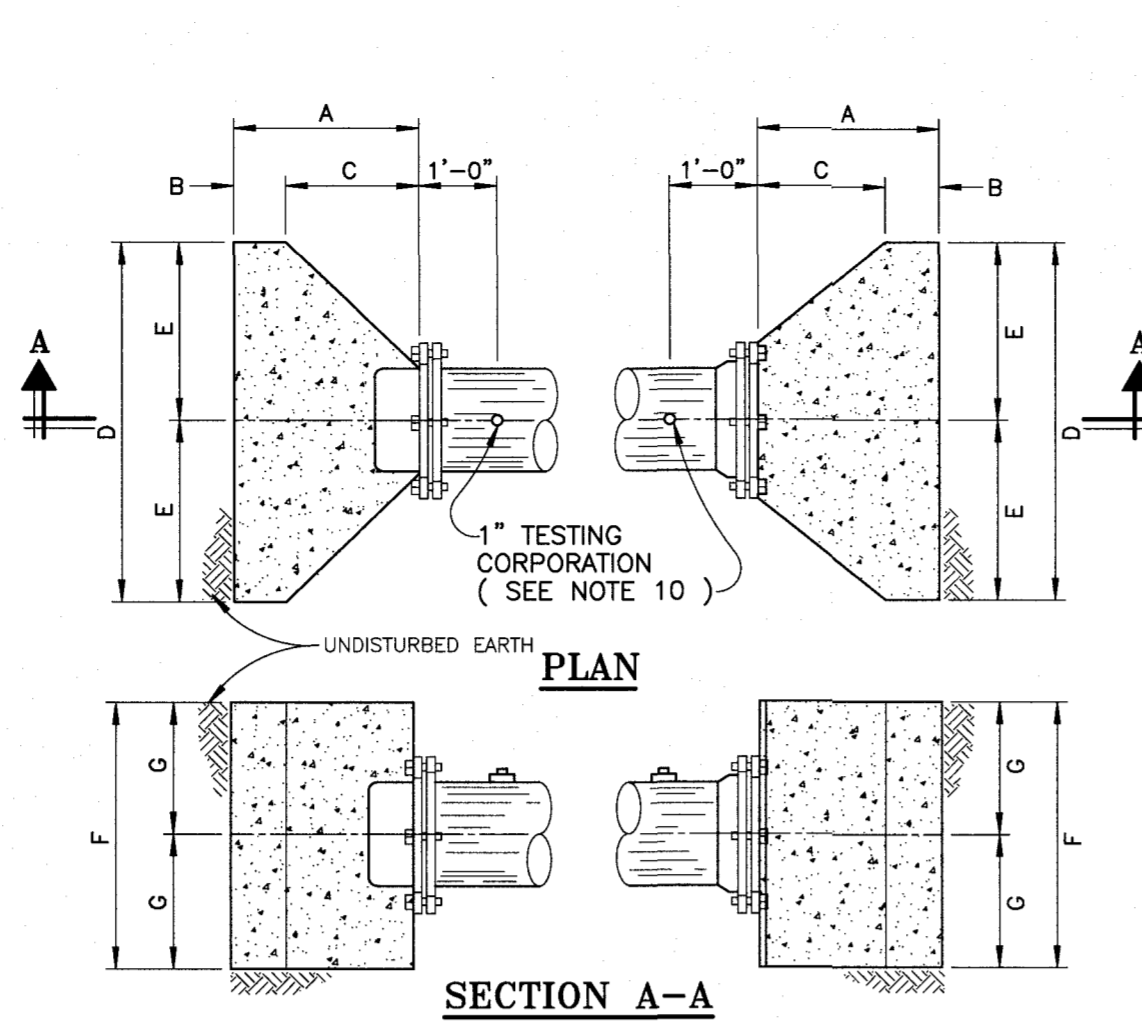


TEE SIZE	A	B	C	D	E	F	G	H
8" X 8"	0'-9"	0'-9"	2'-8"	1'-4"	2'-0"	1'-0"	2'-2"	0'-7"
12" X 8"	0'-9"	0'-9"	2'-8"	1'-4"	2'-0"	1'-0"	2'-6"	0'-8"
16" X 8"	0'-9"	0'-9"	2'-8"	1'-4"	2'-0"	1'-0"	2'-10"	0'-8"
12" X 12"	0'-9"	1'-3"	4'-0"	2'-0"	3'-0"	1'-6"	2'-10"	0'-10"
16" X 12"	0'-9"	1'-3"	4'-0"	2'-0"	3'-0"	1'-6"	3'-4"	0'-10"
16" X 16"	1'-0"	1'-4"	4'-8"	2'-4"	3'-6"	2'-4"	3'-6"	1'-0"

