Introduction

This report supports a State Significant Development (SSD) Development Application (DA) submitted to the Minister for Planning pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The Application seeks approval for the construction of a new public zoological park (known as Sydney Zoo), as described in the Project Summary Description section of this report.

The 16.5ha precinct, herein after referred to as Sydney Zoo, is located in Blacktown, Western Sydney within the Bungarribee Precinct, Western Sydney Parklands, located on the Great Western Highway near the junction of the M7 and F4 highways.

Project Vision and Objectives

The vision for Sydney Zoo is to create an iconic tourist attraction, complementing the masterplan vision for the Bungarribee Precinct of the Western Sydney Parklands. Sydney Zoo is envisioned to become a world-class recreational facility, contributing to the 'Destination West' initiative, becoming a key element in the areas evolution into a major tourist destination and contributing to the cultural and social infrastructure of the area.

Sydney Zoo will comprise of up to 200 state of the art animal exhibition areas as well as significant public open space including active play and picnic zones, new public restaurant and innovative animal viewing areas. The atmosphere of the Sydney Zoo will provide patrons with a relaxing, fun and educational day out.

Sydney Zoo is set to become an important educational and cultural facility for the Western Sydney area, providing educational programs and animal research initiatives that will endow visitors with a deep knowledge and respect for living creatures and the environment.

Design Principles

The masterplan of the Sydney Zoo has been developed using the following design principles:

1. Always prioritise animal welfare
Animals will be exhibited in large enclosures with animal welfare and care at the heart of the Sydney Zoo design and operating ethos.

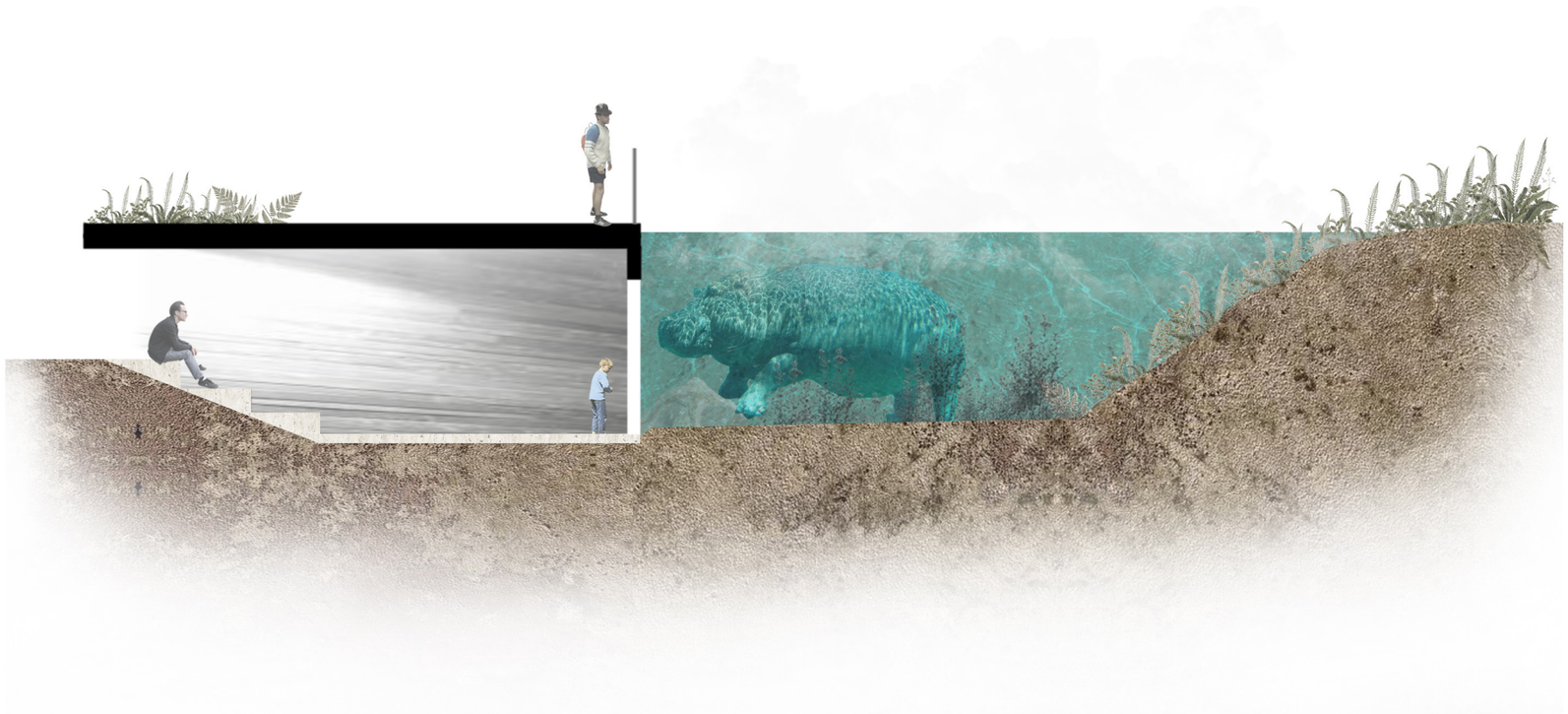
2. Create immersive experiences
Spaces will be designed to allow people to have intimate experiences with animals

