

# PIPE JACKING CASE STUDY

## Blackburn UID's



[www.pipejacking.org](http://www.pipejacking.org)

PROJECT	Blackburn UID's
CLIENT	United Utilities
CONTRACTOR	A E Yates Ltd
PIPE SUPPLIER	F P McCann
TUNNELLING MACHINE	HK MH3 & 1500 AVN, Soltau RVS400
VALUE	£1,800,000



### PROJECT OVERVIEW

Unsatisfactory Intermittent Discharges (UIDs) were causing unacceptable wastewater flooding to fields in the area around the Blackburn Wastewater Treatment works during larger storm events. To solve this United Utilities required works on the combined sewer overflow at the head of the works and to the overflow weirs by storm tanks that were spilling on a regular basis.

### DESCRIPTION OF WORKS

New pipes were installed to carry combined sewerage. These comprised steel banded concrete pipes, 780m at 1500mm diameter and 110m at 1000mm diameter installed by pipe jacking using a range of tunnelling machines. The ground conditions varied greatly across the scheme and ranged from strong rock, firm clay and wet loose silt.

In addition to the tunnelling works there was a wide range of other works including RC CSO chambers, large storage shafts, pumping stations, manholes and shafts, connections to the existing system, abandonment of existing sewers, open cut pipe laying, MEICA and soft and hard landscaping.

### CO<sub>2</sub> SAVINGS

CO<sub>2</sub> savings of the pipe jacking element compared to open cut construction were 42% for the 1000mm diameter drive. For the 1500mm drive at 12 metres depth open-cut was not a viable alternative. Source: [pipejackingco2calculator.com](http://pipejackingco2calculator.com)

FURTHER INFORMATION: [www.aeyates.co.uk](http://www.aeyates.co.uk)

