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## Paignton Zoo Savannah! Mixed Species Exhibit Design and Access Statement April 2016

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# Introduction:

## Preface

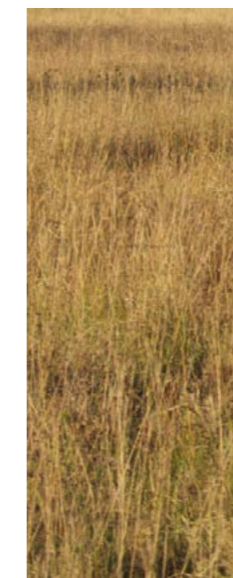
This document should be read in conjunction with the architectural drawings and other reports produced by the relevant design team members in support of the application, including:

- Flood Risk Assessment**
- Archaeological Statement**
- Ecological Statement**
- Arboricultural Impact Assessment**
- Tree Survey**
- Tree Protection Plan**
- Proposed Planting Plan**

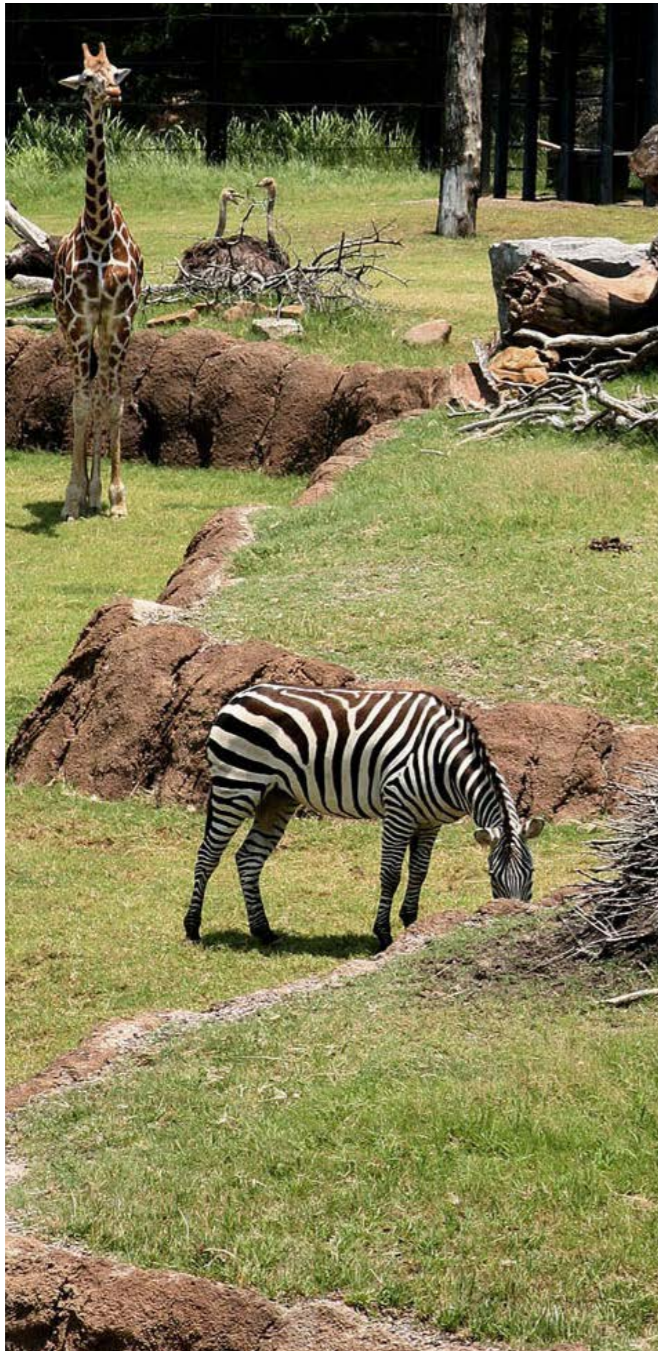
This document supports the application of detailed planning permission for the alteration and combination of several existing animal exhibits in Paignton Zoo into a mixed species exhibit.

