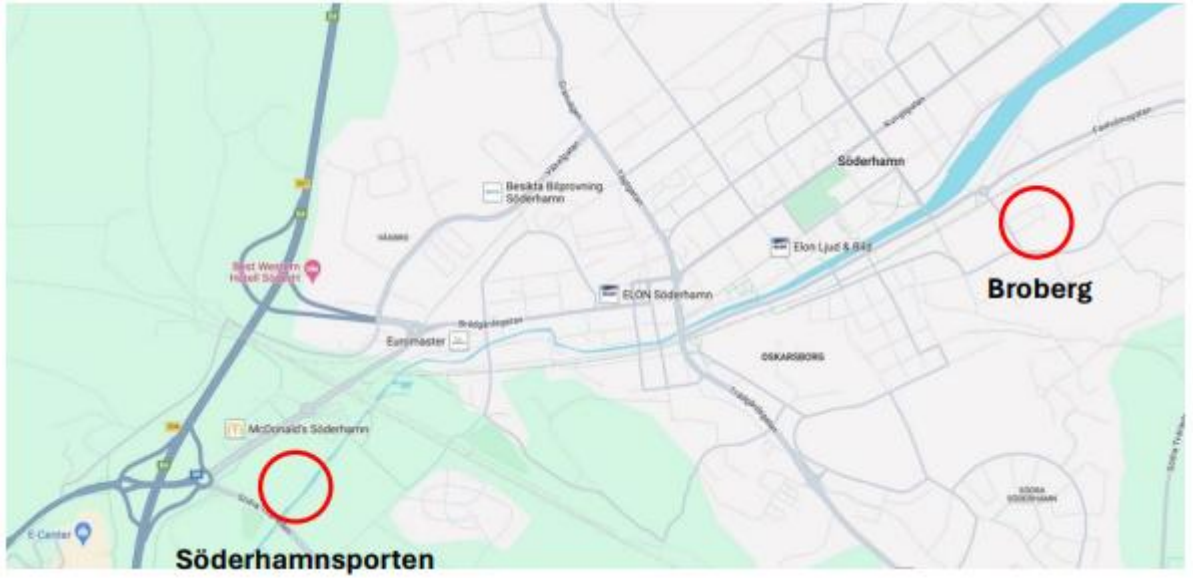
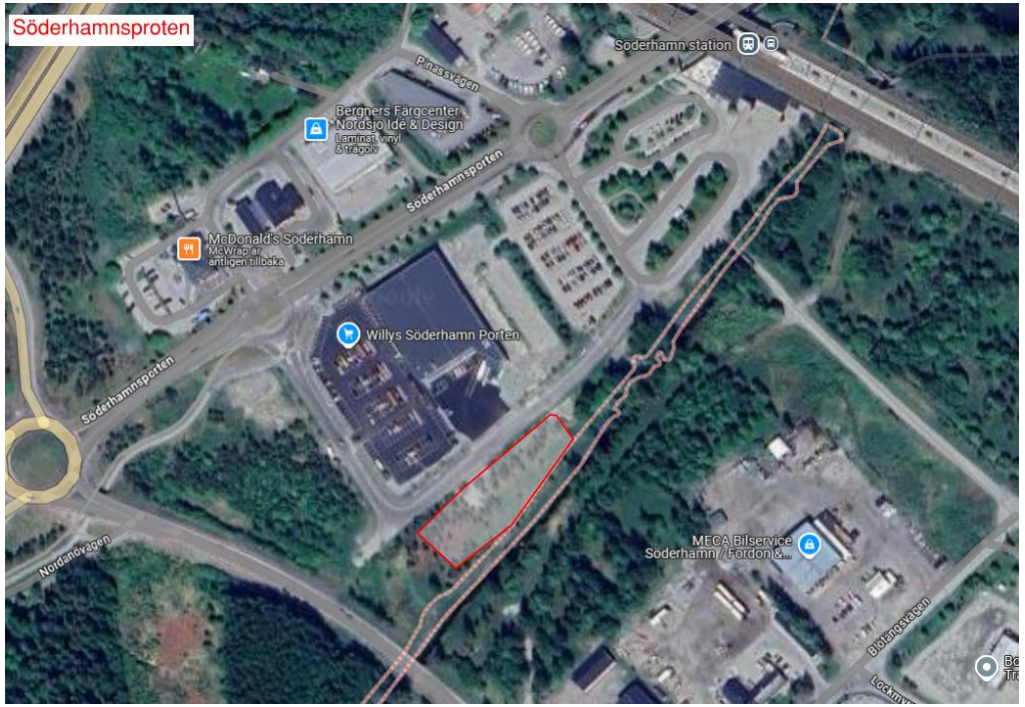
Söderhamn Broberg/Söderhamnsporten

