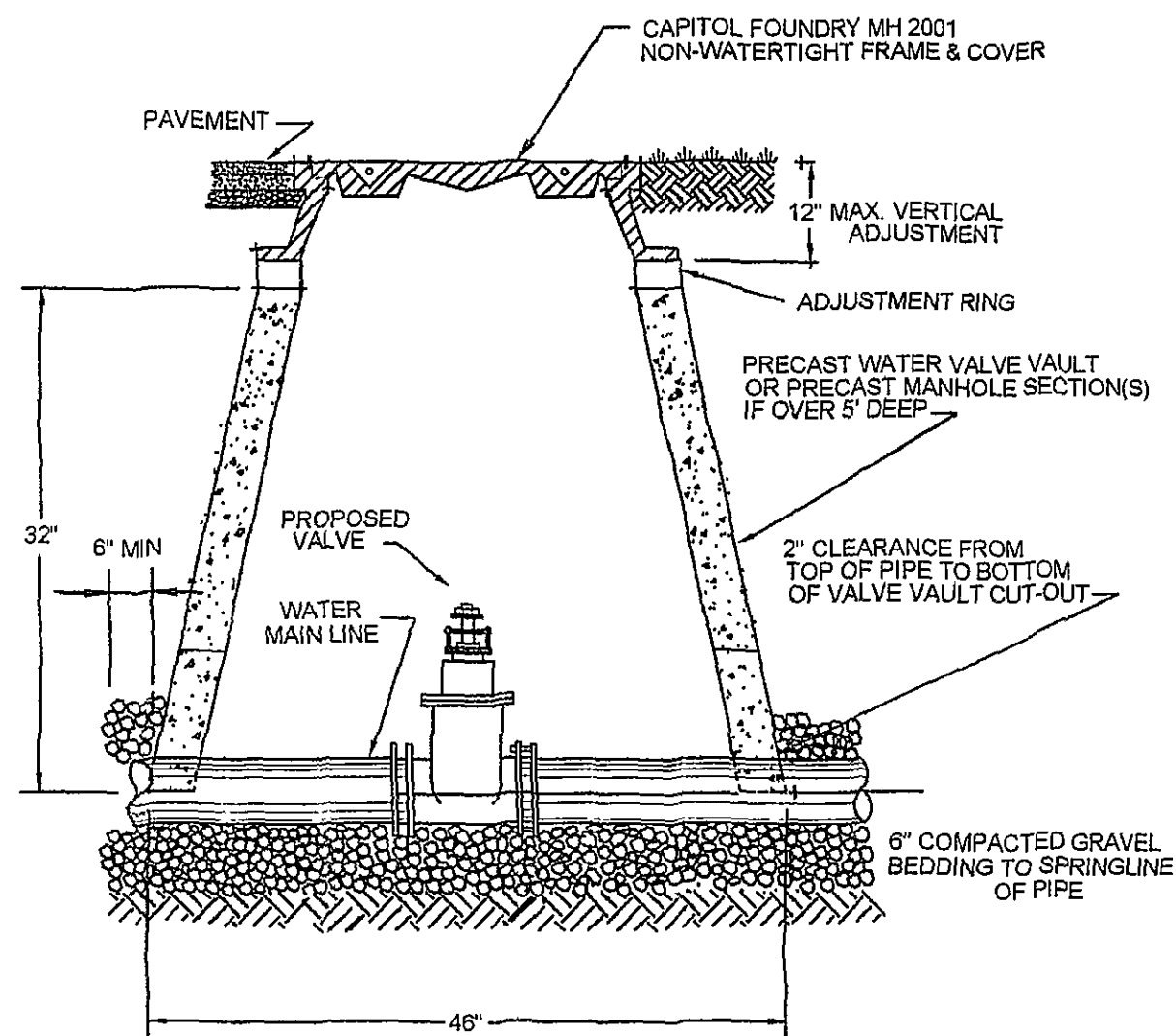
