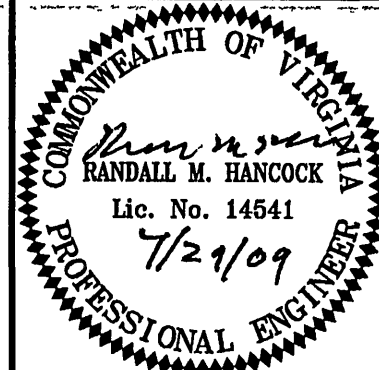




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DETAILS

RUGBY BOULEVARD WATERLINE REPLACEMENTS

CITY OF ROANOKE, VIRGINIA

REVISIONS

APPROVED

UCT 15 2009

DESIGNED BY

RMH

DRAWN BY

SAK

CHECKED BY

TOM

SCALE

AS SHOWN

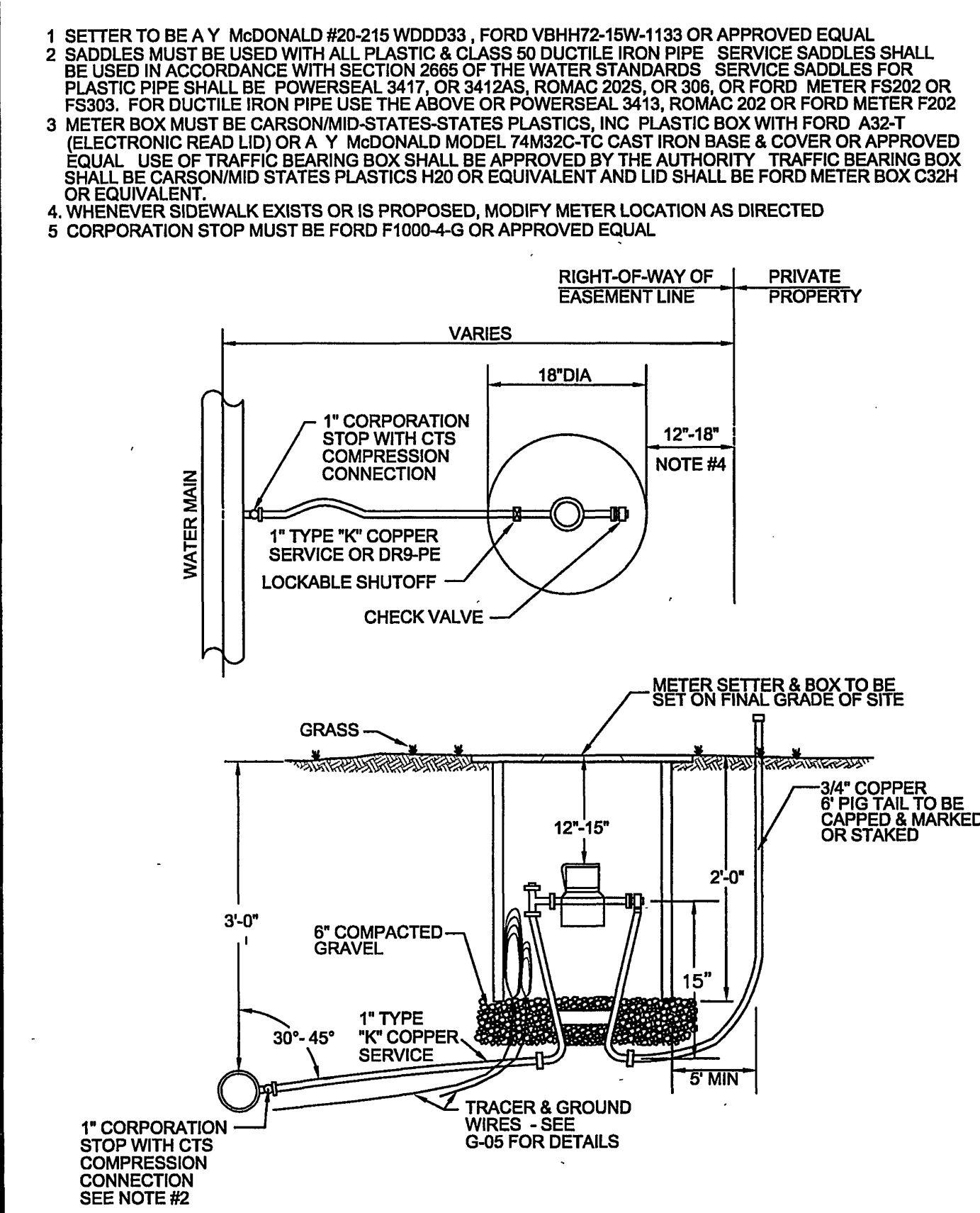
DATE

JULY 29, 2009

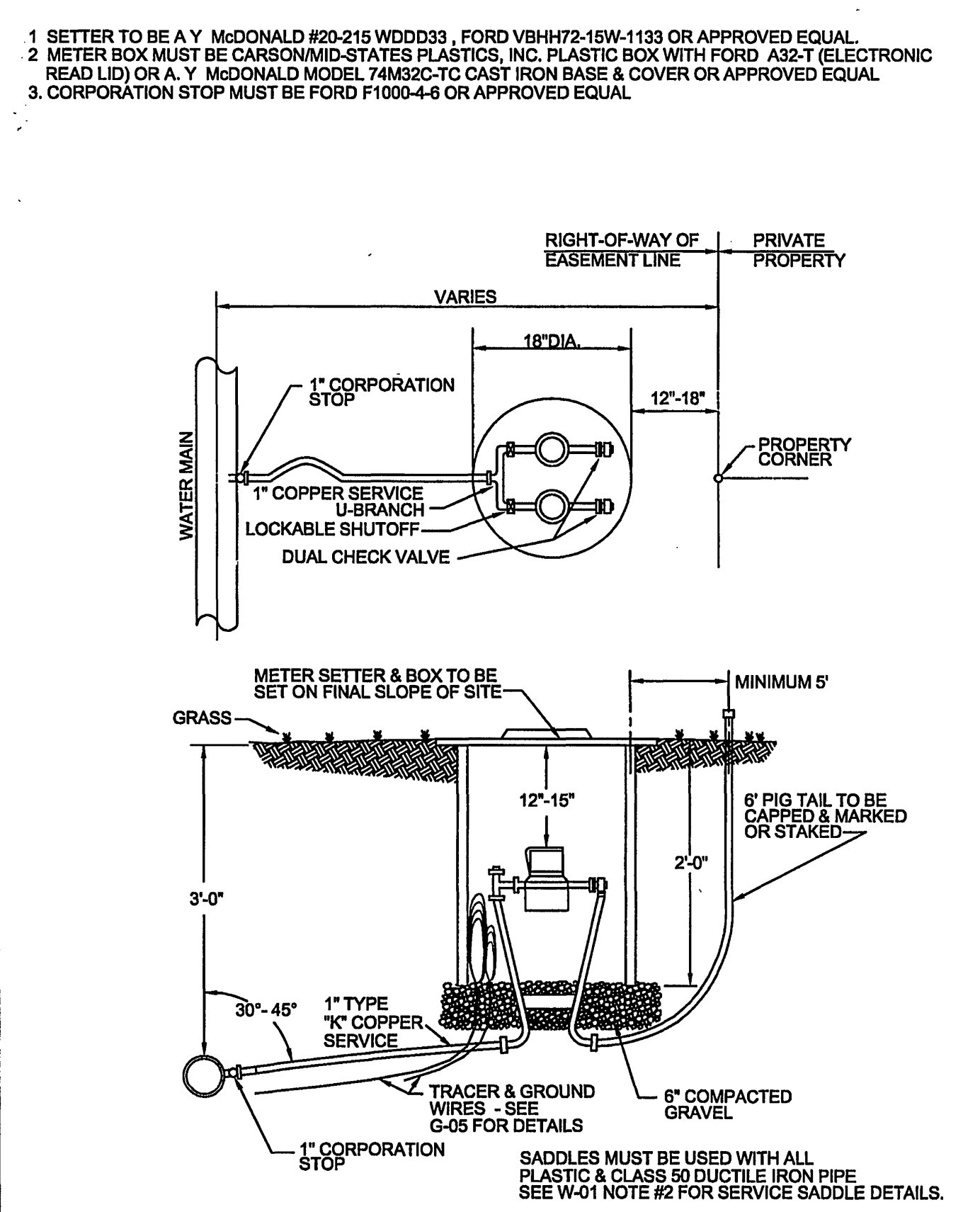
PROJECT NUMBER

B09134B-02

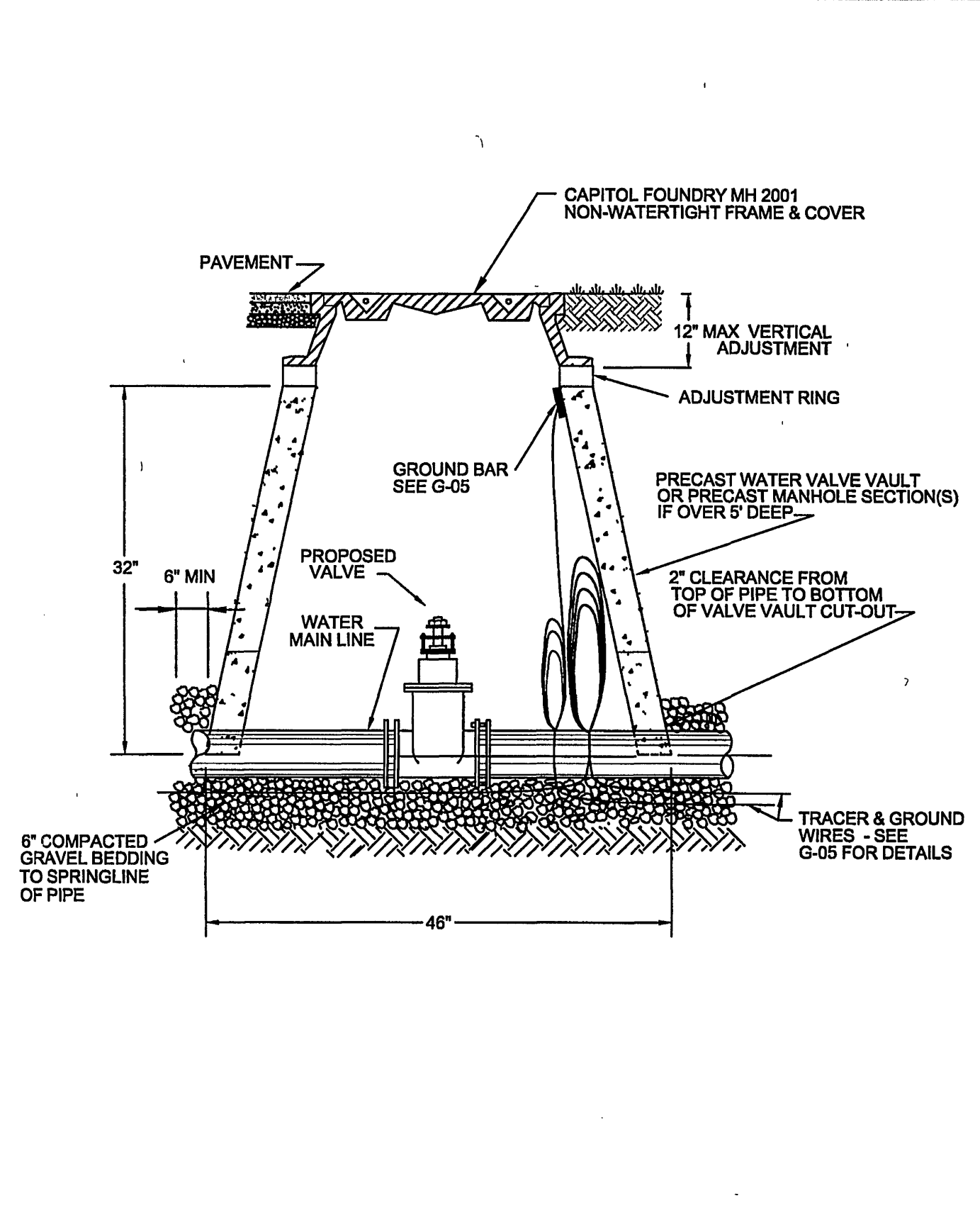
D-1



