

Part of item 149L will be removed for the construction of pod B and the Restaurant building. The rustic stone retaining walls west of the stair (139L) will be removed as part of the proposal and the garden bed excavated for the Restaurant building. No original edges remain to this garden bed. The rows of seats at the base and balustrade at the top were removed in the past. Two stonework walls remain in the garden bed with modern plantings. The section retained east of stair is in poor condition. Mitigating measures recommended later in this document. There may be an opportunity to reinstate some of the walling on each side of the new restaurant building.

The original and early paths throughout the Zoo are listed as 99L. Most existing paths/roads in the proposal site are to be removed. Some of these paths are mapped as part of 99L however most sections of the remaining paths in this area are already altered. Some paths eg near current toilet block, shown as original are not as detailed in the history and description sections of this report..

The curved path, part of 99L, adjacent the Taronga Centre will be retained, with the outer kerb on the line of the original path, with the exception of a section that will be completely excavated to a lower level and built over for the Restaurant. East of the restaurant the path and stair will be retained. There is a negative impact where Restaurant building interrupts line of path.

In another section of path mapped as part of 99L, the service road below the 1968 Platypus House, the route will be developed with a new curving entry and new paving reinstating public use. No original fabric remains in this section of path. There is no change to the paths to the north and west of the Guest Lodge.

A small section of early bitumen path above 152L will be removed and parts of the early roads near 32B (Jungle Cats) will be covered over or altered but these paths are not shown in the CS map of this item (they are on the LMP map).

The following chart sets out the heritage impacts in detail.

#### **4.7 Impact of Proposal on Potential Archaeological Features**

As the subject area has been assessed as being unlikely to contain any Aboriginal archaeological material, the proposed works would have no impact on Aboriginal archaeological resources.

The development area is an area zoned as having medium to low potential for subsurface historical archaeological evidence with a small area of original path of high significance. It is established in this report however that the section of original path identified in the AMP in this area has in fact been altered.

There is medium archaeological potential in the Wollemi lawn and expected features include remains of the Athol Quarantine Station (research has indicated these are in the Wollemi lawn not as shown in the AMP) (and possibly the associated tramline) and remains of the footings of the Ladies and Gents toilets. The Quarantine Station area is unlikely to be disturbed by the current plan but the toilet footings, if they remain, are likely to be disturbed for the footings of Pods D & E.

There may be remains of other previous construction as indicated on figures 3.5 & 3.6 but this is unlikely as the area of the former rockery is heavily altered and regraded. All the demolished stairs would have been largely above ground and are not evident.

The surviving above ground features have been identified in the Section 170 Register and the impact is assessed in the chart below.

Mitigative measures have been proposed in case of unexpected finds.

**Table 4.1 Identification of Heritage Impacts on Significant Items within Site**

**Abbreviations are:** AMP = Archaeological Management Plan, CS= Conservation Strategy, LMP=Landscape Management Plan & s170=Section 170 Register

Item / Significance	Policies and Recommendations	Proposal	Heritage Impacts
<b>Heritage Items within the site</b>			
<b>07L</b> Sandstone perimeter wall. State / High High (CS) Exceptional	Maintain fabric, works to be undertaken in accordance with heritage advice. There has been a continuing progressive restoration since 2008.	The proposal involves changes to the entry and loading dock of the Taronga Centre to create the new entry to the Retreat. No works are proposed to the sandstone perimeter wall. Adjacent modern concrete wall at entry to be demolished.	The wall has already been altered at the Taronga Centre entry. Locating the entry here avoids impacts on the wall elsewhere. The proposal originally required removal of a section of wall below Hallstrom House which is now not required. <b>No heritage impact.</b>
<b>16B</b> Hallstrom House Local Some (CS)	Maintain in accordance with the Burra Charter. Integration into overall conservation management plan for the whole Zoo site is highly recommended. (s170) Conserve in accordance with heritage advice. (CS)	Hallstrom House remains in its current use. No works are proposed to Hallstrom House.	<b>No heritage impact.</b>
<b>31L</b> Sandstone Wall & Stairs Local High	Generally conserve stone retaining walls. (LMP) The dry stone wall deserves to be carefully maintained, and the eastern end of the later wall should be brought up to the same quality of workmanship as the middle section (S170).	The stairs will remain as access to what will be the Red Kangaroo exhibit along with a new ramp. The ramp will require an opening in the wall west of the stairs. The east end of the wall will be buried with a new retaining wall across the line of the road next to Big Cats.	Additional research suggests that the western end of the wall is of recent construction and that the rougher eastern end is older (see earlier in this report). The stairs are retained intact and will now provide access to the relocated shelter and an exhibit <b>(no heritage impact)</b> . There will be impacts on the west end of the wall but this is modern and there was previously a road in the vicinity. The new opening should have matching dry stone walling <b>(no heritage impact)</b> . There will be a <b>small negative heritage impact</b> from burying the wall east of the stair. It should be left intact so it can be reinstated in the future if desired.

