

Fyllning af Mjåner, Nor-Brän p. 18/43.

Stabilitetsberäkning. Gk. 398/3.

$\gamma = 1.8 \text{ t/m}^3$ över loka 0. Ant. vel högt

Snitt 1. $R = 17 \text{ m}$. Med konhafyllning.

$$M_d: 1) 1.8 \cdot 5.1 \cdot 2.3 \cdot 7.2 = 151.5 \text{ t m.} \checkmark$$

$$2) 1.8 \cdot \frac{4.0 + 2.3}{2} \cdot 1.6 \cdot 10.7 = 97.0 \text{ " } \checkmark$$

$$3) 1.8 \cdot \frac{4.9 + 3.1}{2} \cdot 1.2 \cdot 1.9 = 16.4 \text{ " } \checkmark$$
$$= 264.9 \text{ " } \checkmark$$

$$\div 4) 1.8 \cdot \frac{2.8 + 1.0}{2} \cdot 1.2 \cdot 1.0 = 4.1 \text{ " } \checkmark$$
$$= 260.8 \text{ " } \checkmark$$

$$+ mobillast 10.8.9 = 89.0 \text{ " } \checkmark$$

$$= 349.8 \text{ " } \checkmark$$

$$+ 1.5 \text{ m. ballast i 8 m. bredd} = 16.15 \cdot 25 \cdot 8.9 = 34.9 \text{ " } \checkmark$$

$$M_s: \Sigma M_d = 374.7 \text{ t m.} \checkmark$$

~~$$s = 0.8 \text{ t/m}^2$$~~

~~$$0.8 \cdot b \cdot R = 0.8 \cdot 24.5 \cdot 17 = 333 \checkmark$$~~

~~$$F = \frac{333}{374.7} = 0.89 \checkmark$$~~

Med $s = 1.0$ blir $F = \frac{1.0 \cdot 24.5 \cdot 17}{374.7} = 1.11 \checkmark$

Smith 2 $R = 6.6 \text{ m}$ uten kontrafylling
 $\gamma = 1.8 \text{ t/m}^3$

Alt:

$$1) 1.8 \cdot 5.1 \cdot 1.0 \cdot 3.1 = 28.4 \text{ t.m.} \checkmark$$

$$2) 1.8 \cdot \frac{5.1 + 3.2}{2} \cdot 1.25 \cdot 2.1 = 21.2 \text{ " } \checkmark$$

$$3) 1.8 \cdot 0.5 \cdot 2.8 \cdot 2.25 \cdot 5.3 = \frac{31.4}{81.0} \text{ " } \checkmark$$

$$4) 1.8 \cdot 0.5 \cdot 2.1 \cdot 1.4 \cdot 0.6 = 1.6 \text{ " } \checkmark$$

$$79.4 \text{ " } \checkmark$$

$$+ \text{ murballast } 10 \cdot 4 = 40.0 \text{ " } \checkmark$$

$$+ 0.5 \text{ m. ballast i 3.5 m. bredde} = 1.6 \cdot 0.5 \cdot 3.5 \cdot 4.0 = 11.2 \text{ " } \checkmark$$

$$\Sigma M_d = 130.6 \text{ " } \checkmark$$

Skjærspenning i linjal regnes 1.0 t/m^2

Skjærspenning i fylling: $\varphi = 25^\circ$, $\lambda = 81.5^\circ$ og $h = 0.9$

$$s/\gamma \cdot h = 0.12 \quad \therefore s/1.8 \cdot 0.9 = 0.12, \quad s = 1.62 \cdot 0.12 = 0.2$$

$$M_s = (1.0 \cdot 15.5 + 0.2 \cdot 1.7) \cdot 6.6 = 15.84 \cdot 6.6 = 104.5 \checkmark$$

$$F_s = \frac{M_s}{M_d} = \frac{104.5}{130.6} = 0.80 \checkmark \quad \text{uten kontrafylling}$$

Med kontrafylling:

Reduksjon i M_d :

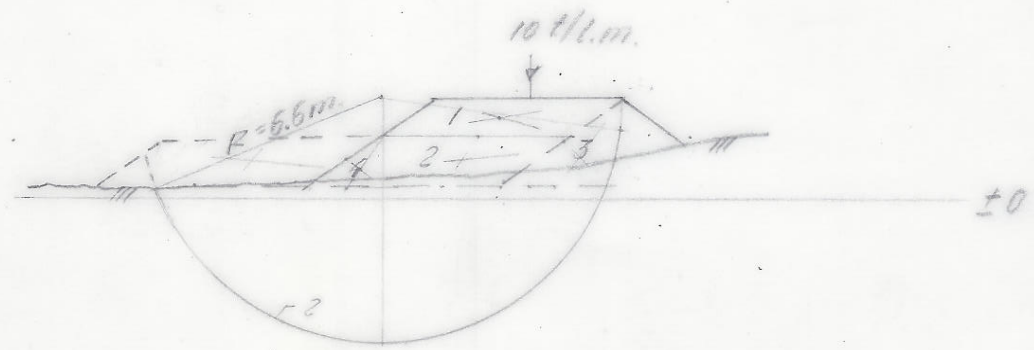
$$1.8 \cdot \frac{6.0 + 4.0}{2} \cdot 1.7 \cdot 3.5 = 41 \text{ t.m.} \checkmark$$

$$\Sigma M_d = 130.6 - 41 = 89.6 \text{ t.m.} \checkmark$$

$$F_s = \frac{104.5}{89.6} = 1.16 \checkmark \quad \text{med kontrafylling}$$

21/10-57.

Kv.



ad. Gk. 398,3