NOTE: THRUST BLOCKS FOR 6" TEES SHALL MATCH THE REQUIREMENTS FOR 8" TEES

CONCRETE THRUST BLOCKS FOR TEES

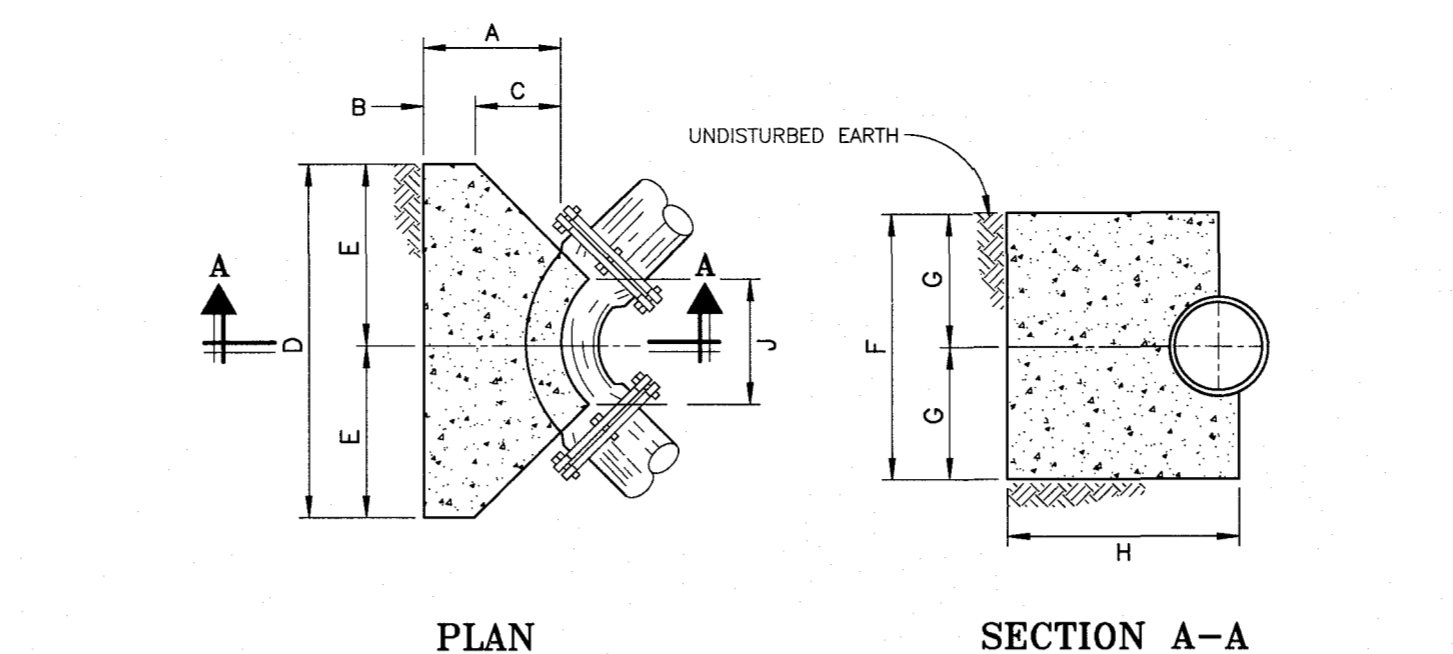
NOT TO SCALE



SIZE	A MIN.	B MIN.	C	D	E	F	G
8"	1'-11"	0'-9"	1'-2"	3'-0"	1'-6"	2'-0"	1'-0"
12"	2'-1"	0'-9"	1'-4"	4'-0"	2'-0"	3'-0"	1'-6"
16"	2'-8"	1'-0"	1'-8"	5'-0"	2'-6"	4'-0"	2'-0"
24"	4'-2"	1'-6"	2'-8"	6'-0"	3'-0"	4'-0"	2'-0"