3. Group animals according to natural habitat
The Sydney Zoo will be divided into habitat zones, mimicking animal habitat and plant communities.

4. Create a tropical centre, graduating to open grasslands
The masterplan is designed to work with its natural bushland setting by grouping exotic tropical species at the centre of the site and graduating to native grasslands communities on either side. This will help to minimize irrigation and water wastage while creating immersive and exciting habitat experiences

5. Create opportunities to pause and relax
Incorporating picnic areas, play zones and a large restaurant within the zoo will create an atmosphere of relaxation and fun.

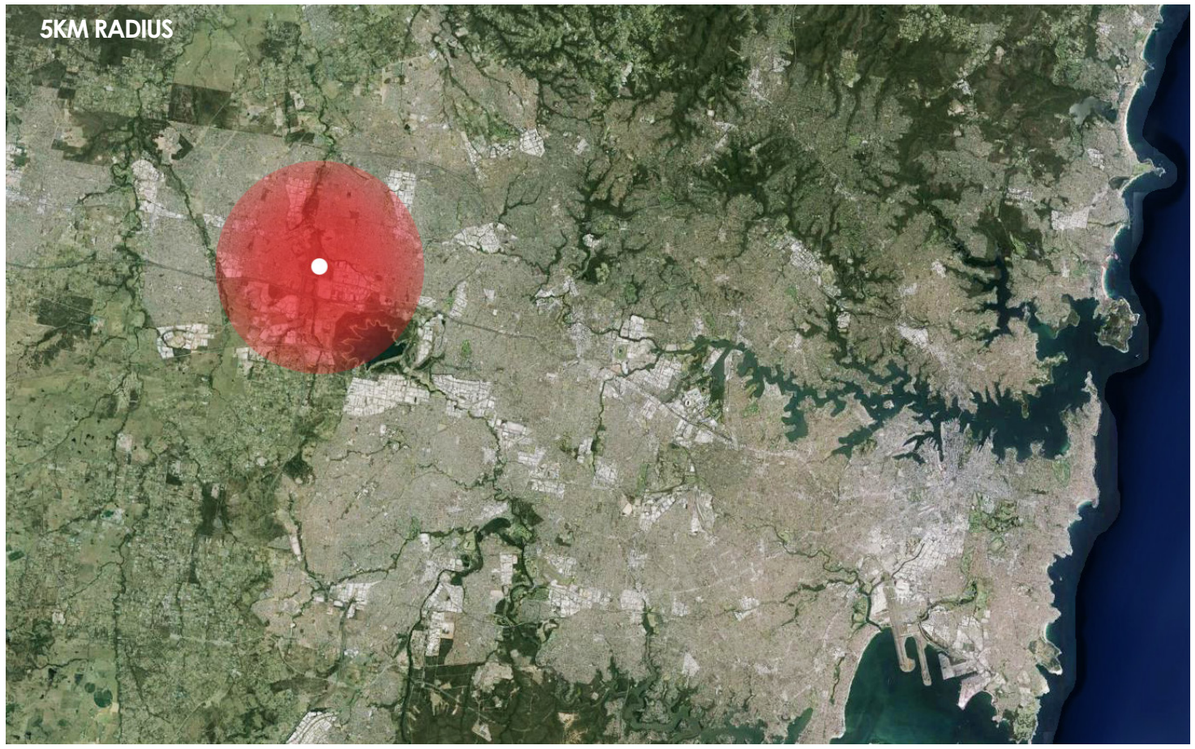
6. Maximise water reuse and enhance biodiversity
The zoo will be engineered to maximise the re-use of water on site through a number of water saving and recycling strategies. Large new areas of native and exotic planting will greatly augment and enhance existing vegetation communities



Extent of Works

2. Site Context and Analysis

Existing Condition Diagrams



Site Greater Context

The Sydney Zoo is located in Blacktown, a high growth area of Western Sydney with a large demographic of young families. The site is approximately a 37Km drive from the Sydney CBD and will become an attractive recreational destination within the Western Sydney area.

