FHWA CULVERT ANALYSIS, HY-8, VERSION 6.0

CURRENT DATE	CURRENT TIME	FILE NAME	FILE DATE
09-19-2003	15:26:05	CHPTR11A	09-19-2003

CULVERT AND CHANNEL DATA

CULVERT NO. 1	DOWNSTREAM CHANNEL
CULVERT TYPE: 7.0 ft x 6.0 ft BOX	CHANNEL TYPE: IRREGULAR
CULVERT LENGTH = 300.37 ft	BOTTOM WIDTH = 7.12 ft
NO. OF BARRELS = 1.0	TAILWATER DEPTH = 2.87 ft
FLOW PER BARREL = 400 ft^3/s	TOTAL DESIGN FLOW = 400 ft^3/s
INVERT ELEVATION = 175.27 ft	BOTTOM ELEVATION = 175.27 ft
OUTLET VELOCITY = 28.7 ft/s	NORMAL VELOCITY = 17.85 ft/s
OUTLET DEPTH = 2.05 ft	

ST. ANTHONY FALLS BASIN -- FINAL DESIGN

LB = 14.07 ft	LS = 13.88 ft	LT = 18.52 ft
L = 46.47 ft	Y1 = 1.536 ft	Y2 = 9.653 ft
Z1 = 166.00 ft	Z2 = 166.00 ft	Z3 = 172.94 ft
WB = 7.000 ft	WB3 = 7.000 ft	

---------- CHUTE BLOCKS ----------

H1 = 1.532 ft	W1 = 1.167 ft	W2 = 1.167 ft	NC = 3.000

---------- BAFFLE BLOCKS ----------

W3 = 1.167 ft	W4 = 1.167 ft	NB = 3.000
H3 = 1.60 ft		LCB = 4.69 ft

---------- END SILL ----------

H4 = 0.73 ft

BASIN OUTLET VELOCITY = 17.85 ft/s

ENERGY DISSIPATOR HY-8 PROGRAM OUTPUT

Figure 34-7C