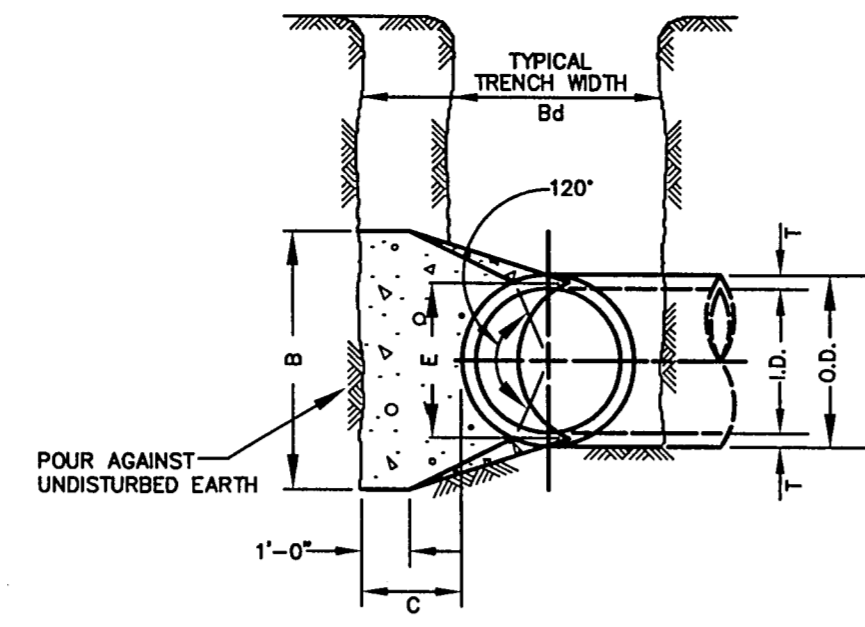
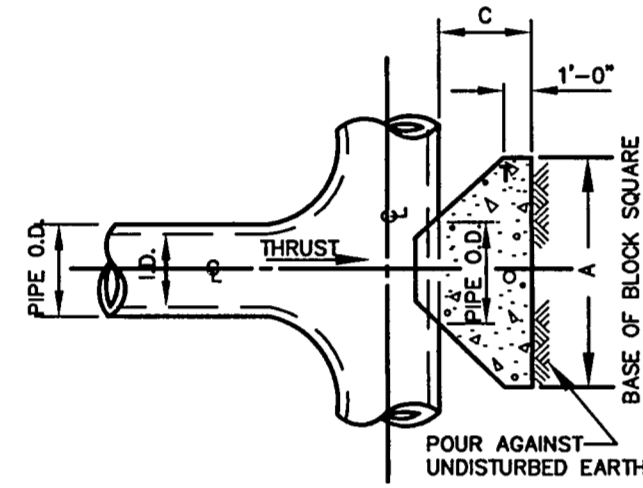


HORIZONTAL THRUST BLOCK
N.T.S.



SECTION X-X
N.T.S.

I.D. (N)	Δ=11.25°				Δ=22.50°				Δ=45°				Δ=90°					
	C FT.	E FT.	G FT.	A FT.	B FT.	VOL. C.Y.	G FT.	A FT.	B FT.	VOL. C.Y.	G FT.	A FT.	B FT.	VOL. C.Y.	G FT.	A FT.	B FT.	VOL. C.Y.
6/8	1.5	0.9	0.4	1.0	1.5	0.1	0.8	1.5	1.5	0.1	1.5	2.0	2.0	0.2	2.7	5.0	1.5	0.4



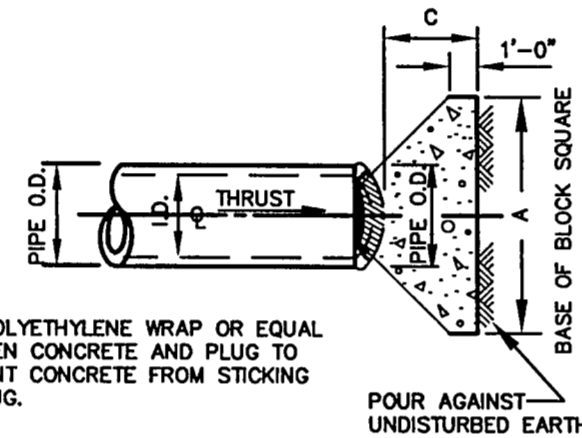
GENERAL NOTES FOR ALL THRUST BLOCKS:

- ALL CALCULATIONS ARE BASED ON INTERNAL PRESSURE OF 200 P.S.I. (EXCEPT 30" I.D. - 150 P.S.I.).
- CONCRETE FOR BLOCKING SHALL BE CLASS B, 2000 P.S.I. CONCRETE.
- DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY THE C.M. THE NET VOLUME OF CONCRETE BLOCKING SHALL NOT BE LESS THAN SHOWN IN TABLES.

