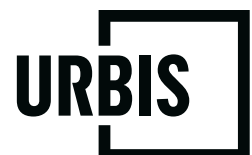




TARONGA ZOO REPTILE AND AMPHIBIAN CONSERVATION CENTRE

Submissions Report
SSD-17483577

Prepared for
TARONGA CONSERVATION SOCIETY AUSTRALIA
20 October 2021



URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

| | |
|---------------|------------------|
| Director | Sarah Horsfield |
| Consultant | Brigitte Bradley |
| Project Code | P00031519 |
| Report Number | 1 |

Urbis acknowledges the important contribution that Aboriginal and Torres Strait Islander people make in creating a strong and vibrant Australian society.

We acknowledge, in each of our offices, the Traditional Owners on whose land we stand.

All information supplied to Urbis in order to conduct this research has been treated in the strictest confidence. It shall only be used in this context and shall not be made available to third parties without client authorisation. Confidential information has been stored securely and data provided by respondents, as well as their identity, has been treated in the strictest confidence and all assurance given to respondents have been and shall be fulfilled.

© Urbis Pty Ltd
50 105 256 228

All Rights Reserved. No material may be reproduced without prior permission.

You must read the important disclaimer appearing within the body of this report.

urbis.com.au

CONTENTS

| | | |
|-----------|--|-----------|
| 1. | Introduction | 1 |
| 1.1. | Project Context | 1 |
| 1.2. | Structure of this Report | 1 |
| 1.3. | Supporting Documentation | 2 |
| 2. | Analysis of Submissions..... | 3 |
| 2.1. | Breakdown of Submissions | 3 |
| 2.2. | Categorising Key Issues | 4 |
| 3. | Actions Taken Since Exhibition..... | 1 |
| 3.1. | Further Engagement | 1 |
| 3.2. | Refinements to the Project | 2 |
| 3.3. | Additional Impact Assessment..... | 4 |
| 4. | Response to Submissions | 5 |
| 4.1. | Consultation | 5 |
| 4.2. | Built form, urban design, and visual impacts | 6 |
| 4.3. | Tree removal and landscaping | 12 |
| 5. | Response to DPIE Assessment | 13 |
| 5.1. | Connection to Country | 13 |
| 5.2. | Estimated jobs | 13 |
| 5.3. | Visual impact Assessment..... | 14 |
| 5.4. | Landscaping and biodiversity | 14 |
| 6. | Updated Evaluation of Project | 16 |
| 7. | Conclusion..... | 20 |
| | Disclaimer..... | 21 |

| | |
|-------------------|---|
| Appendix A | Submissions Register |
| Appendix B | Updated Mitigation Measures |
| Appendix C | List of Plans for Approval |
| Appendix D | Architectural Plans |
| Appendix E | Landscape Plans |
| Appendix F | Visual Impact Assessment |
| Appendix G | Community Stakeholder Report |
| Appendix H | Heritage Impact Statement |
| Appendix I | Civil Plans |
| Appendix J | Stormwater Management Plan |
| Appendix K | Biodiversity Development Assessment Report |
| Appendix L | Services Report |
| Appendix M | Arborist Feasibility Report |

FIGURES

| | | |
|----------|--|---|
| Figure 1 | Location of Known Submitters..... | 1 |
| Figure 2 | Photomontages of proposed development | 3 |
| Figure 3 | Updated Proposed Site Plan | 3 |
| Figure 4 | North Elevation | 4 |
| Figure 5 | View of RACC from Sydney Harbour | 6 |
| Figure 6 | View of RACC from Curraghbeena Lookout | 7 |
| Figure 7 | View of RACC from Cremorne Point | 7 |

| | |
|--|----|
| Figure 8 Public access and linkages: Circulation Map | 8 |
| Figure 9 Conservation of significant bushland and other natural features | 9 |
| Figure 10 Summary of sensitive areas, containing significant view lines..... | 10 |
| Figure 11 East Gully Built Form Principles | 11 |
| Figure 12 Existing site photos | 12 |
| Figure 13 Refined Landscape Design | 13 |

PICTURES

| | |
|---|----|
| Picture 1 Photomontage from south-west corner | 3 |
| Picture 2 Photomontage from south-east corner..... | 3 |
| Picture 3 Current Proposed North Elevation | 4 |
| Picture 4 Amended North Elevation | 4 |
| Picture 5 Looking south from the northern RACC boundary | 12 |
| Picture 6 Looking north from the southern RACC boundary | 12 |
| Picture 7 Rock Outcrop and interpretive elements | 13 |
| Picture 8 Section of Rock Outcrop | 13 |

TABLES

| | |
|--|----|
| Table 1 Supporting Documentation | 2 |
| Table 2 Summary of Submissions Register | 3 |
| Table 3 Design Refinements to Proposed Development | 2 |
| Table 4 Assessment of RACC against visual analysis and urban design principles | 8 |
| Table 5 Cumulative assessment of tree removal for Taronga Zoo SSDA projects..... | 14 |
| Table 6 Updated Section 4.15 Assessment | 16 |
| Table 7 Evaluation Against the Principles of ESD..... | 18 |

1. INTRODUCTION

This Submissions Report relates to a State significant development (**SSD**) (SSD-17483577) for the construction and operation of the Reptile and Amphibian Conservation Centre (**RACC, the project**) at Taronga Zoo (**the site**). On behalf of Taronga Conservation Society Australia (**TCSA, the Proponent**) this Submissions Report has been prepared to address the matters raised by public agencies, the community and other relevant stakeholders throughout the public exhibition period (between Friday 30 July 2021 until Thursday 26 August 2021).

1.1. PROJECT CONTEXT

This State Significant Development Application (**SSDA**) was lodged with the Department of Planning, Industry and Environment (**the Department**) in July 2021 (SSD-17483577). In accordance with Section 4.15 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the proposal comprises the redevelopment of existing animal exhibits on site to provide a Reptile and Amphibian Conservation Centre (RACC). The consent authority for this SSDA is the Minister for Planning and Public Spaces.

1.1.1. Description of Proposed Development

This SSDA seeks approval for the relocation and redevelopment of the existing reptile and amphibian exhibits within the Zoo to provide an updated exhibit which is purpose built for animals.

Specifically, the SSDA seeks consent for:

- Site establishment works including demolition of gabion rock walls and concrete hardstand on site and temporary signage and hoardings.
- Construction of a part two-part three storey exhibit including:
 - Back of House (BOH) and staff facilities;
 - Animal exhibit areas and holding facilities; and
 - Toilets and associated amenities for staff and visitors.
- Other supporting infrastructure and walkways including:
 - Upgrades to the existing pathways and stairs on site to improve visibility and access to the proposed entrance and egress points for the RACC; and
 - Introduction of a new walkway through the aviaries located on the eastern boundary of the subject site to create the eastern entrance portal.
- Augmentation and extension of existing electrical, mechanical, hydraulic, stormwater and dry fire systems.
- Landscaping works, including the removal of 50 trees, retention of 13 trees and relocation of 6 highly significant trees on site.

1.2. STRUCTURE OF THIS REPORT

This Submissions Report has been prepared in accordance with the Department's Guidelines, *State Significant Development Guidelines – Preparing a Submissions Report (Appendix C) July 2021*, and is structured as follows:

- **Section 2** – Analysis of submissions
- **Section 3** – Actions taken since exhibition
- **Section 4** – Response to submissions
- **Section 5** – Response to DPIE assessment
- **Section 6** – Updated evaluation of the project
- **Section 7** – Conclusion

1.3. SUPPORTING DOCUMENTATION

This Submissions Report is supported by the following technical reports and documentation.

Table 1 Supporting Documentation

| Appendix | Report | Prepared By |
|-------------------|---|--------------------------------|
| Appendix A | Submissions Register | Urbis |
| Appendix B | Updated Mitigation Measures | Urbis |
| Appendix C | List of Plans for Approval | Urbis |
| Appendix D | Architectural Plans | DWP |
| Appendix E | Landscape Plans | Context Landscape Architecture |
| Appendix F | Visual Impact Assessment | DWP |
| Appendix G | Amended Community Stakeholder Report (up to lodgement) | Urbis |
| Appendix H | Addendum Heritage Impact Statement | Geoffrey Britton |
| Appendix I | Civil Plans | Meinhardt Bonnaci |
| Appendix J | Stormwater Management Plan | Meinhardt Bonnaci |
| Appendix K | Biodiversity Development Assessment Report | Narla Environmental |
| Appendix L | Services Report | LCI |
| Appendix M | Amended Arboricultural Impact Assessment | Sydney Arbor Trees |

2. 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.

2.1. BREAKDOWN OF SUBMISSIONS

The SSDA was publicly exhibited between Friday 30 July 2021 until Thursday 26 August 2021. There were 14 submissions received from special interest groups, members of the local community or individuals. All submissions were managed by the Department, which included registering and uploading the submissions on the Department's 'Major Projects' website (SSD-17483577).

A breakdown of the submissions made by group and name is provided in **Table 2** below, as well as the relevant section within this Submissions Report where a response has been provided.