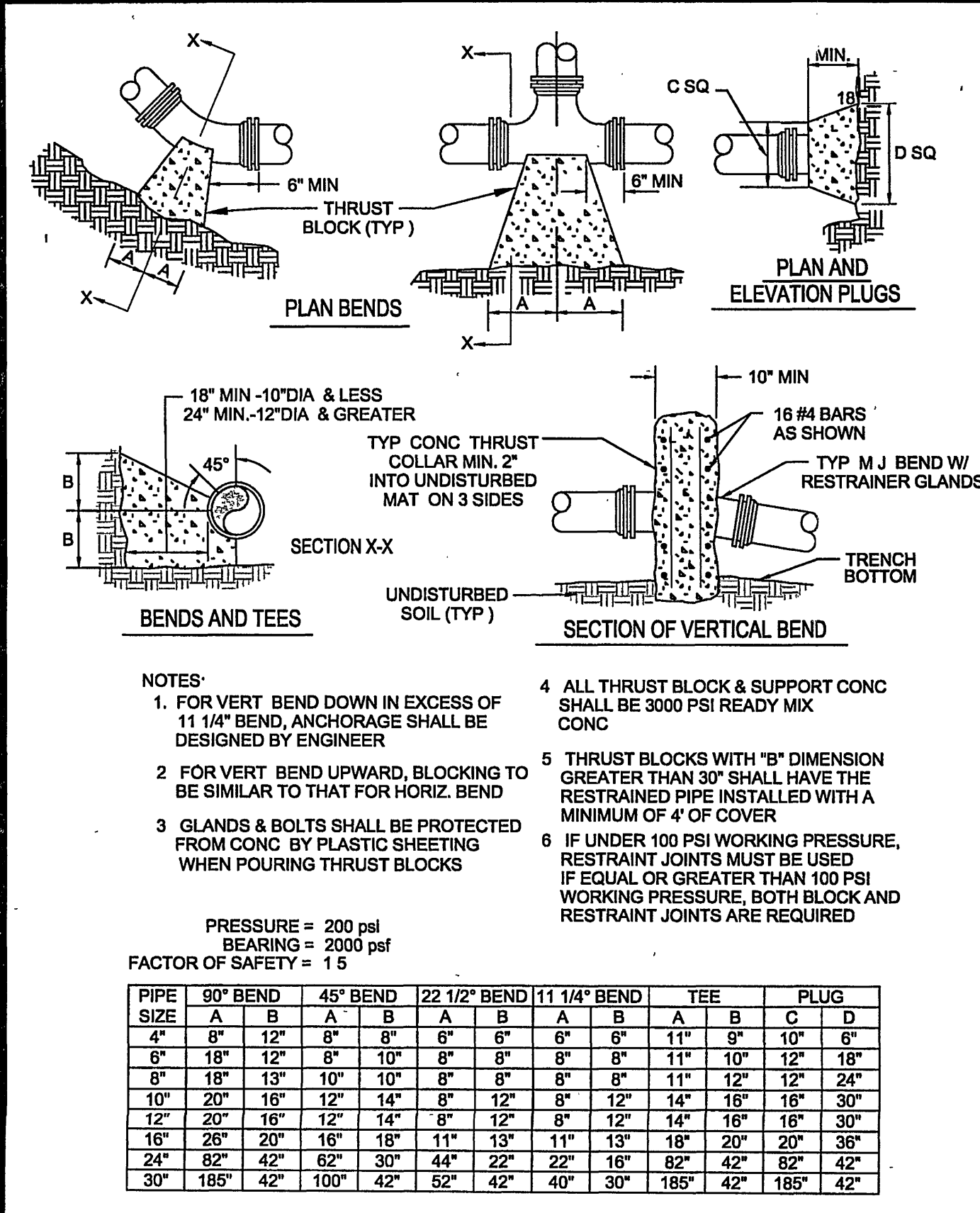
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE	DESCRIPTION	W-01	TYPE "A" SINGLE RESIDENTIAL WATER SERVICE (LINE PRESSURE UNDER 80 PSI)
07/01/04			
03/01/08			



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE	DESCRIPTION	W-04	DOUBLE RESIDENTIAL WATER SERVICE
07/01/04			
03/01/08			



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE	DESCRIPTION	W-08	WATER LINE VALVE INSTALLATION
07/01/04			
03/01/08			