PLAN OF TEE THRUST BLOCK
N.T.S.

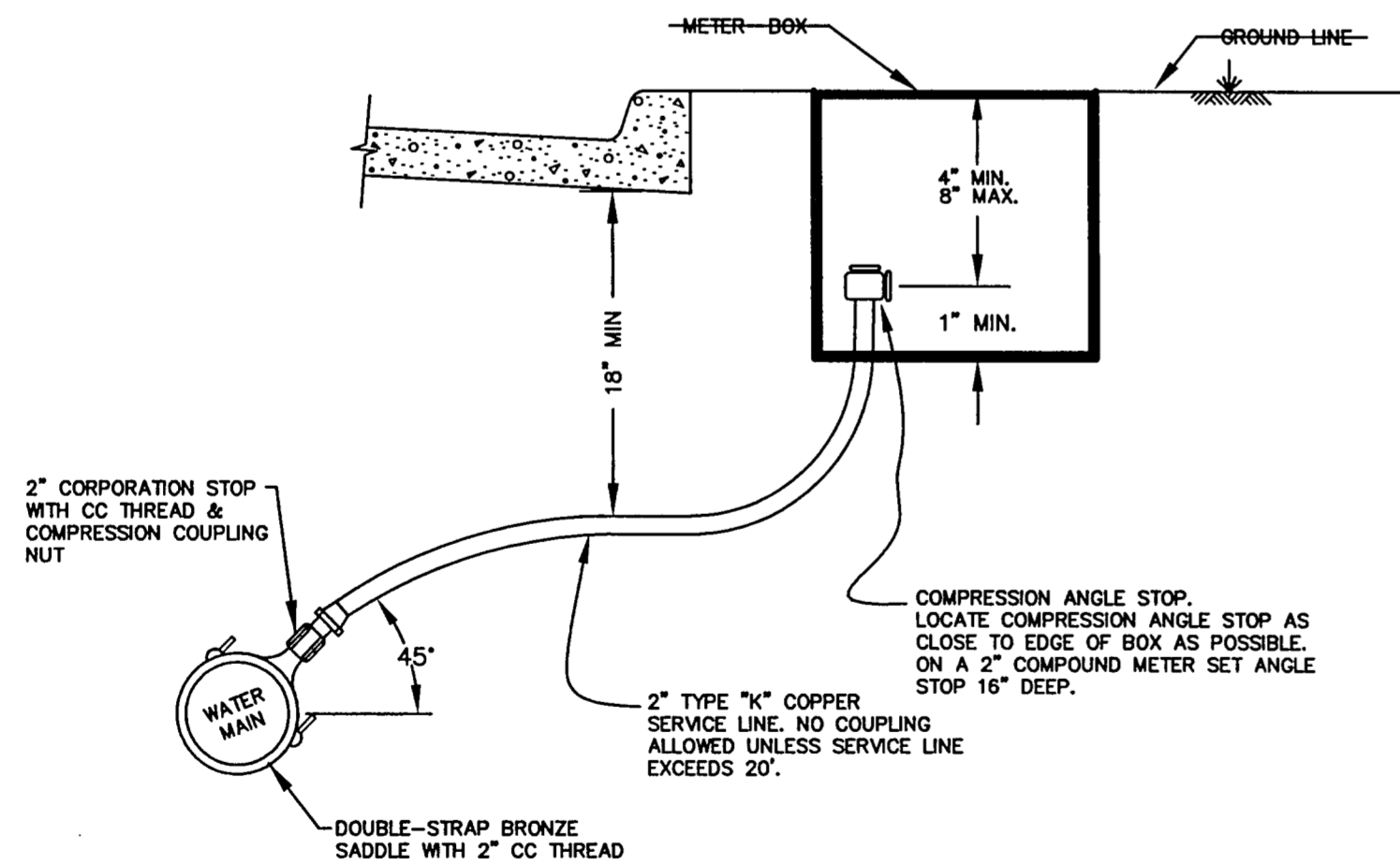
PLUG & TEE THRUST BLOCK

I.D. (N)	C FT.	A FT.	VOL. C.Y.
6/8	1.5	2.5	0.3
10/12	1.5	3.5	0.6
16/18	2.0	5.5	1.6
20	2.0	6.0	1.9
24	2.5	7.0	3.1
30	3.0	7.5	4.1

