Interreg Baltic Sea Region

Co-funded by the European Union

GDAŃSK UNIVERSITY OF TECHNOLOGY

SUSTAINABLE WATERS
WaterMan

The WaterMan project
Reuse of public swimming pool water

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Braniewo Municipality

Final concept, 31 Dec 2025

[Source: geoportal.gov.pl]

Location:

Łąkowa 1 Street, **Braniewo**, Poland

Municipal Sports Center „Zatoka”

Recreation & Rehabilitation Complex „Healthy Braniewo”

Infrastructure:

- **Indoor pool complex:**
  - sport swimming pool
  - leisure pool with wading pool
  - SPA bath

- **Wellness facilities:**
  - sauna rooms (x2)
  - gym
  - massage parlour
  - rest zone
  - tanning beds

2.3 Pilot measure / reuse of treated water:
Reuse of public swimming pool water

30 m³/d

water supply from the municipal network


[Source:Braniewo Municipal Waterworks Ltd.]

Before implementation of the WaterMan pilot solution:

wastewater *from showers and toilets*

pool water ***overflow***

filter rinsing ***wastewater***

15 m³/d | 4÷5 m³/d | 10÷11 m³/d

1. ***Wastewater*** *from showers and toilets and pool water* ***overflow*** *are combined within the Basin and discharged through a* ***common sewage system -*** *directing the pool water overflow to the pilot requires reconstruction of the sewage system in the swimming pool building*

2. ***Filter rinsing wastewater*** *is discharged from the swimming pool building by a* ***separate sanitary collector*** *- it can be easily directed to the pilot*


[Source:Braniewo Municipal Waterworks Ltd.]

discharge into the sewage system (100%):
30 m³/d

2.3 Pilot measure / reuse of treated water:
Reuse of public swimming pool water

30 m³/d

water supply from the municipal network

After implementation of the WaterMan pilot solution:

Reuse of treated wastewater:

- *flushing the sewer system in Braniewo: ap. 3 m³/d (all year round)*
- *watering urban greenery (vegetation period)*
- *watering of plants by residents (vegetation period)*
- *…… (in the process of arrangements)*

