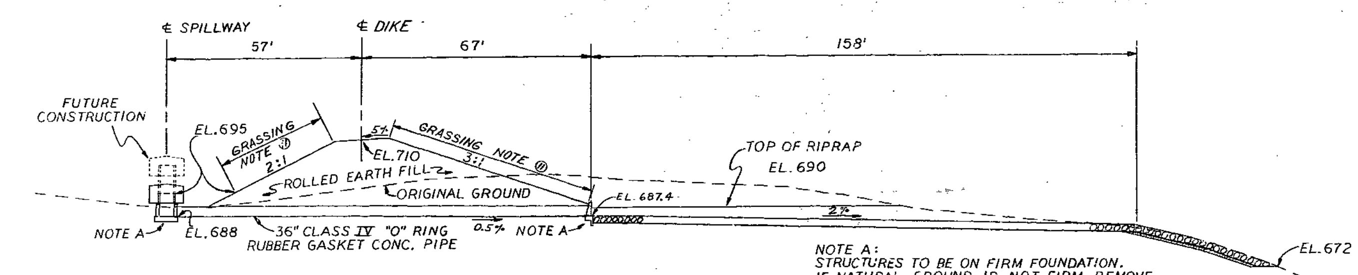
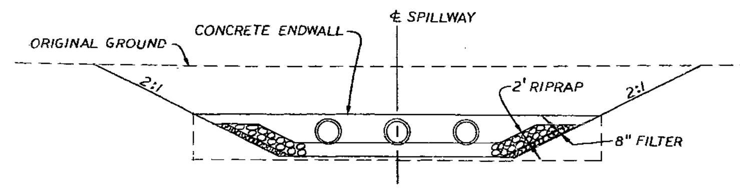
14	C	4	10N246



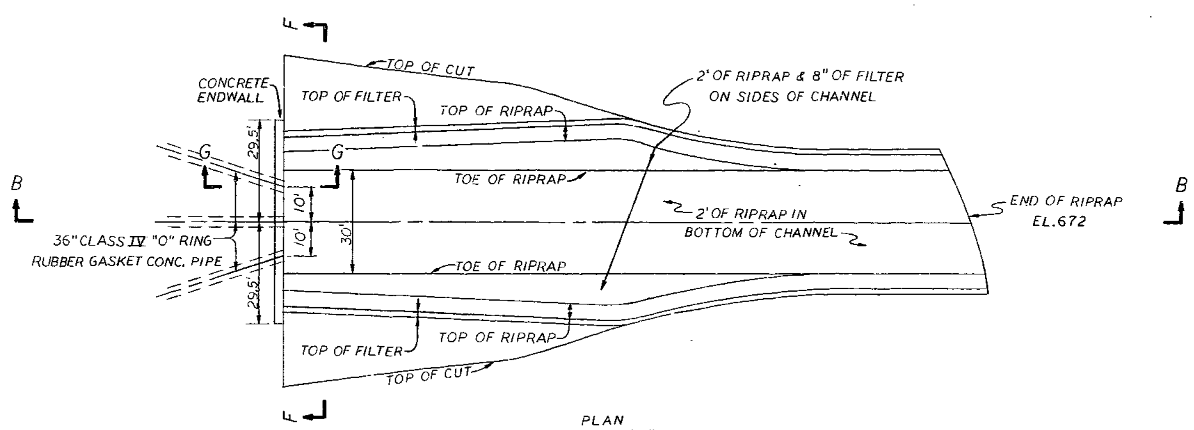
SECTION B-B
SCALE 1" = 20'

NOTE A:
STRUCTURES TO BE ON FIRM FOUNDATION. IF NATURAL GROUND IS NOT FIRM, REMOVE TO DEPTH OF 4' AND REPLACE WITH COMPACTED FILL.

