

# 1. Executive Summary

## **What is Biota!**

Biota! is a showcase for aquatic conservation programmes throughout the world. It will offer the visitor a uniquely entertaining, informative and inspiring experience of the aquatic world, housed in an extraordinary building designed by world leading architects Terry Farrell and Partner. The attractive exhibits will be underpinned by conservation and research, helping the visitor to understand more about the aquatic natural heritage and how we can conserve it. Through active conservation, research and education, Biota! will make a difference to our understanding of the aquatic world, and to our ability to protect it. This 14,000 sq m facility has been designed to provide a home for living plants and animal, using advanced technology to mimic different habitats. It will house over 550 species in 70 exhibits, within an environment of rich foliage and free ranging birds and other animals. Docklands Light Railway at a dedicated station

Biota! will show the global diversity of aquatic life through four strongly contrasting biomes. Each biome will represent a complete eco-system: there will be trees and other plantings, fish, invertebrates, reptiles, amphibians, mammals and birds. Where possible, the habitats created will be exact replicas of specific locations – streams, lakes, rivers, coral reefs or oceans – with detailed surveys conducted in the field enabling the closest possible similarity to the wild. Innovative design and interpretation will enable visitors to experience some of the world's most stunning and fascinating aquatic habitats.

This project is more than just an exciting visitor attraction and conservation centre. This landmark building within a major regeneration project is itself set within the heartland of the 2012 Olympic development. Biota! will contribute to the economic development of Silvertown Quays and the London Borough of Newham.

As a subsidiary charity of ZSL Biota! will benefit from ZSL expertise in running visitor attractions, managing animal collections, undertaking scientific research and running conservation projects in the field.

The application to HLF focuses on the areas of Biota! which relate to the natural heritage of the British Isles and Atlantic.

## **Benefits to Visitors**

Biota!'s benefits to visitors will include:

- Biota! will be gateway to conservation projects throughout the UK and the rest of the world will be created in the London Borough of Newham, giving access to our rich natural freshwater and marine heritage in one of London's most deprived areas.
- Visitors will access ordinarily inaccessible marine heritage
- Biota! will be multi-generational, multi-cultural, and accessible to everyone, regardless of education, interests, learning style and special needs
- Interpretation will be innovative taking advantage of new technology to enhance visitor learning experiences.
- Allowance has been made for a high level of exhibit renewal to ensure that displays remain exciting and relevant.
- Visitors will be given the opportunity to understand and engage with important conservation issues.
- Learning and outreach, including a full range of life-long learning programmes and ongoing work with the local community and schools will be core activities
- A full range of concessions, including reduced entry for residents of the London Borough of Newham, and free entry for pupils in Newham's schools are planned
- Biota! will provide iconic architecture and an innovative visitor experience.

### **Benefits to Natural Heritage**

Biota!'s UK heritage asset is the wildlife and habitats which have evolved in the British Isles through long interaction between people and nature. Biota! will deliver the following conservation benefits:

- Help to protect species in danger of imminent extinction; managing captive populations of globally extinct species and supplementing endangered populations through captive breeding programmes and supporting the implementation of the UKBAP
- Help inspire and raise awareness in visitors about significant conservation issues
- Promote an informed and responsible attitude and behaviour to a range of environmental issues facing aquatic species and habitats
- Contribute directly to conservation research projects in the wild and increasing taxonomical, behavioural and natural historical knowledge
- Generate income of c.£400,000 pa to support global Conservation Programmes
- A Sustainable Acquisitions Policy, ensuring that all livestock will be acquired ethically and sustainably and which will contribute to ongoing programmes conserving species both in the wild and in captivity. This is a benchmark policy setting the parameters for best practice in this sector.

## **The Market**

The latest market analysis [is provided in Appendix 2 of the Business Plan](#), and gives an overview of the demand and supply context in which Biota! will operate.