Item / Significance	Policies and Recommendations	Proposal	Heritage Impacts
<b>Heritage Items within the site</b>			
<b>82A</b> Taronga Zoo – Greater  State	<p>Conserve the original and some later fabric that still remains on site so that its origins, the founders' intentions, the changes in philosophy and approach to keeping and displaying of animals, the style and tastes of successive designers and builders, can be interpreted by present and future generations. Conserve the natural elements to demonstrate the original qualities of the site. Ensure that only local species of native plants are selected for use in bush regeneration. Consider future management of foreshore land as part of Sydney Harbour National Park (s170).</p> <p>The Conservation Strategy has detailed overall policies including that Taronga should continue to be used as a Zoo and that the site should be conserved and managed according to accepted conservation charters such as the Burra Charter.</p>	<p>To redevelop the Australian Section 2 and nearby areas, south of the Taronga Centre, as a new Australian Habitat exhibit and a Wildlife Retreat. The exhibit has a “rock strewn” creek at the centre with five visitor accommodation buildings or “pods” arranged around it. The pods are 2, 3 &amp; 4 storey with the taller buildings further down the hill and have an open corridor on one side screened by a “green” wall. There is a four storey Restaurant and Dining building southeast of the Taronga Centre and the same height as that building. At the northwest of the site is a single storey circular entry / reception / foyer building or guest lodge. There is extensive planting using local species.</p>	<p>Overall the heritage impact is neutral. There are negative impacts with the removal of some items such as some trees, garden beds and Australian section 2. There are some positive impacts with the conservation of other items, the revealing of the fountain base and restoration of the shelter, albeit not insitu. Overall the proposed exhibit is consistent with Taronga's heritage value as <i>“an educational, entertainment and recreational facility”</i> and <i>“as a leading centre of biodiversity conservation and for the Zoo's educational focus”</i>. Accommodation for education and recreation is already provided at the Zoo in a more informal way. The proposal brings more people and a different audience to the Zoo and will provide ongoing income to fund other activities at Taronga. The pods are sited to be low in height and scale, to minimise visual impact and to be recessive in the landscape. Heritage significant views will be retained. There is <b>neutral heritage impact on overall heritage value</b> as <i>“an important keystone in distinguishing Sydney's sense of place”</i>.</p>

Item / Significance	Policies and Recommendations	Proposal	Heritage Impacts
<b>Heritage Items within the site</b>			
<b>96B</b> Circular Kiosk (Fountain base 1917 kiosk 1930s) Local High (CS)	Conserve in accordance with heritage advice	<p>The proposal is that the roof and columns of the 1930s kiosk will be relocated on a new base as a picnic shelter in the Wollemi lawn. The proposed location is adjacent the stone stair and retaining wall 31L. There is as yet no detailed design.</p> <p>The proposal is to reveal part of the fountain base, which will be exposed by the removal of the shelter. It will be a feature in the guest lodge foyer with the circular external wall built over it and interpretation of the former configuration. The half of the fountain in the interior and the central concrete element will be removed.</p>	<p>Overall this has a <b>neutral heritage impact</b>.</p> <p>Today the fountain is covered by the shelter. The removal of the shelter will enable more of the fountain to be seen. The incorporation in the foyer however means it cannot be a fountain, the overall circular form can't be seen and parts of the fountain are demolished. The current scheme shows none of the fountain retained in the interior but there may be opportunities to retain more. The revealing of the form on the outside and proposed interpretation with an historic photo will allow visitors to understand the history.</p> <p>Today the shelter is used as a food service area and store and is not open to the public. Relocating it will allow it to again be used as a shelter open to the public. This is a positive heritage impact. The fabric of the roof and timber columns will be conserved including replacement of the failed modern roof membrane. The former configuration with a low masonry wall and curved seating will be replicated. The separation from the fountain base, from which it derived its circular form is a negative impact but this could easily be interpreted. The loss of the masonry wall has little heritage impact as it is currently obscured and can easily be replicated.</p>

