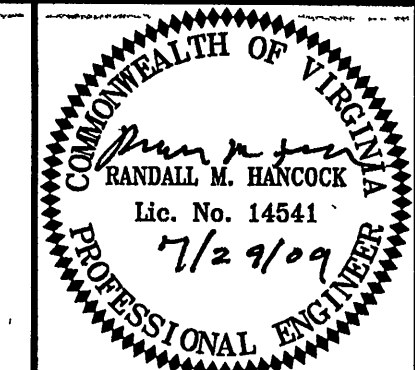




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DETAILS

RORER AVENUE WATERLINE REPLACEMENTS

CITY OF ROANOKE, VIRGINIA

REVISIONS

APPROVED
UCT 15 2009

DESIGNED BY
RMH

DRAWN BY
GAB

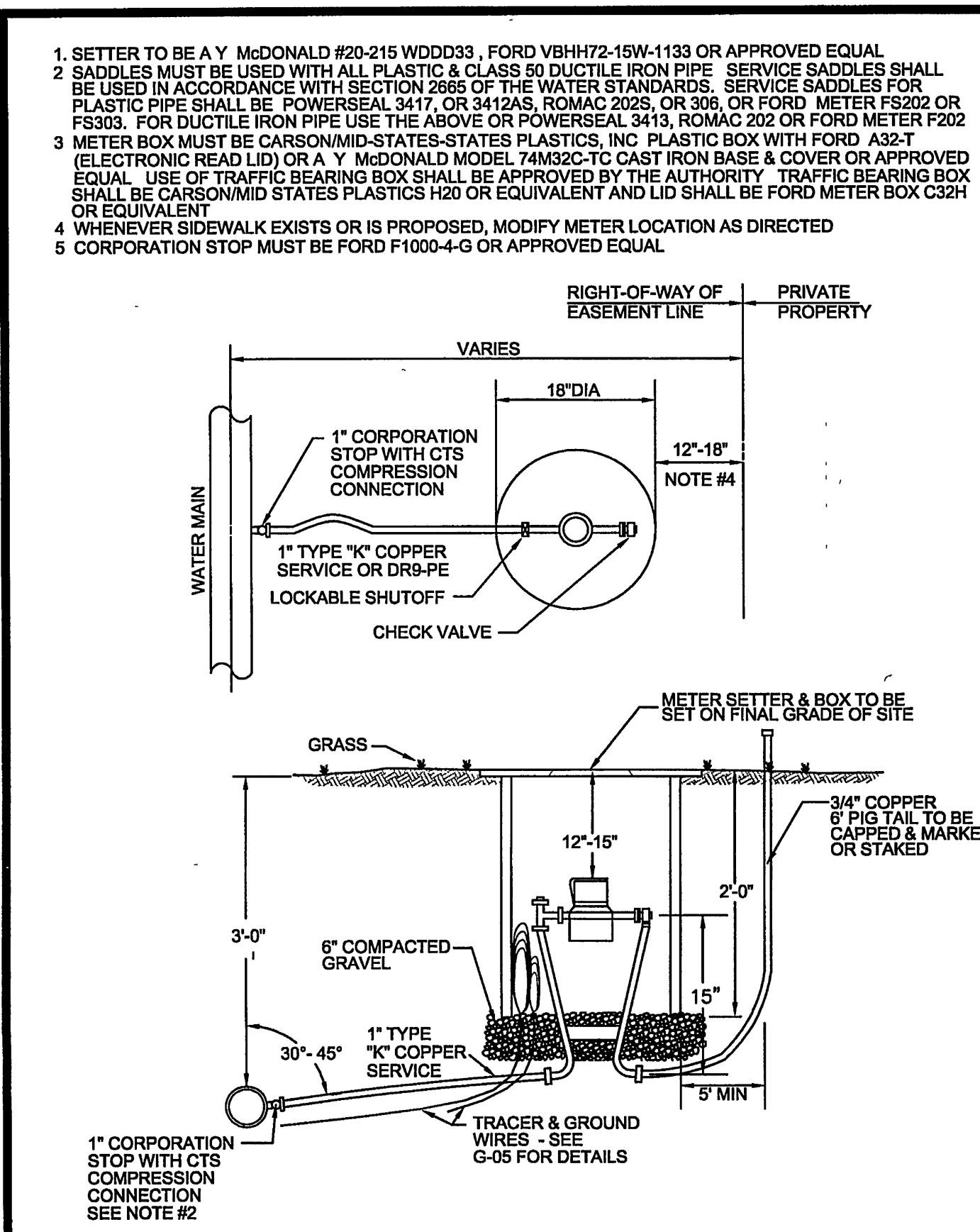
CHECKED BY
TOM

SCALE
NOT TO SCALE

