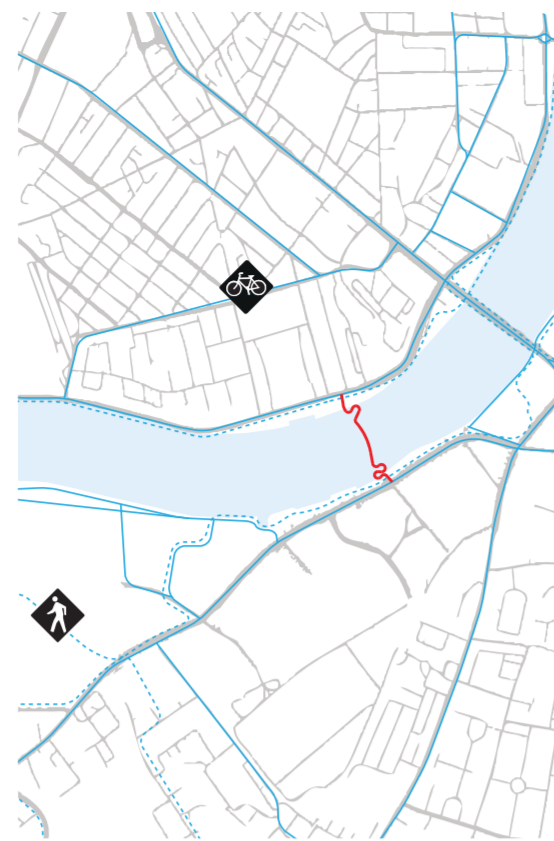


LONDON MEANDER BRIDGE

The London Meander Bridge is poised as a solution to many challenges. The primary design driver is the ambition of creating a bridge that ensures unimpeded access to and from the bridge for cyclists and pedestrians. Elegant meandering ramps echo the figural flow of the Thames river and provide a smooth ascent and descent from the bridge for cyclists. This way, cyclists never have to interrupt their ride or "walk" their bike, rendering the bridge fully integrated into the existing biking infrastructure of London. Pedestrians ascend and descend along inviting staircases into a new community square on the Pimlico side, and a vibrant new public space on the Nine Elms on the South Bank side. It will establish an active connection between two important partners on the Thames, balancing the goal of preservation with that of urban transformation.



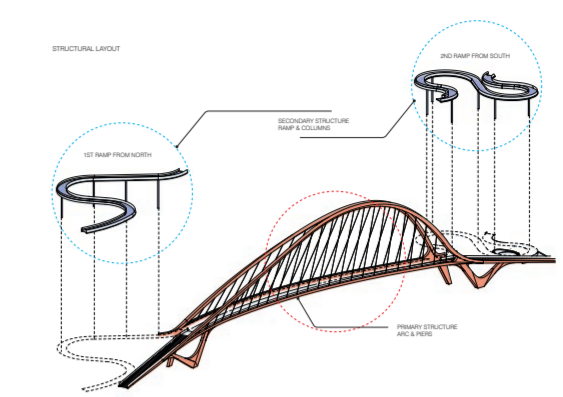
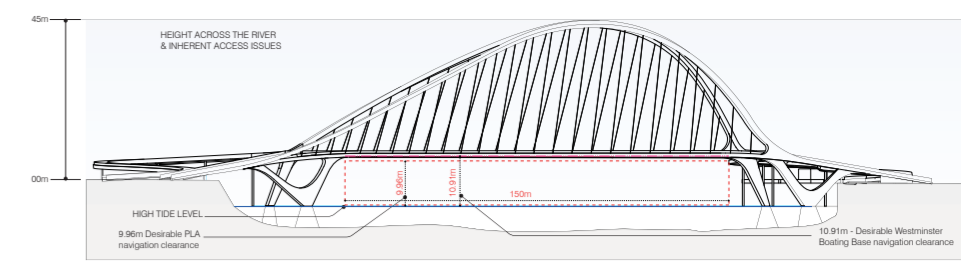
Excellent connectivity to existing city cycling routes



