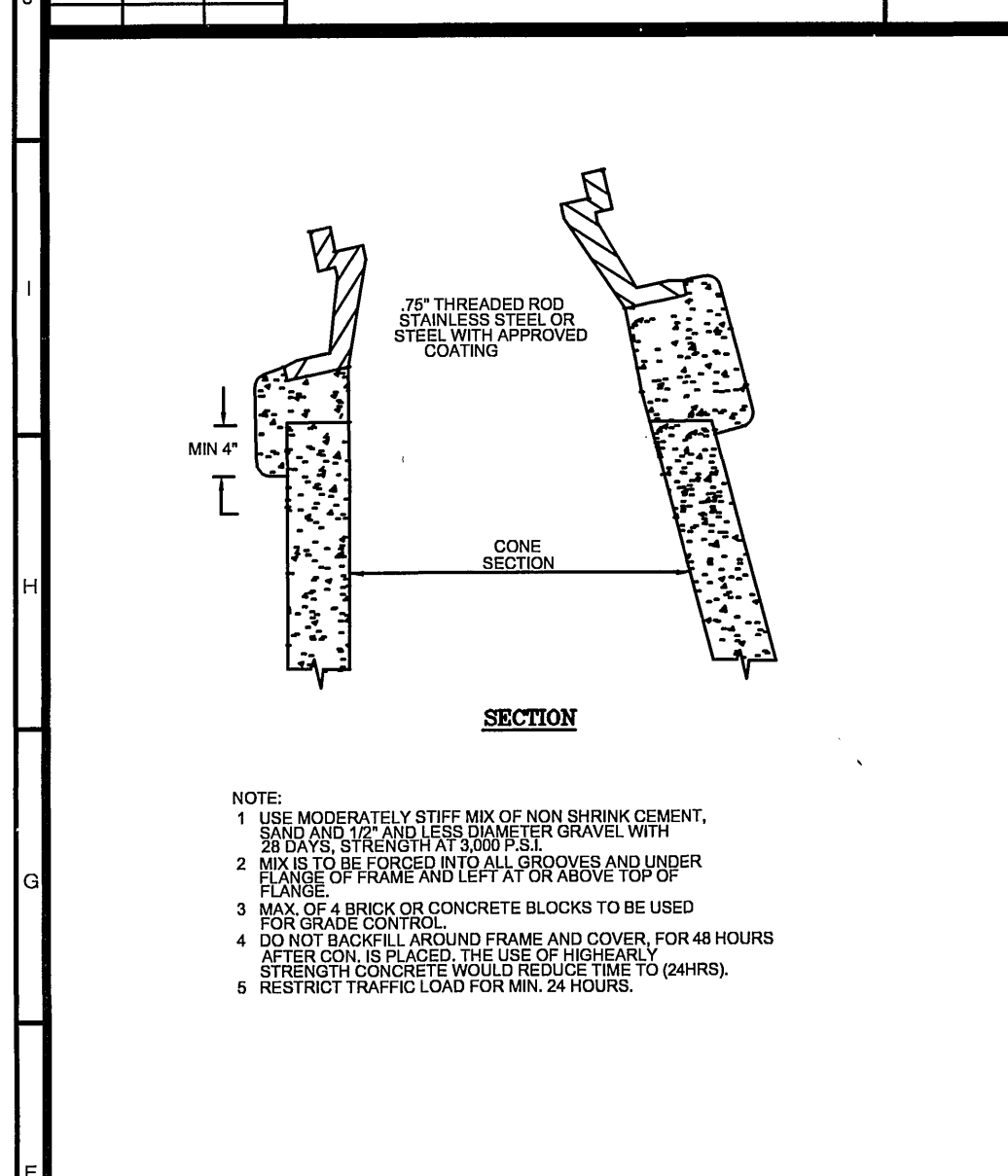


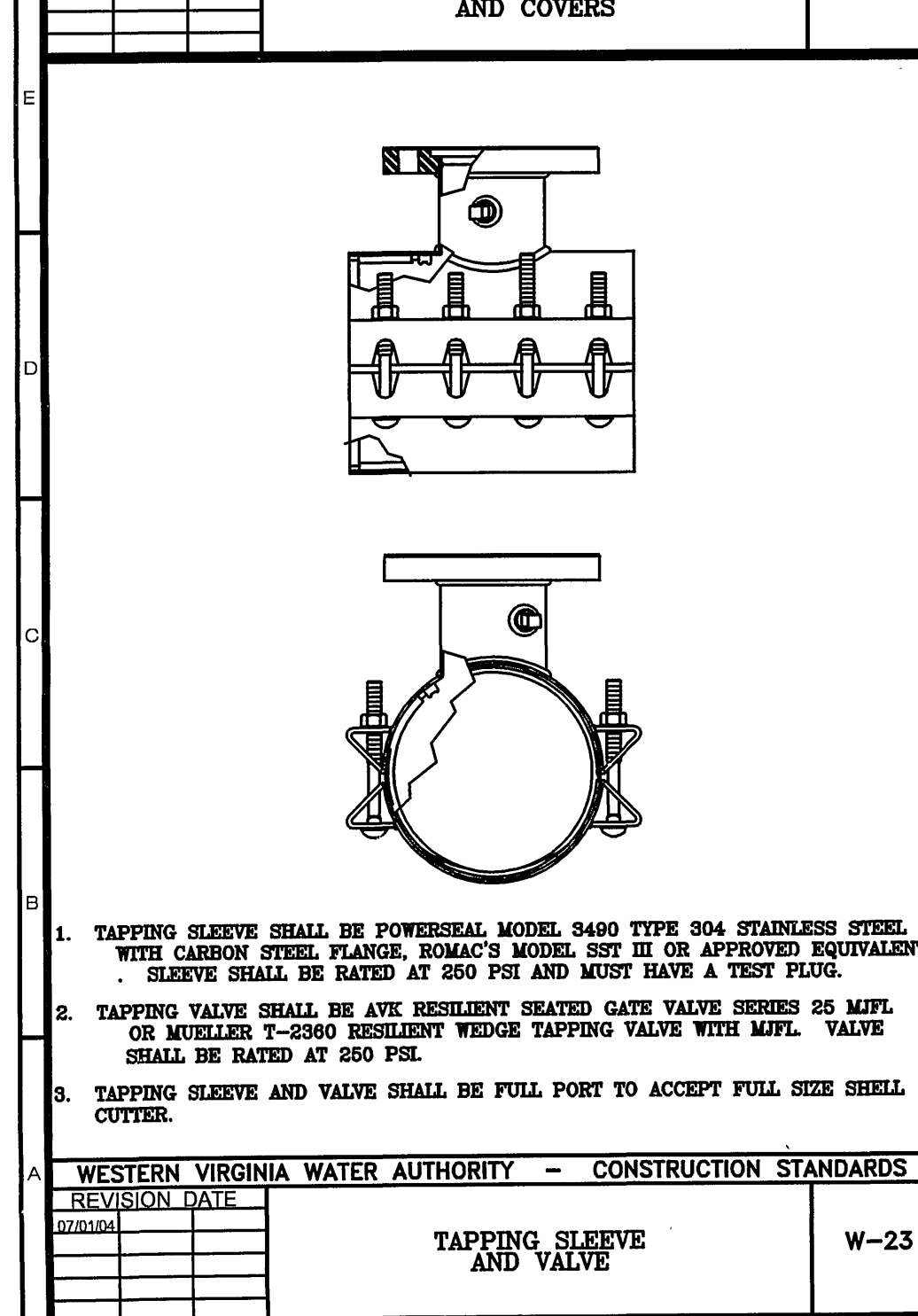
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	W-02
07/01/04	BEDDING AND BACKFILL UNDER PAVEMENT	



