

Benalla to Kilfeera Basin Main - VIC

Benalla Upgrades Water Supply



Objectives:

Particularly in the thirsty months of the Victorian summer, Benalla was in danger of running short of water. The city was growing, but the weak link in its water supply system - 12km of DN 375 steel pipe - was feeling the strain.

In the late 1980s, the Benalla Water Board identified the need to duplicate this main. The board decided on cement-lined steel for the new pipeline and opted for Steel Mains SINTAJOINT Rubber Ring Joint for the bulk of the pipe work. Steel Mains Fabricated Products supplied all steel fittings. The pipeline extends from Kilfeera Basin - running along Kilfeera Road and crossing irrigation channels, broad - acre farm lots, flood plains and the Broken River before terminating in the city.

Challenge

Construction of the pipeline began in October 1992, but the first two months proved to be slow going - a wet Spring brought the water table uncomfortably close to the surface. When suitable weather and ground conditions returned, laying rates were impressive.

Solution

Rubber Ring Joints and 'strength of steel' speed completion

Bill Armstrong of W. J. Armstrong Constructions identified SINTAJOINT RRJ as a key factor in the speedy work: "The key to getting the pipe in the ground was the rubber ring joint. Use of rubber ring joints enabled laying rates up to 420m per day, far in excess of what could be achieved with welded joints".

The pipeline traversing the Broken River flood plain was supplied with Spherical Slip Joints suitable for field welding. The strength of steel permitted placement in one lift of up to four 12m lengths.

The pipeline survived the ravages of the recent well publicised floods, the only disruption coming from a bridge collapse upstream of the new work.

Benalla to Kilfeera Basin Main

Client Benalla Water Board

Project Duplication of Main, Benalla to Kilfeera Basin

Pipeline 12,000m of 610mm OD x 5mm WT SINTAJOINT RRJ MSCL X 12m effective length

Construction W.J. Armstrong Constructions

Construction Period: October 1992 - March 1993

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