Item / Significance	Policies and Recommendations	Proposal	Heritage Impacts
<b>Heritage Items within the site</b>			
<b>99L</b> Original and Early Pathway Layout, including stairs linking levels State Exceptional (CS)	Conserve in accordance with Conservation Management Plan, Landscape Management Plan and heritage advice. (CS) Conserve original path layout. Conserve asphalt finish on main paths and do not introduce other materials and finishes (apart from bricks in Australian precincts). Without compromising the original path alignment, provide alternative access where the path is too steep to satisfy BCA requirements (eg possibly provide lift where path is very steep, or additional gently sloping path off to the side of the main path) (LMP)	Most existing paths in the site are to be removed. 1. The curved path adjacent the Taronga Centre will be retained with the outer kerb on the line of the original path. Between the path and the Taronga Centre will be additional seats and landscaping and the modern brick paving will be removed. A section will be completely excavated to a lower level and built over for the Restaurant. East of the restaurant the path and stair will be retained. 2. The service road below the 1968 Platypus House will be developed with a new curving entry and new paving. 3. Within the Zoo the path north and west of the Guest Lodge will remain as is. 4. The 1970s brick paths below the current Kangaroo exhibit will be removed and a section of earlier bitumen path above 152L. 5. The pre 1940s bitumen road west of 32B (Jungle Cats) will be covered over with a raised ground level. The path north of 32B will remain in part but narrowed by garden beds and resurfaced and the bitumen paved, angled return up the hill will be removed.	Most sections of the remaining original and early paths shown in this area are already altered. Some paths eg near current toilet block, shown as original are not. Overall there is a <b>neutral heritage impact</b> .  1. Neutral impact from retention of the line of the path (the fabric is already replaced). Negative impact where Restaurant building interrupts line of path.  2. Positive impact from the use of the approximate line of the former path as the entry. There fabric is already changed.  3. Neutral heritage impact. This path is already extensively changed in line and levels (there were originally stairs) and materials. Part of the line of the path is similar to the original.  4. Negative heritage impact from the removal of the paths however these paths are not shown in the CS map of this item and the brick paths replaced the original and early paths in this area.  5. Negative heritage impact from the removal of the paths but these paths are not shown in the CS map of this item.
<b>123L</b> Australian Sections 1 and 2 landscaping Local High  Section 2 only is within the site	Conserve brick paths in Australian precincts, including brick edges and gutters. If sections of brick paving are to be replaced, match existing bricks in colour, texture, size and pattern of laying (LMP) Conserve brick edges and gutters to brick paths (LMP). Continue to use brush fencing for enclosure fencing in Australia 1 precinct (LMP).	Australian section 2 is to be removed and replaced with a new Australian exhibit arranged around a new water feature. Paths are proposed to be decomposed granite paths and use of sandstone is proposed to create a naturalistic landscape with locally indigenous plantings.	The removal of the landscaping is a <b>negative heritage impact</b> . None of the brick paths or edges are retained. These remain in other parts of the Zoo.  This is balanced by the retention of the "Australian" themed exhibit and the designed "natural" setting. The new exhibit is more extensive with a bigger range of animal and locally indigenous plant species.

