



NSW GOVERNMENT
Department of Planning

***MAJOR PROJECT ASSESSMENT:
Upgrade of Chimpanzee Facility,
Taronga Zoo***

***Proposed by the Taronga Conservation
Society Australia***

MP 08_0251

Director-General's Environmental Assessment Report
Section 75I of the
Environmental Planning and Assessment Act 1979

August 2009



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1 EXECUTIVE SUMMARY

This is a report on a Project Application seeking approval for the construction of a new Chimpanzee enclosure at Taronga Zoo, pursuant to Part 3A of the *Environmental Planning and Assessment Act, 1979* ("the Act"). Taronga Zoo is located on Bradleys Head Road, Mosman and is legally known as Lot 22 in DP 843294.

Taronga Conservation Society Australia (the proponent) is seeking approval for the upgrade and refurbishment of the existing chimpanzee enclosure including refurbishment of the existing night house, western viewing shelter and viewing deck.

The estimated project cost of the development is \$6 million.

The proposal will create approximately 10 full time equivalent construction jobs and 5 full time equivalent jobs during operation.

The proposal was exhibited for a period of 30 days from 17 June 2009 to 17 July 2009. During the exhibition period, the Department received no submissions.

Public Authorities

Mosman Council advised that they have no issues with the application and will not be making a formal submission.

Preferred Project Report

The proponent responded on 29 July 2009 and provided a final Statement of Commitments. The project did not warrant a Preferred Project Report.

Assessment

The Department has assessed the merits of the proposal and is satisfied that the impacts of the proposed development have been addressed via the proponent's Environmental Assessment, Statement of Commitments and the Department's recommended conditions of approval. Furthermore, the proposal adequately addresses the Director-General's Requirements for the project. On these grounds, it is recommended that the project be approved, subject to the recommended conditions.

The Department recommends that the project be approved, subject to conditions.

2 BACKGROUND

2.1 SITE CONTEXT AND LOCATION

Taronga Zoo is located at Bradleys Head Road, Mosman (Lot 22, DP 843294), within the local government area of Mosman. Taronga Zoo is bounded by Bradleys Head Road to the east, Athol Wharf Road and Sydney Harbour to the south, Little Sirius Cove to the west and Whiting Beach Road to the north. The site is owned by the NSW Zoological Parks Board. The Chimpanzee exhibit is located north-west of the zoo centre adjacent to the African Waterhole precinct.



Figure 1: Aerial photo of site (yellow area indicates location of Chimpanzee exhibit)

2.2 EXISTING SITE FEATURES

The Taronga Zoo site is steeply sloping from Whiting Beach Road in the north to the harbour foreshores and Athol Wharf Road in the south. The site generally has a southerly aspect and has been substantially modified since the zoo moved to the location from Moore Park in 1916 with the creation of access ways, paths and level areas.