Pilotareas
- Broberg
- Söderhamnsporten (if I have time)





Aim/themes of the projects

Broberg

- Landscaping architecture
- Stormwater treatment
- Cloudburst flood management
- Water quality sensor

Söderhamnsporten

- Landscaping architecture
- Stormwater treatment
- Water quality sensor

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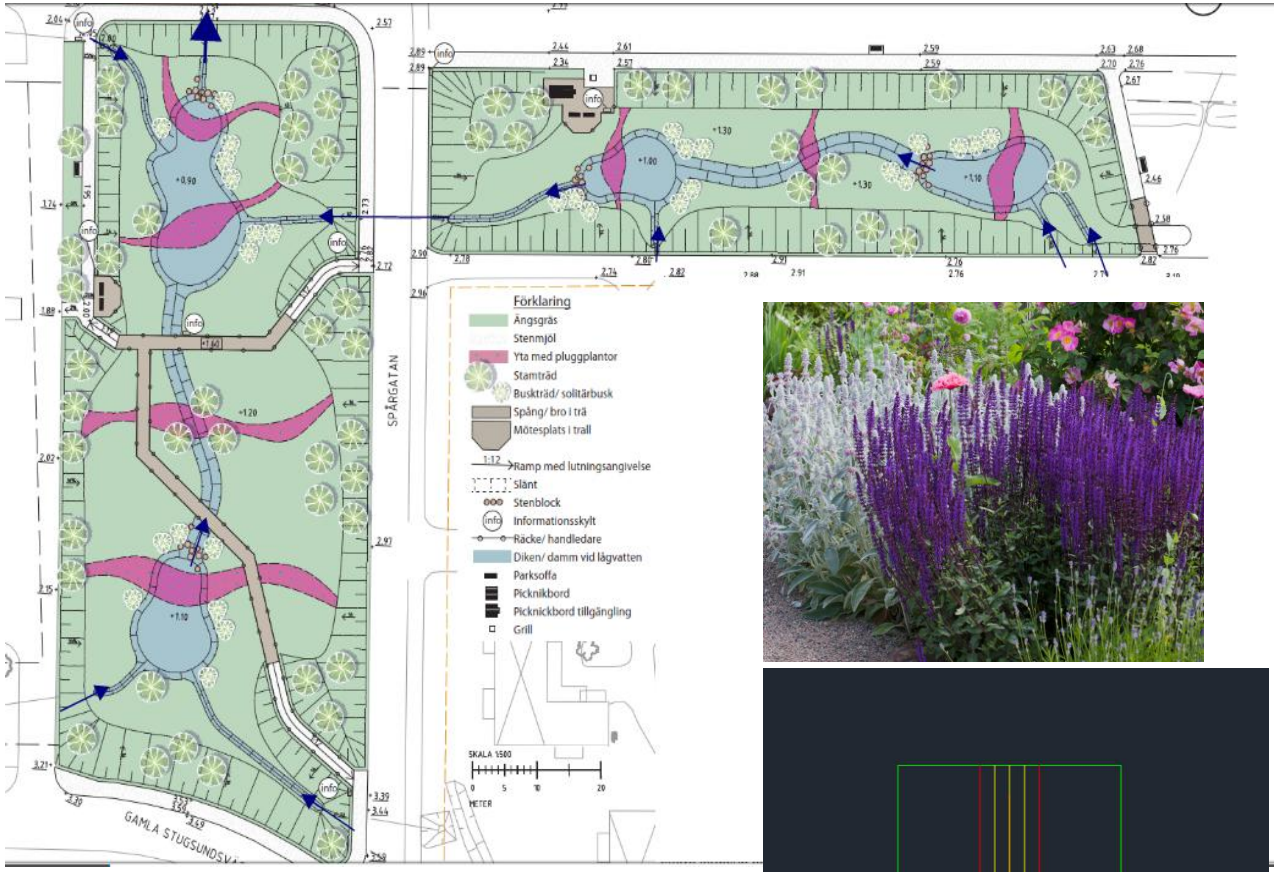
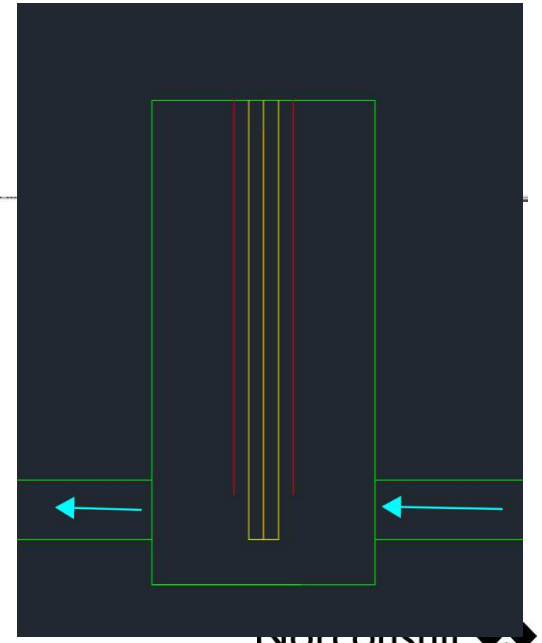
Broberg

