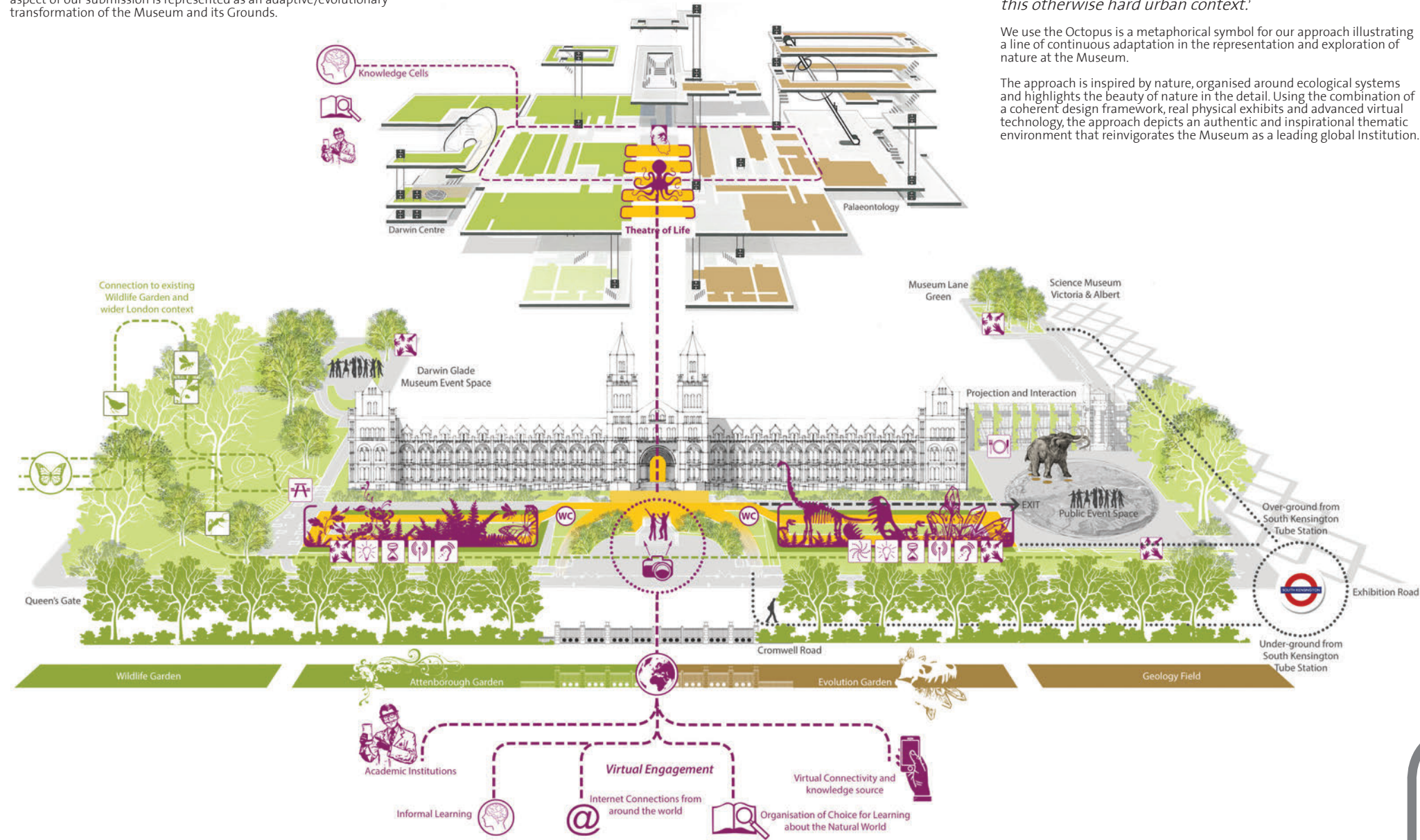


Evolution as a Vision

'...whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved.'

Charles Darwin - On the Origin of Species 1859

Darwin's concepts of Natural Selection, Adaptation and Evolution offer a powerful intellectual and creative framework for this project. Each aspect of our submission is represented as an adaptive/evolutionary transformation of the Museum and its Grounds.

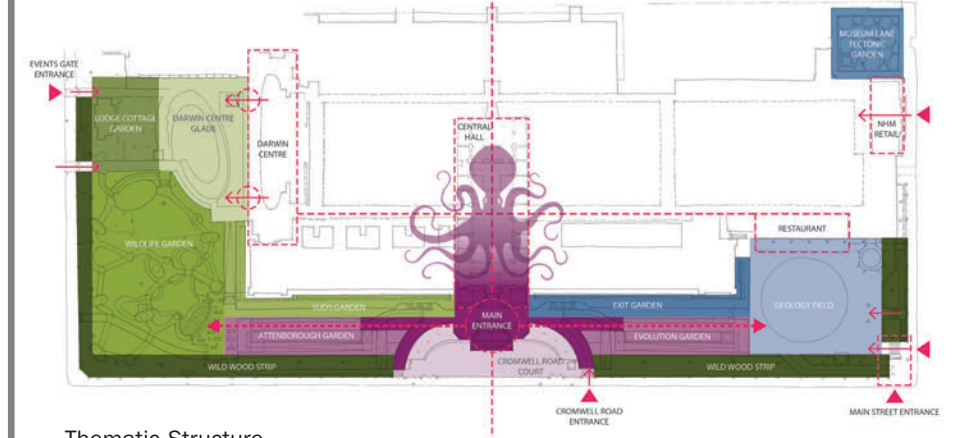


Garden of Natural Science - a new Civic Garden for London

'We imagine the Garden of Natural Science as a living, outdoor expression of the science, collections and learning experiences to be found within the Natural History Museum. At the same time it is a garden for the city and offers a unique public environment for London offering spaces of retreat, delight, tranquility and greenery within this otherwise hard urban context.'

We use the Octopus as a metaphorical symbol for our approach illustrating a line of continuous adaptation in the representation and exploration of nature at the Museum.

The approach is inspired by nature, organised around ecological systems and highlights the beauty of nature in the detail. Using the combination of a coherent design framework, real physical exhibits and advanced virtual technology, the approach depicts an authentic and inspirational thematic environment that reinvigorates the Museum as a leading global Institution.



Thematic Structure

We think there should be a transition from both the eastern and the western edges towards the centre culminating in the arrival area and the Central Hall.

This is envisaged as the Theatre of Life on Earth - Now and the Future.

In addition we envisage anchoring spaces in the SE and SW corners in which the respective narratives are highlighted. The SE corner becomes the 'origin' space and is typically hard and with potential for flexible use and the SW corner is an enhanced waterbody offering the focus for the life and biodiversity stories. This diagram works well with a water and sustainable drainage narrative with each part animated by different uses/types of water features. This simple arrangement sets the scene for the integration of the overlays of visitor access, exhibition, temporary events, servicing and operation of the Grounds.



Nature as storyteller: The Octopus

The Octopus is a metaphorical symbol for our approach. We understand Waterhouse and Owen reflected on the means to best represent the diversity and character of nature within the building and one of their references was ancient Minoan pottery typically decorated with striking graphic images of Octopus. Waterhouse went on to use the Octopus as one of the stencil patterns for the ceiling and as one of the memorable terracotta tiles that characterise the internal and external cladding.

The Octopus is also well represented within the Museum as physical exhibits of the real animals as well as extraordinary illustrations and descriptions. The beautiful Blascka glass Octopus sculpture in the Treasures collection and the Octopus souvenirs in the shops further underline the abiding fascination we have with this particular creature.

