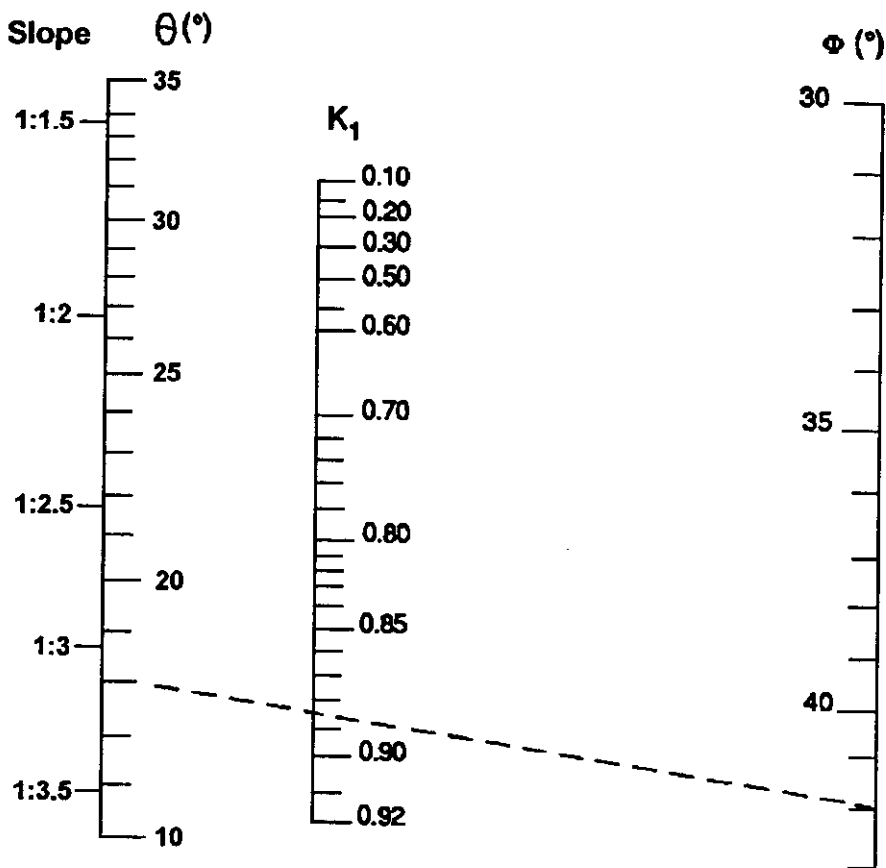
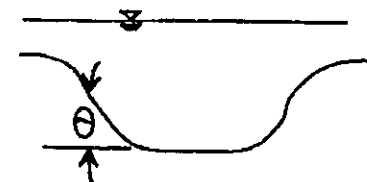


$$K_1 = \left[ 1 - \frac{\sin^2 \theta}{\sin^2 \phi} \right]^{0.5}$$

$\theta$  = Bank angle with horizontal

$\phi$  = Material angle of repose  
(See chart 4)



#### Example

Given:

$\theta = 16^\circ$

Very Angular

$D_{50} = 457 \text{ mm}$

Find:

$K_1$

Solution:

$\phi = 42^\circ$

$K_1 = 0.885$

**BANK ANGLE CORRECTION FACTOR ( $K_1$ ) NOMOGRAPH**

**Figure 38-6B**