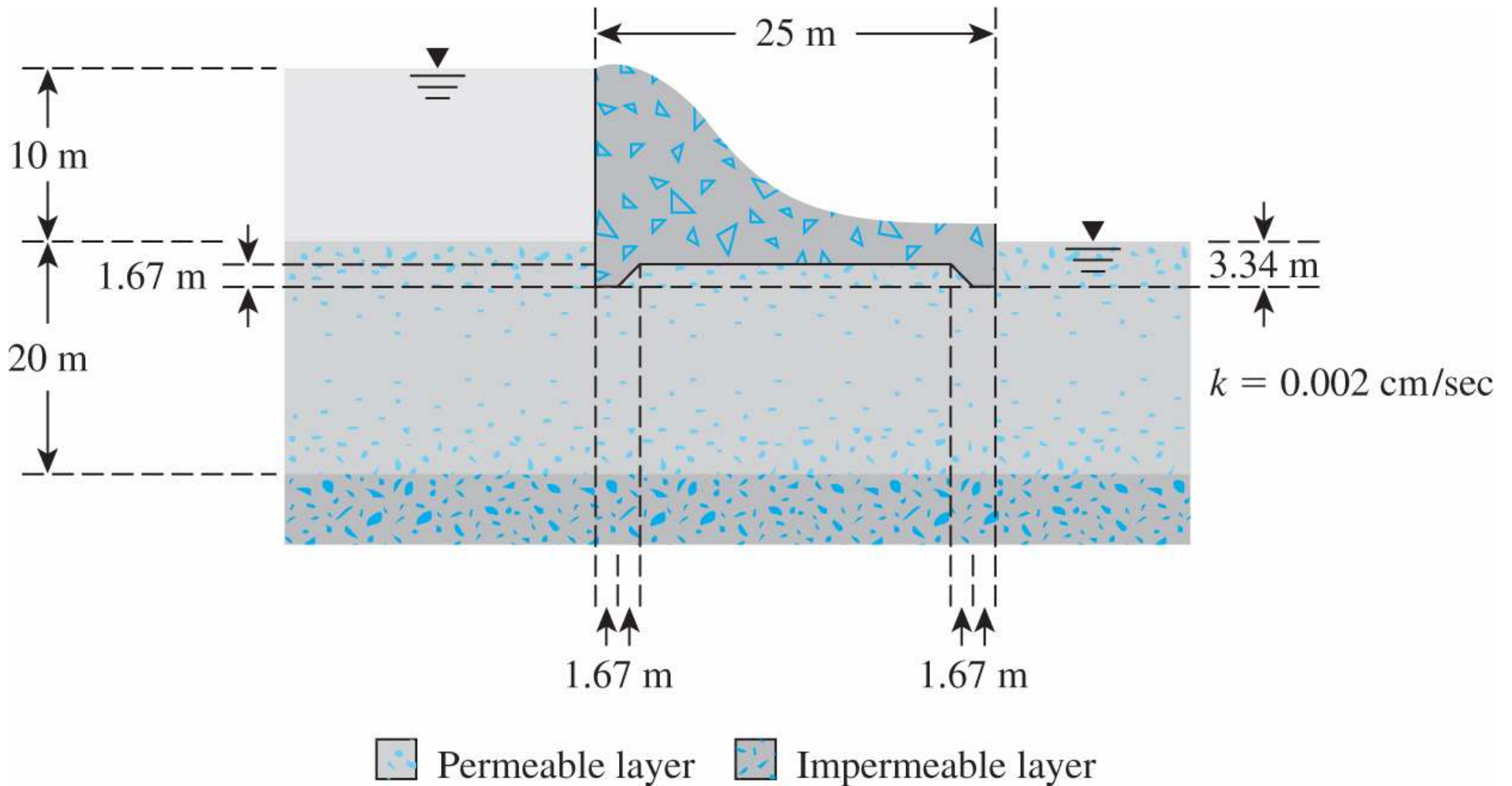


**Figure 8.18**

Problem 8.2

Given --  $H_1 = 6\text{m}$ ,  $H_2 = 1.5\text{m}$ ,  $D = 3\text{m}$ ,  $D_1 = 6\text{m}$