The purpose of this document is to assist Torbay Council and other interested parties in understanding and appraising the design. It outlines the design aspirations for a new mixed species exhibit which will create an immersive and educational experience for visitors whilst responding to the individual needs of the animals, the constraints of the site and the objectives of relevant planning policy.

It aims to describe the scheme's design principles and provides insight into its layout, appearance, accessibility and underlying themes.



## Introduction: Brief



The overarching requirement of the brief is to combine and alter a number of existing exhibits within the zoo into a mixed species exhibit themed on the African Savannah. The aim is to create the impression of a single integrated area, displaying exclusively African animals and with a landscape planted and themed to match. Boundaries between animals and the public will be designed in such a way as to appear visually unobtrusive in order to amplify the immersive experience enjoyed by visitors to the zoo

The major theme of the exhibit will be: Living with Wildlife. The intention is to demonstrate how, with due care, planning and consideration, it is possible for human beings to co-exist with wildlife and to use a specific exemplar from the African continent to illustrate it. The exemplar to be used will be the Matopos Hills in Matabeleland, Zimbabwe.

The reasons for this are:

- The Whitley Wildlife Conservation Trust (Paignton Zoo's parent charity) supports the Dambari Wildlife Trust which is based in Bulawayo, Zimbabwe, and carries out conservation and education work in the Matopos Hills
- The Matopos (or Matobo) Hills, a recognised world heritage site and a National Park, has some of the most extraordinary rock landscapes in the world, which could provide an apposite and striking background to the exhibit
- The last surviving populations of white and black rhinoceroses in western

Zimbabwe are in the Matopos Hills

- Matabeleland, in which the Matobos are situated, has a beautiful indigenous style of African art – Ndebele – that will provide an attractive theme to visitor areas of the new exhibit

The theming of the exhibit will be based heavily around Ndebele. Ndebele art uses primary colours – red and dark red, yellow to gold, a sky blue, green, and sometimes pink.

The patterns are one of the most important aspects in Ndebele communication through painting. The patterns are geometric and are usually repeated throughout their design with only a very slight variation and different colour choice.

Cave paintings and unusual rock formations feature in the Matopos Hills and these will also be included in the theming of the exhibit. The use of earth colours, such as yellow ochre, red ochre, terracotta, burnt umber and natural greens, will feature throughout.

It is proposed that a wide variety of African animals, mostly mammals and birds, will be exhibited, some of which will be new to Paignton Zoo's collection. However, the key animals will be: elephant, black rhino, white rhino, Rothschild's giraffe, Hartmann's mountain zebra, armadillo and vulture.

The following messages will provide the impetus for visitor engagement within the exhibit which

will be delivered through a combination of signage, presentations and social media, etc.:

- 'Why Biodiversity Matters'
  - o Interconnectivity between species (e.g. food chains at a very simple level)
  - o For the local economy (tourism and trade)
  - o Provision of resources such as building materials, medicines, food
  - o Local cultural/spiritual beliefs
  - o Value of plants/local knowledgeWith the overall message that humans should learn to live alongside wildlife; the benefits are mutual and strong.
- 'Conservation Advocacy'
  - o The greatest threat to rhinos, and many other animals and plants, is the illegal wildlife trade
  - o Rhino horn does not have any more medicinal properties than human hair
  - o The only surviving rhinos in western Zimbabwe are in the Matopos Hills
  - o Conservation works: The white rhino was once the rarest large mammal on the planet, but it is now the only rhino that is not Critically Endangered
- 'About WWCT & PZ':
  - o Paignton Zoo is part of the WWCT
  - o WWCT supports Dambari Wildlife Trust
  - o WWCT has in situ projects both in the UK and overseas
  - o Paignton Zoo breeds black rhino for conservation purposes

**“To create a ‘Panorama of African animals’ that offers our visitors opportunities to look out over an aesthetically pleasing scene of animals uncluttered by traditional fences”**

