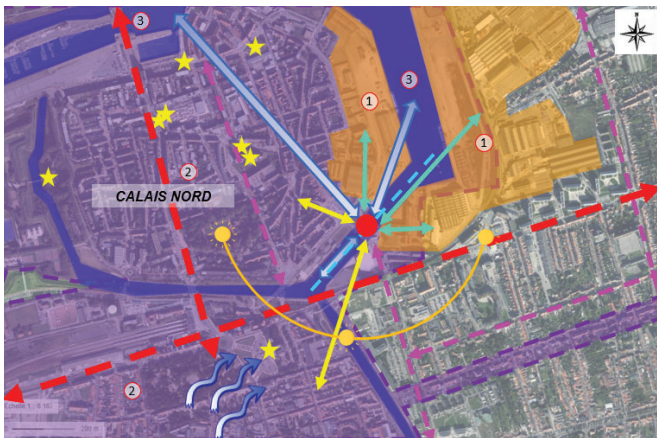


eco-rehabilitation of the existing Batellerie Pumping Station for the Optimization of the Rivière Neuve / Pierrettes Hydraulic System - France

“Green Seam”

HYDRAULIC INFRASTRUCTURE, HQE® APPROACH: PUMPING STATION, WATER MANAGEMENT AND FLOOD RISK MITIGATION

Client	Intercommunal Institution of the Wateringues
Localisation	Calais (62), France
Missions	Construction of hydraulic structures on the Rivière Neuve / Pierrettes
Consultant	SETEC HYDRATEC / AR ARCHITECTES
Capacité De Pompage	From 4 to 8m³/s
Cost	8 000 000 €
Date	Detailed Design Phase - 2026



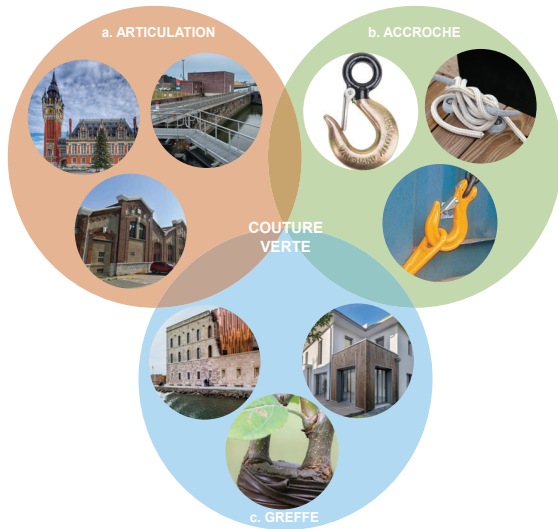
Overview plan of the Batellerie pumping station



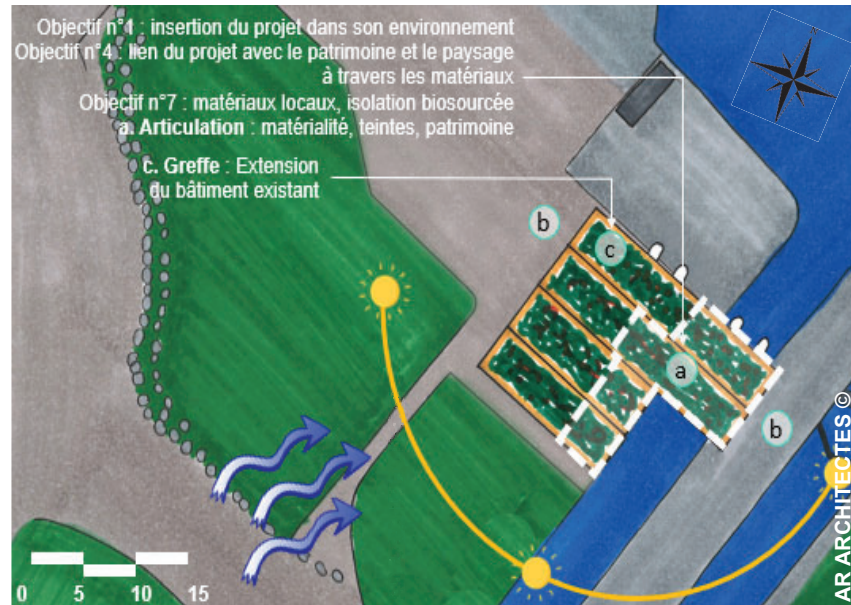
Perspective of the Batellerie pumping station – projected state - Green Seam

The Batellerie pumping station project is part of the optimization of the Rivière Neuve / Pierrettes hydraulic system, aiming **to increase the existing pumping capacity** in order to better respond to intense rainfall events. Located at the interface between an industrial area and a residential urban fabric, in close proximity to the Calais canal and within a **heritage-sensitive site**, the project must reconcile technical performance with careful **urban integration**.

