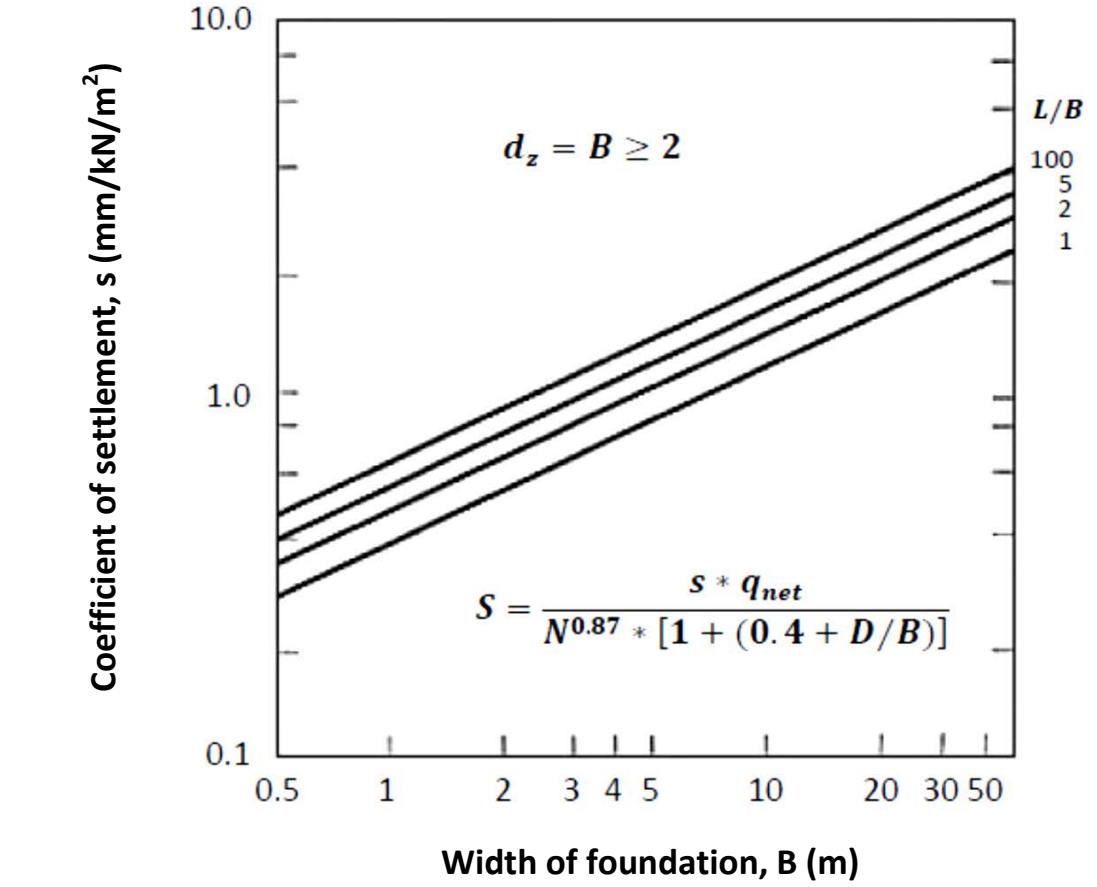
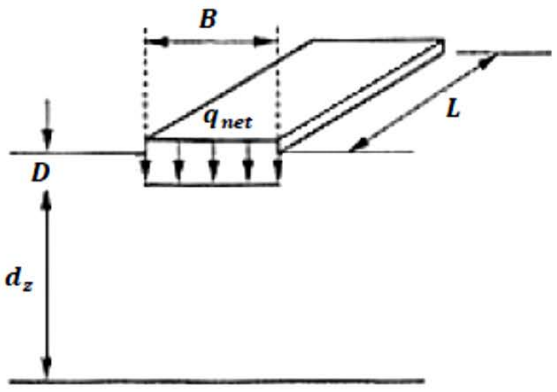
3.2. SPT

