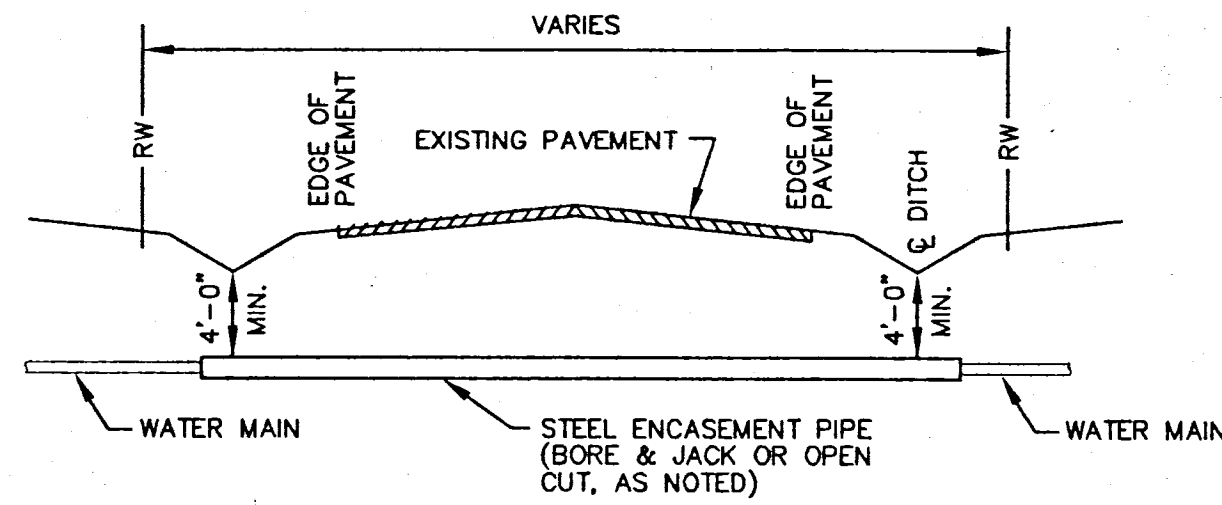
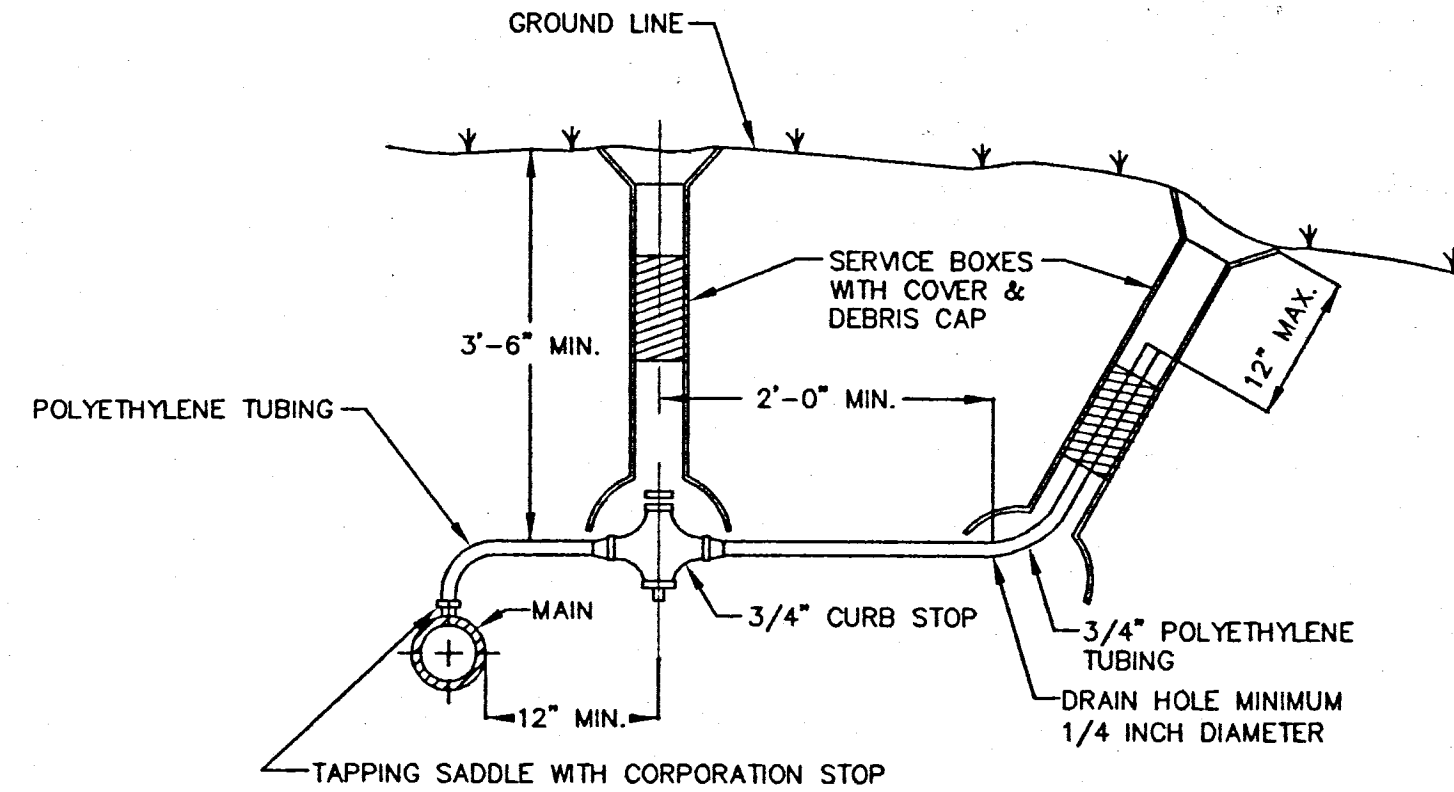


