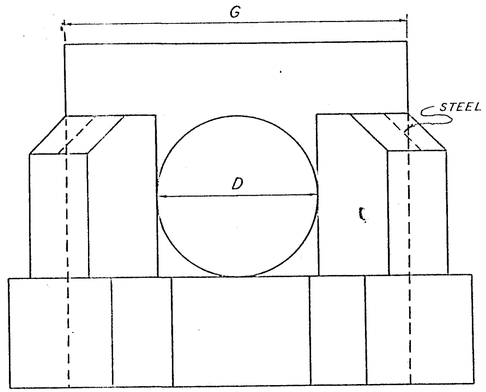
DRAINAGE DESIGN COMPUTATIONS

LINE SEGMENT	LENGTH OF DRAIN IN FEET	DRAIN AREA IN ACRES "A"	CONCENTRATION TIME IN MINUTES: OVERLAND FLOW TIME	DITCH FLOW TIME	TOTAL TIME	RUNOFF COEFFICIENT "C"	SUB AREA RAINFALL INTENSITY "I" IN/HR.	MAXIMUM RUNOFF Q=CIA C.F.S.: INCMT.	ACCMD	SLOPE OF DRAIN FT/FT.	VELOCITY OF DRAIN FT/SEC.	DITCH OR PIPE SIZE	DITCH OR PIPE CAPACITY C.F.S.	REMARKS	ELEVATIONS: INLET INVERT	OUTLET INVERT	FALL FEET
DITCH "A" (MOST CRITICA	1300'	14	14	0	14	0 30	5.5	23.1	23.1	0.005	2	33 SQ FT	70	O K			
"B" LINE	35'	4	15	0	15	0 30	5 5	6.6	6.6	0.010	4.5	18"	8.1	O K	94700	946 44	0.56

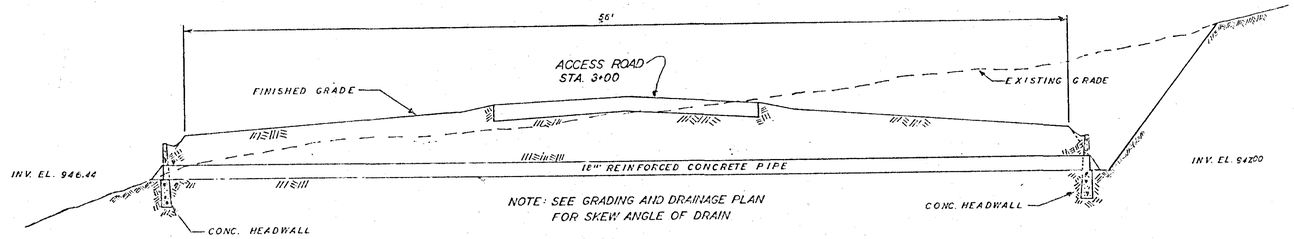
DRAINAGE DESIGN CRITERIA:

1. RAINFALL TO BE EXPECTED ONCE IN 25 YEARS = 2.90"
2. COEFFICIENTS OF RUNOFF = 0.30
3. DISCHARGE THROUGH DITCH BASED ON KUTTERS FORMULA AND N = 0.0225.
4. DISCHARGE THROUGH PIPE BASED ON MANNING FORMULA AND N = 0.015.
5. QUANTITY OF RUNOFF ESTIMATED BY THE RATIONAL FORMULA, Q = CIA.