Table 2 Summary of Submissions Register

| Group | Name | Relevant Section |
|--|--|--|
| Public Authorities (State or Commonwealth Agencies and Council) | Environment Protection Authority | Refer to Appendix A |
| | Transport for NSW | Refer to Appendix A |
| | Transport for NSW – Roads and Maritime Services | Refer to Appendix A |
| | NSW Environment, Energy and Science Group | Refer to Appendix A and Appendix K |
| | Heritage Council of NSW | Refer to Appendix A |
| | NSW Rural Fire Service | Refer to Appendix A |
| | NSW Department of Primary Industries | Refer to Appendix A |
| | Fire and Rescue NSW | Refer to Appendix A |
| | National Parks and Wildlife Service | Refer to Appendix A |
| | Animal Welfare | Refer to Appendix A |
| Councils | Mosman Council | Refer to Sections 3.2, 4.3 and Appendix A and Appendix E |
| Stakeholder Groups | Mosman Parks & Bushland Association Inc. | Refer to Sections 3.1, 3.2, 4.1 and 4.2 and Appendices D, E, F and G |
| | Headland Preservation Group Mosman | Refer to Sections 3.1 and 4.1 and Appendices D, E, F and G |
| | Blacktown & District Environment Group Inc, LEURA, New South Wales | Refer to Sections 3.1 and 4.1, 4.3 and 5.4 and Appendices D, E, F and G |
| Individuals | Phillip Enderby | Refer to Appendix A |

| Group | Name | Relevant Section |
|-------|--------------------|---|
| | Name Withheld | Refer to Sections 3.1 and 4.1 and Appendix G |
| | Jeremy Eccles | Refer to Appendix A |
| | Name Withheld | Refer to Sections 3.1 and 4.1 and Appendix G |
| | Jane Hunter | Refer to Sections 3.1, 4.1 and 4.2 and Appendices D, E, F and G |
| | Linda Bergin | Refer to Sections 3.1, 4.1 and 4.2 and Appendices D, E, F and G |
| | Marta Mangold | Refer to Sections 3.1, 4.1 and 4.2 |
| | Lisa Harrold | Refer to Sections 3.1, 4.1 and 4.2 and Appendices D, E, F and G |
| | Annabella Fletcher | Appendix A |
| | Michael Mangold | Refer to Section 4.2 and Appendices D, E and F |
| | Name Withheld | Appendix A |

The level of local (<5km from the site), regional (5-100km from the site) and broader community interest (>100km from the site) is shown in **Figure 1** below.

Overall, 1 person supported the project, 2 people and 1 community group provided comments and 8 individuals and 2 community groups objected to the project based on the submissions received during the public exhibition of the application.

2.2. CATEGORISING KEY ISSUES

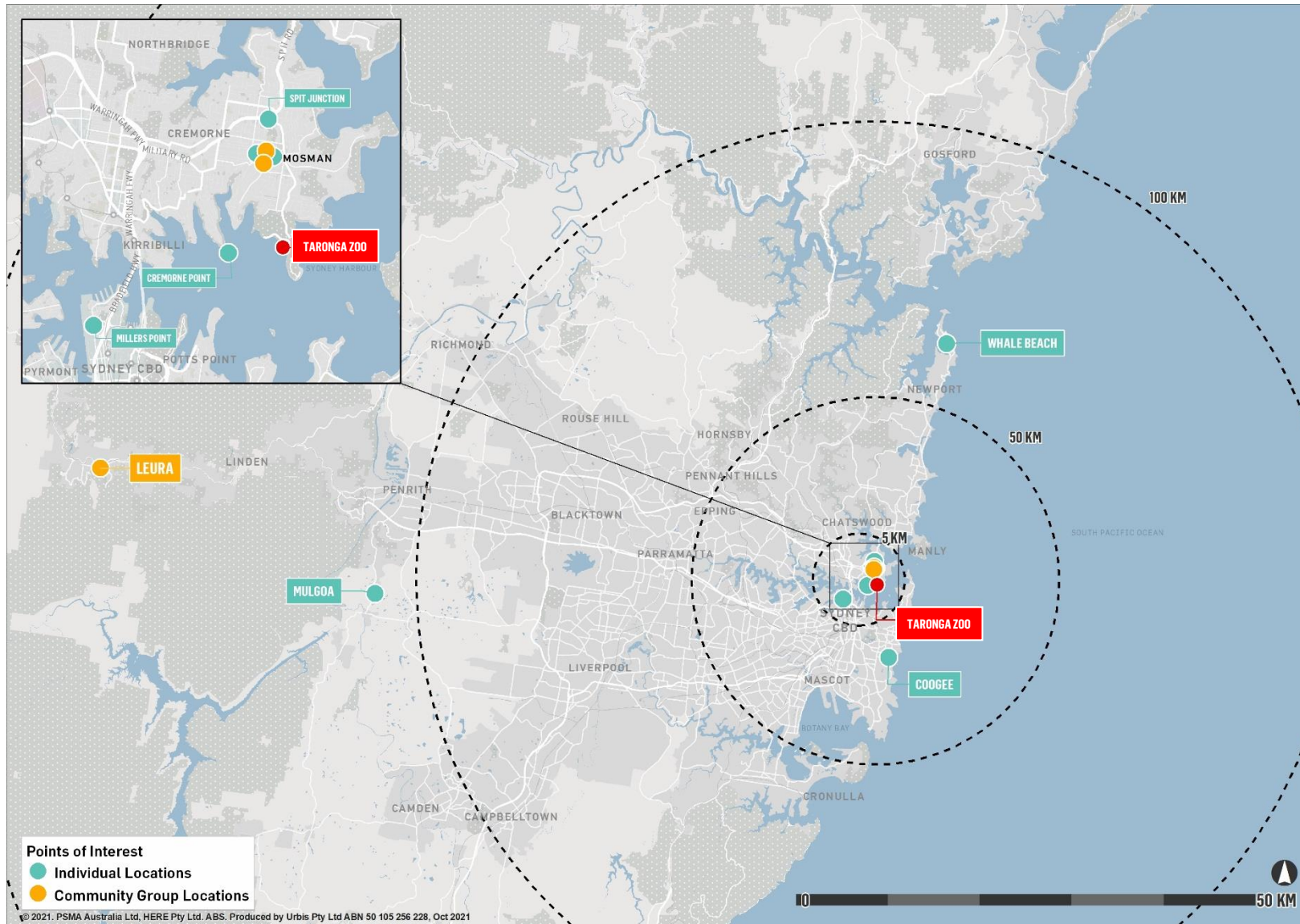
In accordance with the Department's Guidelines, *State Significant Development Guidelines – Preparing a Submissions Report (Appendix C) July 2021*, the key issues raised in the submissions have been grouped into categories which relate to the impacts of the proposal.

These key issues include:

- Consultation
- Built form, urban design, and visual impacts.
- Tree removal and landscaping.

This section provides a detailed response to each of these key issues. Since only a small number of submissions were made, a response to each individual submission is included within the Submissions Register at **Appendix A**.

Figure 1 Location of Known Submitters



Source: Urbis

3. ACTIONS TAKEN SINCE EXHIBITION

In response to the key issues raised within the submissions, several minor design refinements and clarifications have been made to the proposed development 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 the public agency, organisation and public submissions outlined in **Section 2**.

3.1. FURTHER ENGAGEMENT

Since the public exhibition of the SSDA between Friday 30 July 2021 until Thursday 26 August 2021, interest from local community groups on future Zoo projects was noted. In response to this interest, TSCA offered community information sessions to both the Mosman Parks & Bushland Association Inc and Headland Preservation Group to provide an update on future projects including the RACC and Wildlife Hospital (which is subject to a separate SSDA and not yet lodged with DPIE).

A meeting was held on Tuesday 21 September with Mosman Parks & Bushland Association Inc and was attended by members of TSCA including the CEO, and Urbis. Key matters discussed were:

- Visual Impact: Concerns were raised that the project would result in visual impact from the Harbour. It was noted that both projects would have negligible or minimal visual impact from Sydney Harbour.
- Extent of Built Form, Landscaping and Tree Loss: Concern was raised about the extent of development taking place at Taronga Zoo and its impacts on tree loss. It was noted that the RACC was located in an area that had previously housed the Seal pools and vegetation proposed for removal does not incorporate any remnant bushland. New landscaping will incorporate native species as well as plantings that reflect the animals on display within the RACC.
- Consultation: Concerns were raised that targeted community consultation was not undertaken with Mosman Parks & Bushland Association Inc and Headland Preservation Group as the Scoping Meeting Report suggested this **may** occur. It was noted that consultation was undertaken in accordance with the level of consultation agreed in the Scoping Meeting held with the NSW Department of Planning, Industry and Environment (DPIE) (as per the SEARs).
- General interest in the positive wildlife conservation and education programs run by TSCA.

Following the meeting, TSCA received email correspondence from a member of the community group stating:

It is very encouraging to hear from those in charge that the overarching concern of Taronga Zoo is wildlife conservation.

The degree you are offering in Animal Husbandry is something of which I was unaware. Also the opportunity that will be available for the public to see behind the scenes in wildlife conservation, is a most significant step forward in education.

There is concern in the community about the amount of built development that has taken place in the confined area of the zoo and the associated problems this presents. However I do appreciate that it is very important to have easy on-site access to the wealth of knowledge that is found in the specialists and scientists located at the zoo.

A meeting with the Headland Preservation Group was also offered but no response was provided at the time of preparing this response to submissions report.

A meeting was also held with Mosman Councillors and General Manager on 9 September 2021. Key matters raised were:

- Traffic and parking: It was noted that the RACC was a replacement of an existing animal exhibit and would not generate additional traffic or parking requirements.
- Visual Impact: It was noted that both projects would have negligible or minimal visual impact from Sydney Harbour.