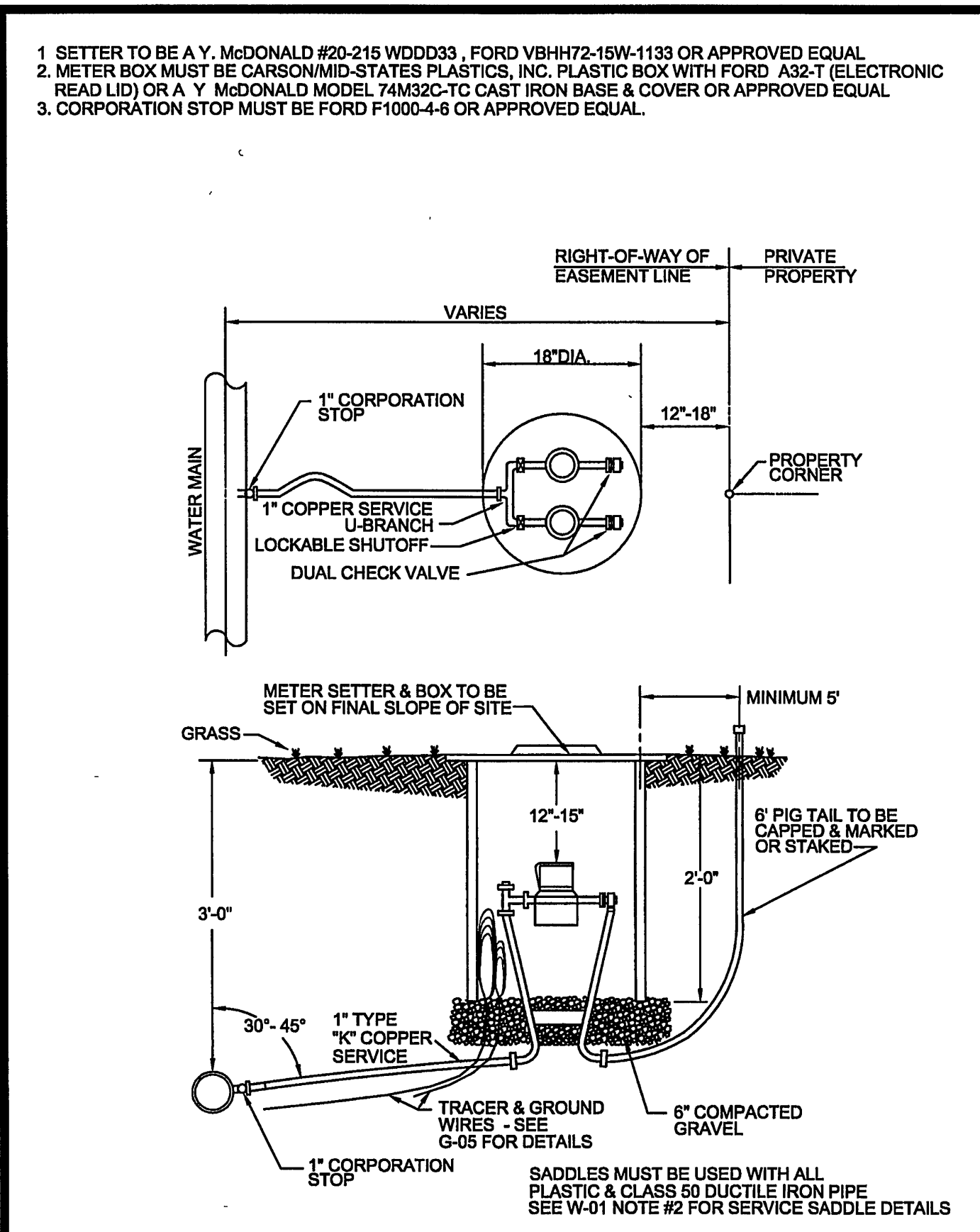
DATE
July 29, 2009

PROJECT NUMBER
B09134B-03

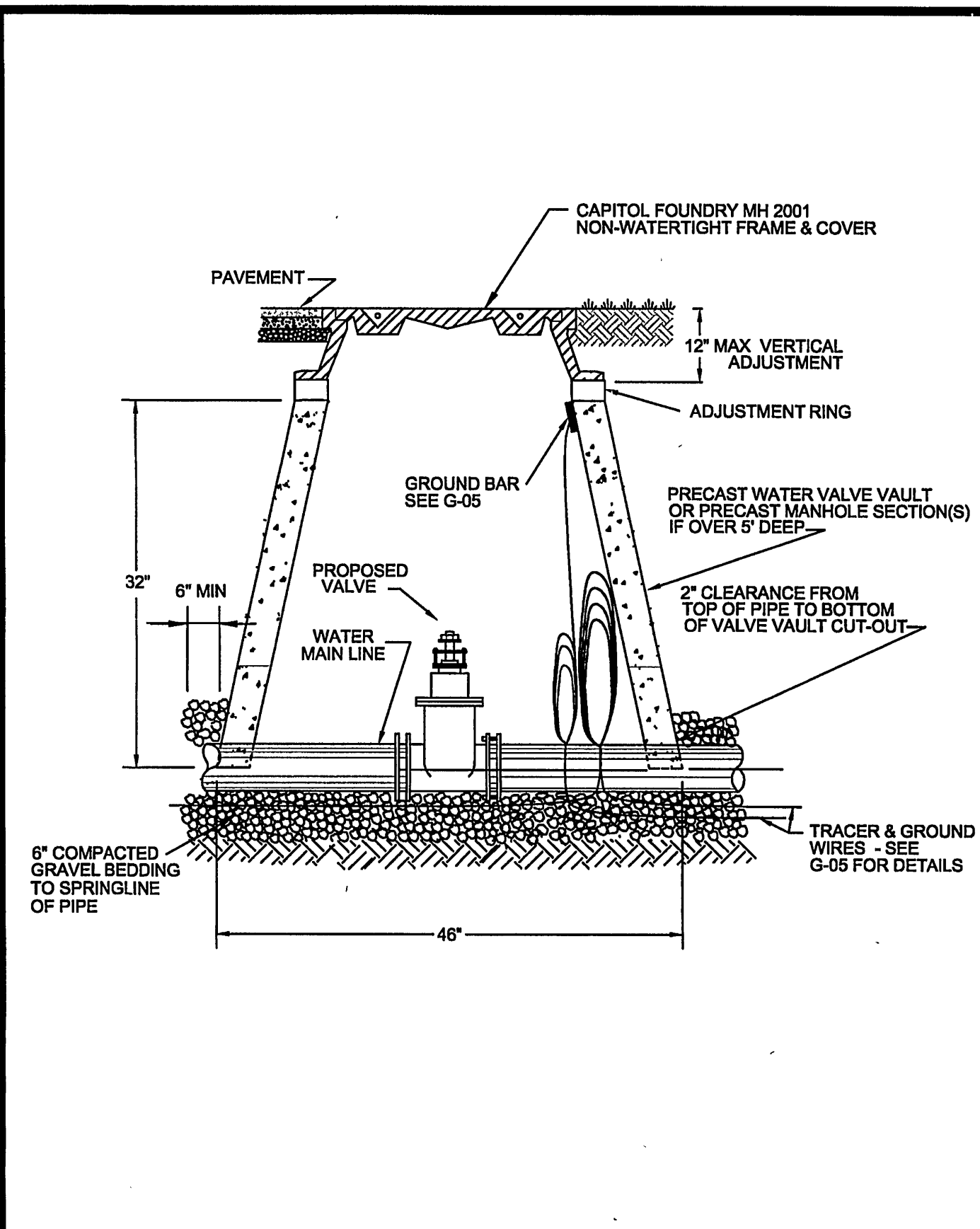
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