

Big Slough Reline

OWNER
DESIGNER
CONTRACTOR

Corporation of Delta PW Trenchless PW Trenchless

LOCATION Hornby Road - Delta, BC

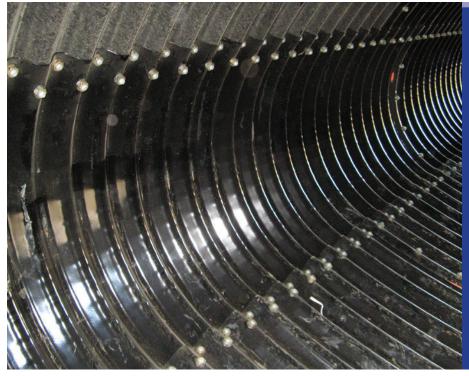
Multi-Plate, a proven and versatile product since 1934, continues to provide cost effective reline and stream crossing solutions. Armtec has a history of striving for excellence and is proud to continue the tradition with Strata-CAT.



The Corporation of Delta needed to replace existing twin Multi-Plate's that had reached the end of their service life, which was reduced due to exposure to brackish waters. The project is located underneath Hornby Road, the only access for local residents and is considered an environmentally sensitive area. The Corporation of Delta decided to tender the project using a Design/Build delivery method. The successful contractor was PW Trenchless, who is an experienced contractor that specializes in the rehabilitation of aging infrastructure and submitted a low bid of \$369,000 to complete the work. PW Trenchless opted to slip line the existing structures using a product familiar to them, Armtec Multi-Plate. Slip-lining allows the road to remain open for the residents and is inherently safer than traditional open trench installation methods. PW Trenchless also elected to use Armtec's new Strata-CAT co-polymer barrier coating in order to meet the owner's requirement for a 75 year service life.

Armtec Strata-CAT is a unique two coat system that provides two layers of protection and is designed to meet or exceed the industry standard 75 year service life per ASTM A742/A 742M-03. Strata-CAT is suitable for environments with a pH range of 3 to 12 and resistivity between 100 to 10,000 Ohm-cm.

Flow was diverted through the second structure while the first structure was relined. The existing structure was dewatered and two rails were connected to the invert. The new Strata-CAT coated Multi-Plate pipe arch structure was assembled at the inlet and pushed along the rails into the old structure. The annulus was then filled using a low density grout completing the rehabilitation of the first structure. Flow was reintroduced to the first structure and then the whole process was then repeated on the second structure, allowing fish passage to remain unobstructed throughout construction.



TECHNICAL DETAILS

 Twin 3,730mm span x 2,290mm rise x 20.76m Multi-Plate structures with Strata-CAT Co-polymer coating

 ${\it Strata-Cat\ copolymer\ coating\ is\ supplied\ in\ standard\ black.\ Other\ colours\ are\ available.}$



Armtec is a leading national manufacturer of a comprehensive range of infrastructure products and engineered construction solutions for customers in a diverse cross-section of industries. With operations coast to coast, we are a trusted partner for transportation, public works, forestry, oil and gas, and mining operations throughout the country and abroad. Since 1908 our commitment to quality, customer service and innovation has set the benchmark in the Canadian drainage and bridge landscape.