We cannot imagine a more appropriate genus than the Octopus to represent the modern age of global connectivity and virtual and augmented reality. It's otherworldly intelligence, shape shifting, colour changing, tentacle extending form is found all across the world. With its implied multitasking and connectivity it somehow perfectly represents the challenges and opportunities for the NHM. By imagining a virtual octopus we somehow imagine the future.

The legacy of curiosity and collection : The way a visitor will experience a museum is very personal. It depends on how they look, what/who catches their eye and what interests them. Connecting lines to build narrative around the collection can be done through subjects, stories or through the presentation of objects and media.

Beauty is in the detail : We understand Waterhouse and Owen reflected on the means to best represent the diversity and character of nature within the building. The visitor's entrance into the building is through the Gateway in the Waterhouse building; an extraordinary concentration of pattern, tessellation, hidden creatures and texture. These shapes and structure inspire the physical structures; of signage and templates. Its invitation to discover the detail of hidden light-hearted playfulness leads the tone of voice for interpretation.

Public Engagement

- from Home to the Central Hall, into the Museum and home again.

'There is an increased importance of real things as the primary asset for Museums - they are the real thing in a virtual world and make Museums more relevant rather than less - especially set in a globalised world which is increasingly homogenised and, in the case of nature, being depleted. The key is to present 'real exhibits' as not old and dead, but relevant to life and future.'

The concept of this 'authenticity meeting the virtual' with the democratisation of the museum through social media activity is clearly a key part of the Museum's current thinking. Our idea has evolved around the personal journey and curation of prescribed or self-generated experiences, building on the hidden joy and discovery of the architecture and incredible collection. We see this growing into a powerful concept for building anticipation prior to the visit and once you arrive how you are guided around the grounds and galleries. For example, you could tailor a journey around the Octopus or around iridescence or discovery trails that match the animals hidden in the architecture to species around the halls.

The Grounds become an important part of this sequence of events since the emphasis on the virtual world at home, along the journey to the Museum and increasingly in the Museum itself, suggests the experience in the Grounds should be very physical, tactile and textured. These spaces will be the first impressions of the Museum and its collection and will portray the 'bony truth' enriched by a tablet/smart phone augmented reality interface. The landscape places the objects giving visitors a glimpse of the world that we only know in our minds. Such experience enhances the messages through the organic/natural design and the material physicality, and works together with amazing technology interfaces. The signage, interpretation and wayfinding within the Grounds reinforce this approach through the graphical approach and can be accompanied by weather robust artwork, fossil casts, habitat... pretty much any

tangible installations that may be magically brought to life and that can all be part of the procession/ performance for busy days.

These external narratives would be linked to a massive and awe-inspiring immersive digital environment in the Central Hall - a virtual Theatre of Life on Earth. Within this space we imagine a large 3D matrix of LED suspended above the ground offering the opportunity to portray multiple selected species morphing within the space. We imagine a full sized virtual Blue Whale swimming, a rainstorm, a murmuration of starlings, a Sumatran Tiger leaping across the space, a Giant Octopus swimming and changing colour above our heads.

From this virtual world, the experience drops back into the tactile reality of real exhibits within the Central hall niches followed by the journey through the extraordinary collections with opportunity for further exploration through smart phone/tablet technology.



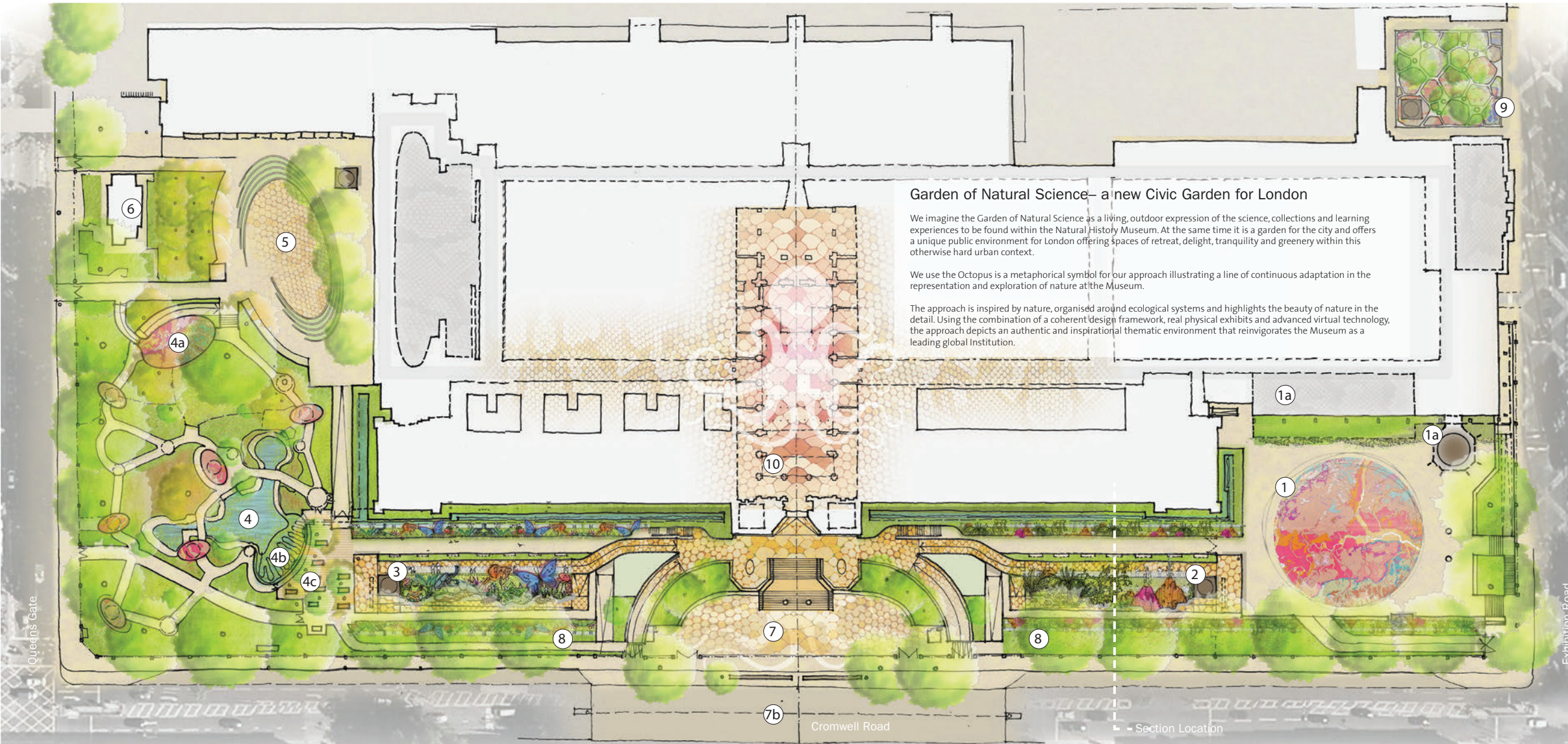
Concept

- Evolution:
- We consider the following key principles laid down within the original Waterhouse/Owen plans should remain the foundation of any new phase of the Museum Grounds;
 - The Cromwell Road Entrance is the most important point of entrance for the greatest majority of Visitors and Staff symbolising the great portal into the Cathedral of Natural History.
 - The Natural History Museum was designed within a Garden that differentiated this institution from the surrounding Albertopolis projects whilst symbolising an emphasis on 'life' and the wonders of nature.
 - The designs of the building and the organisation of the exhibits and narratives were meticulously planned to offer an authentic scientific, physical and emotional expression of nature and its diversity. This includes the organization of Origin/ Evolution to the east and Living Collections/Biodiversity to the west.
 - The Central Hall was originally conceived as an ensemble of all the collections in the Museum offering an extraordinary 3D family portrait of Life on Earth - past and present. It was a set piece index to the collections.

