street tree planting and other Central Barangaroo public domain so that the street tree planting will be in place when Hickson Park is expected to be delivered in late 2020.

92. Based on the material, the Commission finds there is a need, in the short to medium term, to replicate the beneficial mitigating effect of street tree planting northwards along Barangaroo Avenue, to further mitigate wind conditions within Hickson Park and improve public amenity. A condition (**B29**) has been prepared requiring temporary tree planting in the north-western corner of Hickson Park. It is noted planting could take many forms and be utilised as a form of tree nursery for mature planting to be used on other part of the site or indeed the street trees that will eventually be planted northwards along Barangaroo Avenue.

5.10 Wulugul Walk including pontoon

Concept plan terms of approval

93. The terms of approval of the Concept Plan include provision B3(6) which sets the requirements for the foreshore promenade in the vicinity of block Y (Crown Sydney Hotel Resort). Specifically, the provision requires that the area be designed, constructed and landscaped to:
- its western most extent, as mapped in the SEPP amendment;
 - read as public open space; and
 - include mature trees and other soft landscaping and places to stop and sit.

Applicant's consideration

94. The Applicant's Navigation Impact Assessment stated that the Application provides:

"...Opportunity for boat set down/pick up (i.e. no berthing), including the potential for water taxi drop off and pick up is also included in the design..."

95. The Applicant confirmed at the meeting on 14 August 2018 that:
- Wulugul walk comprises a range of zones, elements and materials;
 - other Water taxi drop off opportunities are some distance north (Nawi Cove at the Headland Park) or south (King Street Wharf);
 - gap proposed between Wulugul Walk and pontoon structures is for safety/DDA compliance (refer to **figure 5** over page);
 - a more than two metre tide variation increases the length of ramping; and
 - seeking to allow short term water taxis drop-off and pick up.



Figure 5 – Wulugul Walk Pontoon Structure (source: Applicant's RTS)

Department's consideration

96. The Department's EAR concludes that the proposed public domain plans complies with the Concept Plan because:

"...The Department has reviewed the proposed public domain plans for Wulugul Walk in detail and is satisfied it complies with the Concept plan because:

- *it has been designed and landscaped to its western most extent to provide a waterfront promenade of at least 30 m and a boardwalk over the water*
- *the area predominantly comprises a large tree lined avenue with a substantial open expanse of timber boardwalk along the waterfront which reads as public open space*
- *the tree avenue includes mature trees and a signature Fig tree at the former Spirit of Tasmania loading dock site*
- *it includes formal and informal areas (timber seating, raised sandstone seating, sandstone sitting terraces and the like) which would allow people to enjoy the natural amenity of the promenade and Sydney Harbour..."*

Commission's consideration

97. The Commission accepts the conclusions of the Department outlined in paragraph 96 above.
98. The Commission notes the Applicant's information referred to into paragraphs 94 - 95. The Commission acknowledges that the proposed Wulugul Walk provides public benefit in the form of an additional water taxi pick up and drop off point.

99. The Commission acknowledges a detailed design solution of the pontoon was not envisaged by earlier Concept Plan or SEPP Amendment. These focussed on the scale of the westward extension. The application provides for a varied public domain that allows for the public to move between Central and South Barangaroo as well as opportunities to stop and sit, consistent with the terms of approval of the Concept Plan.
100. Based on the material, the Commission finds the application is not inconsistent with the relevant SEPP provisions and the terms of approval of the concept plan.

5.11 Lighting, materials and finishes

Public and Council comments

101. The Commission notes submissions from the Council regarding the impacts of the Application in relation to the materials and public domain design. Specific concerns included:
 - the transition from Council specification paving to the proposed porphyry paving blurring the distinction between different areas;
 - interface between Hickson Road and the proposed park;
 - interface between the park and residential buildings R4A and R4B;
 - potential slippage issues with porphyry stone sett paving;
 - concern of design of tree planting mounding; and
 - concern over type and location of vehicle protection barriers.