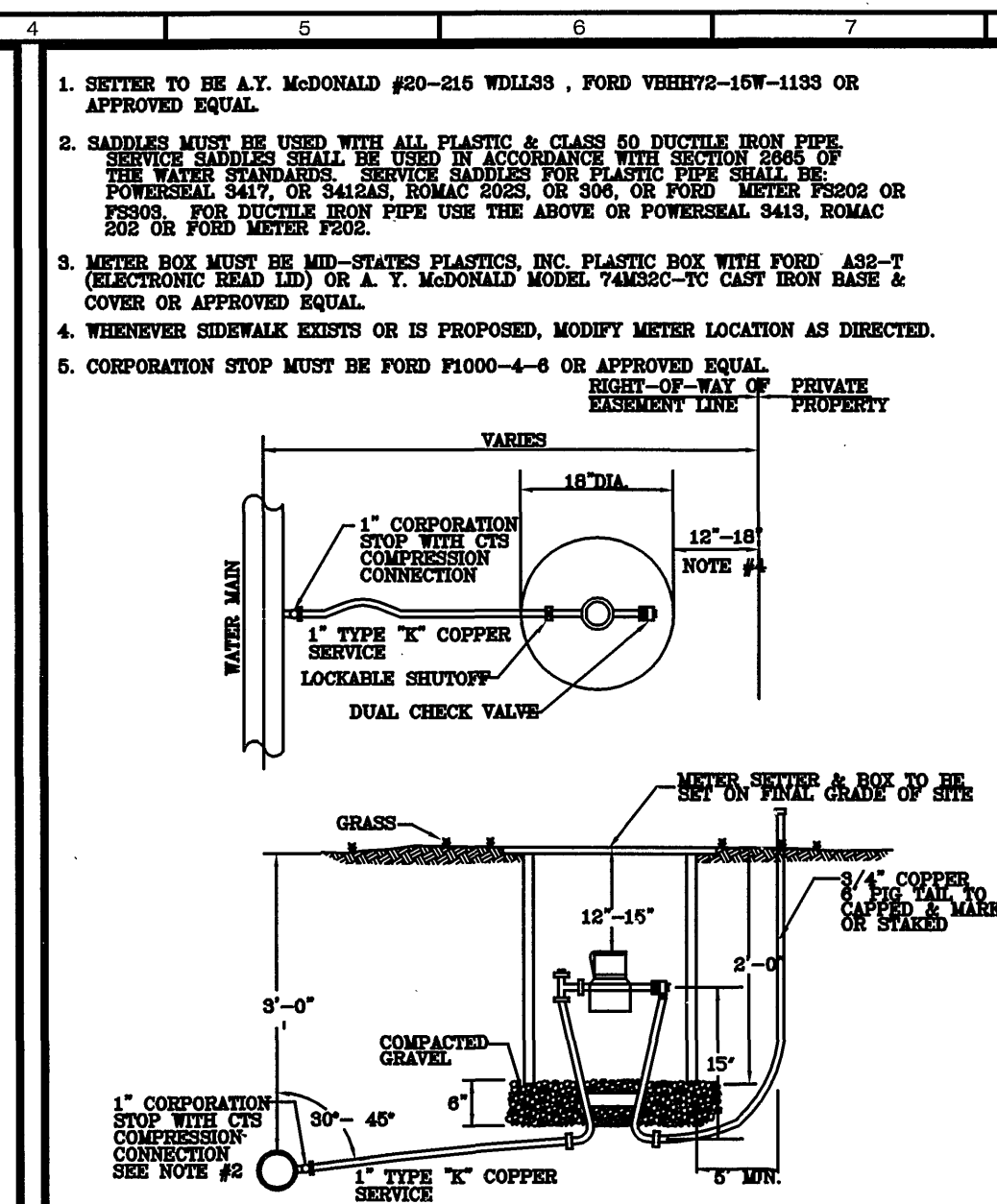
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	W-16
07/01/04	INSTALLATION DETAIL FOR ALL FRAMES AND COVERS	



