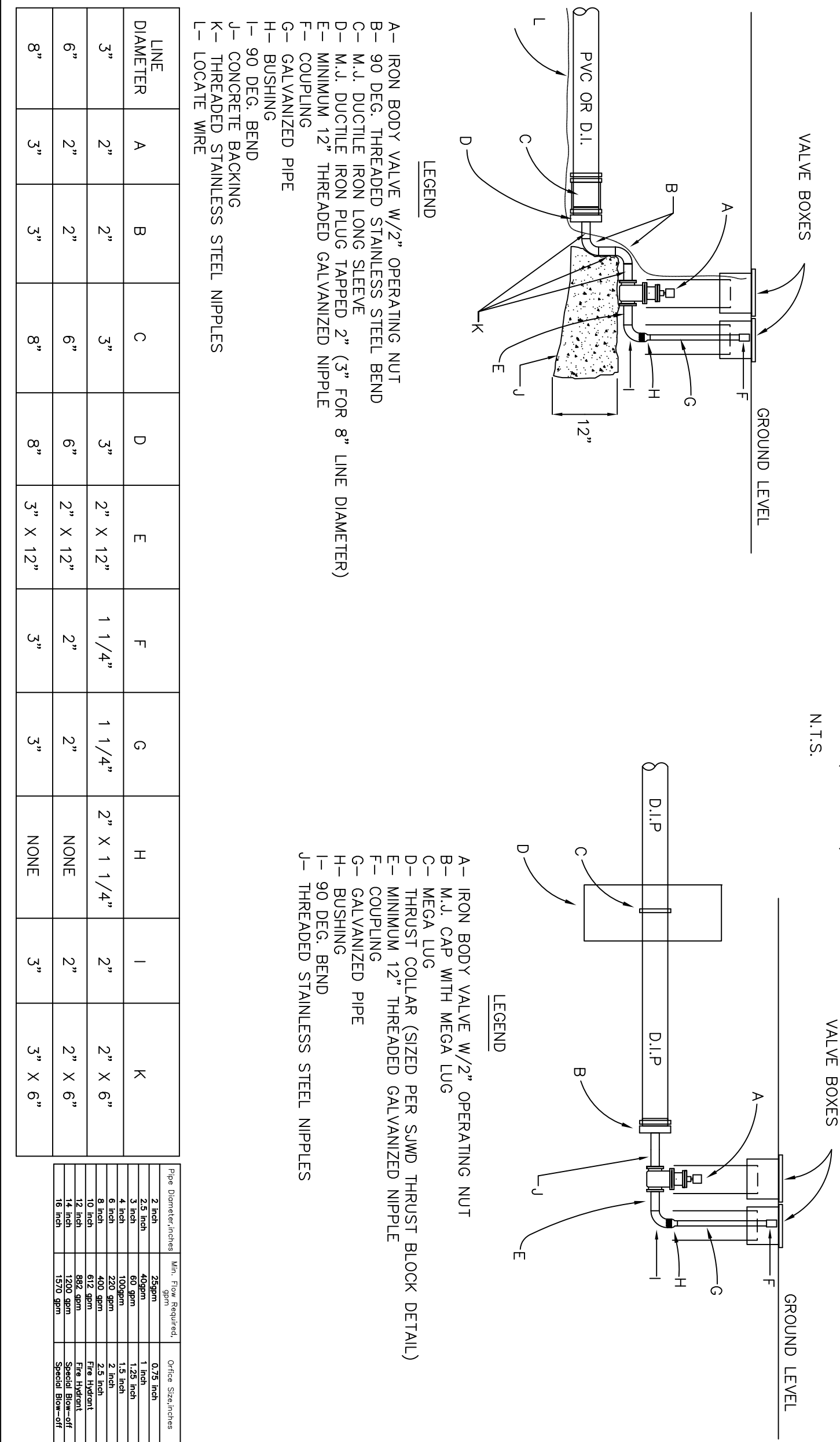


**AIR RELEASE VALVE INSTALLATION**

N.T.S.

