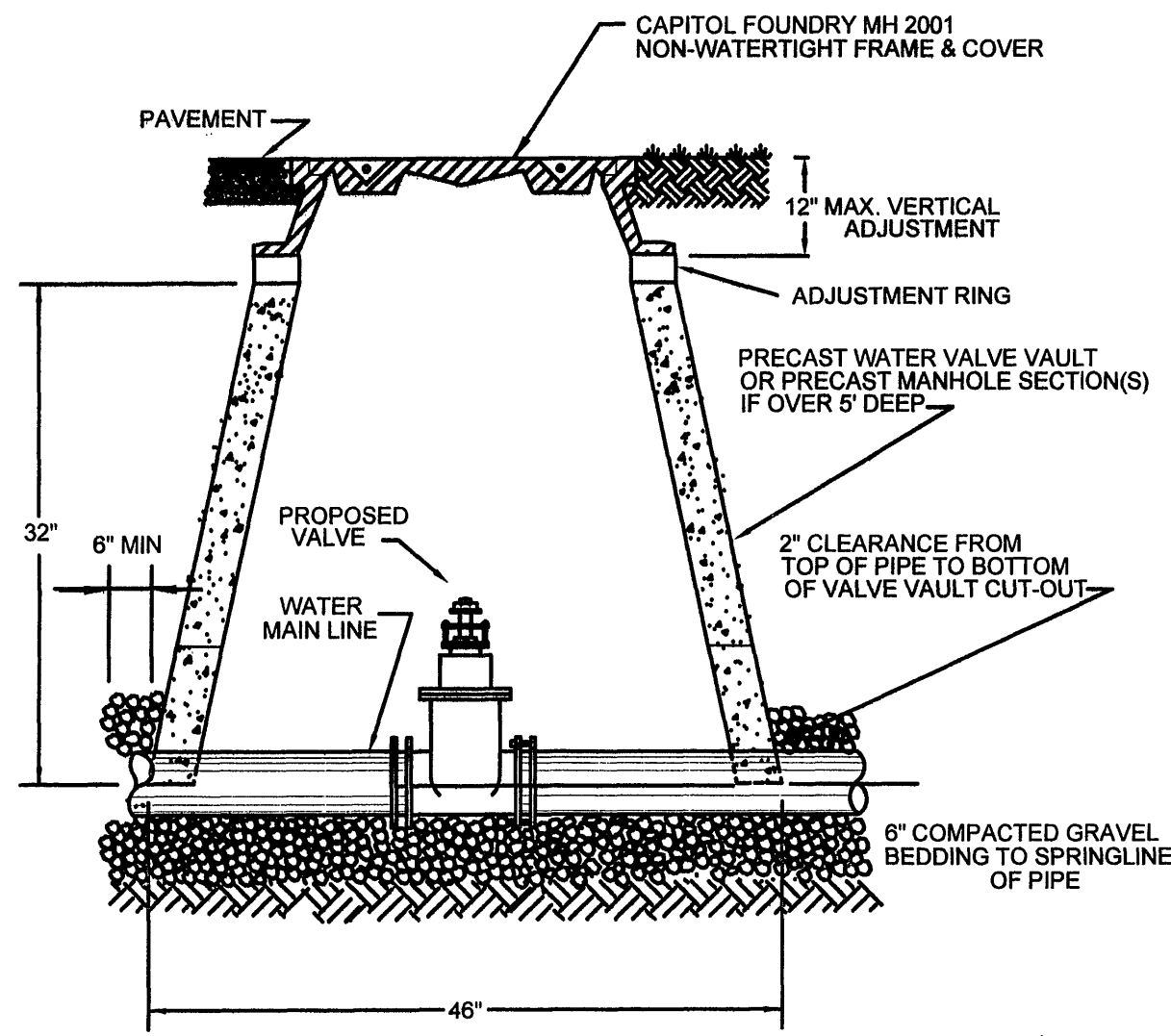
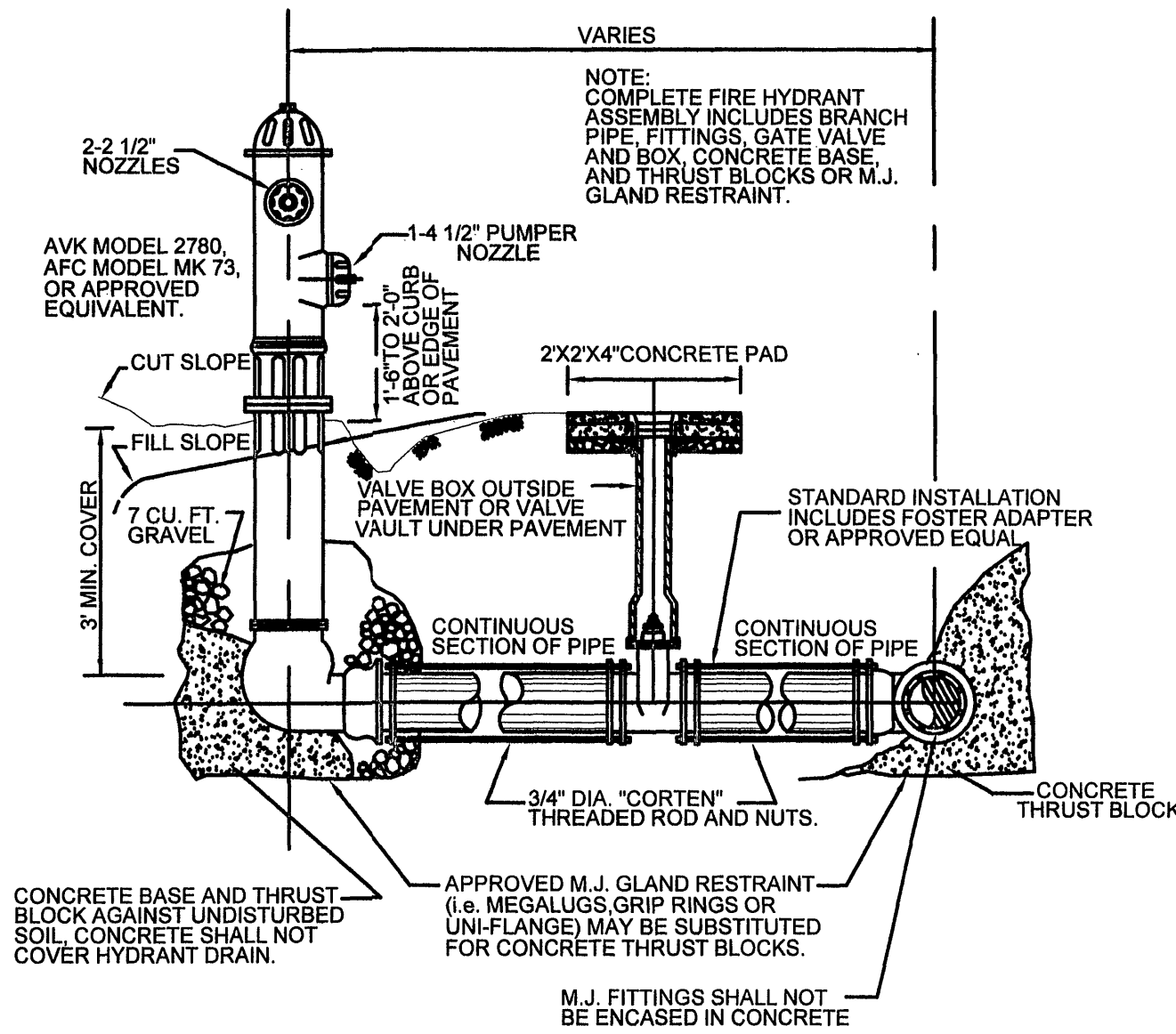


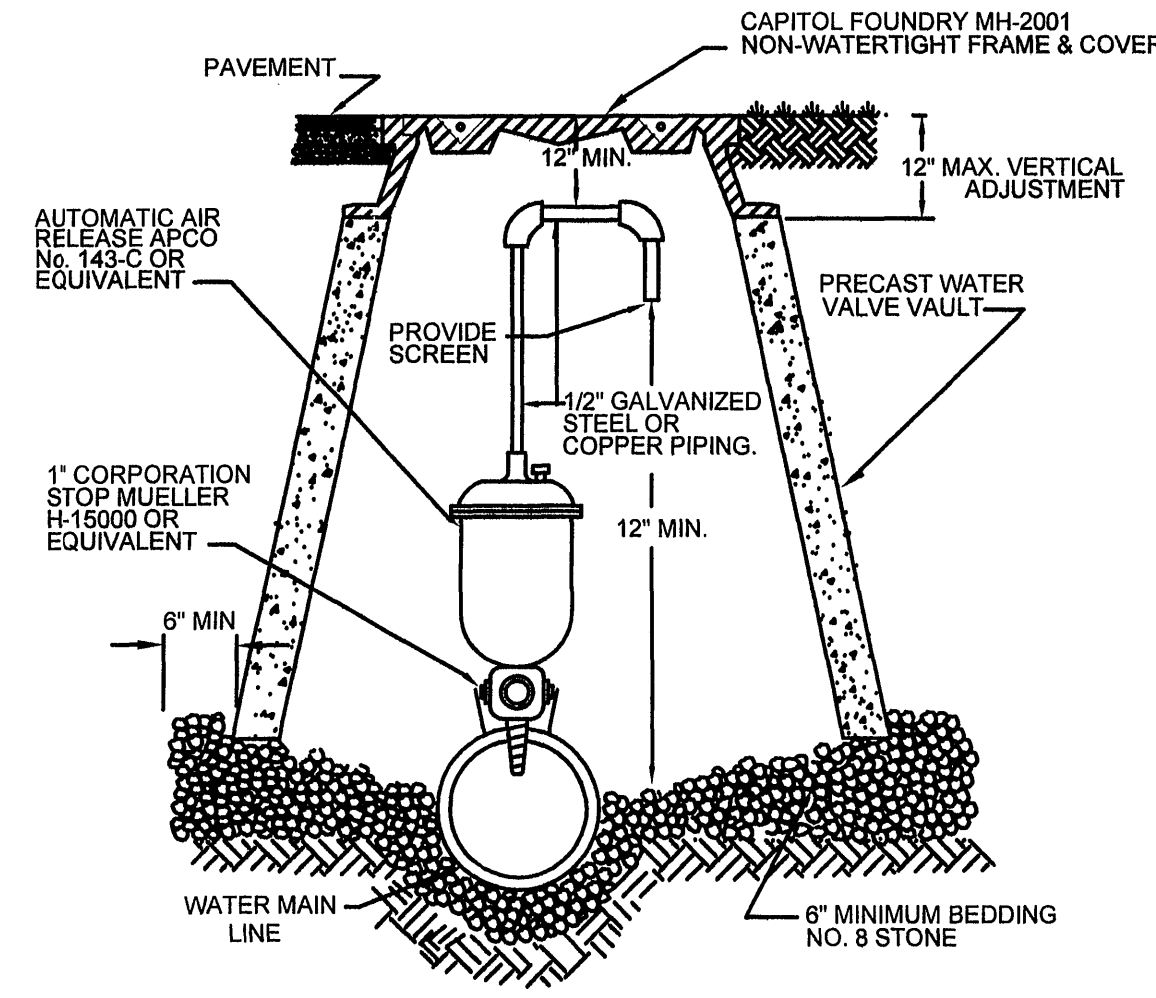