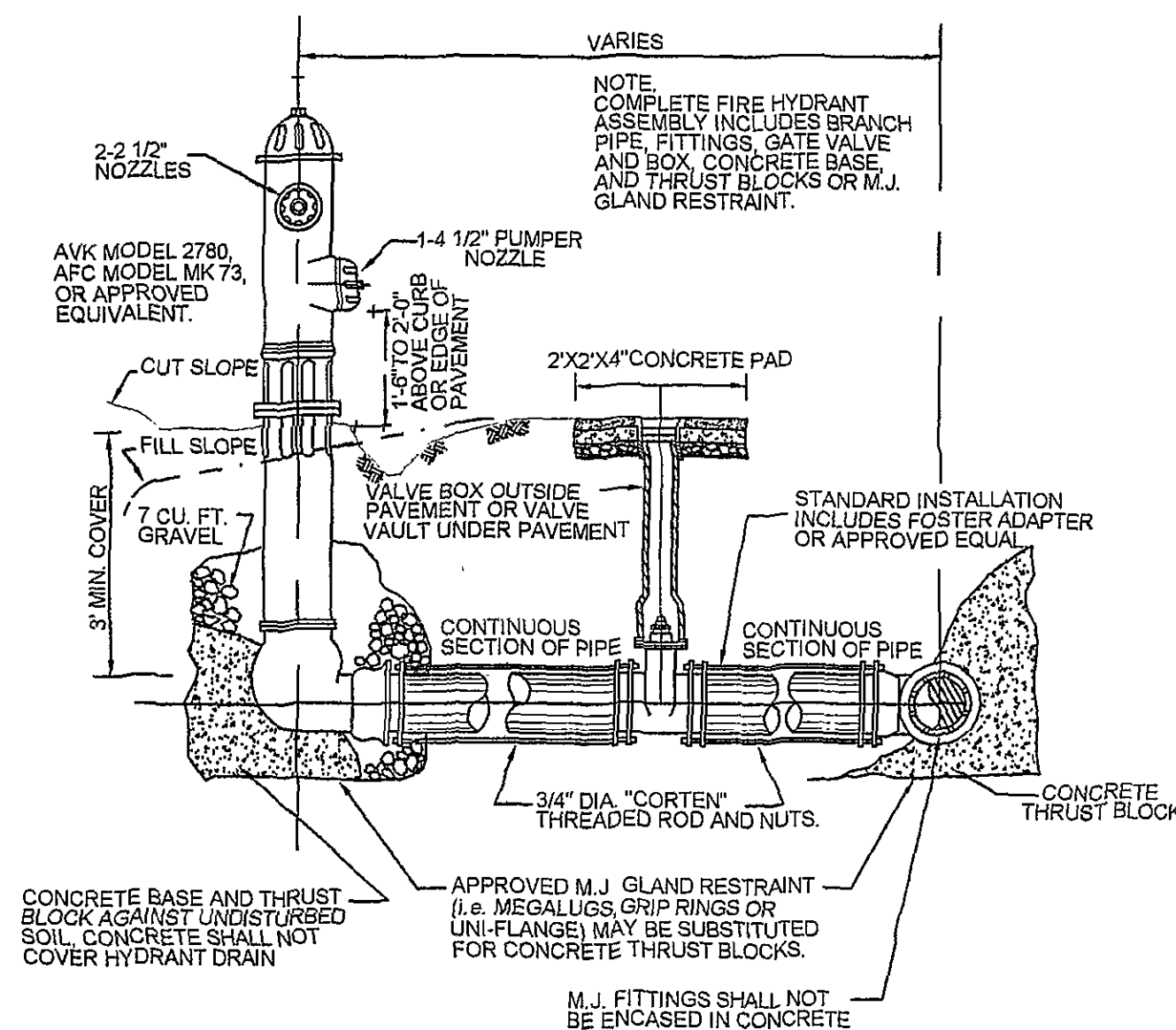


