

Calais - Development of a multimodal platform Construction of a stormwater treatment plant



Country
France

Client
CCI de Calais

Date
2005-2007

Cost of works
€2m exc. VAT

Sogreah's services
► Design services and project supervision



Context

As part of the programme to develop the reclamation area in the eastern harbour at Calais (11 ha), the Chamber of Commerce and Industry commissioned Sogreah's Lille and Pontivy offices to carry out design services and project supervision for the following:

- Development of a 5 ha multimodal platform and creation of a new outfall (ND 1200 mm).
- Sizing and construction of a stormwater treatment plant. The plant is to treat water running off the reclamation area by means of a horizontal-flow lamellar

settling tank (water and sludge circulate perpendicularly) with the aim of complying with standards for discharging into the natural environment (the sea).

This technique is widely used for treating stormwater as the pollution (COD, BOD₅, hydrocarbons and heavy metals) is associated essentially with suspended solids.

Characteristics

- Nominal treatment discharge: 287 l/s (fall velocity 1 m/h).
- Peak discharge flowing through the structure (treatment in downgraded mode): 2120 l/s

(fall velocity 7.4 m/h).

- Prefabricated steel structure
 - height: 5.44 m
 - width: 4.5 m
 - length: 27.36 m
- Weight empty: 55 tonnes.
- Weight filled: 272 tonnes.
- Hydrostatic thrust: 378 tonnes.

The structure is buried in the reclamation area. Sheet-piling was installed in order to carry out the excavations.

The ND 1200 mm outfall was created by making an opening in the deep-water quay (Ravisse basin). The outfall level is such that it is subject to tides.