5km Catchment area around site

Western Sydney is home to 2.2m people and is the highest growth area of Sydney. By 2036 the population is forecast to reach 2.96m. The greater part of this growth will be in Blacktown (the location of Sydney Zoo), Camden and Liverpool Local Government Areas (LGA). These LGAs contain the North West and South West Growth Centres and developing regional centres, including Parramatta and Penrith. Within the immediate vicinity of the site there are 2 train stations, Doonside station and the nodal Blacktown station making Sydney Zoo attractively placed to become a well visited recreational facility.

5km Catchment area around site

Although Western Sydney has a significant population it is under represented with recreational, cultural and tourist facilities. It is common place for people to travel out of the area to visit recreational infrastructure. Sydney Zoo will be a complementary addition to the new Bungarribee Precinct with the new 'Super Park' being constructed directly to its north as a part of the Western Sydney Parklands masterplan. Along with the new Wet and Wild waterpark and the Blacktown sports precinct, Sydney Zoo is set to reinforce Blacktown as a significant new tourism and recreational destination.

Existing Site Conditions

The 16.5ha Site sits adjacent to the Great Western Highway and within close proximity of the junction of the M7 and F4 motorways. Doonside Road, sits parallel to what will become the entrance road on the eastern edge of the site. The site is very well located to be reached by Car, Bus or Tourist coach.

Existing Condition Diagrams

Existing Topography

The Sydney Zoo site topography has a significant slope of 1:30 from its ridge line to both the east and west of the site. The design of the Sydney zoo works with this topography to create a boulevard along the ridge of the site, connecting both the Entrance building and Restaurant at the highest point of the site. Both buildings will afford views over near by animal exhibits. The topography also allows for a spectacular 180m long elevated walkway over the western part of the site which will be accessed through a short ramp. Water filtration and re-use systems will take advantage of the site slope to gravity feed water into a wetland facility at the low point of the site.

Flood Risk

The Sydney Zoo masterplan has ensured that all animal exhibits,Buildings, pedestrian walkways and public areas are above the high risk and medium risk flood zones. A small section of the designed car-park encroach into the low risk flood area. This space is designed to be flood-able and pose minimal risk to safety. A detailed site wide water strategy has been prepared by Lyndsay Dynon.

01 / Grey Box - Forest Red Gum, Grassy Woodland on Shale
Condition - Moderate good to Medium Poor

02 / Forest Red Gum, Rough Barked Apple, Grassy Woodland on Alluvial flats
Condition - Moderate good to Poor

Existing Vegetation

There is a significant amount of remnant vegetation within the Sydney Zoo site boundary. The ambition of the design is to maintain and augment as much of this vegetation as is practical. Where possible existing pockets of vegetation will be linked through the addition of native tree species and understory planting to create rich habitat corridors.

Existing Vegetation Removed

Remnant vegetation will need to be removed in some sections of the site. We will aim to offset this removal within the site - linking remnant vegetation patches with new habitat areas and adding over 800 new trees. A detailed report has been prepared by ELA outlining the impact of vegetation removal and the subsequent planting of new native species in this area.