**Context:**  
**Site plan**



**Context:**  
Site overview and photos



**Context:**  
**Existing site photos**



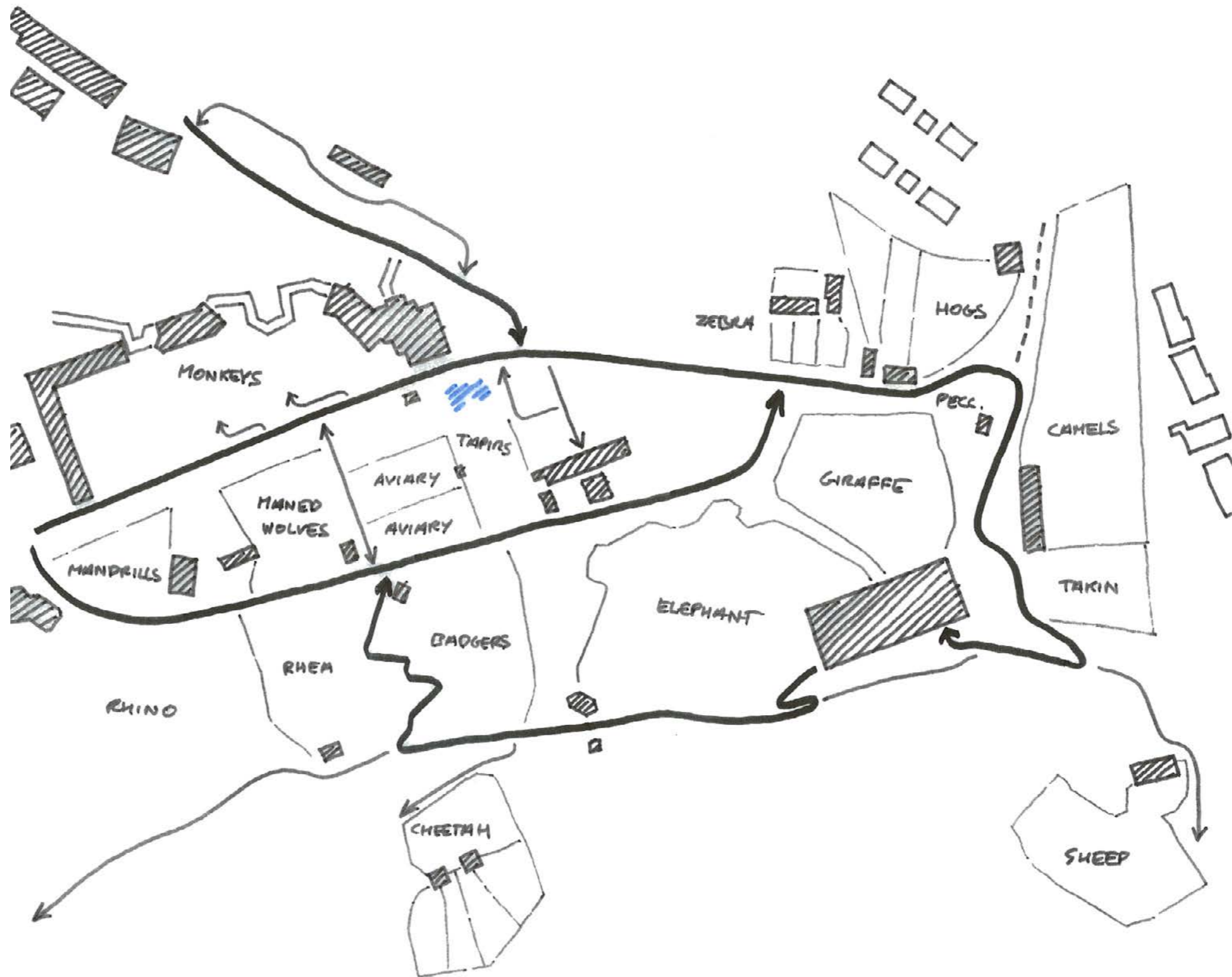
**Context:**  
**Existing Buildings**



## Analysis: Existing routes

Routes through the zoo are used both for pedestrian and vehicular access. Many of the existing pathways are long linear routes that aid in orientation but do little to create a sense of immersion or discovery. Exhibits are viewed concurrently with others and from a distance along long pathways. A number of routes run in parallel between animal exhibits without a clear primary route, meaning many visitors either bypass an exhibit or circle back along routes already taken.

