

12.16 Given:

$$i = 3.0 \text{ in./hr for 60 min}$$

$$S = 0.0001 \text{ ft/ft}$$

$$L = 500 \text{ ft}$$

$$n = 0.014 \text{ (concrete paving, Table 12.17)}$$

$$\Delta t = 5 \text{ min}$$

$$\text{Procedure: } D_2 = D_1 + \Delta D - \bar{q} \Delta t$$

for each interval ($D_0 = 0.0$)

$$\bar{q} = \frac{1.486}{n} S^{1/2} (\bar{D}/L)^{5/3} (1 + 0.6(\bar{D}/D_e)^3)^{5/3}$$