



Case Study

# Reconstruction of Fabryczna Street in Leszno, Poland

Corrugated steel retention tanks collect excess rainwater and expel to sewage system

## THE CHALLENGE

As part of the reconstruction project for Fabryczna Street in Leszno, western Poland, a solution for water retention and release was needed. Collecting excess water to keep the surface area free meant bringing in a retention tank solution that could capture and release storm water into the sewage system.

## THE SOLUTION

A corrugated steel retention tank system consisting of two retention tanks was built into the existing sewage system at Fabryczna Street. The tanks are placed in a car-free green zone, and the tank solution gradually releases excess stormwater into the sewage system. Installed gradually over a three-month period, the retention tank solution is one of the largest-capacity retention tank projects ViaCon Polska has delivered.



## THE ADVANTAGE

The water tank solution offers a number of benefits:

- Faster installation than alternatives
- Cost effective: Short construction time and easier maintenance reduces overall costs
- Sustainable steel solution
- Flexible build: System built under a road, car park or car-free zone and multiple, customizable arrangements for tanks and their capacity and capabilities

## SPECIFICATIONS

The two-tank system included specific design requirements and assumptions:

- Two retention tanks:
  - Tank 1: DN/ID 1,400 mm
  - Tank 2: DN/ID 1,500 mm

- Anti-corrosion with 42 µm thick zinc coating and polymeric WProtect coating of min 250 µm on both sides

**Tank 1** has a total capacity of 676.4 m<sup>3</sup> with an inner diameter of 1,400 mm. Three pipes are arranged in parallel, each 142 m long for a total length of 426 m.

**Tank 2** has a total capacity of 382.9 m<sup>3</sup> with an inner diameter of 1,500 mm. Two pipes are arranged in parallel, each 108.4 m long for a total length of 216.8 m.

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## CONTACT US

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