

Nordhavnstunnel Project

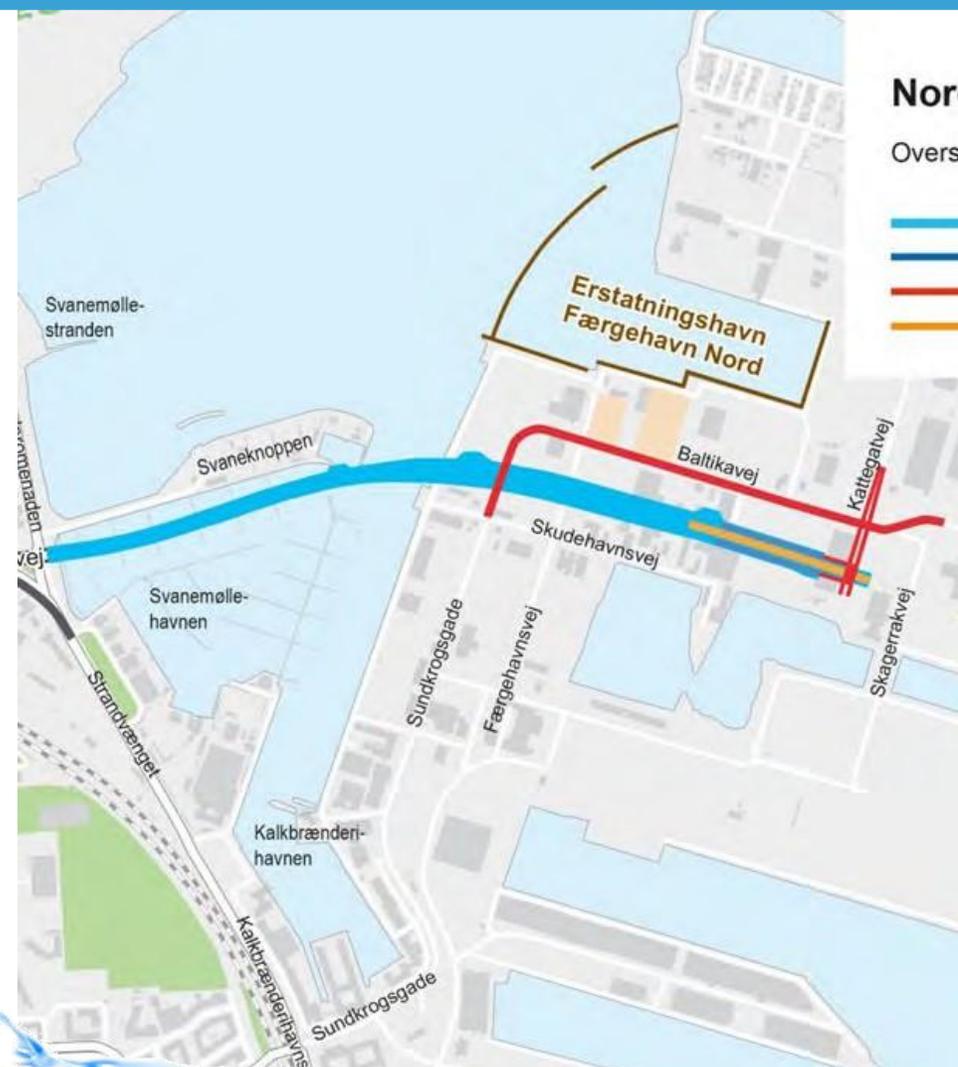


Project Introduction



- Tunnel
- Open ramps
- New roads
- Preparation of connection to Østlig Ringvej

- Svanemøllehavnen– 500m under harbour
- Kalkbrænderiløbet – 150m under channel
- Nordhavn – 750m under land
- **Total length: 1400m**