Proposed Condition Diagrams

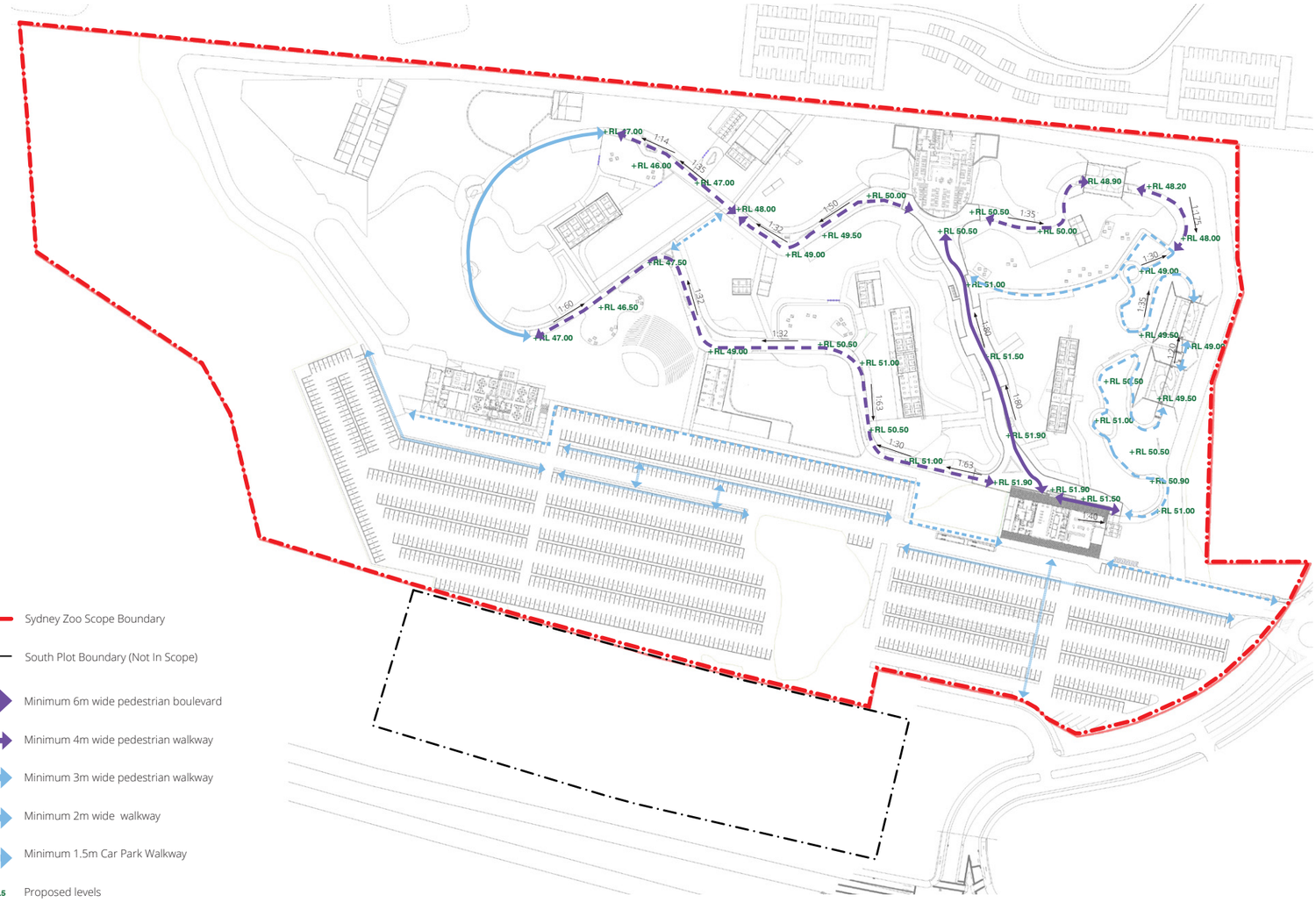
Pedestrian Access

Access through the park has been considered with regard to providing both clear ways of reaching destinations within the zoo and of moving easily through the precinct.

The pedestrian path network within the zoo has been designed to be one directional , clear and generous in width. All pathways within the zoo will be a minimum of 4m wide to comfortably accommodate all visitors in peak periods. One of the landmark features of the zoo will be a 180m long elevated walkway, giving visitors a tree top view of the sprawling African grasslands exhibit. This walkway will be easily accessible from a flush interface between the main pathway

The site falls away at a grade of 1:30 to both the east and west of the main entry boulevard. A major initiative of this project is to create easy, walk-able pathways throughout the park. Re-grading has meant that a maximum slope of 1:21 has been achieved across all walkways.

There will be two emergency egress points to enable quick exit from the ZOO. One to the North and one to the South of the park.