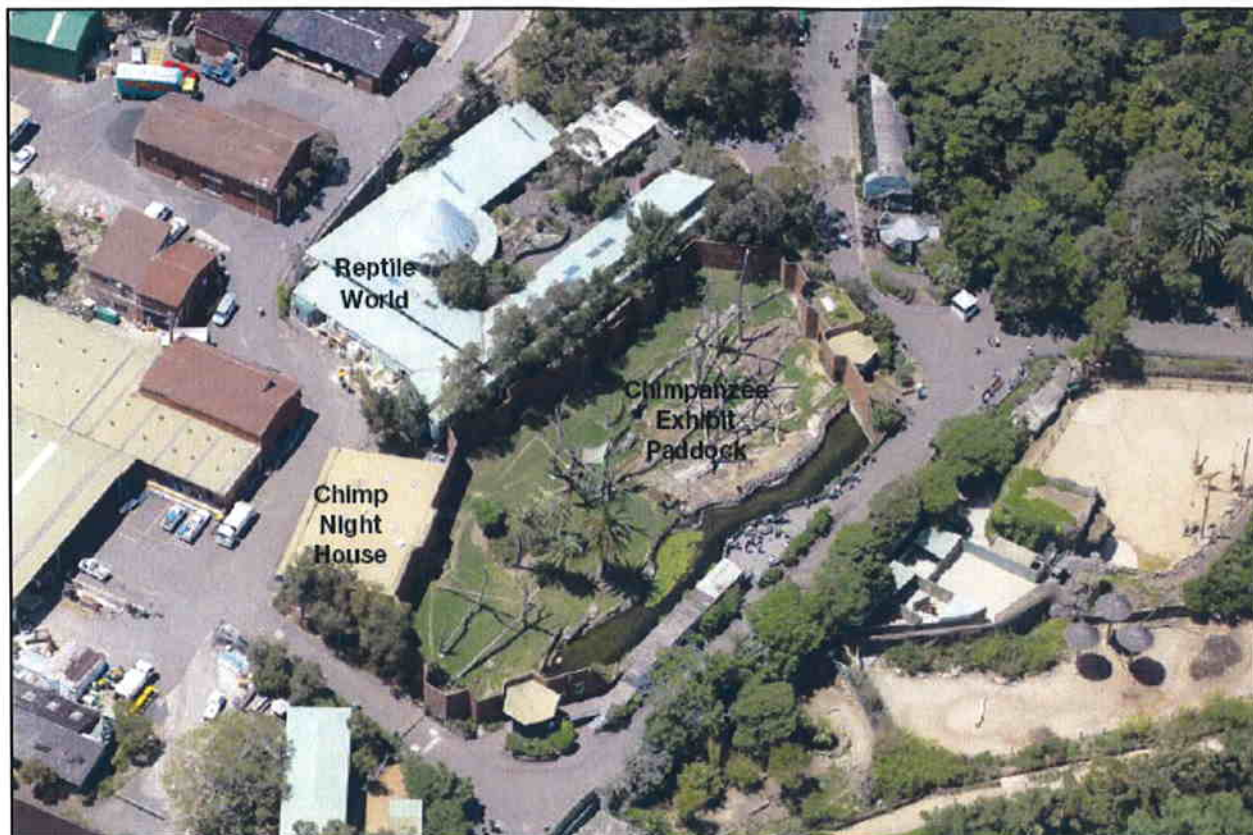


Figure 2: Existing Chimpanzee enclosure and night house to the left

2.3 SURROUNDING DEVELOPMENT

The Chimpanzee exhibit is located to the south west of the main entry, adjacent to the African precinct. The Reptile World is located to the north and the back of house facilities run along the western and southern boundaries. The southern service road functions as the main public viewing access path to view the Chimpanzee exhibit and the African Water Hole precinct.

The nearest street is Bradleys Head Road with the Sydney Harbour National Park adjoining on the other side of the road. The facility is well removed from the existing residential area to the north of the site.

2.4 HERITAGE

The Taronga Zoo site is identified as an item of State Heritage Significance and there are a number of heritage significant items located within the site, as listed under Section 170 of the Heritage Act 1977 of the Heritage and Conservation Register for the zoo. The Taronga Zoo Conservation Strategy, dated July 2002 and prepared by Godden Mackay Logan, provides the policy framework for the conservation, interpretation, management and use of the Zoo as part of the implementation of the endorsed Master plan.

The following heritage significant items are located in the vicinity of the Chimpanzee exhibit:

- The original Zoo pathway layout, identified as 'exceptional significance';
- *Lobelia Gibberoa* (Giant Lobelia), located along the front of the exhibit, identified as 'high significance';
- *Eucalyptus botryoides* (Bangalay), a mature tree to the N-E of the Chimp Exhibit at the entrance to the Reptile World exhibit, identified as 'high significance';
- The natural rock and concrete terraces and early stone retaining wall along the northern boundary of the Barbary Sheep Exhibit, identified as 'exceptional significance';
- A group of five rustic stone seats to the west of the Chimp Exhibit, identified as 'exceptional significance'; and
- Steel pipe post and rail balustrade, contemporary with original paths, identified as 'exceptional significance'.

3 PROPOSED DEVELOPMENT

3.1 THE PROPOSED DEVELOPMENT

The proponent seeks approval for the upgrade and refurbishment of the existing chimpanzee enclosure including refurbishment of the existing night house, western viewing shelter and viewing deck. The works are part of Taronga Zoo's Regional Chimpanzee breeding program and will become a feature of the existing 'African Waterhole' precinct. The facility comprises an existing night house and adjacent existing external paddock, new separation enclosure, existing viewing and chimp wet weather shelter, refurbished deck and remodelled western viewing structure.



Figure 3: Aerial photomontage of proposed new enclosure

The project involves the construction of a:

Separation Paddock (470 m²) comprising: m²

- 'Aviary' type mesh structure over the Separation Paddock;
- Climbing structures and platforms (approximately 14 metres in height);
- Separation and non climb barrier between Separation Paddock and main (eastern) Open Paddock; and
- Wet weather chimpanzee shelter.

Refurbishment of the Night house (290 m²) will address OHS compliance issues and is to include:

- New gates to keeper access area;
- Demolition of central brickwork holding areas;
- Addition of new central caged holding area;
- Addition of 2 new vertical slides to chimpanzee races;
- Addition of 1 new exit with vertical slide from central chimpanzee race into the Separation Paddock;
- Addition of 1 new manual fire exit from each of the 2 chimpanzee dens;
- Replacement of all existing mesh with new steel woven mesh;

- Replacement of existing mechanical ventilation;
- Replacement of existing roofing and skylights; and
- Upgrading of existing electrical and lighting.