Fences and barriers along these routes are a mixture of high and low fences, double fence lines and ditches. Sections of some of the primary pathways are steeply sloping, due to the rolling topography.



Right and above: A number of the existing pathways run in long linear routes in parallel between animal exhibits



## Analysis: Scattered Exhibits

The exhibits in this area of the zoo are primarily segregated with few animals sharing a common paddock. Large mammals are primarily African, with the some key exceptions being the European badger, takin, tapir, capybara and peccary. Opportunities exist for some of the paddocks to be joined creating a larger exhibit which would allow visitors to enjoy a more immersive and connected experience.



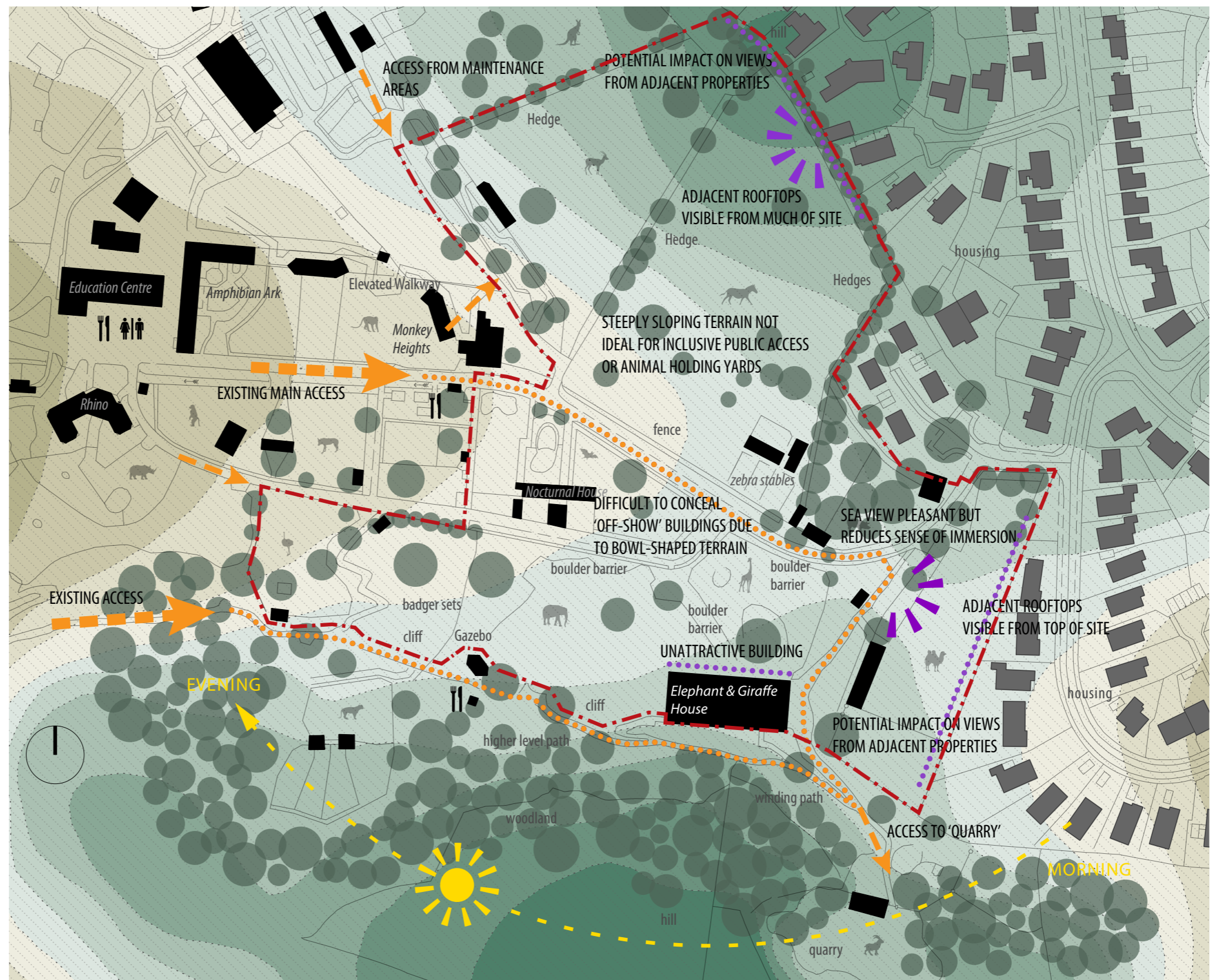
Left and above: Exhibits are primarily segregated with few animals sharing a common paddock