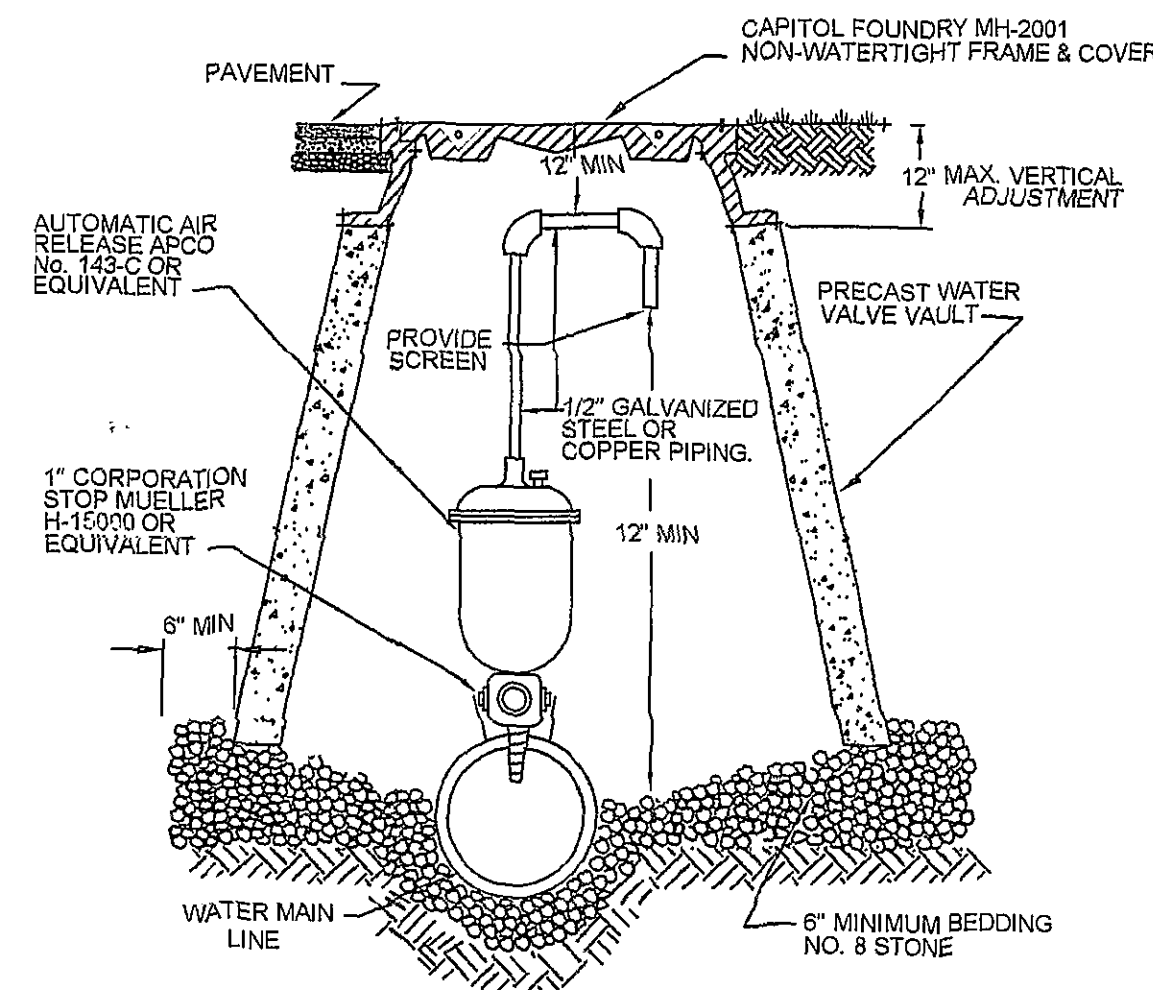


**WATER LINE VALVE
INSTALLATION**
NOT TO SCALE

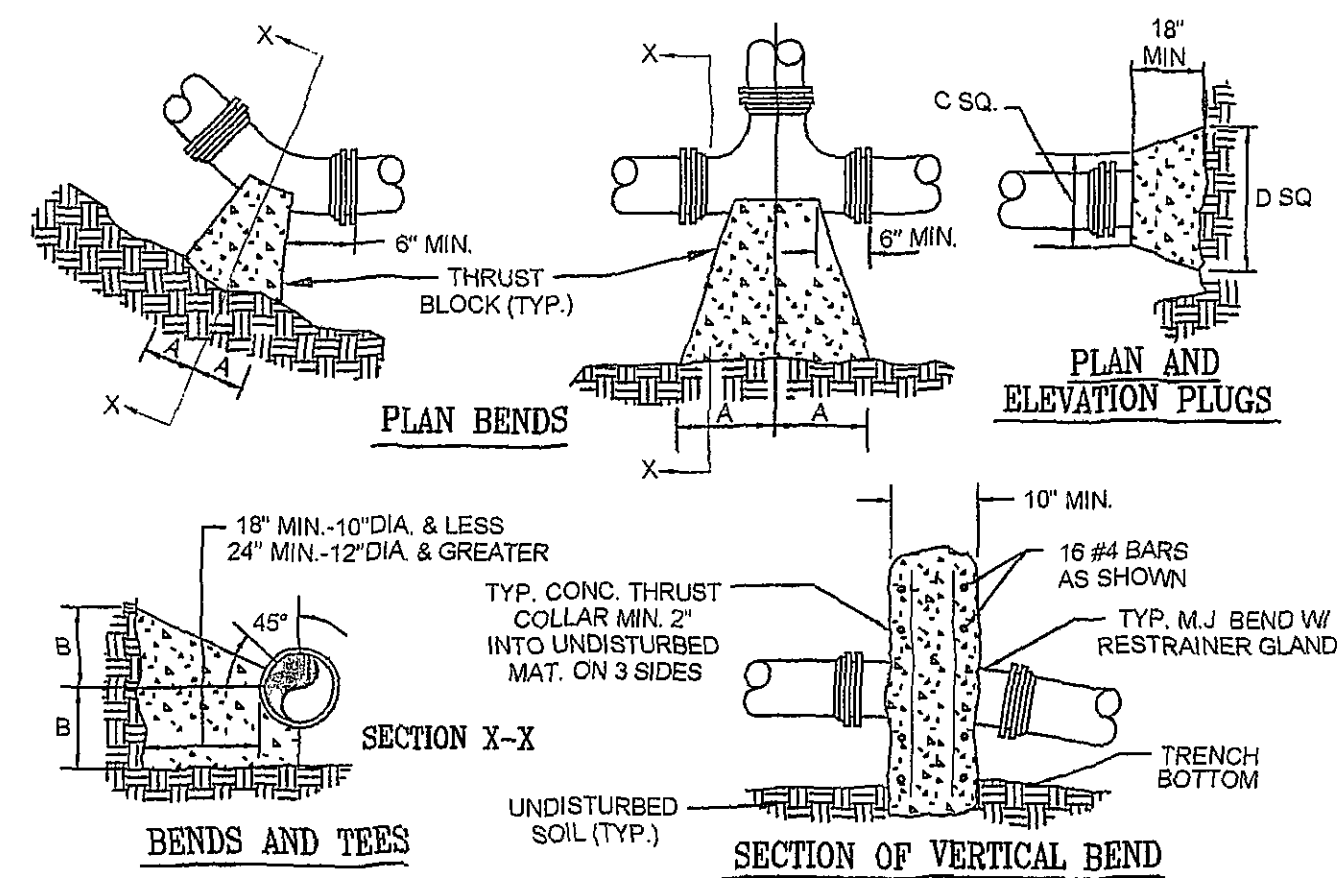
- NOTES:
1. MAIN BODY OF HYDRANT MUST BE PAINTED SILVER WITH RED REFLECTIVE CAPS AND BONNET
2. FIRE HYDRANT SHALL BE INSTALLED 2' MIN. AND 4' MAX. FROM BACK OF CURB OR 6' MIN. AND 12' MAX. WHEN CURB IS NOT PRESENT. FIRE HYDRANT TO BE INSTALLED WITHIN RIGHT-OF-WAY OR EASEMENT LINE.
3. AREA AROUND HYDRANT AT A RADIUS OF 4' TO BE LEVEL AND UNDISTURBED
4. WATERPROOF BAGS SHALL BE PLACED OVER ALL NEWLY INSTALLED FIRE HYDRANTS
5. HIGH PRESSURE (OVER 120 PSI) REQUIRES THE USE ALL 3 RESTRAINTS