Refurbishment of the remaining Open Paddock (1440 m²) comprising:

- New climbing structures;
- Additional trees;
- Relocation of 3 palms (moved out of chimp jump range);
- New tree protection devices; and
- New bushes.

Remodelling of the Western Viewing Shelter (140 m²) comprising:

- New walls and Roof;
- Improved glazed viewing;
- New Interpretive & Thematic Immersion;
- Parallel play facilities; and
- Improved wet weather viewing.

Refurbishment of the Viewing Deck (140 m²) comprising:

- Rebuilding of the deck;
- Removal of the pergola;
- New shade trees; and
- New sunken deck for keeper presentations, improved viewing and seating.

Refurbishment of the Moat (275 m²) is to include:

- New pump to generate greater water movement



Figure 4: Photomontage from public viewing area

3.2 PROJECT NEED

The works to the Chimpanzee exhibit are an integral part of Taronga Zoo's Regional Chimpanzee breeding program and will ensure that the Chimpanzee facility remains a world renowned exhibition. The existing exhibit is dated and modern husbandry techniques require the facility to be upgraded. The facility plays a significant role in the conservation and management of the species both locally and internationally.

The upgrading of the facility would provide a greater level of interpretation and facilitate increased education opportunities to enable visitors to appreciate and understand the Chimpanzee species. The Chimpanzee troop is one the largest in the world and houses twenty Chimpanzees. The need for a separation paddock is an essential part of modern animal husbandry and the management for such a large Chimpanzee troop.

The new facility will assist to:

- facilitate introduction of new Chimpanzee females;
- provide the necessary infrastructure for the current troop management strategy and management philosophies;
- relocation of the Chimpanzees is currently being investigated because leaving them on site during construction will be too disruptive with cost penalties; and
- permit the troop to remain outside at night in summer unsupervised in the separation paddock portion of the exhibit. Currently this not possible because of the openness of the existing exhibit paddock and the fear of possible wall or moat breach from tree fall in a storm event. The proposed separation paddock is designed as an 'aviary' structure providing a full 3 dimensional climbing enclosure..

3.3 PROJECT AMENDMENTS

The project application did not receive any submission from Government agency's or the public. Accordingly, the proponent did not see the need for project amendments and there was no lodgement of a Preferred Project Report.

4 STATUTORY CONTEXT

4.1 MAJOR PROJECT DECLARATION

State Environmental Planning Policy (Major Development) 2005 (Major Development SEPP) outlines the types of development declared a major project for the purposes of Part 3A of the EP&A Act. For the purposes of the SEPP certain forms of development may be considered a Major Project if the Minister (or delegate) forms the opinion that the development meets criteria within the SEPP.

The project is a Major Project under *State Environmental Planning Policy (Major Development) 2005* as development at Taronga Zoo exceeding a Capital Investment Value (CIV) of \$5 million is identified in Schedule 2, clause 11 as development to which Part 3A applies. The CIV of the proposal is \$6 million. The opinion was formed by the Director General as Delegate of the Minister on 19 December 2008.

4.2 PERMISSIBILITY

Under the Mosman Local Environment Plan 1988 (LEP 1988) the site is zoned 5(a) Community Uses – Zoological Gardens, permitting structures solely for the purposes of exhibition, conservation and care of animals. The Proposal is consistent with clause 21 and the objectives of zone 5 (a) and the proposal is therefore permissible subject to approval.

4.3 DIRECTOR-GENERAL'S REQUIREMENTS (DGEARS)

On 19 February 2009, the Director-General issued environmental assessment requirements (DGRs) pursuant to Section 75F of the EP & A Act. The key issues to be addressed in the DGRs issued related to:

- Built form and urban design;
- Car parking and traffic impacts;
- ESD measures;
- Consultation;
- Drainage;
- Heritage;
- Construction and operational impacts; and
- Waste management.

The DGRs are provided in **Appendix C**.

4.4 OBJECTS OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The Minister's consideration and determination of a project application under Part 3A must be informed by the relevant provisions of the EP & A Act, including the objects of the Act.

The objects of the Act in section 5 are as follows:

- (a) *to encourage:*
 - (i) *the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
 - (ii) *the promotion and co-ordination of the orderly and economic use and development of land,*
 - (iii) *the protection, provision and co-ordination of communication and utility services,*
 - (iv) *the provision of land for public purposes,*
 - (v) *the provision and co-ordination of community services and facilities, and*
 - (vi) *the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
 - (vii) *ecologically sustainable development, and*
 - (viii) *the provision and maintenance of affordable housing, and*
- (b) *to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and*
- (c) *to provide increased opportunity for public involvement and participation in environmental planning and assessment.*

Of particular relevance to the assessment of the subject application is consideration of the Objects under section 5(a). Relevantly, the Objects stipulated under section 5(a) (ii), (iv), (v) and (vi) are significant factors in forming the determination of the application and the project is considered to comply with these objects of the Act.

