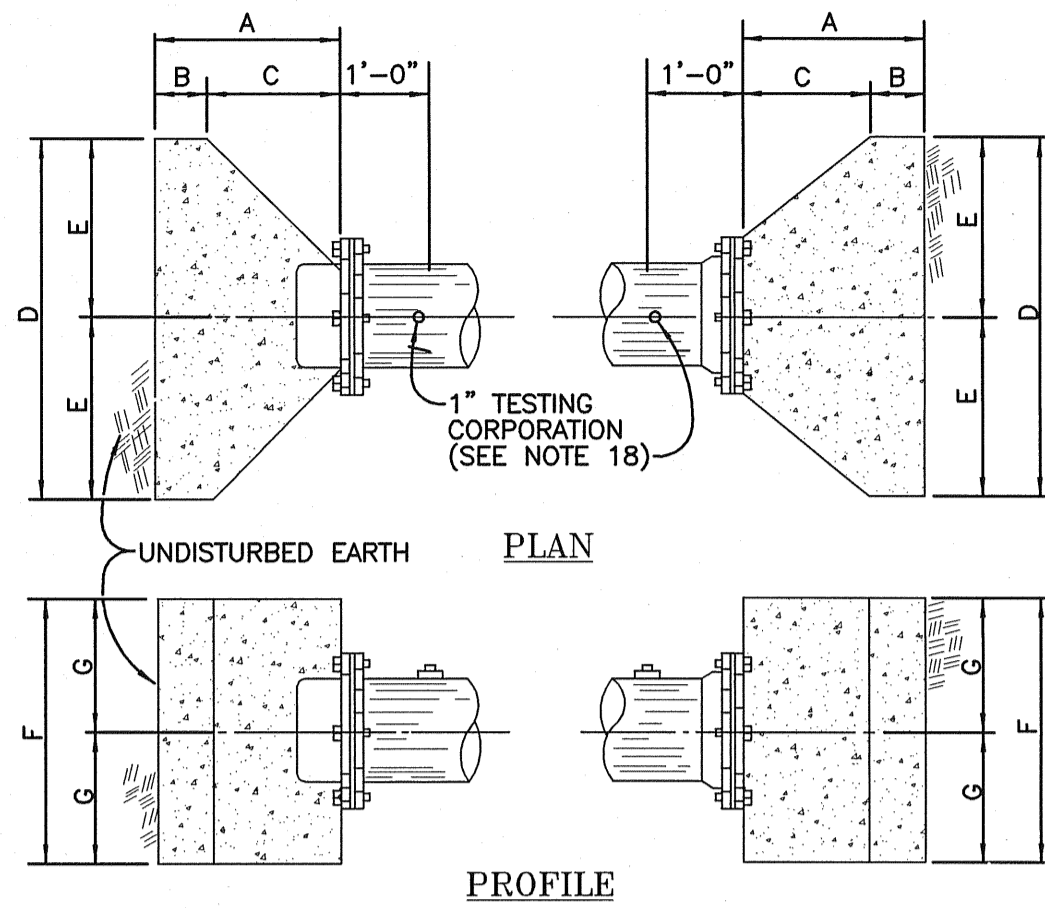


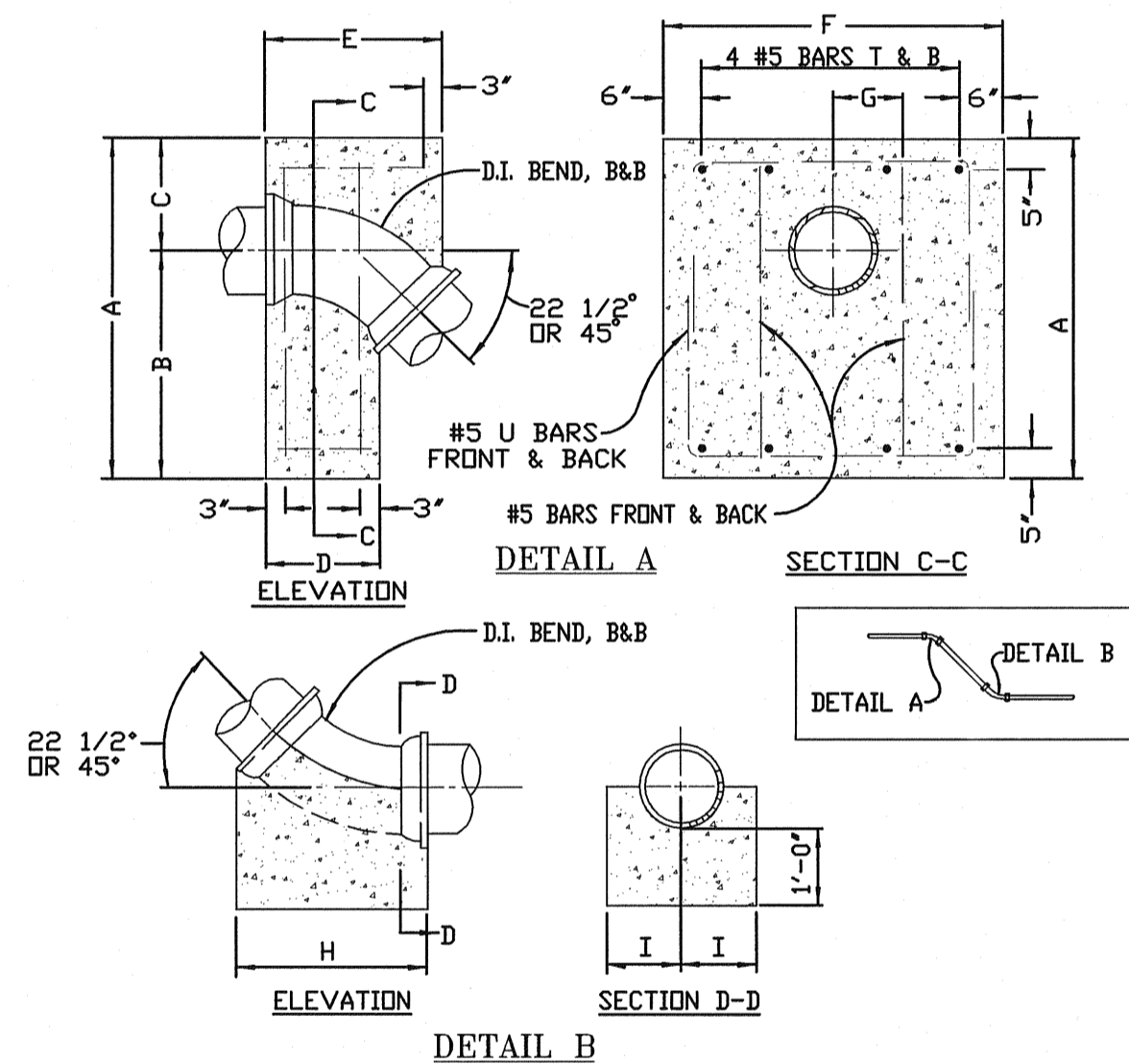
ANGLE	A (MIN.)	B (MIN.)	C	D	E	F	G	H	J (MIN.)
6"	45"	1'-6"	0'-9"	0'-9"	1'-6"	0'-9"	1'-6"	0'-9"	0'-10"
6"	90"	1'-6"	0'-9"	0'-9"	2'-0"	1'-0"	2'-0"	1'-0"	1'-8"
8"	45"	1'-9"	0'-9"	1'-0"	2'-4"	1'-8"	2'-6"	1'-0"	1'-11"
8"	90"	1'-9"	0'-9"	1'-0"	3'-4"	1'-8"	2'-6"	1'-3"	1'-11"
12"	22 1/2"	1'-9"	0'-9"	1'-0"	2'-6"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