Applicant's consideration

102. The Applicant undertook a range of technical assessments and designs in support of the Application. The Applicant's assessment concluded as follows:
 - porphyry paving chosen as a key unifying element both within the Application site and the wider Barangaroo Precinct;
 - Porphyry paving is slip resistant and compliant with AS1428.1 (Design for Access and Mobility);
 - streetscape to park transition was a deliberate design response to distinguish transition zones;
 - mounding and tree planting locations need to balance with the objective to maintain clear view lines between Sydney Harbour and Hickson Road; and
 - regular spacing of physical barriers required to deter unauthorised vehicle access.
103. In relation to the selection of materials for the public domain the Applicant's RtS noted:

"...the approach taken throughout the entire Barangaroo South site is to utilise [Council] standards on the streets. Only the waterfront and Hickson Park, as 'special spaces' are considered differently. The proposed public domain finishes are proposed to blend into the [Council's] specifications towards Hickson Road, as shown in the public domain drawings..."
104. **Figure 6** illustrates the Applicant's proposed 'streetscape to park' transition of materials between the Council's palate of materials and the proposed porphyry paving within Hickson Park.

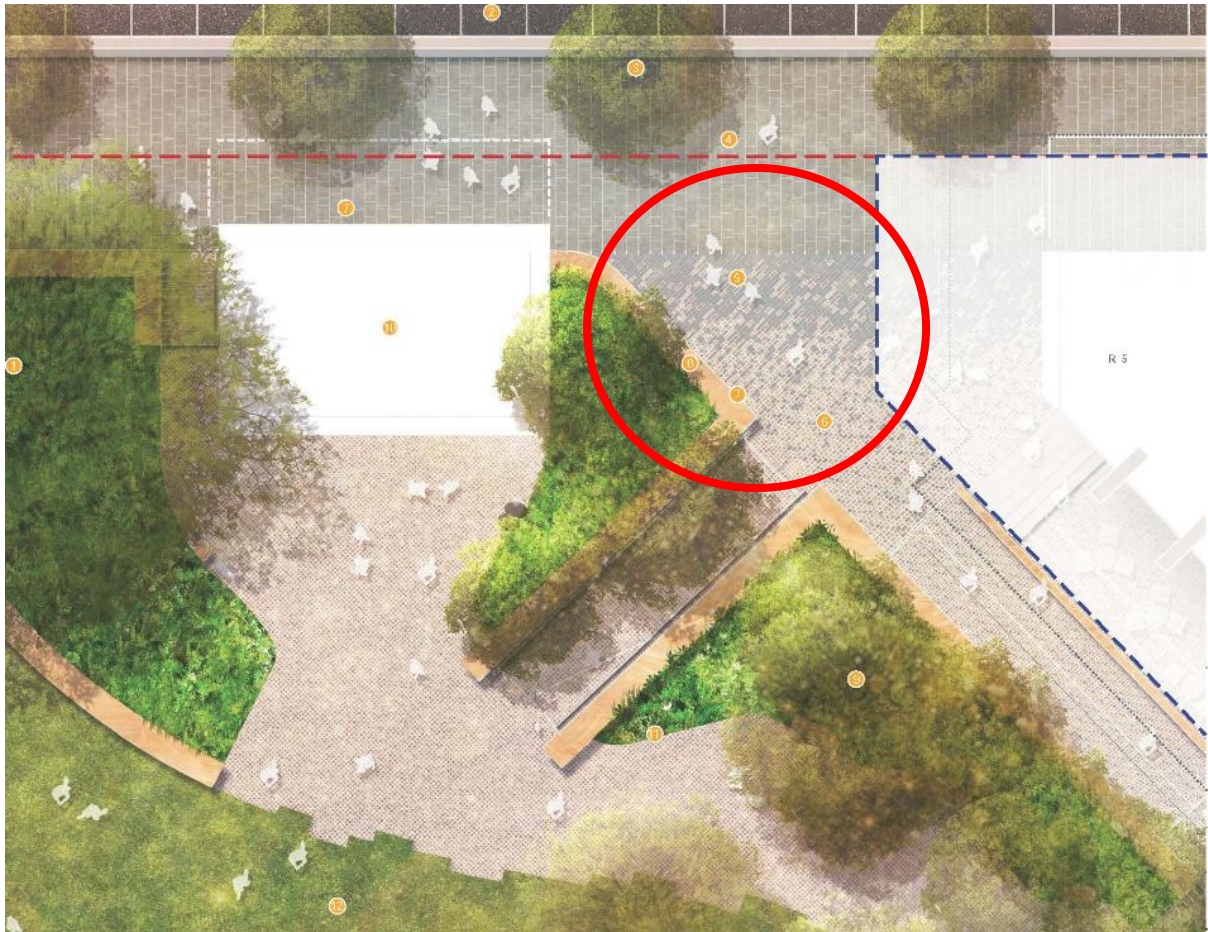


Figure 6 – Hickson Park plan east entry detail plan (source: Applicants RtS)

105. The Applicant stated at the meeting with the Commission (paragraph 29) that the lighting will be consistent with the Council's approach and that the Applicant is working through a precinct wide lighting plan.
106. The Applicant stated at the meeting with the Commission (paragraph 29) that the EIS drawings indicate that the waterfront area will be in situ concrete. The Applicant stated that there is opportunity to:

“Up-spec what we’ve put into the application and put a better, much more robust and better quality material in there (i.e. granite).”

Department’s consideration

107. The Department stated in its assessment report that it supports the porphyry paving and ‘streetscape to park’ transition. The Department noted the utilisation of the transition approach throughout the public domain is *“...an innovative and unique design element which accentuates key transitions zones...”*. Its EAR concluded that:

“...The proposed public domain is of a high quality, has been designed by a world-renowned landscape architectural firm and is consistent with the desired future outcomes of the approved Concept Plan. The Department is satisfied the public domain exhibits design excellence and will greatly enhance the amenity and character of Barangaroo and the western edge of

the CBD at significant benefit to the State...”.

Commission's consideration

108. The Commission acknowledges the Applicant's intent to utilise elements of porphyry paving to create linkages from headland park through Barangaroo central and through to Barangaroo South.
109. The Commission also acknowledges the views of the Council that the 'streetscape to park transition' including the blending of materials unnecessarily confuses the public and private realms as noted in paragraph 101.
110. The Commission generally accepts the conclusions of the Department outlined in paragraph 107 above. However, the 'streetscape to park transition' for paving materials is not supported as it is inconsistent with and dilutes the established design principles for streetscape-to-park transitions that broadly unify the precincts within Barangaroo. The Commission finds that that a more direct transition from the different material type is required, which is consistent with existing Barangaroo South paving treatments.
111. The Commission notes a condition (**B23**) has been included to secure this outcome.
112. Based on the Material, the Commission finds that the materials and finished can be supported, subject to conditions, because they are generally consistent with the desired future outcomes of the approved Concept Plan.
113. The Commission notes the Applicant's approach to lighting within the public domain stated in paragraph 105. The Commission finds that the proposed approach is consistent with Council's standards and is likely to meet the relevant Australian Standard.
114. The Commission notes the Applicant's request in paragraph 106 to improve the paving finishing by up-specing the materials and using a much more robust and better-quality material along the waterfront area. The Commission supports the applicant's request and has amended the conditions (**B22**) to secure this outcome.