Project Introduction

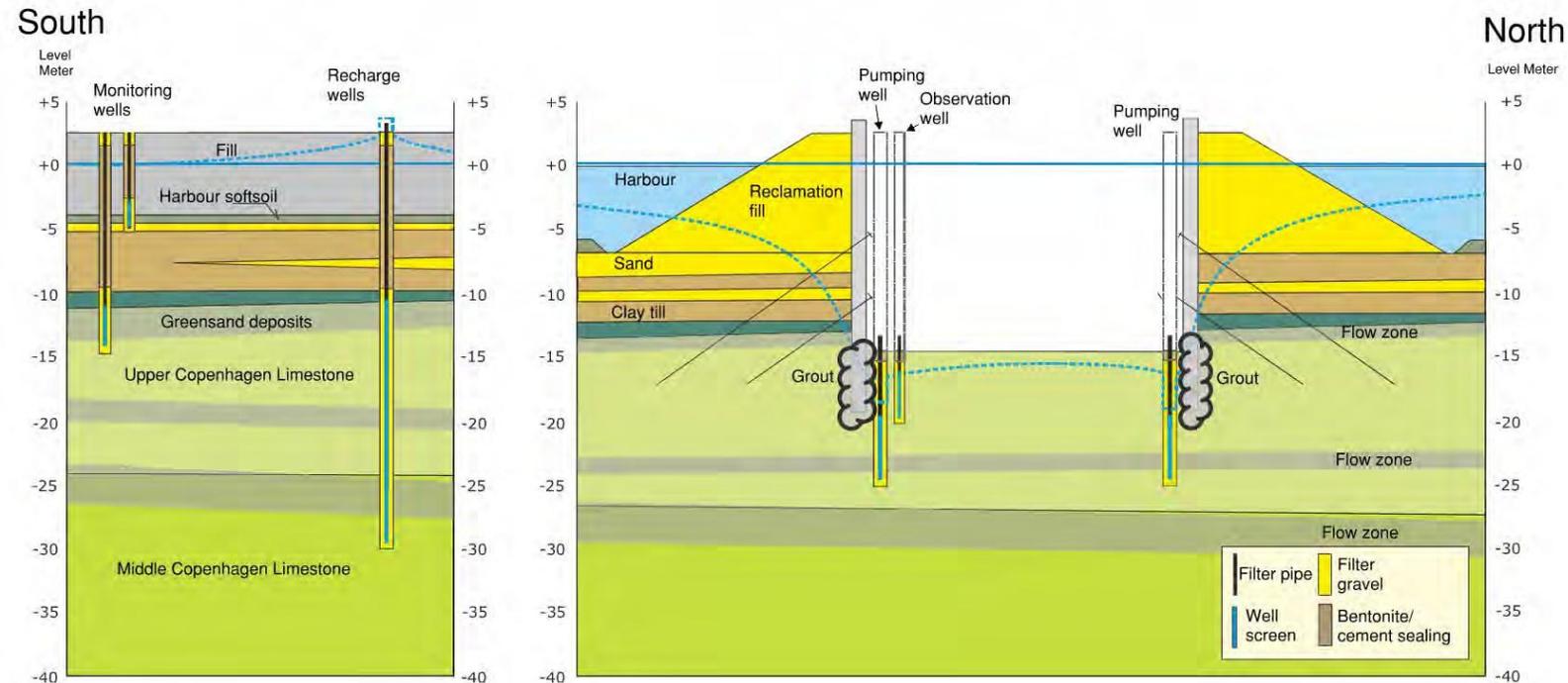


Project Scope

Groundwater Control System (GWCS) used in the project consists of:

- Water Treatment Plant (WTP) 225 m³/h
- Heavy Metal Removal WTP 200 m³/h
- Dewatering system including 131 pumping wells (initially planned 87)
- Observation system inside excavation incl. 39 wells (initially planned 23)
- Recharge system including 11 existing wells and 69 new wells. Total 80 wells (initially planned 73)
- Monitoring system including 27 existing wells and 14 new wells. Total 43 wells

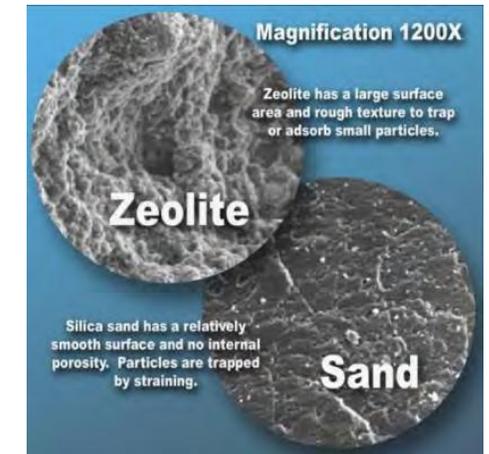
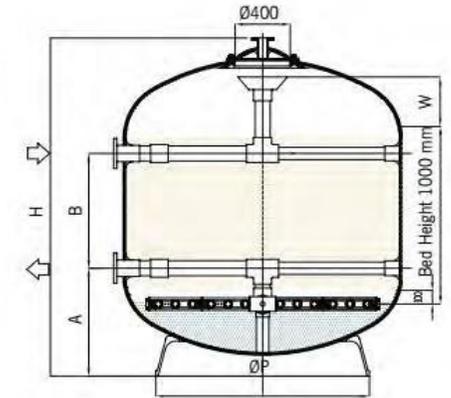
Total amount of wells: 291 for GWL



Water Treatment Plant for 225m³/h

General features of each of three Turbidex filter containers:

- Filter media
 - 3x 350kg filter sand, grain size 2-3 mm (support layer)
 - 3x 45 cuft Turbidex Hyper Filtration medium
- Vessels (filters) 3 x Ø1400mm
- On top of each vessel manhole shaft DN400 incl. air relief valve
- 2 stainless steel Grundfos CR64 booster pumps
- “All-sides open” 20ft container (easy access)



