

# ANYOX HYDROELECTRIC PROJECT DESIGN AND CONSTRUCTION SERVICES

The Anyox Hydroelectric Project, located about 60 kilometers southwest of Stewart, British Columbia, on the shores of Observatory Inlet, is a 30 MW hydroelectric project (2 units, 15 MW each) that involves refurbishing and reusing some of the existing facilities originally built to service the mine, smelter and town of Anyox, which was a thriving mining community in the 1920s and 1930s. Anyox Creek flows southwards and discharges into Granby Bay next to the abandoned town of Anyox. The area held rich lodes of copper and other precious metals. Hydroelectric facilities were first constructed on Anyox Creek in 1910 to support the mining and smelting operations in the area. A large



dam, pipelines and a powerhouse were constructed and operated to provide both electricity and compressed air to the town and smelter. However, in 1935 the mine and the associated power project were shut down. The mine and its components were eventually sold and the purchaser removed most of the equipment on site, including some of the hydroelectric assets (generators and turbine equipment) in



the powerhouse. For safety reasons, the concrete storage dam was breached in several locations to permit water flow and to prevent overtopping. Anyox Dam is a multiple-arch buttress dam, at one time the tallest dam in Canada, at 42 meters. EES Consulting is designing measures to rehabilitate the structure to put it back into service. A new powerhouse is being designed to replace the original powerhouse. A new 3,000 meter unlined tunnel and a steel 108-inch penstock will be constructed to convey water to the powerhouse from

the dam. A new submarine transmission line will connect the Anyox Project to BC Hydro's existing transmission system near Kitsault, B.C. EES Consulting is providing all aspects of civil, mechanical and electrical design and construction management.