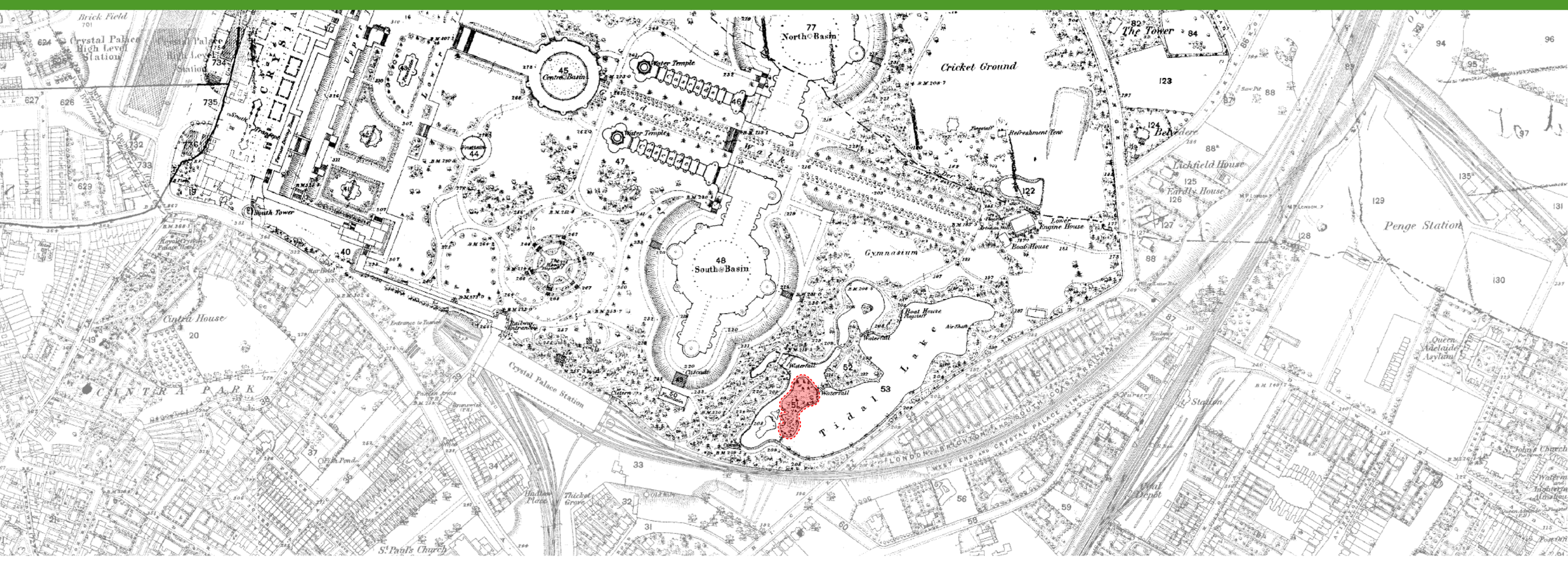
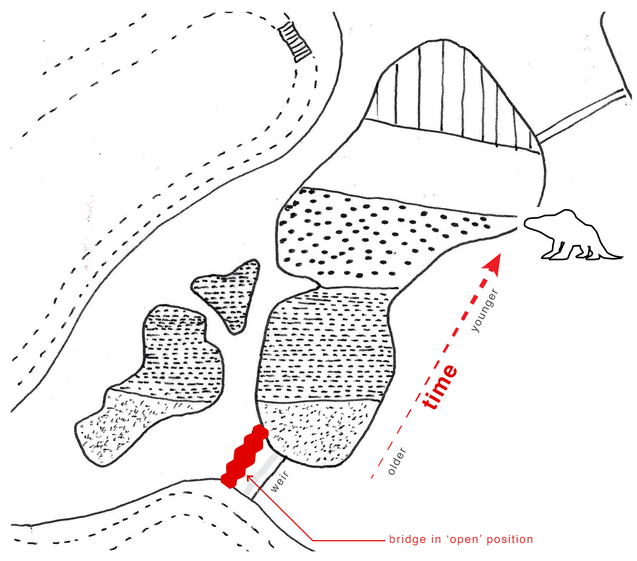
Public Consultation



The Dinosaurs sit prominently on a series of islands on small lakes, situated within Crystal Palace Park.



