

A38/A419 Whitminster Roundabout Canal Bridges



In 2019, Cotswold Canals Trust was awarded vital funds by Highways England to restore parts of the Stroudwater Navigation including waterway, locks, bridges and wetlands which were destroyed when the A38/A419 roundabout and M5 were built in the late 1960s west of Stonehouse.

The completion of this innovative project restores a section of canal that has been missing for nearly 50 years. The renewed stretch is constructed through the busy A38 Whitminster Roundabout, including two new bridges, a canal channel within the roundabout and a towpath under the bridge.

- **Date of completion: Nov 2020**
- **Cost: £4.5m**
- **Location: Whitminster, Gloucester**

Challenges and solutions

The scheme utilised a large pre-cast concrete segmental box with cantilevered towpath retaining walls fixed to the base. This approach helped to largely eliminate any risks associated with steel fixings and formwork, with the added benefit of reducing construction duration and cost.

The main challenges faced were managing groundwater accumulations, maintaining traffic flows, keeping underground utilities intact, obtaining support from adjacent landowners and keeping within a strict budget.

The project team helped deliver significant cost savings by deciding to combine works at the roundabout with remedial work at another site in the county before reopening the adjacent road safely. This resulted in approximately £0.7m savings and prevented 15,000m³ of clean natural material from going to landfill.

In March 2019, the impact from Covid-19 resulted in the shutdown of a key plant manufacturing the designed pre-cast concrete elements. The team helped to provide swift mitigation by re-sequencing the construction programme to allow construction to continue that did not rely on those elements to be delivered.



Benefits and achievements

The Cotswold Canals Trust, with partners including Stroud District Council, Gloucestershire County Council and Canal and River Trust, is working towards a multi-million pound restoration of waterways and towpaths that will provide significant social, environmental and economic benefits by providing a car-free walking/cycling route linking the Sharpness canal towpath at Saul Junction to Stroud and beyond. Other positive outcomes include increased biodiversity through creating new wetland habitats, attracting external investment to support the regeneration of old industrial areas along the canal corridor, and boosting job creation and the local economy.

Cotswold Canals Trust has been working toward this restoration since 1972 and is very proud to have the support of a diverse group of over 800 registered volunteers. Participation in the works enables plenty of healthy activity outdoors amongst nature and provides a welcoming social community. The project helped (and will continue to help) provide jobs to the local community and support the development of new skills.

Completion of this small but complicated part of the jigsaw puzzle has helped inspire the belief that restoring the canal will become a reality. There is a great deal of interest and excitement in seeing the gradual restoration of this canal, benefitting both the local community and economy.



Fascinating facts

- ❑ 15000m³ of excavation material was reused, with much of it transferred to another site within the county to provide support to a significant failing retaining wall.
- ❑ 25 telecommunications cables of national importance were carefully repositioned and supported during the works.
- ❑ The design will enable the bridges to carry unrestricted traffic, including all expected abnormal loads over the next 120 years.

People who made it happen:

- Project Initiator, Concept Designer & Charitable Fundraiser: Cotswold Canals Trust
- Funder: Highways England SW, Designated Funds
- Client and Grant Recipient: Gloucestershire County Council
- Principal Designer, Project Manager and Supervisor: Atkins
- Principal Contractor: Alun Griffiths (Contractors) Ltd
- Thanks also goes to Cotswold Canals Connected Partners, including Stroud District Council

More about this project: gloucestershire.gov.uk/highways/major-projects-list/a38-canal-bridges/