4.5 ESD PRINCIPLES

The *Protection of the Environment Administration Act 1991* provides five accepted ESD principles:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations (**the integration principle**);
- (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (**the precautionary principle**);
- (c) the principle of inter-generational equity - that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations (**the inter-generational principle**);
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making (**the biodiversity principle**); and
- (e) improved valuation, pricing and incentive mechanisms should be promoted (**the valuation principle**).

The Department has considered the proposal in relation to the ESD principles and has made the following conclusions:

- **Integration Principle** – the social and economic benefits of the proposal are demonstrated in the documentation submitted for the assessment of this application. The environmental impacts are addressed through the proponent's EA report and recommended conditions of approval. Taronga Zoo's promotion of good public transport and limited on-site parking is supported. The development will provide for the short-term and long-term economic and social development of the zoo.
- **Precautionary Principle** – no serious environmental impacts have been identified and the proposal's impacts on the environment can be successfully mitigated. Conditions of approval have been recommended to mitigate any potential impact on the environment arising from the project.
- **Inter-Generational Principle** – through the implementation of various conditions of approval and environmental and management practices currently employed on the site, the proposal will ensure the environment is protected for future generations.
- **Biodiversity Principle** – vegetation on the site is limited through the exhibition and viewing areas. The site does not contain any threatened or vulnerable species, populations, communities or significant habitats. The proposal will increase the vegetation on the site including advanced trees and additional palms further satisfying the biodiversity principle.
- **Valuation Principle** – this principle is not directly relevant to the proposal which is a special land use.

Accordingly the proponent has committed to ESD principles as detailed in their Environmental Assessment report.

4.6 SECTION 75I(2) OF THE ACT & CLAUSE 8B OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT REGULATION 2000

Section 75I(2) of the Act and Clause 8B of the Environmental Planning and Assessment Regulation 2000 provides that the Director-General's report is to address a number of requirements in the Director General Report. These matters and the Department's response are set out as follows:

Section 75I(2) criteria	Response
Copy of the proponent's environmental assessment and any preferred project report	The Proponent's EA is located on the assessment file and in a CD-Rom in Appendix D .
Any advice provided by public authorities on the project	No public authorities made a submission to the application.
Copy of any report of a panel constituted under Section 75G in respect of the project	No statutory independent hearing and assessment panel was undertaken in respect of this project.
Copy of or reference to the provisions of any State Environmental Planning Policy that substantially govern the carrying out of the project	Each relevant SEPP that substantially governs the carrying out of the project is identified and assessed.
Except in the case of a critical infrastructure project – a	An assessment of the development relative to all

copy of or reference to the provisions of any environmental planning instrument that would (but for this Part) substantially govern the carrying out of the project and that have been taken into consideration in the environmental assessment of the project under this Division	environmental planning instruments is provided in Section 4.7 .
Any environmental assessment undertaken by the Director General or other matter the Director General considers appropriate.	The environmental assessment of the project application is this report in its entirety.
A statement relating to compliance with the environmental assessment requirements under this Division with respect to the project.	The proponent's EA addressed the DGR requirements and is considered to have satisfied those requirements as addressed in this report. Refer to the Conclusion in Section 7 of this report for a statement relating to this requirement.
Clause 8B criteria	Response
An assessment of the environmental impact of the project	An assessment of the environmental impact of the proposal is discussed in section 5 of this report.
Any aspect of the public interest that the Director-General considers relevant to the project	The public interest is discussed in section 5 of this report.
The suitability of the site for the project	The suitability of the site for the project is discussed in section 5 of this report
Copies of submissions received by the Director-General in connection with public consultation under section 75H or a summary of the issues raised in those submissions.	No submissions were received for the subject application.

4.7 ENVIRONMENTAL PLANNING INSTRUMENTS (EPIS)

4.7.1 Application of EPI's to Part 3A projects

To satisfy the requirements of section 75I(2)(d) and (e) of the Act, this report includes references to the provisions of the environmental planning instruments that govern the carrying out of the project and have been taken into consideration in the environmental assessment of the project application.

The primary controls guiding the assessment of the proposal are:

- State Environmental Planning Policy (Major Projects) 2005;
- State Environmental Planning Policy No. 55 - Remediation of Land;
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005;
- Mosman Local Environmental Plan 1998.

Other policies to be considered in the assessment of the proposal are:

- Zoo 2000 'The View to the Future', December 1999;
- Taronga Zoo Master Plan Urban Design Principles and Visual Analysis (UDAS Guidelines, May 2001); and
- Taronga Zoo Conservation Strategy, July 2002.

The provisions, including development standards of local environmental plans, and development control plans are not required to be strictly applied in the assessment and determination of major projects under Section 75R(3) Part 3A of the Act. Notwithstanding, these standards and provisions are relevant considerations for this application as the DGR's and Section 75I(2)(e) of the Environmental Planning and Assessment Act 1979 require the Proponent to address such standards and provisions and the Department to duly consider them.

