

PARK AVENUE HDD WET WEATHER OVERFLOW ABATEMENT PROGRAM

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

PROJECT OVERVIEW

This project was undertaken to reduce the number of wet weather overflows from ten locations in the area around Park Avenue and Glover Street in Mosman. The work was comprised of upgrades to some of the overflows, amplification of some sewers and sewer diversions to areas of the system with spare capacity. Primarily targeted at swimming sites, the program provides benefits to the environment and human health and is part of Sydney Water's long-term program of sewerage system improvements.



LOCATION

Park Avenue, Mosman NSW



CLIENT

Sydney Water SewerFix Alliance



PIPE

355mm SDR 11 polyethylene



GEOLOGY

Sydney sandstone



LENGTH

540 metres



TECHNIQUE

HDD

SCOPE OF WORKS

The HDD bore design was on a gradual curve from right to left, whilst a constant grade of approximately 2% had to be maintained for the duration of the bore. The design of the project allowed UEA to utilise PDC forward reamers with all cuttings and drill mud returning to the drill face. UEA chose to upsize the hole in two passes – an initial cut of 13 inches and then a final cut of 18 inches. Upon completion of the ream UEA pushed the pipe into place. Individual solutions were combined to minimise disruption to the local community.

CHALLENGES

Due to the complexity of the bore, UEA engaged the services of a steering engineer and a Paratrak 2 system. UEA utilised one of its 45 tonne HDD rigs to undertake the pilot bore, which was completed in twelve days and within 30mm of the required intersection point.

Site-specific challenges included maintaining the grade, working in a densely populated area of Sydney, intersecting an existing manhole and working with limited room for the new polyethylene pipe string. The



355mm product pipe could not be strung out in one length so a weld and pull scenario was adopted for the pull back process.

COMPLETION

Despite the location and complexity, UEA delivered the bore ahead of time and was awarded further HDD works by our client based on the high standard of delivery.