Work Fronts

Work front 1 - Svanemøllen



Work Fronts

Work front 2 - Nordhavn



Work front 3 - Nordhavn

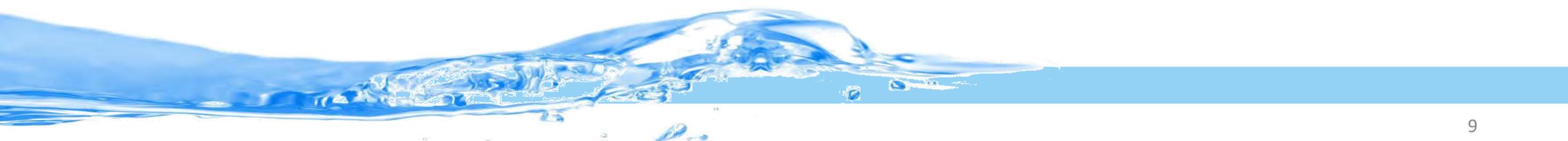


Construction phase

Work front 3 – 1st level excavation

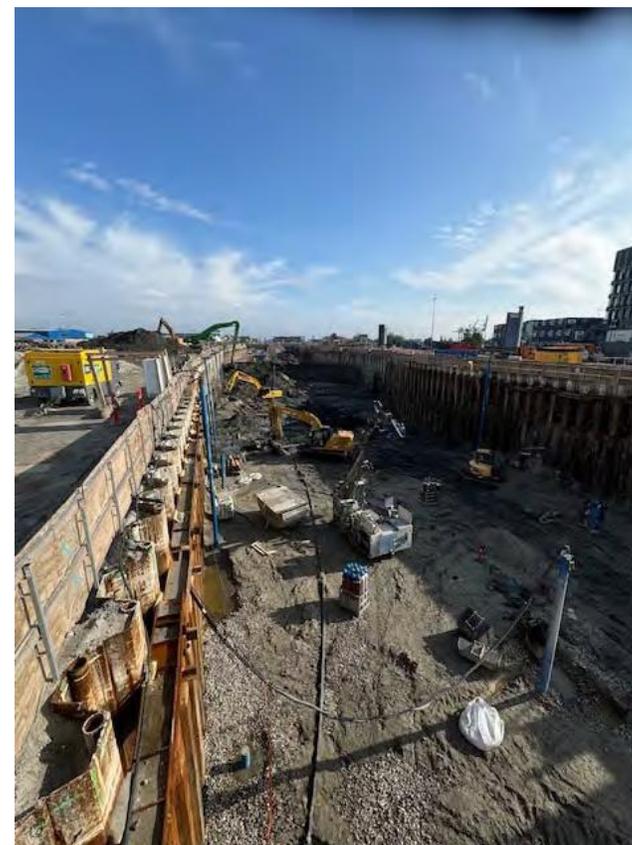


Work front 2 – main GWL pipes crossing to WF1



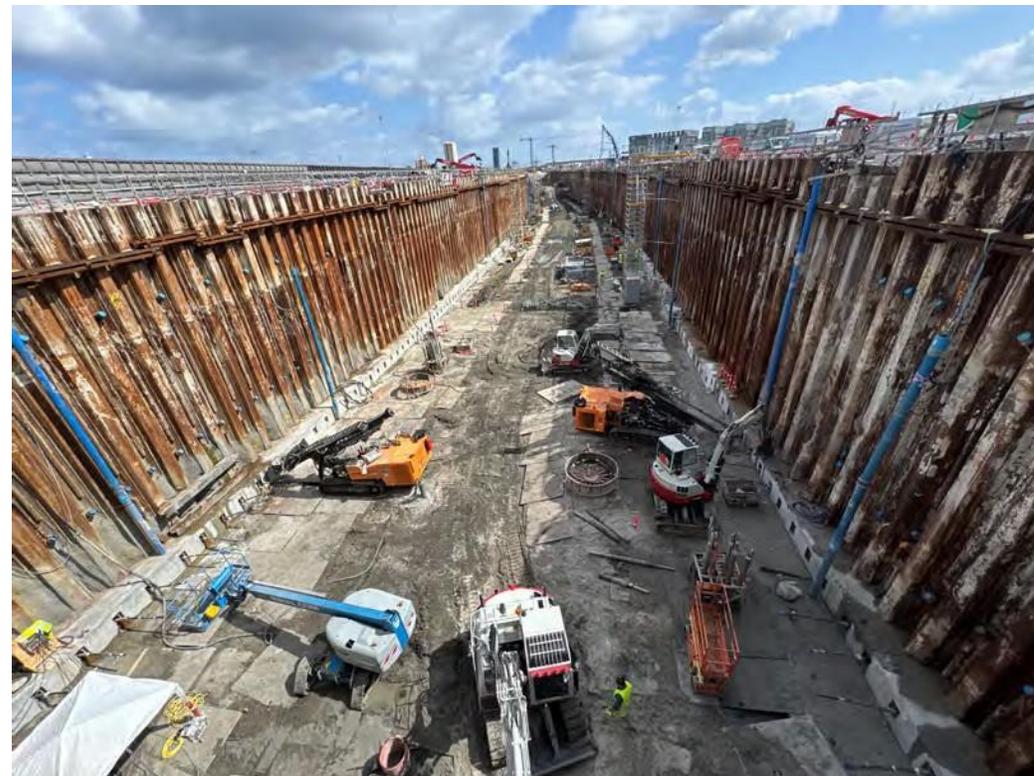
Construction phase

Work front 2 – 2nd level excavation



Construction phase

Work front 1 – 3rd (final) level excavation



Thank you for your attention