CONCRETE THRUST BLOCKS FOR HORIZONTAL BENDS



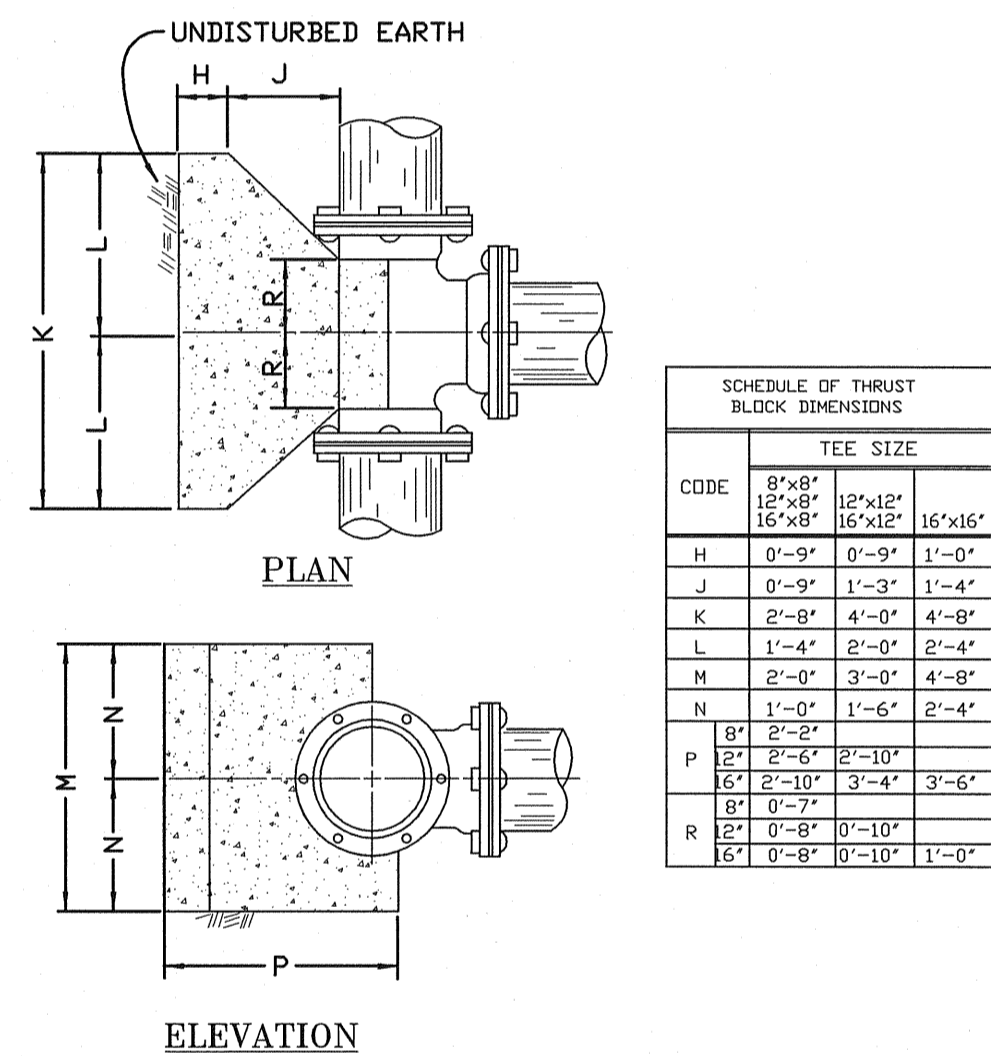
SIZE	A	B	C	D	E	F	G
8"	1'-11"	0'-9"	1'-2"	3'-0"	1'-6"	2'-0"	1'-0"
12"	2'-1"	0'-9"	1'-4"	4'-0"	2'-0"	3'-0"	1'-6"
16"	2'-8"	1'-0"	1'-8"	5'-0"	2'-6"	4'-0"	2'-0"