- Consultation: It was noted that a briefing session has previously been offered to Councillors and that this session was very informative. It was agreed at this meeting that TCSA would provide more regular updates to Councillors on Taronga Zoo capital works projects.
- General interest in the positive wildlife conservation and education programs run by TCSA.

3.2. REFINEMENTS TO THE PROJECT

The following table summarises the minor refinements and clarifications proposed since public exhibition and in response to submissions made, and as a result of further engagement with the Department.

Importantly, these refinements are changes that fit within the limits set by the project description. These refinements do not change what the application is seeking consent for, and therefore an amendment to the proposal is not required.

Table 3 Design Refinements to Proposed Development

| Location | Proposed Refinements |
|---|---|
| Landscaping <i>Refer to Landscape Plans</i> | <ul style="list-style-type: none"> ▪ Additional trees and greenery have been incorporated into the design including native species along the north-west site boundary ▪ Additional landscape areas are also introduced to the northern entrance and the eastern entry portal to reflect the landscaped setting of the site ▪ Further refinements on the eastern entry portal are proposed to increase landscaping, including redesign of balustrade and paving to introduce various interpretive elements. The interpretive elements still incorporate the rock outcrop identified in the original scheme. |
| Ground <i>Refer to Architectural Drawings AA0001-AA0003, AA0101, AA1100, AA1150, AA1201, AA2000, AA2001</i> | <ul style="list-style-type: none"> ▪ Reconfiguration of staff facilities is proposed to reduce the footprint along the eastern boundary and provide additional storage and plant facilities away from public entrances. ▪ Revisions to the service access associated with staff and BOH facilities are also required, as an internal dock area no longer proposed. The façade has also been updated to reflect these refinements. ▪ Reduction to the roof elements associated with viewing windows |
| Level 1 <i>Refer to Architectural Drawings AA1100, AA1200, AA1202, AA2000, AA2001, AA3002</i> | <ul style="list-style-type: none"> ▪ A minor reduction is proposed to the pedestrian ramp to the upper level to reduce the overall length of the proposed ramp ▪ Minor updates to back of house (BOH) facilities are proposed to reflect animal welfare requirements |
| Level 2 <i>Refer to Architectural Drawings AA1100, AA1203, AA1204, AA2000, AA3001, AA3002</i> | <ul style="list-style-type: none"> ▪ Reduction of overall floorplate, including reduction of shade structures and reconfiguration of animal exhibits ▪ Relocation of ramp and increase landscaping |

Refer to the Architectural Plans prepared by DWP (**Appendix D**) for further details on the design refinements made since public exhibition.

Figure 2 Photomontages of proposed development



Picture 1 Photomontage from south-west corner



Picture 2 Photomontage from south-east corner

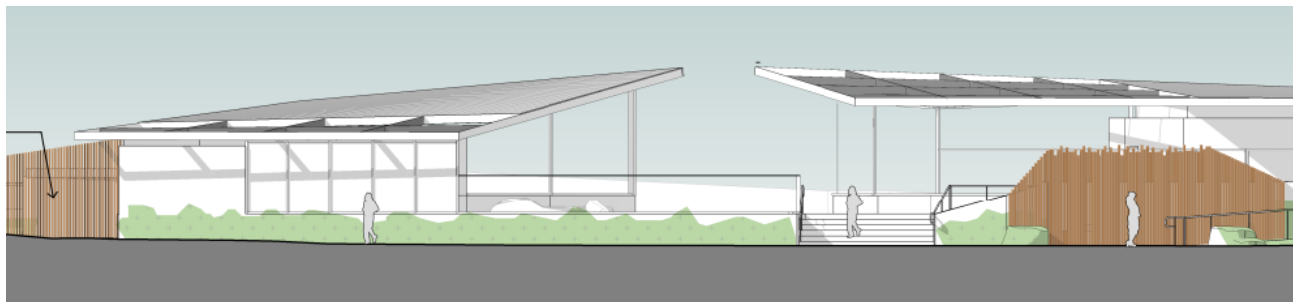
Source: DWP

Figure 3 Updated Proposed Site Plan

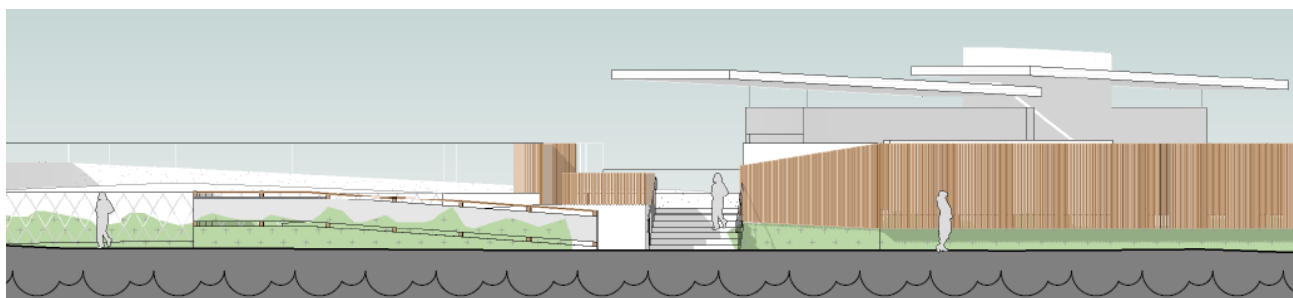


Source: DWP

Figure 4 North Elevation



Picture 3 Original Proposed North Elevation



Picture 4 Amended North Elevation

Source: DWP

3.3. ADDITIONAL IMPACT ASSESSMENT

To reflect amendments to the overall development and submissions received, updated plans and reports have been prepared since the EIS was lodged on 14 July 2021, these include:

- Architectural Plans prepared by DWP (**Appendix D**)
- Landscape Plans prepared by Context Landscape Architecture (**Appendix E**)
- Visual Impact Assessment prepared by DWP (**Appendix F**)
- Stakeholder Engagement Report prepared by Urbis (**Appendix G**)
- Heritage Impact Statement prepared by Geoffrey Britton (**Appendix H**)
- Civil Plans prepared by Meinhardt Bonnaci (**Appendix I**)
- Stormwater Management Plan prepared by Meinhardt Bonnaci (**Appendix J**)
- Biodiversity Development Assessment Report (BDAR) prepared by Narla Environmental (**Appendix K**)
- Services Report prepared by LCI (**Appendix L**)
- Arborist Feasibility Report prepared by Sydney Arbor Trees (**Appendix K**)

The findings and recommendation of the additional assessments are discussed in detail within **Section 4 and 5** of this report.

4. RESPONSE TO SUBMISSIONS

In accordance with the Department's Guidelines, *State Significant Development Guidelines – Preparing a Submissions Report (Appendix C) July 2021*, the key issues raised in the submissions have been grouped into categories which relate to the key elements of the proposal.

These key elements include:

- Consultation
- Built form, urban design, and visual impacts.
- Tree removal and landscaping.

4.1. CONSULTATION

4.1.1. Pre-lodgement Consultation

While two community groups (Mosman Parks & Bushland Association Inc and Headland Preservation Group) were identified as stakeholders that **may** be consulted in the Scoping Report prepared by Urbis, these community groups were not specifically identified in the SEARs issued on 30 April 2021 as stakeholders to consult with.

Consultation was undertaken in accordance with the level of consultation agreed in the Scoping Meeting held with the NSW Department of Planning, Industry and Environment (DPIE) (as per the SEARs).

At the Scoping Meeting held with DPIE, it was agreed that the community consultation required for the RACC SSDA be similar to the most recent Upper Australia Precinct SSDA project. It was anticipated that the RACC would receive limited community interest, similar to the Upper Australia Precinct, African Savannah and other recent SSDAs for animal exhibits within the Zoo, which did not undertake targeted consultation with any community groups.

Community Consultation

In accordance with the SEARs and DPIE's *Undertaking Engagement Guidelines for State Significant Projects (July 2021)*, a range of consultation activities was undertaken to reach broadly across the community prior to lodgement of the EIS including:

- A fact sheet distributed to approximately 440 neighbouring households identifying the Reptile and Amphibian Centre (RACC), Wildlife Hospital and Nutrition Centre projects
- Information on the Taronga Zoo website on future projects
- Social media advertisements, targeted to the Mosman catchment: these advisements reached 33,122 users, of which 571 users clicked through for more information
- We note that, due to very low interest in both the RACC and Wildlife Hospital projects, two planned information sessions were not held and the two people who had RSVP'ed had their questions answered by email (we note that one of these did not relate to the project at all, and was a person interviewing for a job with the Zoo).
- We also note that an item in the Engagement and Communication Outcomes Report prepared by Urbis noting that Zoo members were sent a specific update on the project was incorrect.

Consultation with Government Agencies

Written notification will also be sent to the following government agencies, identified in the SEARs prior to the lodgement of the EIS:

- Mosman Council
- Environment Protection Authority
- Transport for NSW
- Transport for NSW – Roads and Maritime Services

- NSW Environment, Energy and Science Group
- Heritage Council of NSW
- NSW Rural Fire Service
- NSW Department of Primary Industries
- Fire and Rescue NSW
- National Parks and Wildlife Service
- Animal Welfare
- NSW Aboriginal Land Council.

While two agencies were left out of the formal Stakeholder Engagement Report prepared by Urbis as part of the EIS Package, they were notified of the proposed SSDA prior to lodgement by DPIE and Urbis.

