

8/17/99

REVISIONS

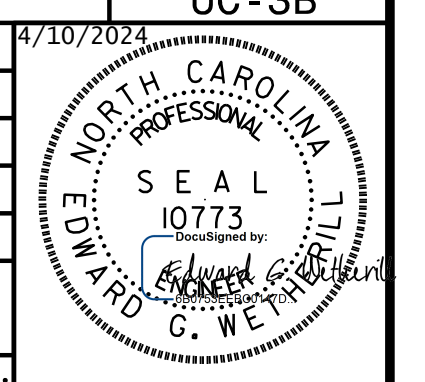
4/4/2024
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 WETHERILL

PROJECT TYPICAL DETAILS

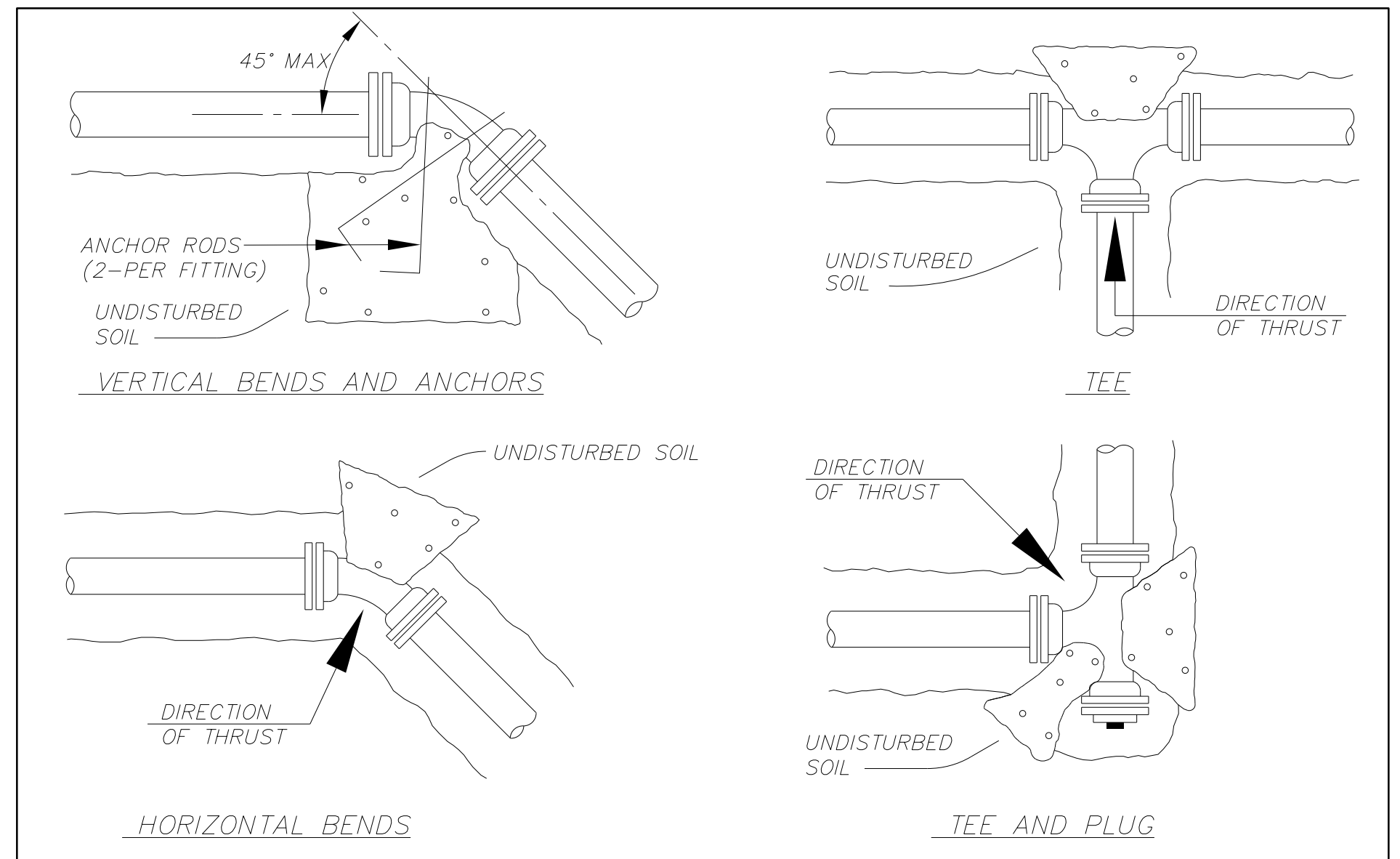