5.12 The public interest

Department's consideration

115. The Department's EAR considered the consistency of the Application with the objects of the EP&A Act and concluded that it was consistent with the objects, in that:
 - *“...The proposal will result in the provision of high quality public domain at Barangaroo at significant benefit to the community;*
 - *The proposal is permitted with consent and is consistent with the Concept Plan. It is therefore considered the proposal represents an orderly and economic use of land;*
 - *The proposal will have no adverse impact on the environment, including native animals and plants, threatened species and ecological communities and their habitats;*
 - *The proposal will not adversely impact on built and cultural heritage;*

- *Recommended conditions would ensure the public domain is properly constructed and the health and safety of users is protected;*
- *The proposal is SSD and the Independent Planning Commission is the consent authority...”.*

116. The Department’s EAR noted the Application was considered in relation to the principles of ESD:

“...The Precautionary and Inter-generational Equity Principles have been applied in the decision-making process by a thorough assessment of the environmental impacts of the project. Overall, the proposal is consistent with ESD principles and the Department is satisfied the proposed sustainability initiatives will encourage ESD, in accordance with the Objects of the EP&A Act...”.

Commission’s consideration

117. The Application would enable public domain outcomes that are broadly consistent with the Concept Plan, except as outlined elsewhere in this statement of reasons or modified by conditions. Other benefits which the Commission accepts include:

- high quality public domain (as set out in paragraph 25);
- positive social and economic benefits (as set out in paragraph 26 and 115);
- increased public amenity (as set out in paragraph 25); and
- improved access within the wider Barangaroo precinct (as set out in paragraph 68).

118. The impacts of the Application have been discussed throughout Section 5.6 of this statement of reasons for decision. The impacts of the application include:

- impacts from the proposed exclusions zones:
 - deferral of 15% of the area of Hickson Park, with potential for a greater area of exclusion if the temporary Barton Street exclusion zone is activated in accordance with the Concept Plan (Mod 8);
 - deferral of mature tree planting in Hickson Park; and
 - privatisation of public amenity space for an extended period.
- wind impacts to Hickson Park.

119. The Commission refers to its conclusions in paragraphs 76 - 78. It finds that it is not in the public interest for exclusions zones in Hickson Park to be established and maintained as proposed by the Application.

120. In determining the public interest merits of the Application, the Commission has had regard to the objects of the EP&A Act. The Commission is satisfied with the Department’s EAR considerations that the Application is consistent with the objects of the EP&A Act, including the principles of ESD, as discussed in paragraphs 115 and 116.

121. The Commission has taken into account the Material and finds, as set out in paragraph 117 and 118, that the Application will provide a public benefit consistent with the Concept Plan.

6 HOW THE COMMISSION TOOK COMMUNITY VIEWS INTO ACCOUNT IN MAKING DECISION

122. The views of the community were expressed through public submissions and comments received (as part of the public exhibition and as part of the Commission's determination process) as outlined previously in paragraph 23.
123. In summary, views expressed by the community raised concerns about view loss resulting from the scale of the proposed tree planting within Hickson Park, sun access to Hickson Park and comments about suitable tree species.
124. The Commission carefully considered of these views as part of making its decision. The way in which these concerns were taken into account by the Commission is set out in **section 5** above.

7 CONCLUSION: THE COMMISSION'S FINDINGS AND DETERMINATION

125. The Commission has carefully considered the Material before it.
126. The Commission finds that:
- the proposed construction exclusion zones are not acceptable or consistent with the terms of approval of the Concept Plan;
 - the impacts from wind on Hickson Park require temporary tree planting to act as mitigation until the northward extension of Barangaroo Avenue is completed as set out in paragraph 92.
 - the revised conditions are adequate to manage environmental impacts resulting from the Application;
 - it is satisfied that the Application meets the objects of the EP&A Act;
 - the Application is in the public interest as set out in paragraph 121.
127. For the reasons above at paragraph 126, the Commission has determined to grant consent to the Application subject to conditions. These conditions are designed to:
- prevent, minimise and/or offset adverse environmental impacts;
 - set standards and performance measures for acceptable environmental performance
 - require regular monitoring and reporting; and
 - provide for the on-going environmental management of the development.



John Hann (Chair)

Member of the Commission



Wendy Lewin

Member of the Commission