Item / Significance	Policies and Recommendations	Proposal	Heritage Impacts
<b>Heritage Items within the site</b>			
<b>137L</b> Rustic stone seat adjacent to stair at SE corner of Taronga Centre. Local / High	Conserve rustic stone seat <i>in situ</i> (LMP).	The seat will be conserved in situ as part of the project.	<b>Positive heritage impact.</b>
<b>139L</b> Concrete stair with roughcast balustrade Local Exceptional	Conserve concrete stair (LMP).	Some conservation work has already been done to the stair in the past. Further repair and removal of seedling figs will be undertaken as part of the project.	<b>Positive heritage impact.</b>
<b>149L</b> Rustic stone garden walling (below Taronga Centre) Local High	Generally conserve rustic garden walling and edges. Manage trees of high or exceptional significance that are associated with areas of this walling in line with policies set out in Appendix B (LMP)	The rustic stone retaining walls west of the stair will be removed as part of the proposal and the garden bed excavated for the Restaurant building. No original edges remain to this garden bed. The seats at the base and balustrade at the top were removed in the past. Two rows of stonework remain in the garden bed with modern plantings. The section retained east of stair is in poor condition. See below for trees.	<b>Negative heritage impact</b> with demolition of the rustic stone garden walls west of the remaining stair. <b>Positive impact</b> east of the stair where the stone walls will be repaired and appropriately planted with small scale shrubs. Mitigating measures recommended later in this document. There may be an opportunity to reinstate some of the walling on each side of the new restaurant building.
<b>152L</b> Rustic stone garden walling near <i>gardenia thunbergia</i> . Local High	Generally conserve rustic garden walling and edges. Manage trees of high or exceptional significance that are associated with areas of this walling in line with policies set out in Appendix B (LMP)	No works are proposed to this wall as part of the project. Paths in the vicinity will be altered slightly but there is no detailed design developed yet. The fence for the Red Kangaroo exhibit is shown on top of this wall. The path above this garden bed will be removed. See below for trees.	<b>Neutral heritage impact subject to</b> detailed design of fence. The wall is not suitable as a base for an enclosure fence and this would compromise the wall.



Item / Significance	Policies and Recommendations	Proposal	Heritage Impacts
<b>Heritage Items within the site</b>			
<b>165L</b> <i>Gardenia thunbergia</i> (Tree Gardenia) State Exceptional	Retain and conserve. This plant is now threatened by increasing shade from large trees to the north that will begin to affect its viability. Remove some of the trees of lower value with the potential to shade the <i>Gardenia</i> . Selectively prune some northern branches of Red Cedar to south to reduce shading (LMP)	The tree is proposed to be retained and will be within the Red Kangaroo exhibit. One of the retreat pods is close to the tree to the north and will overshadow it. The extent of works in the vicinity, associated with the construction of the enclosure wall and pod, is not known.	<b>No direct heritage impact.</b> Overshadowing may affect viability. The tree needs prior management to ensure it is in good health and protection during the works. It may be subject to long term deterioration and succession planting should be undertaken in a suitable nearby location.
<b>169L</b> <i>Podocarpus Elatus</i> (Plum or Brown Pine) State Exceptional	Retain and conserve Continue to monitor health and safety regularly (LMP).	The tree is proposed to be retained and will be right on the edge of the new aviary. The extent of works in the vicinity, associated with the construction of the enclosure wall, is not yet known.	<b>No direct heritage impact.</b> The tree needs protection during the works. Aviary needs to be designed so there is no impact on the tree.
<b>197L</b> <i>Murraya paniculata</i> (Orange Jessamine) Local High	Retain and conserve Consider replanting around this tree with other species typical of Edwardian-period character using archival material as a guide (LMP).	Tree is to be removed. The area is platypus pools.	<b>Negative heritage impact</b> from the removal of the tree. Further research and examination of 1960s images (earlier in this report) indicates that this is not an Edwardian planting but likely planted associated with the development of the "Beastro" or "Zoobecue" in the 1980s. This species continues to be commonly planted in modern gardens. Similar species could be planted at a suitable location such as site of relocated shelter
<b>213L</b> <i>Magnolia Grandiflora</i> (Bull Bay Magnolia) Local / High	Retain and conserve Continue to monitor health and safety regularly (LMP).	Retained in Red Kangaroo exhibit.	<b>No direct heritage impact.</b> The tree needs protection during the works and from long term impact by kangaroos.
<b>214L</b> <i>Alphitonia excelsa</i> (Red Ash) Local High	Retain and conserve As this is the only Red Ash in the Zoo plant another Red Ash along the eastern boundary in the vicinity of this tree (LMP).	Retained on boundary.	<b>No heritage impact.</b> The tree needs protection during the works.
<b>215L</b> <i>Lophostemon confertus</i> (Brush Box) Local / High	Retain and conserve Continue to monitor health and safety regularly (LMP).	Retained on boundary.	<b>No heritage impact.</b> The tree needs protection during the works. These boundary plantings are not all healthy and will eventually require succession planting.