When the park opened in 1854, the public went wild for an experience of unknown worlds and stupendous monsters. This section of the park was constructed to accompany the relocation of the Crystal Palace from Hyde Park following the Great Exhibition of 1851.



The site is a walk through geologic time. From south to north, the sculptures are positioned in a chronological sequence from 325 million years ago to the Ice Ages, almost the present day.

Why is the site important?
The Democratisation of Big Ideas

The Crystal Palace Dinosaurs and Geological Illustrations are a Grade 1 Historic Site, not only as the birthplace of 'Dinomania', but also as global firsts:

- First major public outreach on science
- First public outreach on natural history
- First reconstructions of extinct animals
- First depictions of dramatic changes to the planet and life on earth
- First staged explanations of Britain's mineral wealth

The 30 sculptures and 10 geological reconstructions help us tell the story of how science works. What we know is built on the best evidence we have available at the time, this changes as more and new data becomes available. How different are these historic sculptures compared to modern scientific ideas of what the animals should look like?

Thinking about changes to the earth and its inhabitants is as important today as ever.

Bridging the Gap - why we need a reliable bridge
Conservation Monitoring

We need to keep a regular eye on the condition of the sculptures. They are made of a complex of mixed materials, mostly dating from 165 years ago, and they stand outside all year round. Our short film The Seven Deadly Agents of Destruction explains the threats to the Dinosaurs, and Back to Life shows conservators at work.





Grounds Maintenance
The plants around the sculptures are part of the historic site. Some need to be cut back and some need to be encouraged, with regular, expert attention.

Interpretation
Getting up close and personal brings the story of the science and its artistic representation to life. We offer guided tours for school groups, fans and specialists.

Volunteer Engagement
Everyone wants to lend a hand to their favourite Dinosaur! There are practical ways for people to pitch in.

We have a Palaeo Planting Project to give people a chance to help out. We plan to put in a beehive at the right place in the time series to demonstrate co-evolution of pollinators and flowers, but this will need weekly visits.

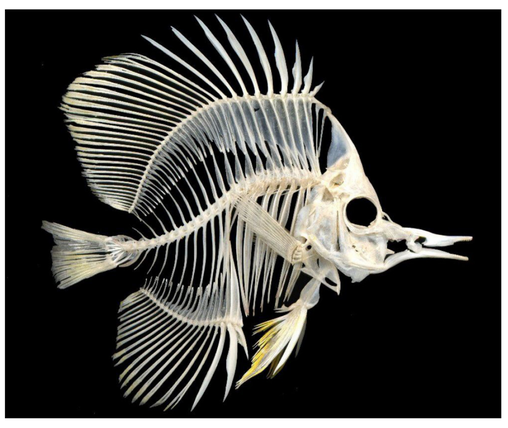


Visualisation of the Bridge to the Crystal Palace Dinosaurs.

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Bridge to Crystal Palace Dinosaurs
Public Consultation

https://cpdinosaurs.org/bridge

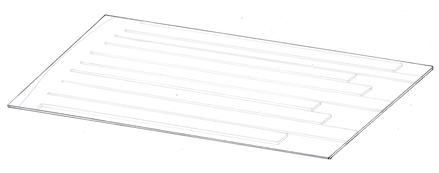


A bony fish skeleton.

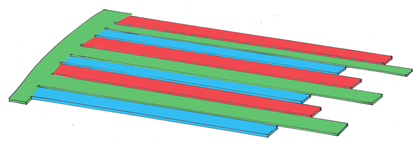
What has inspired the design?
Nature & Evolution

The bridge is positioned off the southern end of the Dinosaur Islands, in ‘deeper time’ than the sculptures of the earliest land vertebrates emerging from the waters. The bridge is inspired by the skeletal structures of fishes, that dominated early seas.