wastewater *from showers and toilets*

pool water ***overflow***

filter rinsing ***wastewater***

15 m³/d

4÷5 m³/d

4÷6 m³/d

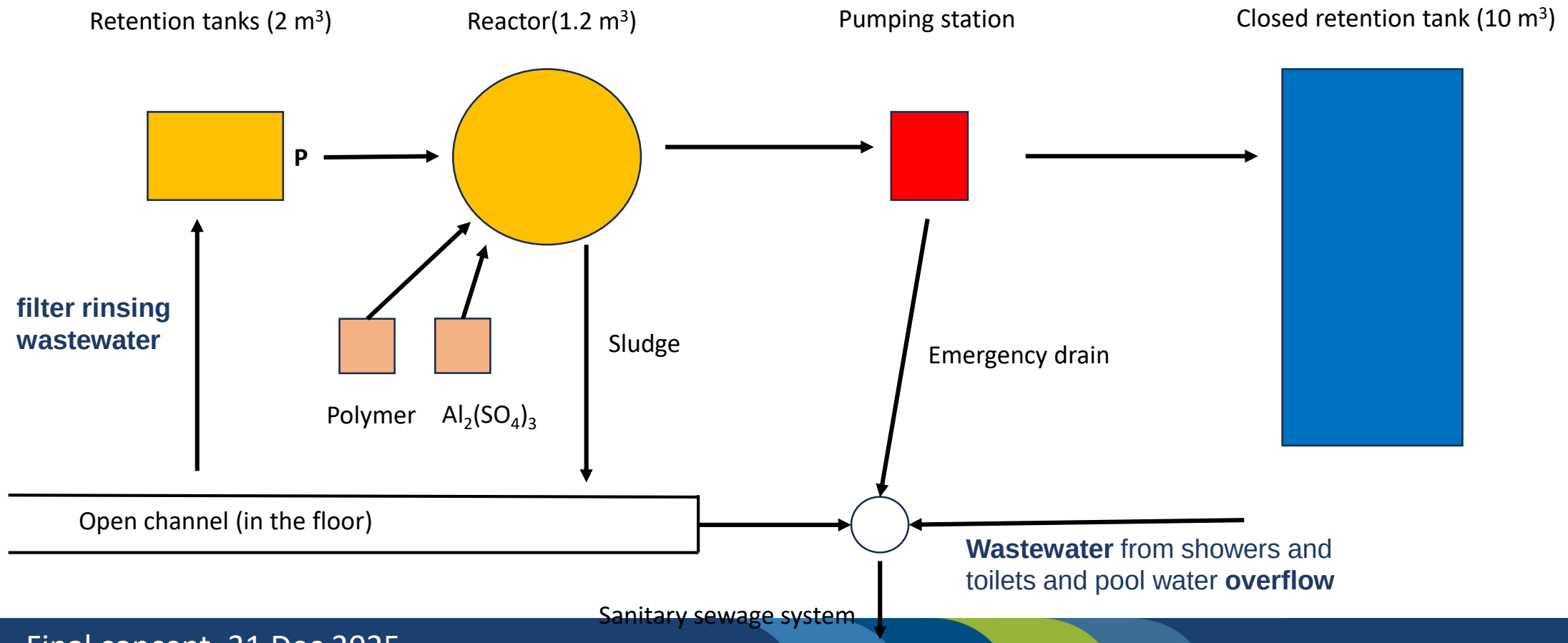
4÷5 m³/d

discharge into the sewage system

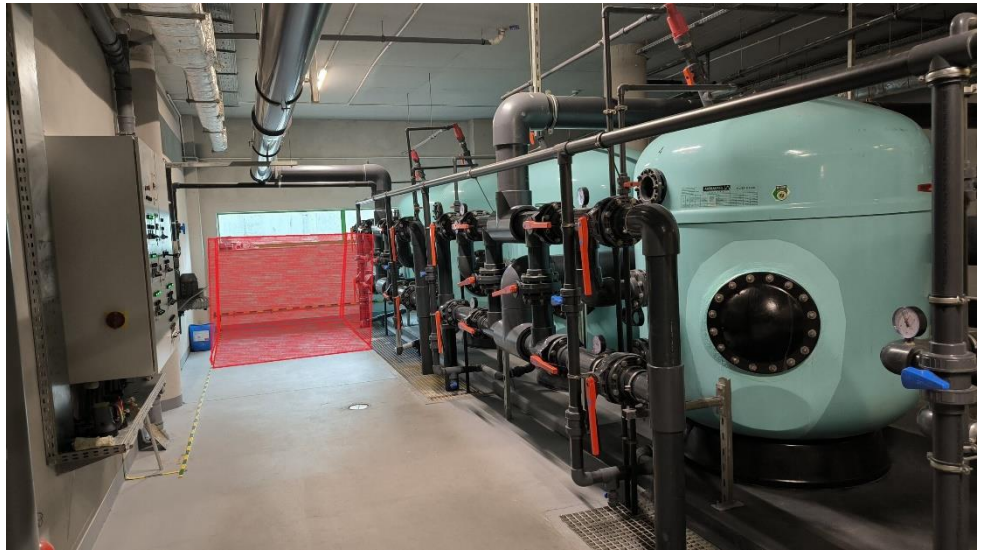
- ✓ 40-50% **reduction** in filter rinsing wastewater
- ✓ 15% **reduction** in sewage discharge
- ✓ 15% **savings** on tap water

