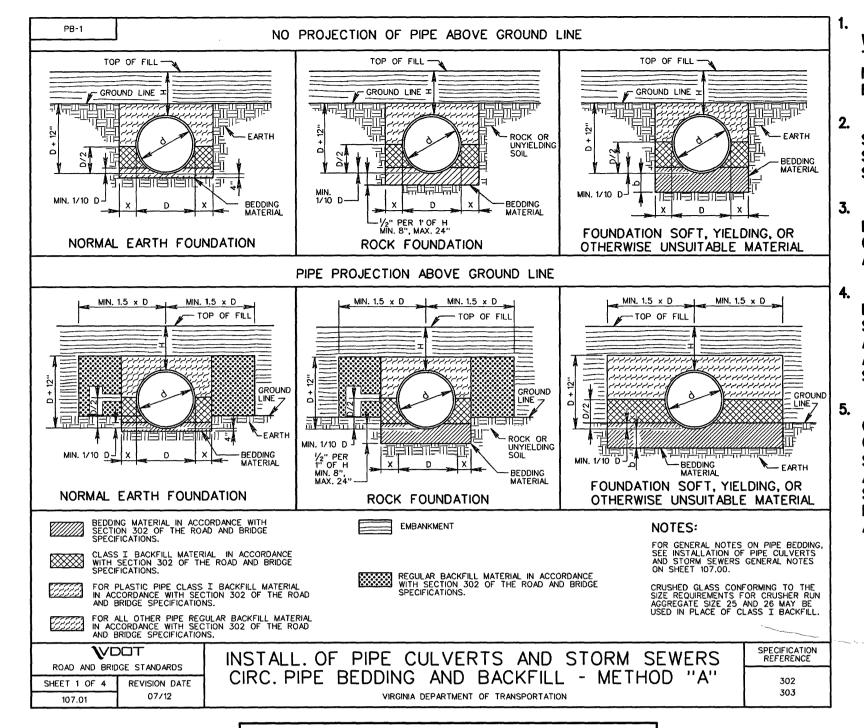


ANTI-SEEP

- BACKFILL PLUG (CLAY DAM)



NOTE: CLASS I BACKFILL SHALL BE CRUSHER RUN

AGGREGATE SIZE NO. 25 OR 26, AGGREGATE BASE MATERIAL SIZE 21A OR 21B, FLOWABLE FILL, OR CRUSHED GLASS CONFORMING TO THE SIZE REQUIRED

FOR CRUSHER RUN AGGREGATE SIZE 25 AND 26.

STORM DRAINAGE GENERAL NOTES:

STORM DRAINAGE PIPE AND DRAINAGE STRUCTURES SHALL COMPLY WITH ALL APPLICABLE VDOT STANDARDS AND SPECIFICATIONS. REFER TO "INSTALLATION OF PIPE CULVERTS & STORM SEWER GENERAL NOTES" AND DETAILS SHOWN ON VOOT STD. PB-1 ON THIS SHEET FOR ADDITIONAL INFORMATION.

THE INVERT OF ALL NEW STORM DRAINAGE INLETS AND MANHOLES SHALL CONFORM TO VDOT STD. IS-1 - "STANDARD METHOD OF SHAPING MANHOLE AND INLET INVERTS." REFER TO DETAIL ON THIS

ALL CONNECTIONS BETWEEN STORM DRAIN LINE (RCP) AND ROOF DRAIN LINE (PVC) SHALL BE ACCOMPLISHED BY USING "KOR-N-TEE" OR "KOR-N-TEE SADDLE" PIPE-TO-PIPE WATER-TIGHT CONNECTORS AS MANUFACTURED BY TRELLEBORG PIPE SEALS MILFORD, INC.

STORM DRAIN PIPE LENGTHS SHOWN HEREON ARE APPROXIMATE HORIZONTAL DISTANCES FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE SLOPES SHOWN ARE COMPUTED USING INVERT OUT AT UPSTREAM STRUCTURE, INVERT IN AT DOWNSTREAM STRUCTURE, AND HORIZONTAL PIPE LENGTH MEASURES FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

UPON COMPLETION OF THE STORM DRAINAGE SYSTEM, THE CONTRACTOR SHALL FURNISH TO THE OWNER A FIELD SURVEYED FINAL CORRECT SET OF AS-BUILT PLANS OF THE NEWLY CONSTRUCTED STORM DRAIN AND/OR STORMWATER MANAGEMENT FACILITIES. AS-BUILT PLANS SHALL BE PROVIDED IN THE STATE PLANE VIRGINIA SOUTH COORDINATE SYSTEM, NAD 1983, FIPS 4502 FEET, US SURVEY FEET, DATUM NA 83, IN THE FORM OF 1 PAPER COPY AND 1 DIGITAL AUTOCAD FILE.

> NOTE: CONTRACTOR SHALL SUBMIT STORM DRAINAGE STRUCTURE FABRICATION ORDER SHEETS TO

> > START OF FABRICATION.

