PIPE JACKING CASE STUDY

Ferniegair Wastewater Treatment Works





Ferneigair WwTW

Scottish Water/Galliford Morgan JV
A E Yates Trenchless Solutions Ltd
F P McCann
Backacter Shield

£257,000



A wastewater treatment works at Ferniegair in Scotland commissioned by Scottish Water required a 5km gravity outfall pipe to complete its construction.

DESCRIPTION OF WORKS

A strategic 165 metre pipe jacked crossing under the M74, at Ferniegair, south of Hamilton, Scotland provided a sleeve through which the permanent MDPE outfall pipe was inserted, transferring final effluent from the new treatment works to the River Clyde.

The crossing was constructed with 1200 mm diameter steel banded concrete jacking pipes using a backacter shield driving through ground conditions consisting of soft to firm brown clay with partings of silt.

The M74 has strategic national importance and the pipe jacking proposal required the approval of Transport Scotland. Monitoring established that there was no movement of the carriageway throughout the works.

CO₂ SAVINGS

 CO_2 savings of the pipe jacking element compared to open cut construction were 45% for the 1200mm diameter drive. Source:pipejackingco2calculator.com



