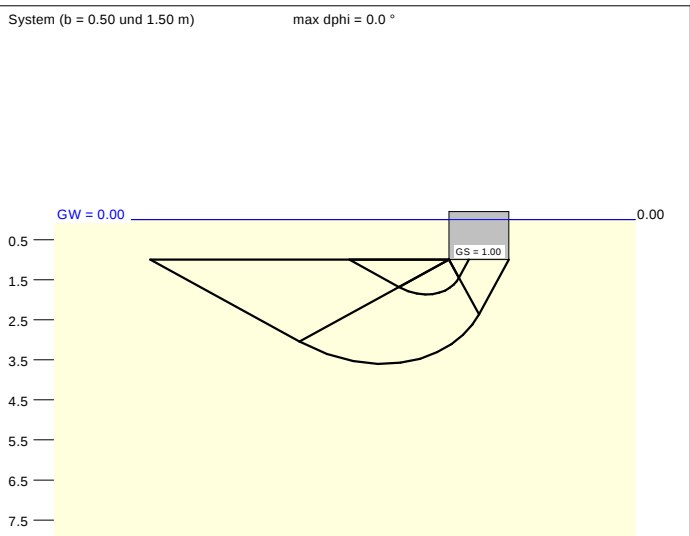


Diagramm zur Bemessung flachgegründeter Streifenfundamente  
Gründung in den Wehraschottern  
Einbindetiefe  $t = 1,0$  m

| Boden | $\gamma$<br>[kN/m <sup>3</sup> ] | $\gamma'$<br>[kN/m <sup>3</sup> ] | $\phi$<br>[°] | $c$<br>[kN/m <sup>2</sup> ] | $E_s$<br>[MN/m <sup>2</sup> ] | $\nu$<br>[-] | Bezeichnung   |
|-------|----------------------------------|-----------------------------------|---------------|-----------------------------|-------------------------------|--------------|---------------|
|       | 20.0                             | 12.0                              | 32.5          | 0.0                         | 60.0                          | 0.00         | Wehraschotter |

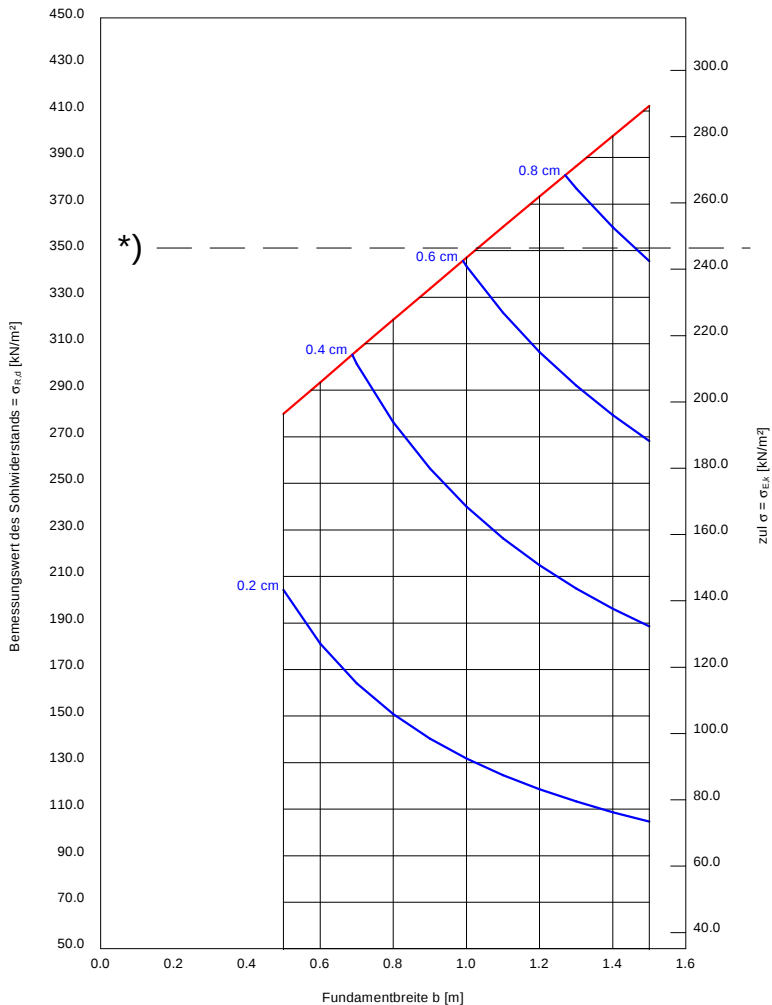
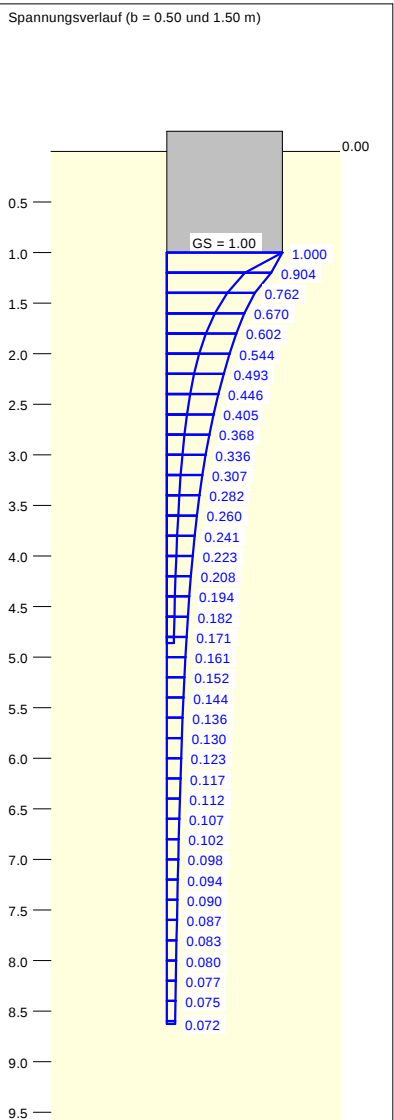