In summary, the consultation prior to the lodgement of the EIS was proportionate to the scale and likely impact of the proposal, as required by the DPIE's *Undertaking Engagement Guidelines for State Significant Projects (July 2021)*.

Further, as detailed at Section 3.1 in response to the submissions received additional consultation was undertaken with Mosman Councillors on 9 September 2021 and with Mosman Parks & Bushland Association Inc on 21 September 2021 for the RACC and Wildlife Hospital (which is subject to a separate SSDA and not yet lodged with DPIE). A meeting with the Headland Preservation Group was also offered but no response was provided at the time of preparing this response to submissions report.

4.2. BUILT FORM, URBAN DESIGN, AND VISUAL IMPACTS

The SEARs required a Visual Impact Assessment, with photomontages, to be prepared to identify the potential visual impacts associated with the proposal when compared to the existing situation, when viewed to and from key vantage points, including Sydney Harbour, Curraghbeena Point and Cremorne Point. This was provided as part of the Design Report and Architectural Plans prepared by DWP as part of the original EIS Package. A summary of the findings of the amended Visual Impact Assessment in accordance with the SEARs is provided below.

As noted in **Section 3.4**, the overall built form and exhibits on the roof level have been reduced since the original EIS submission. The animal exhibit remains within the tree canopy with extensive tree coverage associated with New Guinea aviaries and picnic areas to the south of the RACC and to the east within the Forest Adventure exhibit. **Figure 2** provides photomontages of the amended scheme illustrating the amount of tree coverage surrounding the RACC facility.

Figure 5 confirms that the RACC facility will not be visible by Sydney Harbour. The proposed development will remain obscured by existing trees. From this location, the RACC is obscured by the ridge. If glimpses of the RACC are visible from the other side of the ridge, only glimpses would be visible through the tree coverage and green elements incorporated into the design.

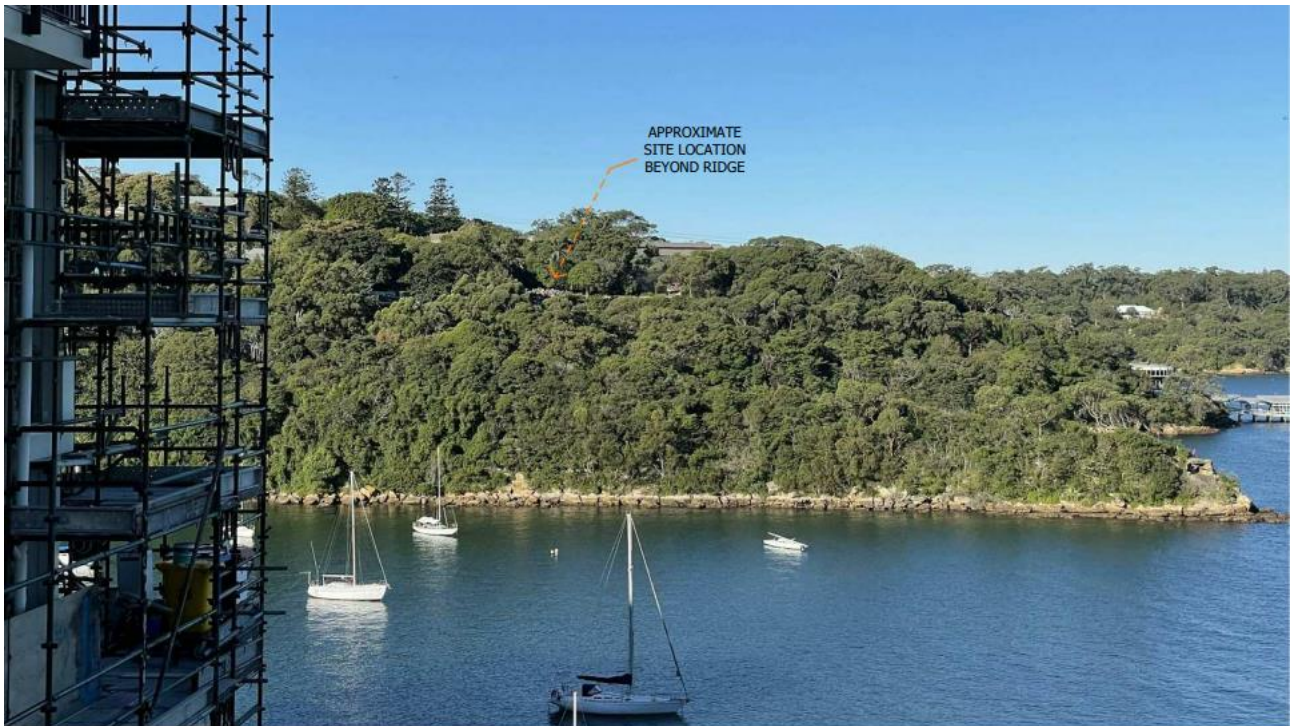
Figure 5 View of RACC from Sydney Harbour



Source: DWP

No public access was available from Curraghbeena Point therefore **Figure 6** has been taken from Curraghbeena Lookout. Given the location of the RACC within the Zoo site, the facility is located beyond the ridge and will remain obscured by existing trees.

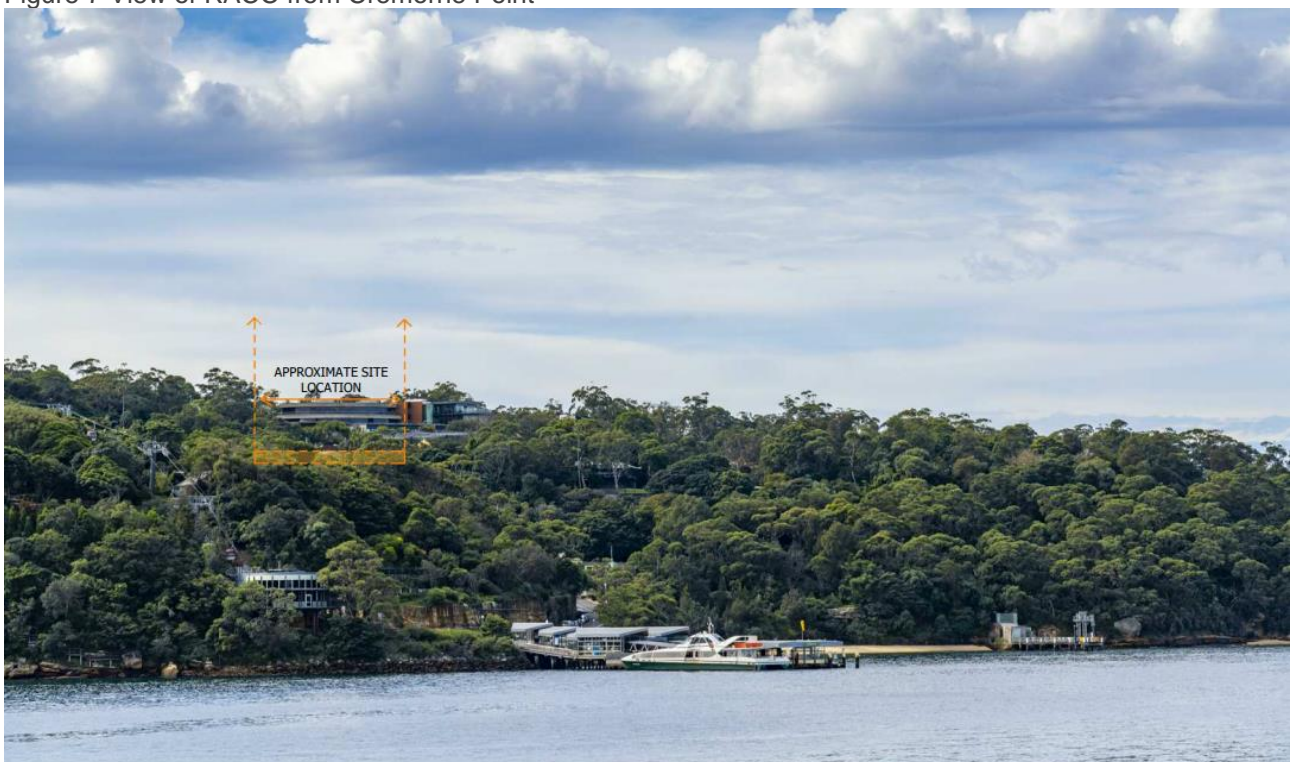
Figure 6 View of RACC from Curraghbeena Lookout



Source: DWP

As shown in **Figure 7**, the proposed structures are not expected to be visible from Cremorne Point as they will be obscured from view by existing trees.

Figure 7 View of RACC from Cremorne Point



Source: DWP

Some of the public submissions raised questions about the compliance of the proposed development with the Taronga Zoo *Urban Design Principles* which form part of the Zoo 2000 'The View to the Future' Master Plan. Further assessment and confirmation that the proposed development remains consistent with the relevant design principles of the Master Plan is provided in **Table 4** below.

