



BRISTOL PORTAL SEWER TUNNEL

Temporary Cofferdam

CLIENT
J MURPHYS & SONS

CONTRACT NO. C21386

PROCESS
TM 14/17M TELESCOPIC LEADER RIG

SPI Piling Ltd, were employed by Murphy's Ltd to install a launch pit and a manhole cofferdam on the West of Bristol to enable the launching of a tunnel boring machine (TBM) which will run underneath the city of Bristol.

This tunnel will replace and modernise the existing sewer network currently used by the city of Bristol.

SPI Piling Ltd, installed around 100 pairs of Z piles to the launch pit and around 40 single U piles to the manhole cofferdam, both using an ABI TM20 leader rig into extremely hard mudstone by utilising soil-loosening techniques prior to driving the sheet piles.

The project was made difficult due to very difficult access and working restrictions due to the works taking place in a housing estate with a fully operational primary school on the boundary of the launch pit and a special needs school to the boundary of the manhole cofferdam.

SPI Piling Ltd also installed a steel fabricated frame within the launch pit cofferdam to enable Murphy's Ltd to complete the bulk dig and install the lower concrete slab.

SPI Piling Ltd provided the Design, supply and installation services for the sheet piled launch pit cofferdam and the steel frame system and engaged with Murphy Ltd' designers throughout the process, developing the design as the clients requirements developed through the construction process.









