



TOPBOND PLC
Group

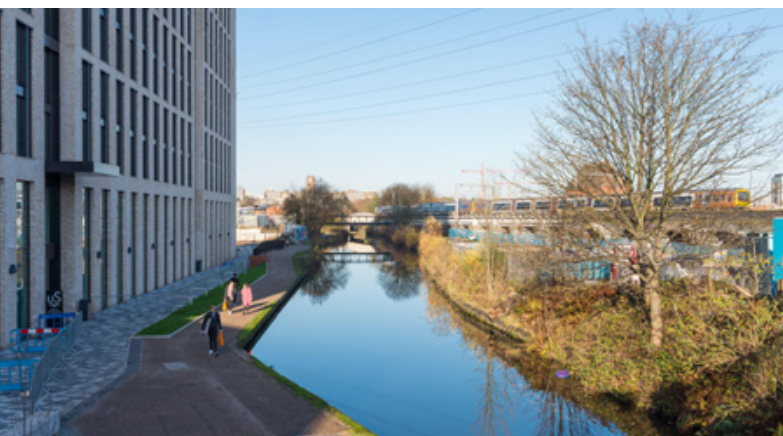
PLATIPUS
EARTH ANCHORING SYSTEMS

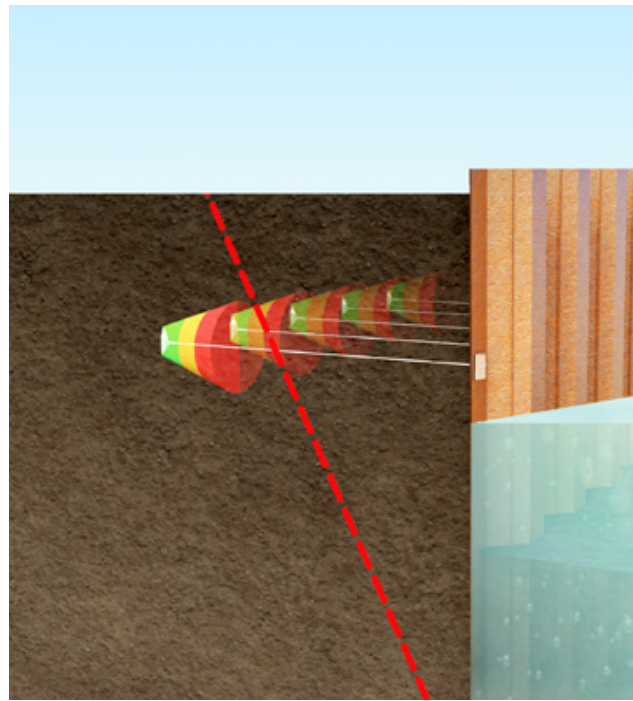
SELLY OAK WINDING HOLE, BIRMINGHAM



OVERVIEW

Along the Worcester and Birmingham Canal, works took place to create a winding hole; a notch in the canal that allows boats to turn. This marked the first section of the Dudley No. 2 Canal to be built as part of the restoration to rejoin the two canals. The land surrounding the winding hole would need to be supported by sheet piling with Percussion Driven Earth Anchors (PDEA®) along 16m of the exclusion zone adjacent to Bristol Road, where traditional tiebacks would have risked undermining the highway. These works were also surrounded by student accommodation, a shopping centre, and a railway line. The winding hole formed part of a larger project, which also included a new footbridge, and a public square on the east side of the canal.





THE SOLUTION

To allow works to be completed a temporary dam was constructed. Following suitability testing, the Platipus S8 anchors showed excellent performance and would still allow installation by hand. A total of 15 anchors were installed in a single row at 1.2m horizontal spacing along the exclusion zone. The anchors were driven to a depth of 5m and loadlocked at a 17kN working load. After the installation of anchors, the capping beam was cast on the sheet piling. The area behind the sheet piling could then be backfilled and graded, and the land in front excavated to form the winding hole.