The Department has considered the proposed Project Application against the objectives and aims of these instruments, and is satisfied that the proposed project, subject to the implementation of the recommended conditions of approval, is generally consistent with the provisions of these instruments. Assessment of each of these is considered as follows:

4.7.2 State Environmental Planning Policy (Major Development) 2005

This assessment has been addressed in section 4.1 above.

4.7.3 State Environmental Planning Policy No. 55 – Contaminated Land

The proponent has not provided an assessment of contaminated land. Given the site has been previously utilised as a Chimpanzee exhibit since 1980 and this use will continue, it is unlikely that the land may contain contamination. A condition of approval shall require that the proponent undertake a contaminated land report prior to construction.

Based on these recommendations it is considered that the site can be made suitable for the proposed development and thus satisfactorily meet the requirements of SEPP 55.

4.7.4 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

Taronga Zoo is located within the 'Foreshores and Waterways Area' identified in Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005. Nine principles are outlined for this area and they are provided below. Of these 9 principles, 2 are directly relevant to the subject application, these being (a) and (d) which refer to the protection and enhancement of the scenic qualities of the harbour and foreshores. It is considered that the application satisfies these principles. The proposal does not interfere with existing foreshore access arrangements in this part of Sydney Harbour.

- a) development should protect, maintain and enhance the natural assets and unique environmental qualities of Sydney Harbour and its islands and foreshores,*
- (b) public access to and along the foreshore should be increased, maintained and improved, while minimising its impact on watercourses, wetlands, riparian lands and remnant vegetation,*
- (c) access to and from the waterways should be increased, maintained and improved for public recreational purposes (such as swimming, fishing and boating), while minimising its impact on watercourses, wetlands, riparian lands and remnant vegetation,*
- (d) development along the foreshore and waterways should maintain, protect and enhance the unique visual qualities of Sydney Harbour and its islands and foreshores,*
- (e) adequate provision should be made for the retention of foreshore land to meet existing and future demand for working harbour uses,*
- (f) public access along foreshore land should be provided on land used for industrial or commercial maritime purposes where such access does not interfere with the use of the land for those purposes,*
- (g) the use of foreshore land adjacent to land used for industrial or commercial maritime purposes should be compatible with those purposes,*
- (h) water-based public transport (such as ferries) should be encouraged to link with land-based public transport (such as buses and trains) at appropriate public spaces along the waterfront,*
- (i) the provision and use of public boating facilities along the waterfront should be encouraged.*

In relation to the maintenance, protection and enhancement of views, clause 26 of Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 is also relevant and is outlined below.

- (a) development should maintain, protect and enhance views (including night views) to and from Sydney Harbour,*
- (b) development should minimise any adverse impacts on views and vistas to and from public places, landmarks and heritage items,*
- (c) the cumulative impact of development on views should be minimised.*

The proposal satisfies these provisions. The views to the zoo will not be adversely impacted upon by the new exhibit. Views from within the zoo to the harbour are readily available from many vantage points and the exhibit will have little impact in this regard. There will be no adverse impacts on night views to or from the site. This matter is given further consideration in Section 5 of this report.

Foreshores and Waterways Planning and Development Advisory Committee

Under the provisions of Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005, Taronga Zoo is located within the 'Foreshores and Waterways Area' and development for the purposes of 'Flora and Fauna Enclosures' within this area is required to be referred to Foreshores and Waterways Planning and Development Advisory Committee ('Foreshores Committee') for comment.

However, the proposal is for the redevelopment of an existing 'Fauna' enclosure. The proposal is considered to have no adverse impacts on the Sydney Harbour area, as it is unlikely to have an adverse visual impact when viewed from the waters of Port Jackson. Further the design aspects of the proposal have been devised to blend the facility with the surrounding landscape. This ensures that the proposed works are recessive in nature and maintains the sensitive amenity of the foreshore locality. Accordingly, the Department did not consider it necessary to consult with the Foreshore Committee.

4.7.6 Mosman Local Environmental Plan 1998

The site is zoned 5(a) Community Uses – Zoological Gardens under the provisions of Mosman LEP 1998. Clause 21 of Mosman LEP permits structures solely for the purposes of exhibition, conservation and care of animals. The proposal being for the purposes of housing and exhibiting Elephants is therefore a permissible use.

Clause 38B specifies that development consent of Council is not required for the carrying out of works in the Zoo unless it is for works to a heritage item specified in Schedule 2. The Upper Entrance Gate, Lower Entrance Gate, Elephant House, Aviary and the Floral Clock are zoo elements listed in Schedule 2, however none of these elements form part of the subject application. The proposal does not have any impacts on heritage items and is compliant with the Mosman LEP.

