GRP pipes add value for nature and citizens

Between the cities of Gondomar and Porto in northern Portugal, a 3129 m long Flowtite pressure pipeline was installed to relieve an ecologically sensitive river from excessive sewage discharges.

Rio Tinto river is a small tributary of the river Douro and has a rich biodiversity. Over the past years, flora and fauna have decreased due to discharges from two wastewater treatment plants (WWTP) that were led directly into Rio Tinto's sensible waters. In 2018, the councils of Gondomar and Porto decided to stop the pollution and build a new pipeline to divert the treated and depurated water away from Rio Tinto into the larger river Duoro, which has a much bigger regeneration and assimilative capacity.

The clients Águas do Porto and Águas de Gondomar chose to implement this project with a reliable, sustainable GRP pipe solution. 3129 m Flowtite pressure pipes DN 800, PN 12 were installed in open trench between the WWTPs Freixo and Meiral, alongside the Rio Tinto river. A high groundwater table and strict environmental requirements posed a challenge to the installation works but were easily managed thanks to the GRP material's optimal properties. The client is very satisfied with the completion of the project which created a new natural environment and returned the Rio Tinto river to the population, including a pedestrian and cycling lane that follows the riverbed.

PROJECT DATA

Country | Cities	Portugal | Porto & Gondomar
Year of construction	2018
Installation time	10 months
Application	Sewer
Installation	Open trench
Technology	Flowtite FW
Total length of pipe	3129 m

Nominal diameter	DN 800
Nominal stiffness	SN 10,000
Nominal pressure	PN 12
Client / investor	Águas do Porto, Águas de Gondomar
Contractor	DST Domingos Silva Teixeira
Designer	Hidrofunção-consultores De Engenharia

Click on the image on the left to get a visual impression of this remarkable project!

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