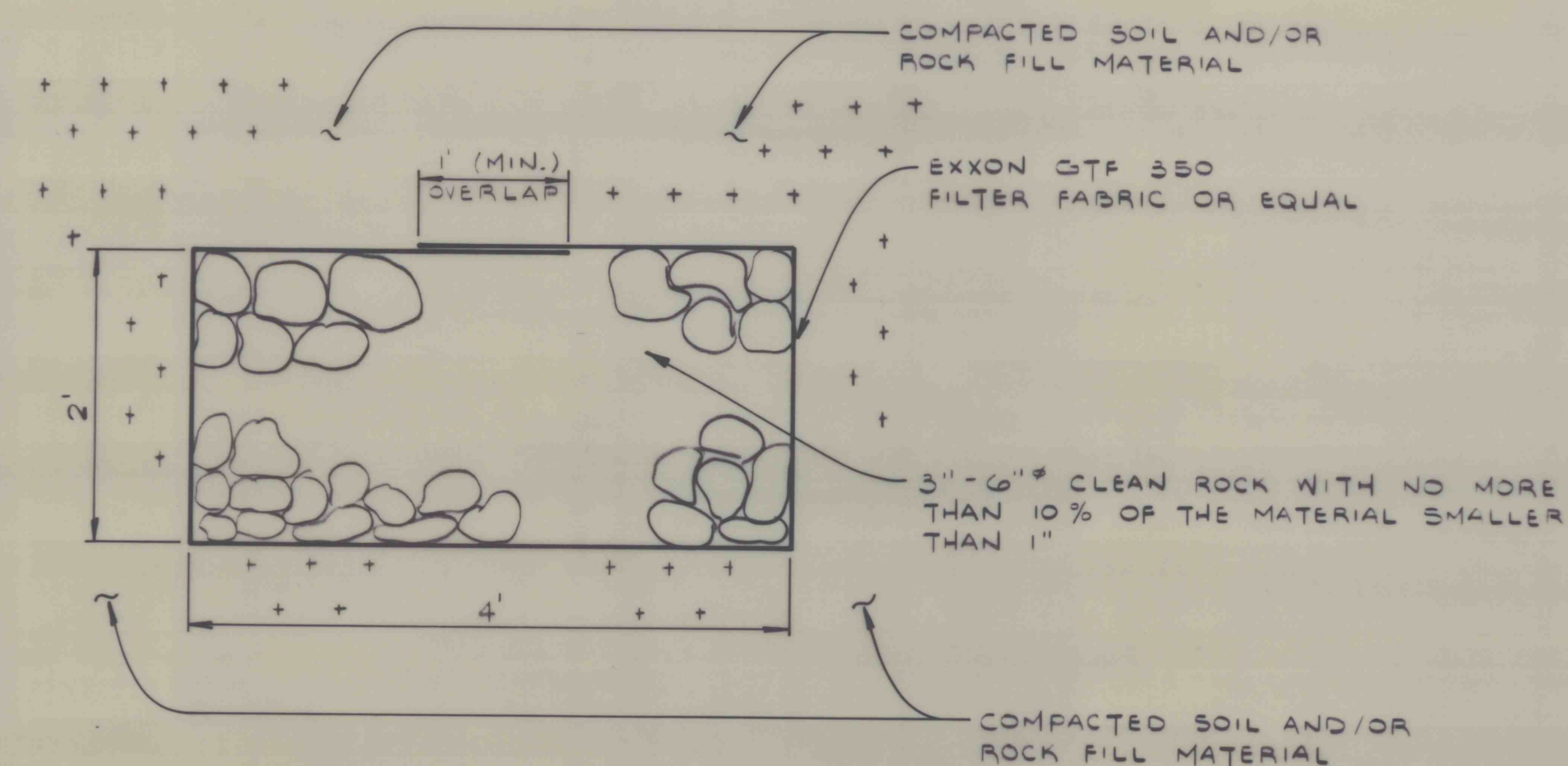
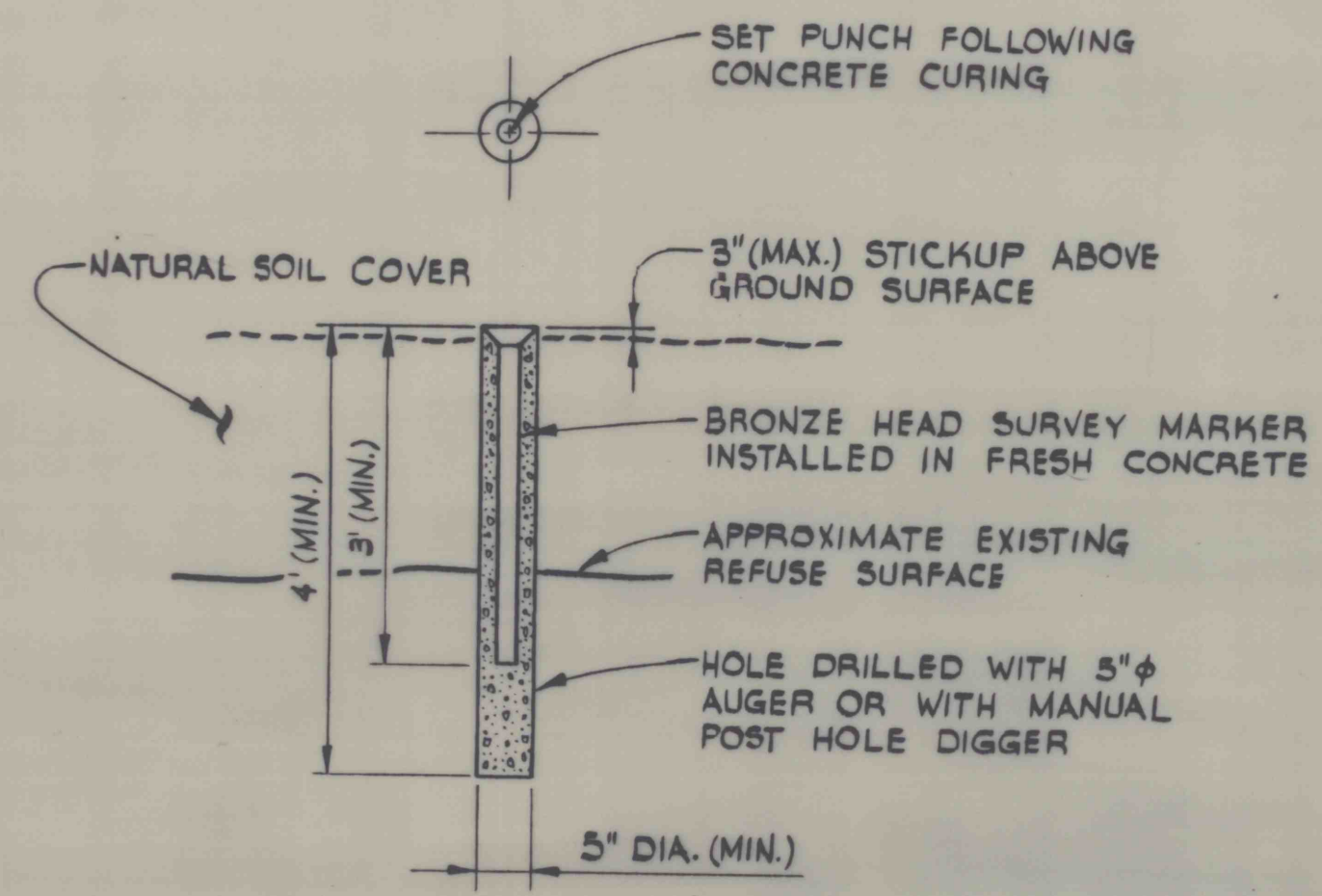


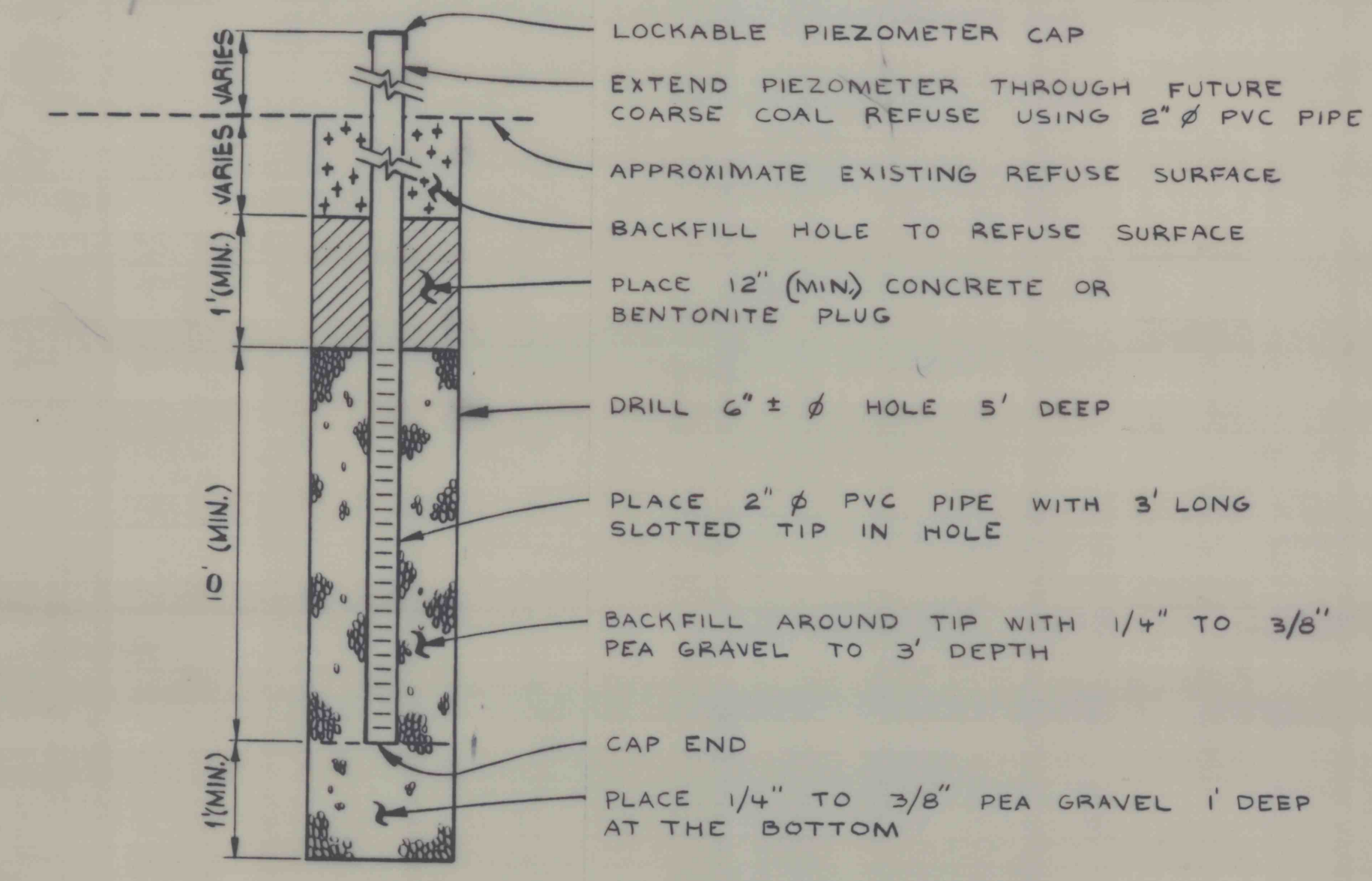
DATE	BY	REVISION	RECORD	DR	CK



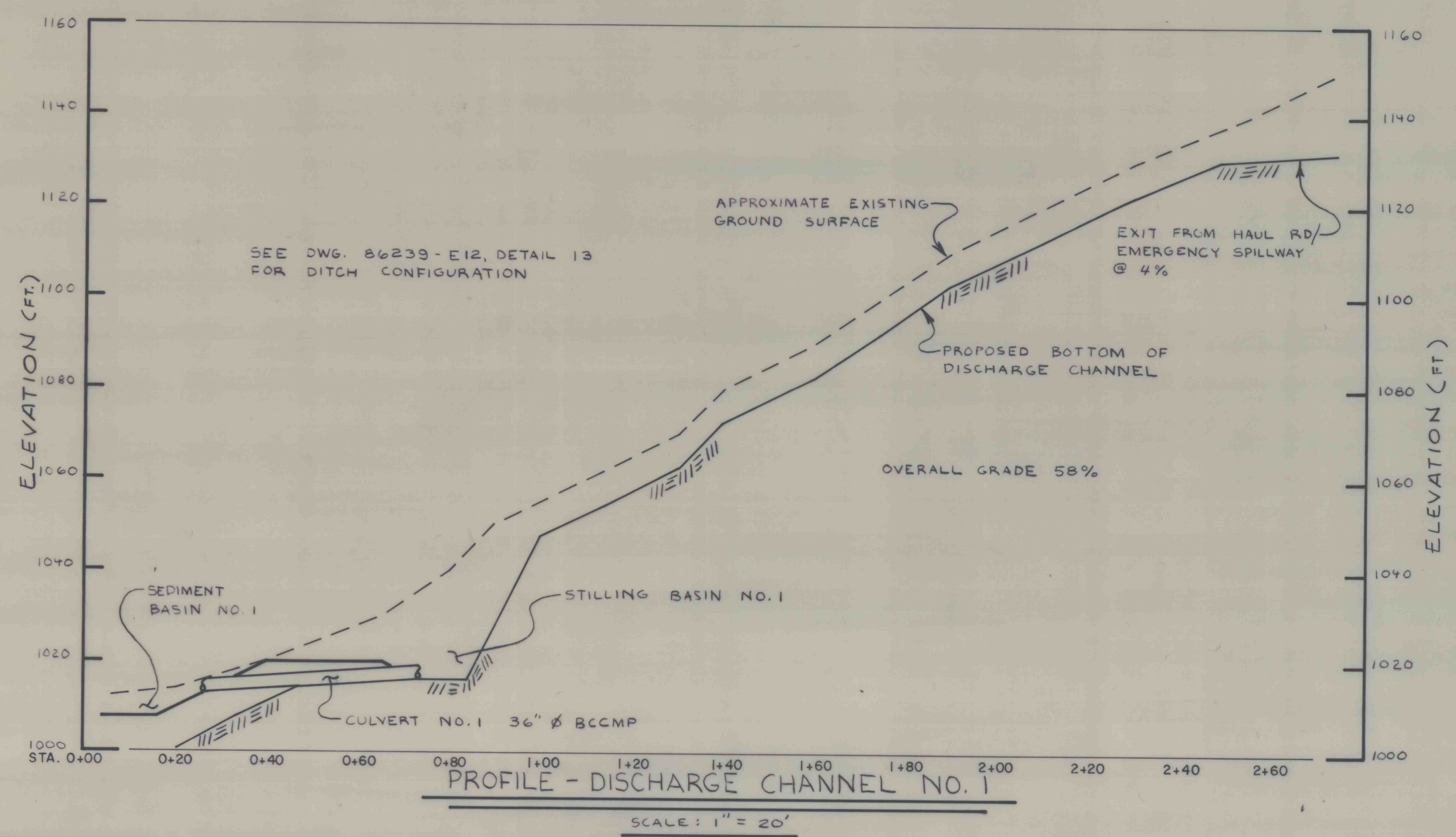