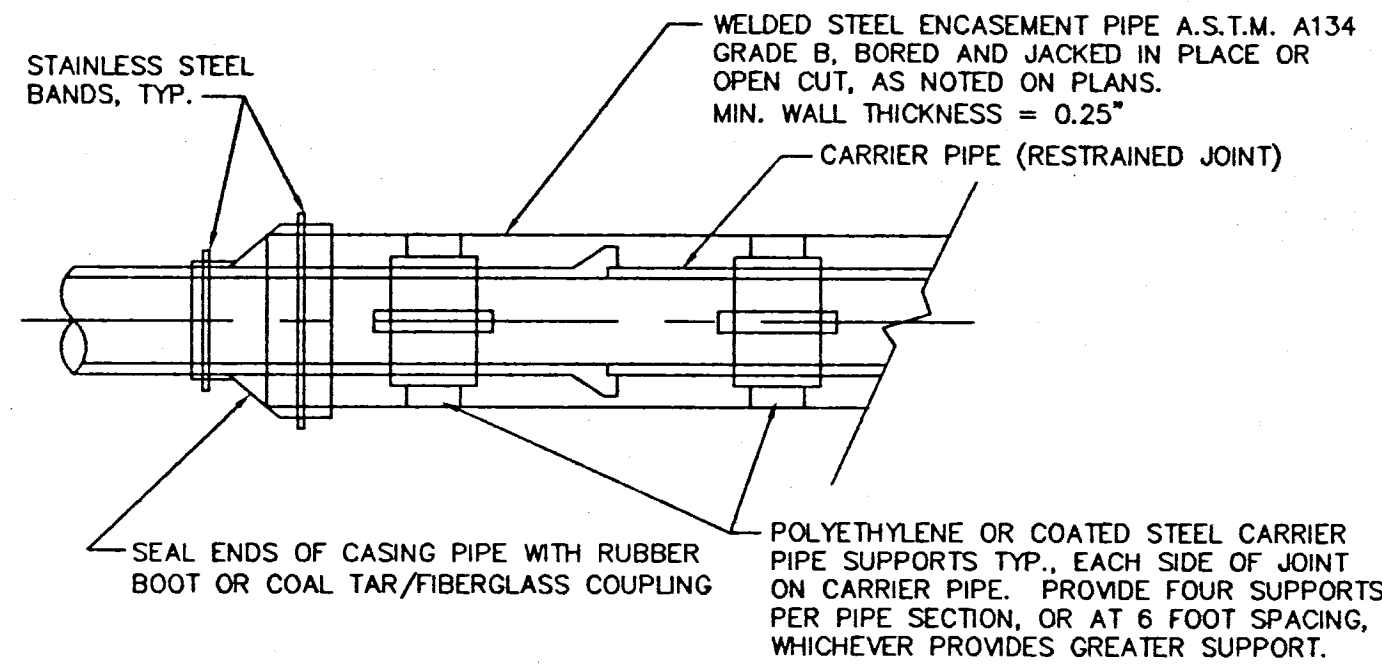


NOTE:
MINIMUM DISTANCE BETWEEN EDGE OF PAVEMENT AND BORE PIT OR RECEIVING PIT SHALL BE 12'. SHORTER DISTANCES ARE SUBJECT TO APPROVAL OF THE ENGINEER.