1) Schultze and Sherif (1973)





d_z/B \ L/B	1	2	5	100
1.5	0.91	0.89	0.87	0.85
1.0	0.76	0.72	0.69	0.65
0.5	0.52	0.48	0.43	0.39

Figure 1. Settlement prediction from SPT (Schultz and Sherif, 1973)

3.2. Burland et al. (1977)

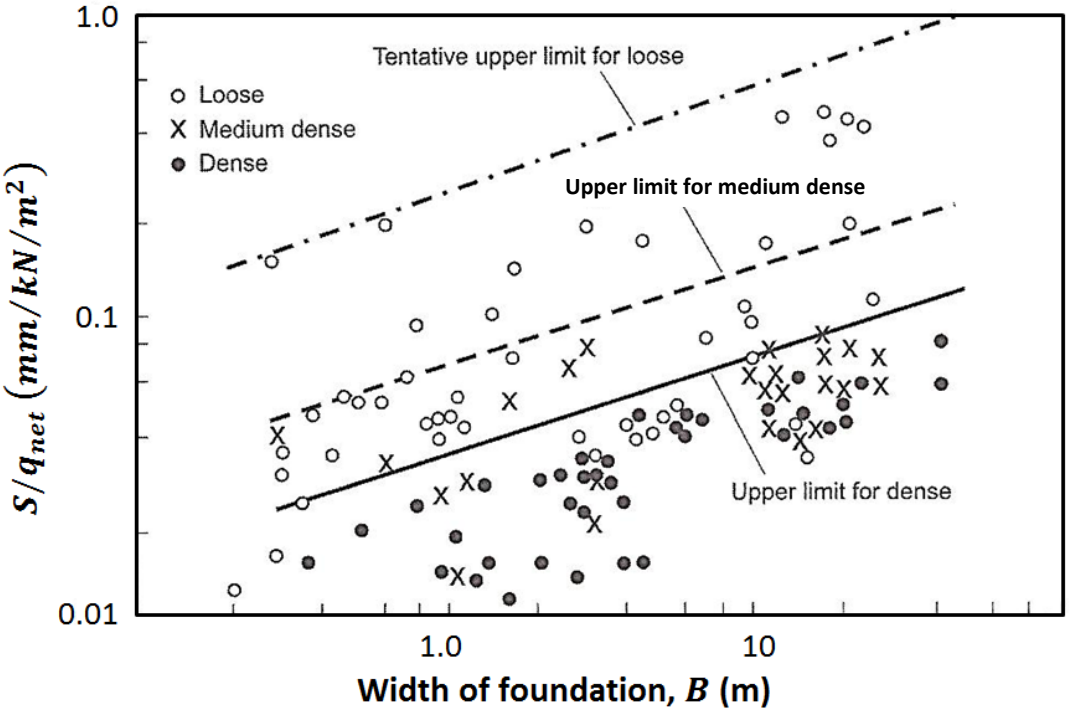


Figure 2. Settlement prediction from SPT (Burland et al., 1977)