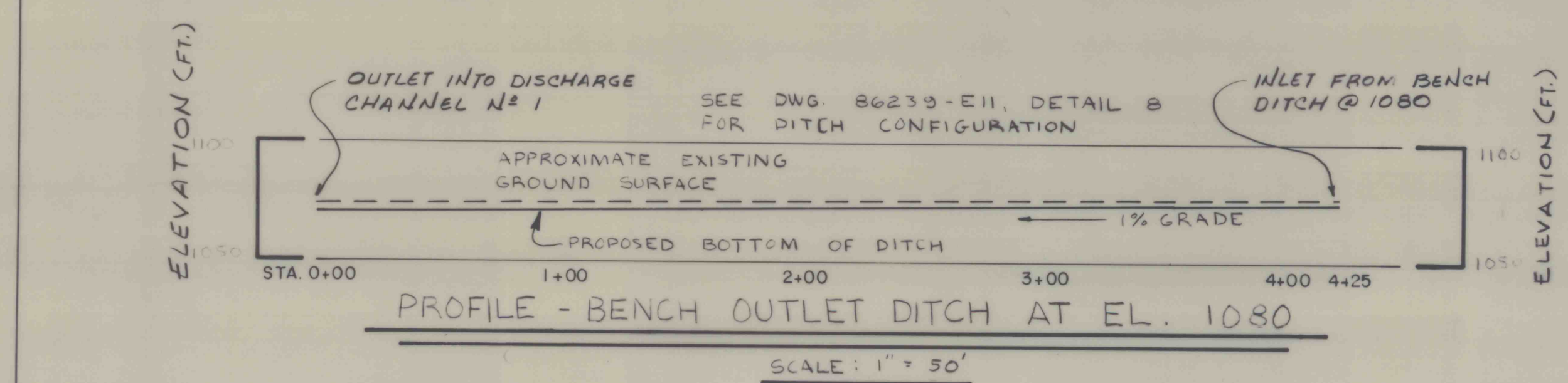
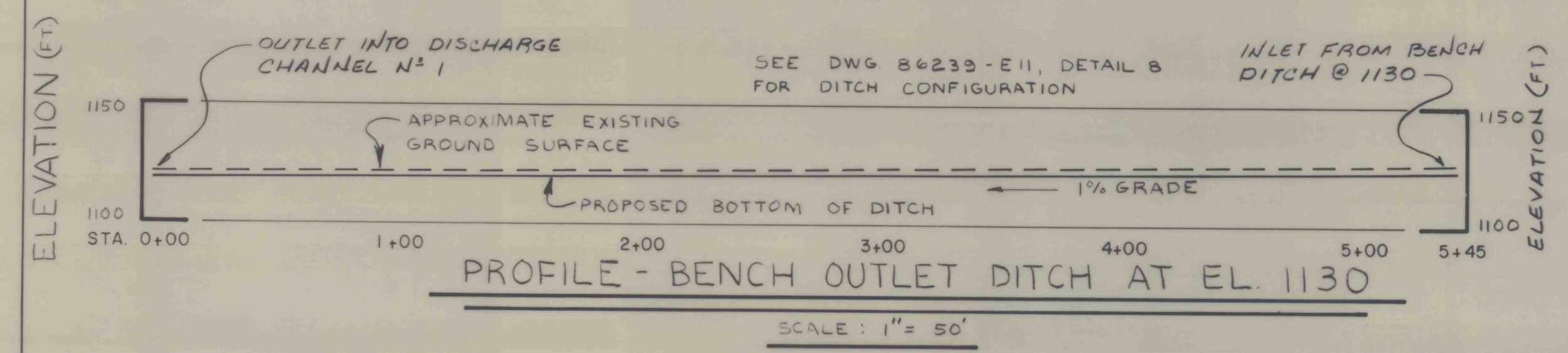
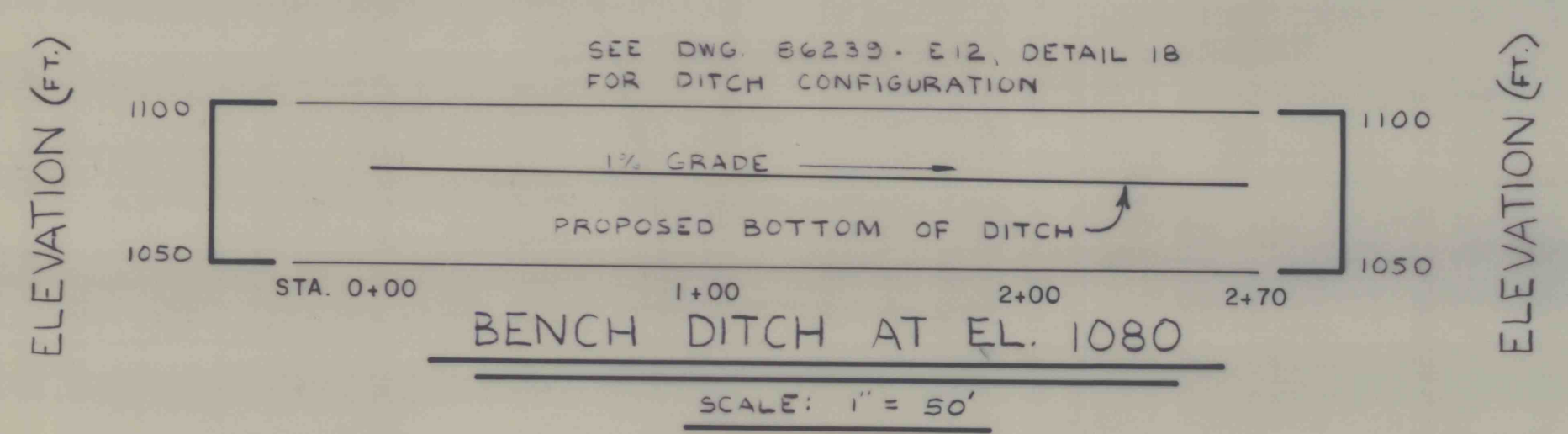
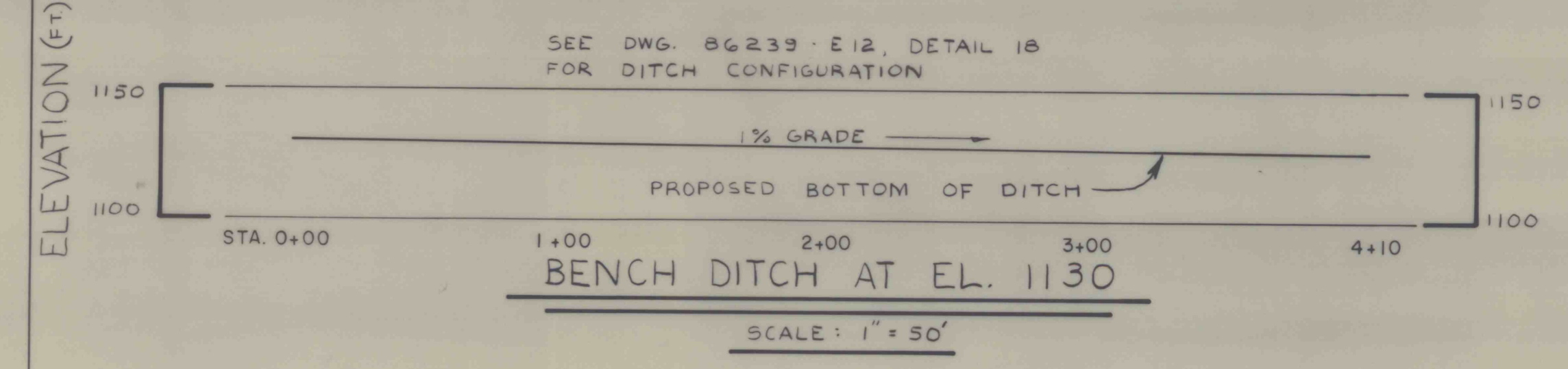
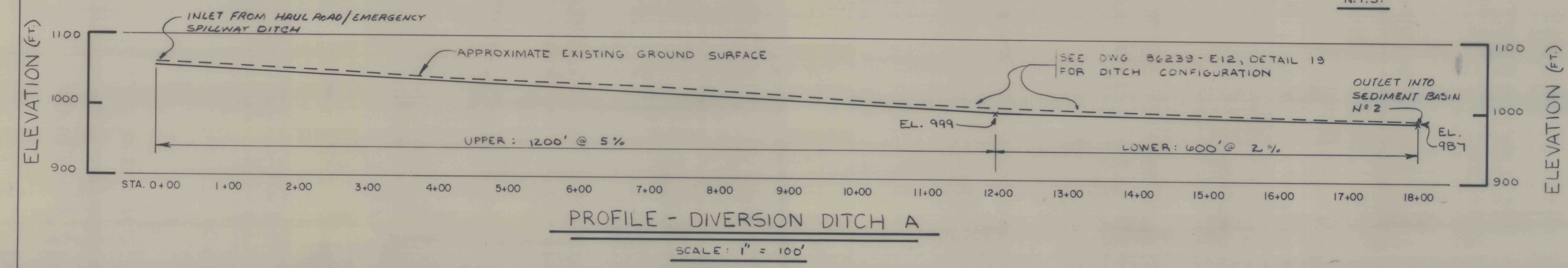
DETAIL 20
INTERNAL DRAIN