- 21st C Adaptation:
- The Cromwell Road Entrance should remain the principal entrance but should be adapted to allow 'Universal Access' through the entrance doors. This includes the virtual entrance to the Museum as portrayed by the recent NHMAlive App.
 - The Museum's 'Garden' should evolve to become a green expression of the aims and objectives and workings of the Museum whilst presenting an inspiring setting for themed narratives, programmed events and informal leisure use.
 - Any design for the evolved fabric and experience of the Museum should utilise both physical and virtual technologies to further the science, expression and interpretation of the natural world and nature's wisdom. This relies on the articulation of the authentic and the virtual and the democratisation of the museum through social media activity. The original concept for the organisation of collections should be extended into the Grounds.
 - The Central Hall is reclaimed as a Theatre of Life on Earth showcasing live and topical issues through the use of extraordinary new interpretive technologies alongside touchable and tangible real exhibits. This is an exciting index to the collections but also the live work of the scientists and the outreach projects. The foundations for this have been set by the recent NHM App that uses the Central Hall as a key setting for virtual 3D interpretation of extinct creatures.

The Garden of Natural Science

Concept and Vision

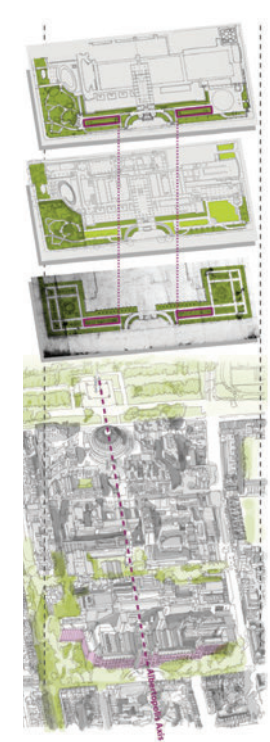


Garden of Natural Science – a new Civic Garden for London

We imagine the Garden of Natural Science as a living, outdoor expression of the science, collections and learning experiences to be found within the Natural History Museum. At the same time it is a garden for the city and offers a unique public environment for London offering spaces of retreat, delight, tranquility and greenery within this otherwise hard urban context.

We use the Octopus as a metaphorical symbol for our approach illustrating a line of continuous adaptation in the representation and exploration of nature at the Museum.

The approach is inspired by nature, organised around ecological systems and highlights the beauty of nature in the detail. Using the combination of a coherent design framework, real physical exhibits and advanced virtual technology, the approach depicts an authentic and inspirational thematic environment that reinvents the Museum as a leading global Institution.



Context

Whilst we fully recognise the significance and gravity of the Grade One Listed status of the Museum and its setting, we are also conscious of the potential benefits that can be developed from selected interventions within the Grounds to both enhance the setting whilst improving the operation and experience of Museum. As implied by the above quotation, the original building was of its time and a new view of Nature demands an evolution of the original concept. At this stage we illustrate a number of these opportunities that we fully recognise will require careful analysis and consideration in the final resolution and agreement of a way forward. Less ambitious or alternative proposals may be necessary in the final analysis.

The illustrated strategy is based around respect for the existing fabric and importance of the Waterhouse Elevations and the existing listed fabric of the Gardens. Taking Waterhouse's formal Garden layout as a template, the concept is to create a calm, recessive, submissive Garden in front of the Waterhouse elevation through the creation of a formal classic garden layout using hedges and internal walls. These enclosing hedges would be approx 3m high and would wrap around the proposed Evolution and Biodiversity interpretive Gardens.

As part of these gardens we have explored the opportunity to integrate small kiosks at each end of these gardens to accommodate functional needs of the Museum. At the eastern end there is a suggestion for an information and reception point whilst the western end offers the potential for a small cafe overlooking the Wildlife Garden. Additional pods are suggested close to the existing ramps to house Toilets for visitors and the general public use of the space. In each case the principal is that these are part of the garden language with appropriate green walls and roofs.

Visibility of the basement areas of the Elevation is ensured from Exhibition Road and Queens Gate and the Gardens are pulled away from the basement to create a special linear garden space allowing full views of the Elevations.

Site Organisation

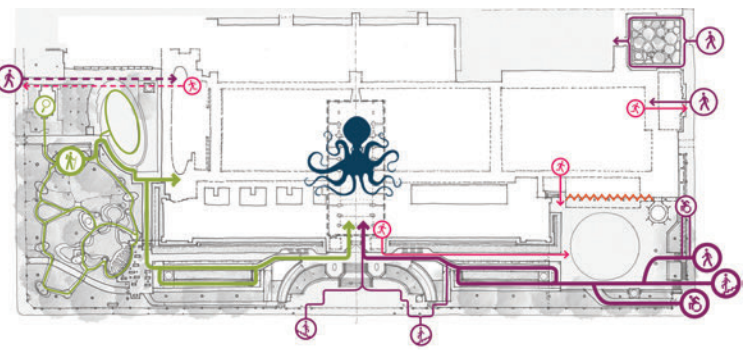
The basic site layout is a very simple diagram in which the central axis of the Museum is articulated by a new armature that allows Universal Access through the main entrance doors and into the Central Hall. This in turn is reinvented as a dramatic nerve centre of the day to day life of the Museum.

The Western parts of the grounds are about UK Biodiversity and have a strong physical relationship with the Darwin Centre and the Biodiversity galleries. The strategy is to better unify the science, access, learning and physical character of these western spaces so they operate as an integrated asset rather than distinct, disconnected elements. This will include the West Ground in front of the Waterhouse building, the Wildlife Garden, the Old Lodge and the new Darwin Centre spaces. This is the quiet side of the Grounds with a focus on Learning and quiet reflection.

The Eastern parts of the grounds are themed around the Origins of Life and Evolution and have a strong connection with the Palaeontology/ Earth Science galleries. The strategy acknowledges these spaces are also suited to the reorganisation of visitor access and management. This will include the opening up of a principal entrance from Exhibition Road and the creation of a linear route to the Main Entrance that accommodates all the necessary visitor facilities. This is a busier

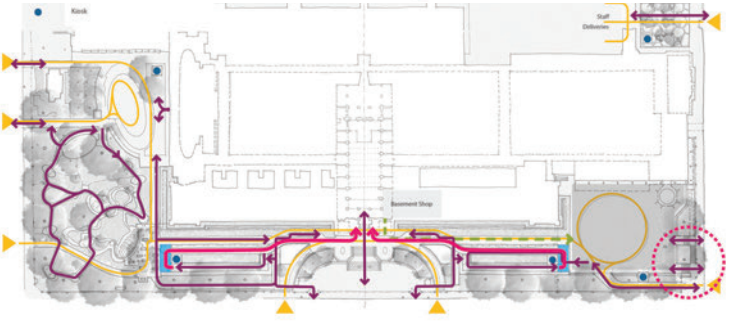
Circulation

- Eastern Garden Routes
- Western Garden Routes
- Exit Routes
- Active Cafe Edge



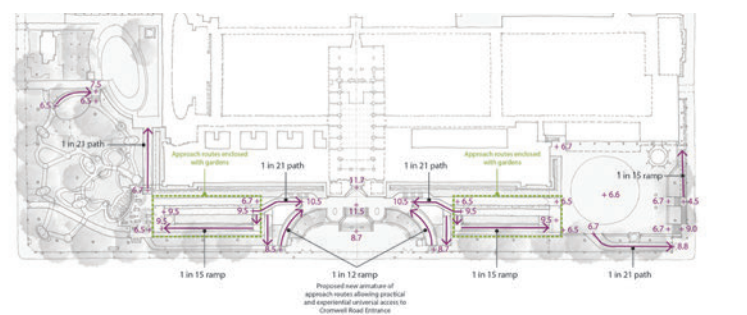
Access

- Elevated Walkway
- Ground Level Walkway
- Exit Route
- Vehicle Access
- Entrance Gateway
- Geology Field
- Visitor Arrival/Cafe
- Kiosk



Universal Access

The strategy explores the potential for Universal Access to the Main Entrance Doors on Cromwell Road. This would require the introduction of new pedestrian access route allowing code compliant access to the front doors. This can be achieved by adding an overlay structure over the existing ramps and steps and which rises up through the enclosed gardens and sits over the existing structures.



