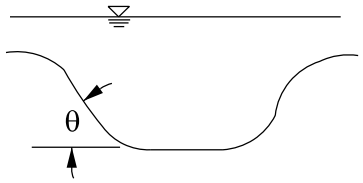
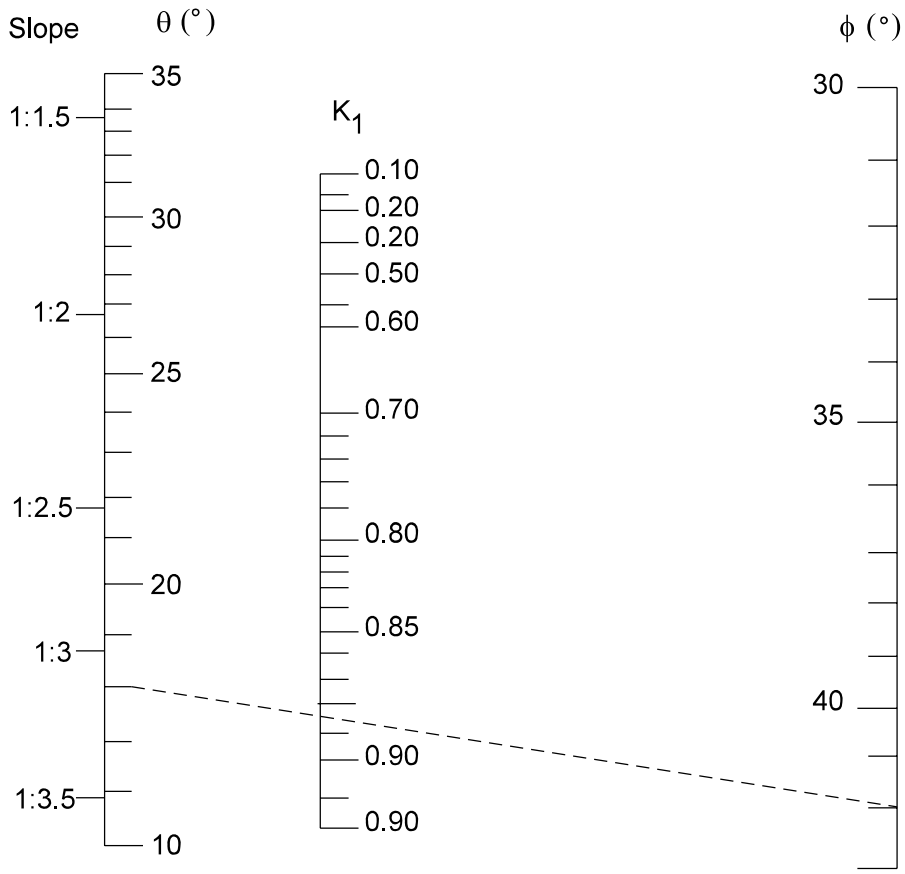


$$K_1 = \left[1 - \frac{\sin^2\theta}{\sin^2\phi} \right]^{0.5}$$

θ = Bank angle with horizontal

ϕ = Material angle of repose (See chart 4)



Example

Given:
θ = 16°
Very Angular
D_{50} = 457 mm

Find:
K_1

Solution:
ϕ = 42°
K_1 = 0.885

BANK ANGLE CORRECTION FACTOR (K_1) NOMOGRAPH

Figure 38-6B