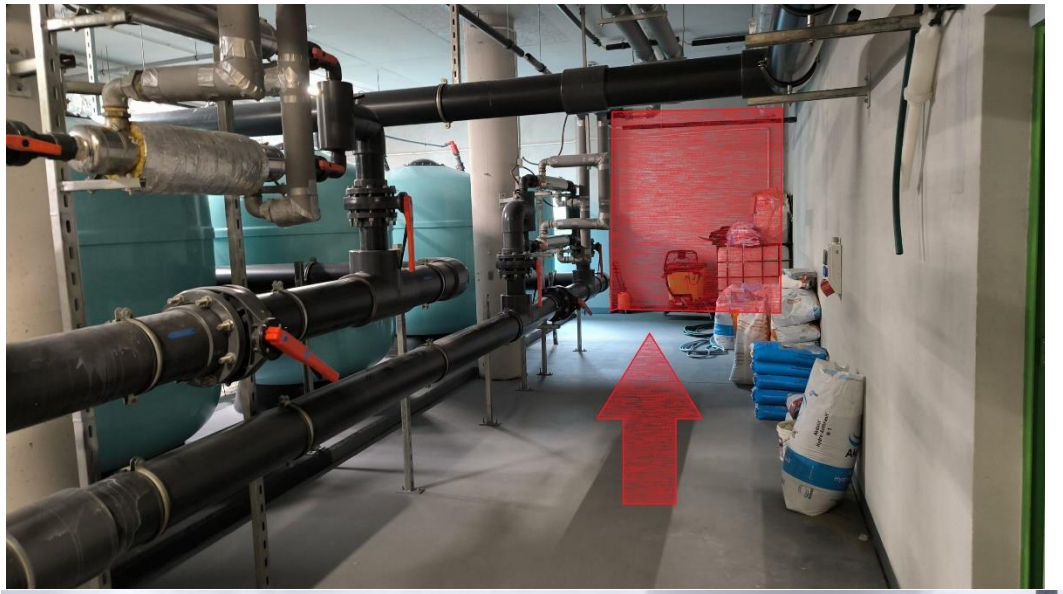
2.3 Pilot measure / reuse of treated water:
Reuse of public swimming pool water

Swimming pool water reuse technology – **Proposed wastewater treatment system**



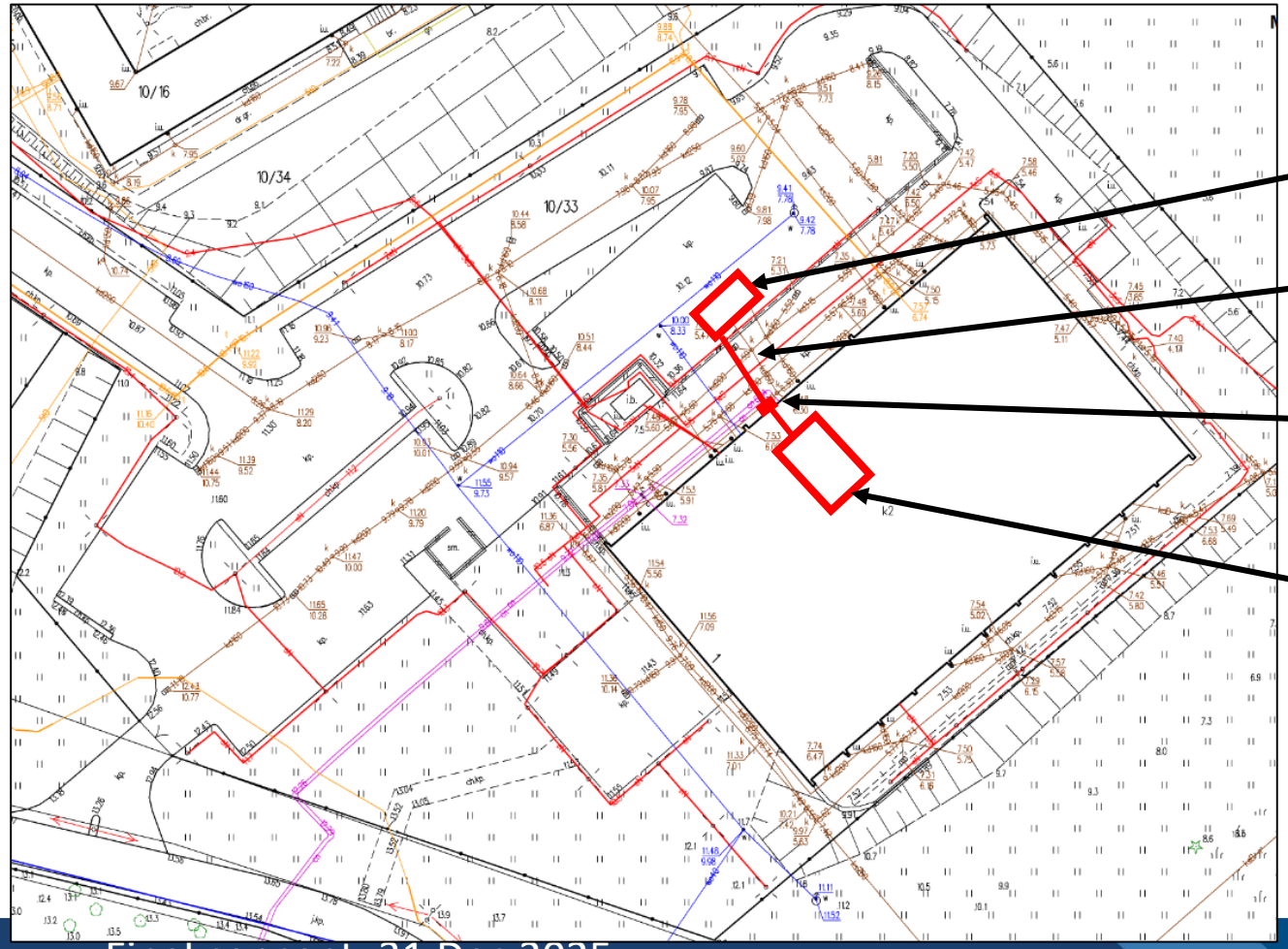
2.3 Pilot measure / reuse of treated water: Reuse of public swimming pool water





