

# WESTERN SYDNEY AEROTROPOLIS GROWTH AREA DRINKING WATER DN450 LUDDENHAM ROAD

CLIENT: WEST REGION DELIVERY TEAM

LOCATION: LUDDENHAM

DURATION: 5 MONTHS

VALUE OF ENGAGEMENT: \$3.9M

The West Region Delivery Team appointed Ferrycarrig to undertake the installation of new drinking water infrastructure to the Western Sydney Aerotropolis Growth Area (WSAGA).

This infrastructure includes the installation of 3.8km of DN450 (560mm OD HDPE) trunk mains running along the alignments of Luddenham Road (WSAGA 3).

The works involve trenching, poly-welding and backfilling of pipes. There are a number of road crossings and connections along the route.

There were a number of specific challenges associated with the delivery of the works:

- Working in the vicinity of live traffic
- Environmental controls along the route
- Indigenous and Cultural heritage area
- Installation of large diameter pipework and welding quality
- Hydrostatics Testing of trunk mains
- Connection to existing Water main from Mamre Road
- Connection to case bore section under Elizabeth Drive
- Nightwork ROLs
- Management of circa 20,000 tons of material and associated truck movements

Ferrycarrig utilised open-trench excavation, HDD and bed boring as trenchless construction methods.

Our in-house Traffic Management Team delivered all traffic control requirements associated with the delivery of the project.

At the peak of this project, the Ferrycarrig team effectively coordinated 2 pipe laying crews along with 3 HDPE welders. The project delivery team identified several design improvements

Throughout the delivery of the project including realignments and alternate construction methodologies. Ferrycarrig's collaborative approach and focus on solutions was key to successful delivery of the scope.

Working in close proximity to underground services and low overhead cables brought challenges, but through well planned and executed temporary works the project delivery team were able to meet high productivities.

Ferrycarrig ensured positive collaboration and communication with all stakeholders involved in the delivery of the project.

**WORKING IN CLOSE PROXIMITY TO UNDERGROUND SERVICES AND LOW OVERHEAD CABLES BROUGHT CHALLENGES BUT THROUGH WELL PLANNED AND EXECUTED TEMPORARY WORKS THE TEAM WERE ABLE TO MEET HIGH PRODUCTIVITIES.**

