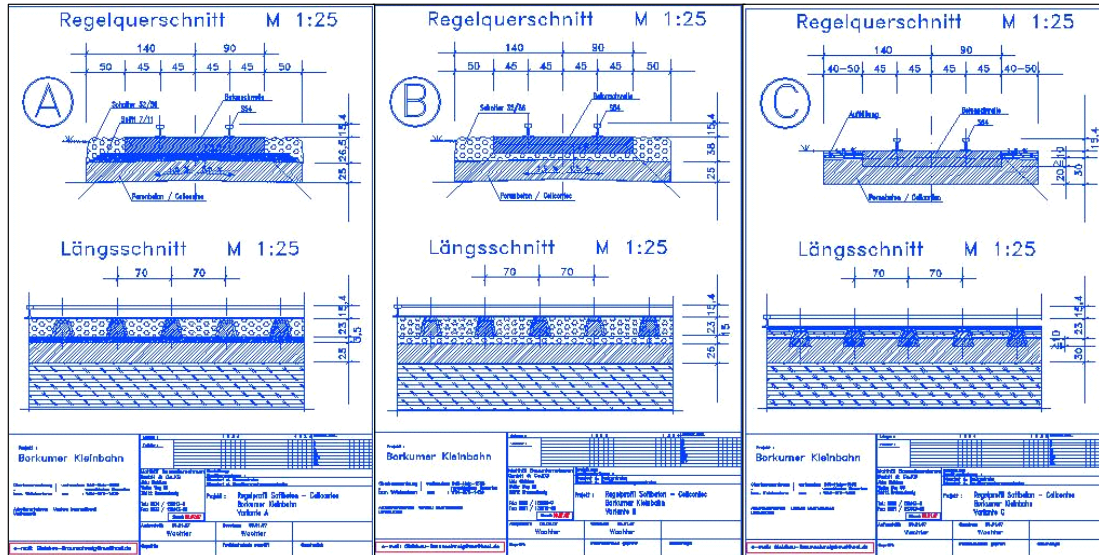


Borkum railway track line: SOFTBETON® superstructure types



Typical cross section

Longitudinal section

Conditions on site

- A 20-year old track line built on sand is to be replaced
- Flooding of parts of the line is possible
- Subgrade lacking stability on some stretches

Construction of superstructure with SOFTBETON®

- Faster construction (700m in 3 days)
- Construction as slab track (200 m) and as subbase with broken stone overlay (500 m)
- Advantage: uniform instead of multi-branch force distribution

Structure

- Three versions of track line construction: A, B, and C
- Versions A and B each with 25 cm SOFTBETON®, tracks are placed on top
- Version C with 30 cm SOFTBETON®, slab tracks with partially cast in
- Top layer: Broken stone, base: geotextile

Materials

- 35% water
- 64 % cement (CEM I 42.5)
- < 1% polypropylene fibre and pore former
- Compressive strength: 6.0 N/mm², weight ('wet' each cubic metre): 0.75 tons