NOTE: COMBINATION VALVE TO BE MANUFACTURED BY BRONSON, VALMATIC, WOOD, EMPEC, OR O.A.

NOTE: BLOW-OFFS SHALL NOT BE DIRECTED TOWARDS ROADS OR SO THAT THE WATER WILL FLOW INTO CREEKS, ETC. AT STREAM CROSSINGS DIRECT AWAY FROM STREAMS OVER GROUND.



**BLOW-OFF ASSEMBLY**

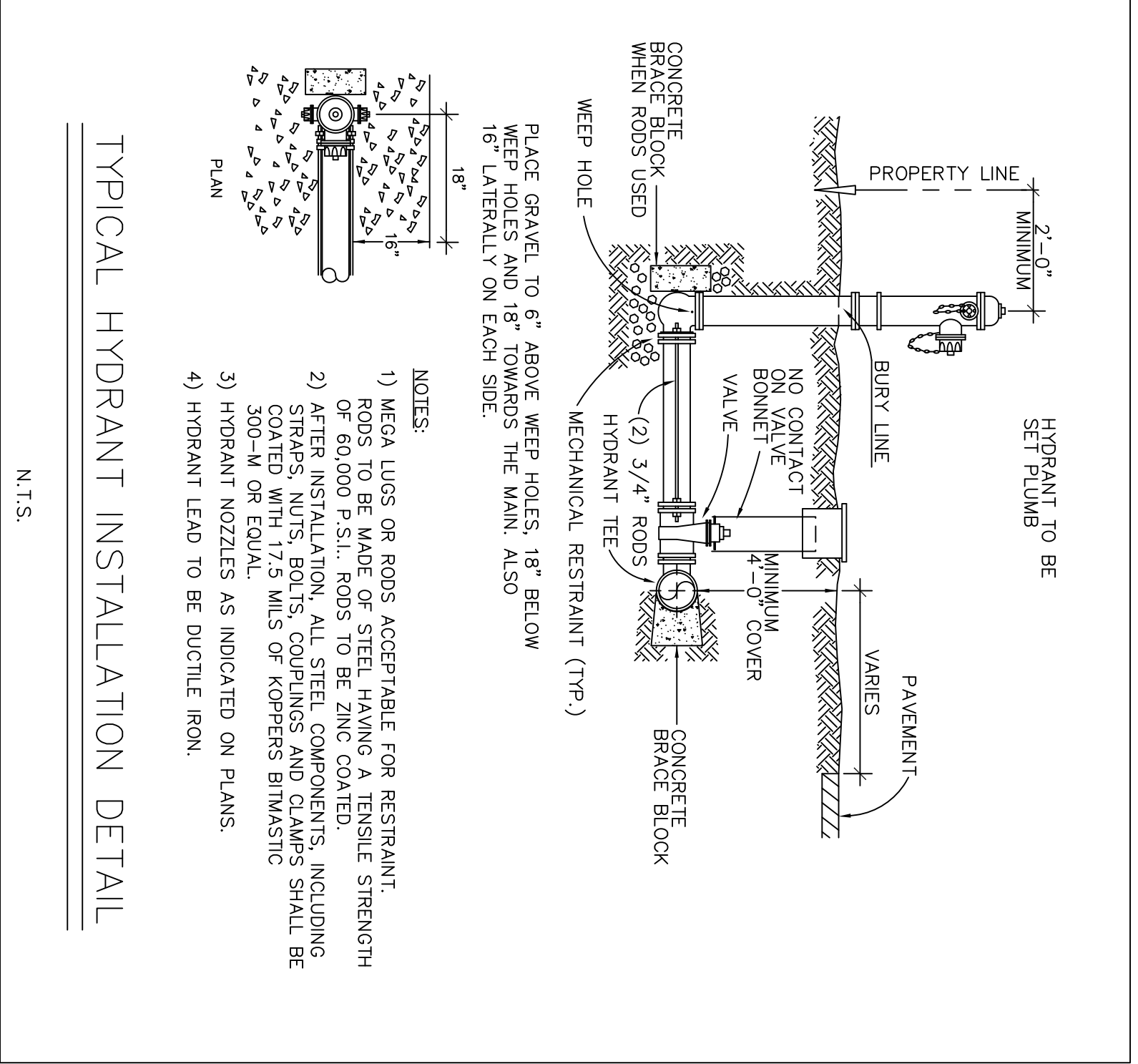
NOTE: ALL FITTINGS & PIPE SHALL BE DOMESTIC. (U.S. MADE)  
N.T.S.