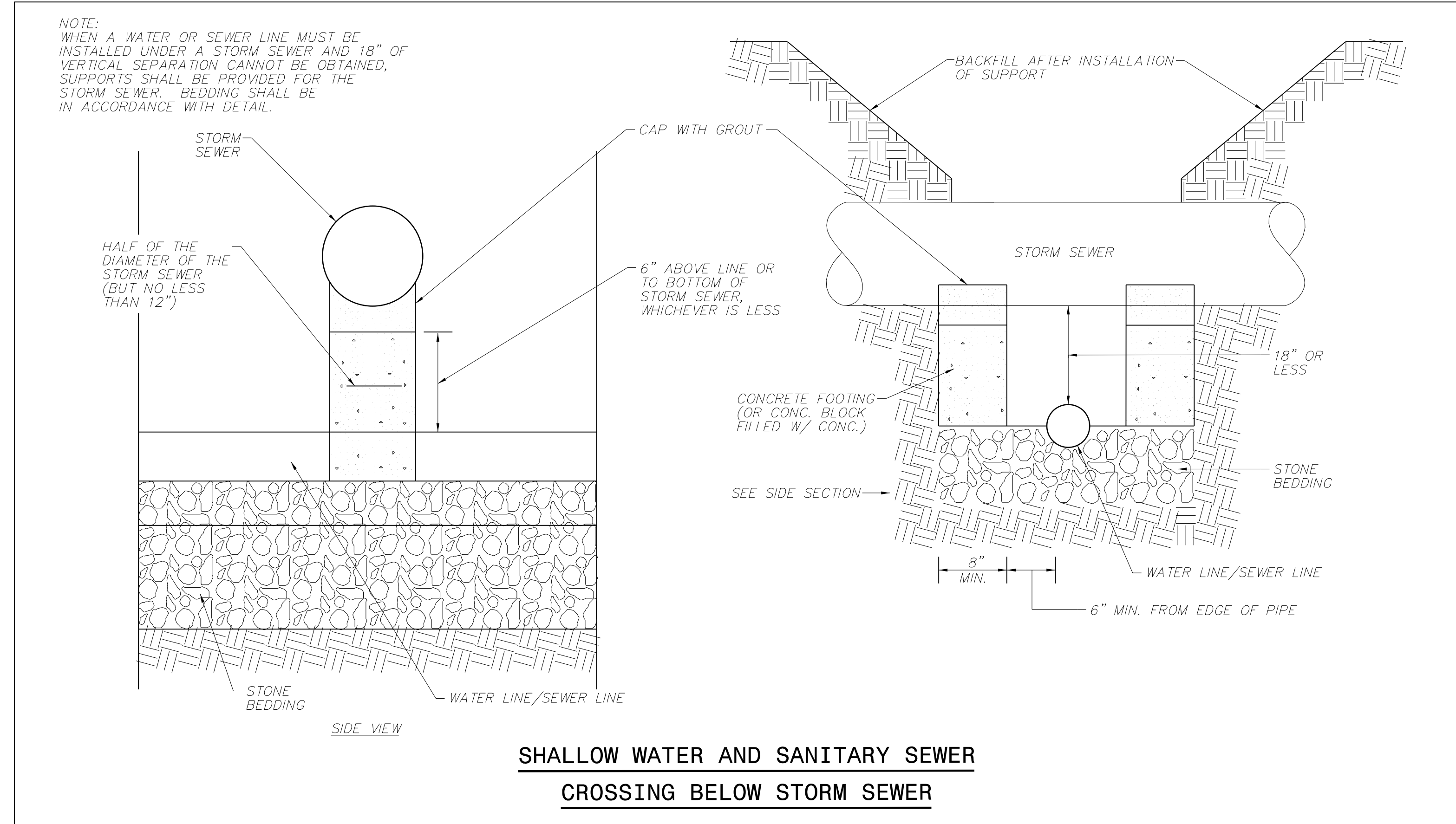
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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
 CIVIL/SITE DESIGN - GIS/GPS - SURVEY/SUE - UTILITIES - CONSTRUCTION OBSERVATION

