




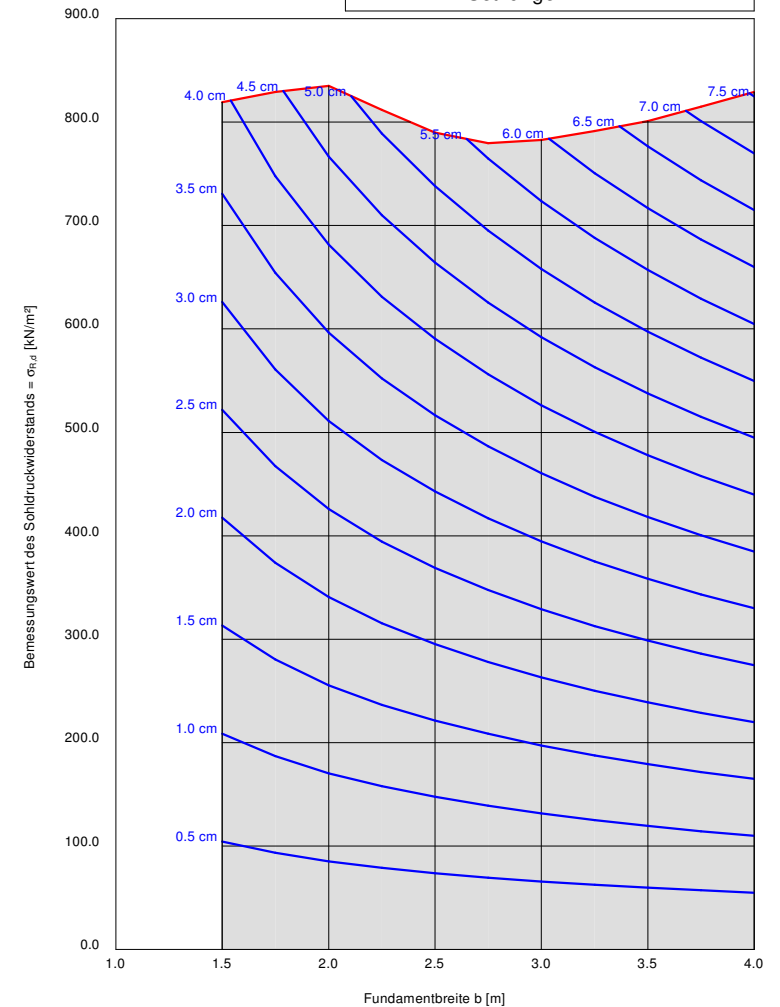
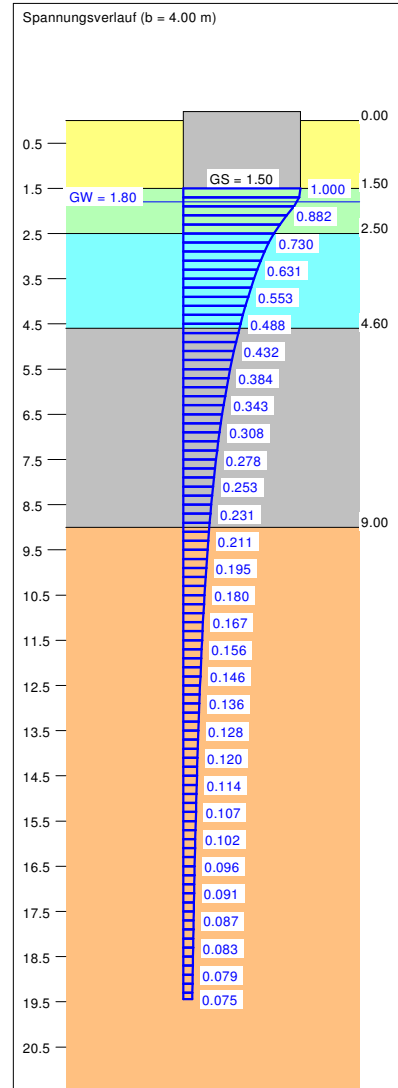
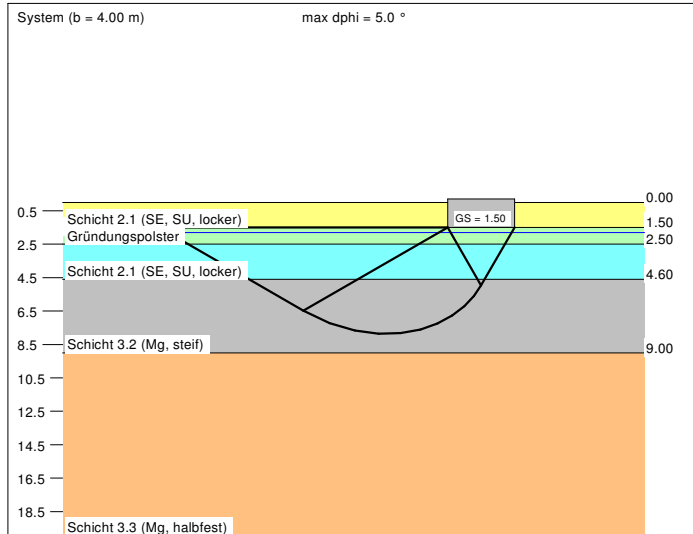


