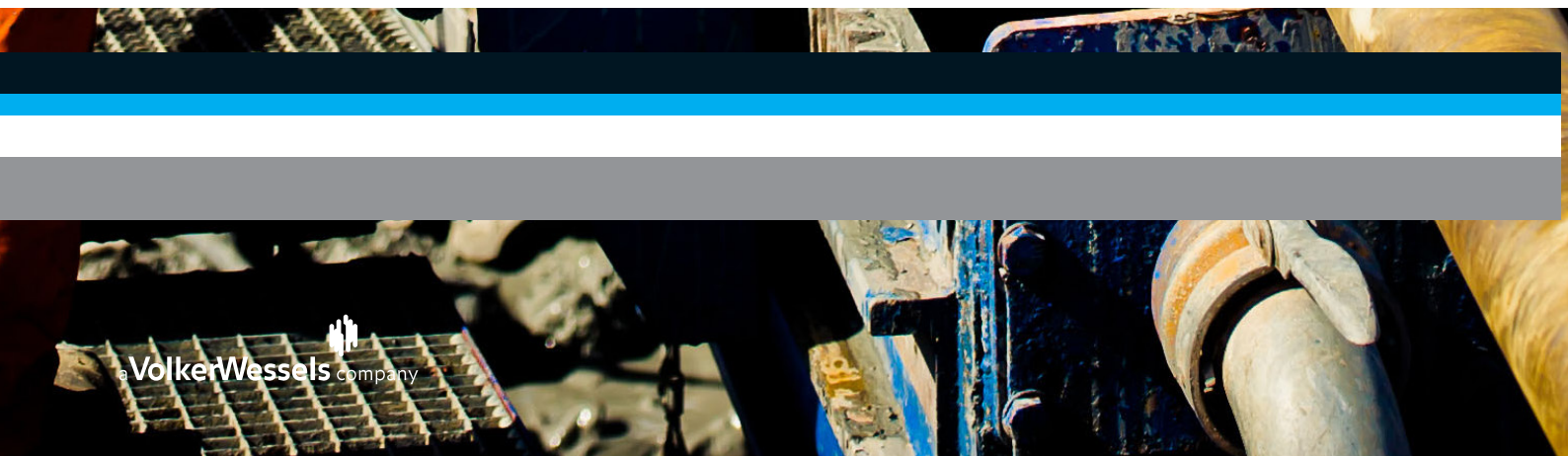




Cambridge to Ryeford HDD





Cambridge to Ryeford HDD

Client	Western Power Distribution
Contract	Cambridge to Ryeford HDD
Value	£770,000
Duration	Six weeks

Under the Western Power Distribution (WPD) framework for trenchless installations, Volkerinfra was appointed as principal contractor to undertake a crossing of the River Cam in Gloucestershire. The works have allowed WPD to increase their network capacity and provide greater flexibility and security of supply.

The crossing was completed using Horizontal Directional Drilling (HDD). Two separate bundles of three 180mm diameter and two 110mm diameter polyethylene (PE) ducts were installed horizontally, separated by five metres, to enable the later installation of HV cables. The works entailed installing approximately 575m of installed pipes, eight metres below the river bed.

To facilitate the drilling operation, water was extracted from the Gloucester and Sharpness Canal under consent obtained by Volkerinfra from the Canal Trust. In advance of the drilling phase the PE cable ducts were delivered in 12 metre lengths and fabricated on site using butt fusion welding. The drilling operation was carried out within an environmentally sensitive area, which necessitated specific consideration with regards to the environmental risks prevalent.

Conventional forward reaming was adopted to enlarge the bored hole. During the drilling operation, stiff clay was encountered which required the use of a drill motor.

A strict traffic management plan was enforced to control vehicle movements in and out of the site, which required careful planning and co-ordination.

Upon installation of the pipe bundles, the cable ducts were subsequently proven and draw cords were installed within each duct to allow the future pull-in of the HV cables by Western Power Distribution.