CONCRETE THRUST BLOCKS FOR CAPS

NOT TO SCALE

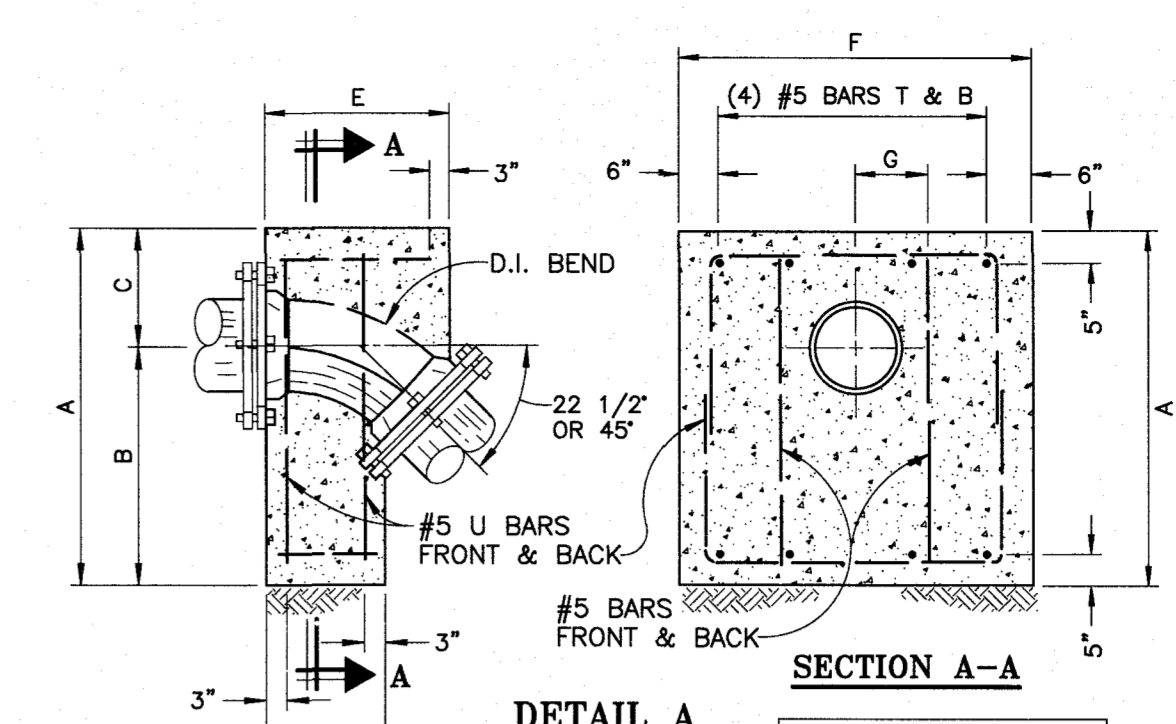


SIZE	ANGLE	A (MIN.)	B (MIN.)	C	D	E	F	G	H (MIN.)	J
6"	45°	1'-6"	0'-9"	0'-9"	1'-6"	0'-9"	1'-6"	0'-9"	1'-8"	0'-10"
6"	90°*	1'-6"	0'-9"	0'-9"	2'-0"	1'-0"	2'-0"	1'-0"	1'-8"	0'-10"
8"	45°	1'-9"	0'-9"	1'-0"	2'-4"	1'-2"	2'-0"	1'-0"	1'-11"	1'-4"
8"	90°*	1'-9"	0'-9"	1'-0"	3'-4"	1'-8"	2'-6"	1'-3"	1'-11"	1'-2"
12"	22 1/2°	1'-9"	0'-9"	1'-0"	2'-6"	1'-3"	2'-0"	1'-0"	2'-0"	1'-4"
12"	45°	2'-1"	0'-9"	1'-4"	3'-6"	1'-9"	2'-6"	1'-3"	2'-4"	1'-4"
12"	90°*	2'-1"	0'-9"	1'-4"	5'-6"	2'-9"	3'-0"	1'-6"	2'-4"	1'-8"
16"	22 1/2°	2'-8"	1'-0"	1'-8"	3'-4"	1'-8"	2'-6"	1'-3"	3'-0"	1'-2"
16"	45°	2'-8"	1'-0"	1'-8"	5'-4"	2'-8"	3'-0"	1'-6"	3'-0"	2'-8"
16"	90°*	2'-8"	1'-0"	1'-8"	6'-0"	3'-0"	5'-0"	2'-6"	3'-0"	2'-8"
24"	90°*	4'-7"	1'-0"	3'-7"	10'-0"	5'-0"	7'-0"	3'-6"	5'-4"	2'-4"