- LEGEND
- A- IRON BODY VALVE W/2" OPERATING NUT
  - B- 90 DEG. THREADED STAINLESS STEEL BEND
  - C- MEGA LUG WITH MEGA LUG
  - D- THRUST COLLAR (SIZED PER SAND THRUST BLOCK DETAIL)
  - E- MINIMUM 12" THREADED GALVANIZED NIPPLE
  - F- COUPLING
  - G- GALVANIZED PIPE
  - H- BUSHING
  - I- 90 DEG. BEND
  - J- COMPRESSED STAINLESS STEEL NIPPLES
  - K- COMPRESSED STAINLESS STEEL NIPPLES
  - L- LOCATE WIRE

LINE DIAMETER	A	B	C	D	E	F	G	H	I	K
3"	2"	2"	3"	3"	2" X 12"	1 1/4"	1 1/4"	2" X 1 1/4"	2"	2" X 6"
6"	2"	2"	6"	6"	2" X 12"	2"	2"	NONE	2"	2" X 6"
8"	3"	3"	8"	8"	3" X 12"	3"	3"	NONE	3"	3" X 6"

FOR CONCRETE/STEEL USE THE FOLLOWING CURB DIMENSIONS

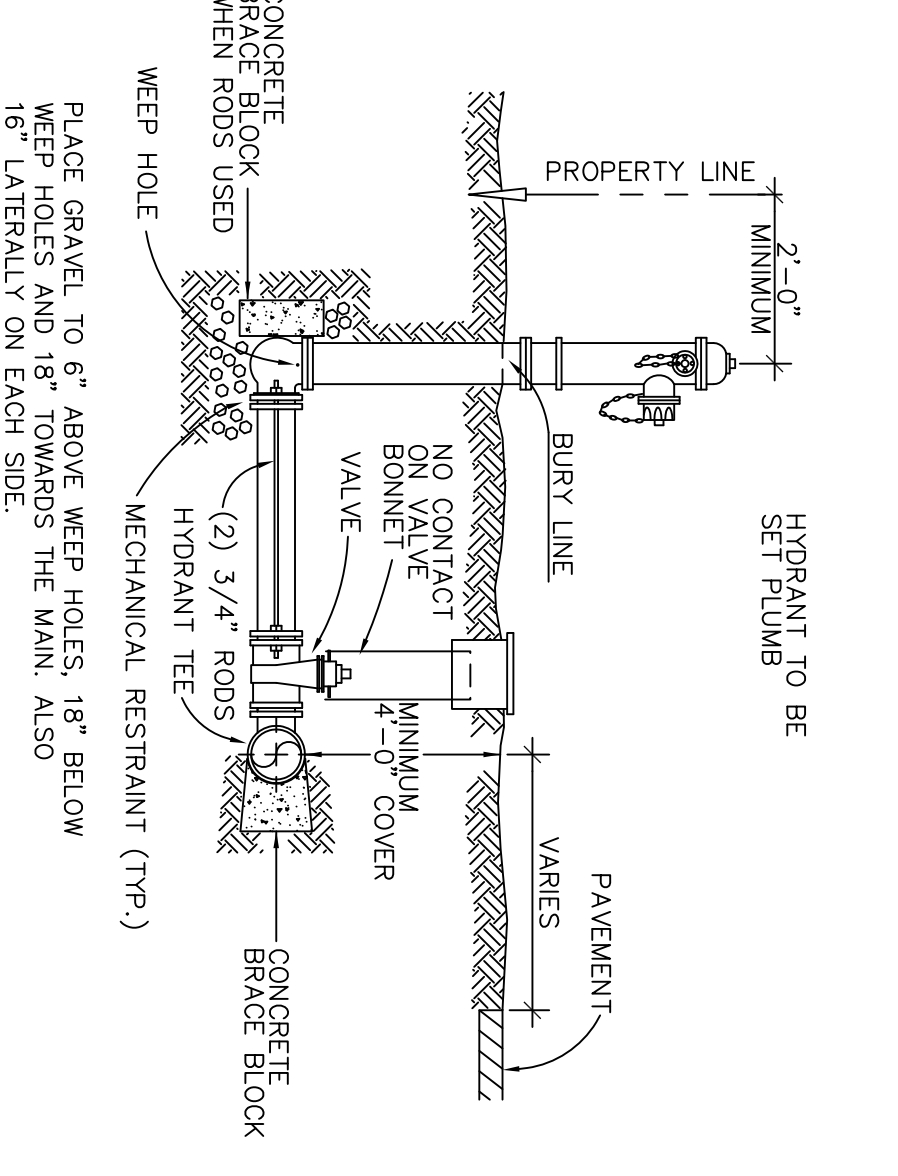
PIPE DIAMETER	VALVE BOX	VALVE BOX	VALVE BOX	VALVE BOX	VALVE BOX	VALVE BOX	VALVE BOX	VALVE BOX	VALVE BOX
3"	10"	10"	10"	10"	10"	10"	10"	10"	10"
6"	14"	14"	14"	14"	14"	14"	14"	14"	14"
8"	16"	16"	16"	16"	16"	16"	16"	16"	16"