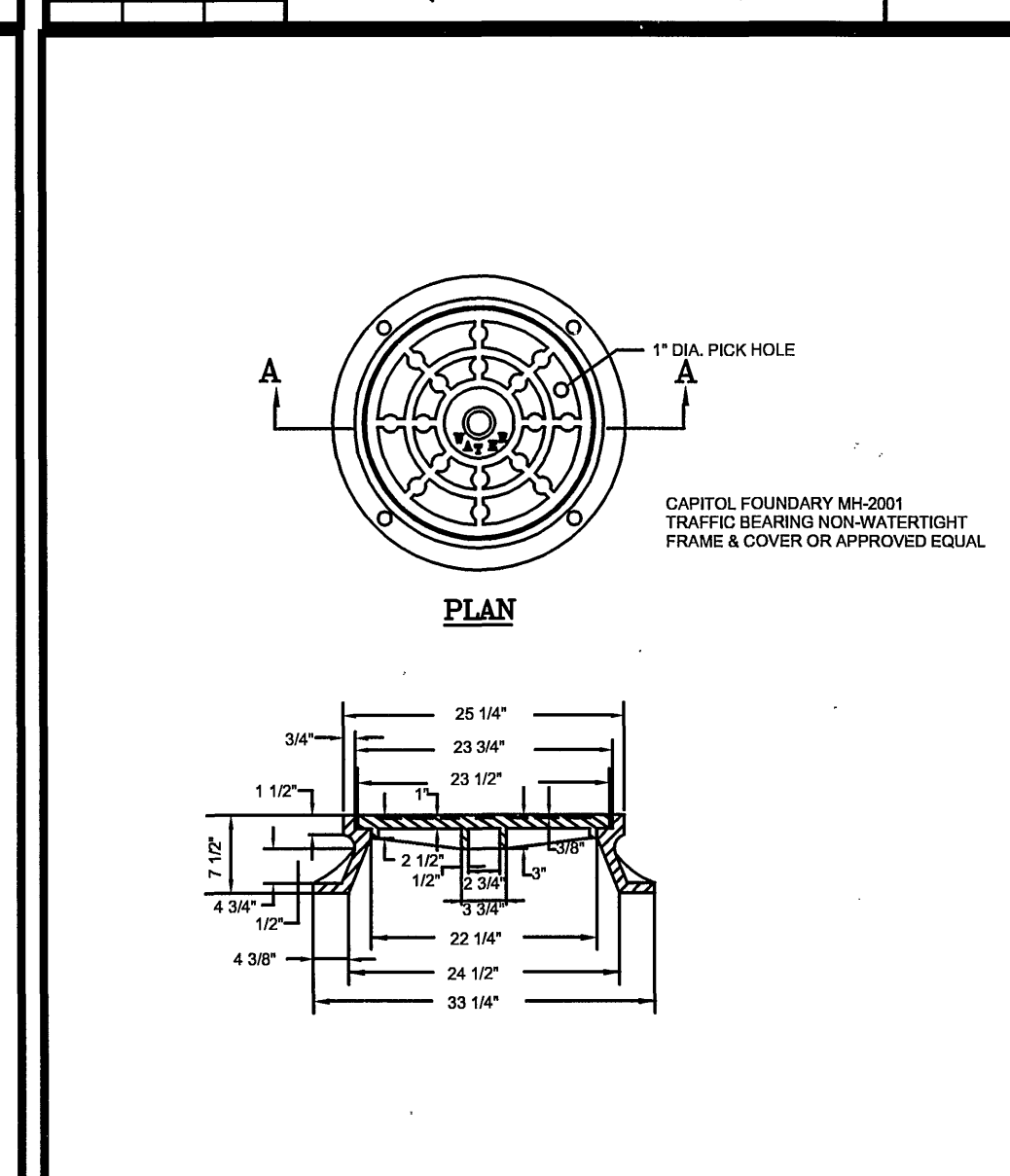
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	W-23
07/01/04	TAPPING SLEEVE AND VALVE	



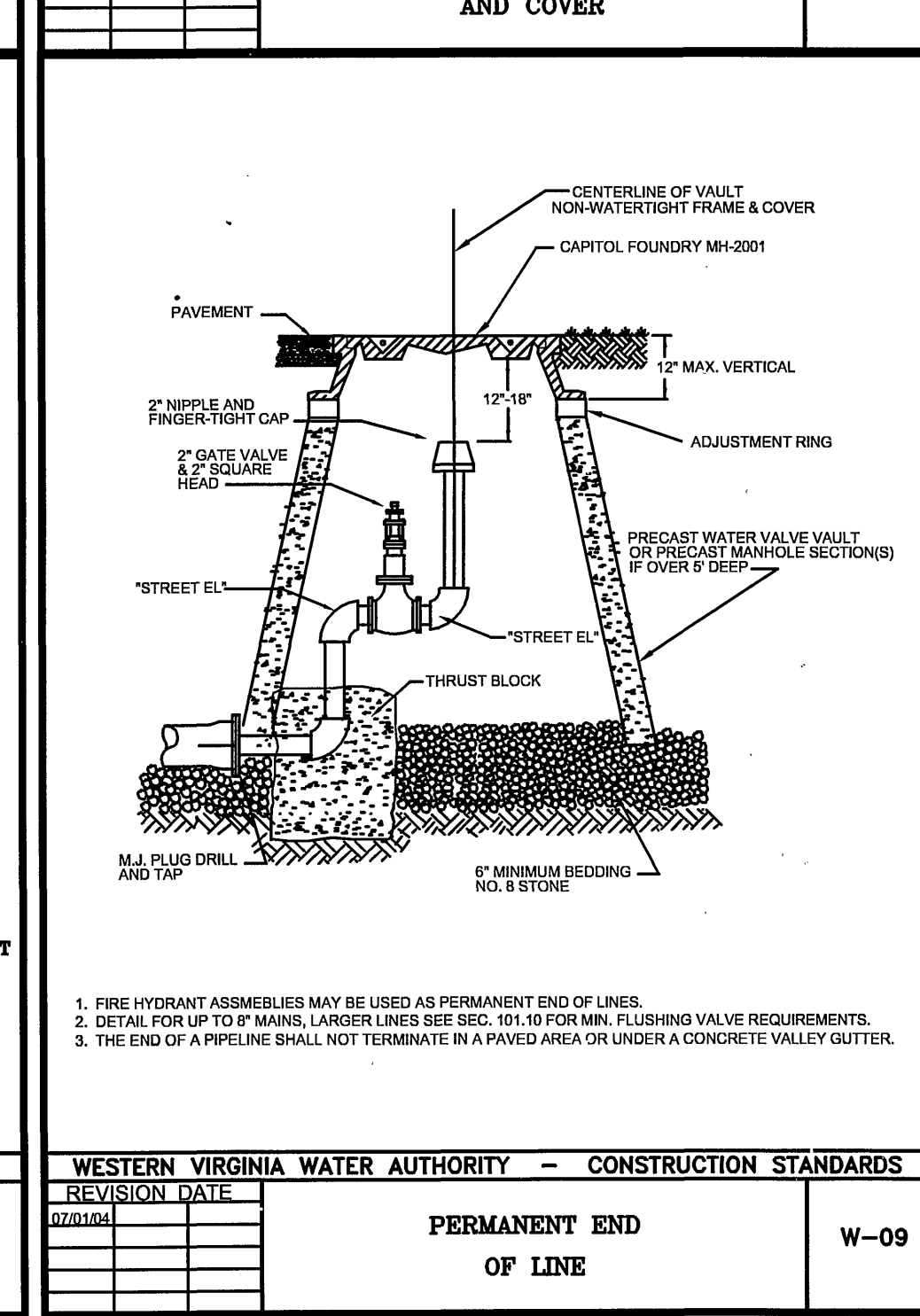
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	W-01
07/01/04	TYPE "A" SINGLE RESIDENTIAL WATER SERVICE (LINE PRESSURE UNDER 80 PSI)	