* 90° BENDS TO BE INSTALLED ONLY WITH WRITTEN APPROVAL OF THE COMMUNITY

CONCRETE THRUST BLOCKS FOR HORIZONTAL BENDS

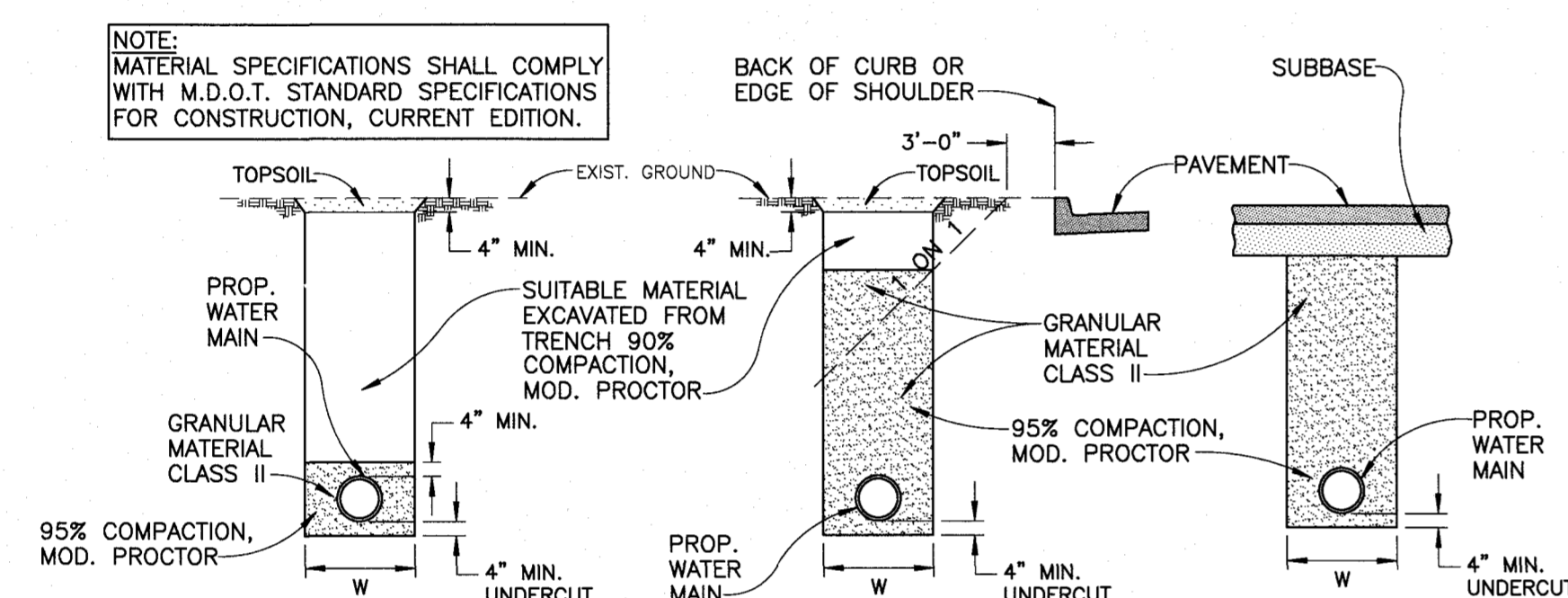
NOT TO SCALE



SIZE	ANGLE	A	B	C	D	E	F	G	H	I
8"	22 1/2°	3'-0"	1'-8"	1'-4"	1'-4"	1'-7"	2'-8"	0'-8"	1'-9"	1'-0"
8"	45°	4'-0"	2'-6"	1'-6"	1'-6"	1'-8"	3'-2"	0'-10"	2'-0"	1'-0"
12"	22 1/2°	4'-0"	2'-6"	1'-6"	1'-7"	2'-0"	4'-0"	0'-10"	2'-6"	1'-0"
12"	45°	4'-6"	3'-0"	1'-6"	1'-6"	2'-4"	5'-0"	0'-11"	2'-6"	1'-0"
16"	22 1/2°	4'-6"	2'-10"	1'-8"	1'-7"	2'-2"	5'-0"	0'-11"	2'-4"	1'-6"

