



Example
Level Slope, Embedded Stone

$V = 8$ ft. per sec.
 $W = 8.5$ lbs.

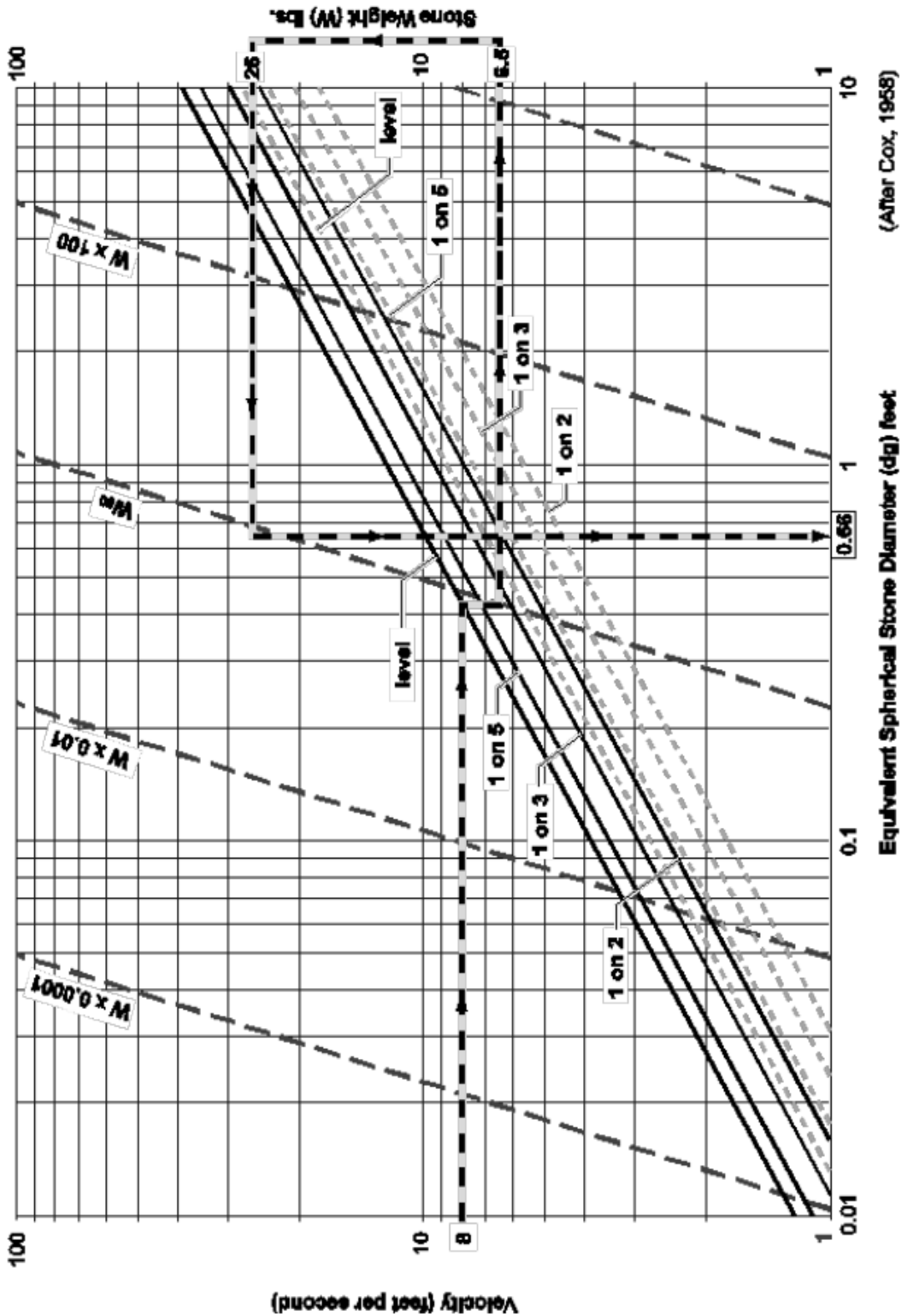
High Turbulence, use $W = 28$ lbs.

$d_g = 0.66$ ft. (8")

$$V = y (2d_g)^{1/2} \left(\frac{w_r - w_w}{w_w} \right)^{1/2} (\cos \theta - \sin \theta)^{1/2} d_g^{1/6}$$

$$W = \frac{1}{6} d_g^3 w_r \text{ where } w_r = 185 \text{ lbs. per ft.}^3$$

$$w_w = 62.4 \text{ lbs. per ft.}^3$$



(After Cox, 1958)

Figure F.17. Mean Channel Velocity vs. Medium Stone Weight and Equivalent Stone Diameter