- Stormwater treatment and landscape architecture
- Accessibility, maintenance, plants
- Shallow ditches which reaches small pond areas
- Measurement with sensors, before and after

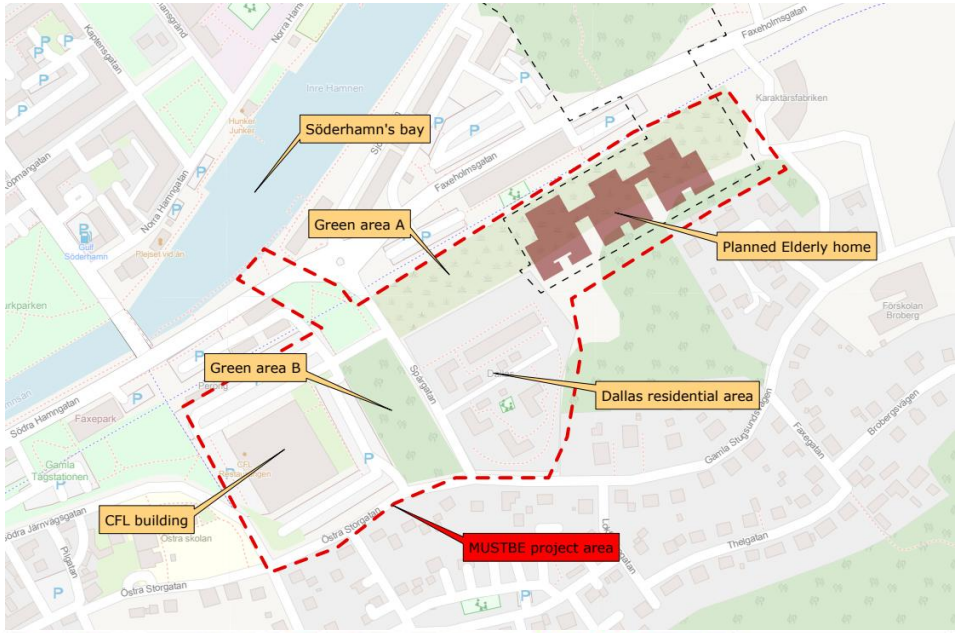
pH, dissolved oxygen, ammonium, nitrate, conductivity, turbudity