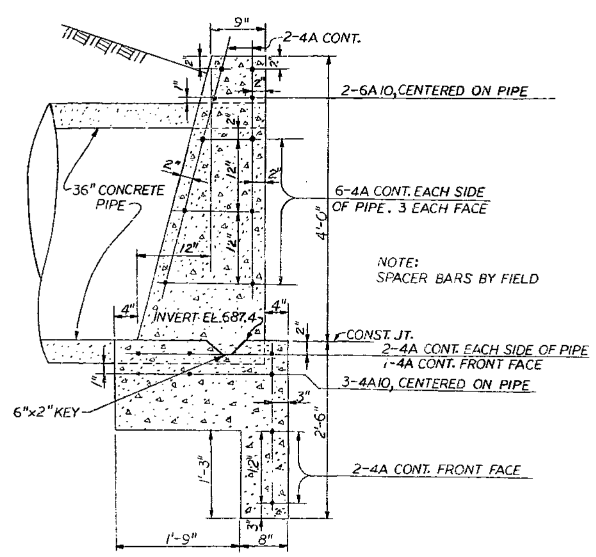


SECTION F-F
SCALE 1" = 10'

SUMMARY OF QUANTITIES		
ITEM NO.	DESCRIPTION	QUANTITY
101	CLEARING & GRUBBING	24 AC.
110	REMOVAL OF PIPES & DROP INLET	L.S.
120	CHANNEL EXCAVATION	3500 C.Y.
123	EARTH BORROW	63900 C.Y.
129	STRUCTURAL EXCAVATION	1,130 C.Y.
180	GRASSING	23,660 S.Y.
210	SURFACING (4" CRUSHED STONE)	830 TONS
401	CLASS A CONCRETE (ENDWALL)	18 C.Y.
418	REINFORCING STEEL (ENDWALL)	610 LBS.
660	18"-12 GAGE FULLY COATED P.I.C.M.P.	48 L.F.
660	36"-12 GAGE FULLY COATED C.M.P.	50 L.F.
660	60"-12 GAGE FULLY COATED C.M.P.	28 L.F.
660	72"-12 GAGE FULLY COATED C.M.P.	124 L.F.
662	36"-12 GA. FULLY PAVED & COATED C.M.P.	120 L.F.
830	RIPRAP	1,000 C.Y.
836	FILTER	320 TONS
FOR BILL OF MATERIALS FOR SPILLWAYS SEE DWG. 10N248		

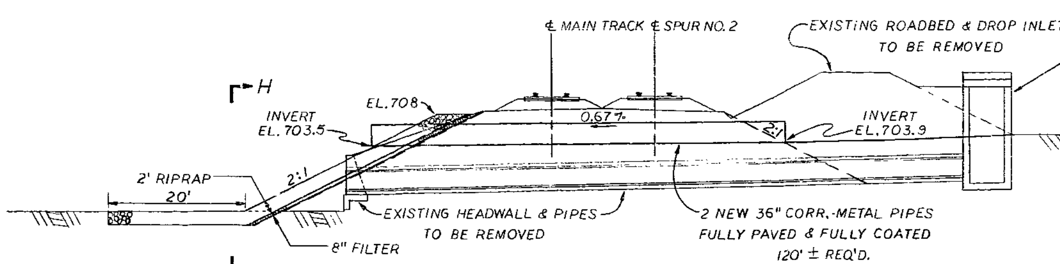


PLAN
DETAIL "A"
SCALE 1" = 20'

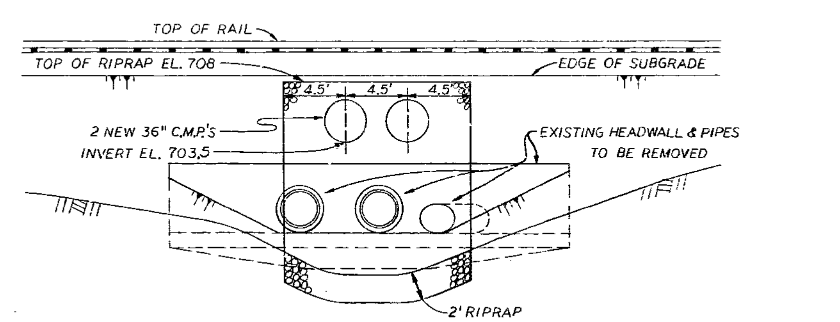


SECTION G-G
SCALE 1" = 1'

