

EAST TAHMOOR SEWER GRAVITY MAIN

CLIENT: SYDNEY WATER/WESTERN REGION DELIVERY TEAM

LOCATION: TAHMOOR NSW

DURATION: 5 MONTHS

PROJECT VALUE: \$5 MILLION

VALUE OF ENGAGEMENT: \$5 MILLION

Ferrycarrig was engaged by Sydney Water's Partnering for Success West Region Delivery Team to deliver 1.6km of trunk DN525 sewer main and maintenance holes along a 1.7km route, providing sewer infrastructure to a new subdivision development in Tahmoor.

The scope of work included the following:

- Excavation and installation of 800m of DN 525 Polypropylene gravity main ranging in depths from 4m –8m installed by conventional open trenching methodology
- Concrete encasement of the wastewater pipe
- Construction of 18 cast-in-situ DN1800 maintenance holes
- Construction of vent shafts
- 800m of DN355 PE pipe by micro tunnelling and horizontal drilling methodology
- Jetting and CCTV of newly installed pipework
- Bypass existing flows and undertaking connections into the existing wastewater network
- Construction of large reinforced concrete overflow tanks
- Diversion of existing DN 900 RCP stormwater pipes
- Provision of traffic control with our own in-house traffic controllers

Key challenges associated with the delivery of the works included:

- Working in the vicinity of residential areas and affected stakeholders
- Providing adequate respite to affected residents where only 6-7 hours per day of rock breaking were allowed
- Working next to live traffic with deep excavations
- Excavating up to depths of 8 meters in hard sandstone rock
- Operating large machinery to enable sandstone removal in tight residential areas
- Detailed staging of works interfacing with other contractors
- Working in the proximity of environmentally sensitive areas.
- Short program to complete all pipe installation works to developers can connect to the new carrier main

Edge protection, barrier systems, and safety recovery systems were in place when working near deep trenches and when executing high-risk activities, this resulted in a record of zero harm/zero accidents with an achievement of 100% of the planned tasks.

Regular workshops and toolbox talks were conducted with crews to proactively address any community concerns.

Ferrycarrig assisted the Sydney Water West Region Delivery Team to resolve issues with design changes. Utilising the expertise of our project delivery team, Ferrycarrig promoted the best value, fit-for-purpose alternative solutions to adequately resolve design change with minimal impact to all project stakeholders.



FERRYCARRIG PROMOTED THE BEST VALUE, FIT-FOR-PURPOSE ALTERNATIVE SOLUTIONS TO ADEQUATELY RESOLVE DESIGN CHANGE WITH MINIMAL IMPACT TO ALL PROJECT STAKEHOLDERS.