



Port Kembla Lateral Pipeline Project

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

PROJECT OVERVIEW

Jemena's Port Kembla Lateral pipeline involved the construction of a 12 kilometre DN450 buried gas transmission pipeline to connect the new Australian Industrial Energy proposed Port Kembla Gas Terminal to Jemena's existing Eastern Gas Pipeline. UEA's scope of works under the contract included installing 4 kilometres of the pipeline via Horizontal Directional Drilling. The 4 kilometres was split into ten separate underbores, eight of which included a drilled mud return line.



LOCATION

Port Kembla, New South Wales



CLIENT

Jemena & Nacap



PIPE

18" steel



GEOLOGY

Marine mud, clay, slag, coalwash, hard rock



LENGTH

Total length 4,043m



TECHNIQUE

HDD

SCOPE OF WORKS

UEA's engagement involved mobilising a number of maxi rig spreads to Port Kembla to complete the package of ten underbores – a combination of two Herrenknecht 250Cs, a Vermeer D330, a Gallagher 660 and a Gallagher D100.

Three steering engineers were designated to the works at the height of the project. Paratrack2 was utilised as the designated method of tracking for eight of the underbores, with a combination of a Beacon and Coil used across the various sites. Due to unforeseen access restrictions for one of the sites, the methodology was changed, and a Gyro module was mobilised and utilised to ensure the accurate steering of the pilot bore.

KEY PROJECT HIGHLIGHTS

- ✓ The successful installation of a road crossing that entailed a two-day pipe installation with two tie in welds.



- ✓ Innovative methodology to overcome excessive volumes of ground water and prevent the ingress of contaminated water.
- ✓ Installation of the longest HDD on the project (950 metres).
- ✓ Utilisation of Gyro to successfully pilot as per the design project tolerance for an underbore that did not have alignment access.
- ✓ Completion of one underbore through hard rock exceeding 160mpa.
- ✓ All underbores were compliant with Jemena and Nacap's mechanical completion specification.

OUTCOMES

Following the completion of each underbore, a coating integrity test was conducted by a NACE Certified Cathodic Protection Specialist, all installed pipes received a successful result. UEA delivered the underbores on time and the team was able to overcome the various challenges that each separate underbore posed.