



CASE STUDY: CROSSRAIL (LIVERPOOL STREET)

Falco was appointed by Laing O'Rourke to carry out three sewer connections from the Liverpool Street Box.

Two of the connections were in a heading from the basement to the sewer in Blomfield Street, the third was in an open cut trench in Broad Street Avenue.

The heading had to pass through a box out in the internal wall of the basement which was formed by Laing O'Rourke. Behind the wall was a piled wall consisting of 750mm diameter reinforced concrete piles. The piled wall was removed by a specialist concrete cutting contracted using rotary core drilling and a robotic breaker (Brok 80).

Behind the piled wall additional obstructions were encountered. This included a large cast iron stanchion which was removed by cutting and grinding.

There was also an additional reinforced concrete footing. This was removed using a one-tonne mini digger with breaker and hand held tools for trimming. In total there was concrete over three metre length of the heading.

Once the sewer was reached two 300mm diameter cores were drilled in the sewer to form the connection points. Two 225mm Cast iron pipes were installed in the cores and made good with sand and cement. The heading was then piped and packed and the soffit grouted.

The opencut was carried out using an 8 tonne excavator. The pipes were installed including a backdrop to the existing manhole. The connection to the building was formed by coring a 200mm diameter hole through the one metre-thick . The connections were air tested and a CCTV survey was carried out on completion.

Sector: Water

Project: Crossrail

Client: Laing O'Rourke

Duration: 6 weeks

Location: London

