



## Shrub Hill Retail Park Worcester

**Client**

St Modwen Developments Ltd

**Contractor**

CJ Pearce

**Consultant**

Halcrow

**Works Completed**

2002



As part of this project, a new canal bridge was required to replace an existing masonry structure. The conforming scheme for the bridge comprised of a simple supported single span deck on piled abutments.

As an alternative, Reinforced Earth Company (RECo) proposed an arch structure. The arch was required to accommodate a clearance envelope for the navigable waterway and provide pedestrian clearance along the towpath.

The solution adopted comprised a TechSpan® arch structure founded on a piled strip foundation. The precast segmental arch was erected as a three pinned structure. However, due to the minimal fill cover over the crown, the structure was made continuous across the crown joint with an in-situ concrete stitch to form a two pinned structure. The spandrel walls and wingwalls were formed in Reinforced Earth using a galvanized steel mesh facing system. The completed walls were subsequently clad in brickwork to meet the aesthetic requirements of the project.

Erection of the arch units was completed in just two days. The combination of Reinforced Earth Company's TechSpan® arch and masonry clad retaining walls provided the Contractor with a cost effective alternative to the conforming scheme. The finished project was shortlisted for the Institution of Civil Engineers' Midlands Award in 2003.