Table 4 Assessment of RACC against visual analysis and urban design principles

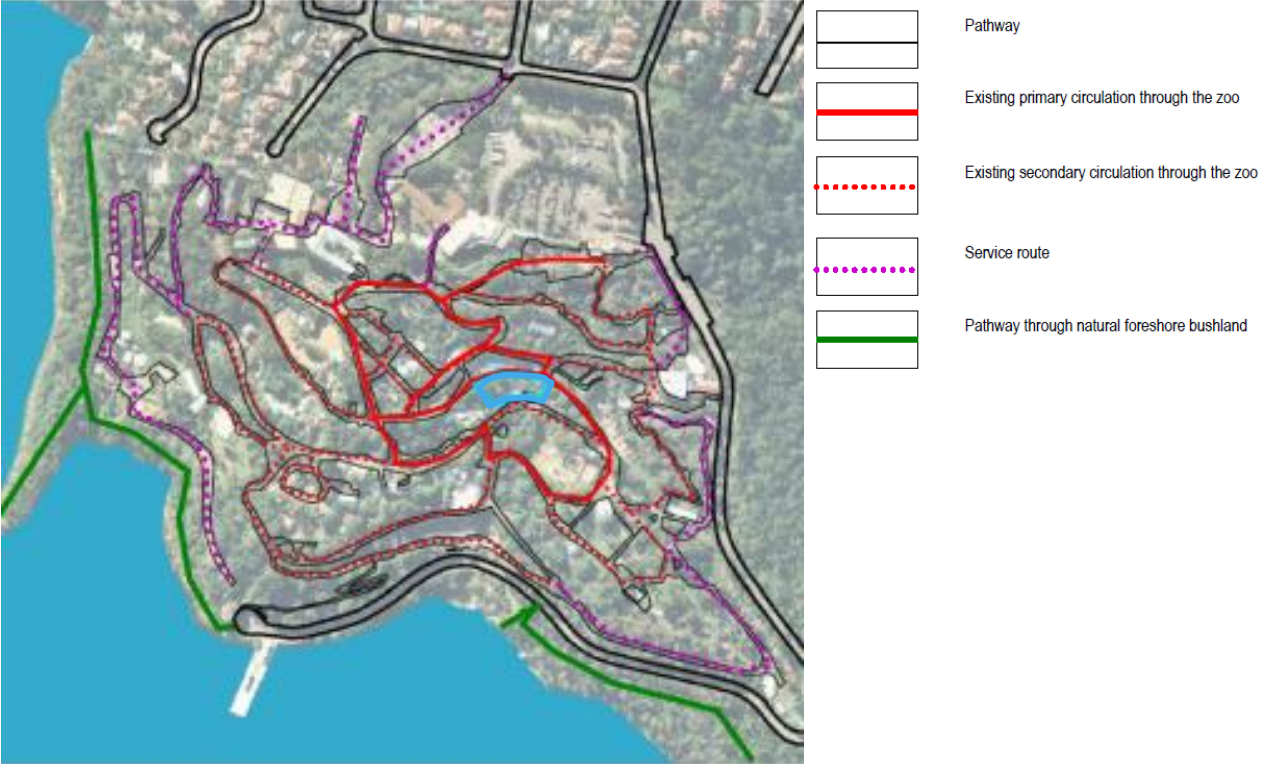
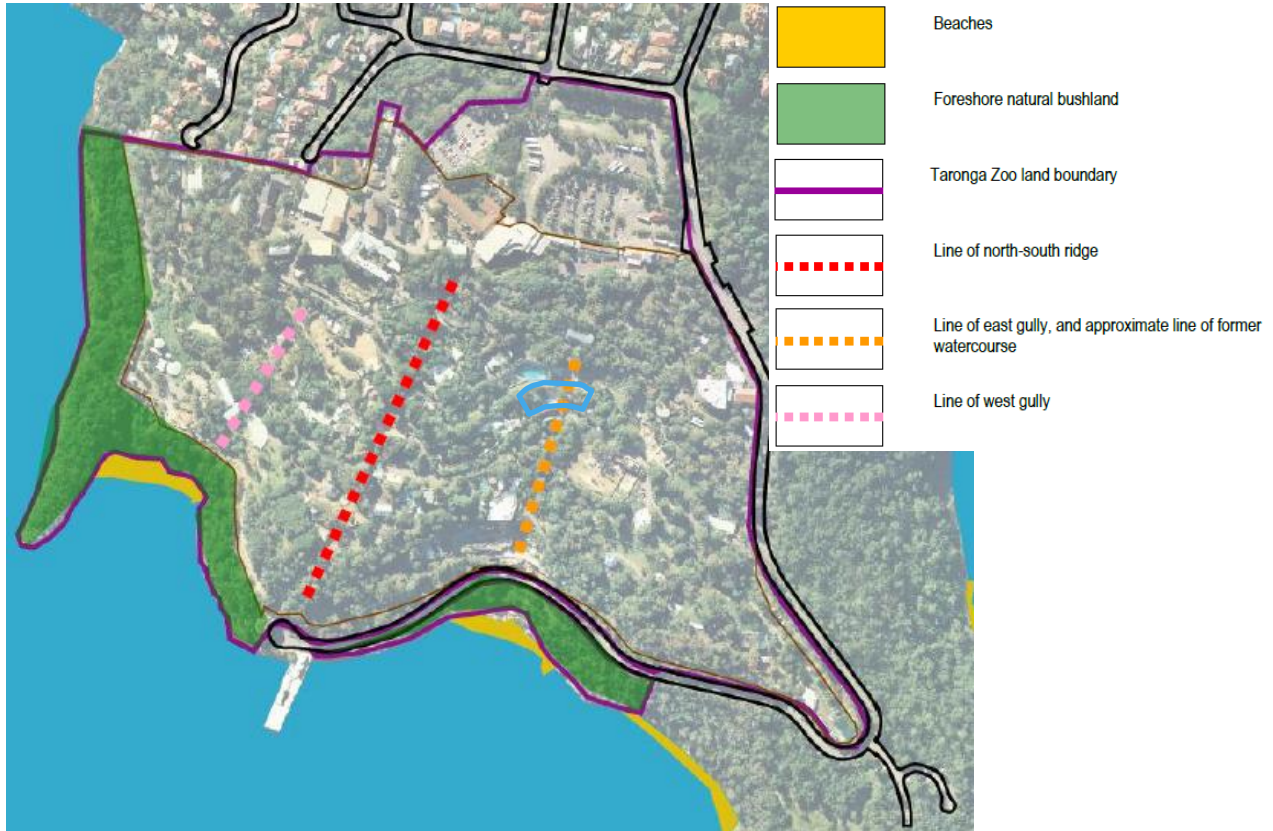
| TZ Visual Analysis and Urban Design Principles | |
|--|---|
| Public access and linkages | |
| Figure 8 Public access and linkages: Circulation Map | |
|  | |
| Source: Zoological Parks Board of NSW | |
| <p>Objectives</p> <ul style="list-style-type: none"> ▪ To provide continuous public access along the foreshore. ▪ To preserve the “natural bushland” character of the foreshore access experience. ▪ To retain public access to the foreshore from the surrounding locality. ▪ To maintain connections with the Bradleys Head SHNP bush tracks to the east, and MMC managed bush tracks to the north-west. ▪ To provide clear means of circulation and way-finding within the zoo. ▪ To optimise visual and physical linkages to and along the foreshore. | <p>The location of the RACC does not impact on existing circulation through the Zoo as shown in Figure 8. The proposed development will:</p> <ul style="list-style-type: none"> ▪ Provide clear visual and physical linkages within the zoo, and to the foreshore, through emphasising a hierarchical pedestrian movement system. ▪ Achieve integrated access for all, including DDA compliant ramps. Ramps have been integrated into the overall design and provide opportunities for interpretive elements. Heritage listed stairs have been retained but provide an alternative pathway rather than the primary access point to the RACC. |

Figure 9 Conservation of significant bushland and other natural features



Source: Zoological Parks Board of NSW

Objectives

- To preserve remnant vegetation, particularly along the foreshore bushland areas.
- To preserve significant items of vegetation within the zoo.
- To retain the natural landform of the zoo.

