

Figure 1: Shallow foundation (spread footing). Photo from X (formerly Twitter) by @CivilEngCo

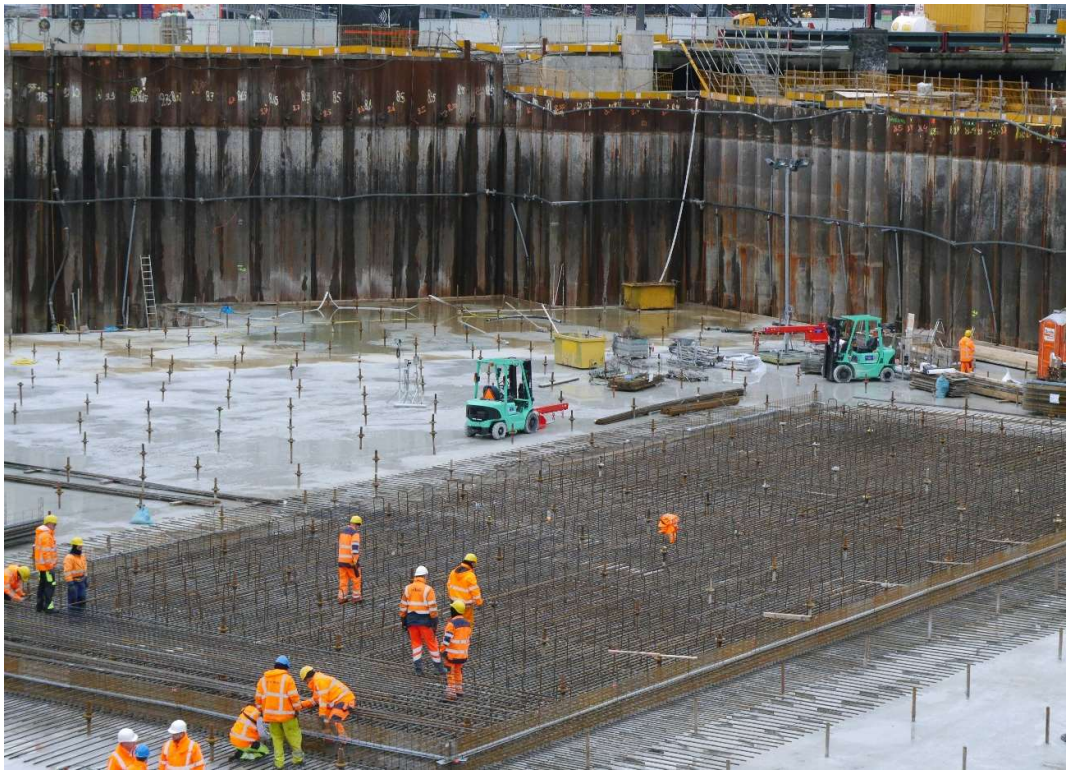


Figure 2: Raft foundation. Photo by Fons Heijnsbroek on Unsplash

Table 5.3 Penetration Resistance and Soil Properties on Basis of the Standard Penetration Test

Sands (Fairly Reliable)		Clays (Rather Unreliable)	
Number of Blows per ft, N	Relative Density	Number of Blows per ft, N	Consistency
		Below 2	Very soft
0–4	Very loose	2–4	Soft
4–10	Loose	4–8	Medium
10–30	Medium	8–15	Stiff
30–50	Dense	15–30	Very stiff
Over 50	Very dense	Over 30	Hard

Figure 3: Soil properties based on SPT-N values. Table from Foundation engineering, 2d ed., by Ralph B. Peck