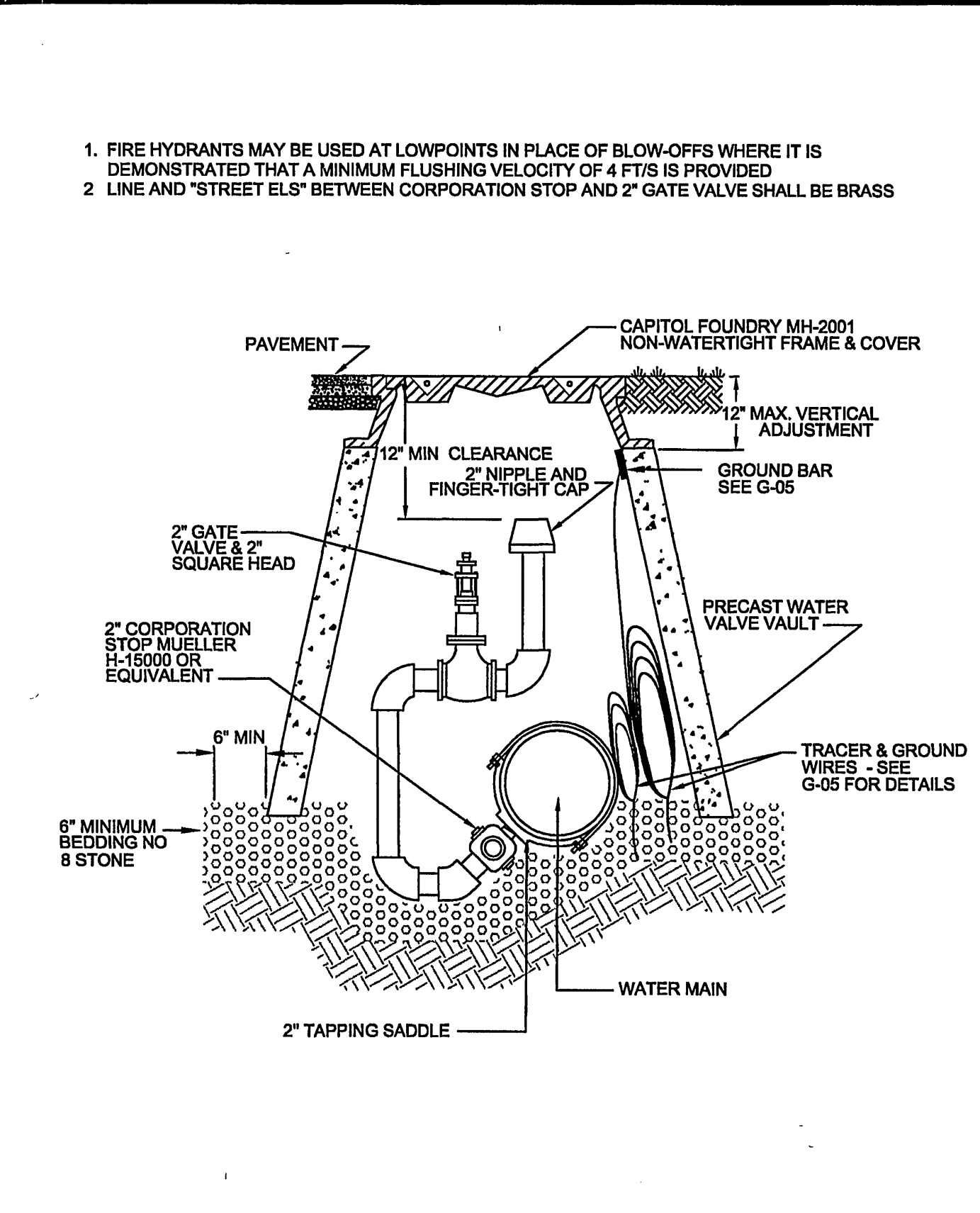
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE	DESCRIPTION	W-19	THRUST BLOCK CONSTRUCTION
07/01/04			
03/01/08			