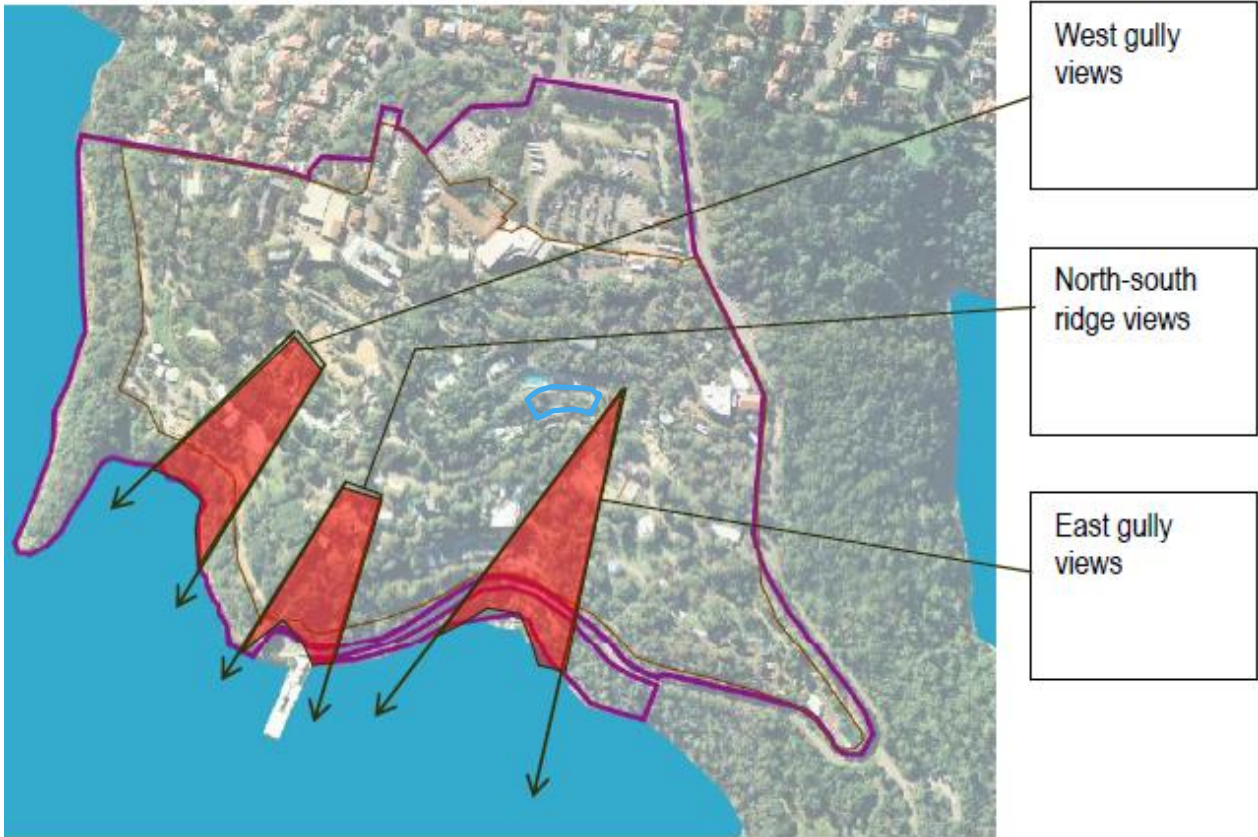
Cutting north-south through the zoo is a steep ridgeline, with a well-contained gully located adjacent to the east, and a less prominent gully to the west. This gully runs through the RACC site (see **Figure 9**) and is interpreted into the landscape design. The line of the eastern gully is approximately the line of a former watercourse that ran north-south through the site.

The overall design sensitively responds to the topography of the site and sits within the tree canopy of the Zoo.

The location of the RACC is already an ‘active’ area of the Zoo accessible by the public. It previously exhibited the Seal pools and vegetation proposed for removal does not incorporate any remnant bushland.

New landscaping will incorporate native species as well as plantings that reflect the animals on display within the RACC.

Figure 10 Summary of sensitive areas, containing significant view lines



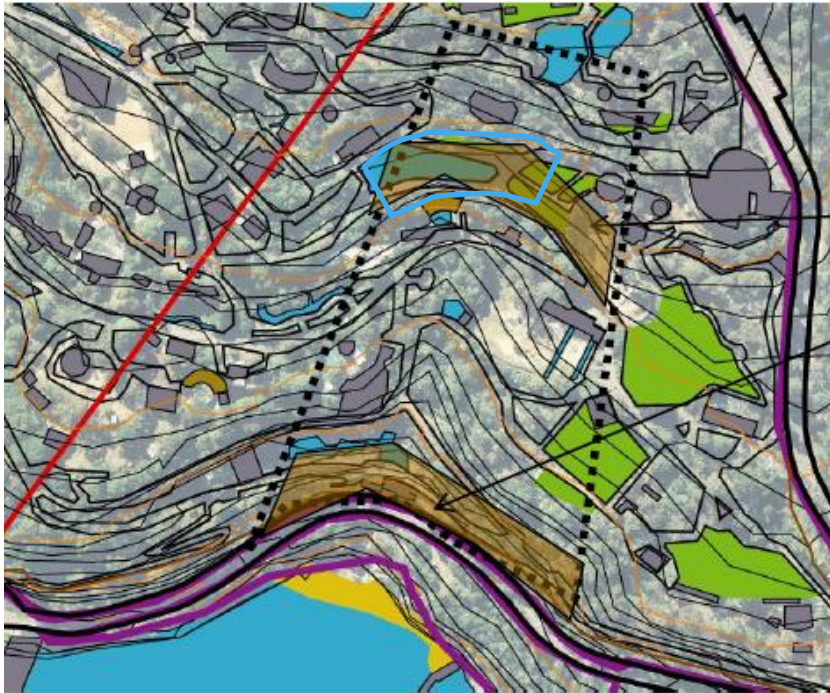
Source: Zoological Parks Board of NSW

- To protect views to the zoo from the harbour: to minimise visual intrusions on the typically “well-vegetated view” [the predominant tree canopy] of the zoo, as viewed from the harbour.
- To protect views to the harbour from the zoo: to maintain cross zoo views to the harbour, typically concentrated in the south-east and north-west gullies; and retain the important cultural views of animals with the unique harbour and city backdrops.

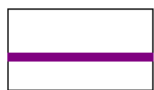
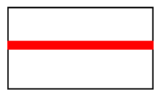
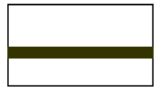
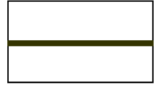




The RACC is not located in a sensitive area or identified as a significant view line as illustrated in **Figure 10**.

The proposed development aims to retain views of the Zoo from Sydney Harbour by preserving the present view of “green vegetation” from the harbour, by minimising built form protrusions through the tree canopy so they will not be visible from the Harbour.

Figure 11 East Gully Built Form Principles



This precinct is characterised by a series of corniches, permitting focussed vies through the line of the gully.

-  Zoo boundary
-  Cable car route
-  Public road pattern
-  Pathways
-  Key open spaces
-  Open air seating
-  Pools
-  2 / 10 m contour intervals



Source: Zoological Parks Board of NSW

Built form guidelines

- Retain the central line of the gully as a wide, and well-defined view corridor. Built form is discouraged within the line of the corridor, so that continuous views north-south views can be achieved.

Since the Masterplan was finalised in 2000, the RACC site was redeveloped . The redevelopment of the site for the RACC will provides a purpose built animal exhibit on a vacant part of the Zoo, which has previously being used for animal exhibits. The overall design does not impact any existing views

- Ensure that the gully retains its role in providing key open spaces and natural amphitheatres, with views through to the harbour beyond.
- Design shade structures to open spaces such that they do not impact on the line of view from areas above [to the north] and below [to the south]. Such structures may be designed such they are temporary only, removed on the completion of events.

within the Zoo and provides the opportunity for harbour glimpses from the roof level.

4.3. TREE REMOVAL AND LANDSCAPING

As noted in **Section 3.2** of this report, landscape plans have been amended to incorporate suitable canopy trees and additional green elements to maintain the dominance of landscaping over new built elements. Given the heritage elements including the aviaries, additional mature plantings are not feasible within the amended design.

As noted in the original EIS, trees proposed for removal are not native to the site and were planted in the past 10 years following the demolition of the Seal pools (see **Figure 12**). A majority of plantings proposed for removal are small shrubs with six high value trees (Trees 1-6) proposed for retention and an additional seven high value trees (Trees 9, 10, 16, 21, 23 & 24) to be relocated within the RACC site or within the Zoo. As noted in the amended Arborist Report (**Appendix M**) all trees proposed for removal are to be replaced locally endemic or non-endemic and correspond to the natural habitat of the species within the RACC exhibit. The following replacement strategy for all tree removal on site is proposed:

- All high retention value trees (9 trees) shall be replaced at an off-set ratio of 2:1, with 2 x 100 litre pot size tree species for every tree removed.
- All moderate value trees (4 trees) shall be replaced at an off-set ratio of 2:1, with 2 x 75 litre pot size tree species for every tree removed.
- All low value trees (30 trees) shall be replaced at an off-set ratio of 1:1, with 1 x 25 litre pot size tree species for every tree removed.

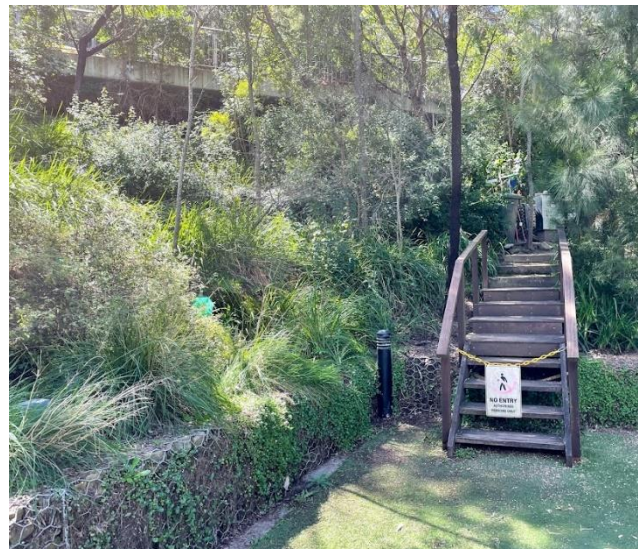
All replacement tree species shall be supplied in accordance with Australian Standard (AS2303:2018) *Tree stock for landscape use*, and Natspec '*Specifying Trees-A Guide to Assessment of Tree Quality*'.

Figure 12 Existing site photos



Picture 5 Looking south from the northern RACC boundary

Source: Urbis



Picture 6 Looking north from the southern RACC boundary

5. RESPONSE TO DPIE ASSESSMENT

The NSW DPIE wrote to the applicant on 15 September 2021 requesting a response to the submissions and matters raised during the public exhibition period for SSD-17483577.

The comments provided by the DPIE required further clarification on:

- Connection to Country;
- Estimated jobs;
- Visual Impact Assessment; and
- Landscaping and biodiversity.

Each of these key matters are addressed in the following sections.

