

KAY STREET BRIDGE WIDENING AND REFURBISHMENT BURY

Reconstruction & widening of a partially collapsed double arch masonry road bridge over the River Irwell following a major flooding event.

CLIENT
BURY MBC

VALUE
£1.4M

PROCESS
BRIDGE WORK

The works involved the reconstruction and widening of a partially collapsed Grade II Listed double arch masonry road bridge over the river Irwell in Summerseat, Bury. Following a major flooding event the historic Waterside Inn collapsed into the River Irwell and the adjacent Kay Street Bridge partially collapsed.

Through our long-standing relationship with Bury Council and our Framework Partner Status with the Environment Agency (EA), AEY were contacted by Bury Council to immediately mobilise and quickly plan, negotiate, and resource emergency stabilisation works to the River Irwell masonry retaining wall and supporting terraced properties above the river.

AEY undertook liaison with the EA, carried out site clearance and construction of stone access road/ramp off the public highway down into the river. We transported numerous 1T aggregate filled bags across river, installed/stacked them against the wall to prevent further movement and de-risk the danger of further collapse. Gaps between the wall and bags were infilled with in-situ dry-mix concrete to further stabilise the wall. These emergency works enabled Bury Council and their designers to produce a design for the reconstruction of the Grade II Listed bridge - the decision was taken to demolish the remains of the Waterside Inn.

After starting works it was discovered that the bridge was damaged significantly more than originally envisaged at design stage. Further investigations found bedrock supporting the central pier had been scoured to a depth of 6m. Due to EA restrictions on in-river working (June to end of September only) works had to be postponed and the site 'stood down'. Anti-scour and protection works were installed and the site was made safe until works could resume.

On restarting works we again accessed the river via a temporary causeway and undertook strengthening works around the central pier and the abutments on either side of the river including; temporary dams/pumping; cased and augured RC piles to 21m depth (see photo right); RC pile cap; mass concrete scour protection beams to abutments/retaining walls adjacent to the structure. We then undertook the original scope for widening and restoring the bridge.