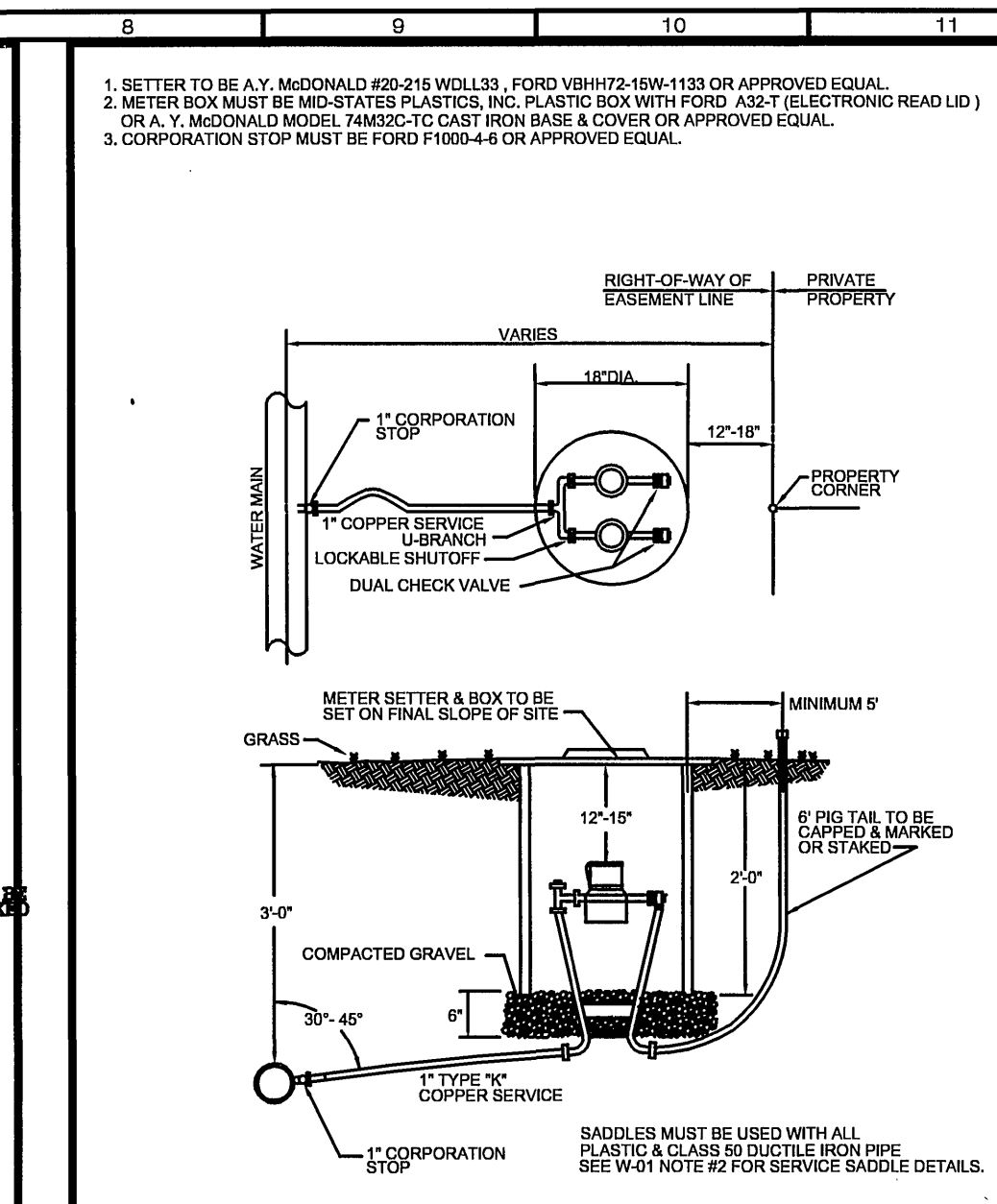
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	W-17
07/01/04	MANHOLE FRAME AND COVER	



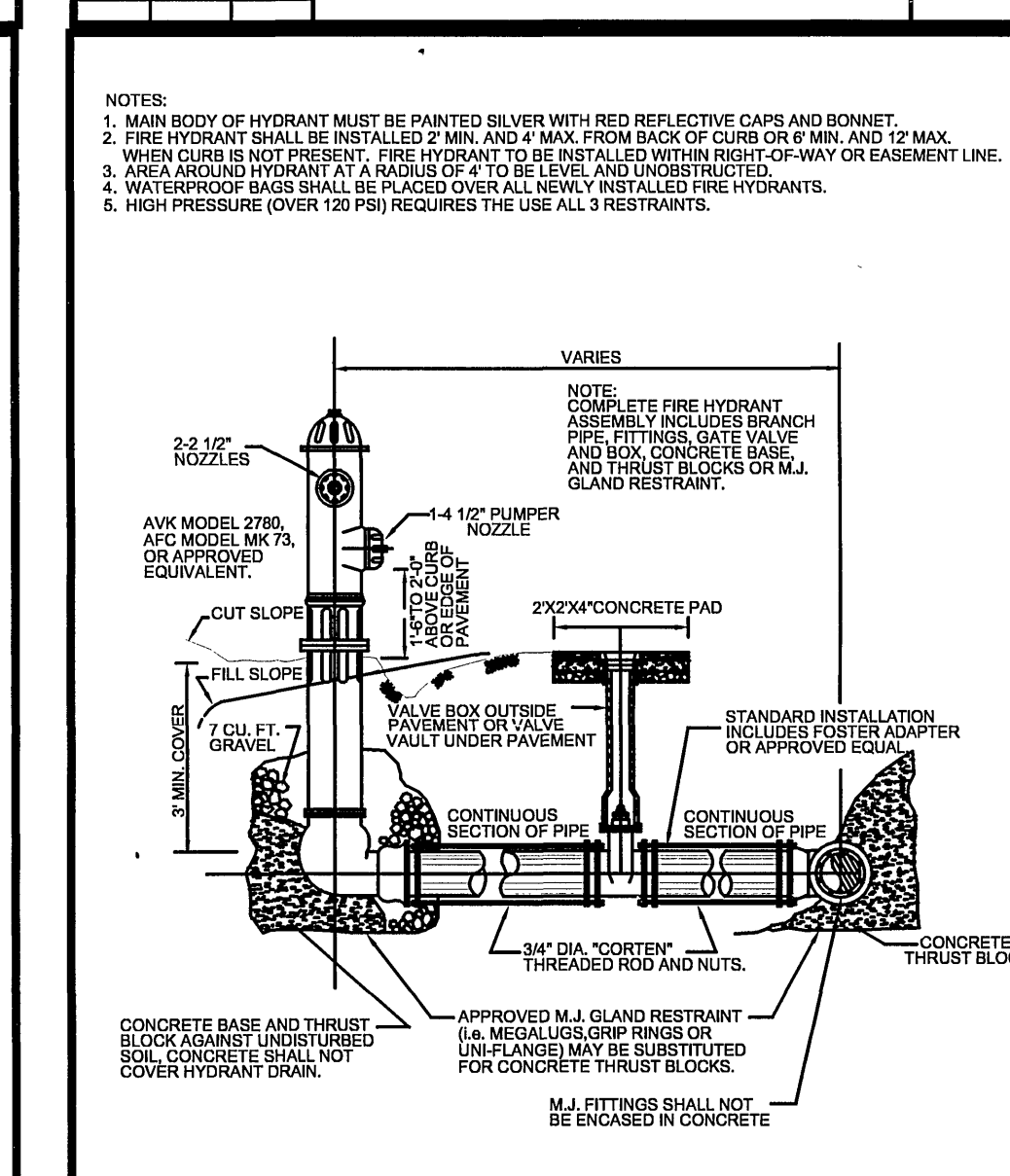
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	W-09
07/01/04	PERMANENT END OF LINE	