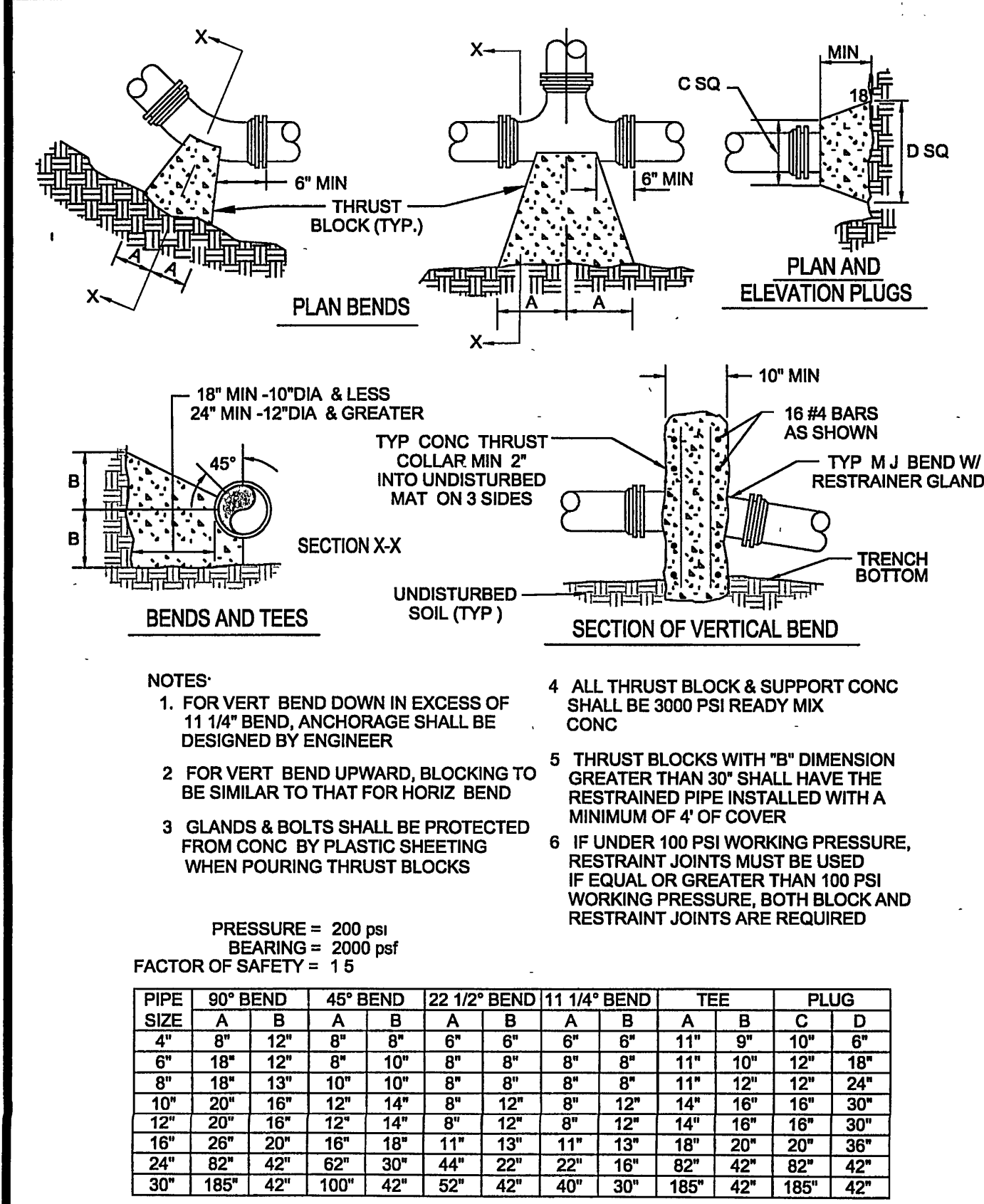
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE	DESCRIPTION	W-01	
07/01/04			
03/01/06			