**FIRE HYDRANT
ASSEMBLY**
NOT TO SCALE



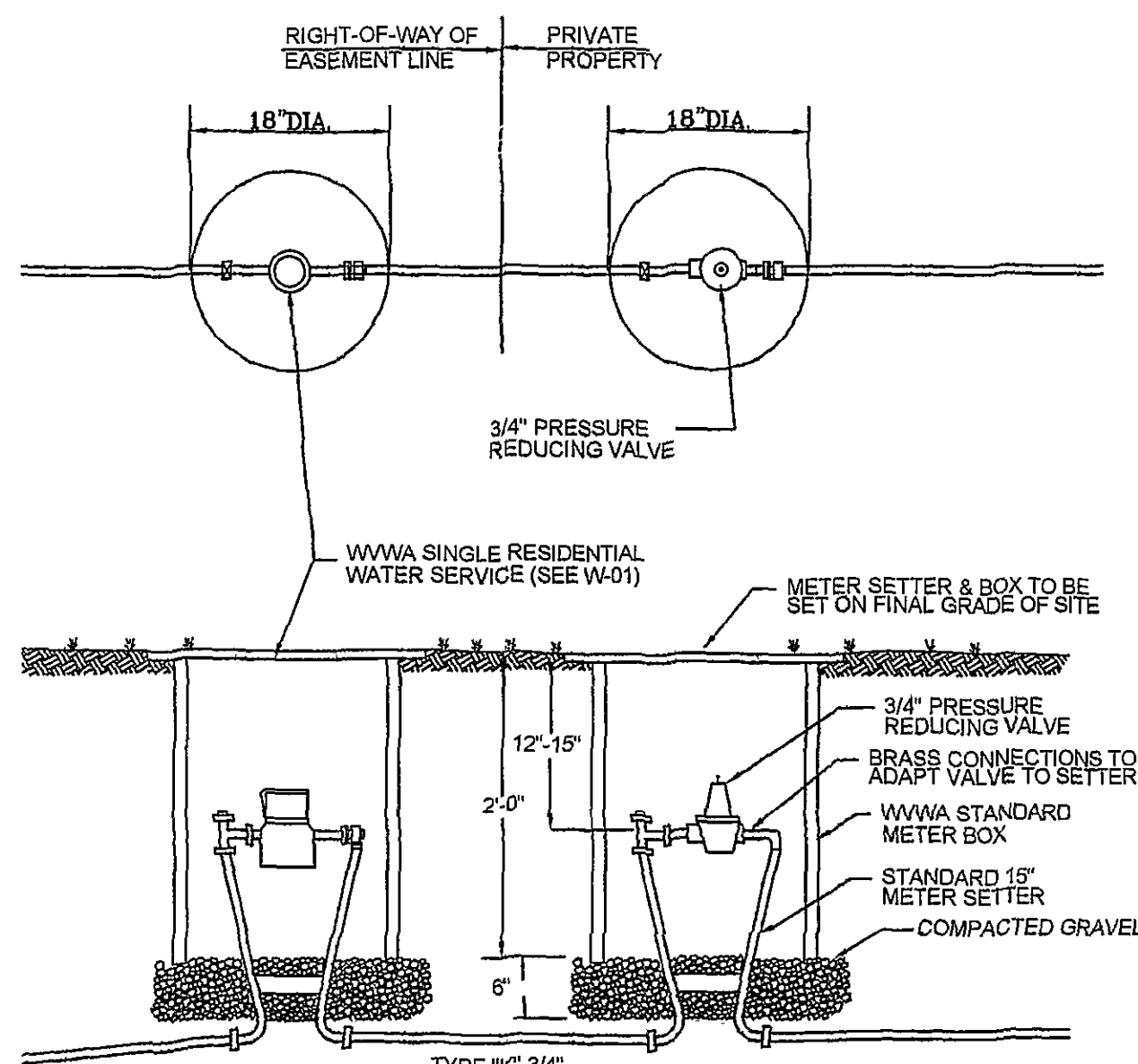
**AUTOMATIC AIR
RELEASE ASSEMBLY**
NOT TO SCALE



- NOTES:
1. FOR VERT. BEND DOWN IN EXCESS OF 11 1/4" BEND, ANCHORAGE SHALL BE DESIGNED BY ENGINEER.
2. FOR VERT. BEND UPWARD, BLOCKING TO BE SIMILAR TO THAT FOR HORIZ. BEND.
3. GLANDS & BOLTS SHALL BE PROTECTED FROM CONC. BY PLASTIC SHEETING WHEN POURING THRUST BLOCKS.
4. ALL THRUST BLOCK & SUPPORT CONC. SHALL BE 3000 PSI READY MIX CONC.
5. THRUST BLOCKS WITH "B" DIMENSION GREATER THAN 30" SHALL HAVE THE RESTRAINED PIPE INSTALLED WITH A MINIMUM OF 4' OF COVER