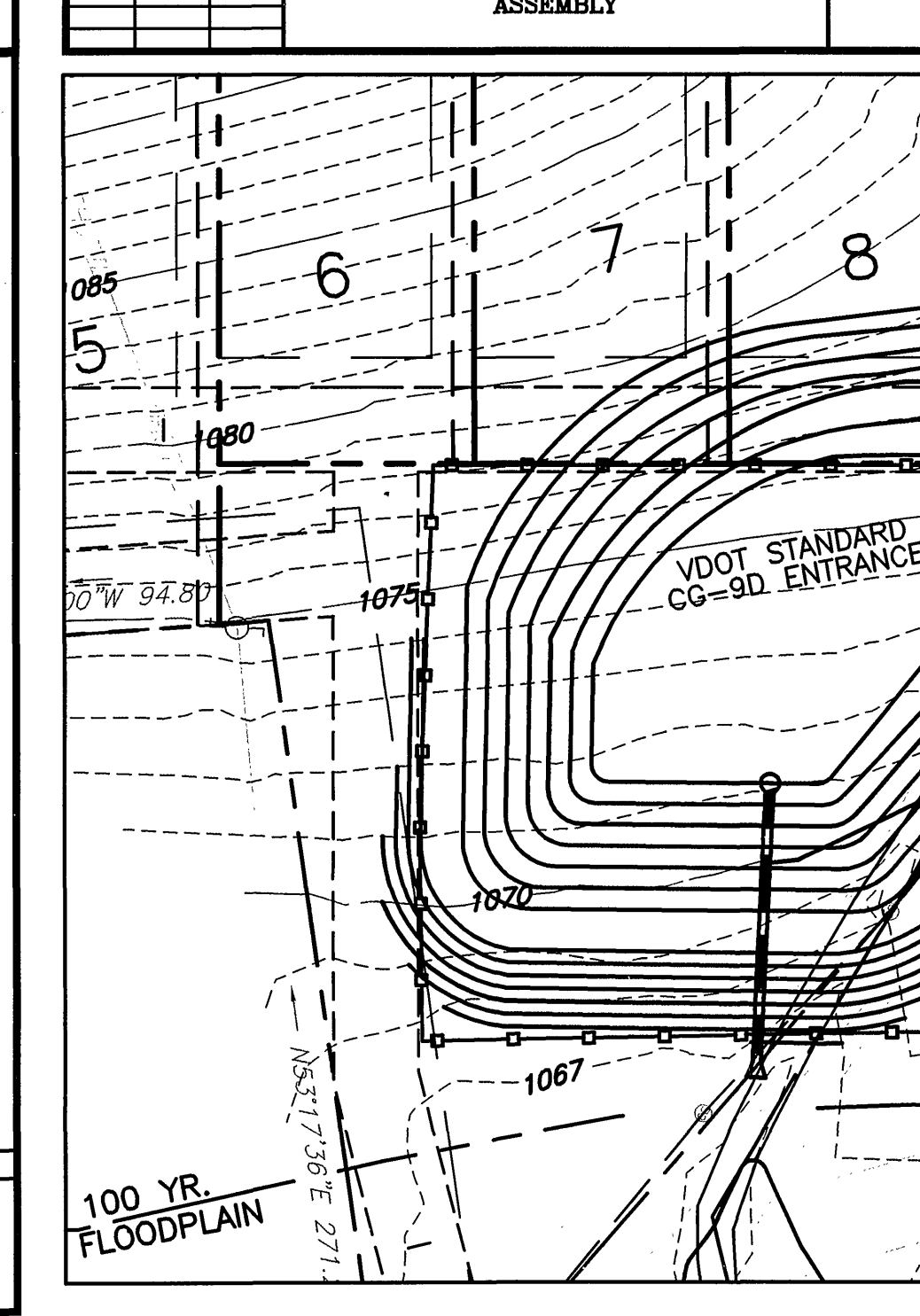
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	W-04
07/01/04	DOUBLE RESIDENTIAL WATER SERVICE	



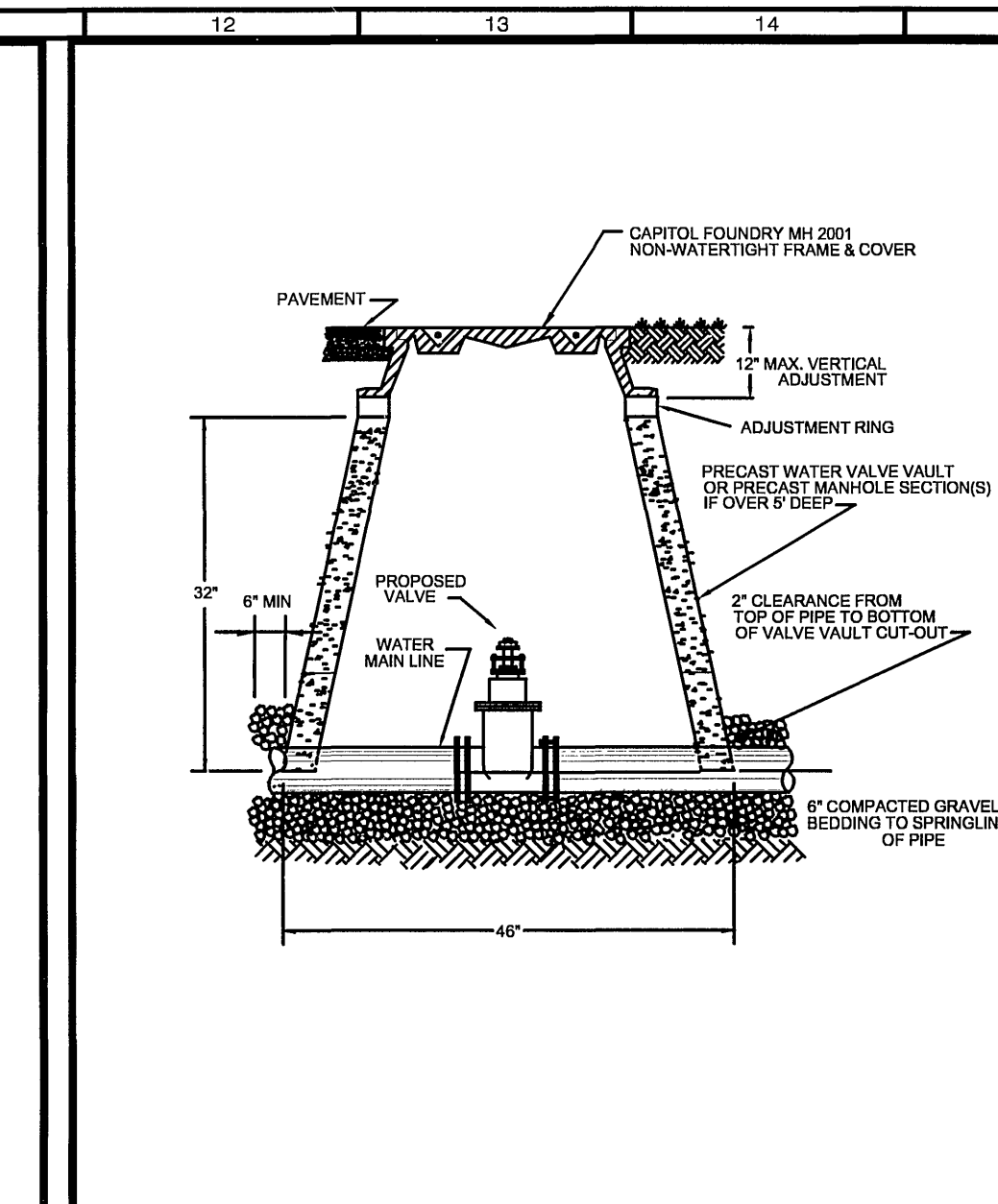
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	W-18
07/01/04	FIRE HYDRANT ASSEMBLY	