**TYPICAL HYDRANT INSTALLATION DETAIL**

N.T.S.

- NOTES:
- 1) MEGA LUGS OR ROOS ACCEPTABLE FOR RESTRAINT. ROOS TO BE MADE OF STEEL HAVING A TENSILE STRENGTH OF 60,000 P.S.I.. ROOS TO BE ZINC COATED.
  - 2) AFTER INSTALLATION, ALL STEEL COMPONENTS, INCLUDING STEEL ROOS, SHALL BE PROTECTED WITH AN ANTI-RUST COATING WITH 7.5 MILS OF COPPER'S BIMASTIC 300-M OR EQUAL.
  - 3) HYDRANT NOZZLES AS INDICATED ON PLANS.
  - 4) HYDRANT LEAD TO BE DUCTILE IRON.

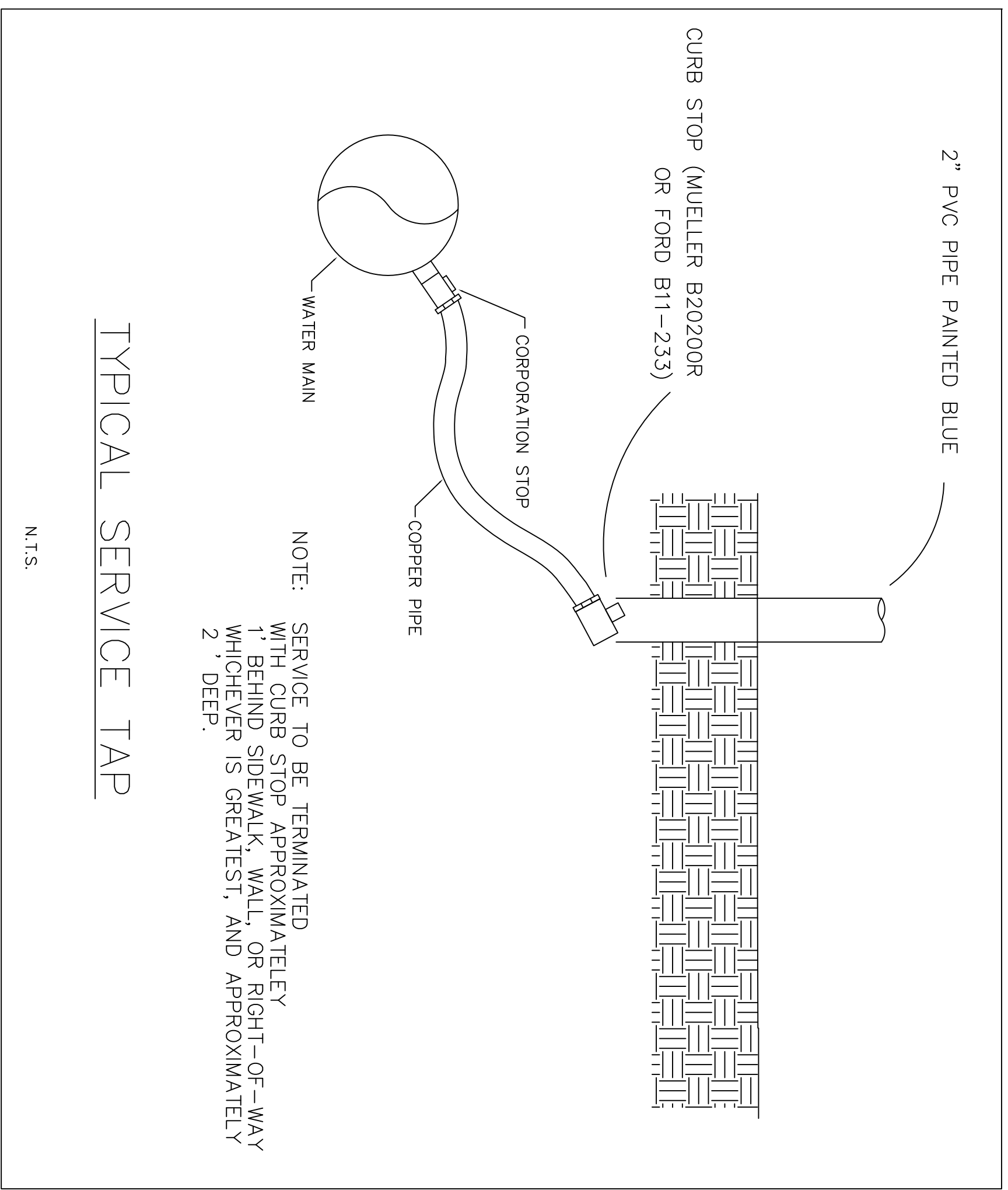


**TYPICAL CONCRETE COLLAR DETAIL**

N.T.S.

- NOTES:
- 1) MEGA LUGS TO BE INSTALLED ON MECHANICAL JOINT DUCTILE IRON PIPE.
  - 2) MEGA LUGS TO BE ORIENTED WITH FLANGE FACING AWAY FROM PLUG.
  - 3) WRAP MEGALUG IN TAPE TO KEEP CONCRETE OUT OF MECHANISM.
  - 4) CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 P.S.I. AT 28 DAYS. HIGH EARLY CONCRETE DIMENSIONS OF CONCRETE COLLARS BASED ON 2000 P.S.I. SOIL BEARING.
  - 5) SOIL CONDITIONS SHALL BE VERIFIED PRIOR TO CONSTRUCTION.
  - 7) FOR 3" PIPE USE 4" DIAMETER DESIGN.