## Analysis: Constraints & Challenges

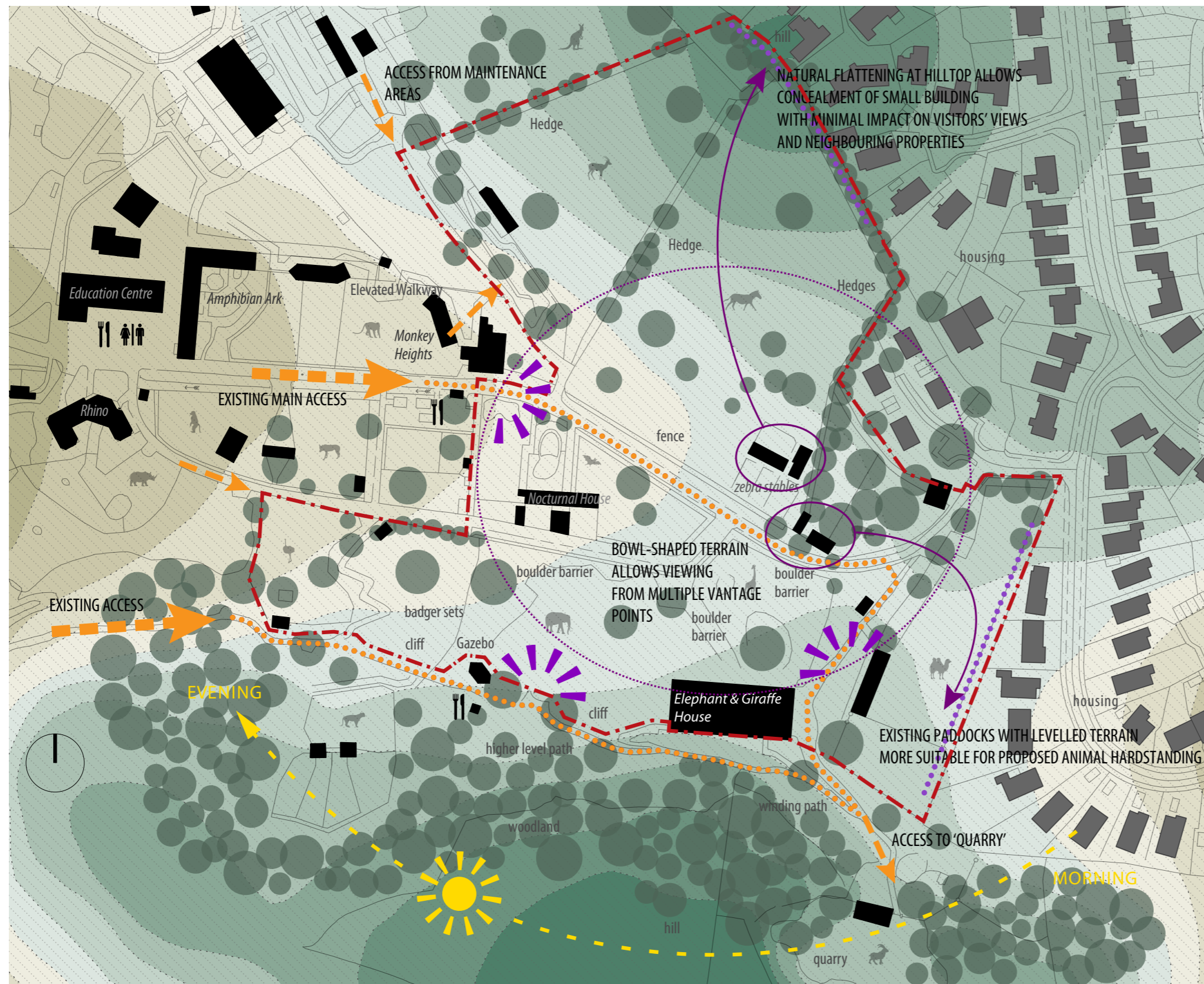
The site is bounded on the south by wooded hillside, the east and northeast by housing and on the west and northwest by adjoining areas of the zoo. There are a number of challenges presented by the nature and setting of the site. Back gardens of the adjoining properties typically abut the site boundary, with a double fence separating those properties from the adjacent animal paddocks. Any development against these edges will need to be sensitively considered in the context of views from these properties. A further challenge thrown up by the proximity of these properties is that the sense of immersion is diminished by the buildings' visibility between the foliage along the boundary. Views of the sea to the east, although pleasant, will also reduce this sense of immersion. The rolling terrain is challenging both in terms of inclusive access for disabled visitors and in meeting animal husbandry requirements for level containment yards. A number of the existing buildings are located towards the centre of the site area and will need relocating in order to allow for a visually uninterrupted exhibit.