**WATER LINE VALVE
INSTALLATION**
NOT TO SCALE

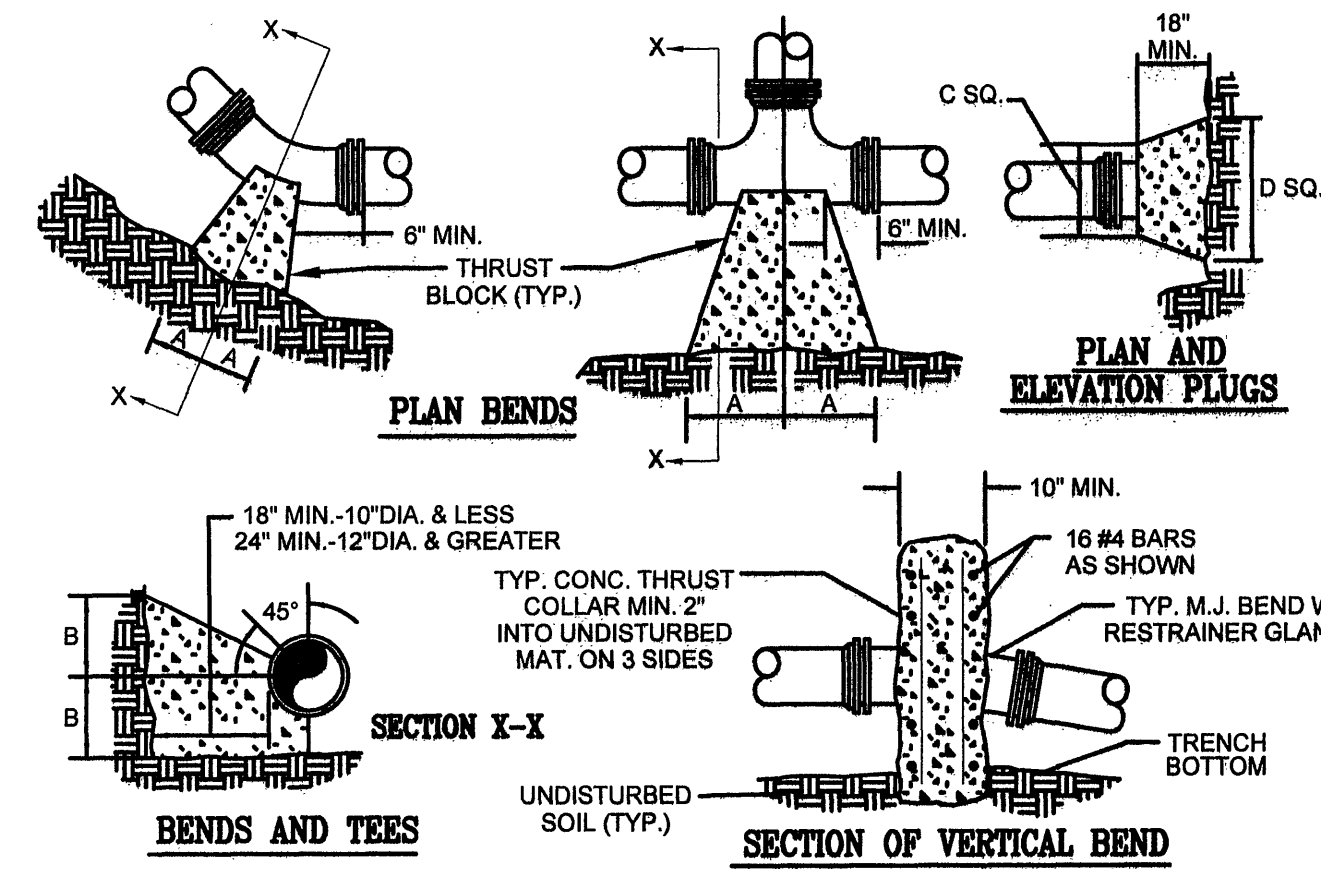
- NOTES:
1. MAIN BODY OF HYDRANT MUST BE PAINTED SILVER WITH RED REFLECTIVE CAPS AND BONNET.
 2. FIRE HYDRANT SHALL BE INSTALLED 2' MIN. AND 4' MAX. FROM BACK OF CURB OR 6' MIN. AND 12' MAX. WHEN CURB IS NOT PRESENT. FIRE HYDRANT TO BE INSTALLED WITHIN RIGHT-OF-WAY OR EASEMENT LINE.
