

# TORRENS STREET, RICHMOND SPS Upgrade

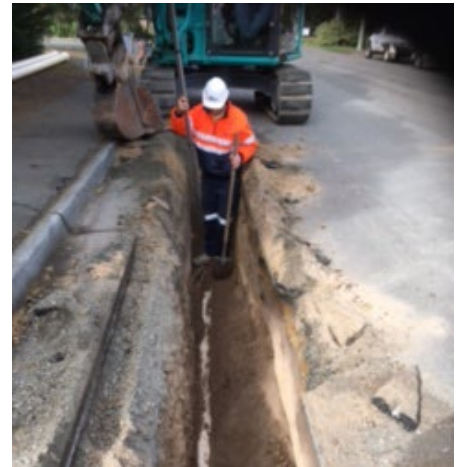
Date: 2017

Principal: TasWater

Project Value: \$875k

## TASK

The Torrens Street SPS is one of three Sewer Pump Stations in Richmond. It is located next to the Coal River and services approximately 300 properties. Two of the key issues were the deficiency of emergency storage capacity and overflow mitigation. TasWater identified this SPS as high risk based on its condition and performance. Torrens St SPS had no dedicated overflow discharge point. Overflows occurred through the lowest maintenance hole on the eastern side of the Coal River, which then spilt into the Coal River and then entered Pittwater Bay downstream. Due to high value aquaculture industries Pittwater Bay is considered high sensitivity receiving environment, which stipulates eight hours Average Dry Weather Flow (ADWF) emergency storage capacity. The existing pumps were undersized as they did not exceed Peak Wet Weather Flow (PWWF) according to TasWater's design standards. The wet well itself was in relatively good condition apart from corrosion at the roof. As such TasWater's plan was to retain the current wet well and merely refurbish the SPS. The current inlet structure used to function as a wet well for the previous pump station. Modification works such as benching and upsizing of the inlet pipe to the existing SPS were required to achieve compliance and reduce current maintenance activities. The original switchboard did not comply with TasWater's standards and required replacement. The original rising main between the SPS and the Sewage Treatment Plant (STP) was approximately 1.3km long with the first 280m being sized at 80mm and the remainder at 100mm. It required replacement with a larger diameter pipe. It crosses Page's Creek, a small side arm of the Coal River, on Commercial Rd approximately 300m before the STP. In the present configuration, a separate rising main originating from Bilney St SPS joins into Torrens St rising main at the STP.



## CHALLENGES

One of the major challenges on this project was the construction of a temporary pump station directly adjacent to the existing and within the coal river flood zone. This was achieved by bypassing the existing gravity mains into a poly holding tank and utilising the original pumps to deliver the sewage through the original rising main

## OUTCOMES

The new pump station was successfully commissioned and the temporary PS removed ensuring there is adequate pumping and storage capacity to eliminate any potential over spills into the adjacent waterways.