Item / Significance	Policies and Recommendations	Proposal	Heritage Impacts
<b>Heritage Items within the site</b>			
<b>216L</b> <i>Ficus macrocarpa</i> var. <i>Hillii</i> (Hill's Fig Tree) Local / High	Retain and conserve Continue to monitor health and safety regularly. Some canopy reduction would be permissible if needed to allow more sun access to the enclosure (LMP).	Retained within exhibit. Buildings have been carefully planned around this tree.	<b>No direct heritage impact.</b> The tree needs prior management including some canopy reduction to ensure it is in good health. The tree needs protection during the works.
<b>217L</b> <i>Ficus rubiginosa</i> (Port Jackson Fig Tree) Local / High	Retain and conserve [No detailed policy in LMP] [Species incorrect in the LMP and s170, ie not a fig]	Retained on boundary.	<b>No heritage impact.</b> The tree needs protection during the works. These boundary plantings are not all healthy and will eventually require succession planting.
<b>218L</b> <i>Acmena smithii</i> (Lilly pilly tree) Local High	Retain and conserve Continue to monitor health and safety regularly. Adjust paving around tree base if necessary to maintain viability and water permeability (LMP).	To be retained within exhibit. Close to path and ramp from pod E. Risk of detailed design of landscaping affecting this tree.	<b>No heritage impact</b> subject to detailed design of landscaping and paths. The tree needs protection during the works.
<b>219L</b> <i>Ficus rubiginosa</i> (Port Jackson Fig Tree) Local / High	Retain and conserve Continue to monitor health and safety regularly. As this tree is partly within the Tree Kangaroo enclosure ensure no wires or structures are attached to the tree that might cause injury, structural damage or insect/ pathogenic infection (LMP).	Removed prior to project.	Neutral. Tree was impeding identified views, had health problems (trunk and roots). It was not a cultural planning nor a remnant indigenous tree.
<b>260L</b> <i>Lophostemon confertus</i> (Brush Box) Local / High	Retain and conserve Continue to monitor health and safety regularly (LMP).	Retained in Red Kangaroo exhibit. May be affected by relocation of shelter to this area.	<b>No heritage impact</b> subject to detailed siting and design of relocated shelter. The tree needs protection during the works.
<b>275L</b> <i>Lophostemon confertus</i> (Brush Box) Local / High	Retain and conserve Continue to monitor health and safety regularly (LMP).	Retained on boundary.	<b>No heritage impact.</b> The tree needs protection during the works.
<b>290L</b> Wisteria at Beastro Local N/A	Not in CS or LMP. No specific policies.	The plant is to be removed.	<b>Neutral heritage impact.</b> Believed to be a 1980s planting but may be from earlier stock. Similar species could be planted at a suitable location such as site of relocated shelter or elsewhere in public spaces within the Zoo.



Item / Significance	Policies and Recommendations	Proposal	Heritage Impacts
<b>Heritage Items within the site</b>			
<b>293M</b> Taronga Zoo sculptures Level not listed	Not in CS or LMP. Typical movable heritage policies are: Conserve and maintain. Place in dedicated heritage storage if relocated until long term location known.	Retained insitu or in vicinity. May be affected by relocation of shelter to this area.	<b>No heritage impact</b> subject to detailed siting and design of relocated shelter.