**The rolling terrain is challenging both in terms of inclusive access and meeting animal husbandry requirements**

The site and surrounding area contains numerous trees and a variety of other foliage. Some of the trees have been identified as being of significant value and consideration will need to be given to their retention within the proposals. The majority of the remaining trees are appropriate to the aesthetic required by the exhibit and should be proposed for retention (the grasslands of the Matopos are characterised by rocky outcrops with isolated trees and small wooded areas dotted between). In developing the layout of animal paddocks and visitor routes, a high degree of consideration should be given to the location of significant and otherwise appropriate trees.



## Analysis: Opportunities



The topography of the site, although challenging from the perspective of access, could allow for a combination of routes at various levels and provide the visitor with panoramic views across the entire exhibit. As noted on the previous page, trees identified as being of value should be retained within the proposals and could be appropriate to the desired aesthetic. These retained trees could also act as focal points, nodes or as screening between separate sections of pathway. This screening would allow visitors to enjoy the animals from different vantage points without losing the sense of immersion due to direct views of other visitors. The opportunity also exists for further new planting to reinforce this screening.

Relocating large stables towards the perimeter of the site would allow the central exhibit sufficient space without interruption by sizeable buildings, fences and holding yards

Although the site has very few level areas, some terrain is more shallowly sloped towards the far north and south-east. These areas might be more appropriate for stables and associated animal yards. The natural terrain in the south-east was historically more steeply sloping but has already been levelled in part to provide a paddock for the Mishmi takin. The location of these areas towards the perimeter of the site, as well as being more appropriate to this use, would allow the central exhibit sufficient space without interruption by sizeable buildings, fences and holding yards.

# Original Proposal: Layout

The existing natural characteristics of the site are used to enhance visitor experience of the Savannah.

Animals are seen as part of the landscape which they co-occupy with the viewer.