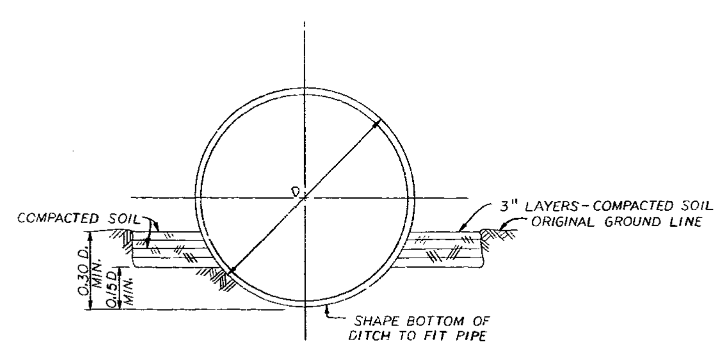
NOTES:
① SOILS EXPLORATION AND TEST RESULTS ARE IN A MEMORANDUM REPORT FROM GENE FARMER TO R.G. DOMER DATED JULY 18, 1973. BASED ON TEST RESULTS IN THE REPORT, WITH DIKE TOP EL. 710 THE MINIMUM STABILITY ANALYSIS SAFETY FACTORS ARE AS FOLLOWS:
EXTERIOR SLOPE, END OF CONSTRUCTION, S.F. = 2.2
OPERATING CONDITION, S.F. = 1.8
INTERIOR SLOPE, END OF CONSTRUCTION, S.F. = 2.0
② THE RAISING OF THE FLY ASH DISPOSAL AREA EXTENSION DIKES SHALL NOT BE DONE WITHOUT PRIOR APPROVAL FROM THE DIVISION OF ENGINEERING DESIGN.
③ DIKE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE PORTIONS OF GENERAL CONSTRUCTION SPECIFICATION NO. G-9 FOR ROLLED EARTHFILL FOR DAMS AND POWER PLANTS. FILL COMPACTION SHALL BE AT LEAST 95 PERCENT OF MAXIMUM STANDARD DENSITY AND FILL MOISTURE CONTENT NOT MORE THAN 3 PERCENT ABOVE OPTIMUM, AS DETERMINED BY THE CENTRAL SOILS LABORATORY.
④ ALL OTHER CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE PORTIONS OF HIGHWAY SPECIFICATION T-1.
⑤ THERE SHALL BE NO CLEARING OR GRUBBING ABOVE EL. 710.
⑥ EARTH FILL FOR THE DIKE CONSTRUCTION SHALL CONSIST OF MATERIAL EXCAVATED FROM INSIDE THE FLY ASH DISPOSAL AREA EXTENSION AND SOUTH OF THE EXISTING ROAD THAT CROSSES THE EXTENSION AREA. CUT SLOPES FOR BORROW MATERIAL ADJACENT TO THE DIKE SHALL NOT BE EXCAVATED STEEPER THAN 3:1, AND TOP OF CUT SHALL BE A MINIMUM OF 20 FEET FROM THE TOE OF ANY SLOPE. EXCAVATION FOR FILL SHALL NOT EXTEND BELOW EL. 686.
⑦ WHEN CONNECTING THE END OF THE NEW DIKE TO THE OLD DIKE, EXTREME CARE SHALL BE USED TO INSURE AN IMPERVIOUS AND STABLE CONNECTION. THE EXISTING SURFACE SHALL BE STRIPPED OF ALL VEGETATION AND SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES AND COMPACTED SO AS TO FORM A BOND WITH THE NEW FILL.
⑧ RIPRAP SHALL BE PLACED AT LOCATIONS SHOWN ON DRAWINGS. THE STONE SHALL CONSIST OF SOUND DURABLE STONE PER SECTION 830 OF T-1 SPECIFICATION. THE RIPRAP SHALL BE A MINIMUM OF 2' THICK WITH AT LEAST 50 PERCENT BY WEIGHT BEING 200 LBS. OR MORE, AND WITH THE MAXIMUM WEIGHT TWO TIMES THE 50 PERCENT WEIGHT AND NOT MORE THAN 5 PERCENT PASSING THE 1" SIEVE.
⑨ THE FILTER BLANKET UNDER THE RIPRAP SHALL BE 8" THICK AND IN ACCORDANCE WITH SECTION 836 OF THE T-1 SPECIFICATIONS.
⑩ SURFACING ON TOP OF THE DIKE SHALL CONSIST OF CRUSHED STONE 4" THICK PLACED OVER THE FULL WIDTH OF THE DIKE IN ACCORDANCE WITH SECTION 210 OF THE T-1 SPECIFICATION.
⑪ ALL CUT AND FILL SLOPES AND OTHER DISTURBED AREAS SHALL BE SEEDED WITH TYPE 7 MIXTURE, FERTILIZED, AND MULCHED IN ACCORDANCE WITH SECTIONS 180 AND 182 OF THE T-1 SPECIFICATIONS.