 3. AREA AROUND HYDRANT AT A RADIUS OF 4' TO BE LEVEL AND UNOBSTRUCTED.
 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

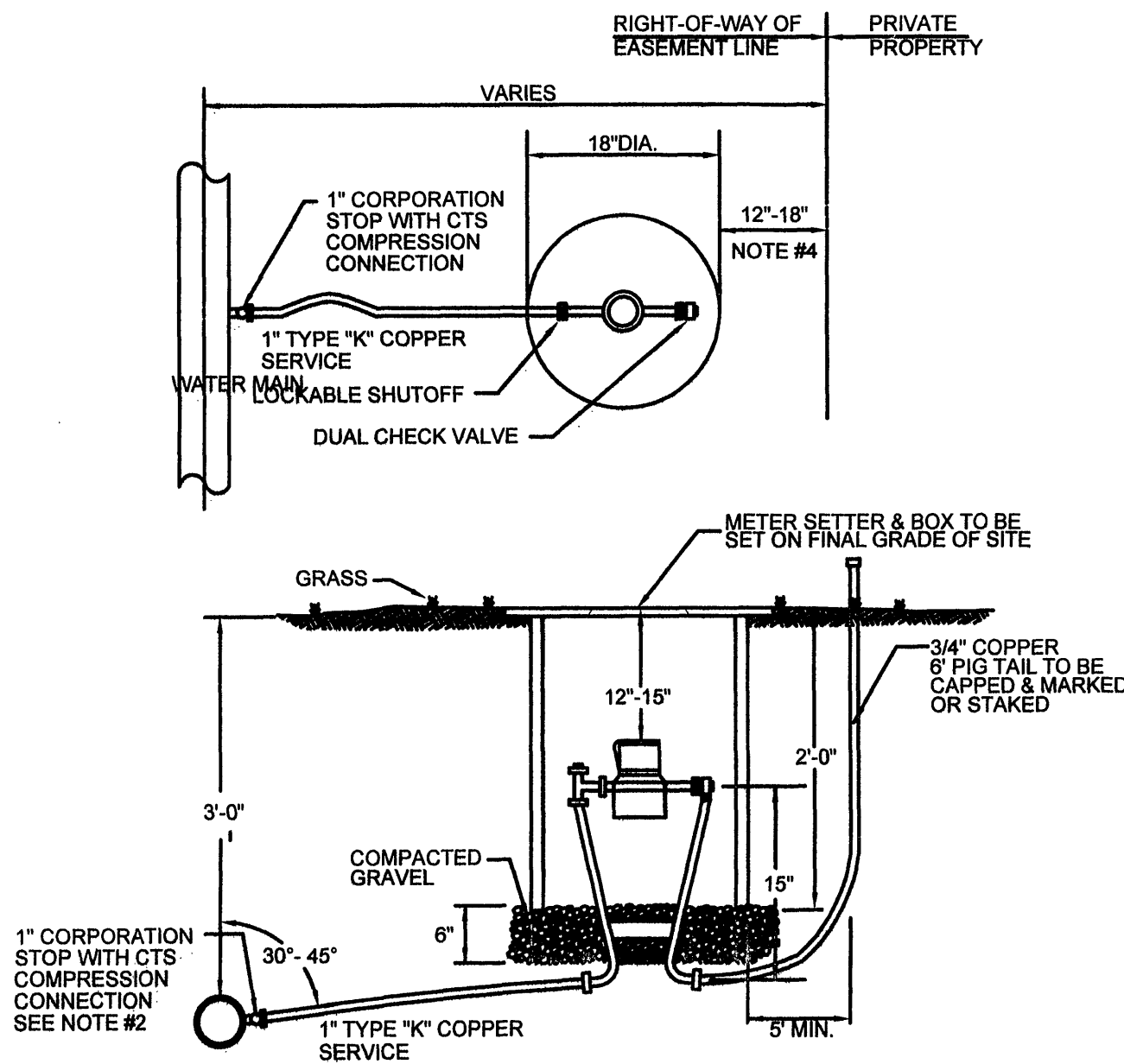


- NOTES:
1. FOR VERT. BEND DOWN IN EXCESS OF 11 1/4" BEND, ANCHORAGE SHALL BE DESIGNED BY ENGINEER.
 2. FOR VERT. BEND UPWARD, BLOCKING TO BE SIMILAR TO THAT FOR HORIZ. BEND.
 3. GLANDS & BOLTS SHALL BE PROTECTED FROM CONC. BY PLASTIC SHEETING WHEN POURING THRUST BLOCKS.
 4. ALL THRUST BLOCK & SUPPORT BEND. 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.
- PRESSURE = 200 psi
BEARING = 2000 psf
FACTOR OF SAFETY = 1.5

PIPE SIZE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	TEE	PLUG
4"	8"	12"	8"	8"	8"	8"
6"	12"	18"	10"	8"	8"	8"
8"	18"	24"	14"	10"	10"	10"
10"	24"	30"	18"	12"	12"	12"
12"	30"	36"	22"	14"	14"	14"
14"	36"	42"	26"	16"	16"	16"
16"	42"	48"	30"	18"	18"	18"
18"	48"	54"	34"	20"	20"	20"
20"	54"	60"	38"	22"	22"	22"
22"	60"	66"	42"	24"	24"	24"
24"	66"	72"	46"	26"	26"	26"
26"	72"	78"	50"	28"	28"	28"
28"	78"	84"	54"	30"	30"	30"
30"	84"	90"	58"	32"	32"	32"

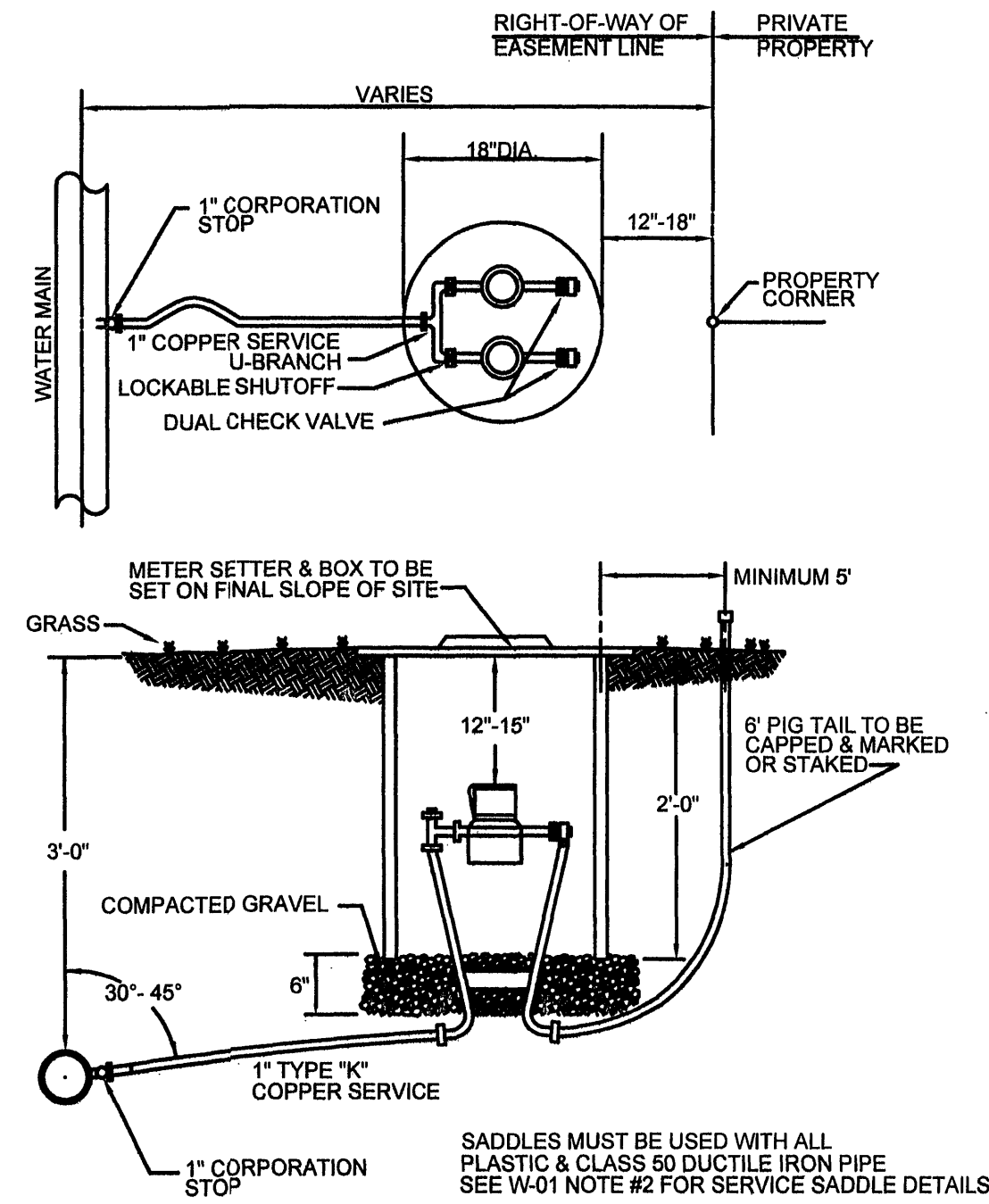
**THRUST BLOCK
CONSTRUCTION**
NOT TO SCALE

