

Storm water basin Vivaqua - Ganshoren

Project Details

Activities

Civil Engineering
Water engineering

Contractors

Willemen Construct

Location

Nestor Martinlaan 38
1083 Ganshoren Belgium
Brussels BE

Client

Vivaqua

Engineering Office

Agidens, Nico Terryn

Span

8m

Surface area above ground

2 555m²

Surface area subterranean

2 555m²

Construction period

1 year 8 months

Start work

02-2014

End of work

10-2015



Storm water reservoirs connected to the drainage system that can collect 10,000 m³ of water during heavy storms, relieving the pressure on sewers. Buffered water is discharged into one of the main collectors in Brussels, half using a gravitational outlet, the other half using pumps.

An automated system has been fitted whereby the mechanical elements (pumps, mixers, rinsing system, ...) can function entirely automatically and can be operated from the owner's own offices. There is also a monitoring system allowing stream levels to be surveyed constantly from a distance.

Design:

- Length ±370m
- Breadth 8m
- Depth of 3.5 to 6m
- Underground, roofing plate is 1.5m below ground level

Construction method:

- Basin structure made of more than 1700 secant piles
- Concrete: 3500 m³
- Reinforcement: 620 tonnes

- HDPE pipes: 1000 m - diameters 400-350
- 2 pumps 35

Willemen Construct



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Willemen Construct came into being on 1 July 2018 as a result of the merger between Willemen General Contractor and the construction department of Kumpen.