3.3. Burland and Burbidge (1985)

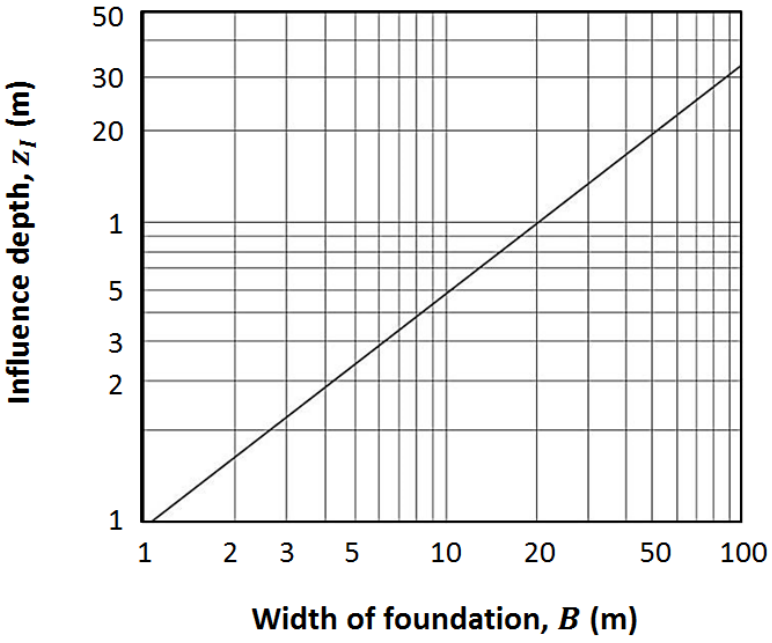


Figure 3. Relationship between influence depth and foundation width

(Burland and Burbidge, 1985)

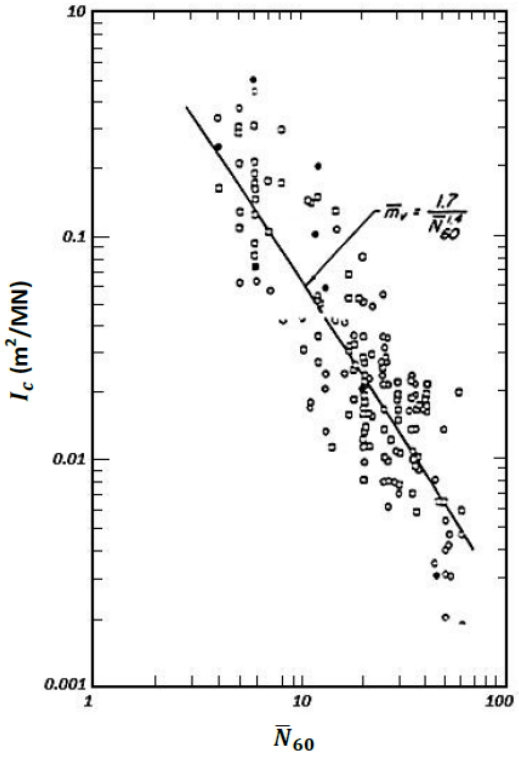


Figure 4. Relationship between $\bar{N}_{60}$ and I_c (Burland and Burbidge, 1985)

3.3. CPT

3.3.3. Schmetrmann et al. (1978)

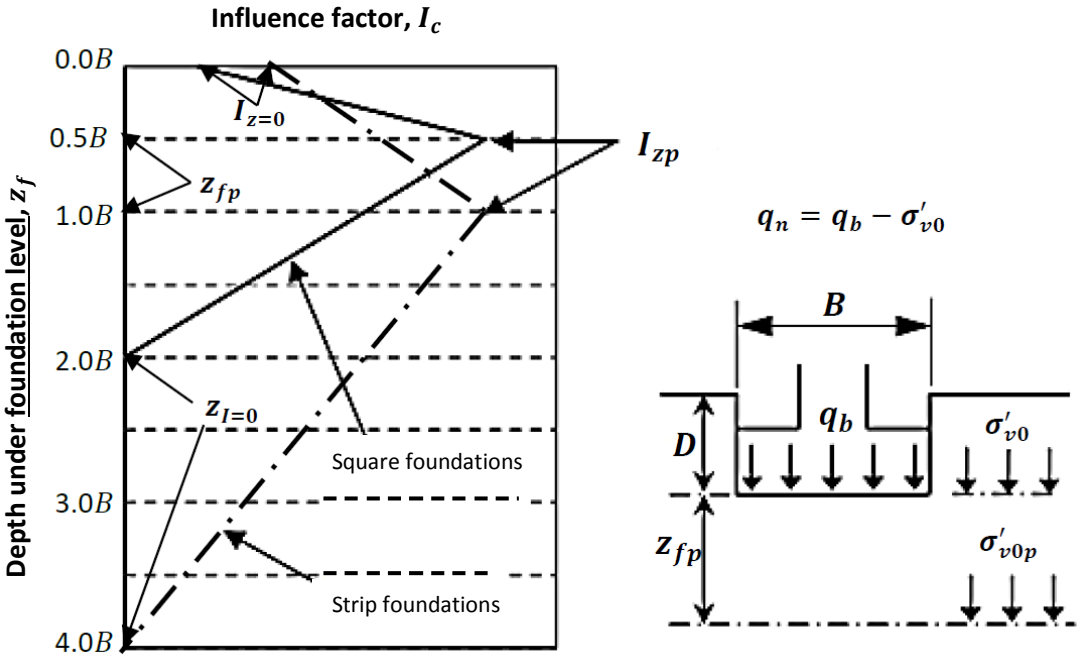


Figure 5. Influence factor chart (Schmertmann et al., 1978)

