



Country
France

Client
Nantes Métropole

Date
2007-2008

Cost of works
€2.3m exc. VAT

Sogreah's services

- Design services and project supervision: civil works, hydraulic and electromechanical equipment and automation systems

Aims of the study

To equip La Roche pumping station with a second system for drawing water from the River Erdre in order to ensure the continuity of drinking water supplies in the event of an emergency affecting resources derived from the River Loire.

Characteristics

- Buried pumping structure made of reinforced concrete, including a feeder canal from the Erdre and a pump shaft.
- Pumping: 7200 m³/h (3 pumps + 1 on standby) with a TDH varying from 3.5 to 13 m – Unit discharge : 2400 m³/h.
- Substation: 630 kVA
- 1800 m long, 1100 mm dia. cast iron transfer pipe.
- Construction of a raw water receiving tank at La Roche plant.

Main difficulties

- Defining the best technical arrangements for guaranteeing the reliability and availability of the structure, making due allowance for the consequences of episodic use.
- Flood-prone area.
- Urban context, requiring landscaping and environmental integration.