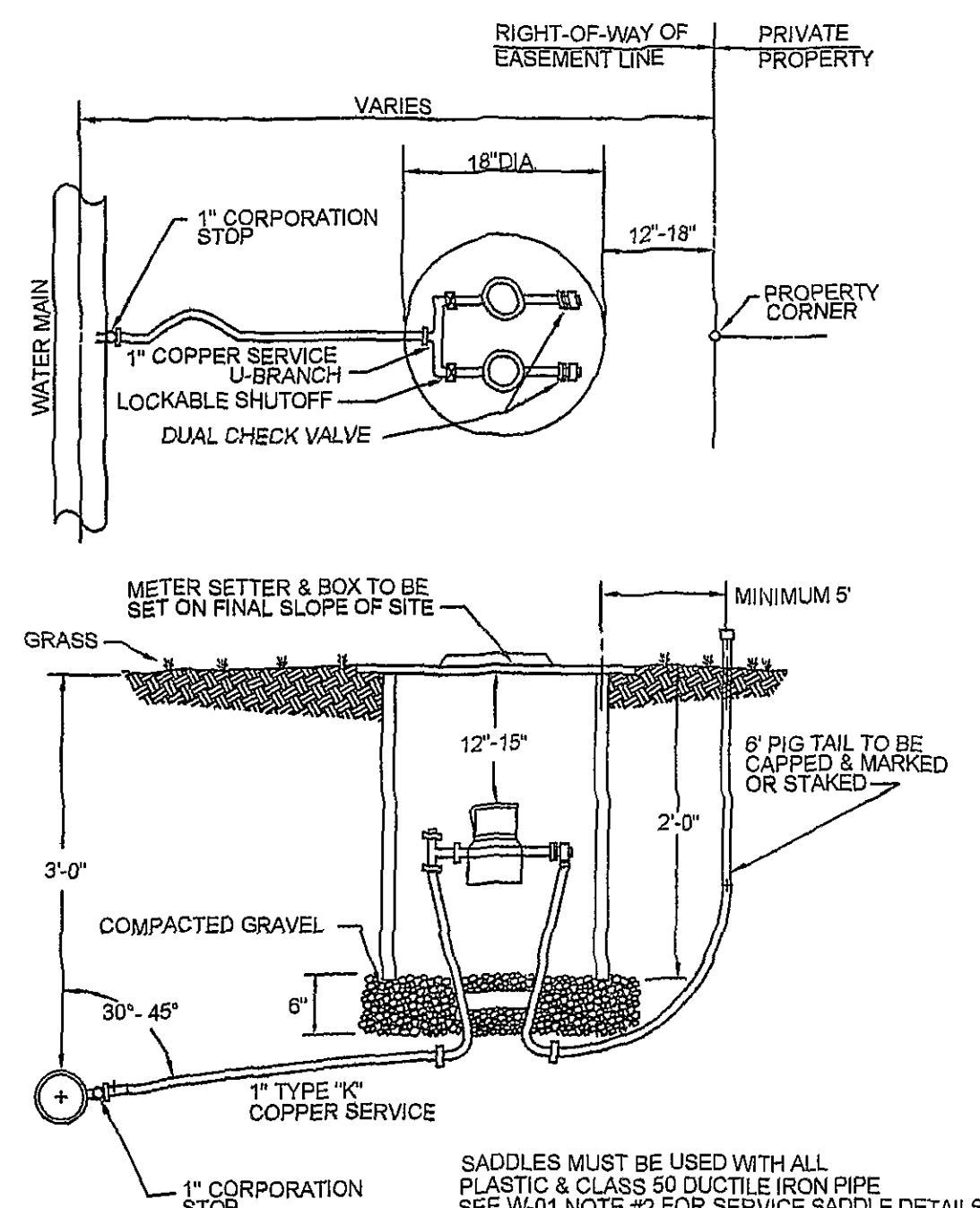
PIPE SIZE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	TEE	PLUG
4"	8"	8"	8"	8"	8"	8"
6"	10"	10"	10"	10"	10"	10"
8"	12"	12"	12"	12"	12"	12"
10"	14"	14"	14"	14"	14"	14"
12"	16"	16"	16"	16"	16"	16"
14"	18"	18"	18"	18"	18"	18"
16"	20"	20"	20"	20"	20"	20"
18"	22"	22"	22"	22"	22"	22"
20"	24"	24"	24"	24"	24"	24"
22"	26"	26"	26"	26"	26"	26"
24"	28"	28"	28"	28"	28"	28"
26"	30"	30"	30"	30"	30"	30"
28"	32"	32"	32"	32"	32"	32"
30"	34"	34"	34"	34"	34"	34"

