



1) EXIST. DROP INLET = 26' x 37"

$$T = (2 \times 2.16) + (2 \times 3.08') = P = 10.48' / 2 = \underline{5.24}$$

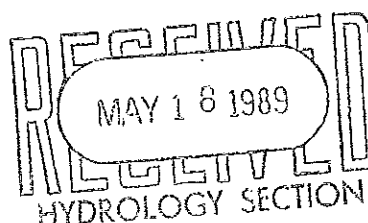
$$d = 13^{84} - 13^{32} = \underline{0.56}$$

$$A = 2.16' \times 3.08' = 6.65' / 2 = \underline{3.32'}$$

$$Q = \underline{5.60 \text{ cfs}} \text{ (PROPOSED)}$$

$$Q/P = 5.60 / 5.24 = 1.06$$

$$Q/A = 5.60 / 3.32 = 1.68$$



$$Q \text{ CAPACITY} = 1.5 \times 5.24 = \underline{7.86 \text{ cfs}} \text{ (SEE ATTACHMENT "A")}$$

2) EXIST. 16" STORM PIPE CAPACITY

$$Q = \frac{A \sqrt{2 g H}}{\sqrt{1.2 + \frac{0.021 \times L}{D^{1.2}}}}$$

$$A = 1.38'$$

$$g = 32.2$$

$$H = 2.80'$$

$$D = 13.3'$$

$$L = 200' \pm$$

$$Q = \frac{1.38 \sqrt{2 \times 32.2 \times 2.80}}{\sqrt{1.2 + \frac{0.021 \times 200'}{1.33^{1.2}}}}$$

$$Q = \underline{9.08} = \text{CAPACITY OF EXIST. 16" } \phi \text{ PIPE (SEE ATTACHMENT "B")}$$

RESULT: CAPACITY OF 16" PIPE AND DROP INLET EXCEED PROPOSED
 Q OF $\underline{5.60 \text{ cfs}}$