ENGINEER FOR REVIEW AND APPROVAL PRIOR TO

DRAINAGE STORM

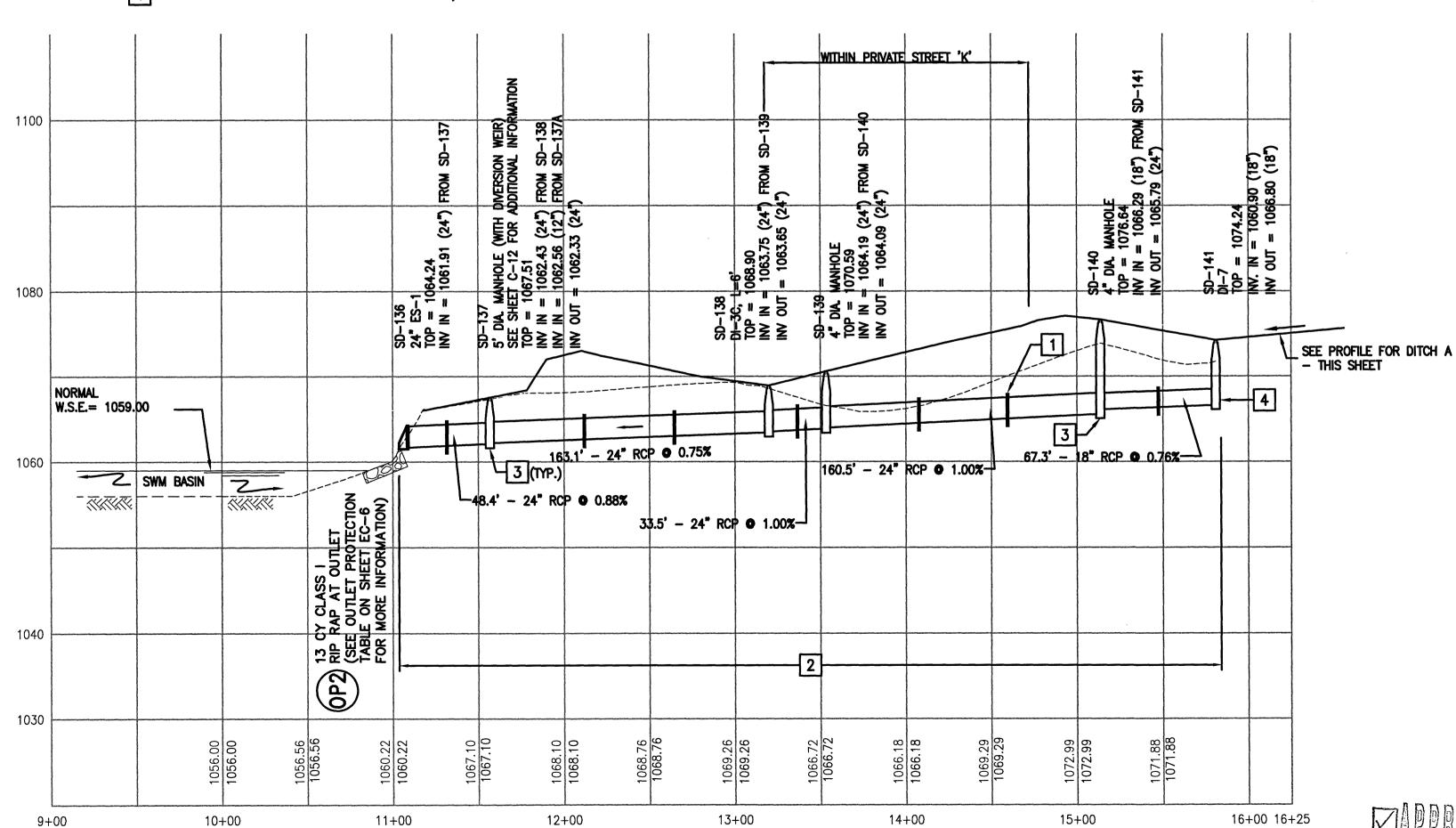
**PROFILES** Vertical Scale: 1" = 10'

1" = 50'

