

Sewer Construction

Replacement of drinking water/rainwater line

The challenge

For the replacement of the drinking water/rainwater line of the Dorfstraße in Störmthal, the excavated soil was to be reused as backfill material with defined properties in accordance with RAL-GZ 507. The load-bearing capacity of the liquid soil should be $> 45 \text{ MN/m}^2$ and the strain at failure of the unconfined compressive strength between 0.1 and 0.4 N/mm². Before the start of constructions, it was assumed that groundwater was present, which should be controlled by the technology of hanging installation without lowering the groundwater level or swamping. The sewer trench was secured with shoring.



Trench backfilled with RSS® Flüssigboden



Construction project

Störmthal, Dorfstraße
Replacement of drinking water/
rainwater line Großpösna

Builder

Leipziger Wasserwerke

Construction works

Flüssigboden GmbH,
Eilenburg

Construction period

2017

Technical planning

LOGIC Logistic
Engineering GmbH

The solution

The trench was filled according to the given technology in timed construction. Due to the groundwater situation, hanging installation was not required. The shoring was removed before the complete fixation of the backfill material.

Properties of RSS® Flüssigboden

- homogeneous and free of any tendency to segregation
- Diameter of flow: 56-60 cm
- Strength and elasticity in the form of load-bearing capacity or unconfined compressive strength according to technical planning.
- Load-bearing capacity EV2 after 28 d: $> 45 \text{ MN/m}^2$
- q_u after 28 d 0.1-0.4 N/mm²



RSS Flüssigboden®
entspricht den Anfor-
derungen des RAL-GZ 507

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