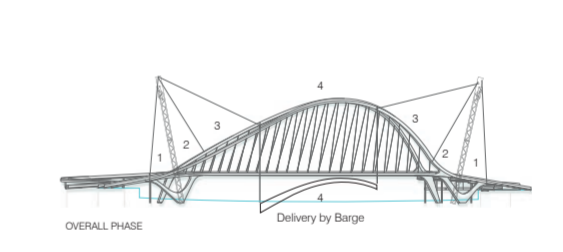
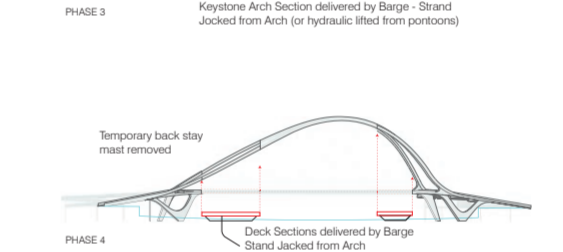
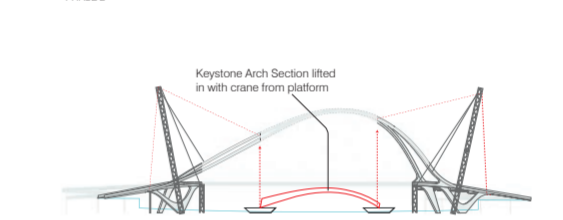
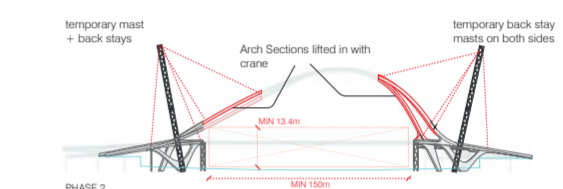
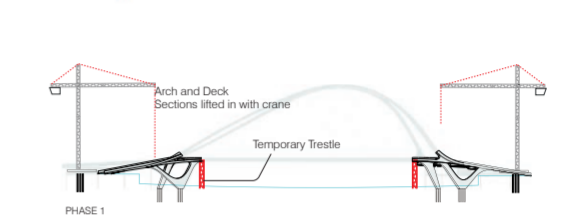
Pimlico Side - Minimum impact on the Pimlico Gardens



On the side of the historic Pimlico Gardens, the mature Plane trees and grass areas for community use are preserved, maintaining a green area of respite and relaxation. Views of the river continue below the thin profile of bridge, as cyclists weave their path through the tree canopies. The landing of the cycle and pedestrian bridge provides the opportunity to create a new community square near the activity of the boat house. Lighting at night will be elegant and subdued creating safe access for cyclists and pedestrians without over lighting the gardens.



Tied-arch bridge: A tie (the bridge deck) has been placed between the ends of both arches, thus creating the 'tied-arch'. The deck carries the horizontal force, while the provided vertical cable hangers only act in tension. By taking the arch thrust through the tie member, the primary requirement for the single and V-shaped piers reduces to principally carrying vertical loads. Abutments on one side of the Thames require a longitudinal restraint to carry wind forces, while the other abutments are permitted to move longitudinally.