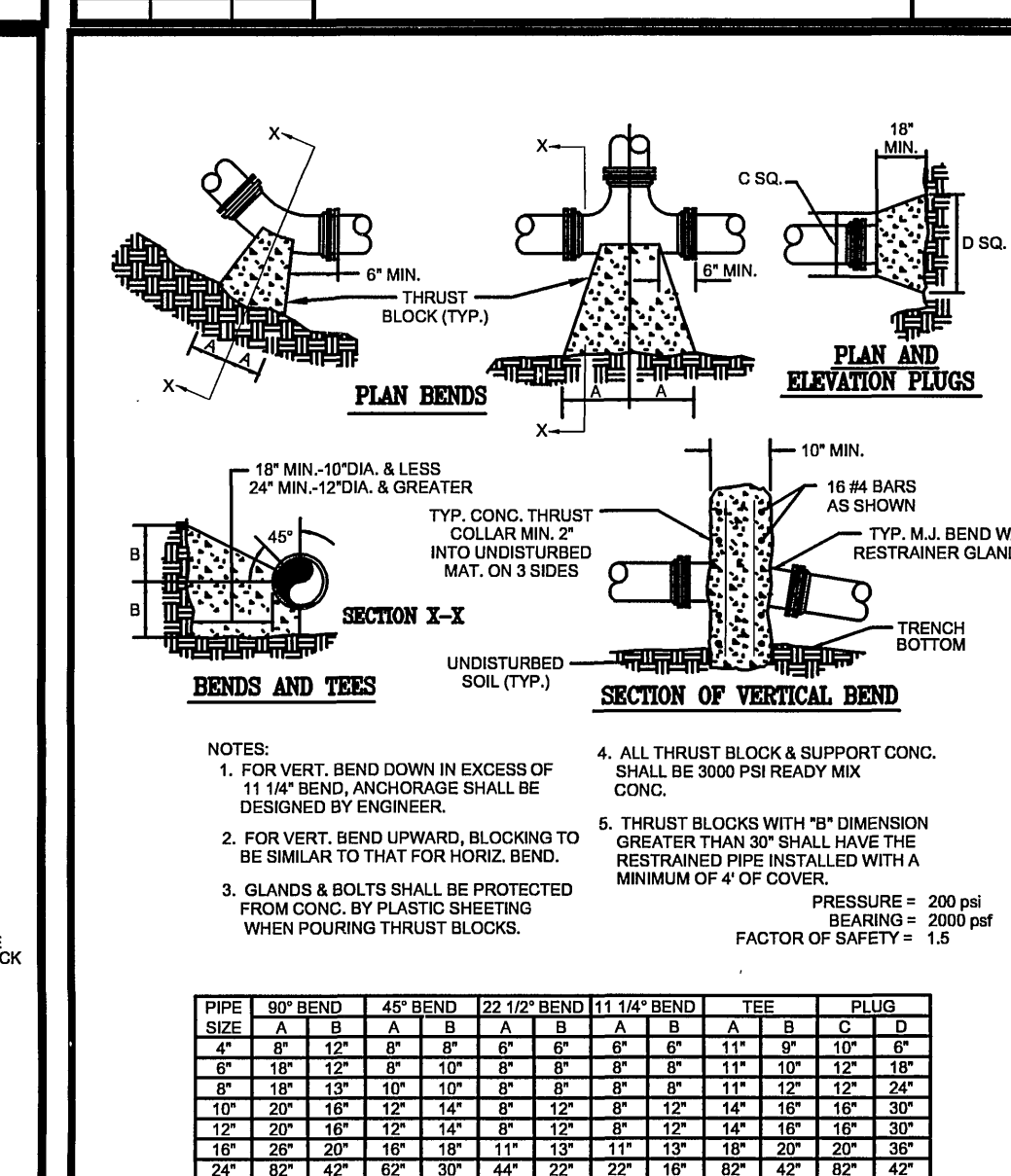
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	W-19
07/01/04	THRUST BLOCK CONSTRUCTION	



