

Expanding into the watermain market

By Ian Bateman, Director, Interflow

The Interflow group recently acquired a significant interest in Infratec International, which specialises in water pipe renewals. With this acquisition, Interflow is now able to offer leading renewal solutions to its clients for both water and sewer pipes.

UP UNTIL THE early 1990s, the most common method to renew a sewer was to excavate and replace the damaged sections of pipe. Until this time, trenchless solutions were either not commercially competitive or non-existent.

Since this time, technology providers and contractors have developed products and methods that have seen trenchless systems largely replace the traditional excavation methods.

The journey over the last 20 years has been gradual. Trenchless lining systems such as spirally wound lining, CIPP and pipe bursting have been refined, improved and developed. The cost per metre of installation has continually reduced such that it is now almost universally cheaper to renew with trenchless than by excavation. Additionally, more and more of the network is being renewed. Manholes, lateral lines, lateral connections as well as culverts and stormwater assets are commonly being renewed using techniques developed over the last 20 years.

The growth in trenchless sewer renewals has also been geographical. It is no longer just performed in the major urban areas. In Australia and New Zealand, most councils will have had some of their assets renewed by trenchless methods.

If current trends in the sewer renewal industry continue, it is likely that we will see trenchless pipe renewals expand and continue to develop such that asset owners get even more value in terms of cost, social amenity and environmental impact. This growth will bring the rate of renewal closer to the average rate of sewer pipeline degradation.

In the case of water pipe renewals, the situation is different. The number of kilometres of water pipelines is similar to the number of kilometres of sewer lines. Both types of pipe have a finite life and degrade over time. However, the rate of trenchless water pipe renewals is far below that of sewer pipe renewals. Water pipe renewals are commonly undertaken with the traditional excavate and replace method. This is similar to where the sewer pipe renewal market was 20 years ago.

The dynamics of watermain renewal are quite different to sewers. Watermains are pressured, sterile, of smaller diameter and are generally laid shallower. Also, the consequence of being without water during a repair or renewal has a significant social impact.

There are real and tangible benefits of renewing watermains with trenchless methods compared to dig and replace

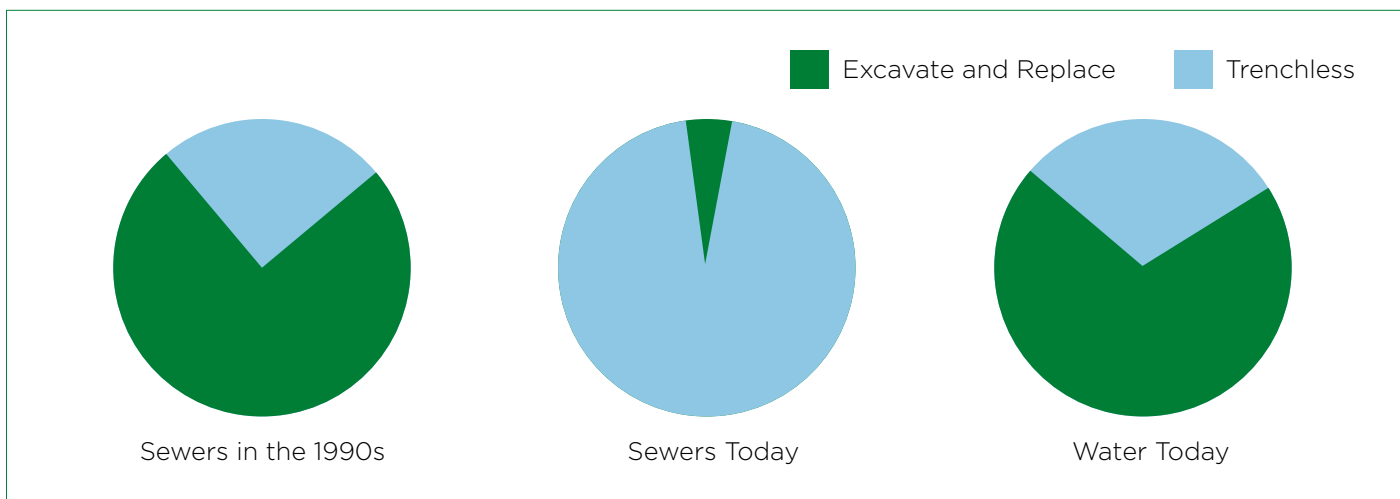
methods. However the overall value proposition is not currently as great as in the sewer sector. Indeed, technically for some aspects, such as reinstatement of the house connection, there are few (if any) trenchless options available for the majority of circumstances.

Looking at how the sewer renewal market developed, and drawing a parallel to the watermain renewal market, it is expected that the market will grow, as watermain renewals become more cost effective, with more being done with Trenchless Technology, causing less disruption.

Furthermore, other drivers, such as asset owners placing greater emphasis on aspects such as environmental impact, social impact and safety will also contribute to growth of trenchless methods.

WHERE ARE WE TODAY?

The majority of trenchless watermain renewals in Australasia are conducted using pipe bursting or sliplining techniques. These techniques replace a deteriorated watermain with a new polyethylene pipe – the very same pipe that would typically be used today when a new pipeline is laid. In the case of pipe bursting there is no loss of cross sectional area and it can →



actually provide the client with an increased diameter when needed.

Infratec is the leading watermain renewal company in Australia and uses pipe bursting extensively throughout Victoria. Over the last ten years more than 400 km of watermains have been successfully renewed using pipe bursting. During this time, several innovations have been delivered that increase the value to the clients and make the trenchless solution a more attractive alternative to the traditional dig and replace methods. By combining Infratec's experience and Interflow's track record of delivering innovation to the industry, Interflow will look to accelerate the rate of development of the trenchless watermain renewal services, and offer clients trenchless solutions of increasing value.

An example of one of the innovations developed by Infratec is the product Infrastop®. Infrastop allows a watermain to be isolated without shutting off service to residents. Prior to commencing the renewal of a given length of watermain, it must be isolated (taken out of service). The traditional way to achieve this would have been to shut off supply at the nearest shut off valve, then cut into the watermain at the desired location and install a valve. This process takes time and during this time all residents downstream

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of the shut off valve would be without water supply. With the Infrastop technology it is possible to isolate the main at the desired location by installing the Infrastop with the main still online.

Infrastop has been widely used throughout Victoria and is endorsed by some of the major water authorities. Infrastop is the only product of its kind that has been extensively tested and installed in Australia.

Benefits include:

- Proven to be cost effective when compared with the cost (actual and social) of notification and supply withdrawal; and
- An effective and fail safe product for this purpose. The Infrastop fitting actually supports the pipe at the installation location and prevents failure of the old pipe.

There are many opportunities ahead of the industry in the watermain renewal sector. It is anticipated that with further technical advancements, Trenchless Technology will play a major role in water pipeline renewals. Interflow and Infratec will look to understand the needs of its clients and provide them with the most competitive and innovative solutions available.

Interflow views this significant step into the watermain renewal industry as a further demonstration of its commitment to offering its clients a solution to all of their asset renewal needs.

For more information about Interflow's sewer, stormwater and water pipe renewal capabilities, and to find out more about the full range of pipeline services Interflow can provide, visit www.interflow.com.au

For more news, information and projects involving Rehabilitation and Repair, visit:

REHABILITATION & REPAIR
Resource centre
www.trenchless-australasia.com/resource