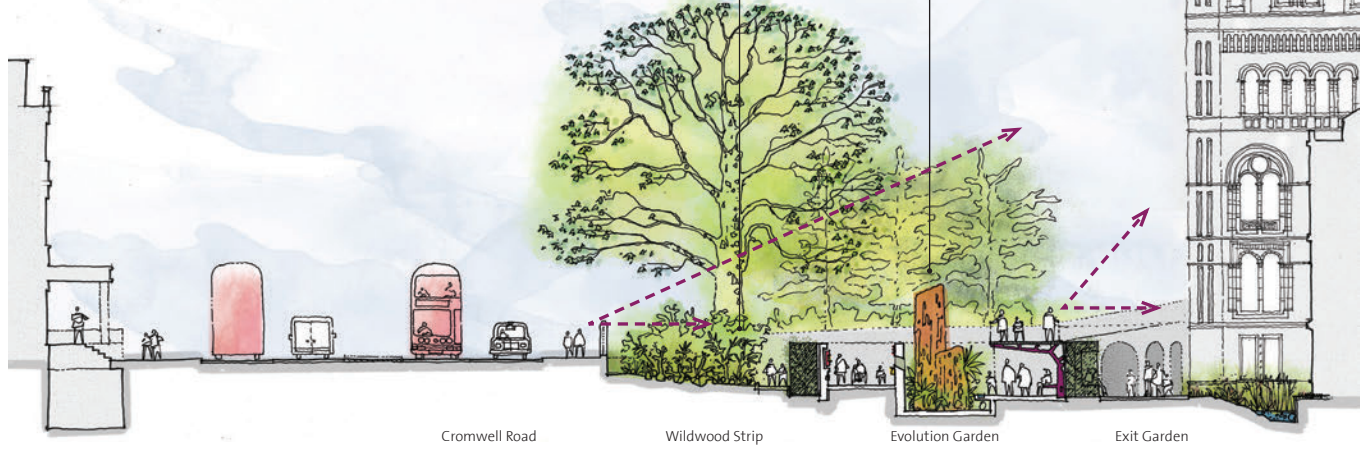
Wildwood Strip : The existing perimeter trees are proposed to be set within a more coherent planted belt of more definite character and purpose inspired by the understorey of a UK Woodland. This would acknowledge the constraints of shade and dry soil created by the trees but would exploit the potential for a more seasonal display of woodland understorey plants when viewed from the elevated street.

It becomes part of a multi functional transitional zone along with the hedges and green wall features, offering enhanced biodiversity, noise and air quality and improved visual appearance through the seasons.

Views to the Museum

The visibility of the Waterhouse Elevation is a key issue to consider. Historic images show the elevation almost totally exposed on completion then variously hidden by the perimeter tree planting during their growth. Today the elevation is partially screened by trees and by the understorey vegetation from much of the adjacent public realm with relatively clear openings at the Southern Entrance and oblique views from Exhibition Road.

The Strategy recognises the need to retain views of the wonderful decorative elevation and seeks to keep the interventions within the east and West grounds to a level that always allows views to the Stringline between the Basement and Ground floor levels of the Museum at around 11m AOD. The Strategy also allows for the opportunity to create an elevated route closer to the Elevation that offers a unique new perspective of the Elevation and the opportunity for much greater enjoyment and appreciation of this work of art.



Evolution Garden - This is the start of the organised approach to the Museum entrance and defines a new secure line that connects the Cromwell Road boundary with the eastern end of the Waterhouse building. This line can be secured with access and exit gates to allow the Geology Field to operate as more of a public space. Bag checking and other security checks can be made at this point allowing the visitors to better enjoy the experience of approaching and entering the Museum.

- 1 - The Geology Field** – a largely paved space fronting the Palaeontology building and linking to Exhibition Road. This space offers flexibility for events and exhibitions whilst having a strong underlying themed design based on the geology of London and the UK, including a cafe (1a).
- 2 - The Evolution Garden** – the East Grounds fronting the Waterhouse building defined as a formally enclosed garden (hortus conclusus) themed around the Origins and Evolution of Life on Earth. This becomes the principal approach route to the Museum Entrance.
- 3 - The Attenborough Garden** – the West Grounds facing the Waterhouse building defined as a formally enclosed garden (hortus conclusus) themed around human engagement with the natural world (Biophilia) as expressed through contemporary art and science (less learning more feeling).
- 4 - The Wildlife Garden** – The existing garden based around bringing the UK countryside to the city and showcasing selected key UK Habitats. The strategy links this more effectively with the remaining grounds and suggest enhancements to the interpretation and function of the Garden. The proposals include a new garden centre (4a), wetland treatment (4b) and picnic area (4c).
- 5 - The Darwin Centre Glade** – The existing external open space developed as a linked part of the wildlife garden taking on a more magical 'glade' character offering flexible use.
- 6 - Lodge Garden** – The Listed Lodge might be developed as a teaching centre linked to the Wildlife Garden and set in the context of a Cottage Garden complete with productive fruit and vegetable areas.
- 7 - Cromwell Road Entrance Court** – The existing open space enhanced by improved paving, planting and upgraded access to connect to the entrance doorway. It becomes a sunny public seating space enhanced by temporary exhibitions, with a character extending across the road (7b)
- 8 - Wildwood Strip** – The existing perimeter trees are set within a planted belt of more definite character and purpose inspired by the understorey of a UK Woodland. It becomes a multi functional transitional zone offering enhanced biodiversity, noise and air quality and improved visual appearance through the seasons.
- 9 - Museum Lane Green** – The space becomes unified within a square of informal paving punctuated by a cluster of beautiful Pines or similar distinctive UK forest trees. A space to rest and refresh just off the busy Exhibition Road
- 10 - Theatre of Life** – The dramatic hub of the Museum offering an inspirational experience that bridges the living outdoor world to the live science and collections within.

Masterplan

Embedded in History and Embracing the Future

Attenborough Garden

This garden explores the human relationship with nature and opportunities for a future (taking lessons from the past) where people live within planetary boundaries; and to work with and protect core ecological systems and the services they provide. The Garden would have a particular focus on the urban ecology of London and would feature a fusion of art, science and ecology. In effect an outdoor art gallery infused with real science and technology recording and reflecting our relationship with the living world of London. Interpretation could explore natural systems and how people in a future sustainable city can learn through ecosystem mimicry to better manage floods, drought, urban heat islands.

Wildlife Garden

The Strategy proposes a number of interventions. These include a woodland picnic area at the SE corner of the Wildlife Garden overlooking a wetland treatment bed linked to the proposed swales in front of the Waterhouse building. The existing buildings within the Garden could be consolidated into a bespoke new, partially buried structure at the northern edge of the Garden. This building would be the ultimate green, vegetated ecological interpretation centre. Within the Wildlife Garden itself, the emphasis would be on enhancing the interpretation by creating small information hubs at the existing defined nodes in the path network. These could be woven or vegetated enclosures housing mini black box real life interpretation of the various habitats for a family group or small group of children.



