Connecting ribbons over the Thames

The site of the crossing exhibits undeniable natural and urban qualities. It comprises both remarkable public spaces but also areas that are currently derelict . We believe that the transformations brought about by the construction of the new bridge can be a vehicle to improve these pockets of low quality, whilst maintaining the character of the formidable landscape of natural and man-made elements in which the project will be set.

Enhanced public space for the local community (4)
St. George's Square and Pimlico Garden form the largest, most pleasurable and memorable urban spaces that characterize the Pimlico area. The green corridor running from St George's Square through Pimlico Gardens to the Thames River not only remains intact but will be enhanced by the project. Pedestrians and cyclists access the bridge beyond the Westminster boating base, amongst trees, from a new green area facing Dolphin Square. A deck cantilevered over the river completes a continuous pedestrian path on the garden edge from which to admire the river and the bridge.

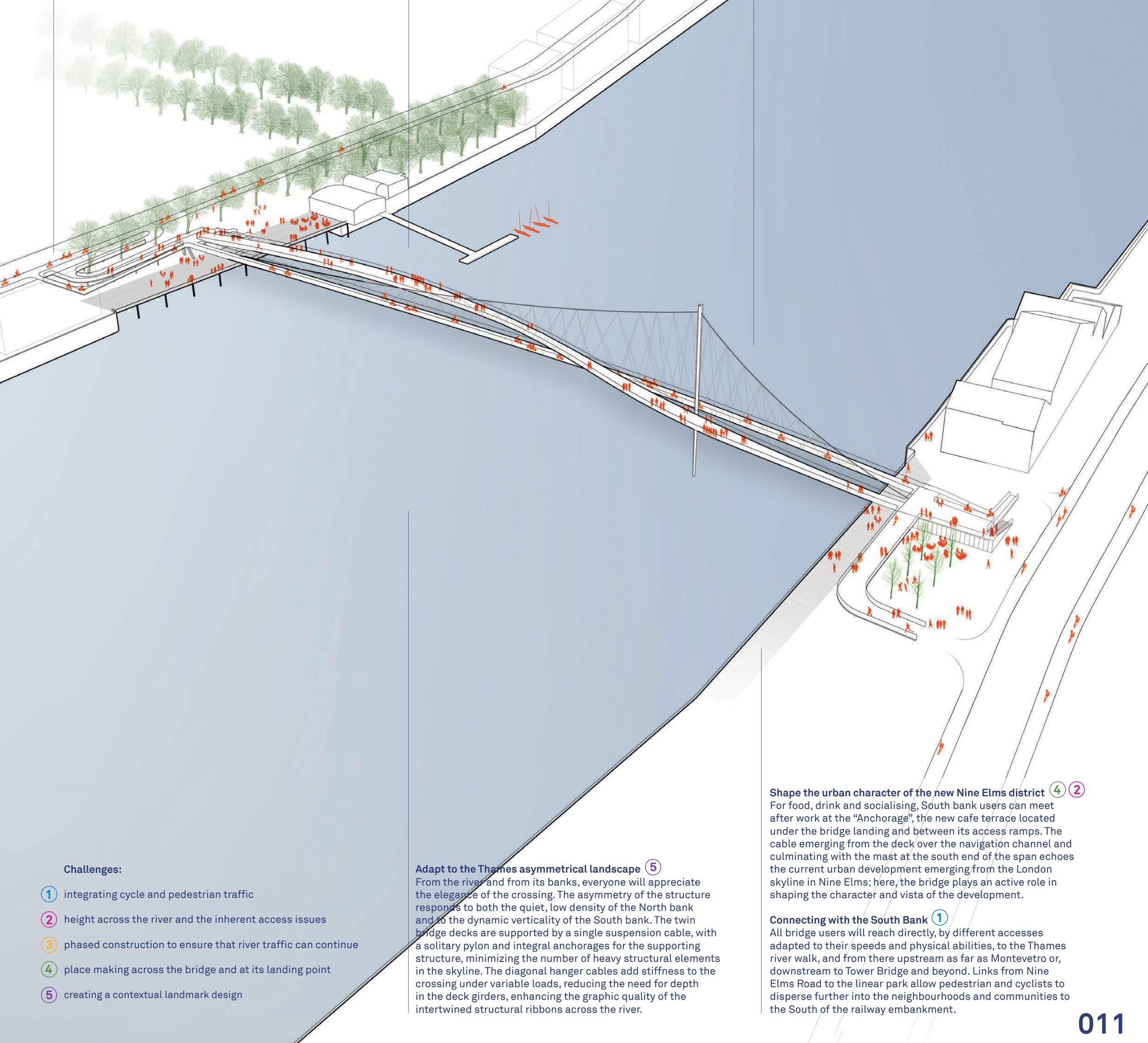
Open views to River Thames (2) (4)
People in the new park perceive only the bridge deck extending from the North bank. The offset pylon is located near the opposite riverbank. The suspension cable passes under the deck and is anchored to an open portal framing the views of the Thames. The ramp is supported on a colonnade that opens onto a deck cantilevered over the water.