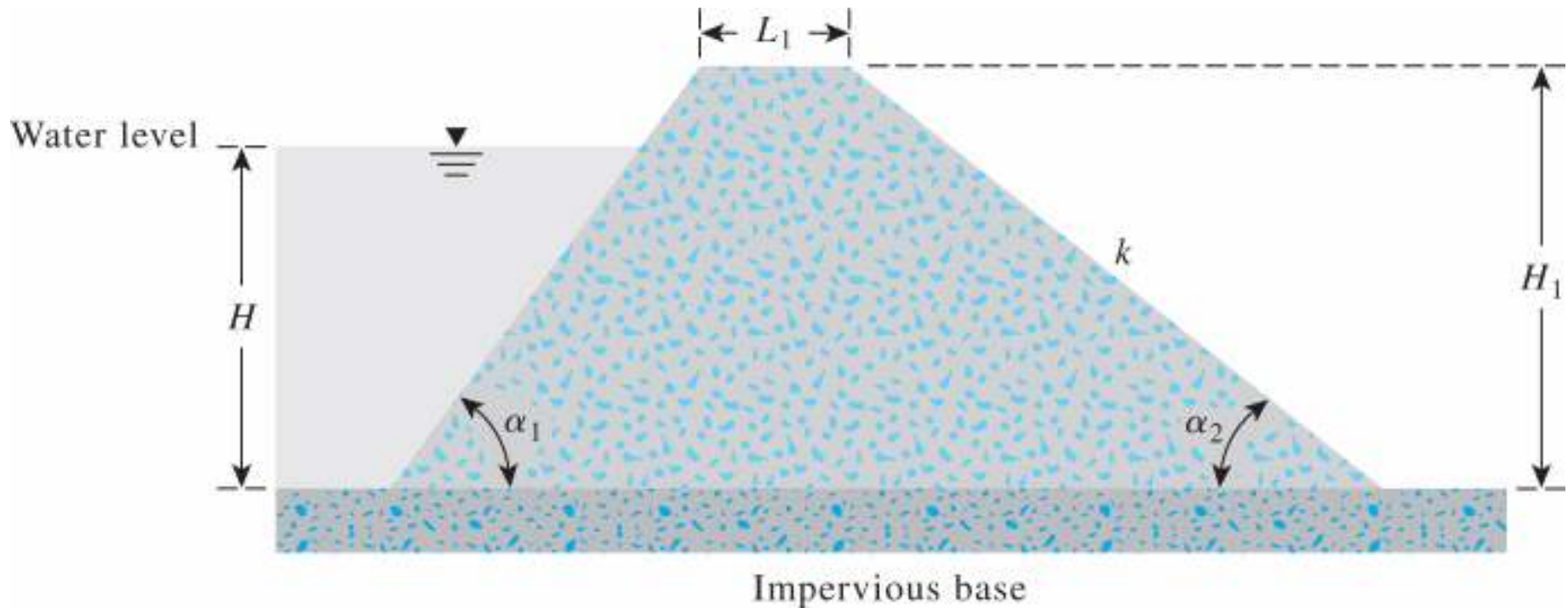
Draw a flow net. Calculate the seepage loss per meter length of the sheet pile wall



**Figure 8.19**

Problem 8.5

For the hydraulic structure shown in Figure 8.19, draw a flow net for flow through the permeable layer and calculate the seepage loss in  $\text{m}^3/\text{day}/\text{m}$ .



**Figure 8.22**

Problem 8.9

For the earth dam shown in Figure 8.22, determine the seepage rate,  $q$ , in  $\text{m}^3/\text{day}/\text{m}$  Length.

Given  $\alpha_1 = 35^\circ$ ;  $\alpha_2 = 40^\circ$ ;  $L_1 = 5\text{m}$ ;  $H = 7\text{m}$ ;  $H_1 = 10\text{m}$ ;  $k = 3 \times 10^{-4} \text{ cm/sec}$

(a) Use Schaffernak's solution and (b) L. Casagrande's method