CONCRETE THRUST BLOCKS FOR CAPS



VERTICAL BEND	DIAM.	ANGLE	A	B	C	D	E	F	G	H	I
8"	22 1/2"	36°	20	16	16	19	32	8"	21"	12"	
8"	45°	48	30	18	18	20	38	10"	24"	12"	
12"	22 1/2"	48	30	18	19	24	48	10"	30"	18"	
12"	45°	54	36	18	18	28	60	11"	30"	18"	
16"	22 1/2"	54	34	20	19	26	60	11"	28"	18"	

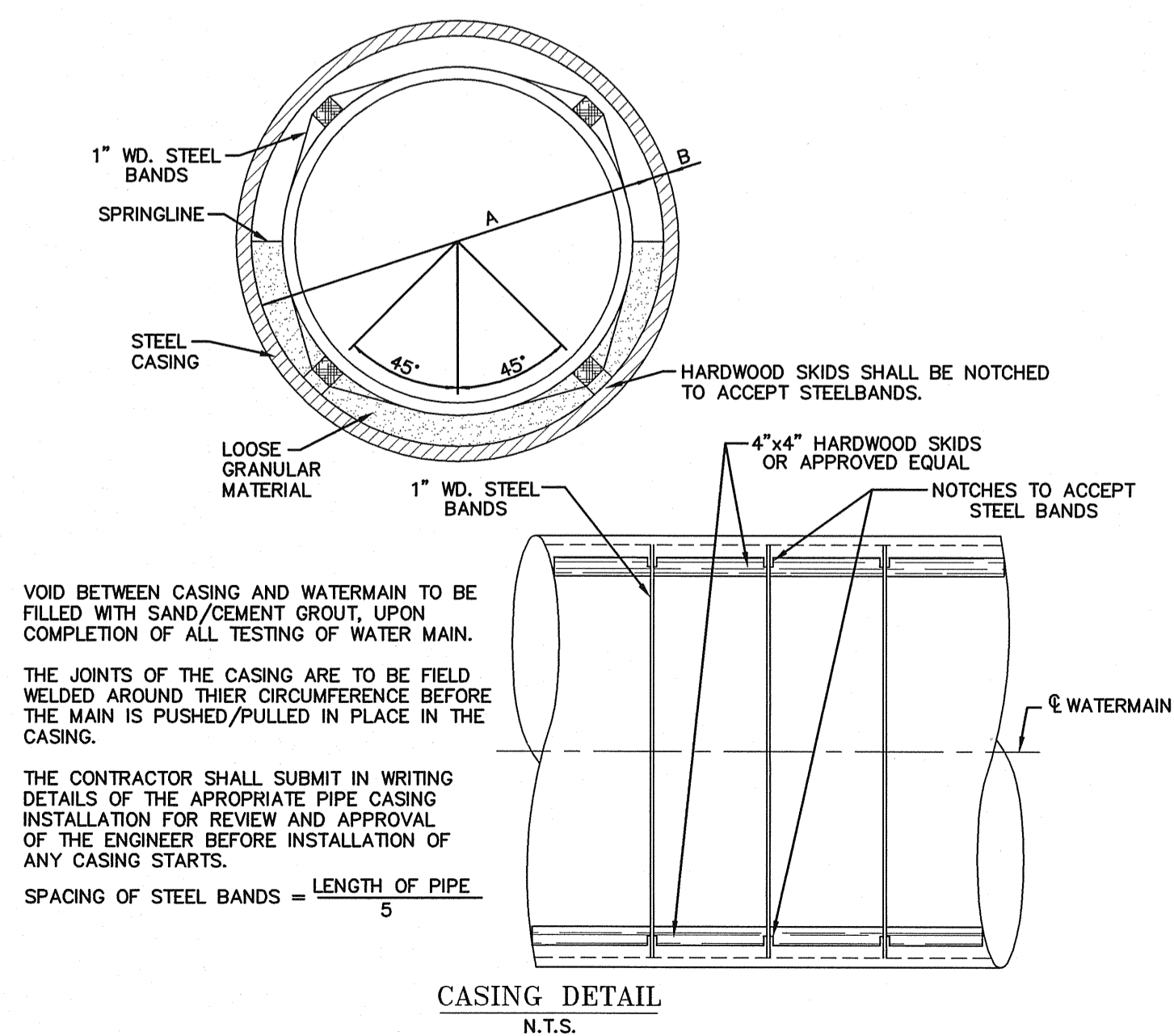
ANCHORAGE FOR VERTICAL BENDS



CODE	TEE SIZE		
	8"x8"	12"x8"	16"x16"
H	0'-9"	0'-9"	1'-0"
J	0'-9"	1'-3"	1'-4"