The intervention involves the refurbishment of the existing station and the construction of an **extension to double the pumping capacity**. The architectural approach is sober and coherent, working with **volumes and materials** to create a dialogue between the existing structure and the new building.



Concept - Green Seam

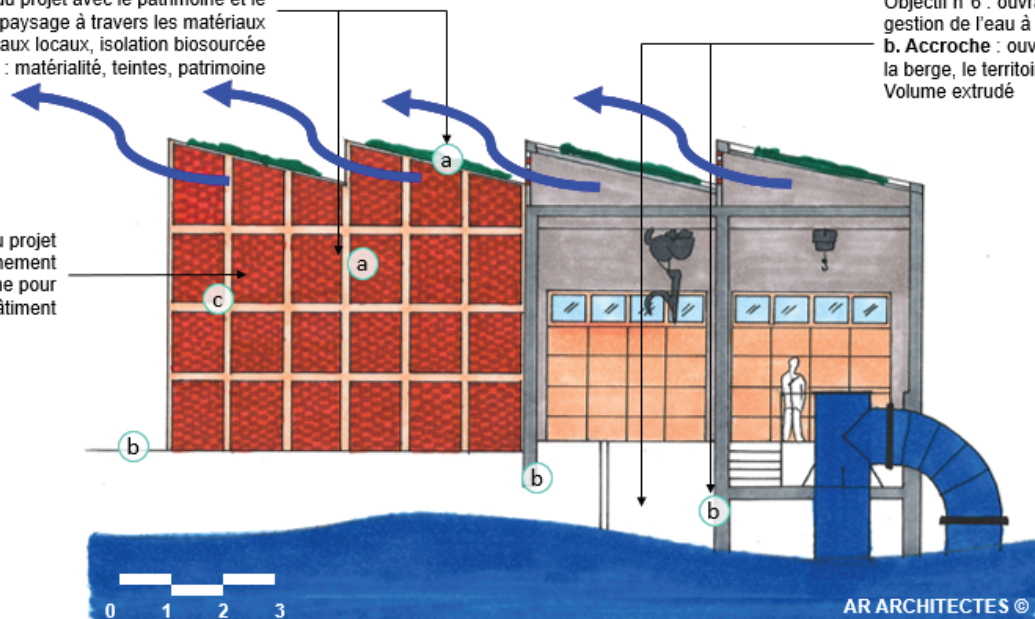


Concept – Design approach – Batellerie site plan - Green Seam

Objectif n°1 : insertion du projet dans son environnement
 Objectif n°4 : lien du projet avec le patrimoine et le paysage à travers les matériaux
 Objectif n°7 : matériaux locaux, isolation biosourcée
 a. Articulation : matérialité, teintes, patrimoine

Objectif n°6 : ouvrage hydraulique, gestion de l'eau à la parcelle
 b. Accroche : ouvrage enterré dans la berge, le territoire
 Volume extrudé

Objectif n°1 : insertion du projet dans son environnement
 c. Greffe : Ajout de volume pour l'extension du bâtiment



Facade concept – HQE® principles section - Green Seam

HQE® TARGETS

OBJECTIVE 1 – SYNERGY AND CONSISTENCY WITH LOCAL PROJECTS AND INFRASTRUCTURE

- Integration of the project taking into account the existing context
- Continuity with industrial and heritage environments
- Building extension in harmony with the existing structure
- Shed roof design

OBJECTIVE 4 – LANDSCAPE AND HERITAGE

- Emploi de la brique pour un rappel avec le patrimoine environnant.
- **Toiture végétalisée.**
- Plantations d'essences locales adaptées favorisant le développement de la biodiversité.

OBJECTIVE 6 – WATER MANAGEMENT

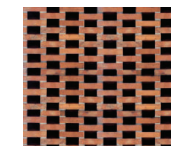
- Hydraulic structure with on-site water management
- Site greening:
 - Green roof
 - Grass meadow

OBJECTIVE 7 – MATERIALS, BY-PRODUCTS AND WASTE MANAGEMENT

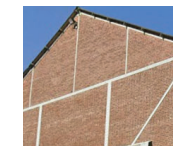
- Bio-based insulation materials
- Mashrabiya screens
- Local brick
- Repeated industrial pattern with light-colored render contrasting with red brick

OBJECTIVE 8 – ENERGY AND GREENHOUSE GASES

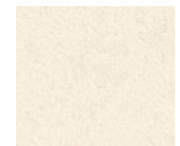
- Air extraction beneath the roof structure
- Ventilation through mashrabiya elements integrated into the sheds



Mashrabiya



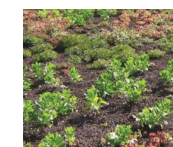
Red brick pattern



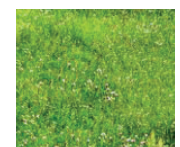
Light lime render



External insulation in wood fiber



Green roof



Grass meadow