PROJECT REFERENCE NO.	HB-0004	SHEET NO.	UC-3B
DESIGNED BY:	PKP	DATE	4/10/2024
DRAWN BY:	JDS		
CHECKED BY:	PKP		
APPROVED BY:	EGW		
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITY CONSTRUCTION PLANS ONLY	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			



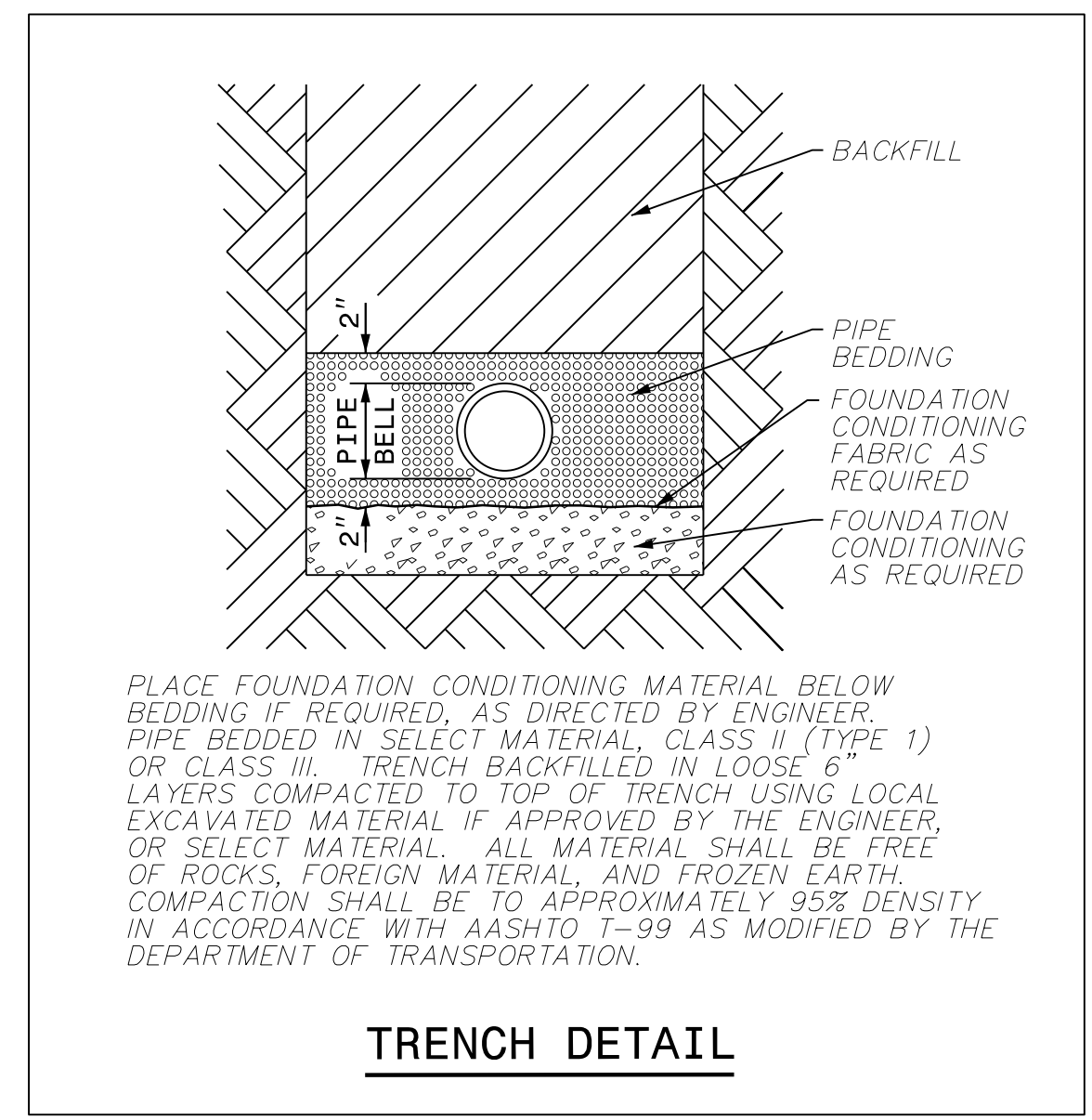
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
UTILITY CONSTRUCTION