1. SETTER TO BE A.Y. McDONALD #20-215 WDL33, FORD VBHH72-15W-1133 OR APPROVED EQUAL.
2. SADDLES MUST BE USED WITH ALL PLASTIC & CLASS 50 DUCTILE IRON PIPE. SERVICE SADDLES SHALL BE USED IN ACCORDANCE WITH SECTION 2805 OF THE WATER STANDARDS. SERVICE SADDLES FOR PLASTIC PIPE SHALL BE: POWERSEAL 3417, OR 3412AS, ROMAC 202S, OR 306, OR FORD METER FS202 OR FS303. FOR DUCTILE IRON PIPE USE THE ABOVE OR POWERSEAL 3413, ROMAC 202 OR FORD METER F202.
3. METER BOX MUST BE MID-STATES PLASTICS, INC. PLASTIC BOX WITH FORD A32-7 (ELECTRONIC READ LID) OR A.Y. McDONALD MODEL 74M322-TC CAST IRON BASE & COVER OR APPROVED EQUAL.
4. WHENEVER SIDEWALK EXISTS OR IS PROPOSED, MODIFY METER LOCATION AS DIRECTED.
5. CORPORATION STOP MUST BE FORD F1000-4-6 OR APPROVED EQUAL.

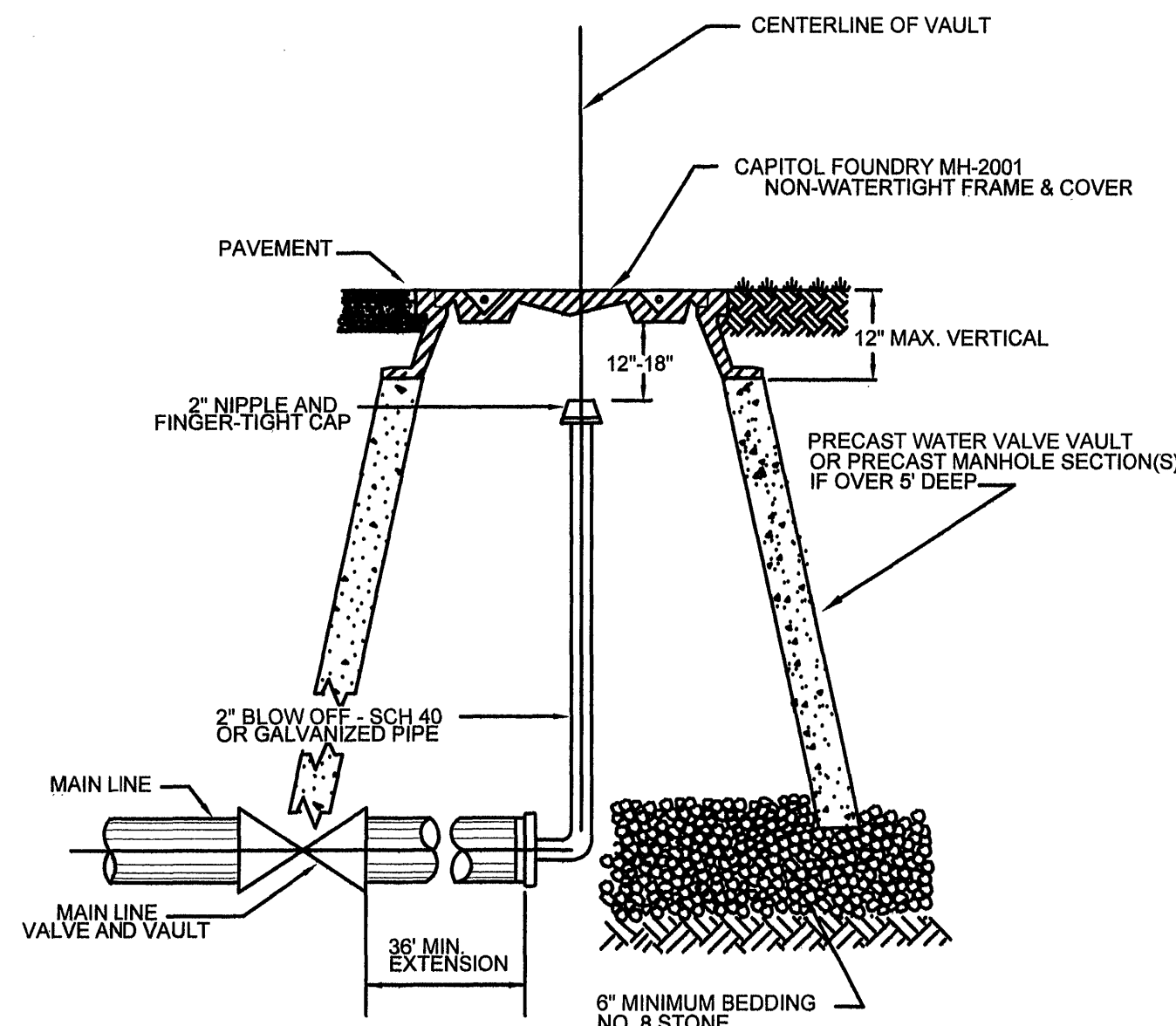


**TYPE "A"
SINGLE RESIDENTIAL
WATER SERVICE**
(LINE PRESSURE UNDER 80 PSI)
NOT TO SCALE

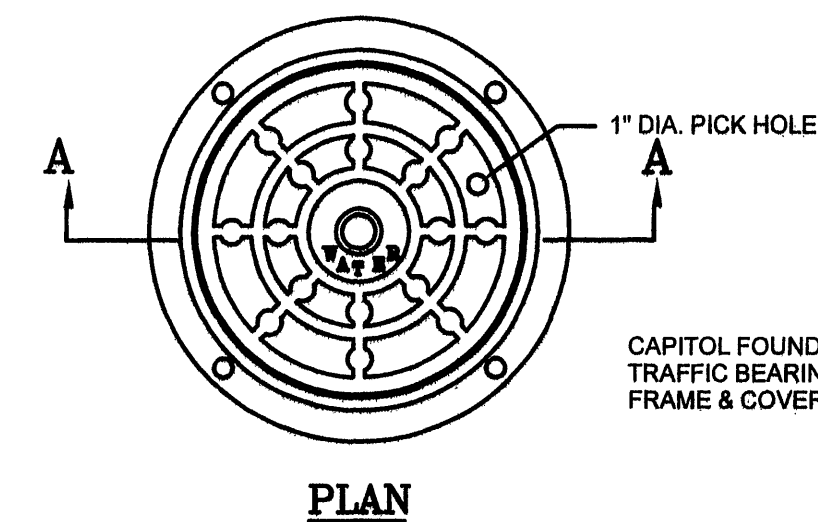
1. SETTER TO BE A.Y. McDONALD #20-215 WDL33, FORD VBHH72-15W-1133 OR APPROVED EQUAL.
2. METER BOX MUST BE MID-STATES PLASTICS, INC. PLASTIC BOX WITH FORD A32-7 (ELECTRONIC READ LID) OR A.Y. McDONALD MODEL 74M322-TC CAST IRON BASE & COVER OR APPROVED EQUAL.
3. CORPORATION STOP MUST BE FORD F1000-4-6 OR APPROVED EQUAL.



**DOUBLE RESIDENTIAL
WATER SERVICE**
NOT TO SCALE



**BLOW-OFF ASSEMBLY
FOR MAIN LINE
TEMPORARY TERMINATION**
NOT TO SCALE



**MANHOLE FRAME
AND COVER**
NOT TO SCALE