TYPICAL HIGHWAY CROSSING FOR WATER MAINS IN ENCASEMENT PIPE
SCALE: NONE



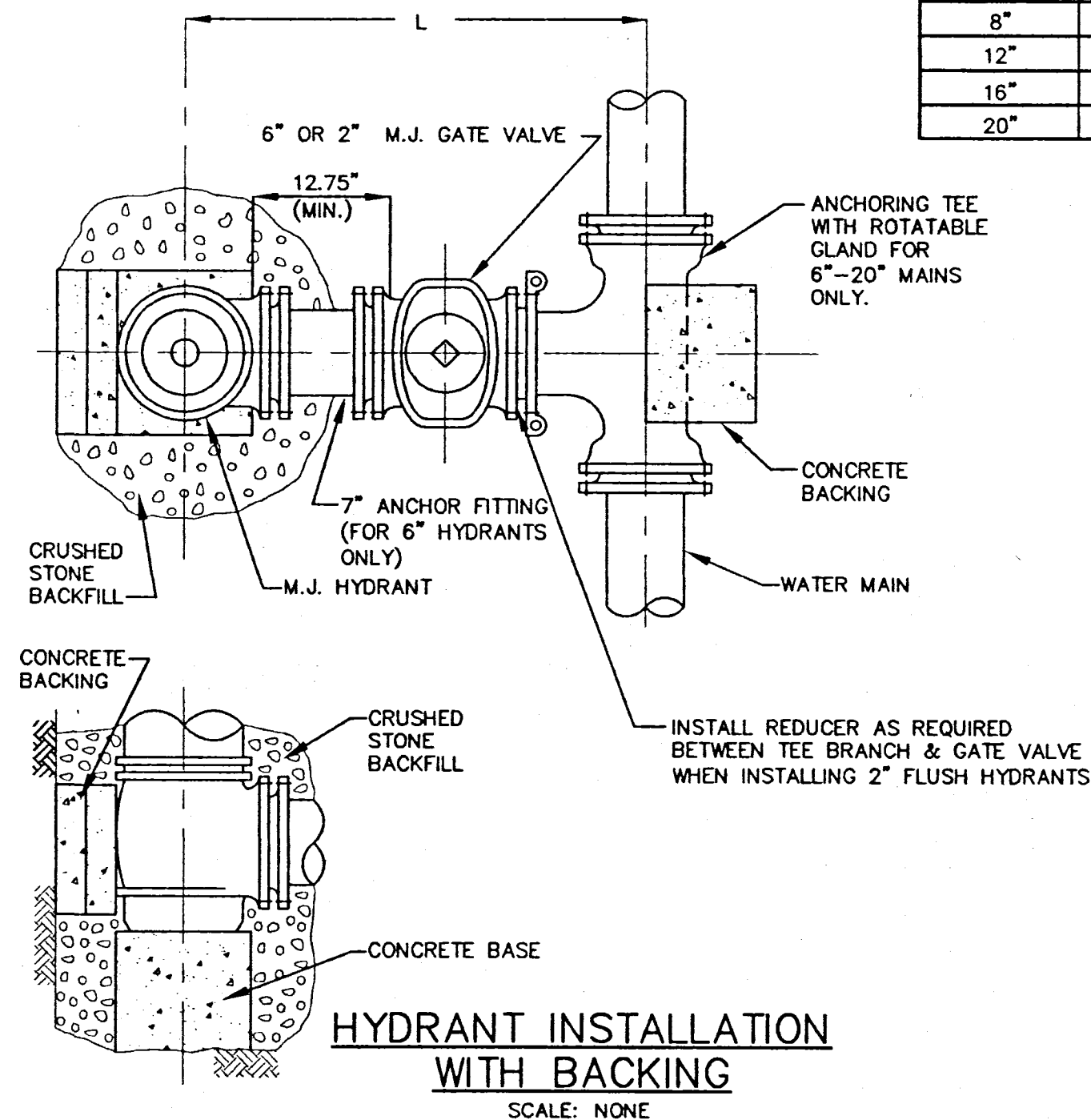
MANUAL AIR RELEASE ASSEMBLY
SCALE: NONE