SECTION E-E
SCALE 1" = 10'

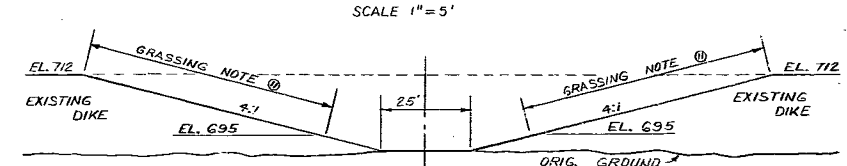


SECTION H-H
SCALE 1" = 5'



W.O. # P8-544-82-31401-J7

DETAIL - CLASS "B" BEDDING
NOT TO SCALE



SECTION L-L
SCALE 1" = 20'
DIKE BREACH

SCALE AS NOTED

COMPANION DRAWINGS: 10N245, 247, 248, 249

INSPECTED AND APPROVED FOR ISSUE
R.M. Pierce
DESIGN PROJECT MANAGER

REV NO.	ECN NO.	DATE									
2		3-22-74	DAF	DAF	JFS		PDH				
	REVISE QUANTITIES (DELETE 140'-24" VIT. CLAY PIPE)										
1		11-19-73	DAF	DRC	OCC		PDH				
	REMOVE HOLD & REVISE SECS. E-E, H-H, & QUANTITIES.										
REV NO.	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	INSP	SUBM	RECM	APPR

DSGN J.R. Chapman — INSP R.J. Bowman
DRWN J.R. Chapman
CHKD D.E. Calloway — ENGINEER
SUPV J.P.H. Stivers

MAIN PLANT

FLY ASH DISPOSAL AREA EXTENSION
SECTIONS & DETAILS
SHEET 1

WATTS BAR STEAM PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

SUBMITTED	RECOMMENDED	APPROVED
J. M. Nelson		W.W. Engle

KNOXVILLE	10-29-73	14	C	10N246 R2

RECORD DRAWING AS CONSTRUCTED

PRINTS REQD-R
BR or PROJ DWG F SIZE H
ME EE CE AD CD ED MD BF SW BL PA

REV NO.	DATE	MADE	CHKD	SUPV	INSP	SUBM	RECM

DSGN J.R. Chapman — SUPV J.P.H. Stivers
DRWN J.R. Chapman — INSP R.J. Bowman
CHKD D.E. Calloway — O.H. Raine
TRCD — ENGINEER C.D. Herald
COMP
SK

① ② ③ ④ ⑤ ⑥