Victor Harbor Road Duplication- Stage 1&2

Project: Victor Harbor Road Duplication- Stage 1 & 2

Principal: SA Water

Construction Contractor: McConnell Dowell Diona JV

Location: Victor Harbor, SA

Completion: July 2022

Stage 1- 2022

Stage 2 - 2023

Supplied: 610, 762 and 813OD MSCL pipes Sintalock® Type I & II joints

Project Need

The Victor Harbor Road duplication was initiated to address critical safety and capacity challenges on a key regional transport corridor. The existing single road carriageway had a documented history of casualty crashes and was consistently identified as high-risk in community feedback. Traffic volumes on the route were increasing significantly, with approximately 23,000 vehicles per day, including a substantial proportion of heavy freight. The Victor Harbor Water Pipeline Upgrade formed a critical component of the broader roads project, which aimed to improve traffic flow and safety along one of South Australia's busiest regional corridors, and support economic development in the South Coast Region by delivering modern, high-capacity transport.

To enable duplication work, significant water service relocations and upgrades were required to maintain supply reliability and support future growth in the South Coast region. This focus was on replacing aging water mains and other water infrastructure to maintain service reliability, as well as to keep up with the growing demand for water supply in the region,

Delivering the MSCL pipes was a critical path activity, as all other road construction works were dependent on the completion of this scope. Stage 1 introduced advanced pipe jointing technology to the region which enhanced construction productivity with no need to weld internally or reinstatement internal corrosion protection within a high risk construction environment, while Stage 2 expanded the scope with additional high-capacity pipelines to strengthen the system and reduce maintenance requirements. The Victor Harbor Water Pipeline Upgrade thereby supported critical water infrastructure to ensure reliable water supply for the future regional growth of surrounding communities, building resilience in communities during high-demand water periods.

Solution

Steel Mains were engaged by MDJV to supply Mild Steel Cement Lined (MSCL) pipes for both stages of the water upgrade, introducing Sintalock® II joint type pipes for an SA Water project marking a significant milestone in joint technology adoption.

Steel Mains supplied pipeline for each of the following stages:

Stage 1 Scope

- 300 m of 813 OD Sintalock® II joint type pipes and fittings

Stage 2 Scope

- 472 m of 762 OD Sintalock® I pipes
- 900 m of 610 OD Sintalock® I pipes
- Various smaller diameter pipes: DN300 to DN500 MSCL Pipes

The use of Sintalock® joints eliminated the need for internal welding and cement mortar lining reinstatement, improving safety and accelerating installation rates. All pipes were manufactured to AS1579 and SA water specification TS 0420 and delivered on schedule to support the project timeline. Steel Mains worked closely with MDJV to provide customised pipes and fittings for the upgrade, using locally sourced steel that were manufactured to suit the specific needs of the pipeline upgrade.

Steel Mains was able to successfully install and upgrade the pipelines across both stages using advanced Sintalock® II jointing and coating technologies, enhancing both installation safety and efficiency as well as providing improved corrosion protection and high pressure performance. The introduction and use of Steel Mains Sintalock® II ensured SA a guarantee of security and stability with their water infrastructure, supporting growth for future regional development and resilience in communities.

Achievements

Steel Mains was instrumental in delivering the Victor Harbor Water Pipeline Upgrade, a critical project that enabled the successful duplication of Victor Harbor Road and supported regional growth. By supplying and delivering all MSCL pipes for both stages within agreed timelines, Steel Mains ensured the project stayed on track with quick and efficient delivery of pipe. The introduction of Sintalock® II joint technology enhanced installation efficiency and safety, reducing confined space entry risks through pre-roping and innovative joint design. These advancements also improved corrosion protection and long-term durability, securing the reliability of the pipeline network for decades to come. Ultimately, Steel Mains' expertise and innovation provided a dependable water supply for Victor Harbor and surrounding communities, reinforcing infrastructure resilience and enabling future development. This achievement reinforces critical infrastructure, supports future development, and exemplifies Steel Mains' role as a trusted partner in building sustainable solutions for Australia's water industry.