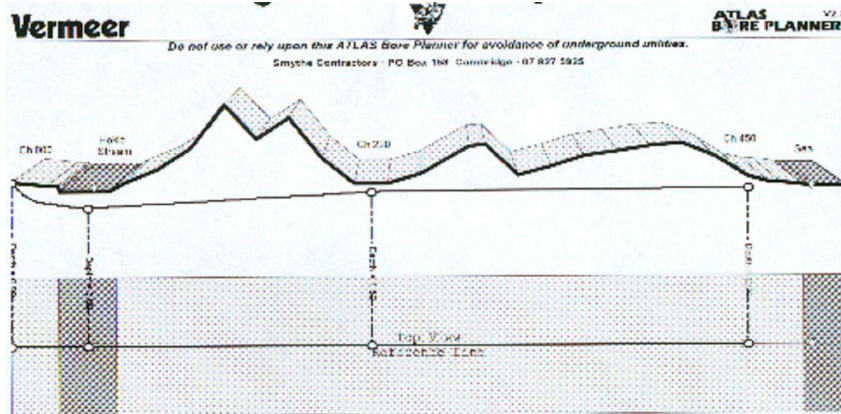


the Contractors

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Telecom NZ Cook Strait Submarine Cable Beach Landings

Recently Smythe Contractors took part in the installation of a new fibre optic link between the North and South Island. Smythe Contractors were engaged early in the design process. The project had several design constraints and it was found necessary to install a duct 450m long under the sand dunes at Hokio Beach in one continuous drill operation. This was no simple task as sand is the most difficult medium to drill through and 450m is a long drill. Bore plan computer software was employed to calculate and plan the drill route, rod by rod.



Bore plan long section



Drill with 6 racks (450m of rods)



Reamer & duct arriving at the drill

The duct installed was a 225mm \varnothing OD Polyethylene with a wall thickness of 33mm. This duct was specially designed and manufactured. It was designed to ensure the pipe would not break during the pull back process in the sand. To minimize friction and to aid flow, 90,000 litres of drilling fluid was pre-mixed before pull back. The duct was up to 14m deep and 5m below the water table.

Paeroa main pipeline

Smythe Contractors won a large contract to install the main pipeline for the treatment plants at Paeroa for the Hauraki District Council. The contract consisted of 2.6km of 630Ø and 830m of 315Ø polyethylene pipe. The pipe lay route included three drill shots, one under SH2 and two under large drainage cannels. The contract required the pipe strings to be hydraulic tested to 700kpa.



Hydraulic testing of 630Ø PE pipe

Smythe Contractors have a comprehensive butt-welding and de-boding capability with Unitech trained and qualified staff.



Butt-welding & data logging PE pipe

Cool Store, Port of Tauranga

Smythe Contractors were involved in a unique project to stop the effects of frost heave at a major cold store in Tauranga. The cold store operates at -22°C and as a result of damaged air vents during construction the ground under the floor could freeze. If the ground continues to freeze the building would eventually be compromised. Once again Smythe Contractors were engaged in the design process and we proposed to drill and install 32mmØ PE pipes at 1m centres under the building. The pipes were then connected and glycol solution circulated through the pipe work and heated with the waste heat from the chiller units.

Due to the mass of concrete and abundance of reinforcing and steel portals, Smythe Contractors imported a new low frequency locator system to track the beacon as it travelled under the building. This worked with much greater success than the traditional location equipment. The project was completed in 8 weeks with 3,600m of heating pipe installed.

Further Information

Further information on our services can be obtained by contacting:

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