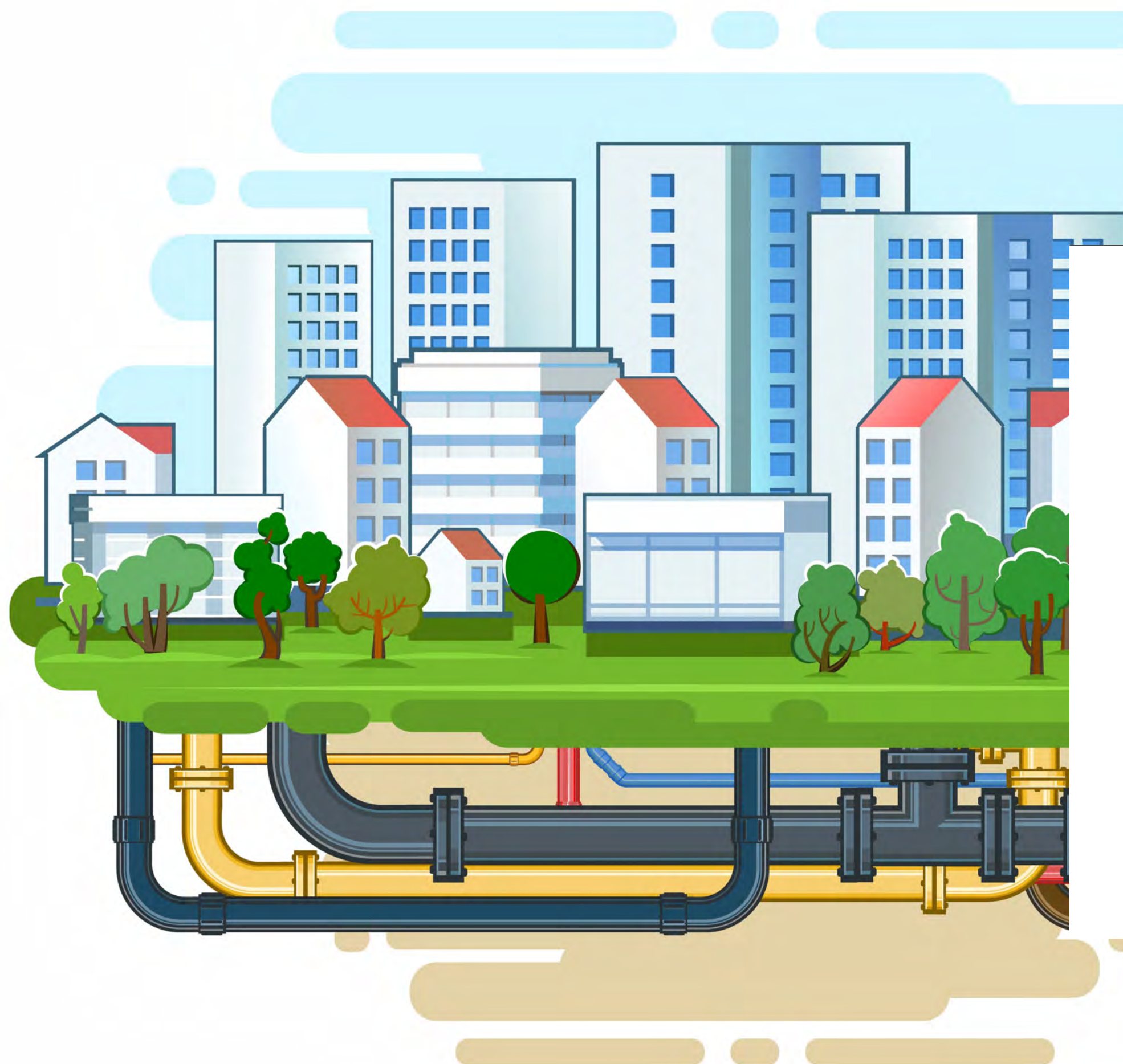




# We've simplified designing sewer networks.



**OUR SMART SEWER NETWORKS TOOL TRANSFORM OUR CLIENT'S PROJECTS.**

**HOW? BY USING ALL AVAILABLE INFORMATION TO DESIGN A STREAMLINED NETWORK IN ONE APPLICATION.**

## **DEVELOPING FASTER SOLUTIONS**

Using available data our innovative algorithm combines the needs of not just each property, but a collection of properties. To identify the optimal network design to meet our client's needs based on elevation, roads and easements, asset costs, lifecycle costs, soil makeup and pipe limitations the Smart Sewer Network Tool identifies and tests unlimited options for possible connections.

## **ADAPTIVE TECHNOLOGY**

Why did Stantec develop the Smart Sewer Networks Tool? To reduce time spent in manual calculations and create more intuitive network designs. This empowers our engineers to evaluate preferred network designs quicker when compared to a traditional approach of mapping and building networks.

