## Monumental Microtunneling in Verona, Italy

The problem of flooded buildings located below street level after heavy rainfalls is finally solved thanks to the construction of a new storm water sewer. The project was promoted by Acque Veronesi, the water management department in charge of 70 municipalities of Veneto.

Constructions consisted of the installation of approximately 200 m of HOBAS CC-GRP SewerLine® DN 900. The line runs from Prato Santo Street to Lungadige Matteotti straight into the Adige, the river which crosses downtown.

The first part of the pipeline was laid in an open trench utilizing short 3 m pipes where the road was relatively wide. The second part of the pipeline was microtunnelled due to the remarkable installation depth of 4 m, a high groundwater level and the presence of old buildings along the pipeline route. Open trench was not an option in this case for the longer construction time would have meant more disruption for inhabitants, tourists and traffic.

Year of Construction

2007

Duration of Construction

2 weeks

Length of Pipe

210 m

Pressure Class

PN 1

Stiffness Clas

SN 10000, SN 32000

Diameter

DN 900, OD 960

Open trench, microtunnelling

SewerLine®

Client

Acque Veronesi S.p.A.

Construc

Impresa Serpelloni S.r.l.

HOBAS Sales Rep.

**Roberto Deversy** 

Advantages

hydraulic properties, long lifetime, light weight



Design Engineer Luca Comitti at Acque Veronesi suggested microtunneling, an installation method the water management department chose for the first time. This premier, Verona's delicate buildings and monuments and sceptic public authorities made a successful implementation imperative.

Fortunately, the installation was awarded to Impresa Serpelloni a reputable contractor of the area specialized in no-dig techniques. Serpelloni and Acque Veronesi did not take any risks and decided to change the pipe material originally planned for the project. They switched to a reliable material that requires the least amount of equipment on site coupled with shortest installation times: HOBAS CC-GRP Pipe Systems.

Although the line is fairly short and the works took only a couple of weeks, the project was highly acknowledged by designers and authorities of the region. It proves that even seemingly difficult projects can be easily handled when the right decisions have been made. The local authorities were impressed by the small work site and the fast installation.

HOBAS proved its reliability and precision. The CC-GRP DN 900, SN 10000 Pipes were produced by HOBAS Pipe Austria, whereas the Jacking Pipes came from HOBAS Pipe Germany. Simply perfect, they were even admired by some competitors.