**Table 4.2 Identification of Heritage Impacts on Significant Items in the Vicinity**

Built Item	Policies and Recommendations	Proposal	Heritage Impacts
<b>Heritage Items in the Vicinity of the Wildlife Retreat Site</b>			
<b>14L</b> Dry Stone Retaining Wall Local High	Maintain fabric	Not affected by proposal.	<b>No heritage impact.</b>
<b>18B</b> Spider Monkey Enclosure Local High	Conserve in accordance with heritage advice. Re-use original moonstone feature as an interpretive device.	Not affected by proposal but close to access road and entry foyer works adjacent.	<b>No heritage impact.</b> Needs protection during construction from vehicle damage etc.
<b>21B</b> Indian Elephant Temple State Exceptional	Conserve in accordance with CMP.	Not affected by proposal.	<b>No heritage impact.</b>
<b>32B</b> Former Jungle Cats enclosure, now Tasmanian Devils Enclosure Local Some (CS)	Consider adaptive reuse. If re-development is proposed, retain at least one of the enclosures as representative example and incorporate into re-development if possible. Prior to any demolition, record the structures. Further research is recommended (S170). May be further adapted in accordance with heritage advice (CS).	Not included in Retreat project. No work is proposed to the enclosure. Alterations to paths adjacent including level changes. See above 99L.	<b>No heritage impact.</b>

Built Item	Policies and Recommendations	Proposal	Heritage Impacts
<b>Heritage Items in the Vicinity of the Wildlife Retreat Site</b>			
<b>84L</b> Natural Rock benches at Monkey Pits (now Wollemi exhibit) Local Exceptional	Conserve in accordance with Landscape Management Plan (CS).	Path/boardwalk at top being built as a separate project.	<b>No heritage impact.</b>
<b>93B</b> Platypus House Local High	Conserve in accordance with heritage advice.	Not affected by proposal.	<b>No heritage impact.</b>
<b>135L</b> Gate Pier Local High	Conserve gate pier in situ. Conserve unpainted finish on adjoining brick and stone walls. (LMP)	Brick wall adjacent is to be demolished.	<b>No heritage impact.</b> Careful demolition of adjacent wall required and protection during works.
<b>141L</b> Concrete Stairs Local High	Conserve stair. (LMP)	Not affected by proposal.	<b>No heritage impact.</b>
<b>171L</b> <i>Tabernae-montana orientalis</i> x3 (Tabernae-montana Trees) Local Exceptional	Retain and conserve (LMP)	Not affected by proposal.	<b>No heritage impact.</b>
<b>173L</b> <i>Eucalyptus Botryoides</i> (Bangalay) Local Exceptional	Retain and conserve Continue to monitor health and safety regularly (LMP).	The tree is to be retained on the edge of a path as existing. No change to the path is proposed adjacent to this tree..	<b>No heritage impact.</b> The tree is on a vehicle access path and will need protection during the works.
<b>211L</b> <i>Lophostemon confertus</i> (Brush Box) Local High	Retain and conserve (LMP)	Not affected by proposal.	<b>No heritage impact.</b>

Built Item	Policies and Recommendations	Proposal	Heritage Impacts
<b>Heritage Items in the Vicinity of the Wildlife Retreat Site</b>			
<b>263L</b> Acmena smithii (Lilly pilly tree) Local High	Retain and conserve (LMP)	Not affected by proposal.	<b>No heritage impact.</b>
<b>281L</b> Baloghia inophyllum (Brush Bloodwood) Local High	Retain on site (LMP)	Not affected by proposal.	<b>No heritage impact.</b>
<b>282L</b> Cryptocarya laevigata var. Bowiei (Glossy Laurel) Local High	Retain on site (LMP)	Not affected by proposal.	<b>No heritage impact.</b>

