



**Country**  
France

**Client**  
Communauté  
d'Agglomération Orléans  
Val-de-Loire

**Date**  
2006-2009

**Cost of works**  
€4m exc. VAT

### Sogreah's services

- ▶ Design services and project supervision: preliminary and detailed designs, assistance with works contract, inspection of working design, supervision of works implementation, assistance with acceptance procedures
- ▶ Additional geotechnical studies

### Context

The Chillesse collector is an old ditch that was gradually lined with pipes. It collects most of the runoff from the urban area's western catchment.

Of the combined type, it discharges wet-weather flows directly into the River Loire via a storm weir and dry-weather flows to La Chapelle-Saint-Mesmin treatment plant.

The Orléans urban area council wished to construct a stormwater detention basin at the outlet from the main Chillesse collector into the Loire, in accordance with the works recommended in

an assessment of the network in 1994, and in compliance with its statutory obligations in connection with the authorisation delivered for La Chapelle-Saint-Mesmin inter-communal treatment plant.

The scheme will play a pollution-control role with respect to the receiving waters, as required by the authorisation order, by helping to reduce overspill into the natural environment.

The basin was therefore designed to collect all the residual pollution from a rainfall event with a return period of 1 month at the Chillesse weir.

### Description

- Construction of a 6500 m<sup>3</sup> basin to the east of the camp site in the village of Saint-Jean-de-la-Ruelle, situated beside the Loire.
- A system for diverting water to the basin.
- Severe geotechnical constraints in a karst context with a high water table.
- Basin emptying, cleaning and deodorising system.

### Particular feature

Preliminary grouting of the ground (karst soil) prior to constructing the diaphragm wall.