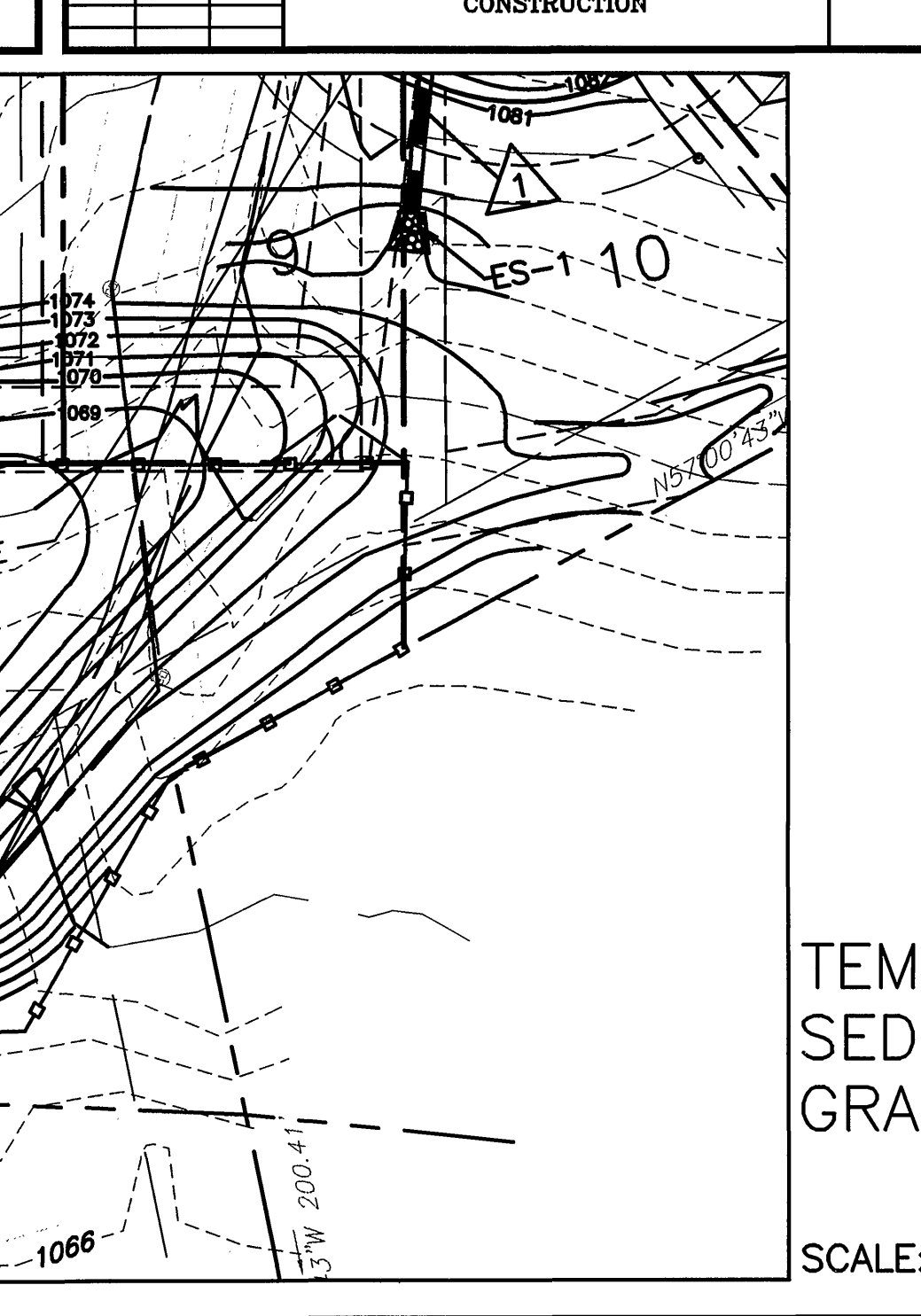
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	W-08
07/01/04	WATER LINE VALVE INSTALLATION	



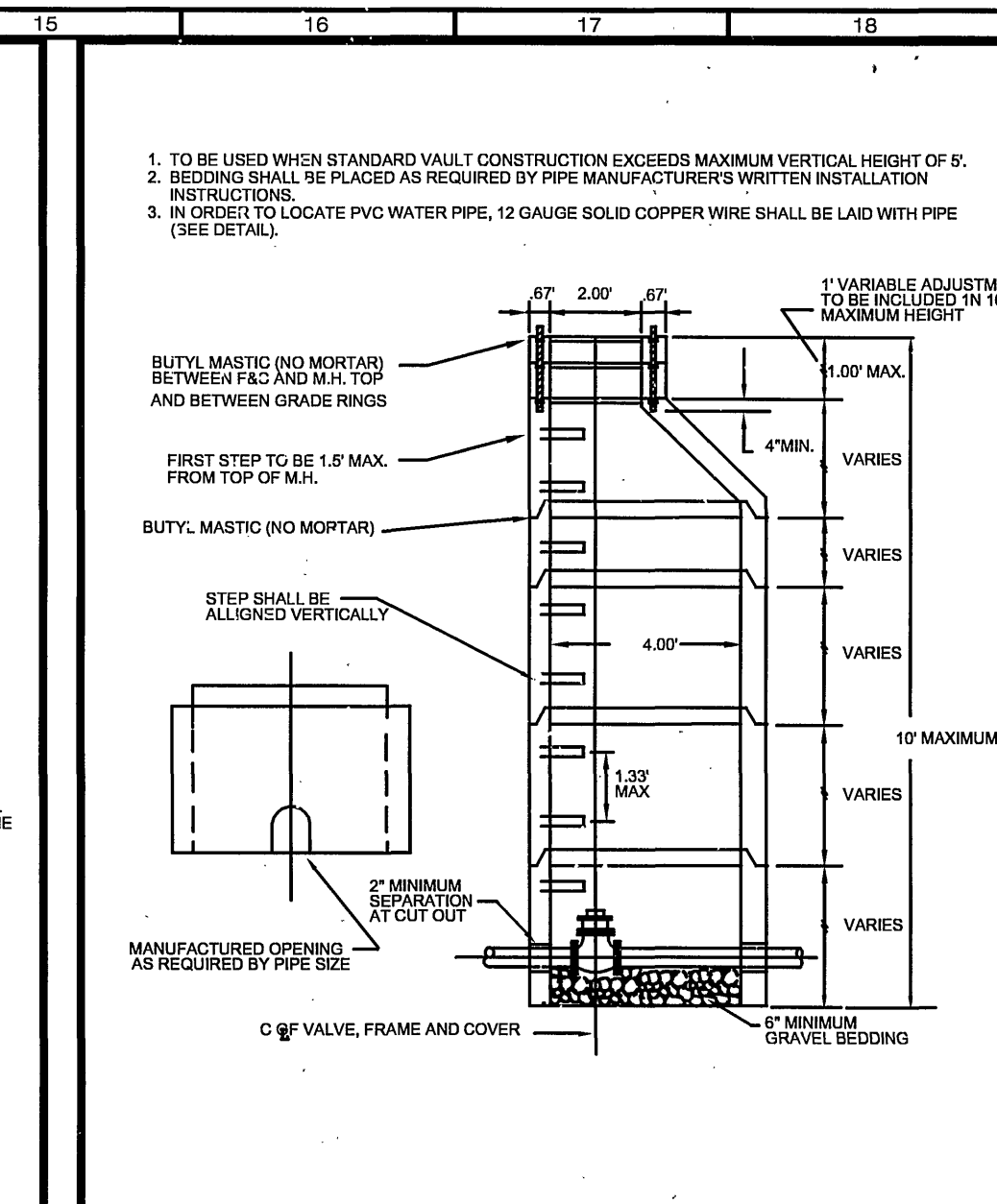
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	W-19
07/01/04	THRUST BLOCK CONSTRUCTION	