2.3 Pilot measure / reuse of treated water: Reuse of public swimming pool water

Swimming pool water reuse technology – **pilot location**



[source: geoportal.gov.pl]

Closed retention tank (in the parking)

New section of sanitary sewage system

Pumping station

Pilot instalation (in the filter room)

Design documentation for the pilot

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PROJEKT ZAGOSPODAROWANIA TERENU

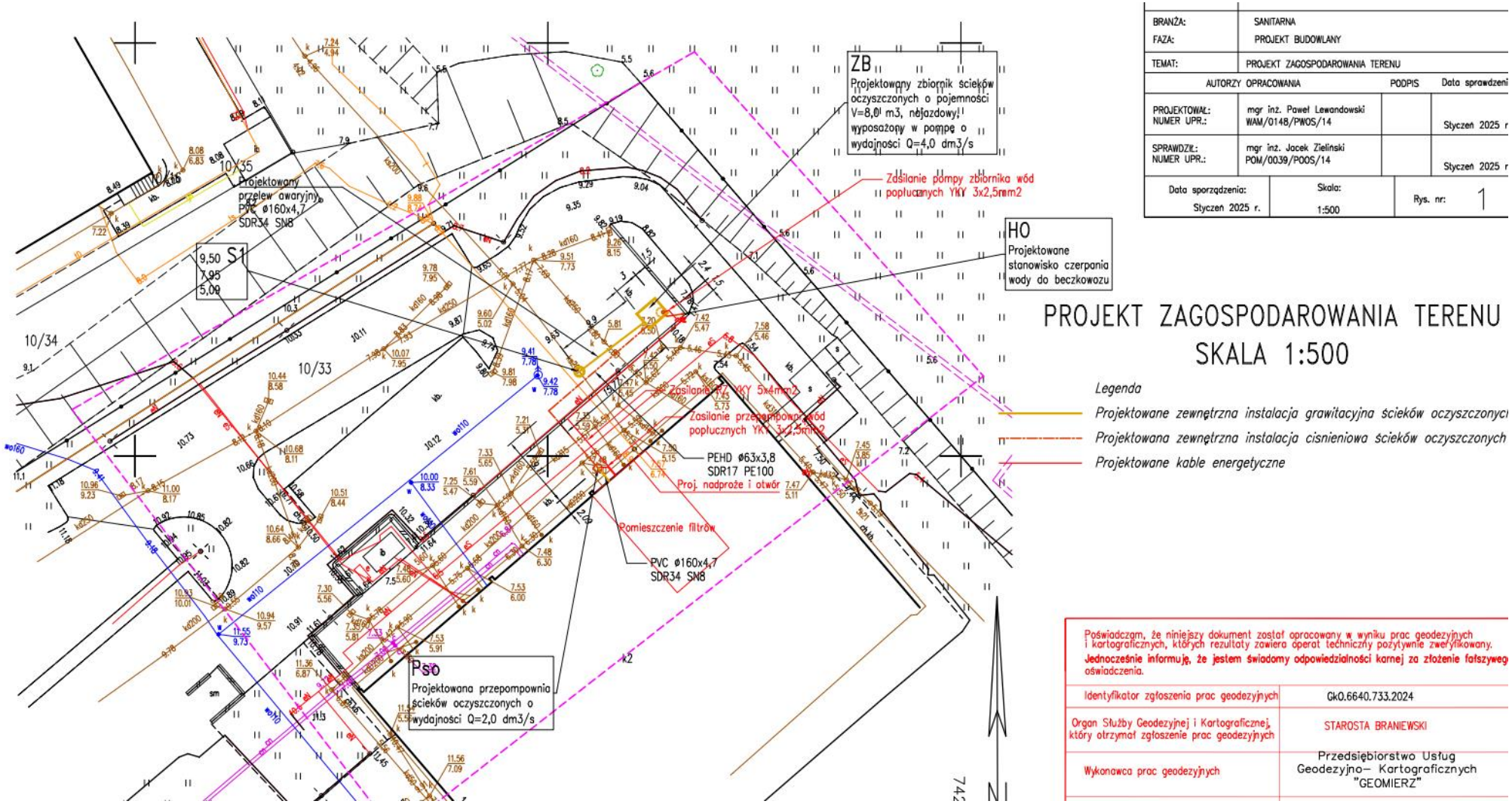
BUDOWA ZBIORNIKA ŚCIEKÓW OCZYSZCZONYCH Z NIEZBĘDNĄ INFRASTRUKTURĄ PODZIEMNĄ DLA POTRZEB BASENU MIEJSKIEGO