Table 1. Values for the parameters defined in Figure 5 (Schmertmann et al., 1978)

	Square Found. $(L/B = 1)$	***Strip Found.*** $(L/B \geq 10)$	***Rectangular Found.*** $(1 < L/B < 10)$
$I_{z=0}$	0.1	0.2	$0.1 + 0.01\left(\frac{L}{B}\right)$
I_{zp}	$0.5 + 0.1\left(q_{net}/\sigma'_{v0p}\right)^{0.5}$		
$z_{I=0}$	$2B$	$4B$	$B\left[2 + 0.22\left(\frac{L}{B} - 1\right)\right]$
z_{fp}	$0.5B$	B	$B\left[0.5 + 0.05\left(\frac{L}{B} - 1\right)\right]$

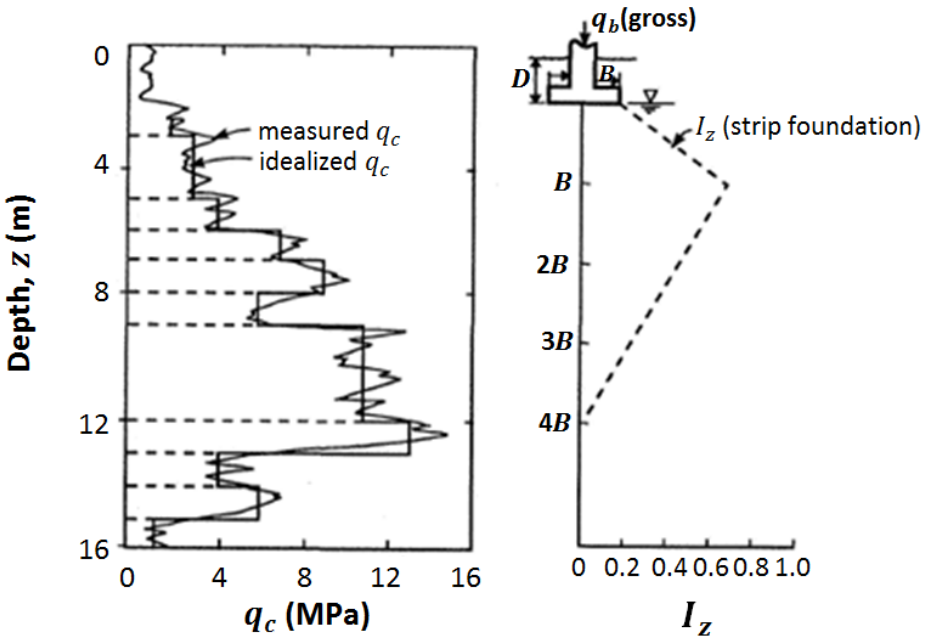


Figure 6. Example for influence factor chart and idealization of q_c values (for strip foundation)

3.4. PMT

Menard and Rousseau (1962)

Table 2. Menard's rheological factor

Soil Type	*Peat*		*Clay*		*Silt*		*Sand*		*Sand and Gravel*	
	E_M/P_{LN}	α_M	E_M/P_{LN}	α_M	E_M/P_{LN}	α_M	E_M/P_{LN}	α_M	E_M/P_{LN}	α_M
Over Consolidated	All values	1	> 16	1	> 14	2/3	> 12	1/2	> 10	1/3
Normally Consolidated		1	9 – 16	2/3	8 – 14	1/2	7 - 12	1/3	6 – 10	1/4
Weathered and/or Remoulded		1	7 – 9	1/2		1/2		1/3		1/4
Rock	Extremely fractured				Others				Slightly fractured or extremely weathered	
	$\alpha_M = 1/3$				$\alpha_M = 1/2$				$\alpha_M = 2/3$	

$$E_M = 2.66[V_0 + 0.5(V_B - V_A)][\Delta P/\Delta V] = 2.66\, V_m \frac{\Delta P}{\Delta V}$$

