

Ross River Dam to Douglas Water Treatment Plant Pipeline

Replacement Pipeline for Townsville's Main Water Supply

Pipeline.





Project Need

Providing roughly 85% of Townsville's water, the Ross River Dam to Douglas Water Treatment Plant (RRD2DWTP) pipeline is critical to the water supply for the city. The existing pipeline was reaching the end of its serviceable life and on one notable occasion, the previous prestressed concrete pipeline failed. Hence, the water supply was effectively cut-off and residents were asked to conserve water to prevent exhausting local reservoirs before emergency repairs could be completed by local contractors.

The project required the design, manufacture, and delivery of approximately 9 km of Mild Steel Cement Lined (MSCL) pipes and fittings, as well as the affiliated valves, dismantling joints and flowmeter.

"The duplicate pipeline will cross Ross River close to the dam and run alongside the river through the Department of Defence's Mount Stuart Training Area before connecting to the Douglas Water Treatment Plant, enhancing the city's water security." – Acting Mayor Ann-Maree Greanev

Solution

The contract for the manufacture, supply and delivery of the pipes and fittings was awarded to Steel Mains by Townsville City Council. Steel Pipe was chosen for the ability to be welded and restrained against thrust forces from the water in the pipeline and the numerous bends and tributary crossings required along the pipeline route. The ability to manufacture specialty fittings that support the Sintakote® Pipeline provided a solution that allowed for the new pipeline route to be effective.

Steel Mains successfully delivered, unloaded and stored the required 9 km of 1290 OD Sintakote® cement lined pipelines and fittings. As part of the contract, Steel Mains was required to unload the pipes and fittings in three separate locations (dubbed northern, central and southern) that the client requested. Steel Mains Sintalock Type I welded RRJ joint ensures that the laying rate of the pipeline was still at premium efficiency while achieving the benefits that a steel welded connection provides.

Achievements

This supply of this pipeline demonstrates the ability of Steel Mains to meet the requirements of crucial projects that require effective solutions to challenging pipeline routes within the supply timing required for this important and somewhat urgent project to proceed. It also provides an excellent example of how Steel Mains can support the pipeline design, manufacture, supply and delivery of pipelines and uphold the requirements of a contract.

Project: Ross River Dam to Douglas Water Treatment Plant Pipeline

Principal: Townsville City Council

Location: Department of Defence's Training Stuart Training Area

Completion: 2022

Supplied: 9 km of MSCL SINTAKOTE® 1290 OD; Sintalock-1 Pipeline





The RRD2DWTP pipeline provides a vital part of Townville's water supply and therefore must be functioning at its best to support the city's development for decades to come.

