DIMENSIONS

The river at Option 2 spans roughly 160 metres. This means that the walkway has to be at least 175 metres long. On the south side there is a lot of space for access to the ramps leading to the walkway, but on the north side, there isn’t a lot. As the smaller north abutment can be built into the river wall, the access ramp can lead onto the existing pavement like so.

Existing pavement

Proposed walkway

The clearance needed is 13 metres, the same as the Chelsea Bridge nearby. As the design is that of a cable stayed bridge, the walkway cannot be curved upwards, to give more clearance. Therefore the clearance has to be 13 metres all the way across, with the exception of the north side, dropping a maximum of 1.5 metres. This way the footbridge will not block the way of the main navigation channel.

The walkway needs both pedestrian lanes and cyclist lanes for safety and ease of travel. Therefore the walkway should roughly be 3 metres wide, including handrails.

The handrails should have a height of 900mm, allowing usage for both adults and younger children.

Whether there will be two pylons (one on either side) or just one pylon (the cables connected through the middle of the walkway) has not yet been decided due calculations taking place in the next stage. However if possible a single pylon would be preferable as it would save money with less materials and in my opinion is more aesthetically pleasing.

The height and dimensions of the pylon(s) will be decided later on in the project, depending on the dead and live load of the bridge, but roughly around 45 metres, so as not to obstruct the surrounding view from or of the Battersea power station.

The circumference of the cables will also be decided later on in the calculations stage, but they cannot be too large as this would lower the aesthetics of the bridge and spoil the view from the walkway.