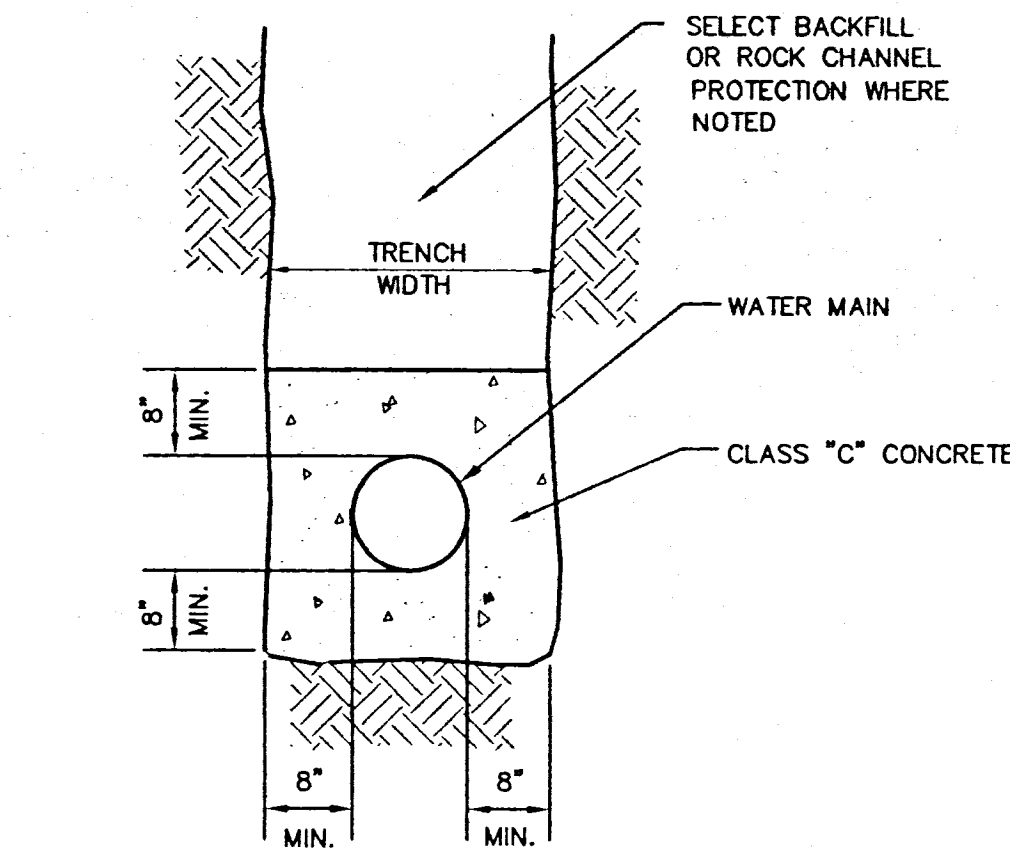
NOTE:
CONTRACTOR SHALL SUBMIT FOR APPROVAL DRAWINGS DETAILING THE TYPE OF AUGER STOP TO BE USED AT EACH BORE AND JACK LOCATION