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	W-20
07/01/04	THRUST RESTRAINT OF PIPE JOINTS DESIGN LENGTHS	



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

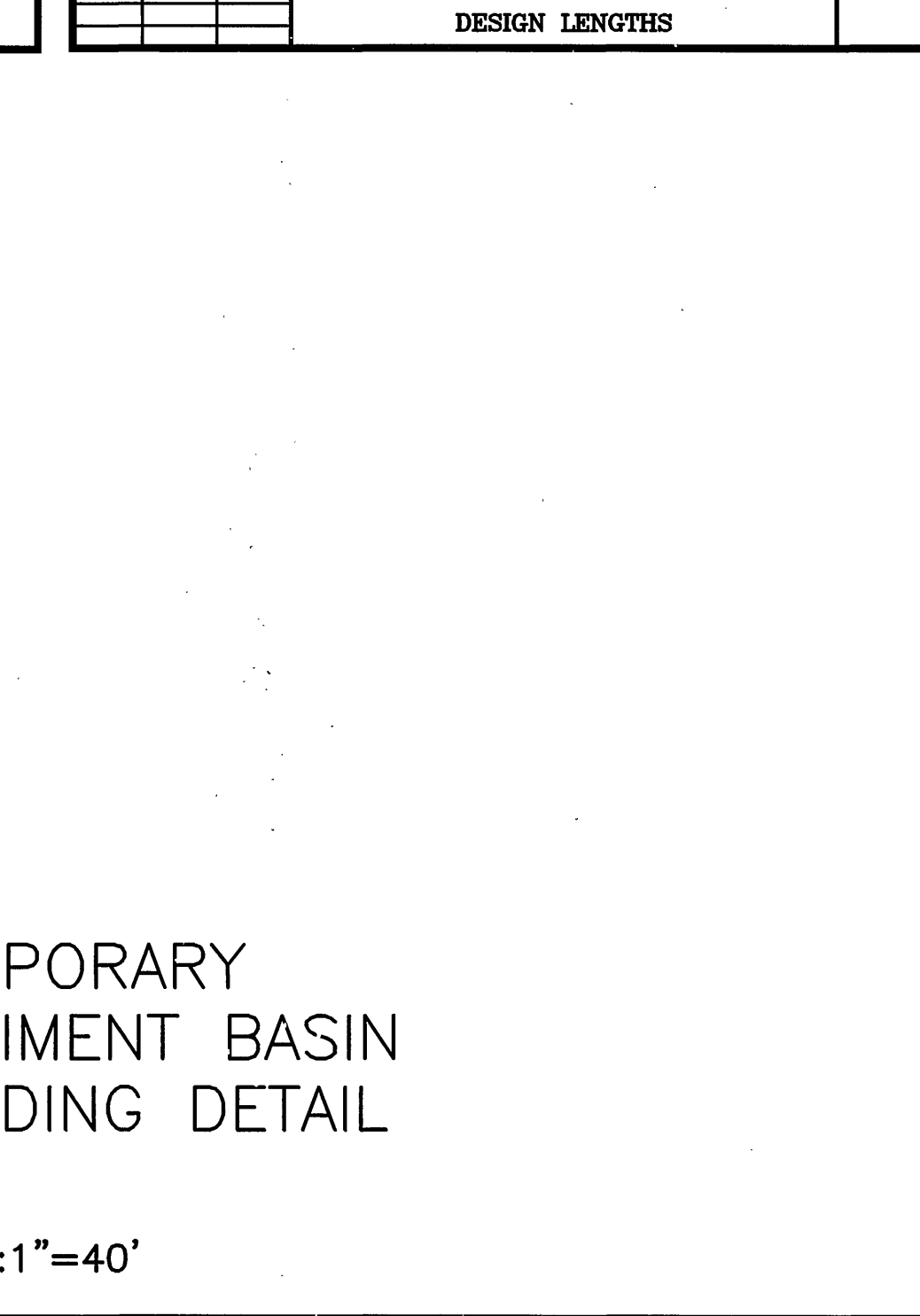
REVISION DATE	DESCRIPTION	W-15
07/01/04	ALTERNATE VALVE VAULT (MANHOLE)	

WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

PIPE SIZE	PIPE MATL.	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	VALVE	TEE	REDUCER	VERT. 45°	VERT. 22 1/2°	VERT. 11 1/4°
8"	D.I.	28"	12"	8"	3"	38"	34"	20"	23"	11"	5"
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"
8"	PVC	30"	12"	8"	3"	56"	38"	29"	35"	17"	8"
10"	PVC	40"	16"	8"	4"	74"	50"	31"	46"	22"	11"
12"	PVC	47"	20"	9"	5"	89"	82"	30"	56"	27"	13"

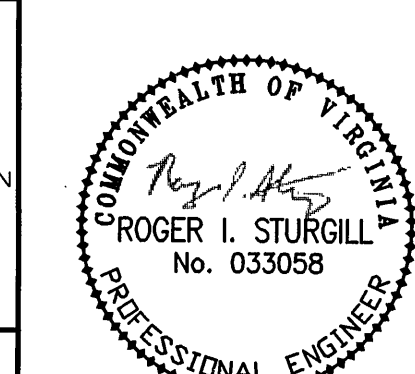
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	W-20
07/01/04	THRUST RESTRAINT OF PIPE JOINTS DESIGN LENGTHS	



WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS

REVISION DATE	DESCRIPTION	W-20
07/01/04	THRUST RESTRAINT OF PIPE JOINTS DESIGN LENGTHS	



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501 Branchway Road
 Richmond, Virginia 23236
 Phone: 804/794-0571
 FAX: 804/794-2635

1208 Corporate Circle
 Roanoke, Virginia 24018
 Phone: 540/772-9550
 FAX: 540/772-9590

880 Technology Park Drive
 Suite 200
 Glen Allen, Virginia 23059
 Phone: 804/653-0132
 FAX: 804/653-0133

102 Hubbard Street
 Blacksburg, Virginia 24060
 Phone: 540/861-0961
 FAX: 540/861-0962

1557 Commerce Road
 Suite 201
 Verona, Virginia 24482
 Phone: 540/248-3220
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CARRIAGE PARK
 WWA DETAILS
 HOLLINS
 ROANOKE COUNTY, VIRGINIA

DRAWN BY: BTC
 DESIGNED BY: BTC
 CHECKED BY:
 DATE: 3-24-05
 REVISIONS:
 6-8-05
 6-15-05
 8-8-05
 8-29-05
 9-27-05
 10-29-05

SCALE: AS SHOWN
 SHEET NO.
9 OF 9
 JOB NO.
 R0500012.00