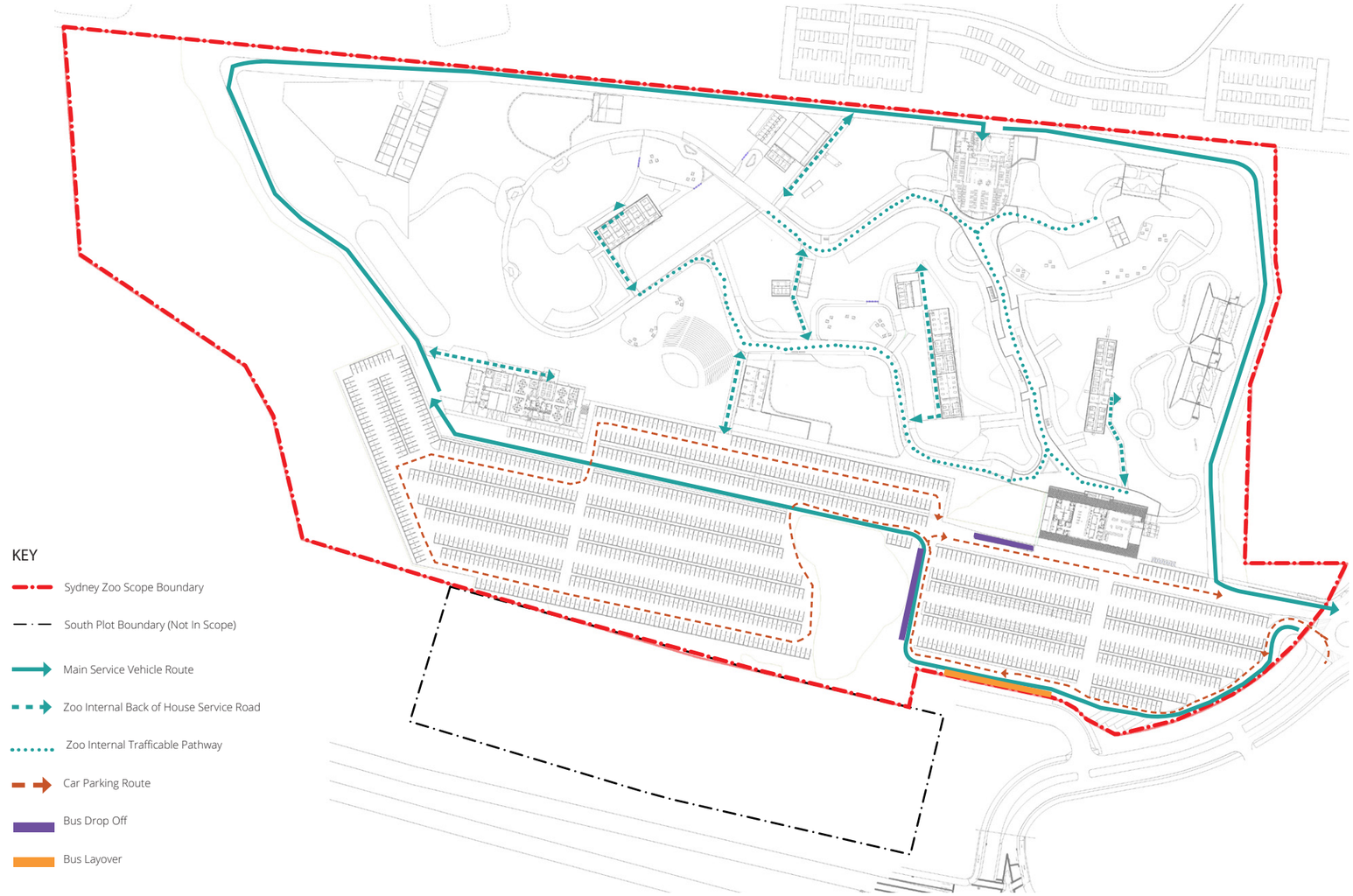
Vehicle Access

The Sydney Zoo is easily accessed from the M4 motorway by car. A generous car-park will accommodate 1300 vehicles as well as spaces for large coach and mini bus parking. A report has been prepared by GTA consulting, identifying visitation modelling and transportation requirements.

Car-park isles will be identified clearly through the use of native understory and tree planting, providing a clear and easily navigable layout.

A generous service road circles the park providing back of house access to the restaurant, service yard and exhibits. This road is two-way, providing required access for both large service trucks and emergency vehicles.