4.8 OTHER PLANS AND POLICIES

Taronga Zoo Conservation Strategy, July 2002

- **Landscape Analysis** – The site has been modified over time and has become a 'cultural landscape', rather than a natural one. The proposal is yet another example of a structure designed to retain the sites natural qualities while further layering its rich cultural qualities. Thematically and in terms of the landscape character, the proposal is appropriate development.
- **Significance** - Taronga Zoo is identified as a site of National significance in the strategy and demonstrates early links with modern zoo philosophy and the fabric of the zoo represents a rich history of the development of zoo exhibits woven into a steeply sloping natural setting. The 'Chimpanzee exhibit' does not contain any items of significance, however there are surrounding items of significance including a Eucalyptus tree to the north east site at the entrance to the Reptile World exhibit, identified as 'high significance'; a group of five rustic stone seats to the west of the Chimpanzee exhibit, identified as 'exceptional significance'; and a steel pipe post and rail balustrade, contemporary with original paths, identified as 'exceptional significance'.
- **Impact of Proposal** - The continuing use of the site as an exhibit will ensure the ongoing association of the area with the exhibition of chimpanzees. The proposal is considered to have no adverse impacts. Rather it will have positive impacts through providing a new refurbished and modern area for the chimpanzees to live.

5 ASSESSMENT OF ENVIRONMENTAL IMPACTS

5.1 KEY ISSUES

Key issues considered in the Department's assessment of the Environmental Assessment include:

- Built Form and Urban Design;
- Car Parking and Traffic;
- Ecologically Sustainable Development;
- Consultation;
- Drainage;
- Heritage;
- Construction Impacts;
- Waste;
- Public Interest.

5.2 BUILT FORM AND URBAN DESIGN

The built form and design of the new exhibit is generally an open plan area which comprises the open paddock area and the adjacent separation paddock, which is distinguished by the mesh non-climb barrier and a viewing platform area. The proposal will also refurbish the existing Night House to improve its function ability and presentation.

The separation paddock is a new aviary structure comprising black stainless steel netting on a tensile structural frame of composite steel and timber masts and stainless steel cables. The enclosure's height will be approximately 14 metres and is required to satisfy the arboreal activities of the chimpanzees. The height will be approximately the same height as the existing climbing pole structures.

The Open Paddock will be reduced in size due to the separation enclosure but its features will be improved by new palm planting areas and will house a number of climbing platforms for the chimpanzee's ranging from 5m to about 10m in height.

The moat viewing area will have a new deck through out and a new sunken deck area to facilitate better viewing for all ages and assist with keeper talks. The new works use the existing buildings palette of materials and forms to integrate the new with the old and have it read as one exhibit.

