

# eco-Design of a sewage rain water storage plant in ermont, France

INDUSTRIAL site, HQE® APPROACH: sewage treatment rain water PLant

CLIENT	SIARE
LOCATION	Ermont
PROJECT	Architectural and lanscape design of a sewage rain water storage plant
CONSULTANT	AR ARCHITECTES, SETEC HYDRATEC
MISSION	Architectural and landscaping design HQE®
STORAGE VOLUME	6 500 m <sup>3</sup>
ELECTRIC POWER	100 kW
AREA	123m <sup>2</sup>
COST	5 600 000 €
DATE	works receipt March 2018



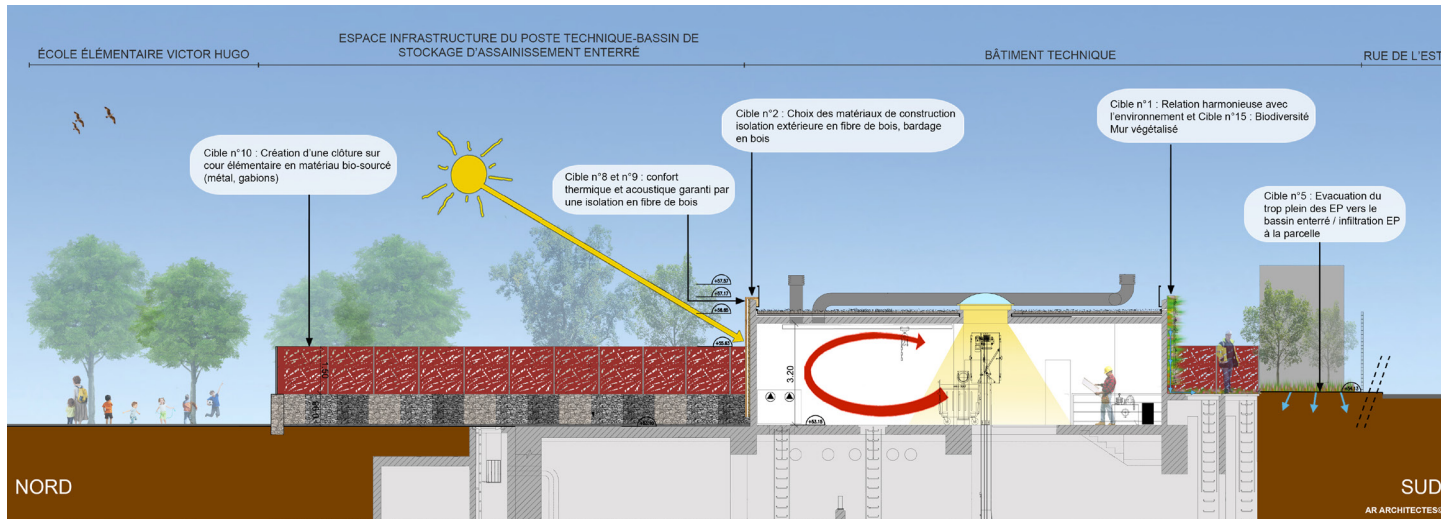
Location plan of the project



View of the entrance, gabion cladding associated with the metal fence, eco-plant in wood

The eco-plant is located in a very urban site close to housing and in a school courtyard. The objective of the project was to design an eco-friendly plant with low impact on the environment. The construction is a 4,45m high and the volume is a simple rectangle.

Wooden cladding have been used on three facades and on the school facade, gabion cladding associated with the metal fence have been designed to create a continuous dialogue between the scholars and the plant. On the Southern façade, a planted wall have been implemented creating harmonious relationship between the construction and the pedestrians.



Section HQE®



View from East street on the Victor Hugo schoolyard



View from Est street on the green wall on the South

## HQE® targets

### target 1: HARMONIOUS RELATION BETWEEN BUILDING AND ITS ENVIRONMENT

- The objective was to provide facades with biodegradable materials, such as steel, wood and recyclable insulation (wood wool).
- Natural areas: vegetated wall.

### Target 2: CHOICE OF INTEGRATED PRODUCTS AND BUILDING MATERIALS

- **Sustainable materials** are used : aluminum cladding, wooden cladding, vegetated wall wood wool (insulation) and gabions.

### Target 3: ENERGY MANAGEMENT

- Thermal insulation using wood wool.
- natural lighting.

### Target 5: WATER MANAGEMENT

- Water management by green roofs.
- Runoff water management on roads with planted slabs.

### Targets 8 AND 9: HYGROTHERMAL AND ACOUSTIC COMFORT

- Thermal and acoustic comfort is ensured with a **wooden fibre insulation**.

### target 10 : VISUAL COMFORT

- **Rustic gardens** are planted all around the plant, creating harmonious relationship between the infrastructure and its surroundings.