ANCHORAGE FOR VERTICAL BENDS

NOT TO SCALE

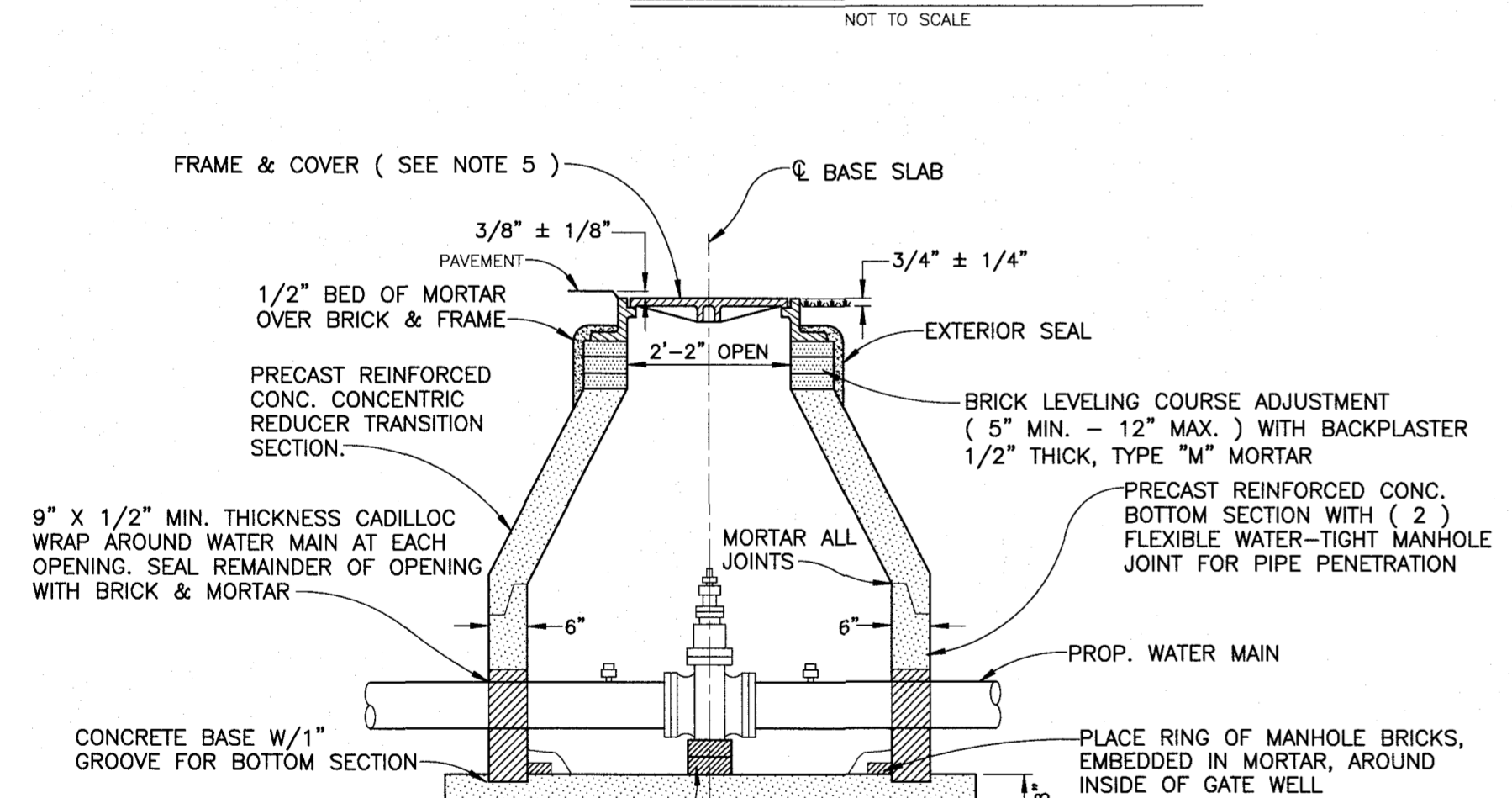


PROP. WATER MAINS NOT UNDER ROADBED

PROP. WATER MAINS UNDER ROADBED OR WITHIN INFLUENCE OF ROADBED

BEDDING & TRENCH DETAILS

NOT TO SCALE



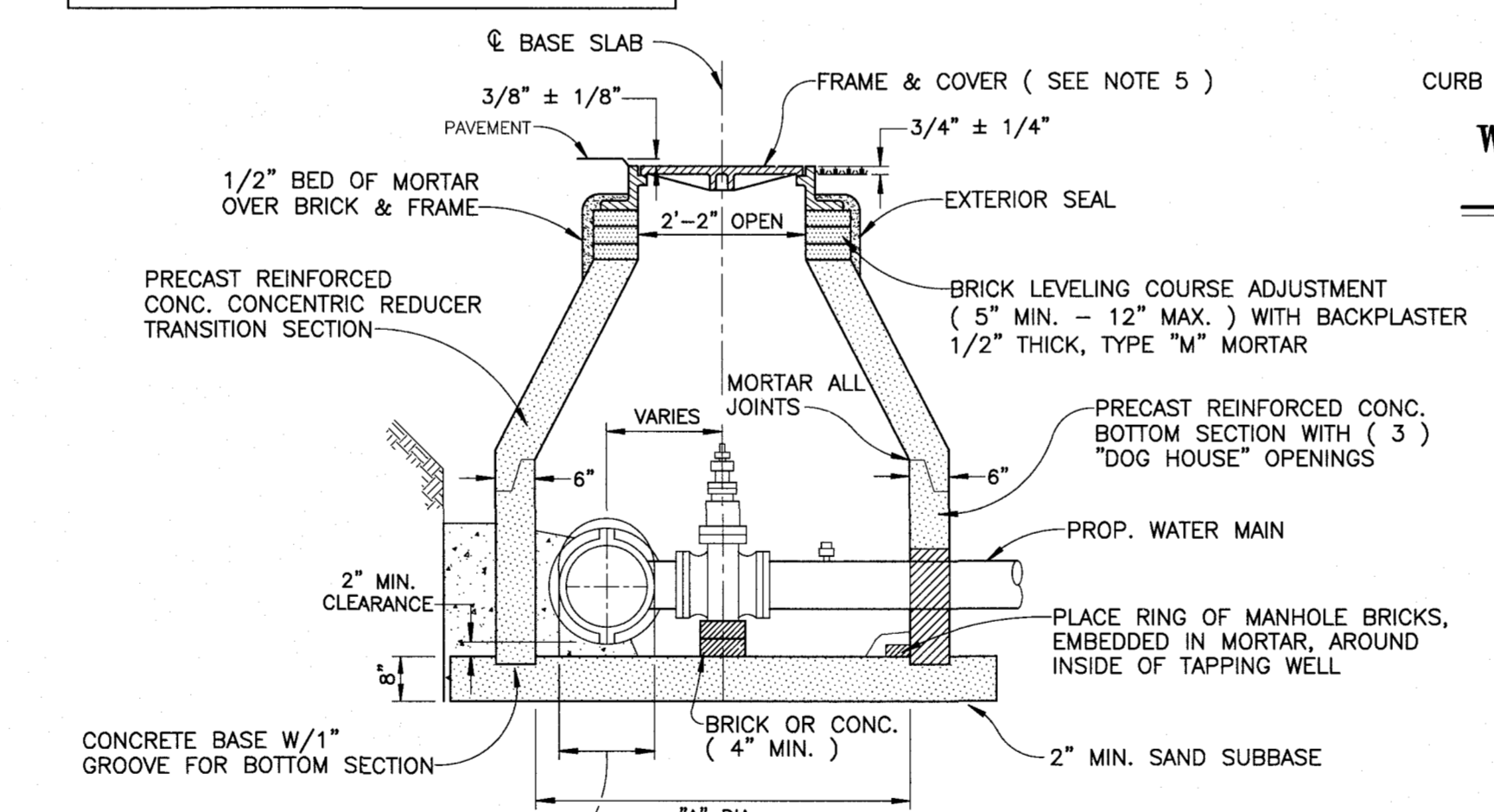
VALVE SIZE	"A" DIA.