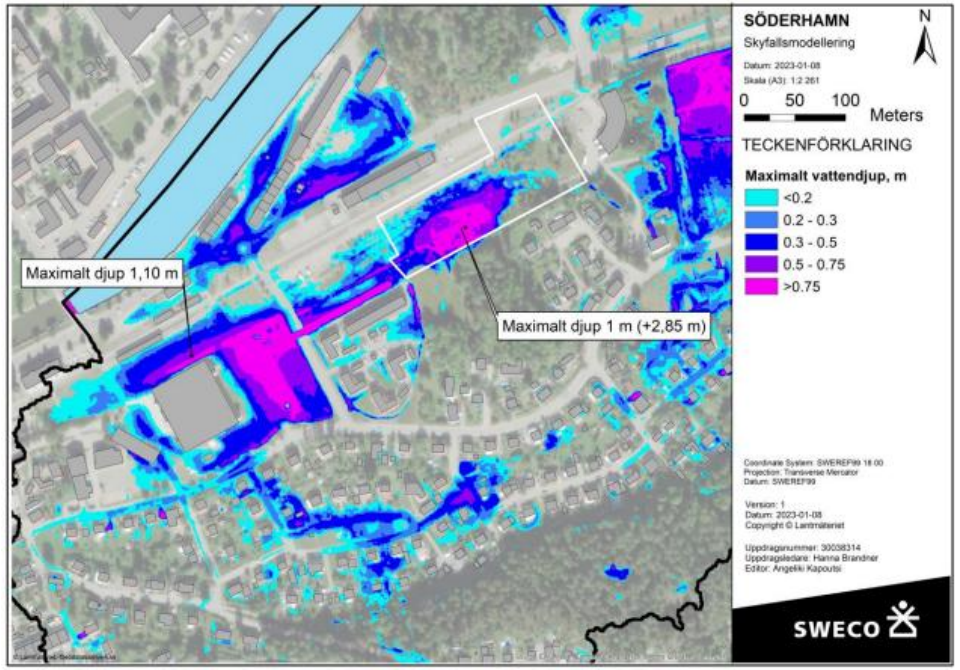




Broberg

- Cloudburst event – 100 year event, duration 6 h, climate factor 1.3
- Flood prone area
- New Elderly home raised
- Aim to retain 4700 m3





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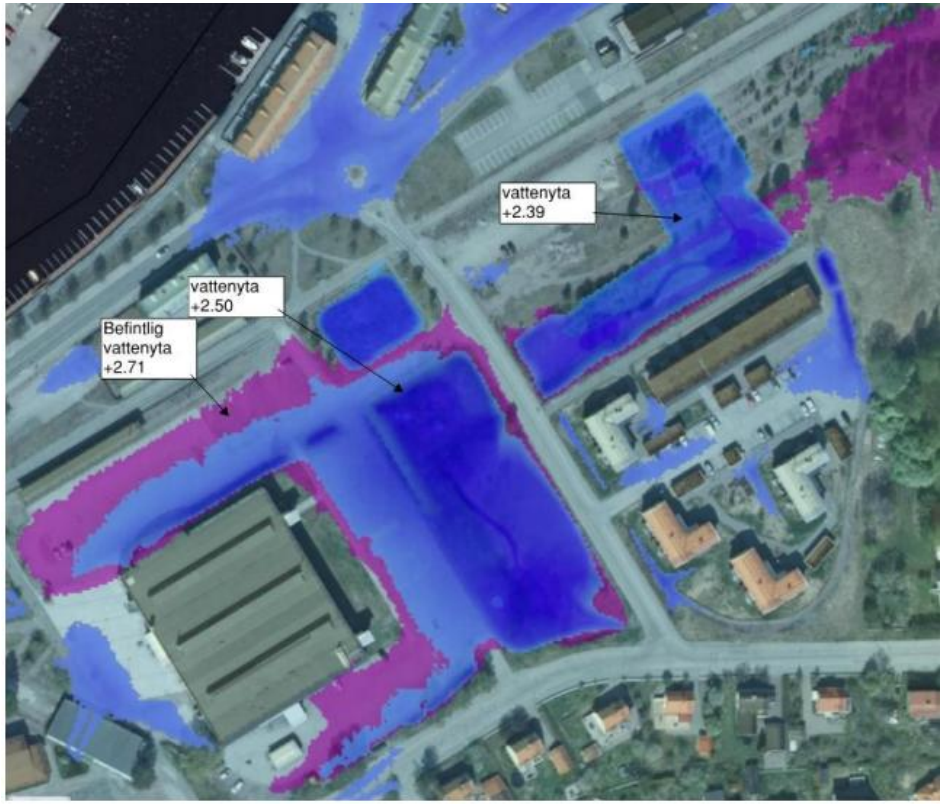
Broberg

Figur 3 Damm A, B och ev. utökad yta



Figur 6 Befintligt scenario (lila) i jämförelse med alternativ A (blått) där Broberg 3:1 har höjts.