NHM The Visitor Experience

A Museum Without Walls

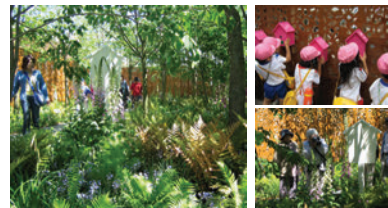
The opportunity for the museum to morph from a building that dispenses knowledge into an accessible and engaging organisation wishing to share its ideas and information with a participating public. Like the visitor we aim to explore the fusion of real with the power of the virtual. André Malraux who anticipated this democratisation of art and knowledge through the internet can be now be made a reality.

Virtual Presence

For some, the visitor's journey will start before they step into the building, exit the tube station or even leave their house. By preparing themselves through digital platforms and social media many visitors will engage with the museum and will prepare their visit. This virtual access can help refine their experience through being more specific about their profile including age and gender, preferred languages and even their level of curiosity.

The Welcome Mat

We acknowledge the NHM's desire to respond to the peak visitation issue that results in lengthy queues occurring over



at least 40 days in a year and the option of introducing timed ticketing may want to be explored. Timed tickets, which will often be pre-booked, can also allow the museum to build information about visitors and create stronger contact between them. Emerging technologies can now enable visitors to have an on and off-site bespoke personal experience. Smart phones or tablets (or hired tablets) would enable visitors to create a personalised profile as described above. For those that need them, pre-loaded tablets would be available at the entry point of the movement system. We believe that it is important to have face to face communication at the entry point provided by well trained NHM staff.

Experiential Movement System

Our desire is to re-imagine the entrance queuing system as a journey of discovery, punctuated with narrative and layered with interpretation.

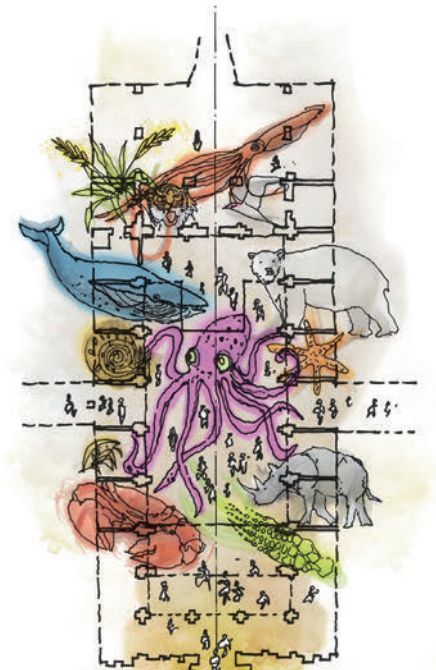
Here, the entry ramp becomes a coherent and integrated part of the museum. Whilst you wait you might experience sound installations from the primeval swamp or smell the breath of a blue whale, and maybe on very busy days see performances on tall tales from Darwin's voyages. The queuing system will

become an orientation device, providing interpretation and learning opportunities through multi-media so that when visitors arrive into the Great Hall they have a sense of place and may even have planned their route through the collections.

The smart phone or tablet would become the interface mechanism that can augment narratives embedded throughout the ramp experience and beyond. These carefully curated 'events' may be drawn from the vast richness of material including; the museum collections, the museum façade, the living landscape or a genuine fossilised specimen.



EAST



WEST



A Journey Through The Garden of Natural Science

The Garden of Natural Science as a living, outdoor expression of the science, collections and learning experiences to be found within the Natural History Museum. At the same time it is a garden for the city and offers a unique public environment for London offering spaces of retreat, delight, tranquility and greenery within this otherwise hard urban context.

Commercial Opportunities

There is wide potential for commercial development of the external spaces whilst respecting the sensitivity of the wider environment. In addition to the formalisation of a temporary event space adjacent Exhibition Road, the diagram suggests opportunities and optimum sizes for cafes, restaurants, shops and small kiosks around the grounds. The report provides additional detail.

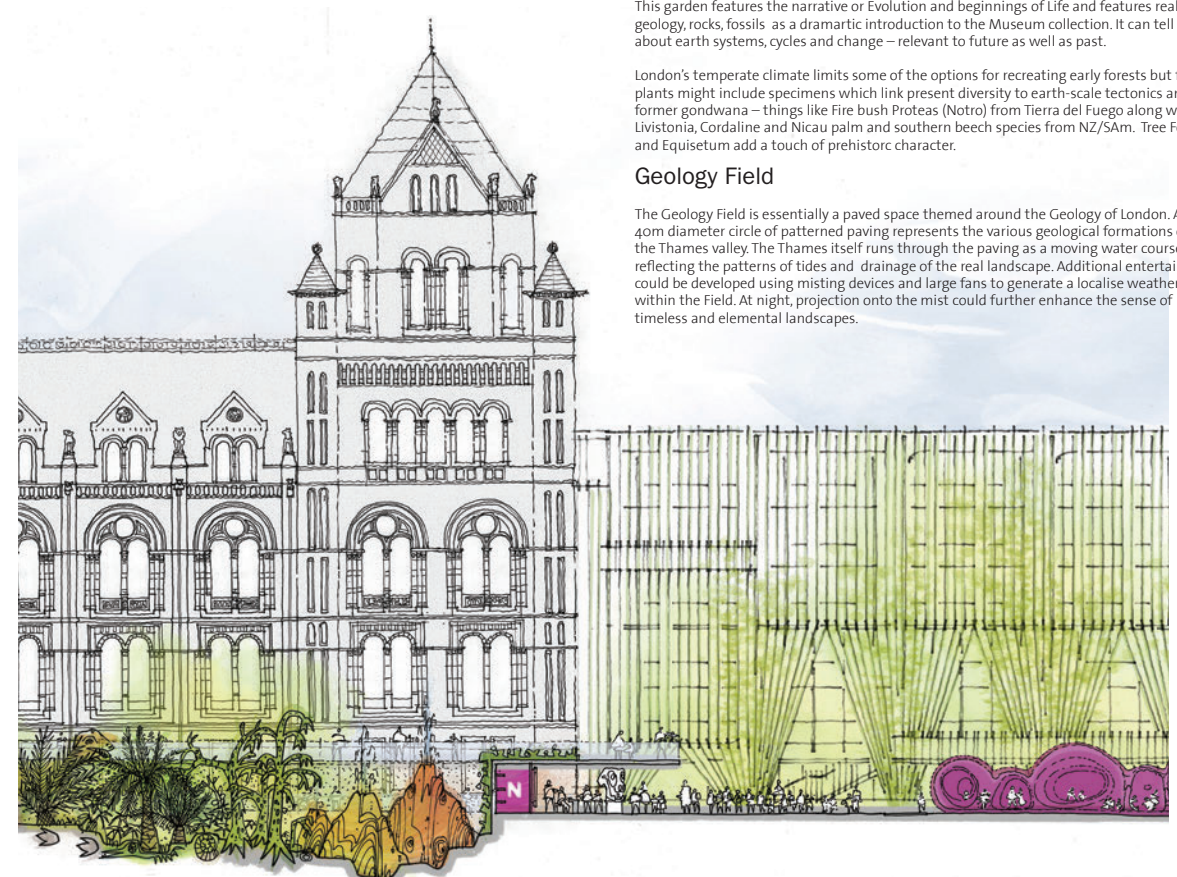
Evolution Garden

This garden features the narrative of Evolution and beginnings of Life and features real geology, rocks, fossils as a dramatic introduction to the Museum collection. It can tell stories about earth systems, cycles and change – relevant to future as well as past.