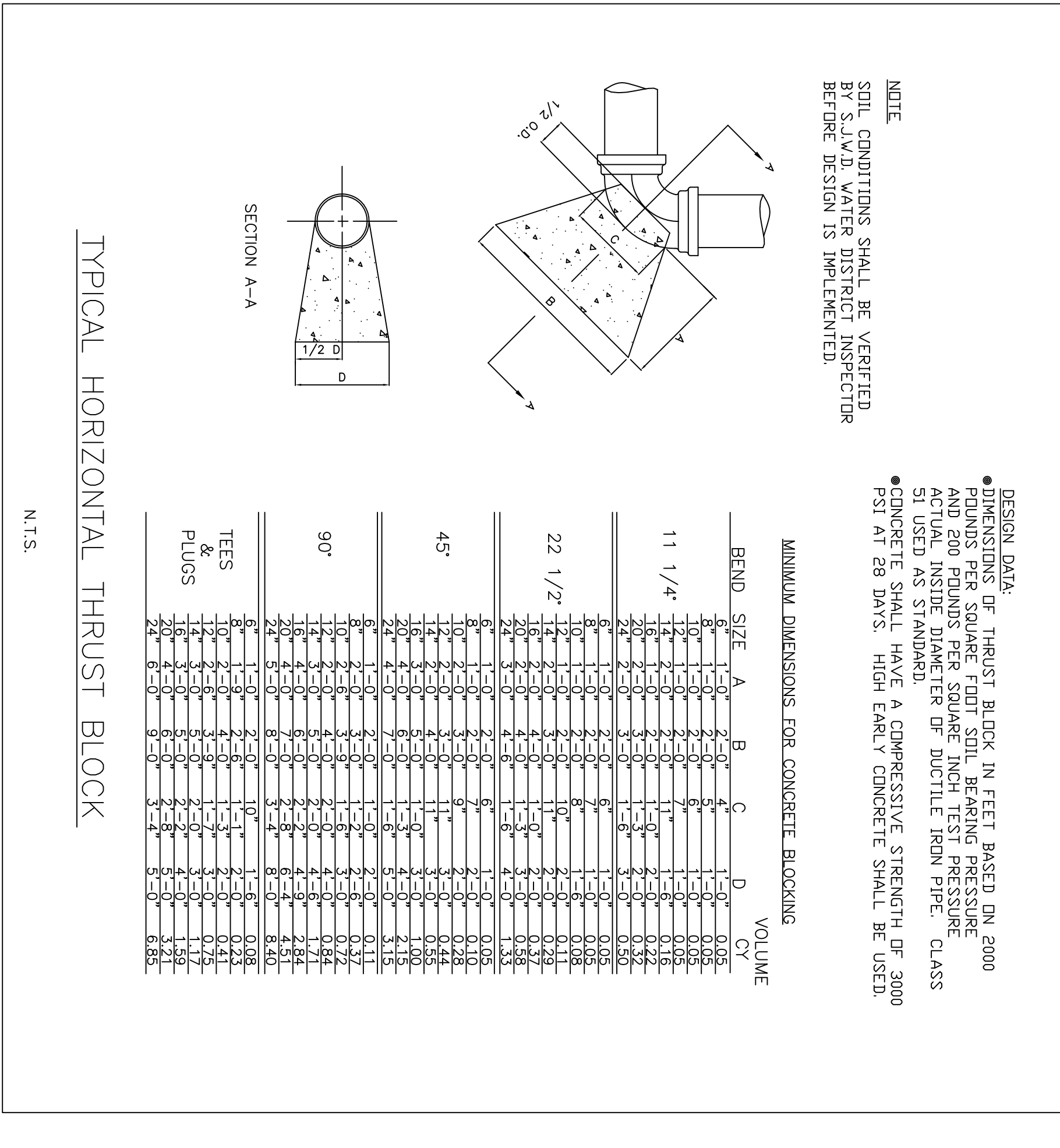
PIPE SIZE	A	B	C	D	E	CX
4"	3'-0"	2'-0"	1'-6"	1'-6"	0'-8"	0.33
6"	4'-0"	2'-0"	1'-6"	2'-0"	0'-9"	0.44
8"	4'-6"	2'-0"	2'-0"	2'-3"	1'-0"	0.67
12"	6'-0"	2'-0"	3'-0"	3'-0"	1'-6"	1.33
16"	6'-6"	2'-0"	4'-6"	3'-3"	2'-3"	2.17



**TYPICAL SERVICE TAP**

N.T.S.

- NOTE: SERVICE TO BE TERMINATED WITH CURB STOP APPROXIMATELY 1' BEHIND SIDEWALK, WALL, OR RIGHT-OF-WAY WHICHEVER IS GREATEST, AND APPROXIMATELY 2' DEEP.



