GERRINGONG CRITICAL MAIN RENEWAL HDD PROJECT

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

PROJECT OVERVIEW

As several towns in the south coast region of New South Wales were receiving potable water supplied through a single-source line experiencing sustainability issues, an alternative supply was required. UEA was initially engaged by a major water authority for early contractor involvement via assistance in asset location, expert know-how on HDD installation and general water main construction design advice.

LOCATION
Gerringong NSW

CLIENT
Sydney Water Corporation

PIPE
250PE PN16, 500PE PN16 & 500PE PN20

GEOLOGY

LENGTH
800 metres

TECHNIQUE
HDD & open-cut

SCOPE OF WORKS

The installation of the 800 metres of potable was installed using separate techniques:

- Stage 1: 550 metres of 250PE PN16 temporary bypass, including two under pressure cut-in connections
- Stage 2: 200 metres of 500PE PN20 drilled under railway line
- Stage 3: 50 metres of 500PE PN16 installed via open-cut trench and connections

The initial temporary bypass design required an extension of approximately 170 metres, which eliminated the need for a major shutdown to these towns. The risk mitigation of this extension, recommended by UEA, was favourably looked upon by both the client and also by the local community.

CHALLENGES

- Client request to accelerate the project by two months
- Flow isolation safety protocols
- Track monitoring of the South Coast Railway Line through surveyors and geotechnical engineers
- Management of ground water

- UPCIC/hot tap connections on different pipe types
- Installation of complex fittings and assets
- Weather challenges with heavy storm conditions
- Existing assets had failure points in network

COMPLETION

Despite some horrendous weather conditions and subsequent flooding, the project was delivered ahead of time, under budget and to the satisfaction of our client. UEA's early involvement with the client ensured the project went to plan from day one.