

Glasgow Science Centre Bridge

The Glasgow Science Centre Bridge provides a new crossing over the River Clyde, close to the city centre, linking the prestigious Glasgow Science Centre on the south bank with the Scottish Conference and Exhibition Centre on the north bank.

The bridge has a total span of 128m, comprising two fixed spans of 44m and two lifting bascules providing a navigable channel of 35m. The structure is formed from a triangular tubular steel lattice frame connecting a single bottom boom with two upper boom members. The lifting spans are raised by twin hydraulic cylinders that are mounted in line with the bottom boom. When in the lowered position the lifting spans maintain the same gradient as the fixed span approaches. Each fixed span is supported at the lifting position by a single 1520mm diameter tubular steel pile and at mid span by a 914mm diameter pile.

All the piling was carried out by C Spencer Ltd utilising their self-propelled barge the 'Meeuw'.

The bridge is controlled from a mobile radio pendant which communicates with media drums located at each side of the bridge. These media drums also house the hydraulic power packs, with each side of the bridge being essentially independent. In order to minimise the piping requirements, a secondary manifold is positioned by the hydraulic rams, which directly controls the oil flow into the lifting and locking cylinders.

Bennett Associates was responsible for the concept design and detailed manufacturing drawings for the Structural, Mechanical, Electrical and Hydraulic systems.