FACTOR OF SAFETY = 1.5

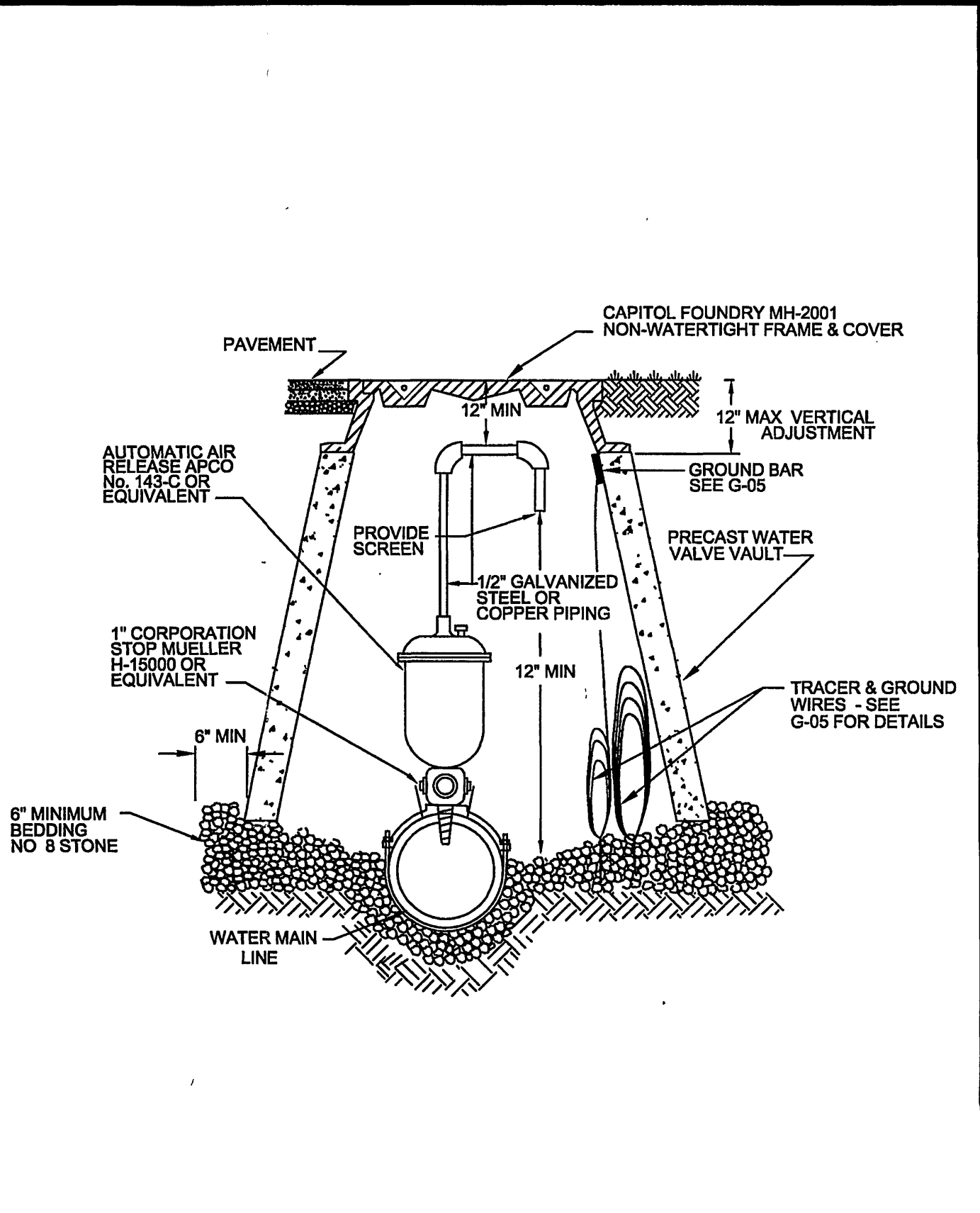
PIPE SIZE	PIPE MAT'L	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	VALVE /PLUG BRANCH (NOTE 2)	TEE	REDUCER	VERT. 45°	VERT. 22 1/2°	VERT. 11 1/4°
6"	D.I.	28'	12'	6'	3'	38'	34'	20'	23'	11'	5'
8"	D.I.	37'	15'	7'	4'	51'	47'	21'	30'	15'	7'
10"	D.I.	45'	19'	9'	4'	61'	57'	20'	37'	18'	9'
12"	D.I.	53'	22'	11'	5'	73'	69'	38'	43'	21'	10'
6"	PVC	30'	12'	6'	3'	56'	38'	29'	35'	17'	8'
8"	PVC	40'	16'	8'	4'	74'	56'	31'	46'	22'	11'
10"	PVC	47'	20'	9'	5'	89'	82'	30'	56'	27'	13'
12"	PVC	56'	23'	11'	6'	106'	88'	58'	66'	32'	16'

1. ALL JOINTS SHALL BE RESTRAINED ON BOTH SIDES OF THE FITTING FOR THE LENGTH SHOWN UNLESS OTHERWISE INDICATED.
2. REDUCER IS ONE SIZE SMALLER THAN PIPE LISTED. RESTRAINED LENGTH IS UPSTREAM ON THE LARGE SIDE OF THE REDUCER.
3. IF UNDER 100 PSI WORKING PRESSURE, RESTRAINT JOINT(S) ARE TO BE USED. IF EQUAL TO OR OVER 100 PSI WORKING PRESSURE, BOTH THRUST BLOCK AND RESTRAINT JOINTS SHALL BE USED.

WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE	DESCRIPTION	W-20	THRUST RESTRAINT OF PIPE JOINTS DESIGN LENGTHS
07/01/04			
03/01/08			



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE	DESCRIPTION	W-11	IN-LINE BLOW-OFF ASSEMBLY
07/01/04			
03/01/08			



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE	DESCRIPTION	W-12	AUTOMATIC AIR RELEASE ASSEMBLY
07/01/04			
03/01/08			