High level viewing points including a cafe and savannah overlook are accessed from pathways off a main drive which weaves through the savannah exhibit. The design also includes a dry 'river bed' running down through the valley, a watering hole and a themed village which will provide further viewpoints as well as visitor facilities. Many of the existing stabling blocks were retained within this proposal

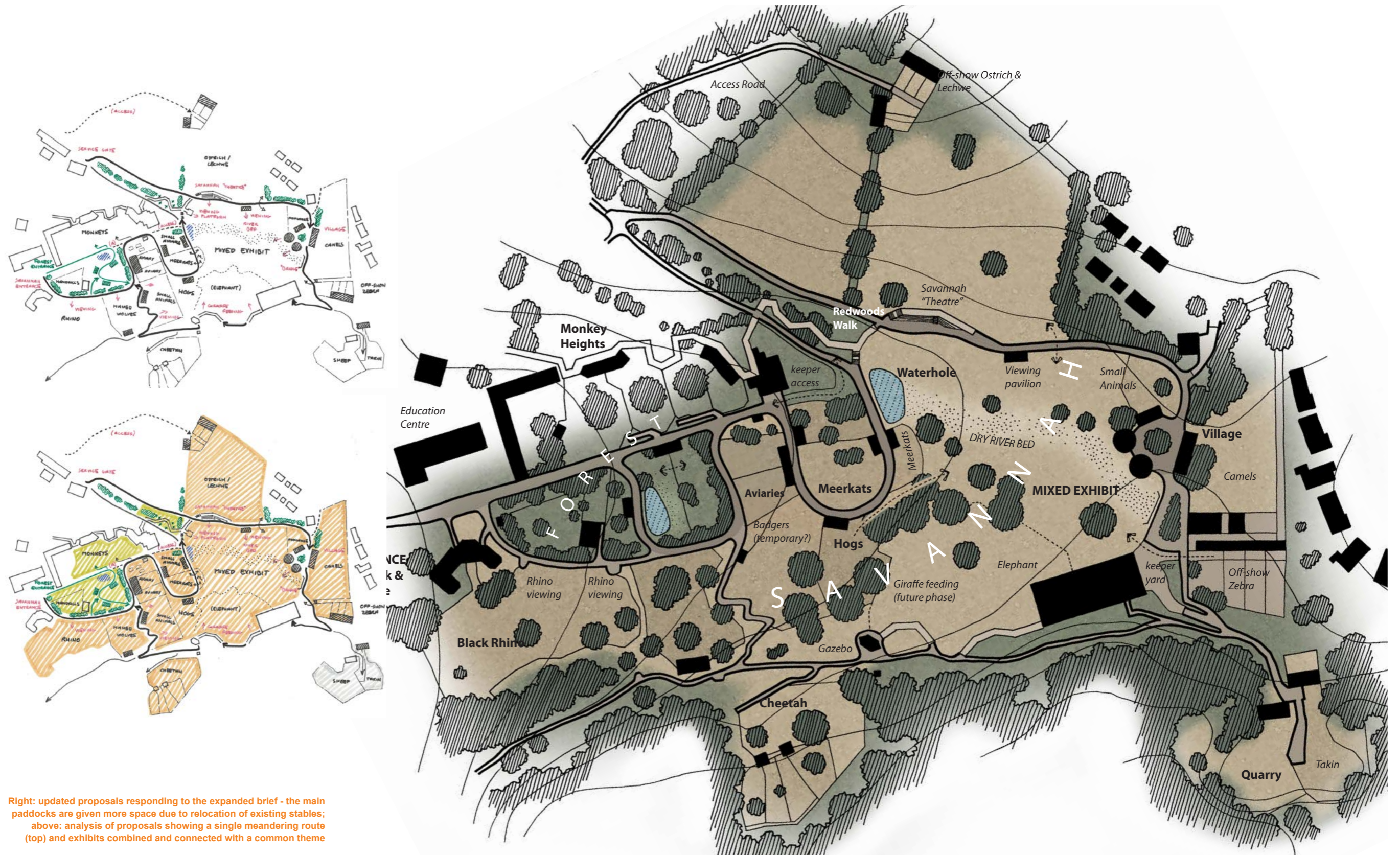
Following early development of this proposal it was clear that the route up to the top of the northern paddock would require significant amounts of pathways winding due to the large level change. This would prove challenging both in terms of disabled access and in terms of cost. The proposal also considered the incorporation of a safari ride, however the overall scale of the exhibit would be unlikely to support the additional space required for queueing and the view was that this would compromise the overall visitor experience.