K	2'-8"	4'-0"	4'-8"
L	1'-4"	2'-0"	2'-4"
M	2'-0"	3'-0"	4'-8"
N	1'-0"	1'-6"	2'-4"
P	8"	2'-8"	2'-10"
R	8"	2'-10"	3'-4"
R	8"	0'-7"	3'-4"
R	12"	0'-8"	0'-10"
R	15"	0'-8"	0'-10"

NOTE - THRUST BLOCKS FOR 6' TEES SHALL MATCH THE REQUIREMENTS FOR 8' TEES.

CONCRETE THRUST BLOCKS FOR TEES



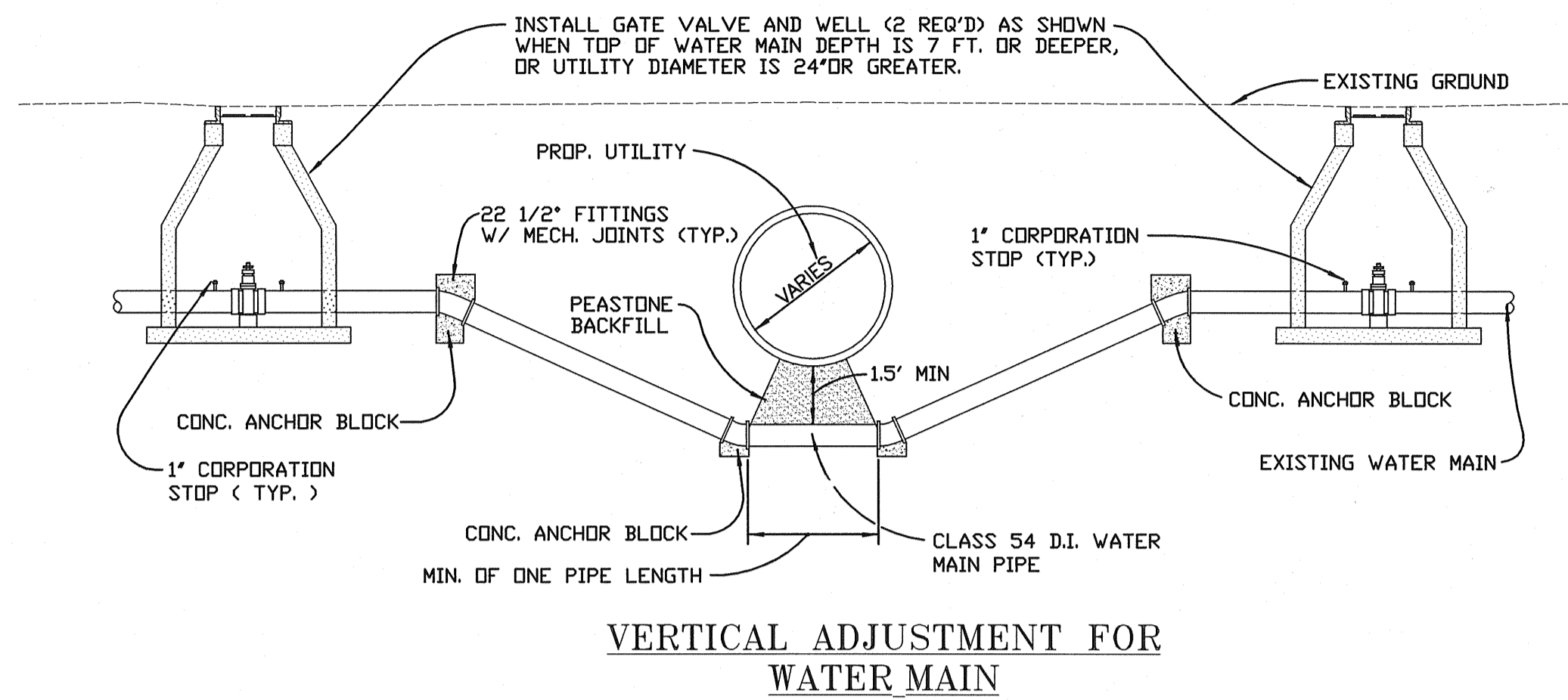
VOID BETWEEN CASING AND WATERMAIN TO BE FILLED WITH SAND/CEMENT GROUT, UPON COMPLETION OF ALL TESTING OF WATER MAIN.