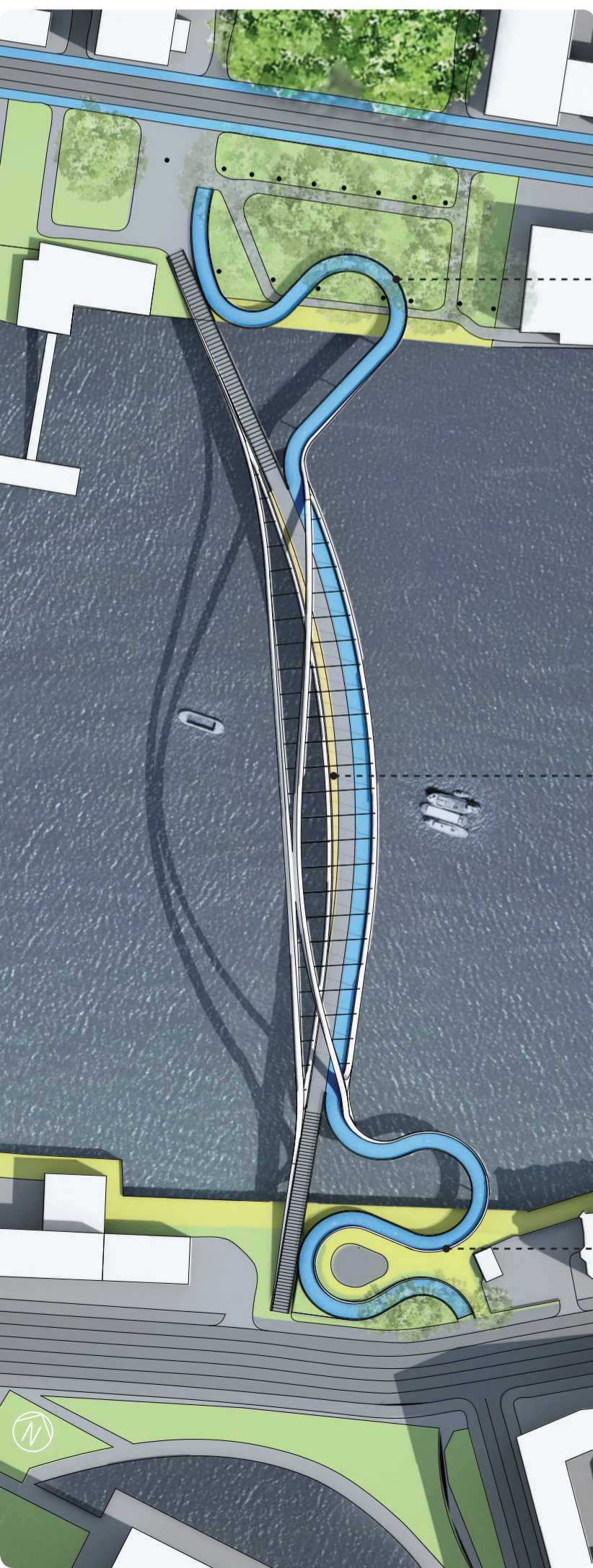
Fabrication and Erection

Phase 1
After piling, the piers are constructed in the river and are located within the inter-tidal zone, approx. 15-20 metres from the riverbanks.

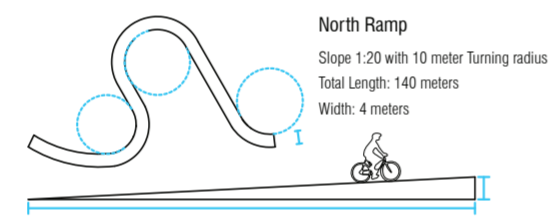
Phase 2
Temporary back stay masts of approx. 40-45 metres high are installed with forestay cables for stability. Arch sections will be delivered by the river and lifted into place using cables from the masts.

Phase 3
The last segment of the arch, traditionally called the "keystone" will be delivered by the water and manoeuvred exactly projected at the final position.

Phase 4
Arches are stable and structurally sound once fully welded, so the temporary back stay masts are removed. The bridge deck can be split in 5 sections and are also delivered by river barge.



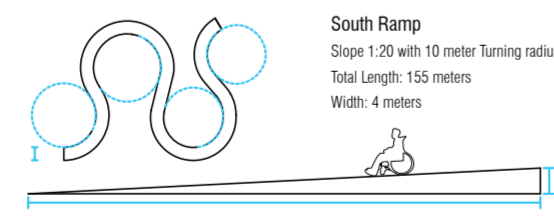
Opportunity for involvement of light artists



North Ramp
Slope 1:20 with 10 meter Turning radius
Total Length: 140 meters
Width: 4 meters



Moment of pause and enjoyment of view



South Ramp
Slope 1:20 with 10 meter Turning radius
Total Length: 155 meters
Width: 4 meters



A new artisan cycle hub and café



Nine Elms on the South Bank Side - Place for public art and a cycle café



Nine Elms on the South Bank is a neighbourhood in rapid transformation from an industrial quarter into London's largest regeneration zone. The landing reflects this dynamic, exciting urban character with its direct connection to the Vauxhall Linear Park and the new high rise residential developments along the river. The character of the space is related to the movement and flow of cycles as they access the bridge. A new artisan cycle hub and café is located in the bend of the cycle bridge adjacent to the river walk. The public space adjacent to the river is an ideal location for an artist's intervention, celebrating the energy of this new area of London and drawing pedestrians to the river's edge. Lighting can be bright, colourful and exuberant, in contrast to the more restrained nature of the Northern bank.



The Meander Bridge offers a mix of architecture, engineering, thoughtful landscape and the involvement of artists to add a new cultural destination to Nine Elms on the South Bank and another high-profile cultural marker for the City of Westminster. Our cross-disciplinary and collaborative approach utilises the 'Nine for Nine Elms' cultural principles, offers a major contribution to growth of cycling in London, a new destination for pedestrians walking from The Shard to Battersea Power Station and supports the idea of a new creative district for London.