Organize connections between decks and the network of paths in the city (1) (2)
All types of users can access the bridge via ramps: quick ramps for cycling commuters leaving the bridge; gentler ramps for runners; cyclists going up; persons with disabilities; roller skaters; and ambling pedestrians. They connect with the network of cycling lanes, paths and pavements so as to minimise crossings and eliminate conflicts between the various flows moving at different speeds. To achieve this, both cycle lanes are relocated on the south side of Grosvenor Road to limit risk of accidents between cyclists and motor vehicles.

Accommodate different speeds of movement (1)
For cycling commuters, the bridge will become the quickest and safest way to cross the River Thames in the area. At peak hours on weekdays, on the lower deck, they are not disturbed by slow moving pedestrians. For pedestrians and tourists too, it will be a pleasure to cross the bridge safely and leisurely on the upper deck. Both at night and at day, the pedestrian deck is a safe, open and generous place for a group celebration, a destination for a Sunday promenade or an ideal setting for a romantic meeting.

Provide a new river crossing experience (4)
Londoners and tourists alike will take pleasure in their new crossing. The deck curves and widens to offer spaces to stop, relax and enjoy the views. The structure picks up the deck on one edge only, creating an open panorama, downstream towards the Shard and London Eye or, upstream towards Battersea Power Station and glorious sunsets.

Build a structurally efficient crossing (3) (2) (5)
Engineering students will want to discover the new, innovative crossing when they visit London as the double suspended deck will look spectacular. The suspension structure is an extremely efficient form in terms of economy of materials and visual and ecological impact. The great efficiency of the structure allows for a minimal structural depth for the deck, thereby reducing the ramp requirements at each approach. Some tourists even came to witness the construction, which took place without interruption of river traffic and with minimal disruption of the daily life on land too. The components of the structure are so small and light that they were easily brought to the site by water and lifted into place using temporary cables strung above the river.



Challenges:

1. integrating cycle and pedestrian traffic
2. height across the river and the inherent access issues
3. phased construction to ensure that river traffic can continue
4. place making across the bridge and at its landing point
5. creating a contextual landmark design

Adapt to the Thames asymmetrical landscape (5)
From the river and from its banks, everyone will appreciate the elegance of the crossing. The asymmetry of the structure responds to both the quiet, low density of the North bank and to the dynamic verticality of the South bank. The twin bridge decks are supported by a single suspension cable, with a solitary pylon and integral anchorages for the supporting structure, minimizing the number of heavy structural elements in the skyline. The diagonal hanger cables add stiffness to the crossing under variable loads, reducing the need for depth in the deck girders, enhancing the graphic quality of the intertwined structural ribbons across the river.

Shape the urban character of the new Nine Elms district (4) (2)
For food, drink and socialising, South bank users can meet after work at the "Anchorage", the new cafe terrace located under the bridge landing and between its access ramps. The cable emerging from the deck over the navigation channel and culminating with the mast at the south end of the span echoes the current urban development emerging from the London skyline in Nine Elms; here, the bridge plays an active role in shaping the character and vista of the development.

Connecting with the South Bank (1)
All bridge users will reach directly, by different accesses adapted to their speeds and physical abilities, to the Thames river walk, and from there upstream as far as Montevetro or, downstream to Tower Bridge and beyond. Links from Nine Elms Road to the linear park allow pedestrian and cyclists to disperse further into the neighbourhoods and communities to the South of the railway embankment.