### The Demand Context

- Levels of interest are high: nine out of ten people from the target market and three out of ten in the general public say they are certain or very **likely to visit**.
- 20 million people live within a two-hour drivetime of the site, including 2.3 million households with children.
- Levels of repeat visits tend to be less for aquariums than visitor attractions in general. For this reason a highly renewable visitor market and product renewal are important to long-term sustainability.
- Although world events have impacted the overseas tourists market negatively, recent indications are that the market has been recovering.
- Overseas visitors are less likely to visit Biota! than domestic visitors.
- Market research by MORI shows that Biota!'s location will not act as a deterrent to visitors.

### The Supply Context

- Of some 34 aquariums in the UK, the vast majority are of only local or sub-regional importance. Most of them are located in coastal resort towns and cities where they provide an all-weather attraction for visitors and residents
- The London Tourism Strategy now explicitly addresses the question of spreading tourism beyond central London. Biota! will both strengthen this process - by providing a unique, world-class attraction that is outside the centre but easily accessible - and benefit from it
- East London is the Mayor's priority area for development, regeneration and infrastructure improvement

## **Policy Context**

The local, regional and national policy context has been researched to ensure that Biota! responds to and helps achieve the urgent economic, cultural, leisure and biodiversity priorities of a range of bodies including London Borough of Newham, Greater London Authority, DEFRA, English Nature and the Convention on Biological Diversity.

## **The Project**

### **Design Development**

A Design Statement for Biota! and the associated landscape and car park in the London Docklands, has been prepared by Terry Farrell and Partners and can be found at [appendix](#)

X. It presents a holistic, integrated master plan, building and landscape proposal for this important new development.

The vision for Silvertown Quays is to create a fully integrated vibrant mixed-use quarter for this rapidly expanding area of East London. Once realised, the new community at Silvertown Quays will contain approximately 5,000 residential units dispersed over five districts. Silvertown will be anchored by Biota! - a World Class attraction for London - and will be fully integrated with neighbouring communities and city-wide transportation networks.

### **Proposed Design**

The building is planned around three levels and comprises two impressive and imaginatively inter-linked pavilions that offer large public spaces for flexible use. The metaphor for the design concept is the earth's environment in microcosm. The enclosures to the two day lit exhibits comprise lightweight regular crystalline formations rising from the solid strata below.

The building is organised in three horizontal layers interconnected by a central vertical foyer. The exhibition path is non-linear and non-prescriptive - any exhibit in any order can be visited without dissolving the underlying message of Biota!.

There are four exhibit areas within the building reflecting four representative diverse world habitats - the British Isles, the Amazon, the Indo-Pacific, the Atlantic Ocean. A fifth exhibit - Living Conservation - carries the underlying message of Biota!, that of conservation, environmental sustainability, education and research.

A dynamic foyer separating the two exhibit pavilions incorporates exhibit programme and provides a link between the four exhibits by means of bridges and lifts. Situated in the foyer is the visitor ticketing facility; there is also direct access to the rest of the public facilities situated on this level including the restaurant, retail, and cloakroom and public WCs. The foyer rises the full height of the three exhibit floors of the building. A series of meandering bridges and a pair of lifts transverse the space to create a varied and unexpected visitor experience.

### **The Exhibits**

The exhibits at Biota! provide an opportunity for visitors to explore and experience major freshwater and marine environments from around the world. Specific conservation and research themes run throughout Biota!, demonstrating the underlying mission and wider activities of ZSL and Biota!. This is the focus of the Living Conservation area, a 'behind-the-scenes' experience for visitors to learn about the important research and field conservation work being done at Biota! and around the world. Educational areas have been incorporated into each of the exhibit areas for learning experiences surrounded by living animals and plants. Rainbow Reef is an innovative mini-aquarium participation and play area for younger visitors, to introduce 4-7 year olds to the wonders of the aquatic world.

Educational programmes, classes, field trips, and outreach activities complete the exhibit experience.

