


Content

1 | HOBAS® - A Single Source Solution for Utrecht's Sewers, NL

3 | Long-Lasting Pipes for the Eternal City, IT

HOBAS® – A Single Source Solution for Utrecht's Sewers

Sewer Renovation Project in the Netherlands Call for a Wide Range of Products



Utrecht, the 4th largest city of the Netherlands, counts about 312,000 inhabitants and is an important node regarding roads, rail- and waterways. Its district Ondiep in the northwest of the city owes its existence to the river Vecht of which the largest bend had silted up over the years and now provides living space for approximately 6000 residences.

It is beneath this district that an important sewer main DN 1800 carrying the wastewater from most of the city to the adjacent wastewater treatment plant was found deteriorated and needed renovation. Expected impacts on the urban district in the course of the works prompted the city to inspect adjacent sewers for possibly additional renovation so that construction works would affect the urban surroundings once only. An approximately 50 meter-long section of egg-shaped concrete sewer was indeed found to be in insufficient state and therefore included in the renovation plans. The extended project presented itself demanding regarding the multitude of required accessories in addition to standard pipe material. During construction works on the main for instance, the sewage disposal of course had to be maintained over a provisional pipe for the time the works on the main take place. Moreover, installation works had to be accomplished in shortest time possible so as to keep the necessary disturbances to the urban surrounding to a minimum.

As for many things however, well begun is half done and finding the suitable construction material often facilitates and speeds up implementation considerably. Utrecht found its material answer in HOBAS Products which presented a single source solution for a great part of the project. Three HOBAS Shafts with GRP Flanges were laminated onto the existing main and equipped with pumps to divert the

wastewater into a provisional pipeline. Once the renovation works were completed, they were covered with GRP Blind Flanges for future use. HOBAS Products were further utilized for the renovation and replacement of old concrete shafts. Due to the restricted space on site DN 1500 GRP Pipes were employed between these structures and their relatively thin walls and low weight facilitated the installation. Masonry couplings, roughened pipe ends and FWC couplings make sure that the system remains tight to all ends. Last but not least, HOBAS NC Line Profiles, each 1.7 m long and 870/1325 mm in diameter, were used to reline the egg-shaped concrete sewer branch. Their easy and therefore fast installation (14 profiles per day) and structural and hydraulic benefits as well as a product lifetime up to 100 years tipped the scale for the client to opt for GRP here as well. To the benefit of the client, HOBAS Benelux resorts not only to the experience but also the material employed for countless projects realized around the globe by the HOBAS Group: In this case, the necessary mold for adapting the GRP Profiles to the old structure could be reused from one of the countless non-circular pipe rehabilitation projects realized in Europe, resulting in further cost and time savings.

Fmd: hobas.benelux@hobas.com



Year of construction

2010 - 2011

Project scope

Shafts, pipes, various components

Diameters

DN 1500

NC Profile 870/1325 mm

Pressure class

PN 1

Stiffness class

SN 5000

Installation method

Open trench, relining

Client

City of Utrecht

Engineering

Grontmij

Constructor

Van Boekel, Boshuis, GMB

Advantages

Easy and therefore fast installation, light weight, relatively thin walls, optimal structural properties, long product life, single source solution.