STORM DRAINAGE

LOCATION: CROSSINGS SOUTH PHASE I SHEET 3 OF 3
DATE: 7-6-87 CALC. WNL & JD CHKD. ____ P.N. 87053-11 REV. 7-24-87

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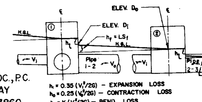
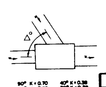


$h_e = 0.35\,(V_1^2/2g)$ – EXPANSION LOSS
$h_b = 0.25\,(V_2^2/2g)$ – CONTRACTION LOSS
$h_b = K\,(V_2^2/2g)$ – BEND LOSS
$h_j = h_e + h_b + h_b$ – TOTAL JUNCTION LOSS



THE ENERGY LOSS FOR THE INITIAL INLET OF A STORM SEWER SYSTEM IS $0.3\,(V_1^2/2g)$.

WHEN MORE THAN ONE LINE ENTERS AN INLET DETERMINE LINE EXCITING GREATEST MOMENTUM (MV) FOR K.

USE LINE WITH GREATEST "K" VALUE FOR DETERMINING h_j.

IF INLET SHAPING IS USED REDUCE "h_j" BY 50%.

IF SURFACE INFLOW OCCURS INCREASE "h_j" BY 50%.

SEEN HYDRAULIC GRADE LINE AT PIPE OUTFALL USING 0.8 PIPE DIA. OR TW WHICHEVER IS GREATER.

HYDRAULIC GRADE LINE

JUNCTION LOSSES

| .35 V_1 | | |