- Cloudburst event
- Increase the retention area
- Landscaping/water treatment vs flooding volume
- 3800 m3 water volume retained (Aim 4700 m3)
- **Challenges:** high groundwater lever and contaminated soils (sulfate soils)

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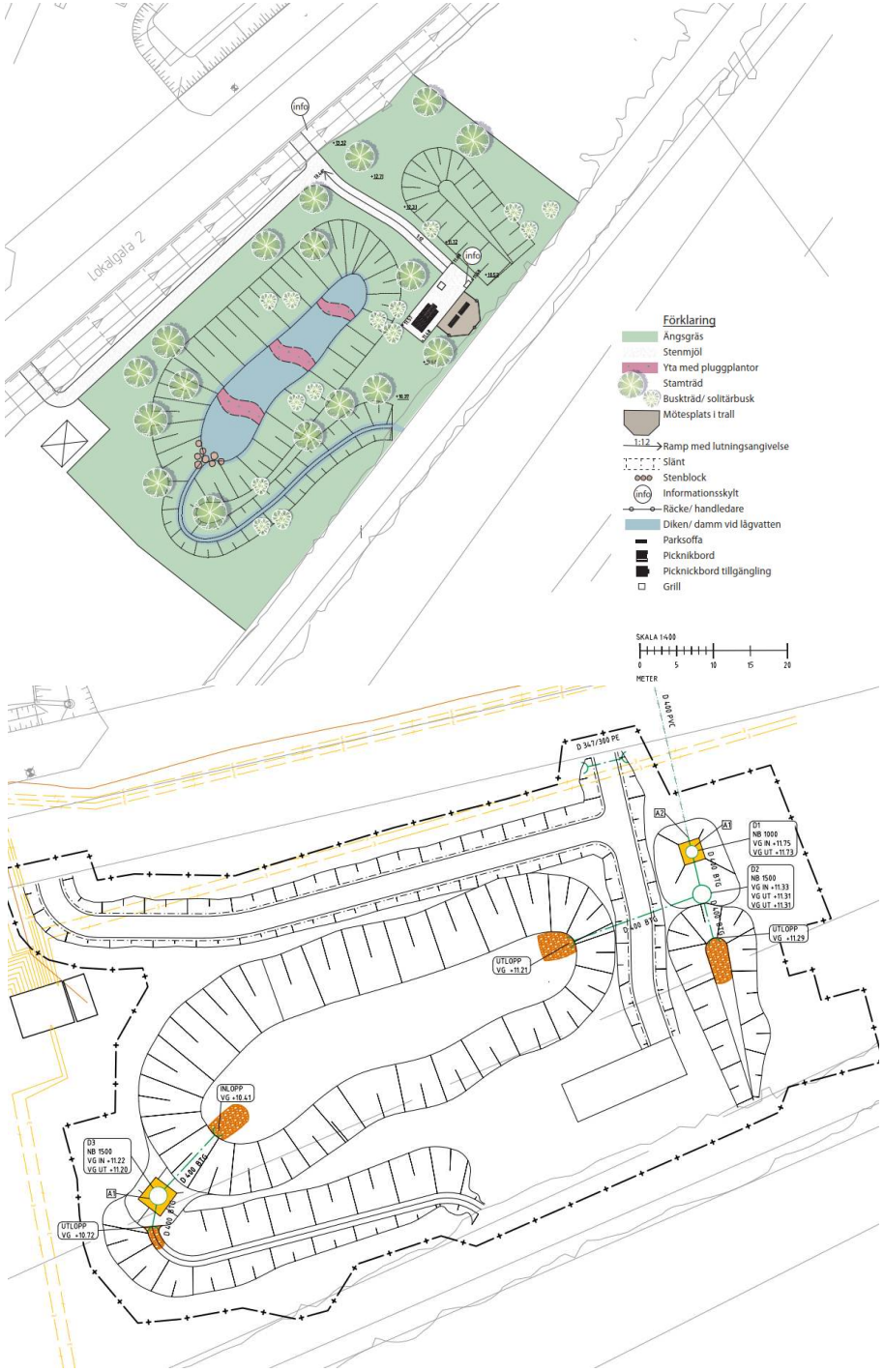
Söderhamnsporten

