HOBAS® Pipes Along the Mediterranean Coast Waste Water Discharge from Izola, SI

The approximately 42 km long coast in Slovenia is home to different industries of which most depend on their location close to the sea. Apart from this, Slovenia boasts one of the biggest ports of the northern Adriatic Sea that is located in the town Koper. Another, predominantly touristic coastal town very close to Koper is Izola. Both share a wastewater treatment plant which is designed for 75,000 inhabitants. However, the 5 km distance between the sewer system in Koper and Izola first had to be overcome. HOBAS® SewerLine® DN 400, SN 10000 and PN 10, was chosen for this purpose.

> The new sewer was installed on the route of an old narrow gauge railway, which had not been in operation since 1936 and which today serves as path for joggers and cyclists. Running along the sea, there are no differences in altitude so that the effluents are pumped through the 4.2 km line leading to the newly built wastewater treatment plant in Koper. HOBAS CC-GRP pressure pipes were therefore chosen.

Apart from a lack in altitude which did not allow a gravity sewer, the coastal area bares another challenge, namely to the pipe material itself. Since saltwater is highly corrosive, one of the main reasons for choosing HOBAS Pipe Systems was the products' corrosion resistance to such. Another crucial factor was to keep construction times as short as possible. The disruption of traffic on one of Slovenia's main highways, that happens to run along the pipeline route, should be kept to a minimum. The installation was accomplished without major traffic jams and by keeping one lane open for the traffic.

The investor Komunala Koper was very pleased with the installation speed. Thanks to a fast assembly facilitated by the easy handling of HOBAS Pipe Systems, the installation of the 4.4 km line could be accomplished within two months only. Apart from the HOBAS DN 400 SewerLine®, a lot of additional pipes with diameters ranging from DN 250 to DN 1800 were utilized around Koper. DN 600 Pipes, for instance, were installed at the water treatment plant in Koper transporting sewage to the cleaning basin.

> The installation was carried out by open trench and in an average depth of 1 m. Due to the strength of the outer pipe layer, single grained 8-16 mm material could be utilized as covering material. The pipeline coverage was protected with geotextiles, which prevent it from being washed out by seawater in cases of high or strong waves or heavy rainfall.

Fmd: ernest.skok@hobas.com

Year of Construction 2007 Total Length of Pipe 4200 m Pressure Class PN 10 Stiffness Class SN 10000 Diameter DN 400 Installation Method open cut

Installation Method open cut Application SewerLine® Client Regeneracija Lesce Planner Hidroinzeniring Ljubljana; IEI Celje Contractor Komunala Koper Constructor Primorje d.d. Advantages quick installation, small construction site, complete leak tightness and corrosion resistance, low construction expenses, long durability