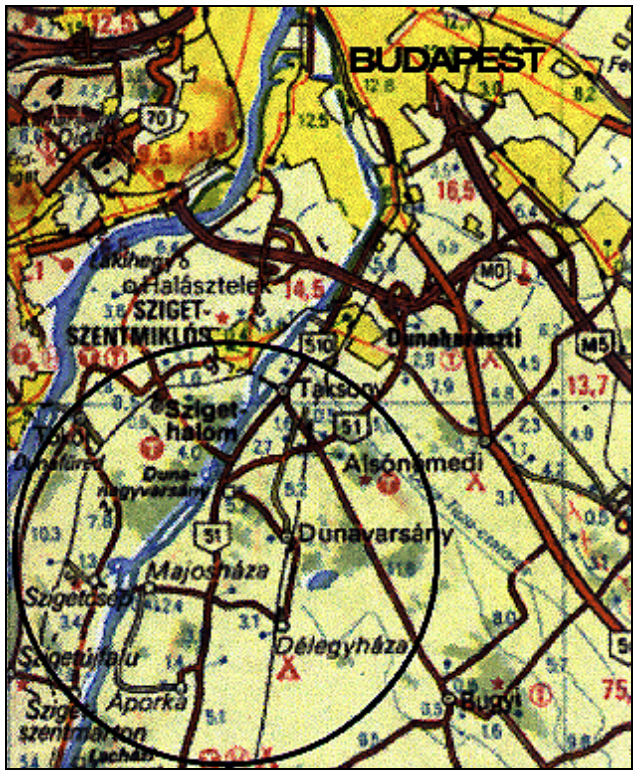
Dunavarsány
6 Villages
Hungary

Client: Pest County
Country: Hungary
Length of Pipe: 100 km
No. of Valves: 2000
Volume of Flow: 7 stations
6000 houses
Specialist Features: Systems linked to common treatment plant. River crossings

The six villages of Taksony, Szigetszentmarton, Majoshaza, Dunavarsany, Delegyhaza and Aporka comprise in total around 6,000 houses. The villages lie in Pest County, to the south of the Hungarian capital of Budapest. Until 1997 the villages were without mains drainage and the Pest County Municipality perceived this situation as in need of attention. Local consulting engineers examined many options in order to achieve the most cost effective and technically appropriate solution. After much consideration, a central sewage treatment works with vacuum sewerage collection systems was selected. The treatment plant is located between Dunavarsany and Aporka - approximately centrally within the group of villages. The six villages themselves are served by vacuum sewerage systems with the Dunavarsany village requiring two vacuum collection stations. In excess of 100 km of vacuum sewer mains and 30 km of pumped discharge mains are incorporated within the systems.

The work is being carried out by local contractor Resonator with the treatment plant due for commissioning in 1998 together with the collection systems for Taksony, Dunavarsany, Delegyhaza and Szigszentmarton.



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Vacuum Pipework
Vacuum sewers in PN6 polyethylene sizes from 90mm - 200mm diameter with electro-fusion joints

Vacuum Station Equipment (each)
Each of the stations incorporate 3 No. liquid ring vacuum pumps rated according to peak flow within the catchment (Nash)

Two dry well discharge pumps rated according to peak flow (full duty)

Vacuum collection vessel fully protected for local conditions. Motor control cabinet fully automatic with a PLC. All pumps start in rotation and conditions are monitored with a data logging system.

Summary

This sewerage system could only have been designed and built within the allocated time span using 'The Vacuum Way' An achievement we are proud to be apart of.

Possible Applications of the Vacuum Way

Rural community sewerage schemes

Industrial developments

Supply bases

Housing developments / compounds

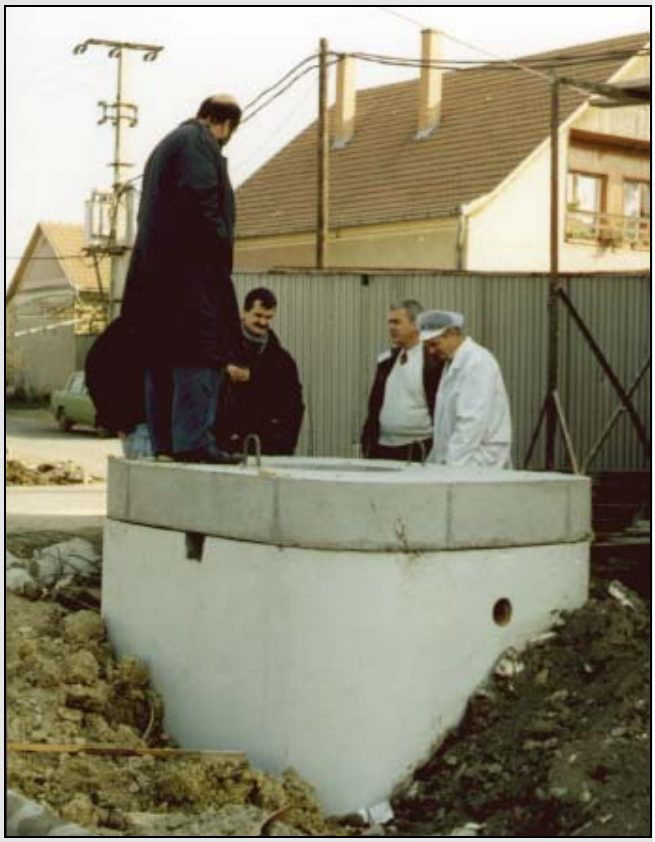
Hazardous waste collection

Airports & military installations

Beach developments

Remote villages


Panoramic view of village


Pre-cast Concrete Collection Pit

Cost effective solutions to many difficult drainage problems