THE JOINTS OF THE CASING ARE TO BE FIELD WELDED AROUND THEIR CIRCUMFERENCE BEFORE THE MAIN IS PUSHED/PULLED IN PLACE IN THE CASING.

THE CONTRACTOR SHALL SUBMIT IN WRITING DETAILS OF THE APPROPRIATE PIPE CASING INSTALLATION FOR REVIEW AND APPROVAL OF THE ENGINEER BEFORE INSTALLATION OF ANY CASING STARTS.

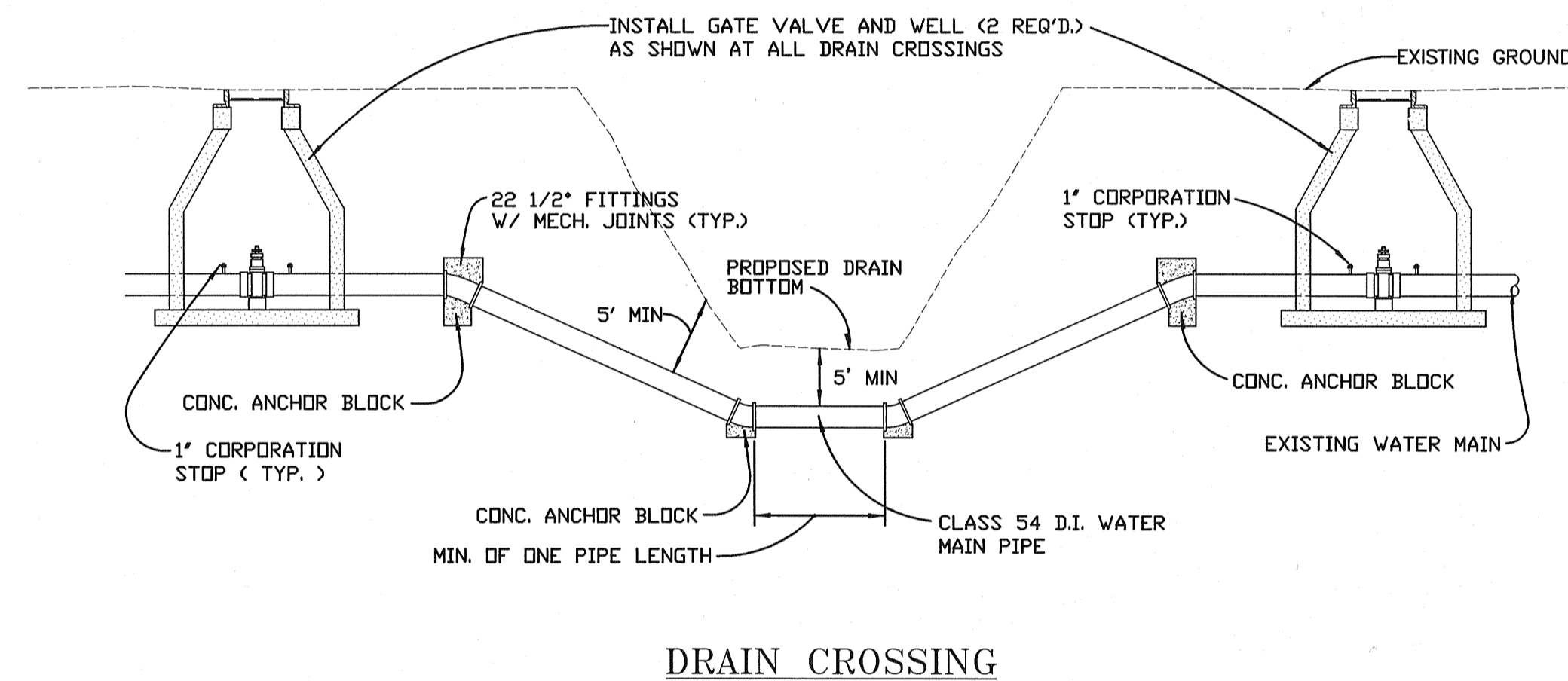
SPACING OF STEEL BANDS = $\frac{\text{LENGTH OF PIPE}}{5}$

