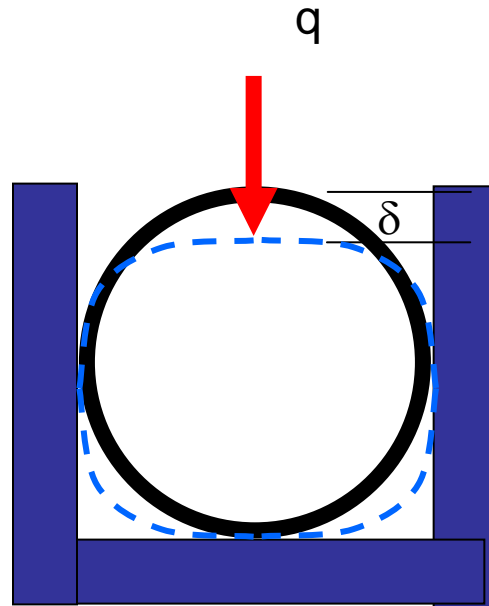
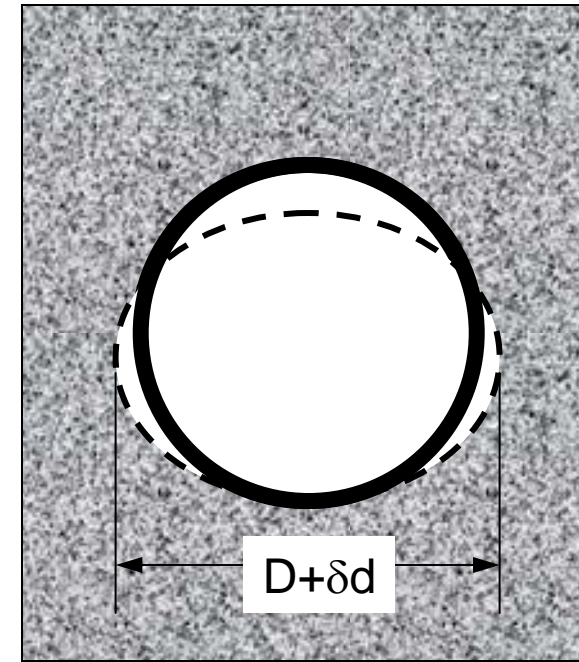


$$\delta = 0.223 \frac{q}{E} \left(\frac{D^3}{t} \right)$$



$$\delta = 0.03 \frac{q}{E} \left(\frac{D^3}{t} \right)$$



$$\delta d = \frac{0.15 P_V D}{E(t/D)^3 + 0.091 E'}$$

$$E' = \frac{P_H D}{\delta d}$$

P_V = vertical soil pressure

P_H = horizontal soil pressure =

2, 9, and 20 MPa for sandy clay,
compacted sandy clay, and
uncompacted gravel

q = load per unit length

E = elastic modulus