FRONT ELEVATION

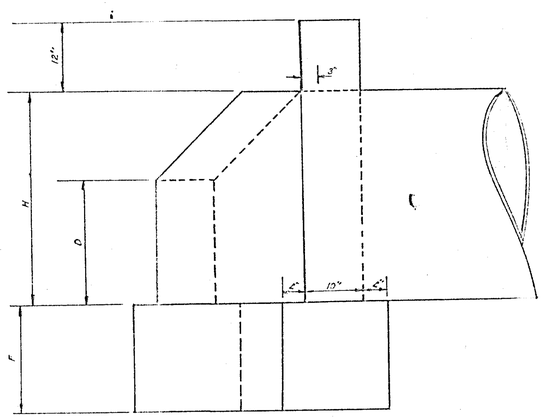
DIMENSIONS: OPENING D	OPENING AREA SQ. FT.	WALL H	WALL G	WALL L	FOOTING M	FOOTING F	QUANTITIES ONE ENDWALL WITH 45° WING WALL, CLASS B CONCRETE: CUBIC FEET WALL	CUBIC FEET FOOT	TOTAL CU.FT.	TOTAL CU.YD.	STEEL TIE RODS
18"	1.8	26"	3'10"	1'2"	1'7"	1'5"	9.3	10.7	200	0.74	NONE
24"	3.1	3'0"	4'4"	1'5"	2'1"	1'4"	13.1	12.4	275	1.02	2-3/4"ø X 2' 0"
30"	4.9	3'6"	4'10"	1'8"	2'5"	1'6"	17.4	16.8	367	1.34	2-3/4"ø X 2' 0"
36"	7.1	4'0"	5'4"	2'0"	2'11"	1'8"	22.6	24.6	472	1.75	2-3/4"ø X 3' 0"
42"	9.6	4'6"	5'10"	2'3"	3'6"	2'0"	29.1	34.6	637	2.36	2-3/4"ø X 3' 0"
48"	12.6	5'0"	6'4"	2'6"	4'0"	2'0"	35.9	39.1	750	2.78	2-3/4"ø X 3' 0"
54"	16.0	5'6"	6'10"	2'9"	4'6½"	2'0"	42.9	46.6	895	3.31	2-3/4"ø X 3' 0"
60"	19.6	6'0"	7'4"	3'0"	5'0½"	2'0"	51.8	51.1	1029	3.81	2-3/4"ø X 3' 0"



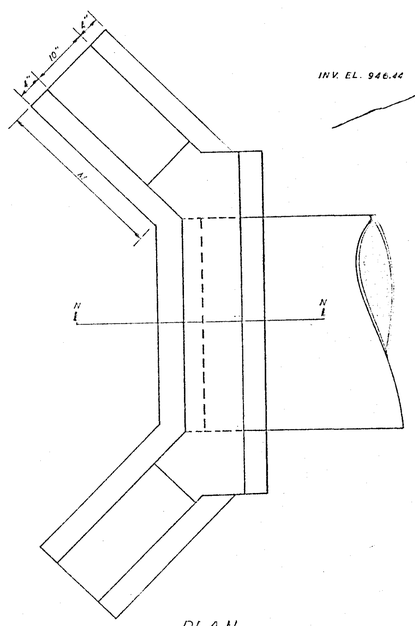
NOTE: SEE GRADING AND DRAINAGE PLAN FOR SKEW ANGLE OF DRAIN

TYPICAL DRAIN PIPE SECTION AT STA. 3+00 ON ACCESS ROAD

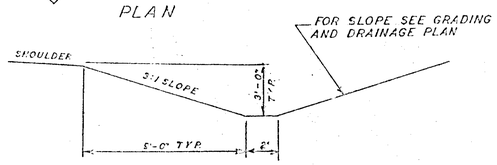
NO. SCALE



SECTION NN



PLAN



TYPICAL DITCH SECTION

SCALE: 1/4" = 1'-0"

REV.	BY	DATE	DESCRIPTION

POLK COUNTY, GEORGIA
FAAP PROJECT NO. 9-09-056 -01

DRAINAGE DETAILS

POLK COUNTY AIRPORT
CEDARTOWN GEORGIA

APPROVED:
DISTRICT AIRPORT ENGINEER — DATE
CONSULTING ENGINEER — DATE
OWNER — DATE

DRWN. EJM
CHKD. PJS / GHF
DATE MAY 5, 1965
SCALE AS SHOWN

HENSLEY-SCHMIDT, INC.
CONSULTING ENGINEERS
CHATTANOOGA, TENNESSEE
MARIETTA, GEORGIA

DRAWING NO. E-354 9