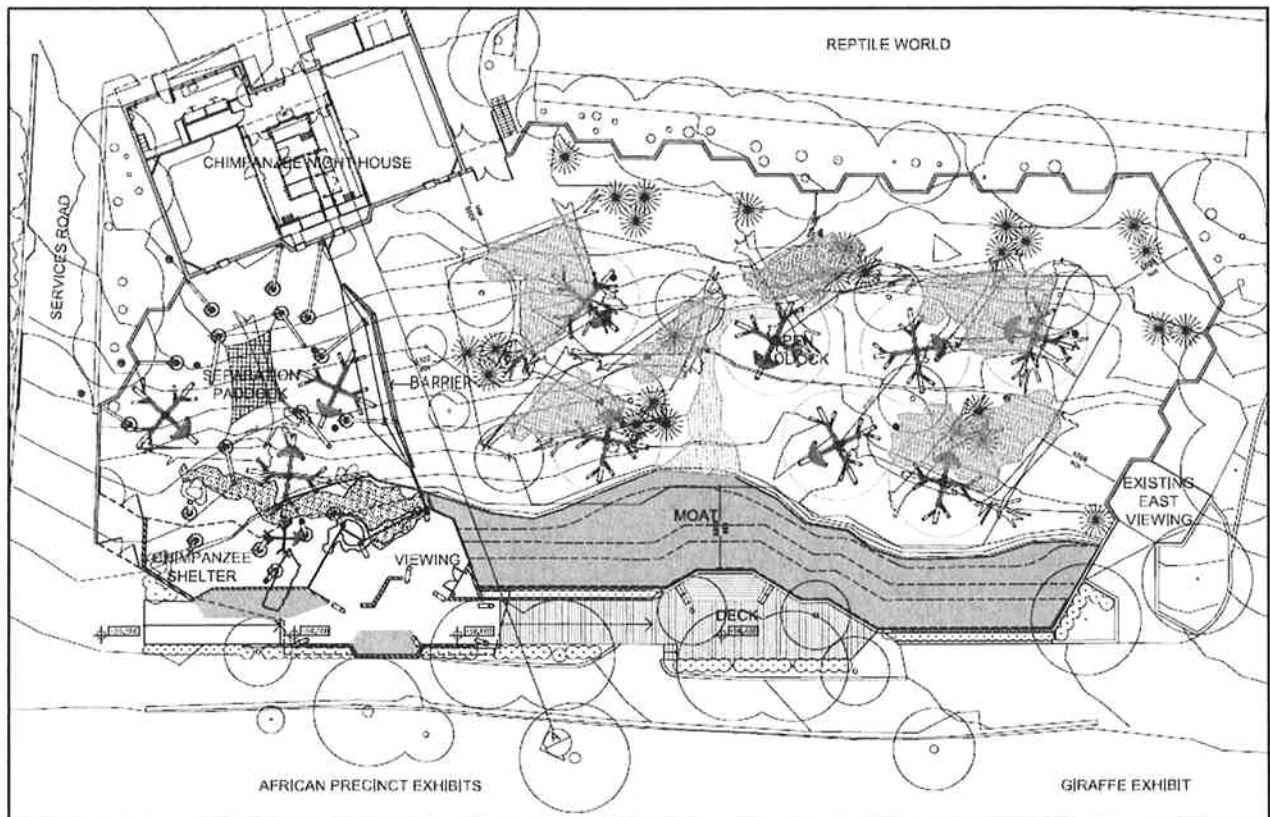


Figure 5: Proposed site plan

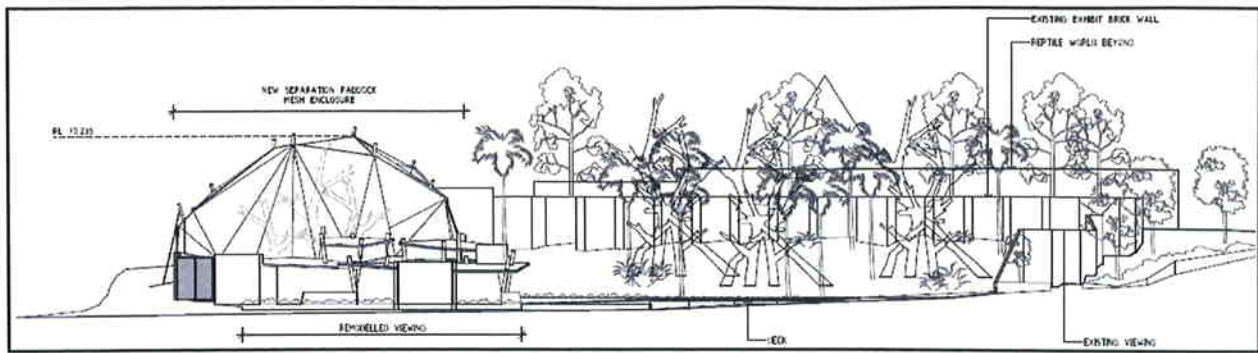


Figure 6: Cross section of proposal

The proposal remains consistent with the bulk and scale of surrounding development. The photomontage below illustrates that the project will have minimal view impacts to and from the harbour foreshore.



Figure 7: Photomontage – harbour view from the foreshore (exhibit circled red)

5.3 CAR PARKING AND TRAFFIC

The project will have no adverse impacts on local parking conditions and existing traffic conditions. The redevelopment of the exhibit will not generate an increase in traffic or parking requirements, and should there be a minor increase in required parking, the existing car park is more than capable of accommodating this additional need. Surrounding access and traffic measures will not be altered and emergency vehicle access is maintained to the adjacent service road.

5.4 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

The proponent has indicated that the design of the new exhibit has included environmentally sustainable features including the careful selection of materials to promote sustainability such as the selection of timber. The proponent indicates that materials with high intrinsic energy costs such as aluminium, and PVC, vinyls and other plastics, will be avoided where possible and that no rain forest timbers will be used.

5.5 DRAINAGE

The proponent has submitted a stormwater plan that identifies stormwater management measures which will be implemented. The proponent advises that the existing stormwater system will be utilised and there are no requirements for it to be upgraded. All stormwater collected will be directed to Taronga Zoo's Waste Water Treatment Plant for treatment and reuse throughout the zoo.

5.6 HERITAGE

The Taronga Zoo site is identified as an item of State Heritage Significance and there are a number of heritage significant items located within the site. The proponent has provided an assessment of heritage within the Environmental Assessment that concludes that the proposal will have minimal impacts on the existing heritage significant items located in the vicinity of the Chimpanzee exhibit. Conditions of approval have been included to ensure measures are implemented to protect the heritage significant items.

