

COOGEE TO ALEXANDRIA COMMUNICATIONS HDD

OIL/GAS | SEWER | STORMWATER | POWER | WATER | **TELCO**

PROJECT OVERVIEW

With a new fibre optic cable landing from overseas and reaching Australian soil at Coogee, a new conduit was required from the location where the fibre exits the ocean on the south side of Coogee beach to a recently built data centre in Alexandria.



LOCATION

Coogee to Alexandria NSW



CLIENT

Mirait Technologies



PIPE

1 x 125mm HDPE



GEOLOGY

Sand & rock



LENGTH

8,620 metres



TECHNIQUE

HDD

SCOPE OF WORKS

- Locate, pothole and design the complete route
- Install 8,620 metres of 125mm conduit via HDD technology
- Install 57 haul pits and five splice pits (including earthing)

CONSTRUCTION

Bore lengths ranged from 50 metres to 245 metres. UEA utilised three HDD rigs for the duration of the project – a Vermeer D60x90, DitchWitch AT4020 and AT3020. Civil crews worked full time to link up bores, install pits and restore all sites.

CHALLENGES

- The new conduit route requires crossing major Sydney roads including Anzac Parade, Southern Cross Drive, Gardeners Road, O’Riordan Street and along Bourke Road. These roads are major arterial routes – not only for transport, but also for other utilities including High Voltage Electricity, high pressure gas and major fibre optic networks. Because of this, the planning of alignment and depths required upfront investigation and consultation with existing utility providers. Along the



entire route, every service was traced, rodded and potholed to ensure an alignment was achievable. UEA's team started this investigation a month prior to drilling commencing.

- Ground conditions varied from sandstone in Randwick to sand in the Coogee and Alexandria areas. These changing ground conditions required different drilling techniques, utilising inner rod rock drilling with sandstone and specialised drilling products with sand to maintain the hole.
- UEA encountered contaminated material at multiple locations throughout the project, and the team conducted extensive testing to ensure correct tracking and disposal of this contaminated material. Additional drill fluid products were used to ensure the bores could be completed.
- The majority of this project was undertaken within residential streets, requiring a close working environment with residents and high foot traffic. Full time traffic control ensured the safety of both pedestrians and workers throughout the job.

COMPLETION

The project was a huge success for both UEA and our client Mirait. Teamwork was essential with everyone working towards the same goal – pipe installed in the shortest, safest time possible. UEA did not damage one single service during the undertaking of this project – an amazing feat considering the high-density nature of the places drilled through.