

Christies Beach Upgrade Project

Ocean Outfall Experience Equals Success- For Adelaide Southern Suburbs



Project Need

When the SA Water in South Australia began planning for the expected growth in the southern suburbs of Adelaide, they found that Christies Beach Wastewater Treatment Plant, commissioned in the early 1970's, would not fulfil the community's needs for the future.

SA Water resolved to upgrade the current treatment plant to world class standards by incorporating membrane treatment technology and UV disinfection techniques. With these technologies, Class A recycled water could be produced by the plant and allow the Noarlunga Downs sludge lagoons to be decommissioned and rehabilitated. Central to the success of this project was the installation of an ocean outfall pipeline that would return treated residential and industrial flows to the sea.

Solution

It was for this ocean outfall pipeline that Steel Mains was contracted to Supply and deliver all pipe fittings and Tideflex duckbill valves. Steel Mains supplied 1km of 1200mm OD SINTAKOTE[®] plain end mild steel cement lined pipe in 13.5m lengths, with a number of pipes supplied with diffuser branches attached at 2.5m centres. For this unique project, pipes were supplied with a bond material applied to the SINTAKOTE[®] surface to allow the principal to apply a concrete weight coating for the ocean outfall pipe to be completely submerged in the marine environment.

Achievements

Steel Mains was awarded the contract based on its experience producing outfall pipes for marine environments and its ability to produce quality product to the exacting project specifications. Steel Mains delivered on its reputation by working closely with the project's alliance partners to ensure all pipes arrived on time and were of the quality required. Steel Mains supplied all pipes on time and in full meeting all of the principal and constructor's performance and timing requirements.

Project: Christies Beach upgrade Project

Principal: SA Water

Location: Christies Beach, South Australia

Completion: May 2011

Supplied: 1Km 1200mm OD Sintakote[®] Steel Pipe, Fittings & Valves