**TYPICAL HORIZONTAL THRUST BLOCK**

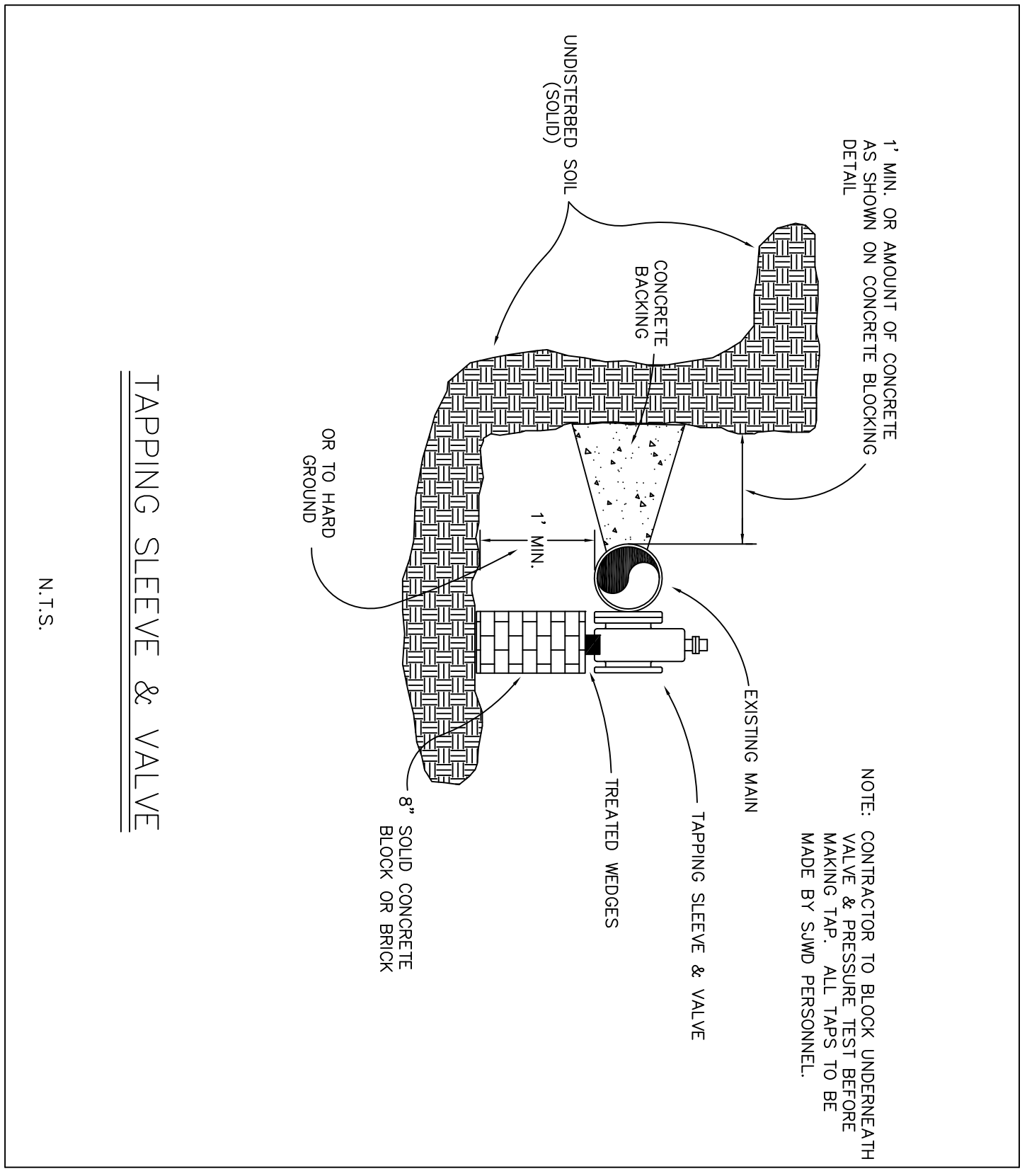
N.T.S.

