



ENGLISH ROMANTIC LANDSCAPES - Allegories, Follies + Bridges

Both the 18th century English Landscape tradition and its overlap with the 19th century celebration of technological innovation are used to integrate the bridge, its circulation and landing points into the immediate context and wider urban realm under one unifying theme and design generator;

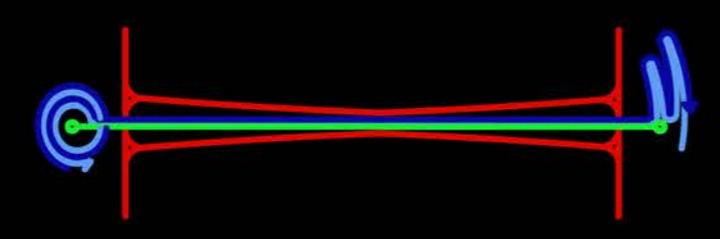
Bridge Location, Landing Points + Integration of Circulation

The use of allegory for laying out a masterplan and combining soft landscaping with follies and bridges to link journeys that also tell a metaphorical story is employed to position and bed in the design. Soft and hard landscaping elements integrate the existing parks and gardens with circulation requirements to create a sense of place and delight at the bridge landing points. Cycle, DDA ramps and lifts become a landscaped folly placed on axis with the east side St George's Square gardens and in central axis within Pimlico Garden, visually linking the riverbank with Belgrave Road and in turn Victoria Station. On the southern bank the ramps and stairs form a 'naturalistic' amphitheatre which with yew hedges and roses screening Nine Elms Lane soften the transition from riverbank to vehicle traffic by drawing on the area's history of 'pleasure gardens' and entertainment. In this way instead of simply being efficient mechanical circulation for cyclists these landscape forms offer opportunities for leisure, lingering and public events that become clear meeting points and part of London's mental map.

Architectonic + Sustainable Bridge Structure

The 19th Century's overlap of formal architectural and landscape languages with the celebration of technological innovation is used to contrast the bridge span in material and form, emphasising its simple and light weight contemporary construction methodology against the landscape formations. The ability to combine concrete and steel within a launched shallow arch allows the proposal to be de-risked, lowering construction time and cost and altogether avoiding works within the river or disturbing its traffic and the PLA. The arch at 400mm deep provides a thin profile across the river within which the 200mm deep cycle path is suspended. The 4m wide cycle deck is made of entirely visible and self-contained 200mm post-tensioned granite sat onto two cables with only the handrail/screen posts adding further visual detail across the 220m length. 40mm granite is also used for the pedestrian steps and viewing areas across the shallow arch.

ACCESS + CIRCULATION

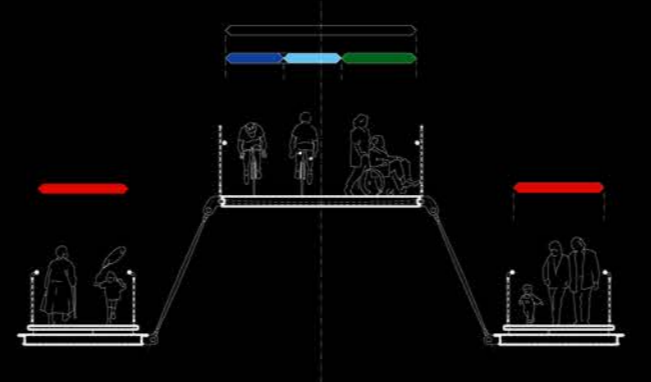


Accommodating Cyclists, Wheelchairs, Commuting Pedestrians + Walking for Leisure

The bridge has been designed to safely accommodate the maximum level of traffic separating cyclists into north and southbound lanes on both the crossing and access ramps allowing smooth transition from adjacent cycle lanes without creating pedestrian crossover difficulties.

Cyclists ascend and descend 1:20 access ramps ("effectively flat" under Building Regulations and Sustrans) either side of the flat river crossing which clears the 10.96m AOD 'air/water daft'. Lifts within the landscaped ramp formations bring wheelchair users to the flat deck level. During heavy commuter traffic periods cyclists have adjacent 1.4m wide north and south bound lanes flowing directly from their ramps with wheelchair users and accompanying pedestrians having a separate 1.5m wide lane connected to the lift without the need to cross-over cycle lanes. Separation is made using tactile ridges within the granite wearing surface.

