

## Quarter Bülastraße Hamburg

### Project Owner:

GS-Bau GmbH

### Client:

Johann Heidorn GmbH & Co. KG

### Quick Info:

Temporary ground anchoring of building pit walls and of jet grouting underpinnings underneath existing buildings in the city centre

### Technical Information:

System:	Temporary strand anchors with 3 and 4 strands, Ø 0,6", steel grade 1570/1770
Quantity:	274 pcs.
Length:	6,00 – 22,00 m
Service Load:	up to 522 kN
Test Load:	up to 652 kN
Technique:	overburden drilling
Building Ground:	marl/sand
Time Frame of Works:	March – June 2011

A property located in the heart of St. Georg in between the streets "Lange Reihe", "Bülastraße" and "Knorrestraße" was due for redevelopment with a multi-level apartment complex with two-story basement car park. This endeavour necessitated the anchoring of pressed sheet piles in two layers for the duration of construction works. According to the building design, temporary strand anchors with 3 and 4 strands each were planned. In the area of "Knorrestraße" the landmark protected façade of the former apartment building no. 9 was secured with jet grouting underpinnings and a steel scaffold (see Image 2).

The underpinning of the façade was secured with temporary ground anchors in two layers. Those buildings adjacent to the building pit, namely Lange Reihe no. 106, Knorrestraße no. 7 (front and back building), and Bülastraße no. 8 (see Image 1) were also secured with high-pressure direct injections. It was our job to provide the associated ground anchoring works. This required high precision and accurate planning. In sum, we produced ca. 4.100 m strand anchors with 3 and 4 strands using an overburden drilling technique.



Image 1



Image 2