ENCASEMENT PIPE DETAIL
SCALE: NONE

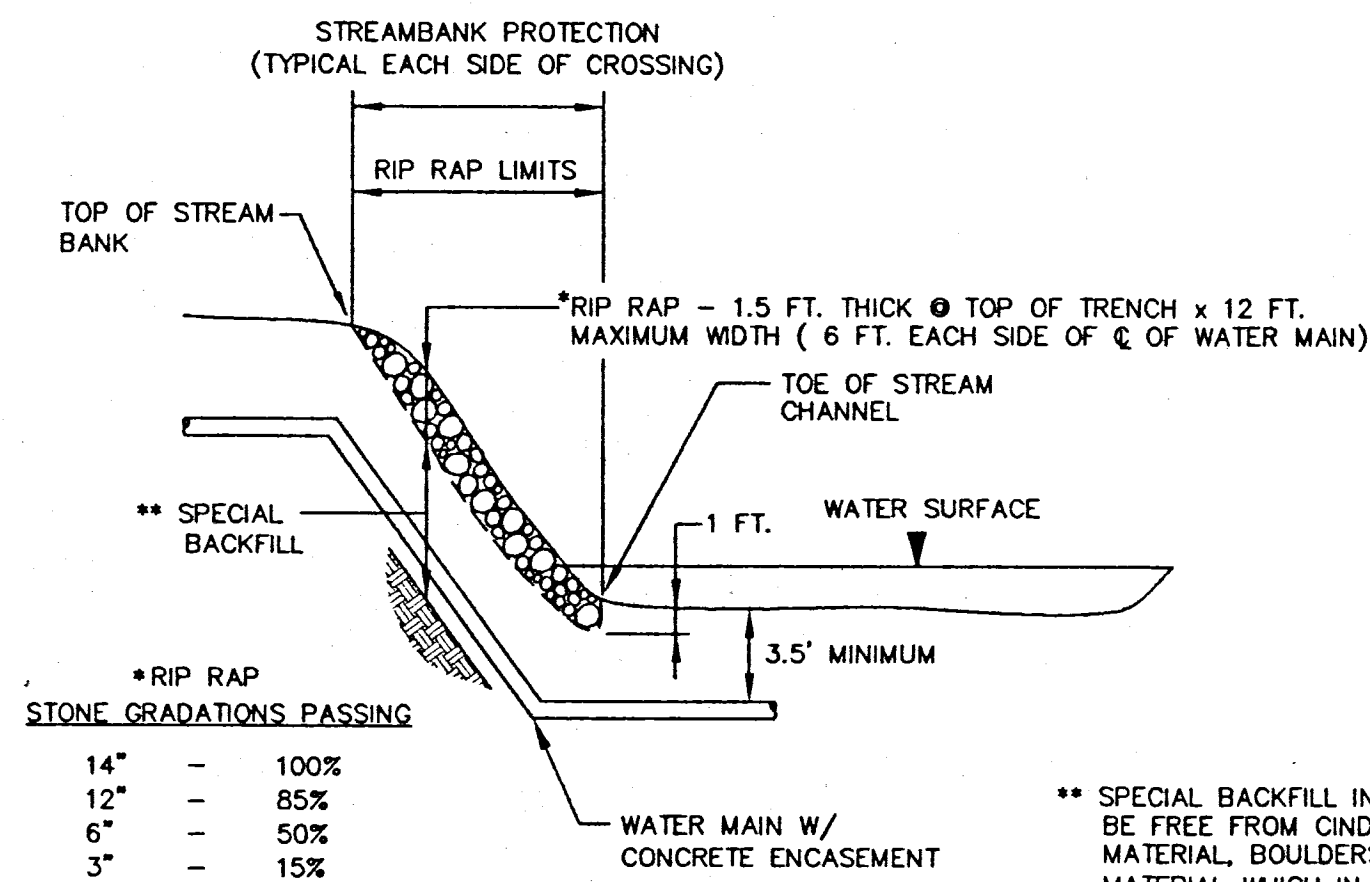
WATER MAIN	DIMENSION "L" (MINIMUM)
≤ 6"	35"
8"	36"
12"	38"
16"	42"
20"	43"



HYDRANT INSTALLATION WITH BACKING
SCALE: NONE

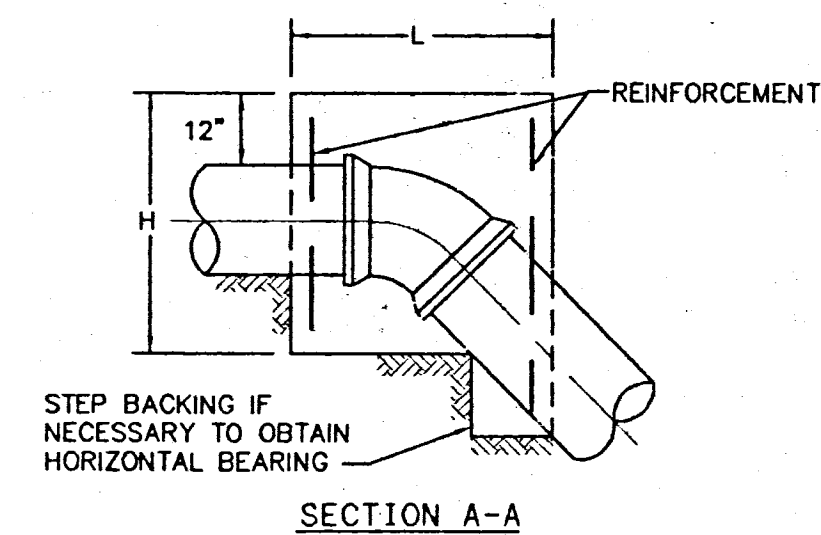
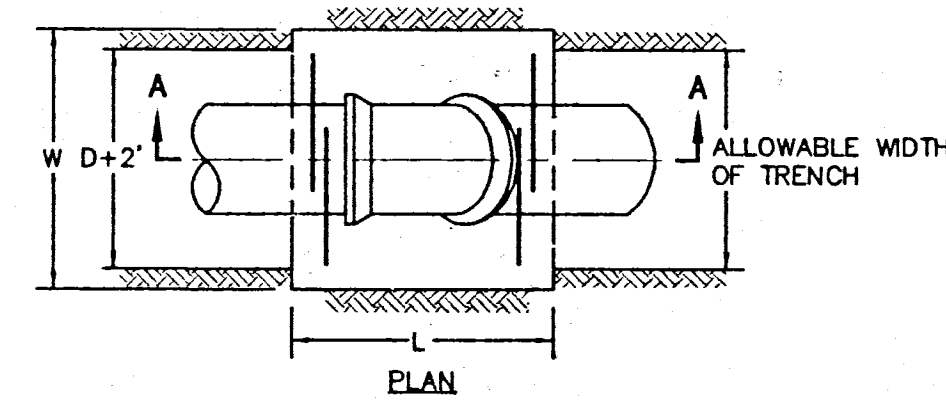


