



Hamburg

Excavations for the “Sechs Freunde” ('Six Friends') housing project

Data and facts

Company	PORR Spezialtiefbau GmbH
Type	Turnkey construction pits
Runtime	12.2016 - 07.2017
Principal	Aurelis Real Estate GmbH & Co. KG

[Project report online](#)

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Excavation pit for the crane-constructed “Sechs Freunde” (‘Six Friends’) housing project in Hamburg-Altona

FRANKI was commissioned with the creation of the entire excavation pit. The soil is very heterogeneous, and contains sandy fillings, expansive boulder clay and moraine clay with irregular alternation and various consistencies, as well as water-bearing fine and medium sand. The groundwater is mainly found below the planned base slab.

The 5,200 m² excavation pit had to be up to 8.50 m deep. The shoring could be implemented on the street side with a simply anchored soldier pile wall. A partially doubly anchored diaphragm wall was constructed along the walls of the store houses. In the final state, the diaphragm wall will serve as a foundation element of the projecting crane constructions. The excavation pit was created in two phases, so that the first part could be handed over to the shell constructor in May. At the beginning of July, the excavation pit was handed over, fully on-schedule.

Services:

- 5.750 m² diaphragm wall, $d = 60 \text{ cm}$, $t \leq 35 \text{ m}$
- 2.040 m² soldier pile wall
- 312 temporary multi-strand anchors, $Z_k \leq 510 \text{ kN}$, $L \leq 21 \text{ m}$
- Ca. 30.000 m³ excavated soil and disposal, water retention,
- probing of anchor and carrier routes

Impressions



Image notes

1

Excavations for the “Sechs Freunde” (‘Six Friends’) housing project

Creation of the diaphragm wall in the area around the historic store house.

2

Excavations for the “Sechs Freunde” (‘Six Friends’) housing project

Creation of the grouted anchor.

Do you have questions about the project or would you like to learn more? Feel free to contact us for further information.

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