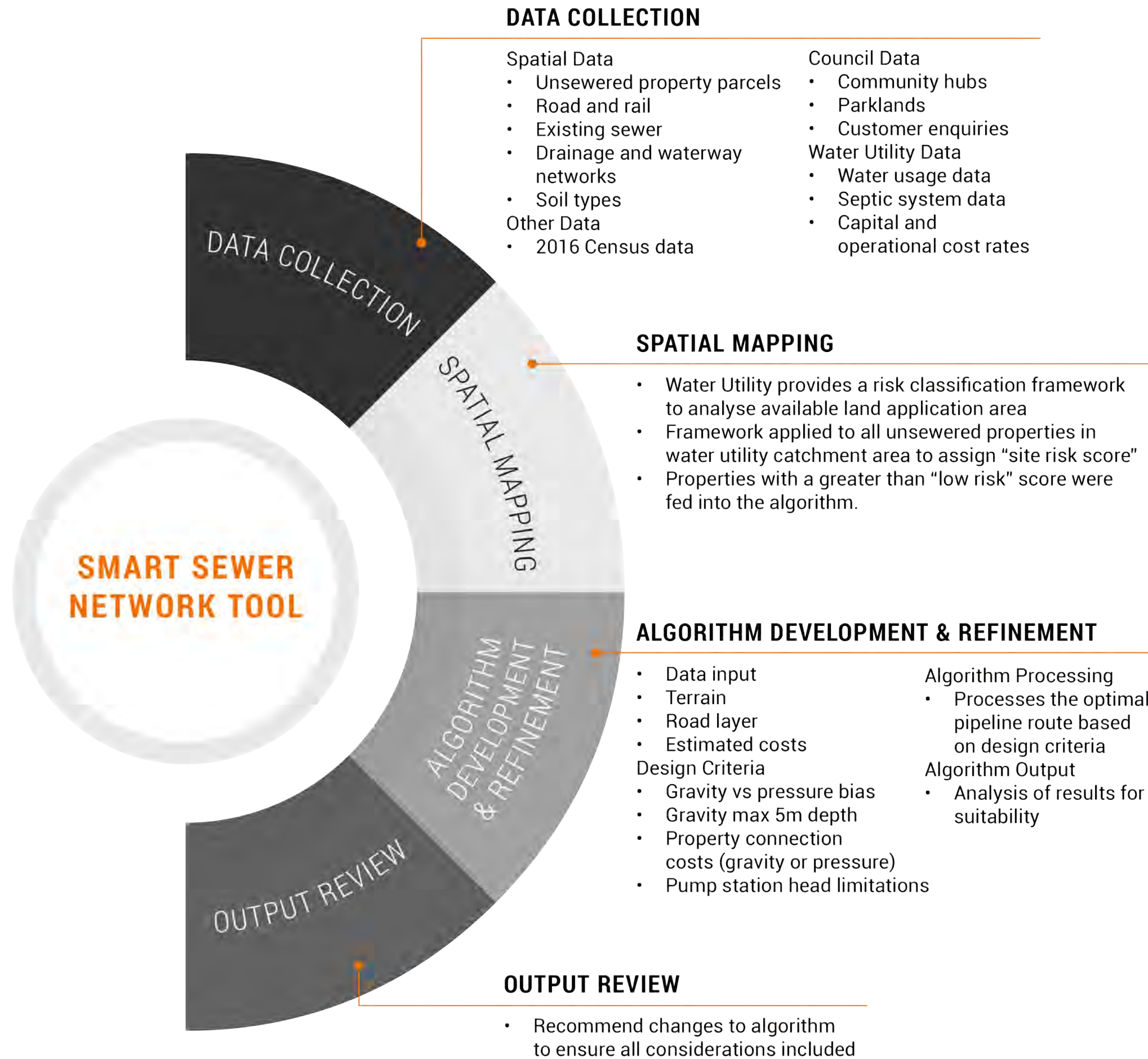
Adapting changes in data, network design rules and assumptions to already developed solutions can be seamlessly modified to fit new information.

The automation and optimisation in our algorithm results in new sewer networks generated for the given inputs will integrate new regulations and locations within hours of scope changes or changes in data inputs.

Our tool designs a fully connected sewer network, complete with ground levels, inverts, and diameters. The automated approach to network development allows the engineering team to focus on finalising the network and refine designs for different assumptions and conditions.

Let our team help streamline and deliver network results for your community more efficiently.

**FACT**  
SMART SEWER NETWORKS TOOL INTEGRATES WITH HYDRAULIC MODELLING SOFTWARE



### YARRA VALLEY WATER COMMUNITY SEWERAGE PROGRAM

#### VICTORIA

Stantec was engaged to complete high-level planning and develop feasibility options for delivering sewerage services to 7,000 properties, within a six-week timeframe as part of the client's Community Sewerage Program.

Traditionally, the planning process for mapping a new sewer network is a manual task. Our team proposed the use of an algorithm to automate it. The Smart Sewer Network Tool enabled the team to deliver results in a fraction of the time, whilst optimising the network design and grouping properties into defined Community Service Areas.

The outcomes of this analysis also provide the opportunity to directly use results in future hydraulic modelling and design investigations. Solutions developed with the Smart Sewer Network tool are provided as a GIS data sets, providing information on network routes, sewer type (gravity, pressure, rising main), sewer depths, pipeline sizes and connection points to sewer. Enabling easy import to hydraulic models for detailed modelling and analysis.

[Learn More →](#)

## Our services

- New sewer network designs
- Network design analysis
- Updating network connections

## Our markets

- Water network
- Sewerage network

## Our awards

- 2022 Consult Australia Awards for Excellence - Technological Innovation Winner