6", 8" & 12"	60"
16"	72"

SECTION A-A

GATE VALVE IN WELL

NOT TO SCALE

NOTE: PRECAST REINFORCED CONCRETE GATEWELL RISER SECTIONS SHALL BE USED WHERE REQUIRED FOR ADDITIONAL DEPTH OF GATE WELL

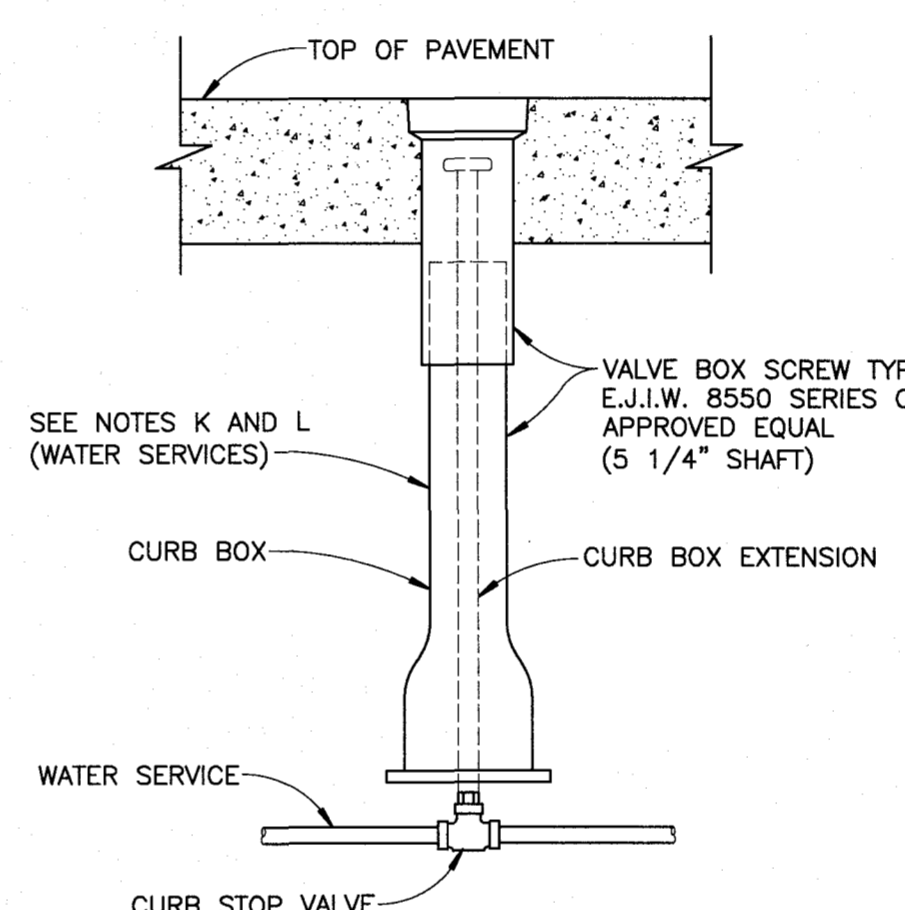


TAPPING VALVE SIZE	"A" DIA.
6", 8" & 12"	60"
16"	72"

