

# TRENCHLESS SUCCESS WORTH CELEBRATING

This November at the Civil Contractors Federation (CCF) Victorian Earth Awards, South East Water and its project partners were recognised for excellence in civil engineering in the delivery of two critical water infrastructure projects.

South East Water's St Kilda Road Main Renewal Project, delivered in partnership with Interflow, was judged winner of the AU\$1 million to AU\$5 million project category, while its 6th Avenue Rising Main Renewal Project in Rosebud, delivered with the consortium Fulton Hogan, Delplant and Beca (FHDB), topped the list of finalists in the AU\$5 million to AU\$10 million project category.

The St Kilda Road Main Renewal Project involved the replacement of 1.4 km of cast iron main dating back to 1868, which lay alongside a tramway, four lanes of traffic, a bicycle lane and over 200 iconic elm trees.

To minimise disruption to traffic and residents, South East Water and Interflow undertook nine months of community and stakeholder management, working with a number of parties including the Alfred Hospital, the Melbourne Fire Brigade, the Bicycle Network, two foreign consulates and up to 6,500 residents.

The condition and location of the pipe left no room for newer replacement techniques such as pipe bursting. Removal and replacement with a bigger polyethylene pipe was the only solution. Some challenges on the project included other pipe work and cabling crossing over the existing water main which required careful excavation and handling.

In some cases a 'dog leg' had to be fabricated to allow the new main to change levels and clear obstacles. There was also a stipulation that full water supply, including fire main supply, was maintained to 29 high-rise buildings along the route.

Work was carried out at night, replacing 200 m sections at a time. Once the sections had been completed, they were pressure tested and chlorinated, before being

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reconnected to the water main and entered back into service. The road was then reinstated and reopened in time for the morning peak hour, to minimise disruption to commuters.

When the project concluded in August 2015, a survey of residents and businesses found that 84 per cent of respondents were satisfied or very satisfied about the project's ability to minimise disruption.

The 6<sup>th</sup> Avenue Rising Main Renewal Project was designed to upgrade critical infrastructure on the Mornington Peninsula to support the region's seasonal population growth.

Receiving wastewater from areas as far apart as Safety Beach and Portsea and transferring it to Boneo Treatment Plant, a 1.8 km section of rising main in Rosebud was approaching end of life, and required replacement without interruption to customers and traffic, and before the summer holiday season.

South East Water worked closely with its project partners to manage risk and meet the project's aggressive timeline. This included the delivery of upgrades in a live sewer environment, and one of the largest sewerage pumping station shutdowns seen in South East Water's network, in order to complete the upgrade by November 2015.

"Through these projects, Interflow and FHDB have enabled South East Water to



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deliver complex, high risk infrastructure upgrades while minimising disruption to the community," said Charlie LittleFair, General Manager for Asset Creation at South East Water.

"The projects highlight what can be achieved through good contracting, close collaboration and strong relationships, and I congratulate everyone involved for their hard work." T