mmission Number: 1966-P3

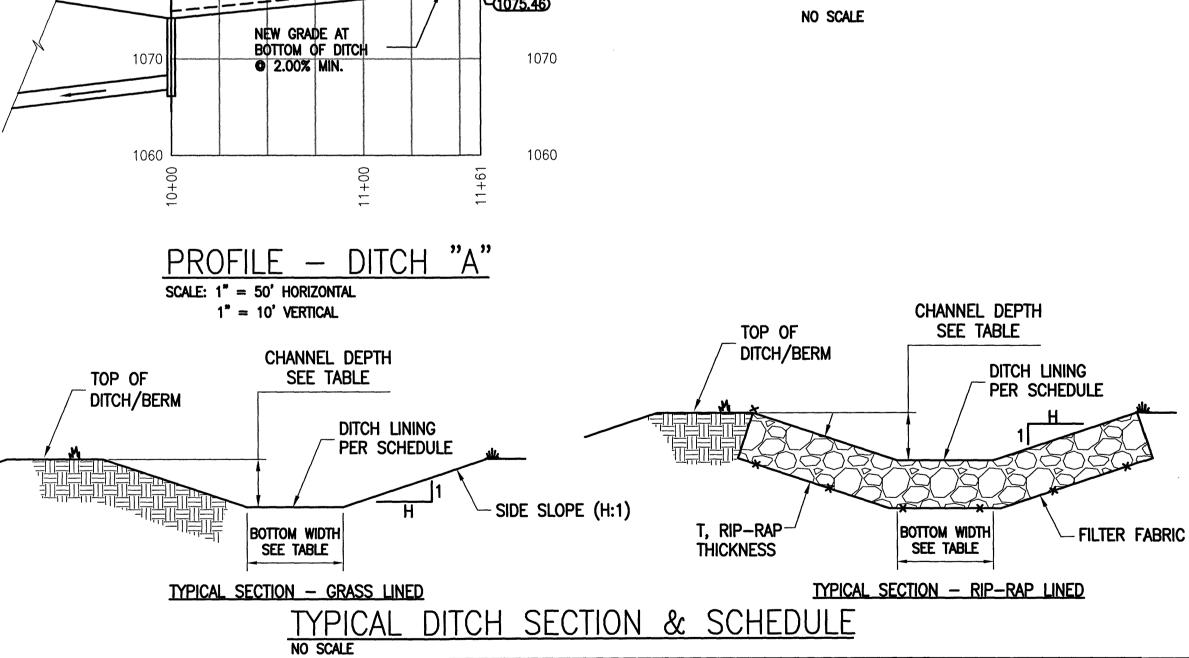
## STORM DRAINAGE PROFILE KEYNOTES:

- CUT-OFF TRENCH AND ANTI-SEEP BACK-FILL PLUGS (CLAY DAMS) WHERE SHOWN. CUT-OFF TRENCH TO EXTEND 1-FOOT INTO NATIVE SOIL, SHALL BE 2-FEET WIDE, AND EXTEND FULL WIDTH OF TRENCH. SEE DETAIL THIS SHEET.
- WATERTIGHT PIPE JOINTS AND MANHOLE CONNECTION SHALL BE USED IN THIS SECTION OF STORM DRAINAGE. WATER-TIGHT PIPE JOINTS SHALL CONFORM TO ASTM C76 AND ASTM C443 AND SHALL BE MANUFACTURED WITH AN OFF-SET SPIGOT CONFIGURATION AND SHALL USE TYPE 4G PROFILE PIPE GASKETS AS MANUFACTURED BY PRESS-SEAL GASKET CORPORATION, OR APPROVED EQUAL. REFER TO DETAIL ON SHEET C-10A FOR MORE INFORMATION.
- WATERTIGHT PIPE-TO-MANHOLE CONNECTIONS SHALL BE MADE WITH FULLY GROUTED CONNECTION WITH PLACEMENT OF FULL-DEPTH NON-SHRINK GROUT / HYDRAULIC CEMENT ON THE INSIDE AND OUTSIDE OF THE MANHOLE CONNECTION.
- 4 CAST OPENING FOR FUTURE 18" DIA. RCP. SEAL/COVER WITH PLYWOOD SHEET PRIOR TO BACKFILLING.



SD141-SD136

SCALE: 1" = 50' HORIZONTAL 1" = 10' VERTICAL



DITCH ID	DESIGN FLOW Q2 (CFS)	DESIGN FLOW Q10 (CFS)	BOTTOM WIDTH (FT)	CHANNEL DEPTH (FT)	SIDE SLOPE L/R (H:1)	CHANNEL SLOPE (MIN) (%)	CHANNEL SLOPE (MAX) (%)	DESIGN FLOW VELOCITY Q2 (FPS)	DESIGN FLOW DEPTH Q10 (FT)	TEMPORARY LINING MATERIAL	PERMANENT LINING MATERIAL	MANNINGS "N" PERMANENT LINING	NOTES:
Α	2.80	3.94	1.0	1.25	3/3	2.00	2.00	2.74	0.44	EC-2	GRASS	0.032	
В	1.30	1.80	0.0	1.00	2/4	3.30	3.30	2.76	0.45	EC-2	GRASS	0.032	
C-1	4.6	6.7	4.0	2.00	2/2	2.50	2.50	3.10	0.40	EC-2	GRASS	0.032	
C-2	4.6	6.7	4.0	2.00	2/2	7.50	12.5	3.17	0.42	CLASS I RIP-RAP (T = 24")	CLASS I RIP-RAP (T = 24")	0.069	3.00

. CHANNEL SHALL BE LINED WITH SOIL STABILIZATION BLANKETS AND MATTING IN ACCORDANCE WITH STD. AND SPEC. 3.36, TREATMENT - 1, VDOT EC-2

 $R:\Dwgs\1966-P3\Dwg\1966-P3\_SHEET\_C10.dwg,\ 9/4/2015\ 9:18:15\ AM,\ rwa$