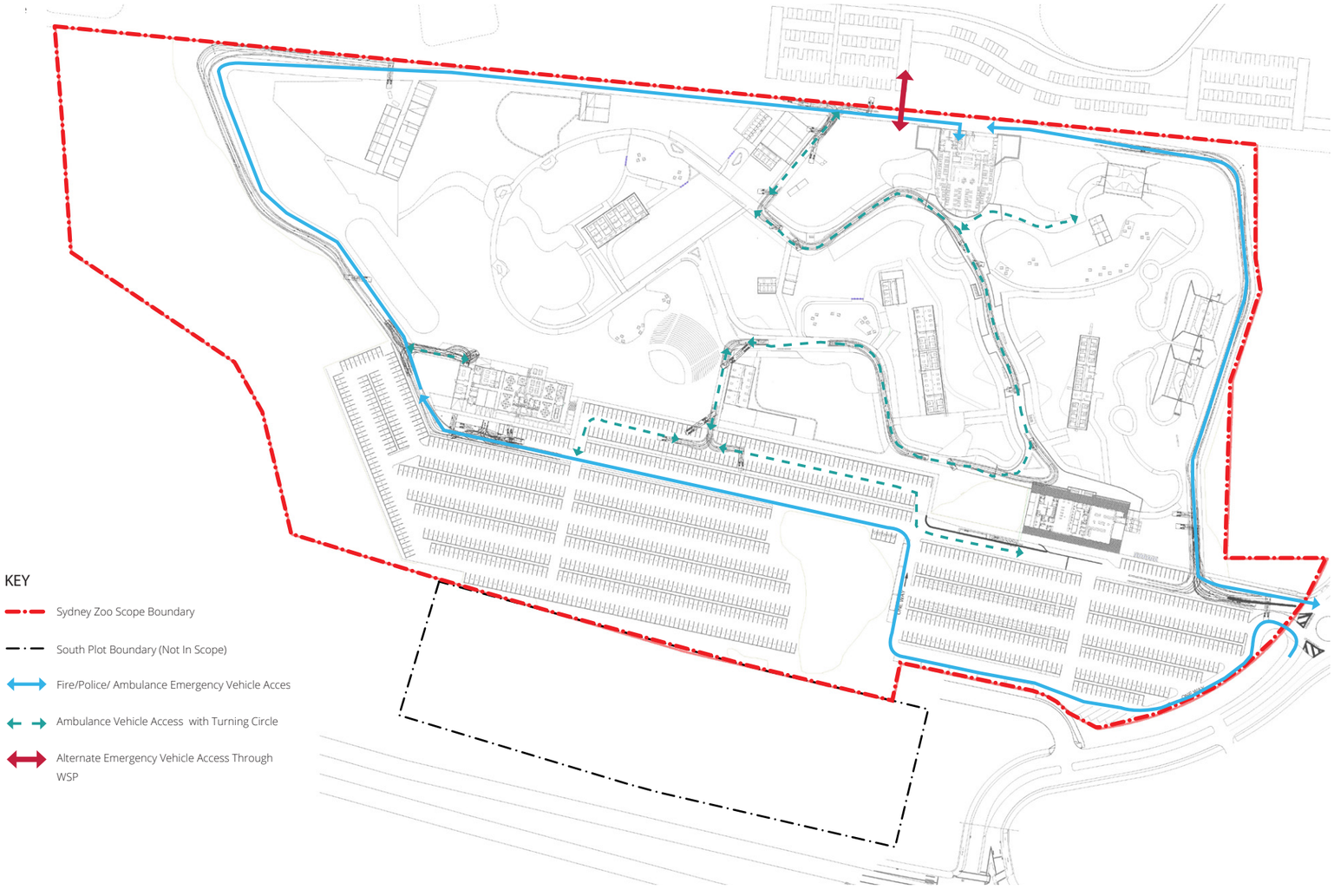
Back of house roads have been designed through the park to allow for access to Back of House animal accommodation and exhibits.



Emergency Vehicle Access

Emergency vehicles are able to gain entry to the park through 2 access points. One from the Northern part of the service road and one from the car-park to the South.

Ambulances Emergency vehicles will be able to move through the wide pedestrian pathways when necessary.



Emergency Pedestrian Egress

Pedestrians will be able to exit the site at 3 points in the case of an emergency. These exit points have been located at strategic points around the site to enable quick escape when necessary. These exit points will be separated pedestrian only paths so as to have no conflict with vehicles

The 3 exits will be located at the the southern end of the site with the main emergency exit being through both sides of the entry building which will be fully opened during an emergency. The other located to the South East of the site, exiting into the carpark.