| a<br>[m] | b<br>[m] | $\sigma_{R,d}$<br>[kN/m <sup>2</sup> ] | $R_{n,d}$<br>[kN/m] | zul $\sigma/\sigma_{E,k}$<br>[kN/m <sup>2</sup> ] | s<br>[cm] | cal $\phi$<br>[°] | cal c<br>[kN/m <sup>2</sup> ] | $\gamma_2$<br>[kN/m <sup>3</sup> ] | $\sigma_G$<br>[kN/m <sup>2</sup> ] | $t_B$<br>[m] | UK LS<br>[m] |
|----------|----------|----------------------------------------|---------------------|---------------------------------------------------|-----------|-------------------|-------------------------------|------------------------------------|------------------------------------|--------------|--------------|
| 10.00    | 0.50     | 279.8                                  | 139.9               | 196.4                                             | 0.29      | 32.5              | 0.00                          | 12.00                              | 12.00                              | 4.86         | 1.87         |
| 10.00    | 0.60     | 293.4                                  | 176.0               | 205.9                                             | 0.35      | 32.5              | 0.00                          | 12.00                              | 12.00                              | 5.30         | 2.04         |
| 10.00    | 0.70     | 306.9                                  | 214.8               | 215.4                                             | 0.41      | 32.5              | 0.00                          | 12.00                              | 12.00                              | 5.73         | 2.21         |
| 10.00    | 0.80     | 320.3                                  | 256.3               | 224.8                                             | 0.47      | 32.5              | 0.00                          | 12.00                              | 12.00                              | 6.13         | 2.39         |
| 10.00    | 0.90     | 333.7                                  | 300.3               | 234.2                                             | 0.54      | 32.5              | 0.00                          | 12.00                              | 12.00                              | 6.52         | 2.56         |
| 10.00    | 1.00     | 347.0                                  | 347.0               | 243.5                                             | 0.61      | 32.5              | 0.00                          | 12.00                              | 12.00                              | 6.90         | 2.73         |
| 10.00    | 1.10     | 360.2                                  | 396.2               | 252.7                                             | 0.68      | 32.5              | 0.00                          | 12.00                              | 12.00                              | 7.26         | 2.91         |
| 10.00    | 1.20     | 373.3                                  | 447.9               | 262.0                                             | 0.75      | 32.5              | 0.00                          | 12.00                              | 12.00                              | 7.62         | 3.08         |
| 10.00    | 1.30     | 386.3                                  | 502.2               | 271.1                                             | 0.82      | 32.5              | 0.00                          | 12.00                              | 12.00                              | 7.96         | 3.25         |
| 10.00    | 1.40     | 399.3                                  | 559.0               | 280.2                                             | 0.90      | 32.5              | 0.00                          | 12.00                              | 12.00                              | 8.30         | 3.43         |
| 10.00    | 1.50     | 412.2                                  | 618.3               | 289.3                                             | 0.98      | 32.5              | 0.00                          | 12.00                              | 12.00                              | 8.63         | 3.60         |

zul  $\sigma = \sigma_{E,k} = \sigma_{G,k} / (\gamma_{R,v} \cdot \gamma_{(G,Q)}) = \sigma_{G,k} / (1.40 \cdot 1.43) = \sigma_{G,k} / 1.99$  (für Setzungen)  
Verhältnis Veränderliche(Q)/Gesamtlasten(G+Q) [-] = 0.50

Geotechnisches Institut GmbH

Auftraggeber: Brennet GmbH / MBB Immobilien GmbH, Wehr  
Projekt: Bebauungsplan Brennet-Areal, Wehr  
GIW-Nr.: 5997



\*) Begrenzung des Bemessungswerts des Sohlwiderstands  $\sigma_{R,d} = 355$  kN/m<sup>2</sup>  
entspricht einer zulässigen Bodenpressung zul.  $\sigma = 250$  kN/m<sup>2</sup>

Berechnungsgrundlagen:  
Grundbruchformel nach DIN 4017:2006  
Teilsicherheitskonzept (EC 7)  
Streifenfundament (a = 10.00 m)  
 $\gamma_{R,v} = 1.40$   
 $\gamma_G = 1.35$   
 $\gamma_Q = 1.50$   
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 = 1.00 m  
Grundwasser = 0.00 m  
Grenztiefe mit  $p = 20.0$  %  
Grenztiefen spannungsvariabel bestimmt  
— Sohlendruck  
— Setzungen