FITTING SIZE	CONCRETE THRUST BLOCKING SCHEDULE					CONCRETE SCHEDULE VERTICAL BENDS				ANCHOR ROD SIZE FOR VERTICAL BEND AND ANCHORS
	TEE/PLUG	BEARING AREA IN SQUARE FEET				MIN. CU. YARDS CONCRETE				
4"	1	2	1	1	1	1	1	1	1	1/2"
6"	3	3	2	1	1	1	1	1	1	
8"	4	6	3	2	1	2	2	1	1	
10"	7	9	5	3	2	3	3	2	1	3/4"
12"	9	12	7	4	2	5	3	2	1	
14"	12	17	9	5	3	6	4	3	2	
16"	16	22	12	6	3	8	6	3	2	7/8"
18"	20	27	15	8	4	10	7	4	2	
20"	24	34	18	10	5	12	9	5	3	
24"	34	48	26	14	7	17	12	7	4	1-1/8"
30"	53	75	41	21	11	27	19	10	5	
36"	77	108	59	30	15	38	27	15	8	

- NOTES:**
- MINIMUM BEARING AREA (IN SQUARE FEET) AGAINST UNDISTURBED TRENCH WALL OF SAND.
 - AREAS SHOWN ARE FOR 150 PSI TEST PRESSURE. IF TEST PRESSURE IS OTHER THAN 150 PSI, ADJUST AREA OF REACTION BACKING IN DIRECT PROPORTION.
 - OTHER SOIL CONDITIONS: CEMENTED SAND OR HARDPAN - MULTIPLY ABOVE BY 0.5
 GRAVEL OR HARD DRY CLAY - MULTIPLY ABOVE BY 0.7
 SOFT CLAY - MULTIPLY ABOVE BY 2.0
 MUCK: SECURE ALL FITTINGS WITH APPROVED HARNESS OR TIE ROD CLAMPS, WITH CONCRETE REACTION BACKING THE SAME AS LISTED FOR SAND CONDITIONS.

THRUST BLOCKING AND ANCHORING



PLACE FOUNDATION CONDITIONING MATERIAL BELOW BEDDING IF REQUIRED, AS DIRECTED BY ENGINEER. PIPE BEDDED IN SELECT MATERIAL, CLASS II (TYPE 1) OR CLASS III. TRENCH BACKFILLED IN LOOSE 6" LAYERS COMPACTED TO TOP OF TRENCH USING LOCAL EXCAVATED MATERIAL IF APPROVED BY THE ENGINEER, OR SELECT MATERIAL. ALL MATERIAL SHALL BE FREE OF ROCKS, FOREIGN MATERIAL, AND FROZEN EARTH. COMPACTION SHALL BE TO APPROXIMATELY 95% DENSITY IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY THE DEPARTMENT OF TRANSPORTATION.