CASING DETAIL N.T.S.



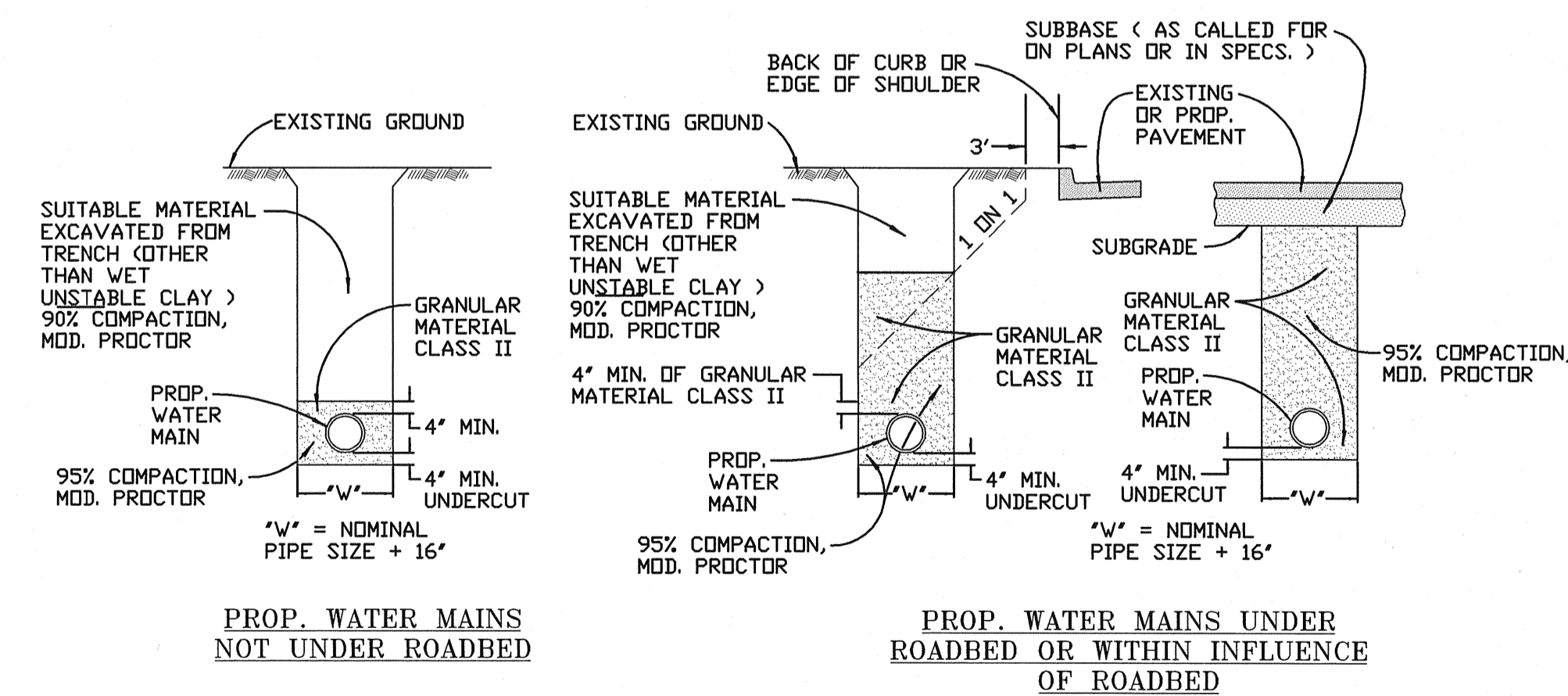
VERTICAL ADJUSTMENT FOR WATER MAIN

- NOTE:
1. USE STANDARD BEDDING
 2. SUBGRADE ELEVATION GIVEN ON PLANS
 3. THE CONTRACTORS SHALL CHLORINATE AND PRESSURE TEST THE SECTION OF ADJUSTED WATER MAIN AT 150 P.S.I. PRIOR TO PLACING IN SERVICE.
 4. VERTICAL ADJUSTMENT OF EXISTING WATER MAIN INCLUDING GATE VALVES SHALL BE INCLUDED IN THE PROJECT
 5. WATER MAINS SHALL NOT BE INSTALLED WITH MORE THAN 6' OF COVER WITHOUT PRIOR APPROVAL OF THE VILLAGE
 6. FIELD LOCK GASKETS SHALL BE REQUIRED WHERE MECHANICAL JOINTS ARE NOT USED. (USE OF FIELD LOCK GASKETS REQUIRES PRIOR APPROVAL OF THE VILLAGE)



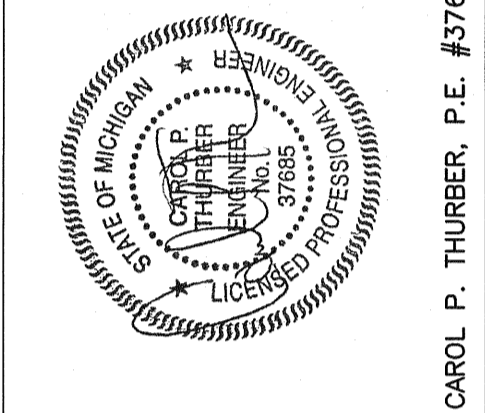
DRAIN CROSSING

- NOTE
1. USE STANDARD BEDDING
 2. SUBGRADE ELEVATION GIVEN ON PLANS
 3. THE CONTRACTORS SHALL CHLORINATE AND PRESSURE TEST THE SECTION OF ADJUSTED WATER MAIN AT 150 P.S.I. PRIOR TO PLACING IN SERVICE.
 4. VERTICAL ADJUSTMENT OF EXISTING WATER MAIN INCLUDING GATE VALVES SHALL BE INCLUDED IN THE PROJECT
 5. WATER MAINS SHALL NOT BE INSTALLED WITH MORE THAN 6' OF COVER WITHOUT PRIOR APPROVAL OF THE VILLAGE
 6. FIELD LOCK GASKETS SHALL BE REQUIRED WHERE MECHANICAL JOINTS ARE NOT USED. (USE OF FIELD LOCK GASKETS REQUIRES PRIOR APPROVAL OF THE VILLAGE)



BEDDING DETAILS

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 www.fazalkhan.com



DEPARTMENT OF
 PUBLIC WORKS

APPROVED BY: *Michael Barnett*
 MICHAEL BARNETT
 DIRECTOR OF PUBLIC WORKS
 DATE: 8-1-07

VILLAGE OF NEW HAVEN
 STANDARD DETAILS
 FOR WATER MAIN
 (2 OF 2)