

E.L. Porvenir Subd

Street Width = 24 Feet Face to Face

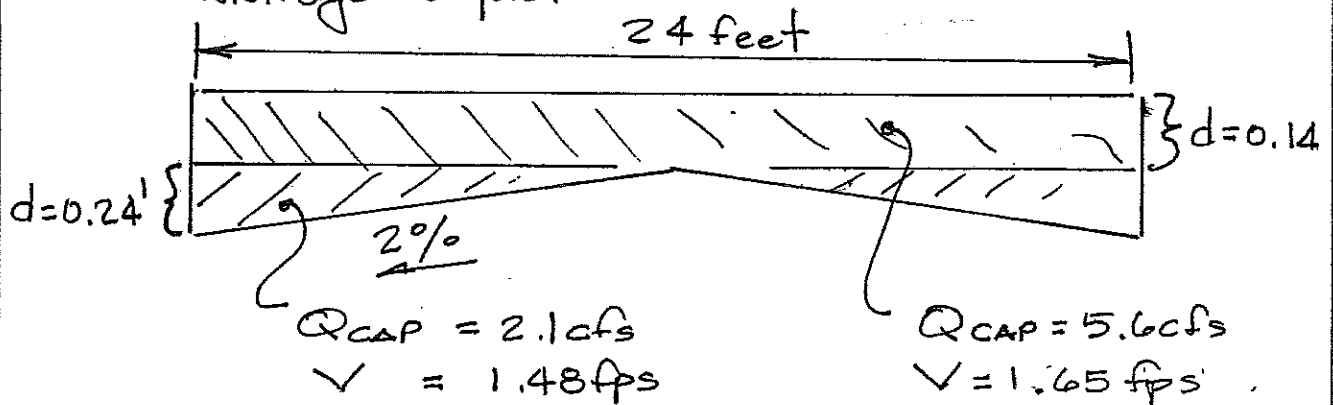
Mountable Curb Height = 0.33 feet

$$Q_{100} = 6.2 \text{ cfs (onsite)} + 3.5 \text{ cfs (offsite)}$$

$$Q_{100} = 9.7 \text{ cfs (total)}, \quad n = 0.017$$

$$S = 0.5\%$$

MANNINGS Equation



$$\text{Energy Head} = D + \frac{V^2}{2g}$$

$$= (0.14 + 0.24) + \frac{(1.48 + 1.65)^2}{2 \times 32.2}$$

$$= 0.42 \text{ feet} > 0.33 \text{ curb height } \underline{NG}$$

MOVE SIDEWALK BEHIND Mountable Curb
FOR 4 LOTS EAST OF ARNO STREET

See Sheet 2 for CALCS.

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Calculate Transition from Std Curb to Mtbl.

Lot Impervious AREA (Typical)

$$= (25' \times 39') \text{ Dwelling} + (24' \times 12') \text{ Garage} \\ + (65' \times 10') \text{ Driv} = 1,913 \text{ SF Typical Lot} \\ \times 2 \text{ Lots} = 3,826 \text{ SF}$$

$$\text{Street Frontage} = 42.44 \text{ feet} \times [(24' \text{ F.to F.} \\ + (0.5' \times 2) \text{ curb} + 2 \times (4' \text{ sidewalk})] = 33' \times 42.44 \\ = 1,400 \text{ SF}$$

$$\text{Total "D"} = 3,826 + 1,400 \text{ SF} = 5,226 \text{ SF}$$

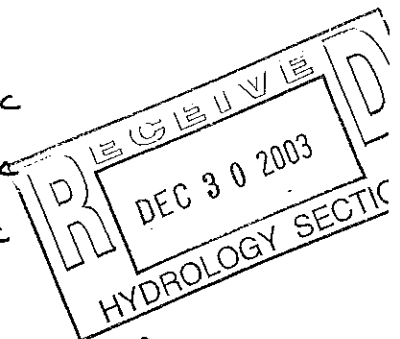
Total AREA 2 Lots w/ Street

$$42.44' \times 210' = 8,912 \text{ SF}$$

Treatment "B" & "C" is 50% Each Remaining Area

$$= 0.50 \times (8,912 \text{ SF} - 5,226 \text{ SF}) = 1,843 \text{ SF}$$

<u>Treatment</u>	<u>Area (ACS)</u>
A	0
B	1,843 SF = 0.04 AC
C	1,843 SF = 0.04 AC
D	5,226 SF = 0.12 AC



$$Q_{2 \text{ Lots}} = (2.28 \times 0.04) + (3.14 \times 0.04) + (4.70 \times 0.12) \\ = 0.78 \text{ cfs} / 2 \text{ Lots} \& \text{ Street}$$

$$Q_{\text{TOTAL}} = 9.65 \text{ cfs}, D_{\text{TOTAL}} = 0.38 \text{ feet}$$

$$D_{\text{REQD}} = 0.33 \text{ feet}$$

$$\text{PRORATE } Q_{\text{CURB HEIGHT}} = \frac{0.33}{0.38} \times 9.65 \text{ cfs} = 8.38 \text{ cfs for 4" CURB}$$

$$Q_{\text{DEFECT 4 LOTS}} = 9.65 \text{ cfs} - (2 \times 0.78 \text{ cfs}) = 8.09 \text{ cfs} < 8.38 \text{ cfs}$$

Sheet 2

OK