MINIMUM DIMENSIONS FOR CONCRETE BLOCKING

BEND SIZE	A	B	C	D	VOLUME CY
6"	1'-0"	2'-0"	4'	1'-0"	0.05
8"	1'-0"	2'-0"	4'	1'-0"	0.05
10"	1'-0"	2'-0"	4'	1'-0"	0.05
12"	1'-0"	2'-0"	4'	1'-0"	0.05
14"	1'-0"	2'-0"	4'	1'-0"	0.05
16"	1'-0"	2'-0"	4'	1'-0"	0.05
18"	1'-0"	2'-0"	4'	1'-0"	0.05
20"	1'-0"	2'-0"	4'	1'-0"	0.05
22"	1'-0"	2'-0"	4'	1'-0"	0.05
24"	1'-0"	2'-0"	4'	1'-0"	0.05
26"	1'-0"	2'-0"	4'	1'-0"	0.05
28"	1'-0"	2'-0"	4'	1'-0"	0.05
30"	1'-0"	2'-0"	4'	1'-0"	0.05
32"	1'-0"	2'-0"	4'	1'-0"	0.05
34"	1'-0"	2'-0"	4'	1'-0"	0.05
36"	1'-0"	2'-0"	4'	1'-0"	0.05
38"	1'-0"	2'-0"	4'	1'-0"	0.05
40"	1'-0"	2'-0"	4'	1'-0"	0.05
42"	1'-0"	2'-0"	4'	1'-0"	0.05
44"	1'-0"	2'-0"	4'	1'-0"	0.05
46"	1'-0"	2'-0"	4'	1'-0"	0.05
48"	1'-0"	2'-0"	4'	1'-0"	0.05
50"	1'-0"	2'-0"	4'	1'-0"	0.05
52"	1'-0"	2'-0"	4'	1'-0"	0.05
54"	1'-0"	2'-0"	4'	1'-0"	0.05
56"	1'-0"	2'-0"	4'	1'-0"	0.05
58"	1'-0"	2'-0"	4'	1'-0"	0.05
60"	1'-0"	2'-0"	4'	1'-0"	0.05

NOTE: SOIL CONDITIONS SHALL BE VERIFIED BY S.A.W.D. WATER DISTRICT INSPECTOR BEFORE DESIGN IS IMPLEMENTED.

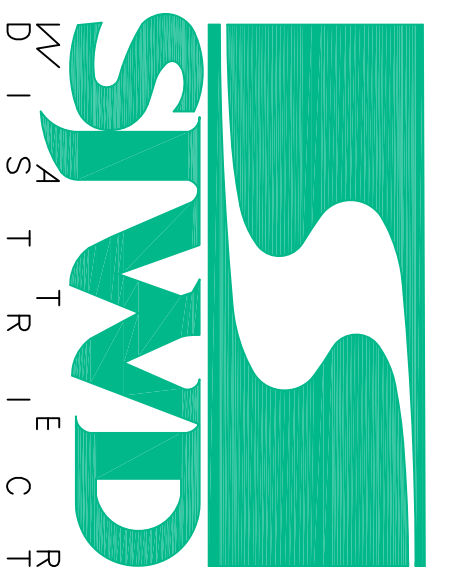
- DESIGN DATA:
- DIMENSIONS OF THRUST BLOCK IN FEET BASED ON 2000 POUNDS PER SQUARE FOOT SOIL BEARING PRESSURE AND 200 POUNDS PER SQUARE INCH TEST PRESSURE CLASS 5 USED AS STANDARD.
  - CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. HIGH EARLY CONCRETE SHALL BE USED.



**TAPPING SLEEVE & VALVE**

N.T.S.

NOTE: CONTRACTOR TO BLOCK UNDERNEATH VALVE & PRESSURE TEST BEFORE INSTALLATION AND TO BE MADE BY SAND PERSONNEL.



SJWD WATER DISTRICT  
P.O. BOX 607  
LYMAN, SOUTH CAROLINA  
29365

SEAL

PROJECT NAME  
**STANDARD  
DETAILS**