- Stormwater treatment and landscape architecture
- Overflow
- Natural design of swales in the retention area to attenuate the flow
- Open sections in the retention area to promote sedimentation
- Measurement with sensors + insulation



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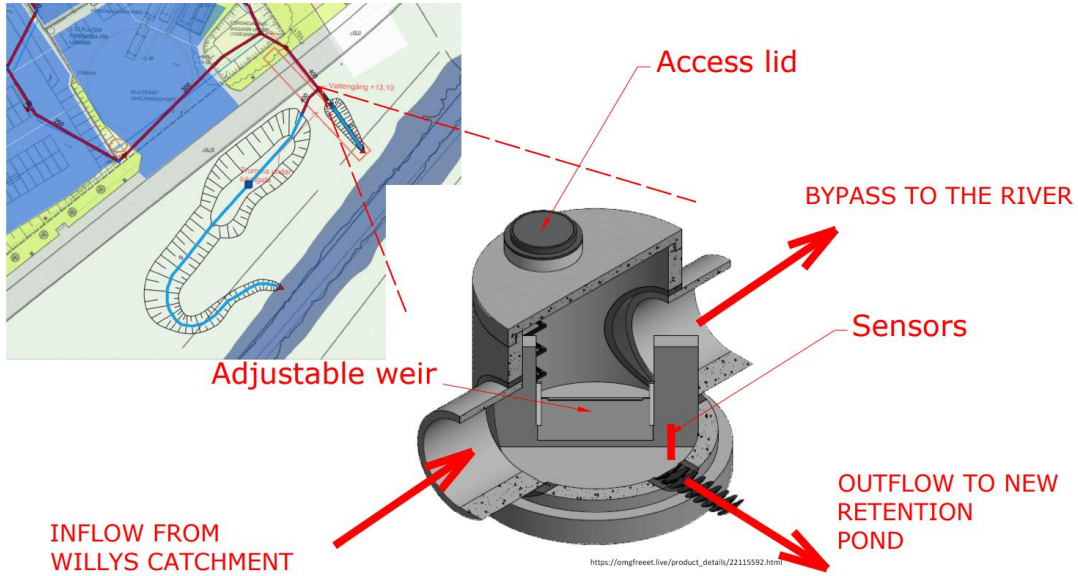
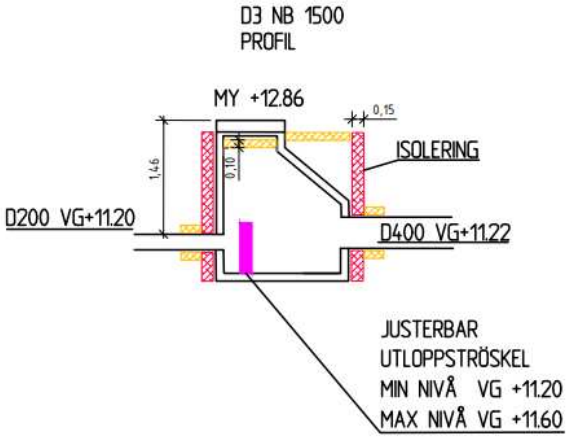
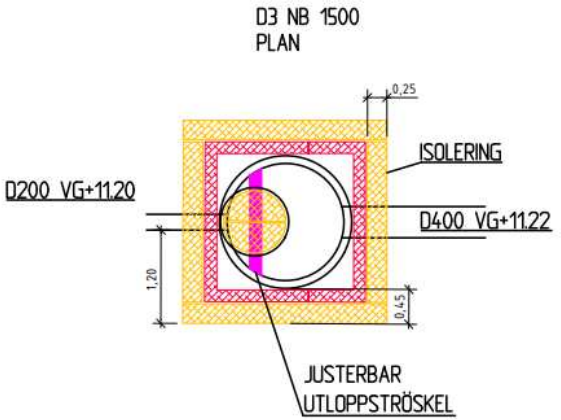
Söderhamnporten



Annex 4. MustBe - SöderhamnsPorten pilot area
Diversion manhole and weir / TalTech / 22.03.2024





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Every day we improve everyday life