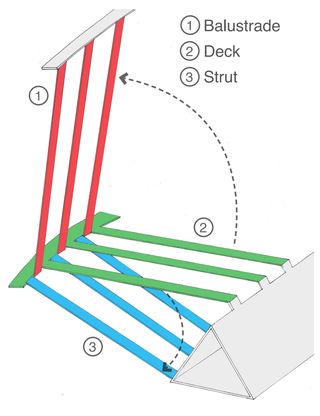
The swinging bridge features a ‘*linear spine*’ that supports a steel plate, off which a series of ‘*ribs*’ are folded - supporting the bridge deck and the handrail. Like a living animal it moves, pivoting into its active or inactive position. Like geometries in nature, the bridge features organic and curved components that are shaped to provide structural support and stability.



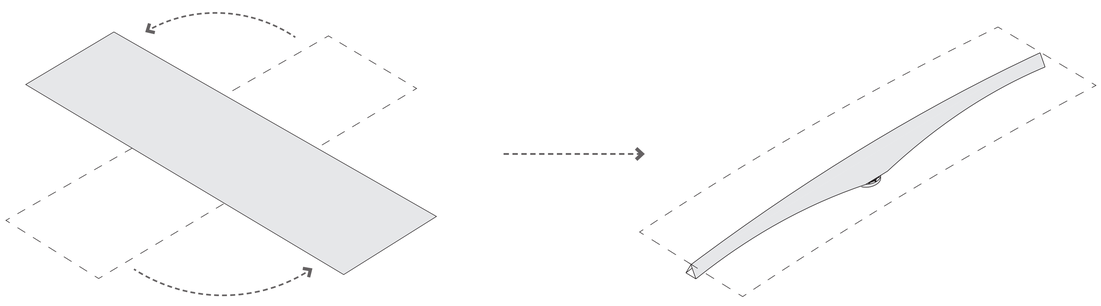
Steel sheet



Laser-cut geometry

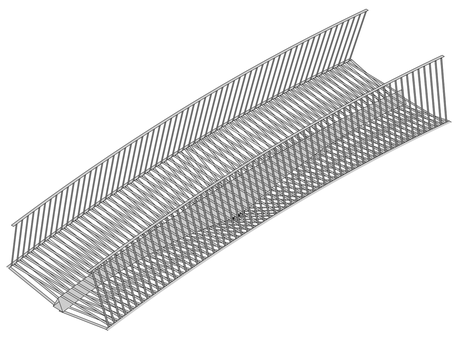


Unfolded geometry

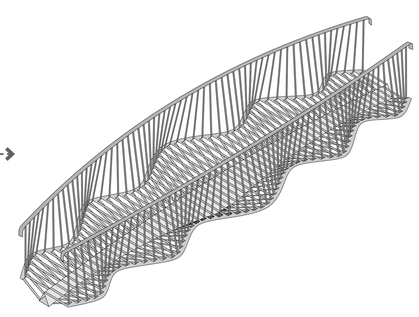


1 Rotating Gate

2 Arching Spine



3 Folded Ribs



4 Waving Structure



How will the bridge be built?
Folded & Galvanised Steel Plate

The bridge has to be developed and assembled efficiently. The ultra-lightweight structure uses minimal material and touches the landscape lightly, achieving economy, material efficiency, and sustainability.

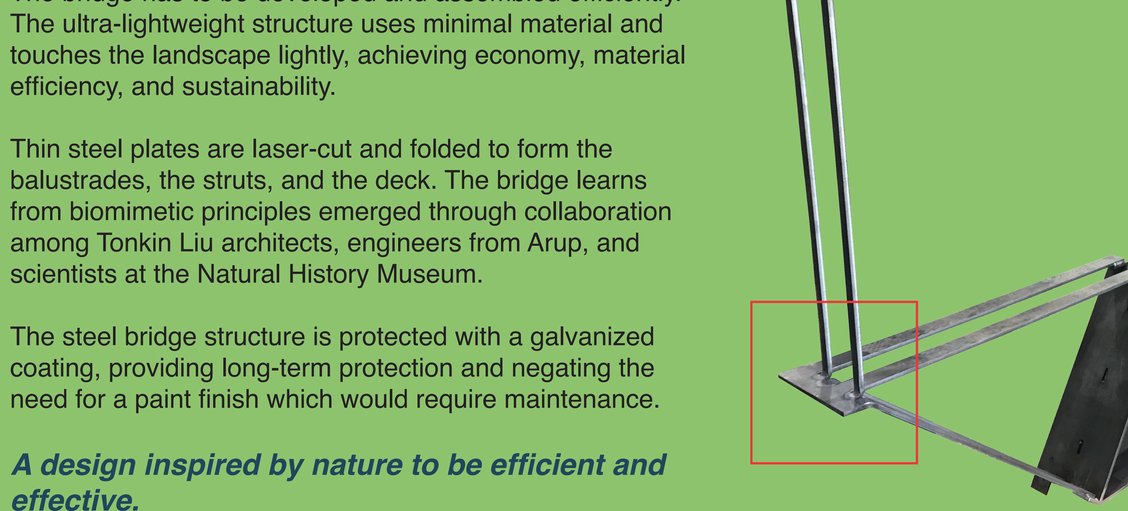
Thin steel plates are laser-cut and folded to form the balustrades, the struts, and the deck. The bridge learns from biomimetic principles emerged through collaboration among Tonkin Liu architects, engineers from Arup, and scientists at the Natural History Museum.