London's temperate climate limits some of the options for recreating early forests but for plants might include specimens which link present diversity to earth-scale tectonics and former gondwana – things like Fire bush Proteas (Notro) from Tierra del Fuego along with Livistonia, Cordalaine and Nicau palm and southern beech species from NZ/SAM. Tree Ferns and Equisetum add a touch of prehistoric character.

Geology Field

The Geology Field is essentially a paved space themed around the Geology of London. A 40m diameter circle of patterned paving represents the various geological formations of the Thames valley. The Thames itself runs through the paving as a moving water course reflecting the patterns of tides and drainage of the real landscape. Additional entertainment could be developed using misting devices and large fans to generate a localised weather within the Field. At night, projection onto the mist could further enhance the sense of timeless and elemental landscapes.



The Portal

The portal doorway into the building is an incredibly important symbolic gesture. It connects our external orientation experience to the Great Hall and into the heart of the museum. By preparing and orientating our visitors on the ramp experience then we enter with knowledge of what they want to see and where it is, getting maximum enjoyment from the beautiful Great Hall.

The Great Hall

An imaginative solution to replace Dippy is required. Our proposal is to suspend a significant volumetric array of LED strands. This would provide a medium within which powerful 3D video animations of a wide range of thematic narratives can be shown. Creatures could morph; an Archaeopteryx evolving into a bird, or a meteorite shower could strike off a species (or even create a corporate sponsors logo). The transparent nature of such a rig would



help maintain the visual integrity of the space whilst the visual impact would provide a dramatic theatrical experience. The display of iconic treasures juxtaposed in the side galleries would provide a perfect authentic foil to the central installation.

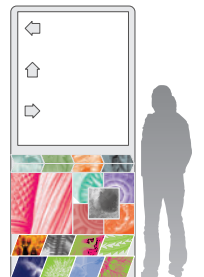
The Museum Journey

From the moment a visitor engages with the museum there is opportunity to build a personal collection. Through smart phones and tablets visitors can dig deep into the archive and access multi-media narrative on the objects. Here visitors would be then able to label and store their favourite pieces, placing them in their curated virtual museum 'box' to access later when they get home. This kind of engagement can happen even before they enter the museum and can be rewarded when they arrive in the great hall with a personal itinerary that opens up some of the more hidden gems of the collections.

The Onward Journey

As with the ramp, the exit sequence alongside the DNA wall is presented as an extended part of the museum experience. The visitor is located between the original façade and the 21st Century wall that clearly presents the contemporary science that could never have developed without the work of Darwin. It is in that sense an immersive moment that holds an important and memorable message for the visitor as they finish their journey. The café and retail facilities are located back in the arrival zone. It is important to note that tablets (smart phones) may be used to carry information on topical information and events throughout the journey and conveniently returned here.

When the visitor arrives home they can access their own curated museum box full of films, interpretation, pictures, archive pieces and information that would otherwise be hard for them to source, allowing visitors to build their own virtual collection. In time they can add new discoveries and the museum can let them know about upcoming gallery tours or exhibitions.



A New Visitor Approach to the Museum

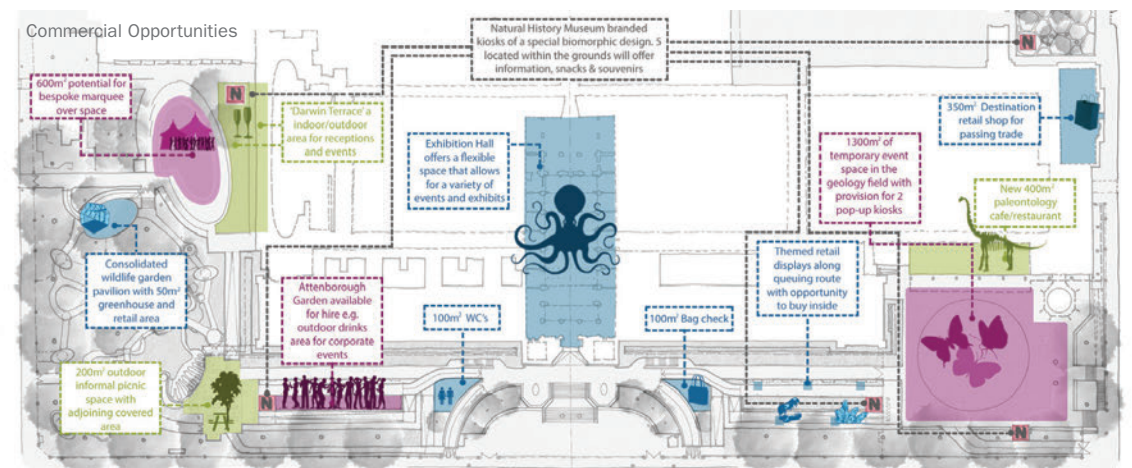
The Masterplan sets out the potential organisation and framework for the Garden of Natural Science and establishes an approach to the management of Visitors. Our approach is based on the definition of a strong and flexible infrastructure that can respond to appropriate narrative themes and functional requirements of the NHM. The existing access from Cromwell Road and approach to the Museum via the existing ramps and steps does not meet the standards and facilities expected of a world class attraction. There is a need to restructure the approach into a multifunctional and beautiful new armature set within a garden setting.

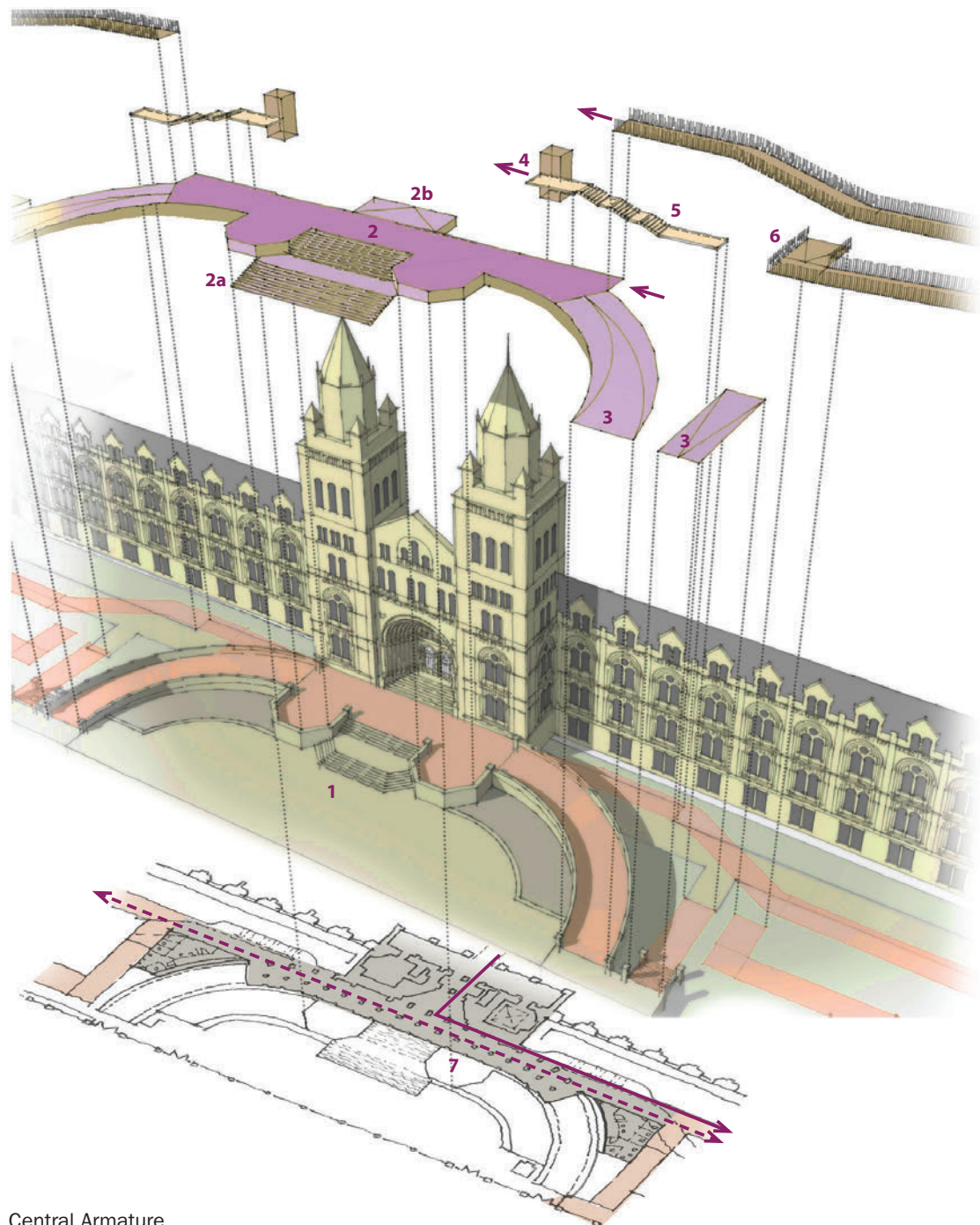
This new intervention should deliver the following:

- A controlled route linking Exhibition Road to the Main Entrance via a themed garden experience.
- An evocative and inspirational linear experience that echoes Darwin's famous Sand Walk at Down House.
- Capacity within the route to accommodate upto 800 people waiting to access the Museum (approx. 800m2).
- Strong educational narrative structure to the route that expresses the Museum aims and objectives and reflects the thematic structure of the internal galleries.
- Route characterised by authentic and striking tactile exhibits, integrates opportunities for media related interpretation and personal engagement with embedded exhibits and collections.
- Offers opportunities to view and advance purchase NHM related retail products available for collection in the Museum shops.
- Provides a Living Gallery experience fully coordinated with the respective internal gallery equivalent.

Biophilia & Evolution

Content and Programme





Central Armature

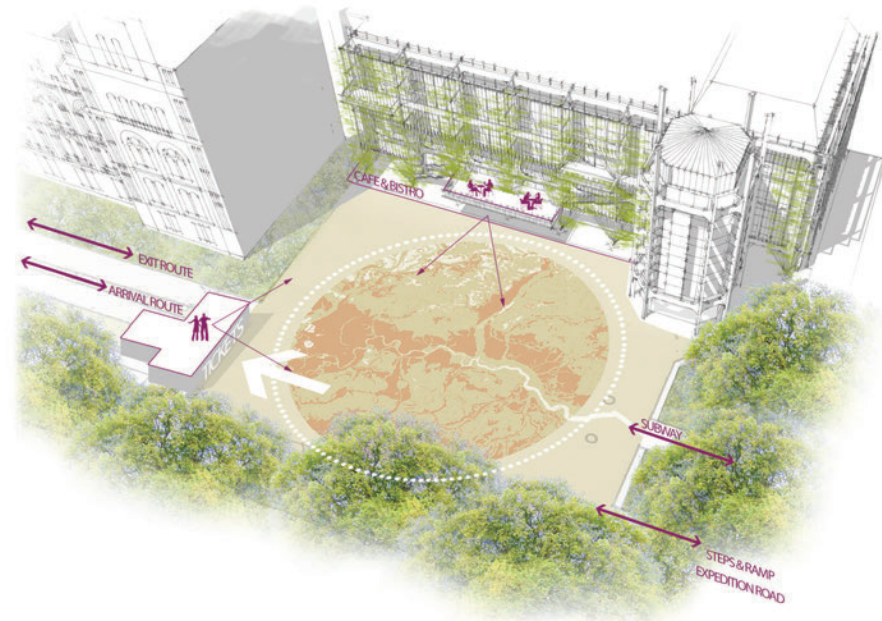
The strategy explores the potential for Universal Access to the Main Entrance Doors on Cromwell Road. This would require the introduction of new pedestrian access route allowing code compliant access to the front doors. This can be achieved by adding an overlay structure over the existing ramps and steps and which rises up through the enclosed gardens and sits over the existing structures. This would be a carefully designed beautiful overlay that would update the access of the building to meet contemporary requirements. The overlay would be designed to minimise impact on the existing fabric and to be removed at a later date. This overlay structure would raise the landing in front of the entrance and would include a new set of steps directly in front of the entrance, new gradients for the vehicle access maps and the new pedestrian access routes linking in the fabric.

In a similar vein, the proposal explores the benefit of making a connection from the East to the West grounds beneath the existing ramp structure. This would unlock greater flexibility and functionality of the Garden Spaces. This would require some reorganisation of the functions and infrastructure beneath the ramp but relatively limited interventions in the fabric.

The Strategy also explores the potential for a new exit route from the Museum through this lower basement area. This would be linked to a review of options for developing some of the basement spaces into retail and visitor experience spaces as part of the exit route. In these ways we imagine significant benefits incl;

- The problem area of the entrance is addressed with new overlay that provides new facilities and a reinvigorated image.
- It addresses the key approach from the east (and west) as a Universal Access route.
- Vertical accessible route created into main hall from the lower level.
- Huge potential for future unlocking of basement galleries / spaces.
- Absolutely minimal intervention into GD I listed fabric.
- Deals with general existing levels and can adapt as necessary.
- Can be designed for future removal with minimal impact on original fabric

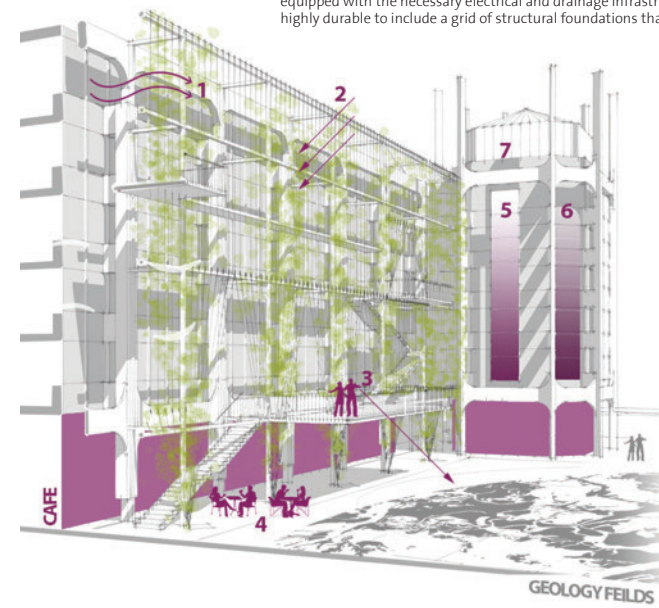
- 1: All existing and historic surfaces, steps and masonry to remain in place.
- 2: New front door threshold level. New steps and landings laid over existing historic fabric, to fully reversible detail. New "overlay" to achieve level access through front entrance for all visitors, incl. those with wheelchairs and pushchairs.
- 2a: Half landing between steps slightly reduced in width to accommodate new steps up to new level. Emergency vehicle width requirements maintained through new overlay.
- 2b: Gentle ramp from precise threshold down to building frontage designed to ensure new front landing level sits beneath significant mouldings of historic elevation.
- 3: New ramps to new landscape levels. Slight increase in incline up to front door level offset by new accessible and alternative routes up to new landing. All new surfaces and building materials to high quality specifications, to match existing i.e. masonry, terracotta, and cast iron elements.
- 4: New accessible lift as an alternative to the ramp to take wheelchairs / pushchairs up to new front door landing level. To bespoke, high quality finish, designed for minimal presence in front of historic elevation.
- 5: New stair: Proposed to provide additional route up to new landing level from newly landscaped areas. Generous width and expedient route to help assist visitor / staff circulation as necessary.
- 6: New walkway approach through Evolution Garden: Reversible, light weight walkway designed to negotiate interpretation areas. Extremely thin profile designed to be of minimal visual impact to historic elevation. To serve as gently inclining walkway up to existing NHM Main entrance.
- 7: Basement altered with relatively limited interventions in the fabric to provide a controlled through route and exit space for visitors.