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE	DESCRIPTION	W-04	
07/01/04			
03/01/06			



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE	DESCRIPTION	W-08	
07/01/04			
03/01/06			



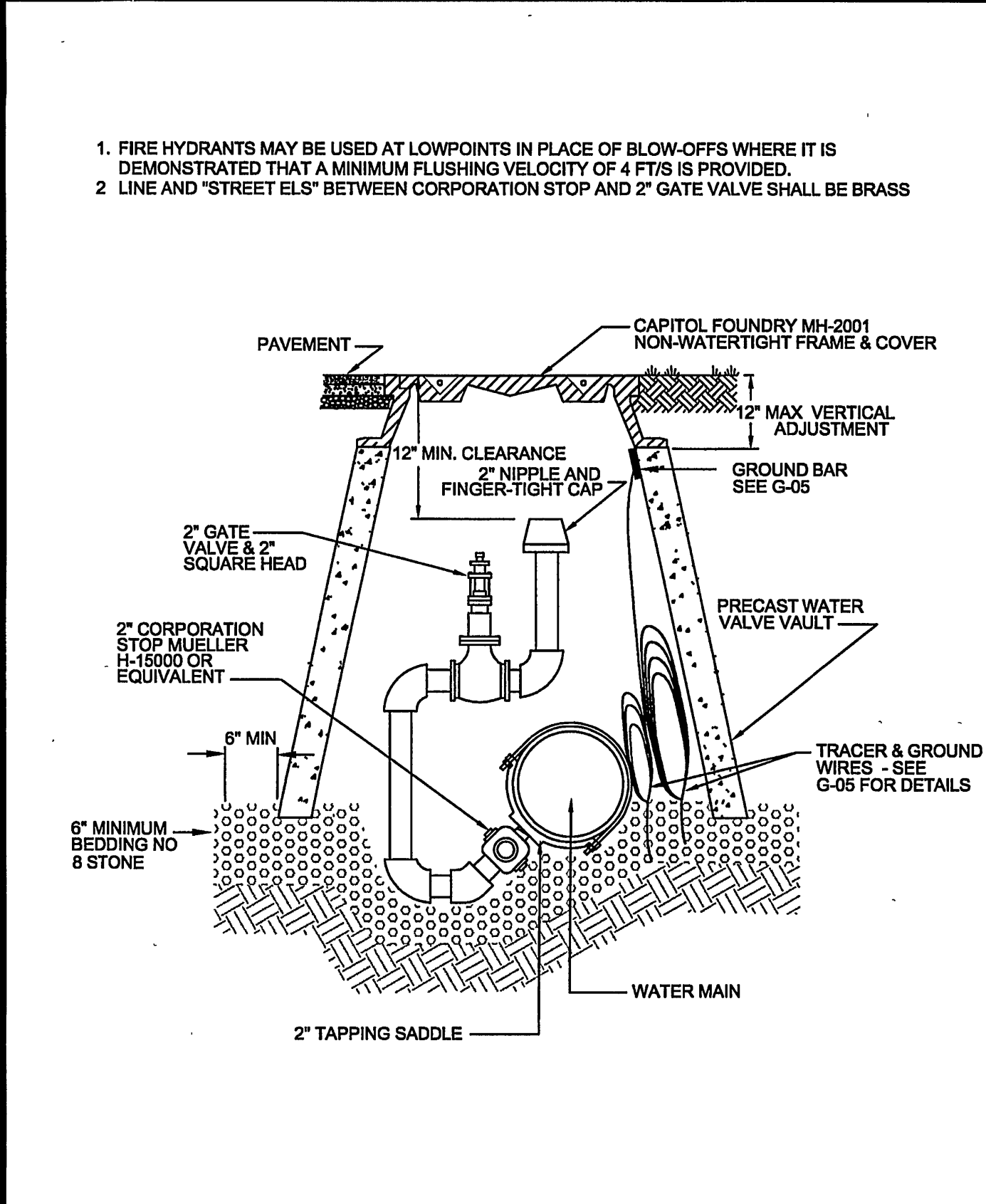
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REVISION DATE	DESCRIPTION	W-19	
07/01/04			
03/01/06			