5.7 CONSTRUCTION IMPACTS

The chimpanzee exhibit is located within the main Zoo area and therefore it is important that construction impacts be minimised. A condition of approval requires the proponent to provide a Construction Management Plan and Access and Safety Plan prior to the commencement of works. The following specific issues have been addressed as part of conditions of approval:

- Construction hours to be limited to 7.00am to 5.00pm Mondays to Fridays and 8.00am to 4.00pm on Saturdays with no work on Sundays or Public Holidays;
- Noise minimisation and suppression techniques to be employed on all construction equipment;
- Erosion and sediment control measures to be installed and maintained around the site during construction;
- Control of vehicular movement within the zoo;
- Erection of hoardings to protect the public and heritage buildings; and,
- Compliance with the BCA.

These proposed measures should satisfactorily manage the potential construction and noise related impacts from the proposal. Given the location of the site and the above measures, it is considered that construction impacts have been adequately addressed and will not pose a significant issue during the implementation of the development.

5.8 WASTE

The proponent advises that where possible, all re-usable/non contaminated spoil from the excavation will be retained on site and will be crushed and used for landscaping purposes. Water for the various ponds and moats is recycled water taken from the Zoo's water treatment plant.

5.9 PUBLIC INTEREST

The project is considered to be in the public interest for the following reasons:

- Existing heritage significance is maintained and protected as part of the proposal;
- The design approach is innovative both in terms of aesthetics and in achieving ESD principles;
- The completed facility will enhance the overall attractiveness of the zoo through the provision of an improved and interesting exhibit;
- The construction management procedures will ensure minimal environmental impact and disruption to the functioning of the zoo.

5.10 CONSULTATION

The proponent has consulted with Mosman Council, the Department of Primary Industries and the Department of Planning during the design and preparation of the application. The proponent also consulted with the Zoological Parks Board of NSW which includes Ministerial appointees, representatives of Local Government and representatives from Zoo friends. The proponent also conducted a concept work shop involving local zoo designers to comment on the proposed enclosure. Accordingly it is considered the proponent has adequately consulted with relevant stakeholders in their preparation of the project.

6 CONSULTATION AND ISSUES RAISED

6.1 PUBLIC EXHIBITION DETAILS

In accordance with Section 75H of the Act, a "Test of Adequacy" was undertaken by the Department which determined that the matters contained in the DGRs were adequately addressed in the Environmental Assessment prior to public exhibition.

The environmental assessment was publicly exhibited for a period of 30 days from 17 June 2009 to 17 July 2009 at the following locations:

- Department of Planning – Information Centre, 22 - 33 Bridge Street, Sydney
- Mosman Council – Mosman Square, Spit Junction, Mosman

The EA was placed on the Department's website during the course of the exhibition period.

Local residents surrounding the site were informed of the project application in writing and invited to make a written submission. Details of the application were also published in the public notices section of the Parramatta Advertiser and the Sydney Morning Herald. The advertisement provided details of the proposal, exhibition locations and dates and how interested parties could make a submission.

The proponent conducted their own consultation with the Zoological Parks Board of NSW, Department of Primary Industries and local stakeholders during the design process.

Mosman Council indicated they did not wish to make a formal submission.

The proponent responded on the 29 July 2009 and did not make any amendments to the project.

6.2 SUBMISSIONS RECEIVED ON ENVIRONMENTAL ASSESSMENT

The Department received no submissions from NSW Agencies or from the public.

7 CONCLUSION

The Department has reviewed the environmental assessment in accordance with Section 75(2) of the Act. All the relevant environmental issues associated with the proposal have been adequately assessed.

The proposed development will allow for a valuable new and interesting Chimpanzee exhibit at Taronga Zoo while at the same time preserving the aesthetic and heritage significance of the location. Furthermore, the project application is compliant with the existing environmental planning instruments.

The Department is of the view that the proponent has satisfactorily mitigated any potential environmental impacts associated with the proposal. The recommended conditions (at **Appendix A**) and implementation of the measures detailed in the proponent's Environmental Assessment report and Statement of Commitments seek to maintain the amenity of the local area, and adequately mitigate the environmental impacts of the proposal.

On these grounds, the Department considers the site to be suitable for the proposed development and that the project application is in the public interest. Consequently, the Department recommends that the project be approved, subject to conditions.

8 RECOMMENDATION

It is recommended that the Director-General:

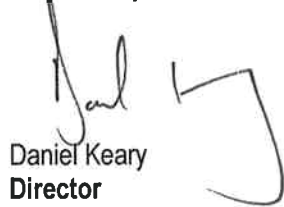
- (A) consider the findings and recommendations of this report;
- (B) approve the project application for the refurbishment of the Chimpanzee exhibit at Taronga Zoo, under section 75J *Environmental Planning and Assessment Act, 1979*; subject to conditions; and sign the Determination of the Major Project (**Tag A**).

Prepared by:



Wil Nino
Planner
Government Land and Social Projects Assessments

Endorsed by:



Daniel Keary
Director
Government Land and Social Projects Assessments



Chris Wilson
Executive Director
Major DA Assessments

u.f.-08



Richard Pearson
Deputy-Director General
Development Assessment and Systems Performance