CONCRETE ENCASEMENT DETAIL
SCALE: NONE



STREAM BANK PROTECTION DETAIL
SCALE: NONE

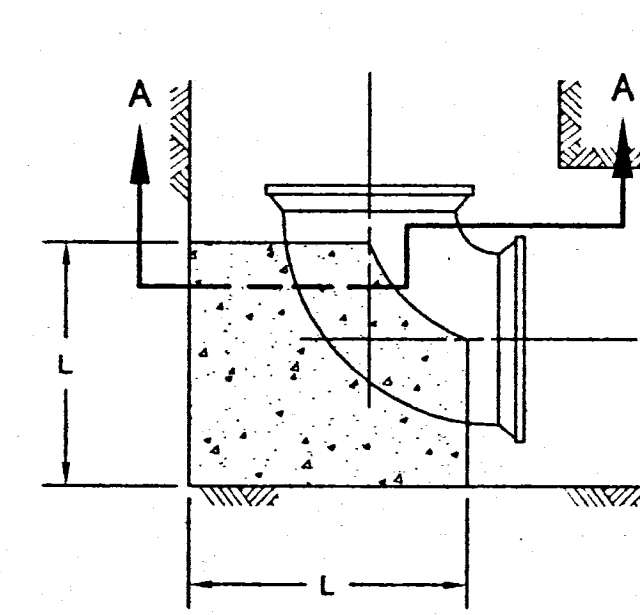
SIZE OF PIPE	DEGREE OF BEND								
	11 1/4°			22 1/2°			45°		
	L"	W"	H"	L"	W"	H"	L"	W"	H"
6" OR LESS	12	48	18	15	43	36	30	55	24
8"	12	63	24	18	57	34	36	57	33
12"	20	56	36	37	62	37	48	62	51
16"	31	65	38	60	65	39	65	65	65
20"	45	70	40	56	70	60	72	77	78
24"	41	76	54	67	74	69	88	84	84



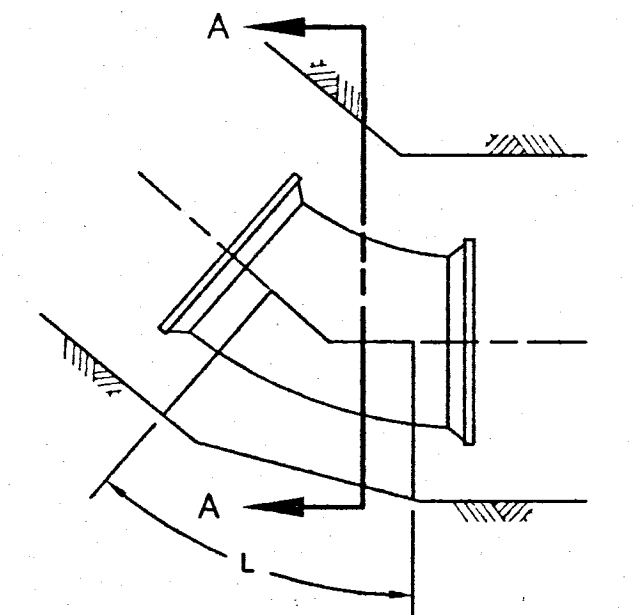
CONCRETE BACKING FOR VERTICAL BENDS
SCALE: NONE

- BACKING DESIGNED FOR 3000 POUNDS PER SQUARE FOOT SOIL BEARING AND 150 POUNDS PER SQUARE INCH INTERNAL PRESSURE, WATER MAINS.
- PROVIDE MINIMUM CONCRETE REINFORCEMENT OF 2 PAIR OF TWO #5 "U" BARS AT 12" C/C.
- CENTER BACKING ON BEND.
- THESE SAME DIMENSIONS WILL BE USED FOR SHORT BODY FITTINGS.
- FOR BACKING FOR SDR 17 PVC PIPE, ADD 2" TO EACH DIMENSION GIVEN ABOVE.

