

## Anchor with removable strands on site Europlaza / Vienna



### General Information

- Excavation support for a three storey underground car park
- Design comprised of bored piles  $\varnothing$  60cm with spacing, two rows of anchors
- Jet grouting columns between the piles were used in the range influenced by the groundwater
- Upper level anchors were installed with two chords C300
- Lower level of anchors mostly directly through the piles
- Anchors encroached on public land necessitating the use of totally removable strands



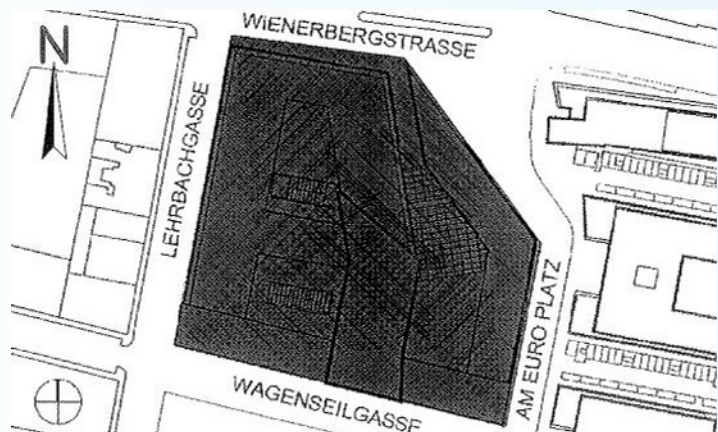
### Data

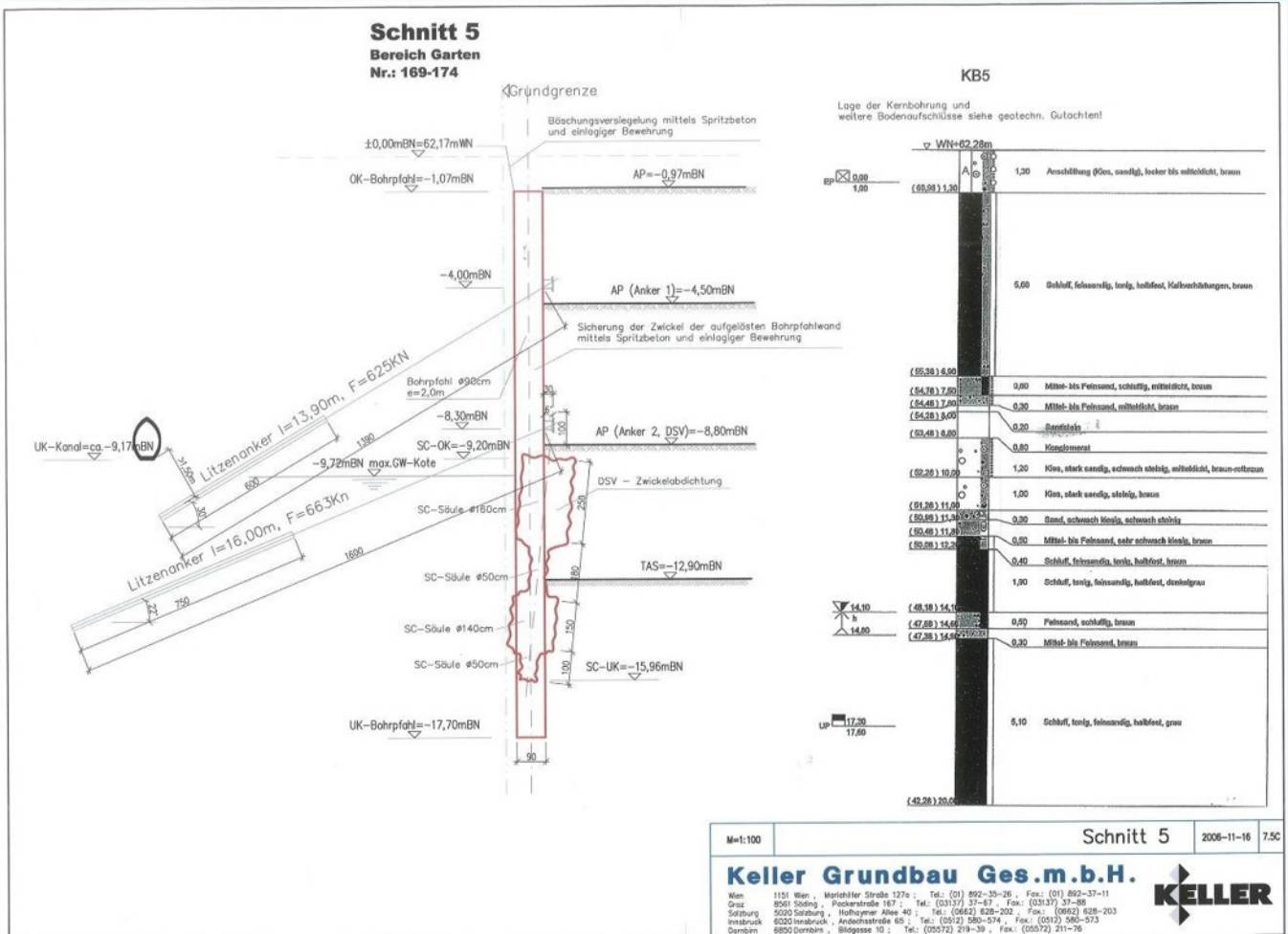
Circumference of excavation bit: 425 lfm

Area: ~ 100 x 100 m

Greatest excavation depth: 12.5m BN

Excavation volume: ~ 12,500 cubic m





## Upper level of anchors

No. WGL Anchor: 70 No.

Average length: 14.5 m

Average force: 620 kN

No. of strands,  
(1670/1860, ø 12,9 mm): 6 strands or 3 loops

Inclination: 12° – 35°



## Lower level of anchors

No. WGL Anchor: 76 No.

Average length: 16.0 m

Average force: 640 kN

No. Of strands,  
(1670/1860,  $\varnothing$  12,9 mm): 6 strands or 3 loops  
and 8 strands or 4 loops

Inclination: 15° – 27°



In total appr. 2.500 lfm Anchor



*View after reaching max. excavation depth*

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