**THRUST BLOCK
CONSTRUCTION**
NOT TO SCALE

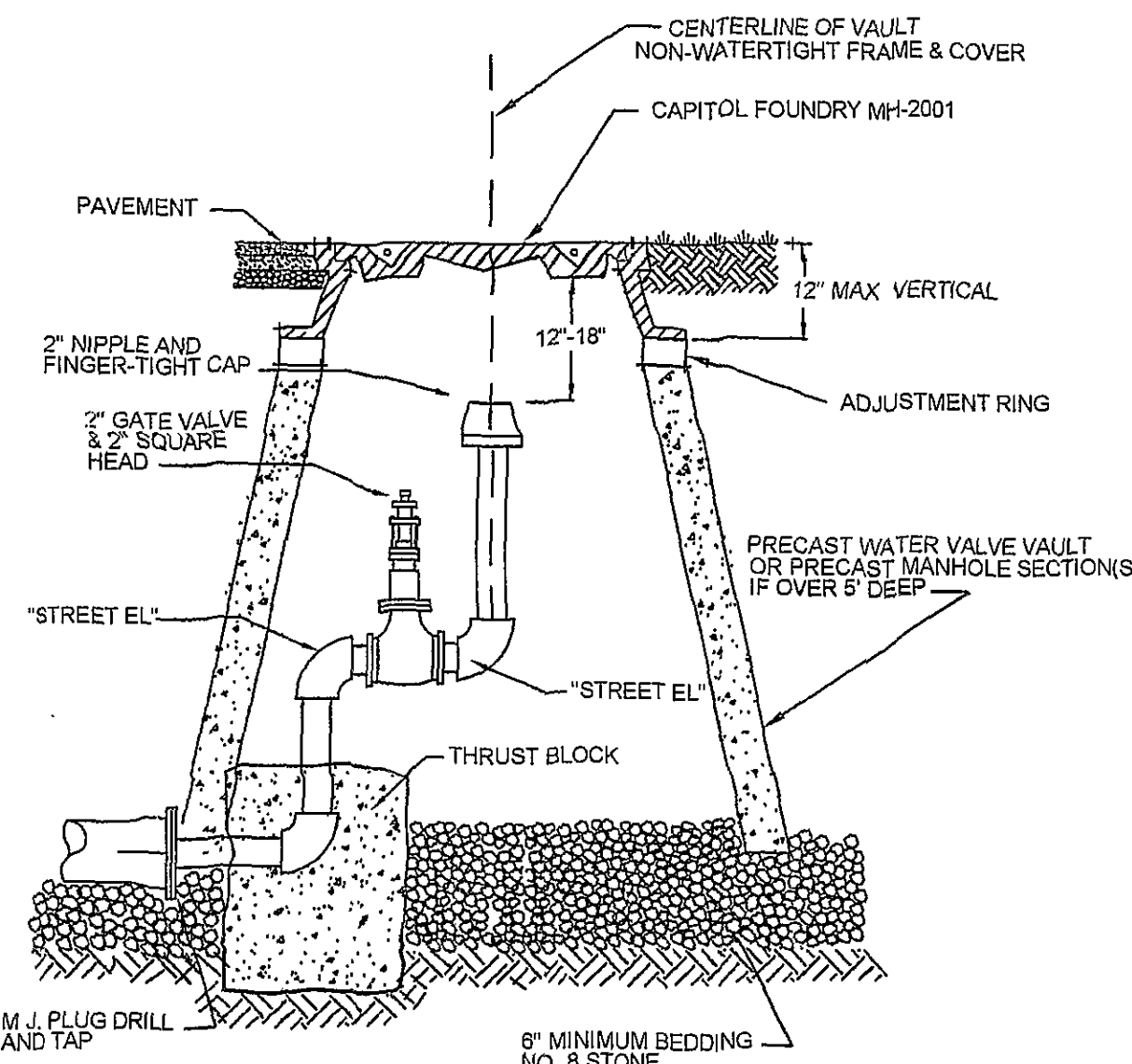


**TYPE "B"
SINGLE RESIDENTIAL
WATER SERVICE**
(LINE PRESSURE UNDER 80 TO 120 PSI)

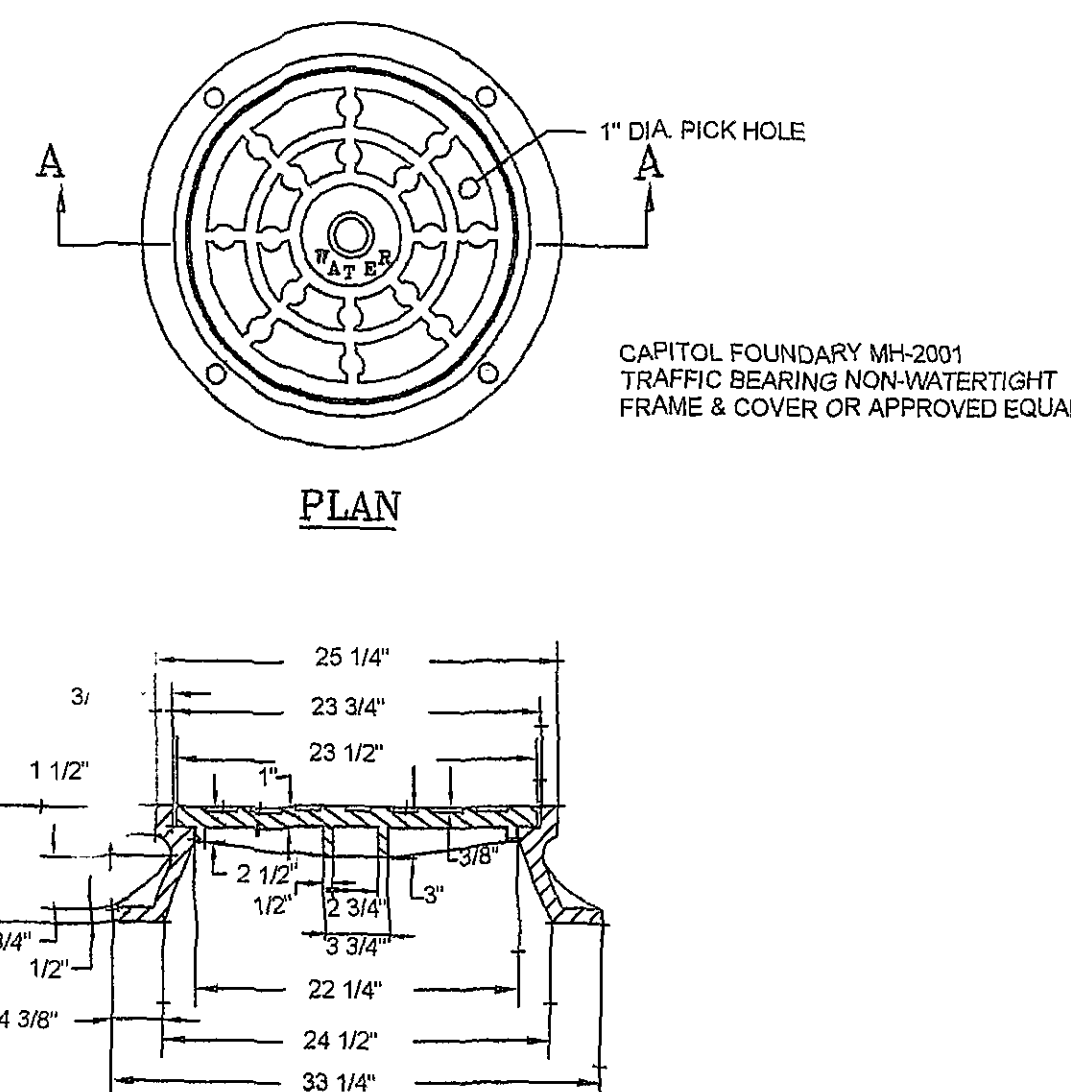
1. SETTER TO BE A.Y. McDONALD #20-215 WOLL 33, FORD VEH72-15W-1133 OR APPROVED EQUAL
2. METER BOX MUST BE MID-STATES PLASTICS, INC. PLASTIC BOX WITH FORD A32-7 (ELECTRONIC READ LID) OR A.Y. McDONALD MODEL 74M32C-7C CAST IRON BASE & COVER OR APPROVED EQUAL
3. CORPORATION STOP MUST BE FORD F1000-46 OR APPROVED EQUAL



**DOUBLE RESIDENTIAL
WATER SERVICE**
NOT TO SCALE

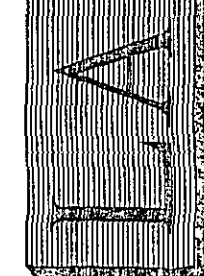


**PERMANENT END
OF LINE**
NOT TO SCALE



**MANHOLE FRAME
AND COVER**
NOT TO SCALE

LUMSDEN ASSOCIATES, P.C.
ENGINEERS-SURVEYORS-PLANNERS
ROANOKE, VIRGINIA



COMMONWEALTH OF VIRGINIA
9-21-05
B. LEE
HENDERSON
Professional Engineer
No. 17591

WATER DETAILS

"THE RESERVE"
PREPARED FOR
BARON ENTERPRISES
WINDSOR HILLS MAGISTERIAL DISTRICT
ROANOKE COUNTY, VIRGINIA

REVISIONS		DESCRIPTION							
NO.	DATE								
1									
2									
3									
4									
5									

DATE: SEPTEMBER 21, 2005

SCALE: NO SCALE

COMMISSION NO: 04-026

CADD FILE: 040261-01.dwg

SHEET 9 OF 11