5.1. CONNECTION TO COUNTRY

DPIE requested clarification into consultation undertaken with the Taronga Aboriginal Advisory Group (TAAG) and Indigenous staff. Consultation was undertaken on 25 May 2021 and 16 June 2021, with members of the TAAG and Indigenous staff.

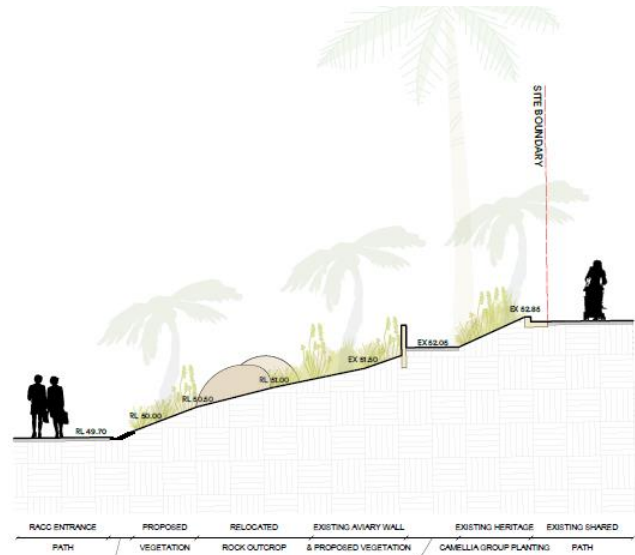
In response to these consultation processes including thorough advice received from Traditional Custodians and represented RAPs, interpretation of Country has been incorporated into the landscape design including the retention and re-use of the sandstone boulder on site in the landscape design.

The re-use of this boulder as a landscape element in the design also interprets the original sandstone landscape of the Bradley's Head Peninsula and evokes a Connection to Country through the retention and interpretation of original landscape elements. Other elements have been incorporated into the design including interpretive signage and plantings. Further details are incorporated into the amended Landscape Package enclosed in **Appendix E**.

Figure 13 Refined Landscape Design



Picture 7 Rock Outcrop and interpretive elements



Picture 8 Section of Rock Outcrop

Source: Context Landscape Architects

5.2. ESTIMATED JOBS

DPIE identified there was discrepancy between the estimated jobs identified in the original SSDA application form and SSDA. The proposal is anticipated to generate approximately 800 jobs including design, project management and construction over the 30-month design development and construction period.

As the proposed development is a redevelopment of an existing animal facility with the Zoo grounds, the proposed development will not generate additional operational jobs on site and will continue to employ approximately 12 staff aligning with current numbers at the Serpentina facility.

5.3. VISUAL IMPACT ASSESSMENT

It was requested by DPIE to submit the visual impact assessment as a separate appendix to the architectural plans with each view enlarged and on a separate page to provide a better understanding of the scale and any potential visual impact of the proposal. The Department notes that by combining the visual impact assessment with the architectural plans, this has resulted in confusion with community members over the inadequate visual impact assessment of the proposal.

To ensure that the visual impacts of the proposed development are legible for the public, a Visual Impact Assessment package has been prepared by DWP and is enclosed in **Appendix F**.

5.4. LANDSCAPING AND BIODIVERSITY

As requested by DPIE, a transplanting feasibility study for six trees proposed for relocation (Trees 9, 10, 16, 21, 23 & 24) has been prepared by Sydney Arbor Trees and is enclosed in **Appendix M**. The report confirms that transplanting the proposed trees is possible and will not result in any detrimental impacts on the ongoing health of the trees.

The amended Arborist Report (**Appendix M**) notes that where transplanting is unsuccessful, suitable replacements must be offset at a 2:1 ratio. All replacement trees or palms should be of a pot size no less than 500 litres and be planted in locations that support above and below ground future growth.

A cumulative assessment into the number of trees removed (including level of significance) and replacement trees and biodiversity offsets and credits for recently approved projects (SSD 10456, SSD 7419, SSD 7311, SSD 8008, SSD 6864) was requested by DPIE and is provided in **Table 5** below.

Table 5 Cumulative assessment of tree removal for Taronga Zoo SSDA projects

| Project | Portion of Site | Existing Trees in Precinct (Prior to SSDA) | Trees Removed | Trees Planted | Trees Retained | Trees Transplanted | Total Trees (After SSDA) |
|---|------------------|--|--|---------------|----------------|--------------------|--------------------------|
| SSD 17483577 (RACC) | 2,390sqm (0.8%) | 73 | 53 including: <ul style="list-style-type: none"> ▪ 9 high value ▪ 4 moderate value ▪ 37 low value | 70 | 17 | 6 | 93 |
| SSD 10456 (Upper Australia Precinct) Approved: 21/12/2020 | 7,900sqm (2.8%) | 198 | 41 including: <ul style="list-style-type: none"> ▪ 11 moderate value ▪ 30 low value | 18 | 157 | 0 | 175 |
| SSD 7419 (Wildlife Retreat) Approved: 21/04/2017 | 12,970sqm (4.6%) | 219 | 77 including: <ul style="list-style-type: none"> ▪ 39 moderate to high value ▪ 38 low value | 80 | 142 | 0 | 222 |
| SSD 7311 (Taronga Institute of | 7,060sqm (2.5%) | 49 | 39 including: <ul style="list-style-type: none"> ▪ 1 high value ▪ 5 moderate value | 8 | 10 | 0 | 18 |

| Project | Portion of Site | Existing Trees in Precinct (Prior to SSDA) | Trees Removed | Trees Planted | Trees Retained | Trees Transplanted | Total Trees (After SSDA) |
|---|--------------------|--|--|---------------|----------------|--------------------|--------------------------|
| Science and Learning) Approved: 29/07/2016 | | | <ul style="list-style-type: none"> ▪ 33 very low and low value | | | | |
| SSD 8008 (African Savannah and Congo Exhibits) Approved: 20/12/2017 | 2.8 hectares (10%) | 550 | 196 including: <ul style="list-style-type: none"> ▪ 36 high value ▪ 72 moderate value ▪ 88 low and very low value | 226 | 8 | 7 | 588 |
| SSD 6864 (Sumatran Tiger Adventure) Approved: 12/11/2015 | 5,600sqm (2%) | 134 | 78 (all good or fair health) | 80 | 39 | 18 | 119 |

Based on the cumulative assessment, open air animal exhibits such as Upper Australia, African Savannah and Congo and the Sumatran Tiger Adventure result in a large number of trees for animals as well as shading. Where new built form is proposed, exhibits and buildings require additional tree removal to facilitate built form. Based on the size of the RACC facility in comparison to other SSDA projects within the Zoo, the building envelope and associated tree removal is an acceptable outcome with landscaping incorporated into rooftop exhibits, the entrance portal and the southern façade. While the proposal does result in tree removal, the overall design results in the retention and relocation of 29 trees on site and 63 new trees while also providing a new purpose-built reptile exhibit.

It is also noted that TSCA have a full time horticulture staff who plant additional trees, shrubs and other landscaping elements across the Zoo site when needed. Under Schedule 2 of Mosman LEP 2012 landscaping within the Zoo can be undertaken as exempt development. This means that while tree removal requires development consent, new trees are being planted on site frequently without the need for any approval to provide shading, improve the amenity of the Zoo and provide shelter and food for animals. Therefore, whilst it is easy to review the extent of trees that have being removed, retained and replanted within recent SSDA development project areas (which is approximately 22.7% of the site), it is much more difficult to quantify the extensive amount of trees and vegetation that are planted on an ongoing basis across the remaining 21.6ha (77.3%) of the 28ha site without any approval.

It is important to note that TCSA's mission for conservation and education means that tree retention is critical and forms part of the ethos of the Zoo. While tree removal is required to facilitate the RACC, the scheme retains a significant tree canopy across the Taronga Zoo site and none of the trees proposed for removal are native to the site or heritage listed trees. In fact, all trees proposed to be removed were planted in the past 10 years by TCSA following the demolition of the Seal pools. In summary, the cumulative impacts of tree removal as a result of the proposed development are considered entirely acceptable, with substantially more trees retained, transplanted and planted than removed on site.

It is also noted that DPIE have requested a summary of BDAR requirements for previous Zoo projects. Given the change in legislation, only the Upper Australia Precinct (SSD 10456) was subject to biodiversity offset credits. Based on the approved works, five ecosystem credits and three species credits were required for the Upper Australia SSDA. A total of four ecosystem credits are required to offset the biodiversity impacts of the proposed RACC development.

6. UPDATED EVALUATION OF PROJECT

In accordance with the Department's Guidelines, *State Significant Development Guidelines – Preparing a Submissions Report (Appendix C) July 2021*, this section provides the justification for the project and an updated evaluation of the project as a whole.

This evaluation includes matters for consideration within Section 4.15 of the *Environmental Planning and Assessment Act 1979* (EP&A Act 1979) and the principles of ecologically sustainable development (ESD) within Schedule 2 (Part 3) of the *Environmental Planning and Assessment Regulation 2000* (the Regulations). This evaluation is set out in **Table 6** and **Table 7** below.

