

CLIENT	MADE BY	CHECKED BY	PROJECT NO.	
PROJECT 164 PALISADES STREET	MM	AM		
SUBJECT (STORM WATER CALCS)	DATE	DATE	REVISION	SHEET NO.
	3-18-73	3-18-73		1

PERCOLATION #1 (REAR YARD)

① "SLOWEST" RATE OF PERC. $6.04 \frac{\text{MIN}}{\text{INCH}} \rightarrow \frac{60 \frac{\text{MIN}}{\text{HR}}}{6.04 \frac{\text{MIN}}{\text{INCH}}} = \underline{\underline{9.9 \frac{\text{IN}}{\text{HR}}}}$

② ASSUME (2) CULTEC 330XL UNITS: SIDE AREA = 260 FT^2
 BASE AREA = $\underline{162.8 \text{ FT}^2}$

422.8 FT^2

③ DETERMINE VOL. OF PERC. $\frac{9.9 \frac{\text{IN}}{\text{HR}}}{[12 \frac{\text{IN}}{\text{FT}}]} \times 422.8 \text{ FT}^2 = \underline{\underline{348.81 \text{ FT}^3}}$

④ DESIGN STORM = 7.56 INCHES

AREA TO MANAGE = $\underline{952 \text{ FT}^2}$

DETERMINE TOTAL VOLUME TO MANAGE = $\frac{7.56}{[12 \frac{\text{IN}}{\text{FT}}]} \times 952 \text{ FT}^2$

DETERMINE TOTAL VOLUME TO MANAGE = $\underline{599.76 \text{ FT}^3}$

⑤ DETERMINE VOL. TO MANAGE w/ DRYWELLS = $599.76 - 348.81$

DETERMINE VOL. TO MANAGE w/ DRYWELLS = $\underline{250.95 \text{ FT}^3}$

⑥ DETERMINE NUMBER OF DRYWELLS:

$330 \text{ XLHD} = 92.79 \text{ CF/UNIT}$

NO OF UNITS = $\frac{250.95 \text{ FT}^3}{92.79 \text{ CF/UNIT}}$

NO OF UNITS = $\underline{2.7 \text{ UNITS}}$

⑦ ASSUME (3) CULTEC UNITS 330XL UNITS: SIDE AREA = 310 FT^2
 BASE AREA = $\underline{215.3 \text{ FT}^2}$

TOTAL: $\underline{525.3 \text{ FT}^2}$

CLIENT	MADE BY	CHECKED BY	PROJECT NO.	
PROJECT 164 POLISADES STREET	MM	AM		
SUBJECT (SEWAGE-WASTE) CULCS.	DATE	DATE	REVISION	SHEET NO.
	3-18-23	3-18-23		2

(PERC. #1) (CONT.) REAR YARD

$$\textcircled{A} \text{ DETERMINE VOL OF PERC.} = \frac{9.9 \frac{\text{IN}}{\text{HR}}}{[12 \text{ FT}]} \times 525.3 \text{ FT}^2$$

$$= \underline{433.37 \text{ FT}^3}$$

\textcircled{B} DETERMINE VOL. TO MANAGE W/ DRYWELLS: ?

$$\text{VOL. TO MANAGE} = 599.76 - 433.37$$

$$\text{VOL. TO MANAGE} = \underline{166.39 \text{ FT}^3}$$

\textcircled{C} DETERMINE NUMBER OF DRYWELLS:
3301 LHD = 92.79 CF/UNIT.

$$\text{NO. OF DRYWELLS} = \frac{166.39 \text{ FT}^3}{92.79 \text{ CF/UNIT}}$$

$$\text{NO. OF DRYWELLS} = \underline{1.8 \text{ UNITS}}$$

SO USE (3) CULTC UNITS 330XLHD