

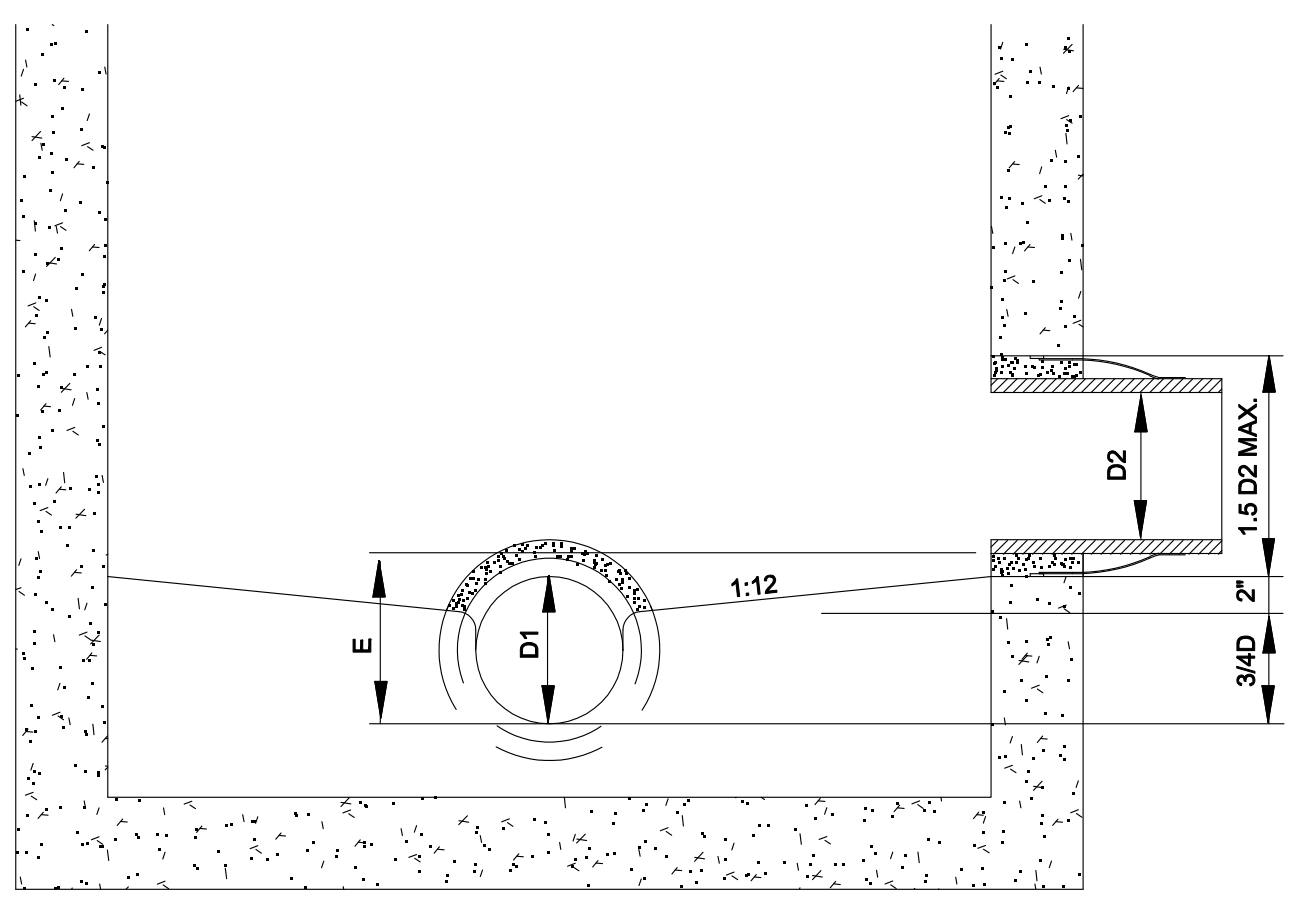
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO. B-4490	SHEET NO. UC-3K
DESIGNED BY:	
DRAWN BY: NONE	
CHECKED BY:	
APPROVED BY:	
REVISED:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151

TO FIND "E" ENTER CHART AT LEFT WITH EFFLUENT PIPE SIZE AND ENTER PIPE AT TOP WITH INFLUENT PIPE SIZE. "E" DISTANCE IS POINT OF CONVERGENCE OF COLUMN AND ROW.

	D2						
D1	4"	6"	8"	12"	15"	18"	24"
8	9.00	9.50	10.00	-	-	-	-
12	11.00	11.50	12.00	13.00	-	-	-
15	14.25	14.75	15.25	16.25	17.00	-	-
18	16.50	17.00	17.50	18.50	19.25	20.00	-
24	21.00	21.50	22.00	23.00	23.75	24.50	26.00

WHERE 5' MH IS REQUIRED ADD 1/2" TO "E" DISTANCE TO ACCOUNT FOR THE ADDITIONAL 6" OF SHELF SLOPE.



MAIN OR LATERAL MIN SLOPE
4" @ 2.00% MIN.
6" @ 0.67% MIN./MAIN
6" @ 2.00% MIN./LATERAL
8" @ 0.40% MIN.
12" @ 0.22% MIN.
15" @ 0.15% MIN.
18" @ 0.12% MIN.

- NOTES:
- SEE FAYPWC STANDARD MANHOLE AND PIPE SLIDE, MORTAR SLIDE AND SHELF DETAILS FOR ADDITIONAL INFORMATION.
 - THE "E" DISTANCES INDICATED ARE FOR CONNECTION TO AN EXISTING OUTFALL AND ARE THE MINIMUM DISTANCE ALLOWABLE.
 - WHERE SANITARY SEWER OUTFALLS AND MAINS ARE BEING CONSTRUCTED THE TOP OF THE EFFLUENT PIPE AND THE TOP OF THE INFLUENT PIPE SHALL BE AT THE SAME ELEVATION UNLESS CONDITIONS ARE PROHIBITIVE TO THIS PRACTICE.

MH CONNECTION DESIGN GUIDE N.T.S.		PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.			NO.	DATE	REVISION
SHEET NO. 1 OF 1	DWG. NO. S.18 DATE: JULY 01, 2015	DWG. BY: FAYPWC APPROVED BY: J.E.G.	WATER RESOURCES ENGINEERING DEPARTMENT				

2015-S18 PENETRATION DETAIL.dwg

UTILITY CONSTRUCTION

DATE: 2/2/2016
TIME: 7:43:36 AM
DRN: B4490_UF_pen_D3K.dgn

Prepared by:

AECOM

AECOM TECHNICAL SERVICES OF NORTH CAROLINA, INC.
701 CORPORATE CENTER DRIVE, SUITE 475, RALEIGH, NC 27607
919-854-6200 919-854-6259 (fax)
F - 0342