Table 6 Updated Section 4.15 Assessment

| Consideration | Comment |
|---|--|
| Environmental Planning Instrument | <p>The proposed refinements include a reduction to the overall bulk and scale of the RACC building by reducing animal exhibits and associated shade structures on the rooftop level. Overall, the refined scheme results in a reduction of 53sqm of GFA.</p> <p>The proposed refinements to the RACC also aims to remove any perceived views to the animal exhibit when viewed from the Harbour. An amended Heritage Impact Assessment has been prepared by Geoffrey Britton (Appendix H) which confirms that the proposed amendments do not result in any negative impacts on the heritage significance of the site.</p> <p>Therefore, the proposed refinements and clarifications do not change the assessment against the relevant State and Local Environmental Planning Instruments set out within Section 5 of the EIS.</p> |
| Draft Environmental Planning Instruments | <p>The proposed refinements and clarifications do not change the assessment against the relevant draft Environmental Planning Instruments set out within Section 4 of the EIS.</p> |
| Development Control Plans | <p>Although it is noted that Clause 11 of the <i>State Environmental Planning Policy (State and Regional Development) 2011</i> excludes the application of DCPs to State Significant Development Applications (SSDAs) the proposal remains consistent with the <i>Mosman Development Control Plan 2012</i> and <i>Sydney Harbour Catchment Development Control Plan 2005</i>.</p> |
| Any Matters Prescribed by the Regulations | <p>This EIS has been prepared in accordance with Schedule 2 of the <i>Environmental Planning and Assessment Regulations 2000</i>. This includes an updated evaluation against the principles of ESD, set out in Table 7 below.</p> |
| Likely Impacts of the development | <p>This EIS and Submissions Report has been prepared in accordance with Sections 6 and 7, Part 3 in Schedule 2 of the Regulations. The likely impacts of the proposal have been outlined in Section 6 of the EIS, and the key matters raised within the submissions have been addressed within Sections 4 and 5 of this Submissions Report.</p> |
| Suitability of the Site | <p>The site is still considered suitable for the proposed development (as refined) for the following reasons:</p> <ul style="list-style-type: none"> ▪ The site is zoned SP1 'Special Activities (Zoological Gardens)' under the MLEP 2012. The works will facilitate the continued use of the site as a |

| Consideration | Comment |
|---|--|
| | <p>Zoo, and the replacement animal exhibit is clearly permissible with consent and consistent with the zone objectives. Further, there are no significant environmental constraints that would limit the proposal from being developed at the site.</p> <ul style="list-style-type: none"> ▪ The design positively responds to the site conditions and existing landscape character of the locality. ▪ The proposed works are respectful of the heritage significance of the Zoo and will provide activation within a currently underutilised and generally cleared portion of the Zoo. ▪ The works will not have any significant detrimental impact on the scenic, visual and natural bushland setting of Sydney Harbour. ▪ The proposal has been prepared having regard to State and Council planning policies and complies with the aims and objectives of the controls for the site. ▪ Subject to the various mitigation measures recommended by the specialist consultants, the proposal does not have any unreasonable impacts on adjoining properties or the public domain in terms of views, traffic, acoustic and environmental impacts. |
| Any Submissions made in Accordance with this Act or the Regulations | <p>All submissions made in accordance with the EP&A Act and the Regulations have been considered following exhibition of the application.</p> <p>Responses to the key matters raised within the submissions is set out within Sections 4 and 5. Key matters raised by each submitter have also been addressed, with detailed responses included in the Submissions Register at Appendix A.</p> |
| The Public Interest | <p>The proposal is in the public interest for the following reasons:</p> <ul style="list-style-type: none"> ▪ The site is well serviced by public transport and various walking and cycling routes. Further, the proposal greatly encourages the use of non-private vehicle options to access the site. ▪ Taronga Zoo is a highly-revered institution within Sydney's social fabric, and is internationally recognised as a leading centre of biodiversity conservation and for TCSA's educational focus. The proposed development will assist in retaining the Zoo's global reputation as a world leader in zoos. ▪ The project will deliver genuine economic benefits in these challenging times, particularly in creating fulltime jobs during construction, and will sustain direct and indirect jobs during its ongoing operation. ▪ The project will provide a new animal exhibit which was partially funded as part of the NSW Government's COVID relief stimulus budget package which aims to promote tourism and jobs in NSW. <p>The SSDA is in the public interest and any environmental impacts are able to be managed, subject to appropriate conditions of consent.</p> |

Table 7 Evaluation Against the Principles of ESD

| Principle | Comment |
|---|---|
| <i>The Precautionary Principle</i> | <p>The proposed development will be constructed on a previously developed site. This will not have an adverse environmental impact and therefore alleviates concern of serious or irreversible environmental damage.</p> <p>Proactive measures to prevent environmental degradation have been included within the design, construction and operational phases of the proposed development. During the design and construction phases the main contractor will implement an Environmental Management System that follows NSW Environmental Management System Guidelines. TCSA has several ambitious sustainability targets that will drive efficient operation of the building, as well as an Environmental Protection Licence which ensures environmental risks are actively managed across the site.</p> |
| <i>Inter-Generational Equity</i> | <p>To uphold inter-generational equity, the proposed development minimises the consumption of energy and water resources while reducing waste.</p> <p>The ESD principles incorporated into the proposed RACC facilitates the conservation of energy and water resources through energy and water efficiency measures. Energy reduction has been considered in the design of the building, through passive and active measures. The reduction in water use has been considered through high WELS equivalent water fixtures and fittings, low water demand landscaping and use of non-potable water sources where appropriate.</p> <p>Waste generated during the construction and operational phases will be diverted from landfill to be recycled. An Environmental Management System (EMS) will be utilised to throughout construction. Operational waste streams will be separated to maximise recycled waste in accordance with TCSA's target of 90% diversion from landfill.</p> <p>Reducing energy, water and waste ensures that the health, diversity and productivity of the environment is maintained for the benefit of future generations.</p> |
| <i>Conservation of Biological Diversity and Ecological Integrity</i> | <p>The existing site comprises of vegetation planted in the last 10 years, astro turf and an existing temporary meerkat exhibit. The project will be constructed on a previously developed site (the former Seal pools), will include removal of several trees within the building footprint and will retain all heritage listed trees (refer to the Arborists report for further details). As a result, the project will seek to reduce its impact to the surrounding biodiversity and ecological integrity.</p> <p>The project's ESD principles to reduce energy, water and waste consumption have an indirect impact to conserve biodiversity and ecological integrity to the surrounding area. By minimising demand on energy and water resources, the need for land-clearing and the pollution generated from new RACC to support</p> |

| Principle | Comment |
|--|--|
| | the surrounding area will be minimised. New landscaping and a trellis/green wall have also been considered to contribute to site's biodiversity |
| <i>Improved Valuation, Pricing and Incentive Mechanisms</i> | <p>The valuation of the project's assets and services consider environmental factors through the implementation of various ESD initiatives. An Environmental Management System will be adhered to during construction to ensure that contractors are responsible for costs associated with generating excessive pollution and waste. The project team will bear the extra cost of providing recycling and landfill waste streams during construction and operational phases. This creates a system where the polluter pays and creates and incentive to reduce pollution and waste.</p> <p>The design of the project will be benchmarked against NCC, Taronga Zoo Environmentally Sustainable Design Checklist and Green Star guidelines which will provide environmental goals for the project. Project requirements stipulate design teams are contractually required to deliver targeted ESD initiatives for the project.</p> |

In accordance with the Department's Guidelines (dated July 2021), an updated table of proposed mitigation measures is included at **Appendix B** which has regard to the economic, environmental and social impacts of the proposal.

This updated table demonstrates that there will be no additional environmental impacts as a result of the proposed refinements and clarifications. Rather, the refinements include additional measures to ensure any previously known and assessed impacts will be appropriately managed and mitigated where relevant.

7. CONCLUSION

This Submissions Report has responded to each of the matters raised within the submissions received regarding the proposed redevelopment of the Reptile and Amphibian Conservation Centre at Taronga Zoo.

The report is accompanied by:

- Updated Architectural, Landscape and Civil Plans which set out the proposed refinements to the original scheme and the clear identification of works associated with the RACC Facility.
- Supplementary reports and technical advice which provides additional clarification and further information regarding the proposed development where relevant.

The report and supporting documents have also been informed by additional consultation and engagement with key stakeholders, including DPIE, Mosman Councillors and Mosman Parks & Bushland Association community group post lodgement of the EIS.

The Reptile and Amphibian Conservation Centre (including minor design refinements and clarifications) is in the public interest and any environmental impacts are able to be managed, subject to appropriate conditions of consent.

DISCLAIMER

This report is dated 20 October 2021 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Client Name (**Instructing Party**) for the purpose of Response to Submissions (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

In preparing this report, Urbis may rely on or refer to documents in a language other than English, which Urbis may arrange to be translated. Urbis is not responsible for the accuracy or completeness of such translations and disclaims any liability for any statement or opinion made in this report being inaccurate or incomplete arising from such translations.

Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A

SUBMISSIONS REGISTER

APPENDIX B

UPDATED MITIGATION MEASURES

APPENDIX C

LIST OF PLANS FOR APPROVAL

APPENDIX D

ARCHITECTURAL PLANS

APPENDIX E

LANDSCAPE PLANS

APPENDIX F

VISUAL IMPACT ASSESSMENT

APPENDIX G

COMMUNITY STAKEHOLDER REPORT

APPENDIX H

HERITAGE IMPACT STATEMENT

APPENDIX I

CIVIL PLANS

APPENDIX J

STORMWATER MANAGEMENT PLAN

APPENDIX K

**BIODIVERSITY DEVELOPMENT
ASSESSMENT REPORT**

APPENDIX L

SERVICES REPORT

APPENDIX M

ARBORIST FEASIBILITY REPORT

