

St Philips Footbridge



The St Philips Footbridge scheme lies within the area known as Bristol Temple Quarter Enterprise Zone (TQEZ) which is an area of strategic development within Bristol City Centre and one of the UK's largest urban regeneration areas. The zone covers an area of 70 hectares and the bridge scheme is a key component particularly in relation to enhancing the green travel network and one of the first pieces of infrastructure in this new ambitious regeneration area.

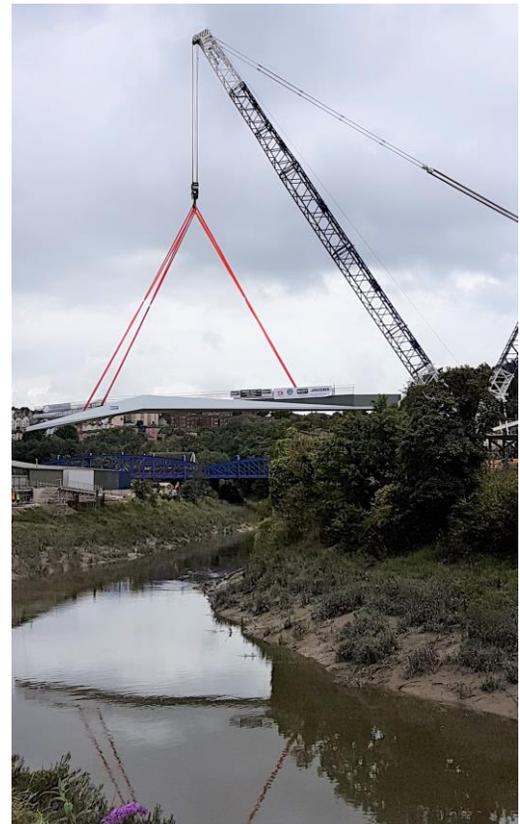
- **Date of completion: March 2019**
- **Cost: £4.3m**
- **Location: St Philips, Bristol**

Challenges and solutions

The footbridge, together with its associated ramp and riverside walkway, is an innovative solution to a complex crossing problem comprising the connection of the two banks of the River Avon with a significant elevation and appearance difference, with one side being developed to a higher architectural standard sooner than the other.

The resulting structure is considered to be an elegant solution that has its own identity whilst not detracting from the existing bridges, vistas, and intended future developments. Complex 3D design was needed to analyse the 4m wide, 50m single span bridge, enabling its placement in a single bridge lift. The River Avon Footpath has also been significantly improved, with a 3m wide access throughout, planting and stylish lighting enhancing the sense of personal safety.

The scheme is sensitive to the locality with an existing masonry wall on the west bank incorporated into the design, minimising the export of materials to landfill, while the single span design eliminates any adverse effects on the river.



Benefits and achievements

The improvement of public space is the sole purpose of the scheme, both for the initial development of the Temple Island mixed-use development, a 'brownfield' site, and also for the longer-term development of the St Philips Marsh area, a future regeneration area. The design is sensitive to the heritage and ecology of the area by avoiding nearby listed buildings and effects on local ecology such as the presence of bats, otters and kingfishers. It is also sensitive to the local vistas by being a suitably low-lying, non-intrusive structure over the River Avon.

The scheme provides a significant new component in Bristol's sustainable transport (walking and cycling) network primarily to Temple Island via the new bridge. It is also a major improvement of the River Avon shared use path, including a 3m-wide Equality Act 2010 compliant route throughout, street lighting, and planting of native species, such as blackthorn and hawthorn within anti-erosion matting. In addition, the scheme provides enhanced flood protection for the area for a 1 in 200-year event, including climate change allowance, by means of both an integral flood wall and a landscaped earth bund.



Fascinating facts

- A massive 1200t mobile crane lifted the entire bridge, weighing around 160t into place in a single operation!
- Seventy-one piles, each 17 metres-long were needed on the east bank due to the poor ground.
- Enhanced flood defence measures included in the scheme offer protection to the area against a one in 200-year flooding event.

People who made it happen:

- Client: Bristol City Council
- Designer and Project Manager: Jacobs
- Contractor: Andrew Scott Ltd.
- Architect: Knight Architects
- Steel Fabricator: SH Structures

More about this project:

knightarchitects.co.uk/projects/st-philips-footbridge