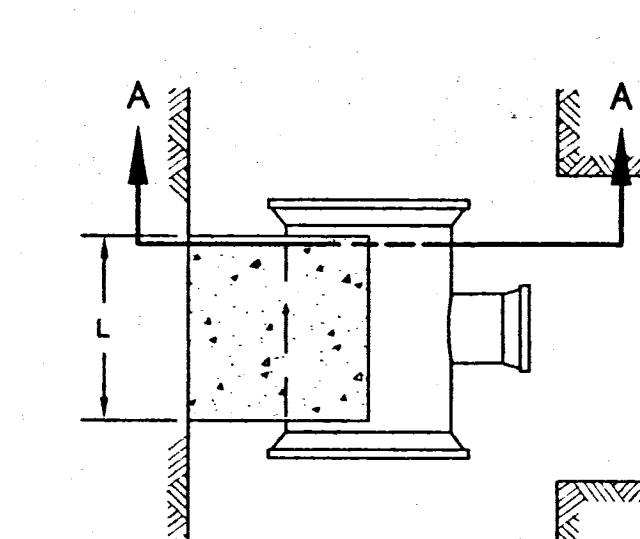
SIZE OF PIPE	DEGREE OF BEND								RUN	BRANCH															
	11 1/4°		22 1/2°		45°		90°			6"		8"		12"		16"		20"		24"					
	L"	D"	L"	D"	L"	D"	L"	D"		L"	D"	L"	D"	L"	D"	L"	D"	L"	D"	L"	D"				
6" OR LESS	12	6	12	8	20	12	18	13	6" OR LESS	18	13														
8"	12	9	16	16	24	13	25	18	8"	18	13	23	18												
12"	15	13	22	18	36	30	32	30	12"	18	13	23	18	38	24										
16"	19	21	32	27	36	39	41	39	16"	14	16	20	20	36	25	49	32								
20"	25	24	30	32	49	49	50	50	20"	11	21	18	22	35	26	46	34	60	42						
24"	27	30	39	42	60	54	58	61	24"	9	25	15	27	30	30	42	38	54	46	68	52				