N.T.S.



DETAIL 21
SURVEY MONUMENT
N.T.S.



DETAIL 22
PIEZOMETER INSTALLATION
N.T.S.



DIVERSION SUMMARY						
Ditch Description	Flow Depth (ft.)	Peak Flow (cfs)	Slope (ft)	Velocity (fps)	Erosion Protection	
Haul Road/ Emergency Spillway Ditch	1.95	0.55	2.5	30.4	3.5	6.4 In Rock
Ditch for Lower Portion of Spillway	1.09	0.91	2.0	11.0	10.0	7.37 In Rock
Diversion Ditch A	1.88	0.63	2.5	60.0	5.0	8.5 Vegetation
	2.24	0.26	2.5	60.0	2.0	5.89 Vegetation
Bench Ditch	0.98	0.52	1.5	8.7	1.0	2.6 Vegetation
Bench Outlet Ditch	1.4	0.60	2.0	8.7	1.0	2.9 Vegetation
Discharge Channel No. 1	0.24	0.76	1.0	45.0	58.0	12.2 In Rock
Sediment Basin No. 1	1.23	1.27	2.5	164.1	2.0	6.44 In Rock
Spillway Outlet Channel	0.61	0.39	1.0	164.1	21.0	13.36 In Rock

SRW ASSOCIATES INC.

SCALE: AS NOTED
DATE: SEPT. 5, 1986

APPROVED BY: *[Signature]*
CHECKED BY: *[Signature]*

BETHENERGY MINES CORPORATION
WEST VIRGINIA DIVISION
BROWN'S BRANCH IMPOUNDMENT
BOONE COUNTY, WEST VIRGINIA

DETAILS 20 THROUGH 22
AND DITCH PROFILES

SHEET NUMBER 14 of 17
DRAWING NUMBER
86239 - E13