**Table 4.3 Identification of Heritage Impacts on Significant Views**

Item	Policies and Recommendations	Proposal	Heritage Impacts
<b>Views in the Vicinity of the Site</b>			
V2 Panorama High	Manage views, particularly where there are trees or shrubs that grow and have the potential to obscure these.	There is no impact on the distant view of CBD skyline from top floor of Taronga Centre.	<b>No heritage impact.</b> See photo montage in architectural reports.
V3 Panorama High	This will involve regular monitoring and maintenance, including pruning. (LMP) Maintain plantings to conserve identified views. No new structures should be erected which would impact on views to and from the site. New development should not detract from or obscure existing view. (CS)	The distant view of CBD skyline from the Beastro will be available from the proposed Guest Lodge and to some extent from the new viewing platform in the Wollemi exhibit.	<b>No heritage impact.</b>
<b>Framed View</b> None identified			
<b>Filtered View</b> None identified			
<b>Internal Views</b>			
V48 High	As above	The view looking down from the Taronga Centre along path towards Monkey Pit and Floral Clock will remain. The left foreground of the view will be of the Guest Lodge instead of the Kiosk. Harbour bridge and CBD Skyline in distance will remain visible.	<b>No heritage impact.</b>
<b>Lost Views</b>			
V69, V70, V77	Former vistas may be reconstructed by removal of visually intrusive elements (CS).	No change is proposed to this lost view. A similar view will be available from the upper level rooms in pods A & B but not from the path behind them.	<b>No heritage impact.</b>

## **5.0 Mitigative Measures**

### **5.1 Preamble**

As elaborated in the Conservation Strategy, the zoo is a cultural landscape, the conservation of which should extend to the total resource, including the site's landscape, built elements, views and vistas, records, memories and associations, along with uses and activities.

Generally, the Zoo's site-wide values are retained ensuring the distinctive historic character of the place is retained. There is an overall question of whether the accommodation use is compatible however there are successful and popular precedents elsewhere in the Zoo and the proposal has potential to bring increased visitation and provide income to assist the ongoing conservation and educational aims.

The proposal removes and alters some individual heritage items. The Australian Section 2 exhibit, part of item 123L is removed. The kiosk roof and columns are removed and relocated on a new base and the existing base demolished. This reveals the original fountain under. A semicircular wall is built on the part of the fountain on the exterior of the building and the fountain wall on the interior and the central plinth are demolished.

Identified heritage significant trees are retained and other mature trees. Significant new planting is proposed of local species. Two identified plants are removed. Views are not impacted. There are possible archaeological remains in the Wollemi lawn area.

The following recommendations are made by way of mitigative measures.

### **5.2 Detail of Mitigative Measures**

#### **Detailed Design**

Detailed design is needed to resolve the interface between the proposal and heritage items in the site including the fountain and shelter, the path and retaining walls adjacent the Taronga Centre and adjacent the former "Big Cats" 32B, the rock walls of garden bed 149L, the new aviary with the Brown Pine (169L), retaining wall 152L and the exhibit fence and the plantings and movable items in the Wollemi Lawns.

Detailed design should minimise deleterious impacts on these heritage items. The detailed design should retain as much as possible of the fountain, particularly the circular edge. The design needs to consider minimising impact on the remaining masonry stair and the masonry and stone seats and on vegetation within the site and items in the vicinity. If possible more of item 149L should be retained (or re-established after construction). The design of the new base for the kiosk/shelter should use authentic details developed by research and physical investigation of the existing. Designers should liaise with the Zoo's heritage advisor, currently Jean Rice, Senior Project Manager, Heritage.

#### **Conservation Works**

Conservation works should be undertaken to items affected by the works including the masonry stairs, stone retaining walls and garden walls and the kiosk roof and columns.

#### **Conservation Advice**

Appropriate conservation advice should be available during the detailed design phase and throughout the works program. This should include availability for response to unforeseen circumstances that may arise during construction. Currently regular heritage advice is being provided to Taronga Zoo by staff specialist, Jean Rice, Senior Project Manager, Heritage.

#### **Archival Recording**

The history of the site is generally documented and additional research has been undertaken in respect to this project. A photographic archival record should be made of the proposed site and items in the vicinity including individual heritage items, their respective settings and views to and from the subject development area. Additional recording should be made during the works, paying attention to any items revealed during excavation and tree removal. In particular the stone walls in garden bed 149L should be recorded after the removal of the trees. The tree removal should not damage the stone garden retaining walls. Recording should also be made of the removal of the shelter and its columns, the fountain after removal and adjacent excavation and of Australian Section 2 before its removal.

