



BYPASS | North Yarra Main Sewer Bypass

CLIENT:

John Holland KBR JV

PROJECT:

North Yarra Main Deviation Rehabilitation

LOCATION:

Spotswood, Melbourne



The North Yarra Main Deviation Rehabilitation Project was so well received, it won the Victorian CCF Earth Award.

The Project then went on to win the National CCF Earth Awards for Category 4 (\$10 – \$30 million project value).

[Read more on the award winning project here.](#)

To enable the rehabilitation of the North Yarra Main Deviation, Welltech were engaged to design, engineer, install, and manage the Bypass system, which carried up to 20% of Melbourne's wastewater.

The pipeline consisted of a HDPE DN900 temporary pressure main. A carefully planned alignment travelled along busy Hyde Street, through the West Gate Bridge Memorial Park, over high-pressure gas lines, and under high-voltage power lines before finally discharging back through a custom-built diffuser into the North Yarra Main Sewer. Every precaution possible was made to ensure there were no lasting impacts on this culturally and commercially significant area.

Although using an existing syphon manhole as a temporary wet well presented a considerable engineering challenge, it proved to be a cost-effective and practical solution. The two huge Hidrostal pumps were double stacked at a depth of 18m with a total weight of 16 tonne hanging from an engineered lifting beam on the surface.

Power was provided by 2 x 1000kVA generators feeding 2 x 450kW VVVF drives. Pump control was achieved using ultrasonic level sensors with the entire system monitored by purpose-built SCADA package, including remote HMI access for clients and operators.

SPECIFICATIONS

PUMPS	FLOW RATE	DISTANCE	PIPELINE	DURATION
2 x Hidrostal L20K in a duty/assist arrangement	Up to 2,100L/sec. Ave. flows of 120 million litres per day	700m from suction manhole to discharge manhole	DN900 HDPE	4 Months

We will always deliver, on every promise we make, Guaranteed.

Zak Haines

Technical

0451 057 567

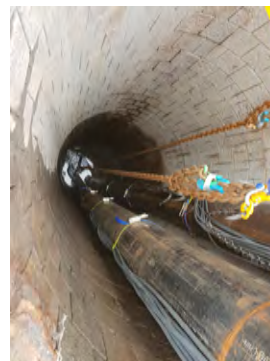


Welltech Total Water Management are Australia's leading specialist in Bypass Operations. When your next bypass project demands an innovative solution, offering the best equipment and a dedicated team, Welltech has you covered.

Bypass Operations

Why Welltech?

- Our Bypass Division specialises in the successful pumping and bypassing of sewer and wastewater across the nation and internationally, incident-free;
- Large-scale operator with the capacity to manage flow rates in excess of 14,000L/sec.;
- We ensure each project component is considered, planned and executed using the most advanced equipment and practices;
- Our in-house fabrication facility has the capacity to make and modify pipe and spool work to enable fast turn around, ensuring a one stop interface with existing assets, any time of day or night;
- We take full ownership of projects, including temporary works engineering and construction of temporary pressure mains up to DN900 HDPE;
- Our in-house Water Supply Division has a vast inventory of pumps, control equipment, pipelines and process instrumentation;
- We are the exclusive national distributor for Lampe® Sewer Sealing Cushions;
- Our highly skilled, fast deploy teams are available to mobilise our in-house fleet at a moment's notice;
- You can be assured we will deliver as promised and you will be supported by Welltech's guarantee of *Commitment = Satisfaction*.



We are proud to be aligned with and recommend:



ENGINEERING TOMORROW



SIEMENS

Click here for more details on our Bypass Operations



Bypass Project Process:



Commitment = Satisfaction

Zak Haines

Zak's highly technical background in electrical instrumentation and mechanical, coupled with his expert project management skills ensures you are in safe hands. He has a hard earned, decorated history, of successful sewer bypass projects.

Zak is also responsible for the development of Welltech's innovative Hypro app. Welltech Hypro is a free app, giving users access to a real-time pipe friction calculation, critical engineering information tables and an interactive unit converter.

Zak's thorough knowledge of sewer bypass operations and true understanding of project deadlines gives clients the confidence Welltech will deliver on every promise we make, guaranteed!



"If you can't find a solution elsewhere, you will find it here – guaranteed".

From an ambitious dream to reality.

"The installation of the temporary stopboard gate 1 was successful and was a tribute to the planning and hard work from all those involved. Thanks to Zak H and the Welltech crew for assisting in proactive and precise planning."

Matt Smith Fulton Hogan Engineer, Luggage Point QLD

CONTACT US ANY TIME

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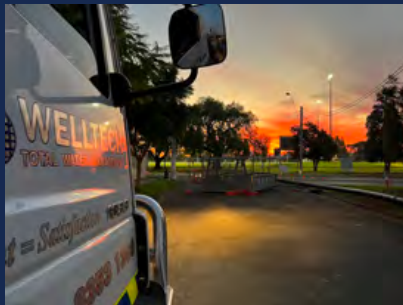
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Download the Welltech HyPro™ Hydraulic Pipe Friction App.
Available free for Apple and Android devices.



Commitment = Satisfaction



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