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PROJECT Anasazi Ridge
SUBJECT Drop Inlet Capacity
BY JSD DATE 11-11-04
CHECKED _____ DATE _____
SHEET 1 OF 1

Determine inlet requirement at east end of Basketweaver Ave.

- Inlet(s) will be located in a sump at end of cul de sac.
- $Q_{total} \text{ to inlet(s)} = 35 \text{ cfs}$

$$Q = CA(2gh)^{1/2}$$

$$\text{where } C = .67, h = .67'$$

$$\begin{aligned} \text{Double Albuquerque Grate Cross Area} &= 13.88 \text{ sf} \\ \text{minus bearing and cross bar areas} &= \frac{5.02 \text{ sf}}{8.86 \text{ sf}} \end{aligned}$$

$$\text{w/ } 1/2 \text{ clog factor, } A = 4.43 \text{ sf}$$

$$\text{Use curb opening area} = .5' \times 5' = 2.5 \text{ sf}$$

$$\therefore Q_{grate} = .67(4.43)(64.4 \cdot .67)^{1/2} = 19.50 \text{ cfs}$$

$$\begin{aligned} Q_{curb \text{ opening}} &= .67(2.5)(64.4 \cdot .67)^{1/2} = 11.00 \text{ cfs} \\ &= \underline{30.50 \text{ cfs}} \end{aligned}$$

$$30.50 \text{ cfs} < 35 \text{ cfs}$$

NO GOOD

Plans will call for a triple 'C' inlet to ensure adequate capacity.

Sizing of storm drain pipes was performed using Manning's Eqn - Flowing Full.