## **Archaeology**

Approval from the Heritage Council of NSW under Section 140 of the *Heritage Act 1977* (NSW) is only required if archaeological remains are to be impacted upon, in accordance with the policies and recommendations outlined in the Taronga Zoo AMP. It appears that the fabric or the original paths and stairs has been removed in the past. There may be remains of the toilet blocks below Pods D & E and remains of the Athol Quarantine Station in the Wollemi Lawn. This may be impacted by works in the area including the relocation of the shelter. Additional research and documentation is needed to determine if there will be an impact. If there is a permit should be applied for and excavation undertaken by an archaeologist.

## **Contractor Induction**

Suitable clauses should be included in all site contractor and subcontractor contracts to ensure that on-site personnel are aware of their obligations and requirements in relation to the *Heritage Act 1977* (NSW). Specifically, relevant on-site personnel should be made aware of the procedure to be followed for notification and stopping works should items of heritage significance be found during site works.

## **Unexpected Remains**

In the event of unexpected historical archaeological relics are encountered during site works, works will cease immediately and the NSW Heritage Office notified, pursuant to Section 146 of the *Heritage Act 1977* (NSW).

## **Interpretation**

An important obligation arising from the historic significance of Taronga Zoo is that its cultural heritage values should be interpreted to the public. Previous studies have recommended that a strategy for interpreting the site as a whole should be developed to effectively and creatively incorporate an integrated approach to interpreting the site's significant heritage aspects but this has not yet been done.

In this case there should be interpretation of the demolished Australian section 2, the former fountain base and the relocated shelter and their relationship. There should also be interpretation of the former rockeries with the removal of the remnant 149L.

The former circular path edge and line of the former balustrade adjacent to the Taronga Centre should be interpreted in the new landscape design in paving or a low wall or similar.

## **Protection of Heritage Items during Works**

Adequate signage should be erected in the vicinity of the heritage items within the development site that are to be retained alerting contractors and subcontractors to their existence and fragile nature. The stone seats should be carefully protected – for example by solid structural protective covers.

Stone from the removal of items 149L should be stockpiled for later reinstatement or for future use in repairing landscape elements including the eastern part of 149L.

Temporary access to the site should be determined in such a manner so that there is no impact of the surrounding heritage items, vegetation or landforms.

## **Landscape Heritage Items**

The existing landscape heritage items in the precinct and within its vicinity are to be clearly marked and all workers inducted as to their significance prior to starting works on the site.

All works to significant trees should be undertaken in accordance with the Taronga Zoo Tree Protection Guidelines.

The wisteria and murraya are listed but are proposed to be removed. Similar species should be planted at a suitable location such as site of relocated shelter or elsewhere in public spaces within the Zoo.

The boundary plantings are retained but some trees in the boundary plantings are not healthy and will eventually require succession planting.

If overshadowing or the kangaroos affect the tree gardenia's viability succession planting should be undertaken in a suitable nearby location preferably taking cuttings from the existing tree.

## **6.0 Conclusion**



The primary significance of Taronga Zoo lies in its unique and evocative cultural landscape; the place's ability to show the evolution of zoological approaches over the last century; its continuity of use and its recognition as a zoo of world-standing; and for the iconic sense of place and esteem in which it is held by visitors and Sydney residents.

Negative impacts on individual items should be mitigated by relocation, conservation of remaining elements and interpretation of items removed. The gradual removal of minor elements risks loss of values through incremental change.

The proposal provides a compliant equitable access route to and within the site, which is not currently the case. The ramped path in the Wollemi lawns also provides general public equitable access to the Wollemi Exhibit.

The design of the relocated shelter roof and columns needs to be carefully developed to preserve its heritage value and authenticity. The design of the foyer around the fountain base needs to retain as much original fabric as possible and to enable visitors to understand that it was a circular fountain.

Overall, the proposal generally satisfies the objectives of the Conservation Strategy, Archaeological Management Plan and Landscape Management Plan and has an overall neutral heritage impact on the place as a whole, while facilitating Taronga's ongoing role as a Zoo of world-class standing.