FACTOR OF SAFETY = 1.5

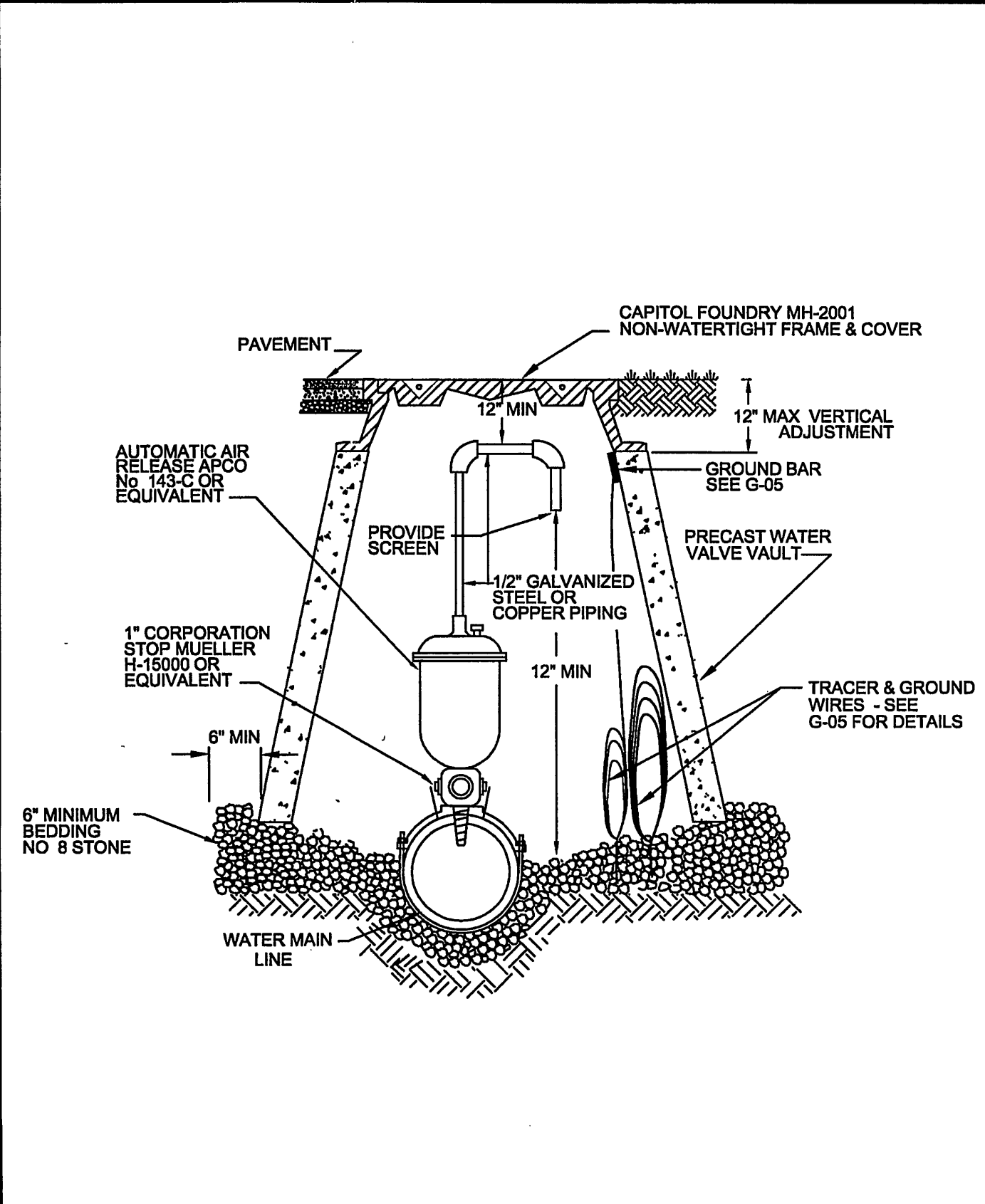
PIPE SIZE	PIPE MAT'L	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	VALVE / PLUG BRANCH	TEE	REDUCER (NOTE 2)	VERT. 45°	VERT. 22 1/2°	VERT. 11 1/4°
6"	D.I.	28"	12"	6"	3"	38"	34"	20"	23"	11"	5"
8"	D.I.	37"	15"	7"	4"	51"	47"	21"	30"	15"	7"
10"	D.I.	45"	19"	9"	4"	61"	57"	20"	37"	18"	9"
12"	D.I.	53"	22"	11"	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"	56"	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	
07/01/04			
03/01/06			



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE	DESCRIPTION	W-11	
07/01/04			
03/01/06			



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE	DESCRIPTION	W-12	
07/01/04			
03/01/06			