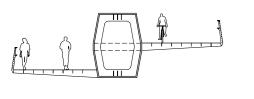
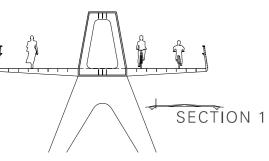
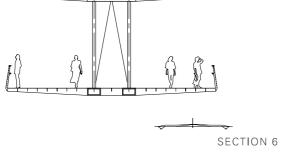


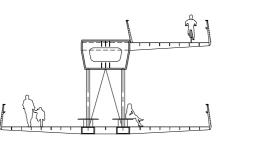
SECTION 3

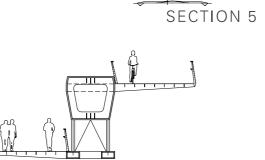


SECTION 2







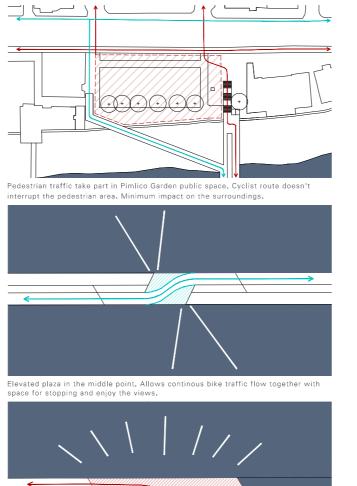


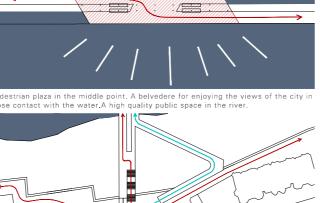
SECTION 4

# CHALLENGE 1\_CROSS SECTIONS I 1/200









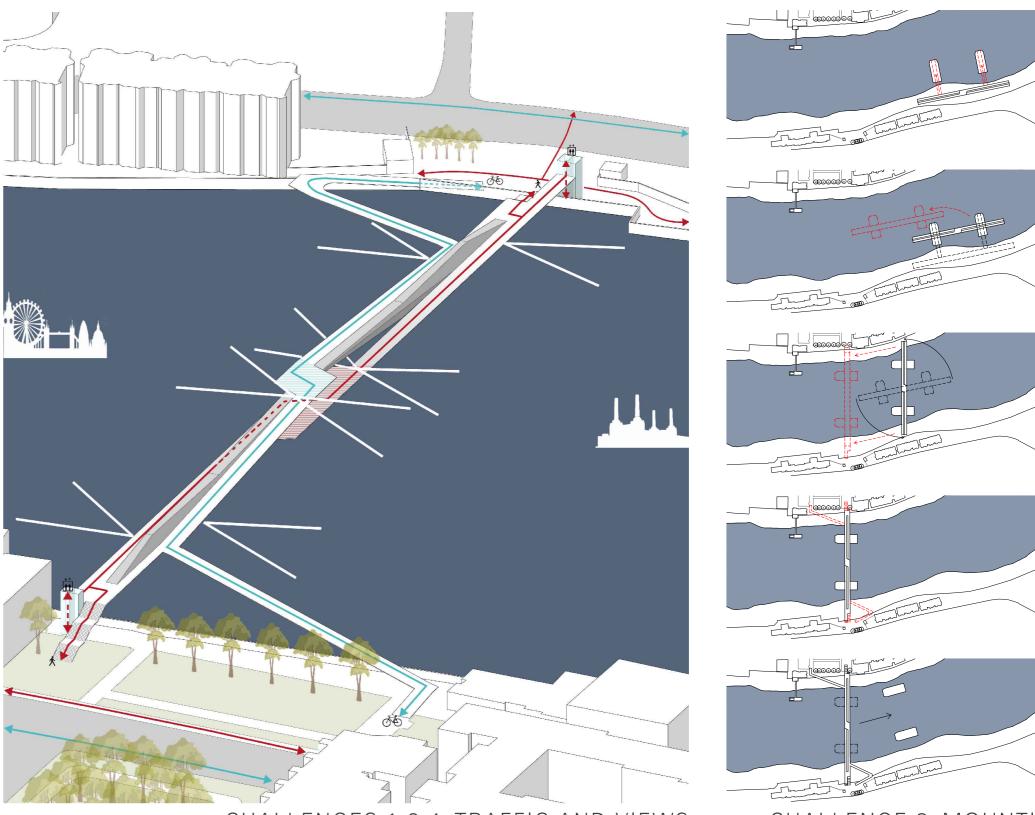


Plaza-like public space in the south river bank, easy access for pedestrians and bikes while flow along the waterfront stays obstacle-free.





# NINE ELMS-PIMLICO BRIDGE



CHALLENGES 1,2,4\_TRAFFIC AND VIEWS

CHALLENGE 3\_MOUNTING



Walking over water, to discover new perspectives of the city, the skyline, the sky and the horizon, are the pleasures that accomplish a pedestrian and cycler's bridge. A place in the middle of the river on two levels allows being close to the water and wide-open perspectives. Take a rest on midway and contemplate the urban and natural landscape!

Cyclers pass above, lead on a seven percent inclined way, the walkers cross underneath on a perfectly horizontal path.

Both traffics stay segregated in two paths of four meters wide, ensuring a comfortable use for the pedestrians while granting that the cyclists will flow unimpeded even in the rush hours.

## The structure

Structure is part of the concept: a central beam – a box – carries the walk- and cycle ways on cantilevers. The section of the box varies according to loads and moments. The edges are slim. The central beam forms a rigid piece to take up the loads, especially torsion, like the bone of a fish. The beam is fixed on both sides by abutments divided into compressed and tension foundations by a V-shaped end element. The horizontal footpath forms a tension rod minimizing horizontal efforts on foundations.

The structural scheme is evident. The metal pieces are welded together; junctions are easily accessible for maintenance.

Integrating dampers when needed control dynamics.

These clear and elegant structural elements work together generating an expressive and iconic landmark. It empowers the urban characteristics of both shorelines while becoming a remarkable element of the river's landscape. Its quality of a public space on the water with a fabulous view makes it a destination.

#### **Public Space**

The bridge links delicately to the riverbank, ramps lead from the land to the part of the river that allows ships to pass creating an obstacle-free and attractive crossing path for the cyclist.

The paths for pedestrians end with stairs and lifts, linking the 6m50 high ending to the quay assuring minimal disruption of the existing surroundings.

High quality public spaces are created in the middle of the river at two levels as well as in the ends, empowering the public use of the Pimlico Garden and adding a plaza-like space in the south waterfront without interrupting the flow along the bank of the river.

Banks to rest are provided in the central area of the pedestrian part.

#### Mounting of the bridge

The rigid structure of the bridge allows easy mounting of large prefabricated elements. They are assembled on the riverside and shipped in place. This ensures a minimal disruption of the river traffic.

#### Materiality

An anti-slip coating covers the paths granting safety for users in any condition. Railings consist of double steel posts carrying a wooden handrail. The filling is made of a pre-stressed net made of stainless steel cables.

### Light

LED lights are integrated in the handrail illuminating the paths from one side. The underside of the steel beam is underlined by light at night enhancing the elegant silhouette of the footbridge.