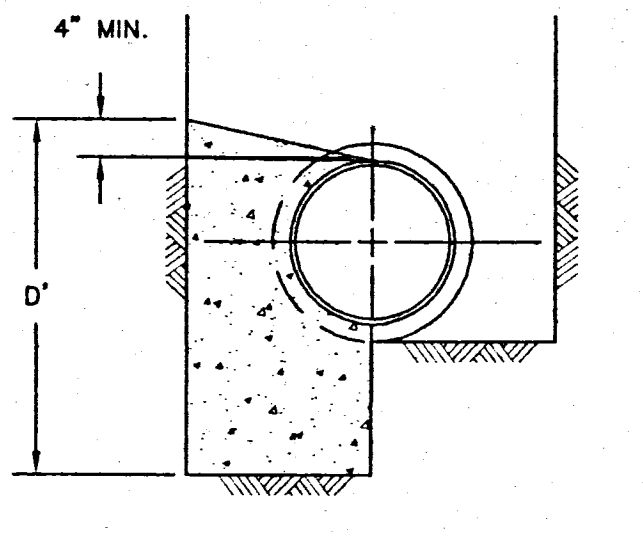
90° BENDS



BENDS LESS THAN 90°



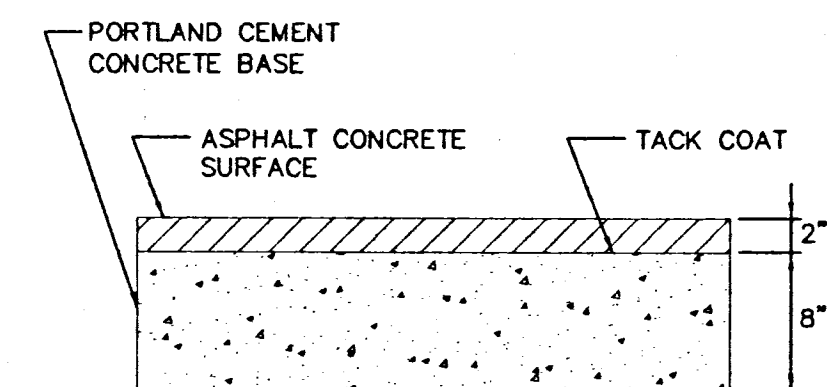
TEES



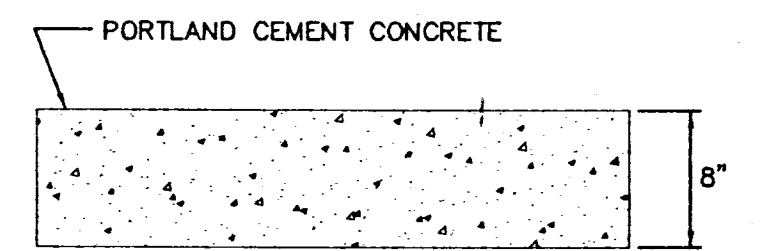
SECTION A-A

CONCRETE BACKING FOR HORIZONTAL BENDS & TEES
SCALE: NONE

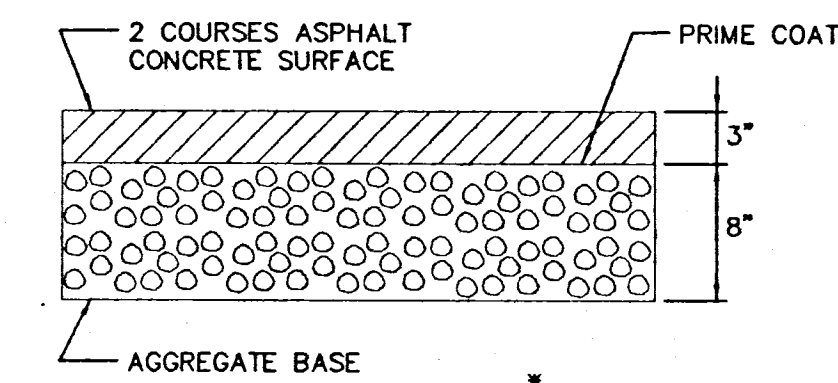
- BACKING DESIGNED FOR 3000 POUNDS PER SQUARE FOOT SOIL BEARING AND 150 POUNDS PER SQUARE INCH INTERNAL PRESSURE, WATER MAINS.
- PROVIDE CONCRETE REINFORCEMENT AS NECESSARY.
- THESE SAME DIMENSIONS WILL BE USED FOR SHORT BODY FITTINGS.
- FOR BACKING FOR 8" OR SMALLER SDR 17 PVC PIPE, ADD 2" TO EACH DIMENSION GIVEN ABOVE.



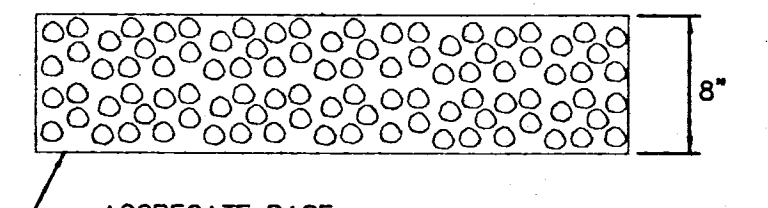
TYPE A*



TYPE B*



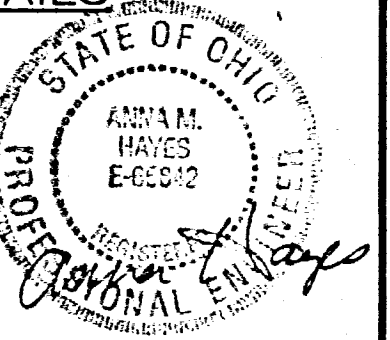
TYPE C*



TYPE D*

PAVEMENT AND DRIVE REPLACEMENT DETAILS
SCALE: NONE

* PAVEMENT TYPES INDICATED RELATE TO PAVEMENT REPLACEMENT LISTED IN THE PRICES TO INCLUDE OF THE SPECIFICATIONS (NOT ODOT PAVEMENT TYPES)

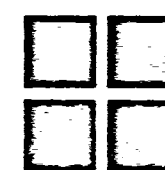


P:\PR2541\CADD\DETAILS.DWG 1-15-03 3:02:01 pm DYE

NO.	REVISIONS	DATE	BY	CHK.
1				
2				
3				
4				
5				

Burgess & Niple, Limited

Parkersburg, WV



BURGESS & NIPLE

**MAYSVILLE REGIONAL WATER DISTRICT
WATER DISTRIBUTION SYSTEM IMPROVEMENTS
LENT ROAD
CONTRACT 03-1**

JOB NO. 32541
DESIGNED BY: AMH
DRAWN BY: DRD
CHECKED BY: LES
APPROVED BY: LES
DATE: DEC 2002

MISCELLANEOUS DETAILS

SCALE:

NO SCALE

SHEET NO.

8

OF

8