The steel bridge structure is protected with a galvanized coating, providing long-term protection and negating the need for a paint finish which would require maintenance.

A design inspired by nature to be efficient and effective.

1:1 Scale prototype fabricated by Cake Industries
Note: Prototype is unfinished mild steel, the finished bridge will feature a galvanized coating.





How are the Dinosaurs protected?
A Secure & Lockable Bridge

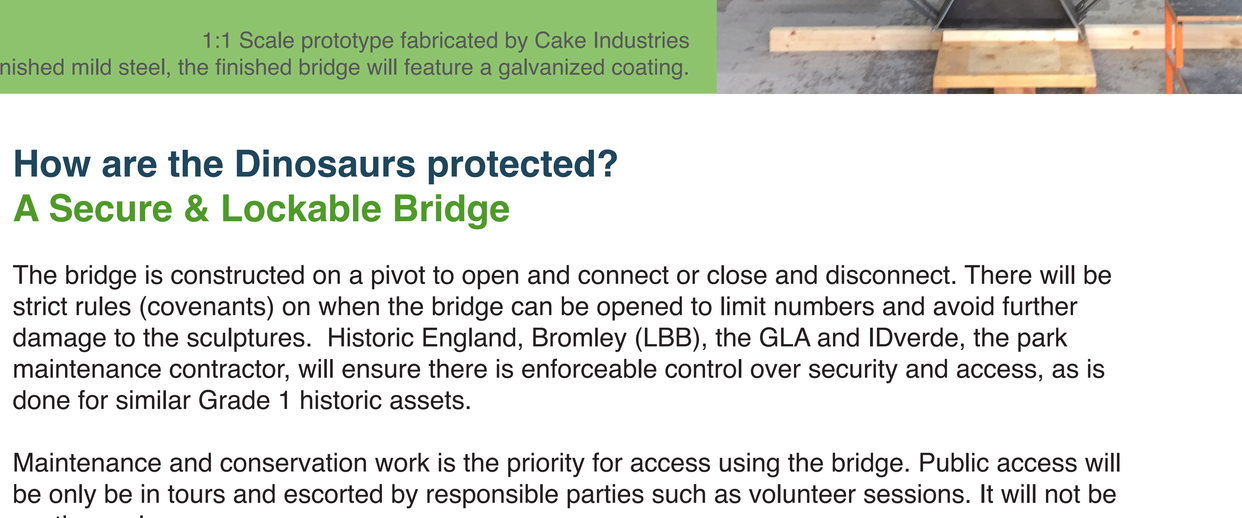
The bridge is constructed on a pivot to open and connect or close and disconnect. There will be strict rules (covenants) on when the bridge can be opened to limit numbers and avoid further damage to the sculptures. Historic England, Bromley (LBB), the GLA and IDverde, the park maintenance contractor, will ensure there is enforceable control over security and access, as is done for similar Grade 1 historic assets.

Maintenance and conservation work is the priority for access using the bridge. Public access will be only be in tours and escorted by responsible parties such as volunteer sessions. It will not be continuously open.

The safety and security of the island is achieved by the pivot motion, providing temporary access when needed for events and maintenance.



Top: RA Model: Winner of BKI ARCHITECTURE & Material Prize.
Bottom: Bridge Plan, with rotation direction.



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