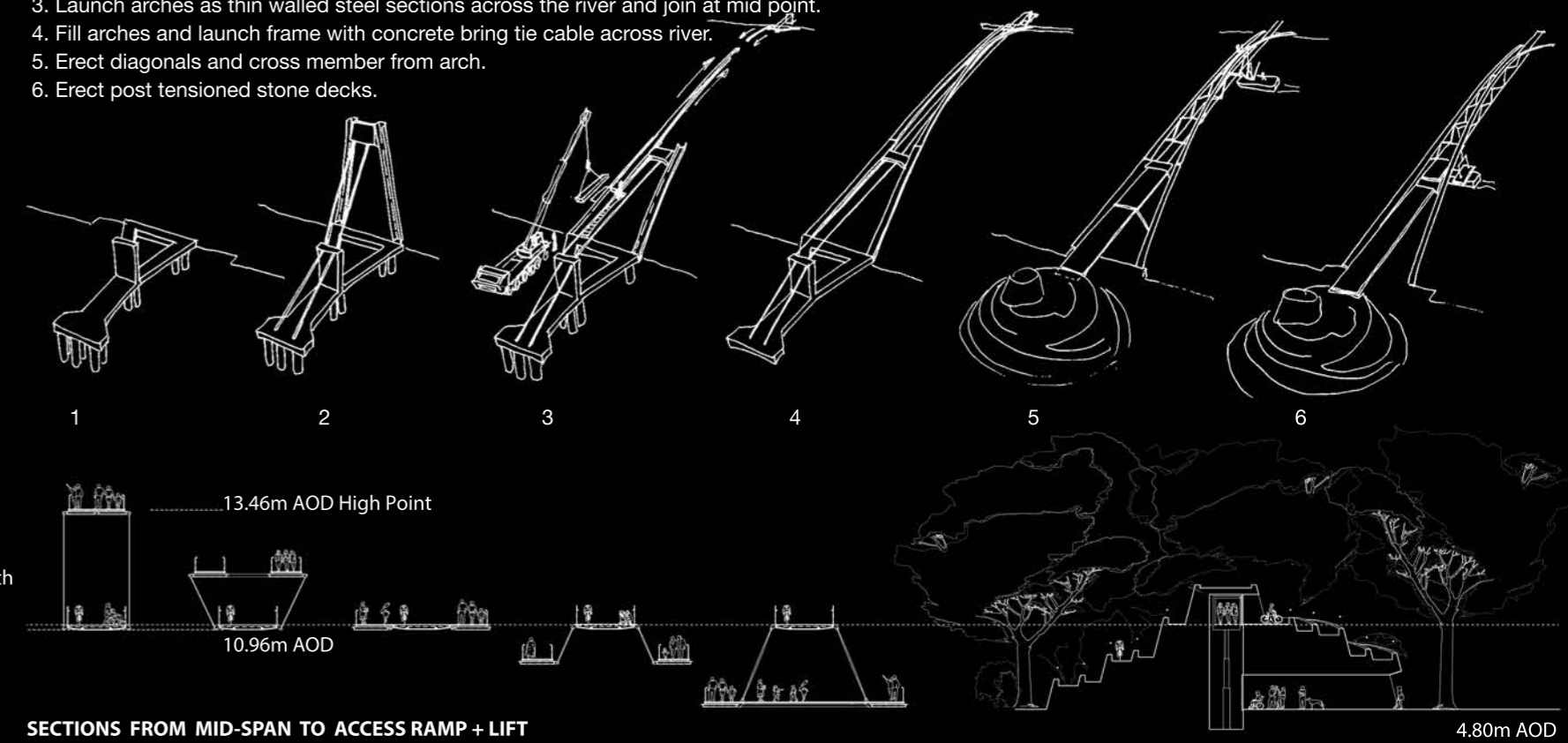
The single span shallow arch allows for wide and shallow ambulant disabled steps that during commuter periods can be used for quick pedestrian crossing or fit cyclists carrying their bikes to the point the steps meet the flat cycle crossing. The steps continue across the arch until a 1:20 slope is reached after which the effectively flat surface becomes a public space for lingering, viewing the river and its landmarks. During weekends and less trafficked hours both levels are open enough to allow leisure walkers with the tactile ridges on the lower deck indicating separation when cyclists approach.



- 1.5m Cycles -Southbound
- 1.5m Cycles Northbound
- 1.5m Wheelchair+Passing
- 1.5m - 1.8m - 4m Pedestrian + Ambulant Disabled (15m width at landing points, with minimum 1.8m footpath and 4m mid section viewing platform)

CONSTRUCTION SEQUENCE

1. Install piles and foundations both banks and build tied thrust blocks.
2. Erect launch platform and first section of arches and lower over river on ties to thrust blocks.
3. Launch arches as thin walled steel sections across the river and join at mid point.
4. Fill arches and launch frame with concrete bring tie cable across river.
5. Erect diagonals and cross member from arch.
6. Erect post tensioned stone decks.



SECTIONS FROM MID-SPAN TO ACCESS RAMP + LIFT

4.80m AOD