The goals of the exhibits are to:

- Increase the public's interest, awareness, and literacy about our aquatic environments;
- Be multi-generational, multi-cultural, and accessible to everyone, regardless of education, interests, learning style and special needs;
- Provide experiences that are engaging, relevant, and personalised;
- Be a model of excellence in public-private partnership, educational leadership, sustainability, and commitment to community;
- Inspire the visitor to learn more about the aquatic environment and ultimately change their behaviour;
- Demonstrate the leading role of Biota! in global conservation, research and conservation education.

A full account of all the exhibits can be found in Chapter 5 of the Design Statement at [appendix XXX](#).

### **Development over Time**

In order for Biota! to be responsive to emerging conservation issues as they emerge and to optimise its financial performance in the medium and long term it will be essential that the visitor experience evolves and improves over time to:

- reflect developments in the subject field thus ensuring the material remains current and relevant
- provide an incentive for visitors to make return visits thus maintaining overall visitation levels.

Consultation with the world's leading aquariums has emphasized the importance of developing the visitor experience over time. Biota!'s exhibits are designed to include an element of natural renewal. The corals in the Indo-Pacific area will grow more visually striking over time. The exotic vegetation in the Amazon jungle will develop as the planting matures. In addition, several options for major development are available:

- The part of the Biota! building initially occupied by administration, next to the entrance foyer, can be converted into a 500 m<sup>2</sup> flexible space suitable for temporary exhibitions and similar uses. The area will be designed and constructed to facilitate this change of use. Alternative space for administration would be leased in the locality.
- The building design makes it possible to perform a total overhaul of any one of the main exhibition areas without having to close others. Such a project could be funded

by a mixture of sponsorship, grant funding, and Biota!'s accumulated product renewal fund. This could take place in a period eight to ten years after opening.

There are a number of possibilities of creating exhibits outside the Biota! building. Ideas range from a seal exhibit in Pontoon Dock to creating an exhibit within Thames Barrier Park that could link Biota!, the park and River.

Product renewal is essential to secure the long-term future of Biota!

**Options Appraisal** check with Jess that 6.5 is up to date

### **Collections Management and Conservation Benefits**

Biota! will provide key benefits to conservation:

- Help to protect species in danger of imminent extinction; managing captive populations of globally extinct species and supplementing endangered populations through captive breeding programmes
- Promoting an informed and responsible attitude and behaviour to a range of environmental issues facing aquatic species and habitats
- Contribute directly to conservation research projects in the wild and increasing taxonomical, behavioural and natural historical knowledge
- Help inspire and raise awareness in visitors about significant conservation issues
- Generate income of c.£400,000 to support global Conservation Programmes
- Development of a Sustainable Acquisitions Policy, assuring that all livestock will be acquired ethically and sustainably and contribute to ongoing programmes conserving species both in the wild and in captivity. This is a benchmark policy setting the parameters for best practice in this sector.

### **Access Benefits**

Enhancing access – in its widest sense – to the diversity of the wildlife, habitats and landscapes is at the heart of the development of Biota!. This is reflected in two of its aims and objectives:<sup>1</sup>

- To deliver a world-class visitor experience and inspire visitors and the wider public to learn more about the aquatic environment and conservation, and to act to support conservation.

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<sup>1</sup> Business Plan Section 2

- To be a model of excellence in public-private partnership, accessibility, educational leadership and commitment to the Newham community.

### **Economic Benefits**

Biota! will deliver positive economic benefits to the Borough of Newham and to London. The creation of Biota! will deliver:

- 933 construction jobs
- 276 full time jobs
- Direct investment of £80 million
- 725,000 extra tourist day visits
- £13.7 million gross additional annual visitor spending

Non-quantifiable benefits include:

- Remediation and use of a contaminated, long-disused brown-field site.
- Enhancing quality of life in the Royals and in Newham.
- Strengthening Newham's brand image and civic pride
- Supporting Newham's regeneration and tourism strategies.
- Developing training and skills.
- Education and learning. The business plan projects more than 60,000 school visits per year, 6,000 of them by students at Newham schools.
- Creating a centre of conservation expertise and generating a stream of income for conservation projects in the UK and abroad.