Design Approach 2 (summary)

Verification of resistance

For drained sliding $H_{Ed} = 71.9 \frac{kN}{m}$ and $H_{Rd} = \blacksquare \frac{kN}{m}$

Degree of utilization $\Lambda_{GEO,2} = \frac{H_{Ed}}{H_{Rd}} = 109\%$ ❼

For drained bearing $q'_{Ed} = 85.9\,kPa$ and $q'_{Rd} = 175.6\,kPa$

Degree of utilization $\Lambda_{GEO,2} = \frac{q'_{Ed}}{q'_{Rd}} = 49\%$

For toppling $M_{Ed,dst} = 245.2 \frac{kNm}{m}$ and $M_{Ed,stb} = 944.3 \frac{kNm}{m}$

Degree of utilization $\Lambda_{GEO,2} = \frac{M_{Ed,dst}}{M_{Ed,stb}} = 26\%$

Design is unacceptable if degree of utilization is > 100%

Design Approach 3 (summary)

Verification of resistance

For drained sliding $H_{Ed} = 64.7 \frac{kN}{m}$ and $H_{Rd} = 78.1 \frac{kN}{m}$

Degree of utilization $\Lambda_{GEO,3} = \frac{H_{Ed}}{H_{Rd}} = 83\%$ ❼

For drained bearing $q'_{Ed} = 79.3\,kPa$ and $q'_{Rd} = 113.7\,kPa$

Degree of utilization $\Lambda_{GEO,3} = \frac{q'_{Ed}}{q'_{Rd}} = 70\%$

For toppling $M_{Ed,dst} = 198.6 \frac{kNm}{m}$ and $M_{Ed,stb} = 716.7 \frac{kNm}{m}$

Degree of utilization $\Lambda_{GEO,3} = \frac{M_{Ed,dst}}{M_{Ed,stb}} = 28\%$

Design is unacceptable if degree of utilization is > 100%