OBIEKT	Budynek użyteczności publicznej Basen Miejski
ADRES INWESTYCJI	ul. Łąkowa 1, 14-500 Braniewo
NUMER DZIAŁKI, OBRĘB	dz. nr 10/33, obręb 8, Braniewo
JEDNOSTKA EWIDENCYJNA	280201_1.0008.10/33
INWESTOR	Urząd Miasta Braniewa
ADRES INWESTORA	ul. Kościuszki 111, 14-500 Braniewo
KATEGORIA OBIEKTU	XXVI - sieci, jak: elektroenergetyczne, telekomunikacyjne, gazowe, ciepłownicze, wodociągowe, kanalizacyjne oraz rurociągi przesyłowe
DATA OPRACOWANIA	Styczeń 2025

In early 2025, a comprehensive pilot project was prepared.
It covered the following sectors:

- **construction,**
- **sanitary,**
- **electrical.**

Design documentation for the pilot



The assumed location of the elements constituting the pilot has been confirmed

Pilot - photos from the production

Raw material storage (filter rinsing wastewater)

Design documentation for the pilot

Reaction tank

Design documentation for the pilot

Control system

Methods for evaluating water usage

a) Water consumption meter reading; "A flow meter on the tank and readings, e.g., once a week, showing how many cubic meters were taken for private use by external recipients. Readings are taken from valves and pump operating time

b) Water usage log;

c) Contractor register (assessment of demand trends and volumes)."

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The „BSR Water Recycling Toolbox" was elaborated as part of the WaterMan project, which is co-financed by the European Union (European Regional Development Fund) and implemented within the Interreg Baltic Sea Region Programme. More information:

eurobalt.org/WaterRecyclingToolbox
interreg-baltic.eu/project/waterman

WaterMan promotes a Baltic Sea Region-specific approach to water recycling, which makes use of the alternation of too much and too little water that has become typical for humid areas in the EU to strengthen the resilience of local water supply. Building on this approach, the project supports municipalities and water companies in adapting their water supply strategies.