The Geology Field

This space offers flexibility for events and exhibitions whilst having a strong underlying themed design based on the geology of London and the UK. The plaza is a largely paved space fronting the Palaeontology building and linking to Exhibition Road. This becomes a semi public space that seamlessly extends the public environment of Exhibition Road and the subway into the NHM site via universally accessible ramps and steps. The space is supported by a new café and restaurant set into the lower level of the Palaeontology Building and base of the tower. Smaller bespoke kiosks tengage with the square. The pavement features a distinctive patterned and multi coloured panel depicting the geology of London. Augmented reality programming and the interactive screens on the Palaeontology Tower allows users of the space and passers by on Exhibition Road to view and interact with the history of London's geology and nature. - To walk with woolly mammoths, to endure the smog, to swim with the salmon.

The space has a durable infrastructure allowing easy transformation into a temporary exhibition or event space capable of accommodating the existing series of seasonal events such as the Butterfly World and the ice Rink within a more coherent and structured environment. This space can be equipped with the necessary electrical and drainage infrastructure and the base paving would be highly durable to include a grid of structural foundations that can support likely loadings.



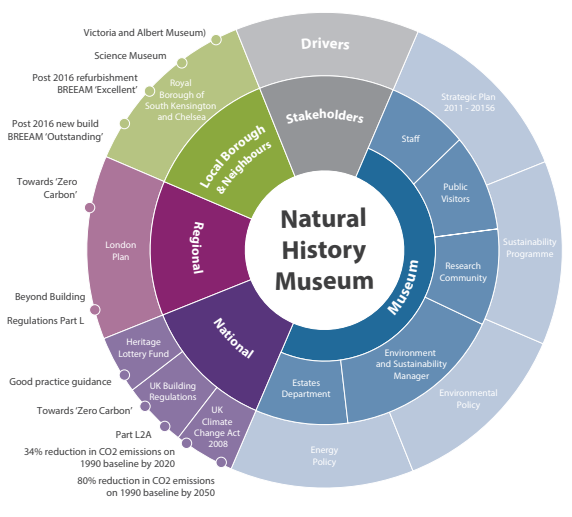
- 1 - Pre-conditioning of ventilation air through planted zone
- 2 - Providing solar shading to building in summer months
- 3 - High level views down to landscape spaces
- 4 - Sheltered spill-out space for cafe within planted zone
- 5 - Digital information screens integrated into tower facade structure
- 6 - Glass in tower replaced with high performance and intelligent glazing system (integrating LED lighting and printed photovoltaic technology)
- 7 - New uses in tower providing high level views out to the landscape and Exhibition Road

Environmental Integrity

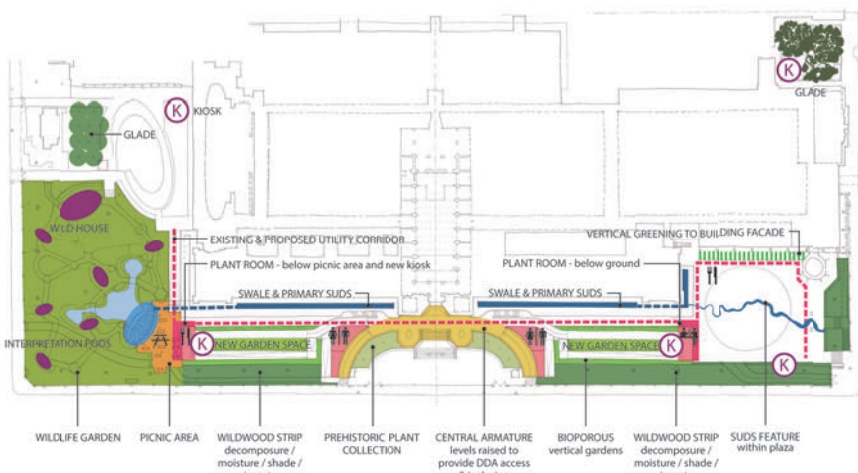
In addition to all the opportunities to create a wonderful spatial, educational and sensory experience, this project has a responsibility to equip the Museum for the long term and to demonstrate best practice ecological and sustainable design. The project offers a unique opportunity to demonstrate integrated sustainable design that for the first time considers water sensitive urban design, biodiversity and nature conservation, energy and microclimate, waste and resource and the full consequences of ecosystem services including health and well being, air quality, and economic value.

The Strategy explicitly looks for an integrated approach to environmental planning and design that will further establish the NHM as a leading example of sustainable design and operation. The Grounds offer distinct opportunities for demonstrating the following:

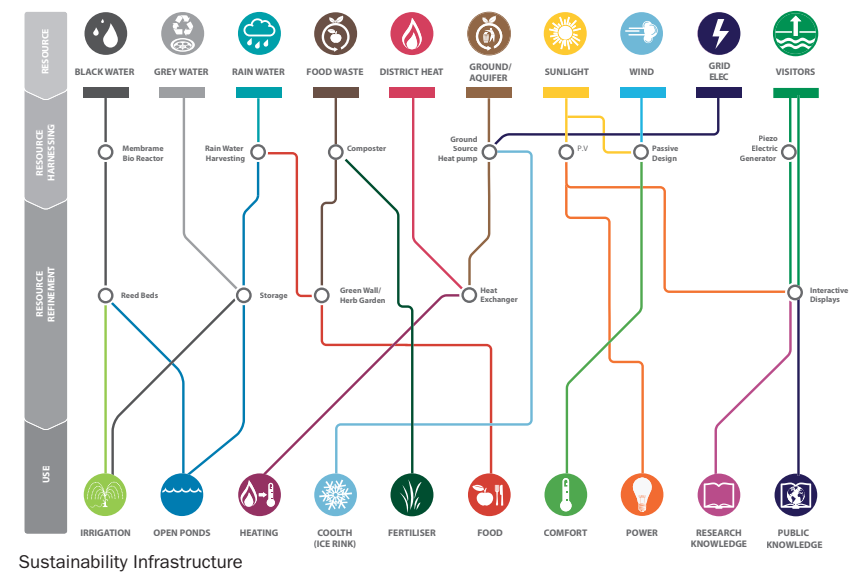
- Human enjoyment of urban nature
- Innovative Urban Biodiversity and Habitat creation
- Sustainable Urban Drainage and water management
- Ground Source Heat Pumps
- Sustainable Material use
- Carbon Zero operations
- Air Quality Enhancement
- Microclimate enhancement – shade and shelter



Environmental Systems : Section



Environmental Systems : Plan



Sustainability Infrastructure

Beauty in Detail

Technical and Construction