The brief was then expanded to include the quarry at the south-east corner of the site. This freed up the opportunity to relocate the takin exhibit and allow the zebra stables to move, creating more space for the main savannah paddock. The extent of the savannah exhibit also expanded to the west, allowing creation of a meandering pathway that passed smaller birds and mammals before opening onto the main mixed species area.



Right: Initial proposal showing a single main route with a panoramic lookout point at the top of the current zebra paddock

# Expanded Brief: Initial Layout



Right: updated proposals responding to the expanded brief - the main paddocks are given more space due to relocation of existing stables; above: analysis of proposals showing a single meandering route (top) and exhibits combined and connected with a common theme

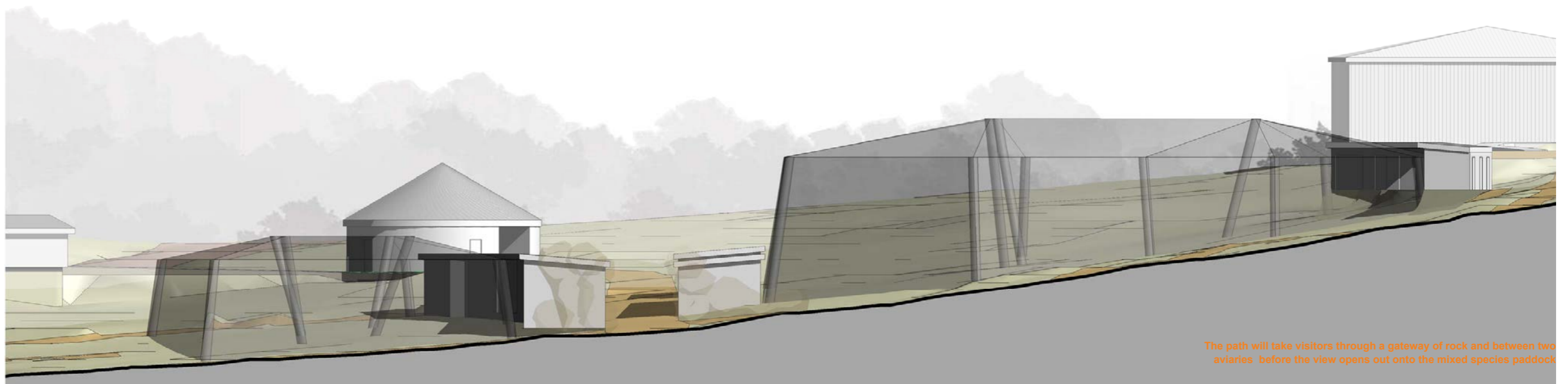
Expanded Brief:  
Updated Proposal



## Expanded Brief: Updated Proposal

The final updates to the scheme included the addition of two large aviaries at the entrance. On the approach to these aviaries a new path configuration has been added to remove the circular path around the mandrill enclosure and create a feature around one of the finest existing trees on the site, a category A oak. Off this will be a viewing area into the monkey paddocks to the north, the mandrills and the maned wolves.

The visitor will then continue around the path, past a rhino viewing area and through a themed rockwork wall (shaded on the below image to show the buildings behind) which will act as a gateway to the Savannah exhibit. The site area was also extended up into the north-east corner to include the group of bungalows at the end of Brantwood Close. These properties will be demolished to make way for an education facility with associated screening planting along the northern edge.



The path will take visitors through a gateway of rock and between two aviaries before the view opens out onto the mixed species paddock