

Eungella Dam to Moranbah

Pipeline through environmentally sensitive National Park



Project Need

The development of Queensland's coalfields called for the transfer of water across one of Queensland's largest National Parks, containing hundreds of kilometres of isolated bushland. Queensland State Government therefore needed to provide the large-scale infrastructure required, whilst minimising impact on the local sensitive environment.

Solution

Steel Mains worked closely with the Queensland State Government and The Eungella Water Pipeline Company, who jointly managed the entire project, from feasibility studies, to design and installation.

The final outcome resulted in Steel Mains supplying 124km of 711mm outside diameter SINTAJOINT[®] rubber ring joint pipe, along with a full range of associated steel fittings. The pipeline commenced from an inlet pontoon on Eungella Dam, 100km west of Mackay. The first 10km of the pipeline route followed a twisted path through tropical vegetation, rugged terrain and hillside gorges, posing many challenges for the pipeline designer and project contractor. Eungella National Park boasts one of only a few locations in Australia where the Platypus can be easily viewed in their natural environment. Steel Mains' SINTAJOINT[®] pipe reduced the amount of excavation required and kept the time that noisy machinery was needed on site to a minimum. The RRJ joint assisted the pipeline installers (Leightons) to ensure fast installation times thereby minimising the impact to the environment. Utilising three different pipe wall thicknesses along the pipeline also reduced installation time and costs, by designing the most appropriate wall thickness for the ground conditions and operating pressures. The most economical design was found to require 5, 6 and 8mm wall thickness.

Achievements

Despite interference from a very active Queensland cyclone season, the contract was completed within the agreed time and with minimum disruption to the protected environment around Eungella. On such a large-scale project, working with Steel Mains guarantees the technical support and flexible logistics required - just as much in remote outback areas as in the major cities of Australia.

Project: Eungella Dam to Moranbah

Principal: Queensland State Government

Location: Eungella Dam, 100km west of Mackay, Queensland.

Completion: March 1997

Supplied: 124km of 711mm OD Sintakote[®] Steel Pipe, Fittings & Valves