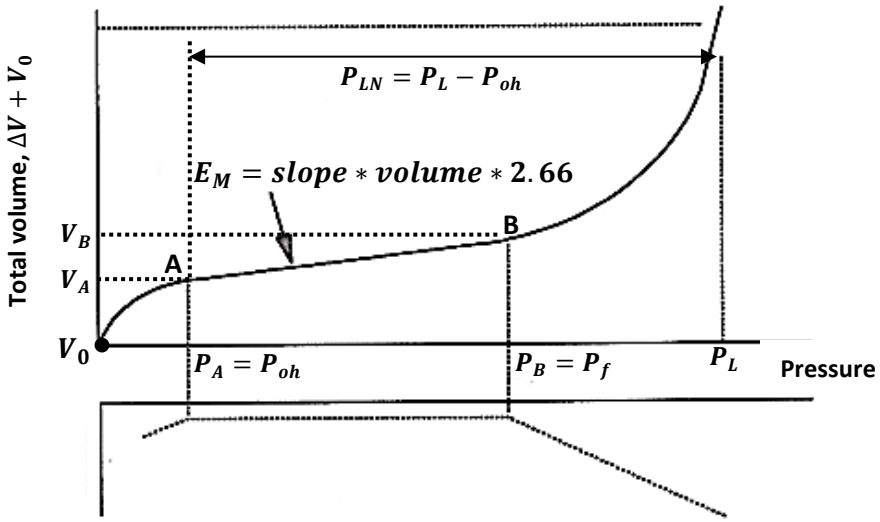


Figure 7. PMT pressure-unit deformation and creep curves

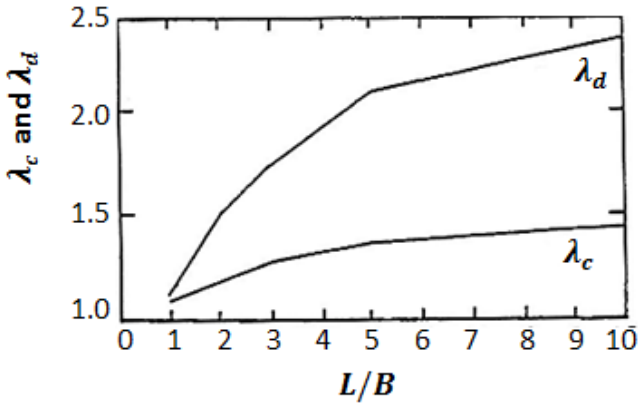


Figure 8. Shape factors

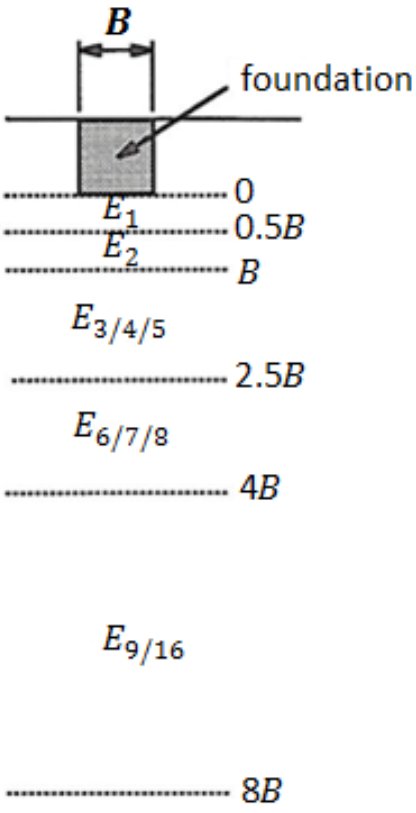


Figure 9. Calculation of E_d value