Boden	γ [kN/m ³]	γ' [kN/m ³]	ϕ [°]	c [kN/m ²]	E_s [MN/m ²]	ν [-]	Bezeichnung
	18.0	10.0	32.5	0.0	26.0	0.00	Schicht 2.1 (SE, SU, locker)
	19.0	10.0	37.5	0.0	50.0	0.00	Gründungspolster
	18.0	10.0	32.5	0.0	26.0	0.00	Schicht 2.1 (SE, SU, locker)
	20.0	10.0	29.0	10.0	40.0	0.00	Schicht 3.2 (Mg, steif)
	21.0	11.0	30.0	12.0	50.0	0.00	Schicht 3.3 (Mg, halbfest)

Berechnungsgrundlagen:
 Grundbruchformel nach DIN 4017:2006
 Teilsicherheitskonzept (EC 7)
 Einzelfundament (a = 20.00 m)
 $\gamma_{Gr} = 1.40$
 $\gamma_G = 1.35$
 $\gamma_Q = 1.50$
 Anteil Veränderliche Lasten = 0.500
 $\gamma_{(G,Q)} = 0.500 \cdot \gamma_Q + (1 - 0.500) \cdot \gamma_G$
 $\gamma_{(G,Q)} = 1.425$
 Gründungssohle = 1.50 m
 Grundwasser = 1.80 m
 Grenztiefe mit p = 20.0 %
 — Sohldruck
 — Setzungen



a	b	$\sigma_{R,d}$	$R_{n,d}$	$\sigma_{E,k}$	s	cal ϕ	cal c	γ_2	σ_0	t_g	UK LS
[m]	[m]	[kN/m ²]	[kN]	[kN/m ²]	[cm]	[°]	[kN/m ²]	[kN/m ³]	[kN/m ²]	[m]	[m]
20.00	1.50	819.1	24572.4	574.8	3.92	34.0	0.00	11.49	27.00	13.13	4.25
20.00	1.75	829.2	29022.9	581.9	4.44	33.5	0.95	11.31	27.00	14.04	4.65
20.00	2.00	835.1	33403.7	586.0	4.90	32.7	2.75	11.18	27.00	14.85	5.01
20.00	2.25	811.8	36529.9	569.7	5.14	32.0 *	3.56	11.08	27.00	15.39	5.34
20.00	2.50	789.8	39488.8	554.2	5.35	31.4 *	4.16	11.00	27.00	15.87	5.67
20.00	2.75	779.5	42872.6	547.0	5.61	30.9 *	4.63	10.92	27.00	16.39	6.02
20.00	3.00	782.6	46955.2	549.2	5.95	30.6 *	5.05	10.86	27.00	16.99	6.37
20.00	3.25	791.5	51447.7	555.4	6.33	30.4 *	5.40	10.80	27.00	17.61	6.74
20.00	3.50	801.0	56067.2	562.1	6.71	30.3 *	5.71	10.75	27.00	18.21	7.11
20.00	3.75	815.0	61124.5	571.9	7.12	30.1 *	5.98	10.70	27.00	18.84	7.48
20.00	4.00	829.0	66319.0	581.7	7.54	30.0 *	6.21	10.66	27.00	19.44	7.86

* phi wegen 5° Bedingung abgemindert
 $\sigma_{E,k} = \sigma_{D1k} / (\gamma_{Gr} \cdot \gamma_{(G,Q)}) = \sigma_{D1k} / (1.40 \cdot 1.43) = \sigma_{D1k} / 2.00$ (für Setzungen)
 Verhältnis Veränderliche(Q)/Gesamtlasten(G+Q) [-] = 0.50