SECTION A-A

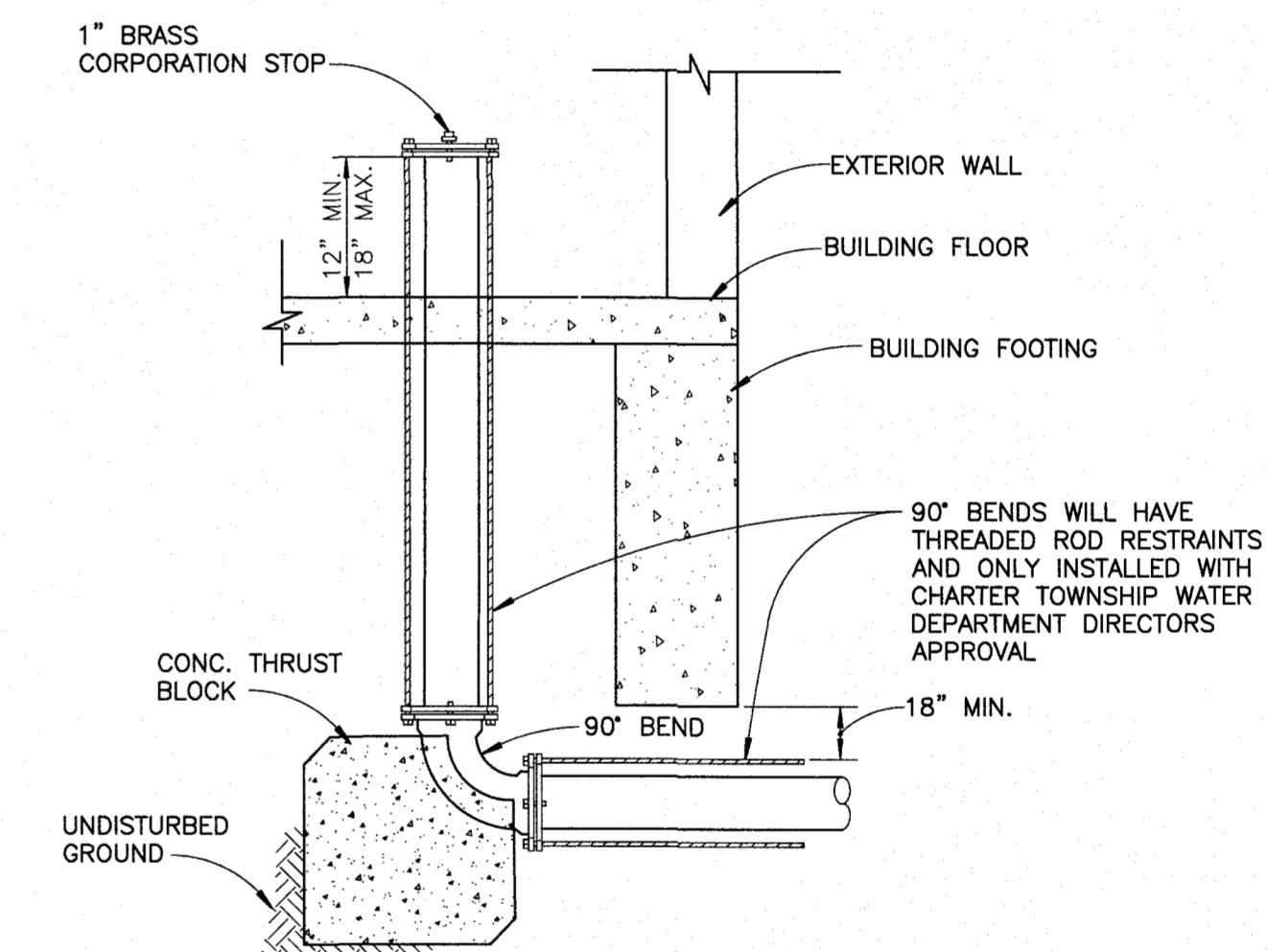
TAPPING SLEEVE & VALVE IN WELL

NOT TO SCALE



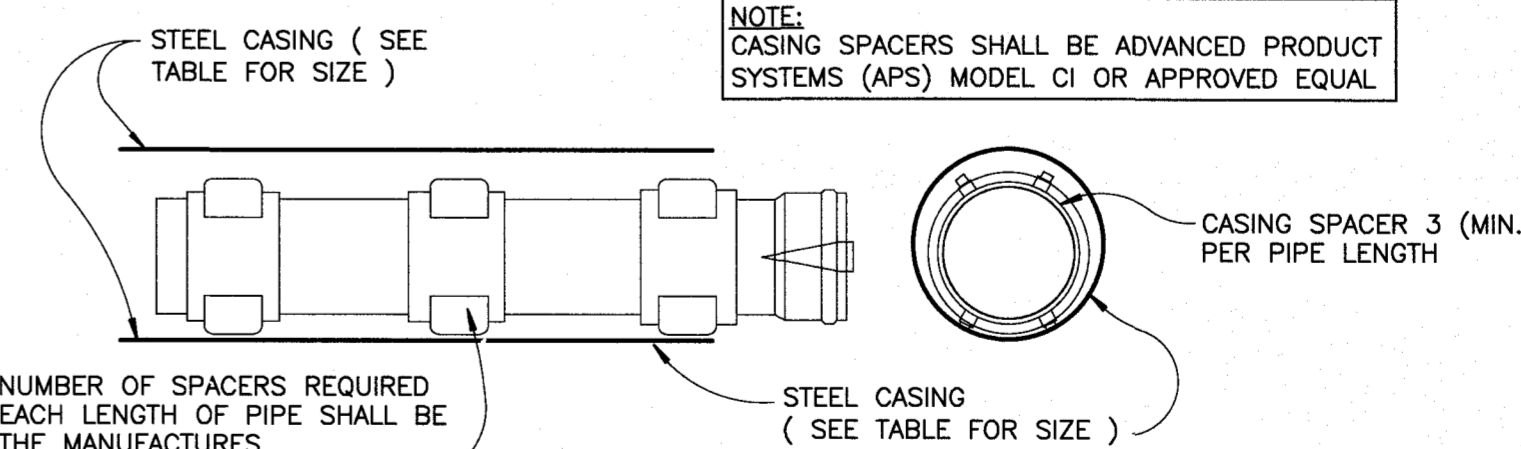
WATER SERVICE SHUTOFF IN PAVEMENT

NOT TO SCALE



BUILDING RISER DETAIL

NOT TO SCALE



PIPE SIZE	RECOMMENDED MINIMUM CASING DIAMETER (O.D.)	MINIMUM CASING WALL THICKNESS
4"	12.75"	0.375"
6"	14"	0.375"
8"	16"	0.375"
12"	20"	0.375"
16"	24"	0.406"
24"	36"	0.532"

STEEL CASING REQUIREMENTS

NOT TO SCALE



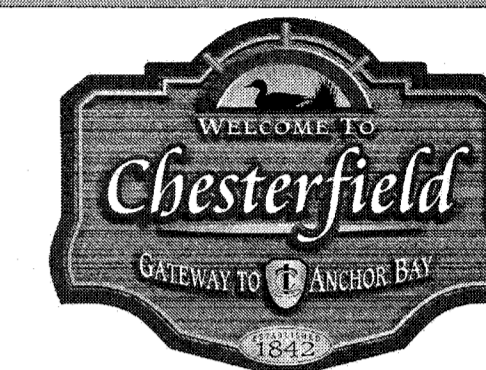
ANDERSON, ECKSTEIN AND WESTRICK, INC.

CIVIL ENGINEERS SURVEYORS ARCHITECTS

51301 Schoenherr Road Phone 586 726 1234
Shelby Township Michigan 48315 Fax 586 726 8780

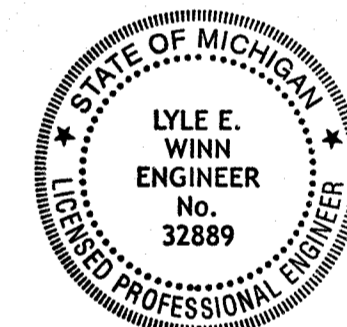
www.aewinc.com

ENGINEERING STRONG COMMUNITIES



DATE	SUBMITTALS/REVISIONS

M:\COMMUNITIES\CHESTERFIELD\STDETAILS\CURRENT\WATER_2.DWG Model--12/5/2018 8:45:31 AM



Lyle E. Winn
LYLE E. WINN P.E. NO. 32889

DEPARTMENT OF PUBLIC WORKS

APPROVED BY *Bon Coddington*
BON CODDINGTON, DIRECTOR

DATE: 12/6/18

CHARTER TOWNSHIP OF CHESTERFIELD

STANDARD WATER MAIN DETAILS (2 OF 2)

SHEET NO.

W2

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