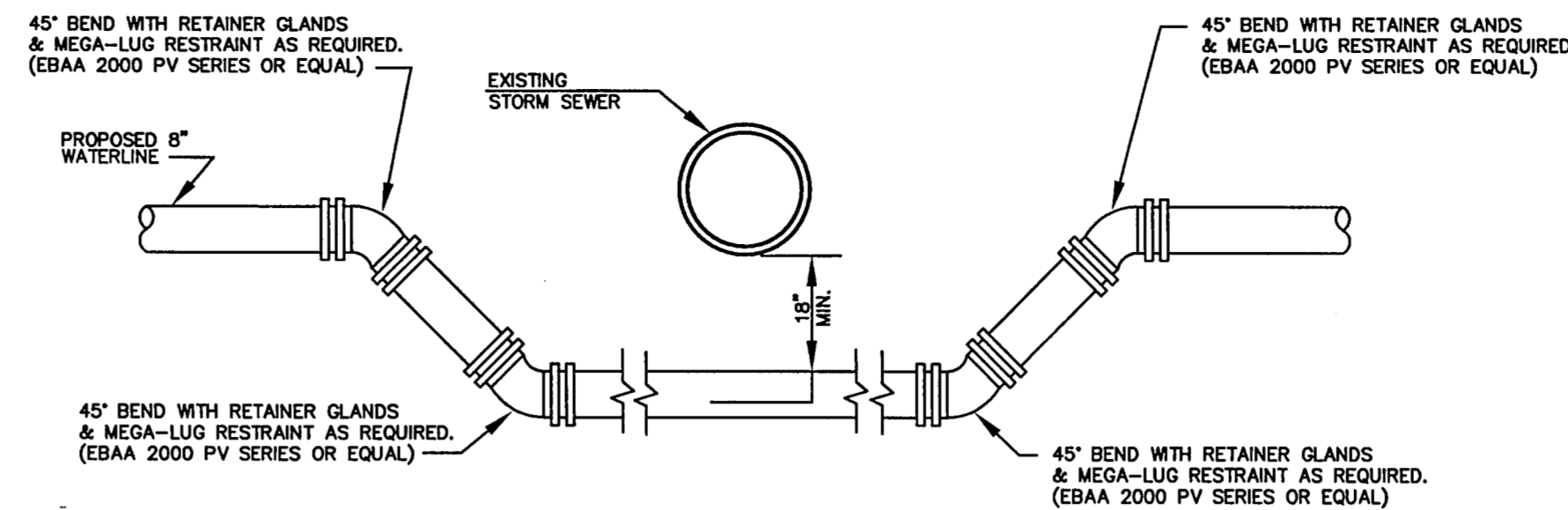


NOTE: USE POLYETHYLENE WRAP OR EQUAL BETWEEN CONCRETE AND PLUG TO PREVENT CONCRETE FROM STICKING TO PLUG.

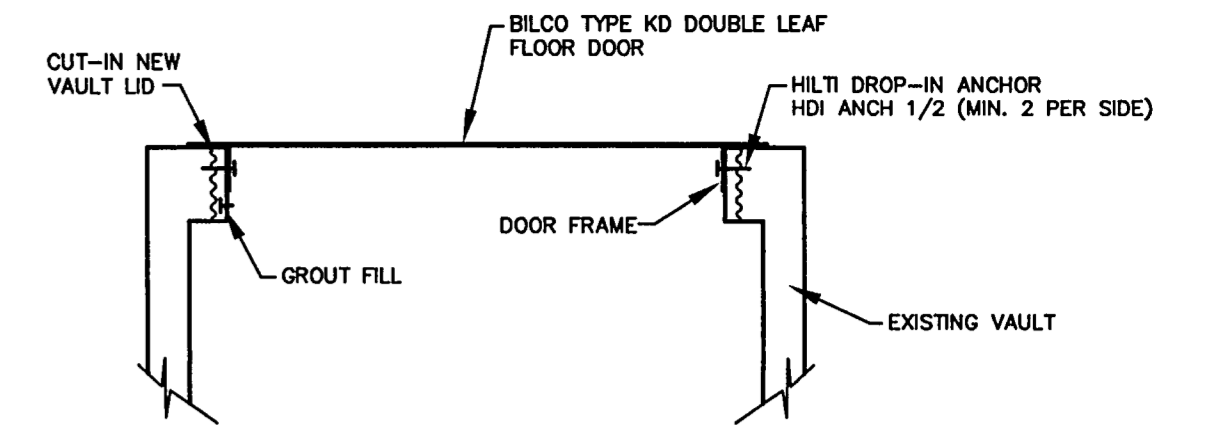
PLAN OF PLUG THRUST BLOCK
N.T.S.



TYPICAL SERVICE CONNECTION WITH METER BOX
N.T.S.



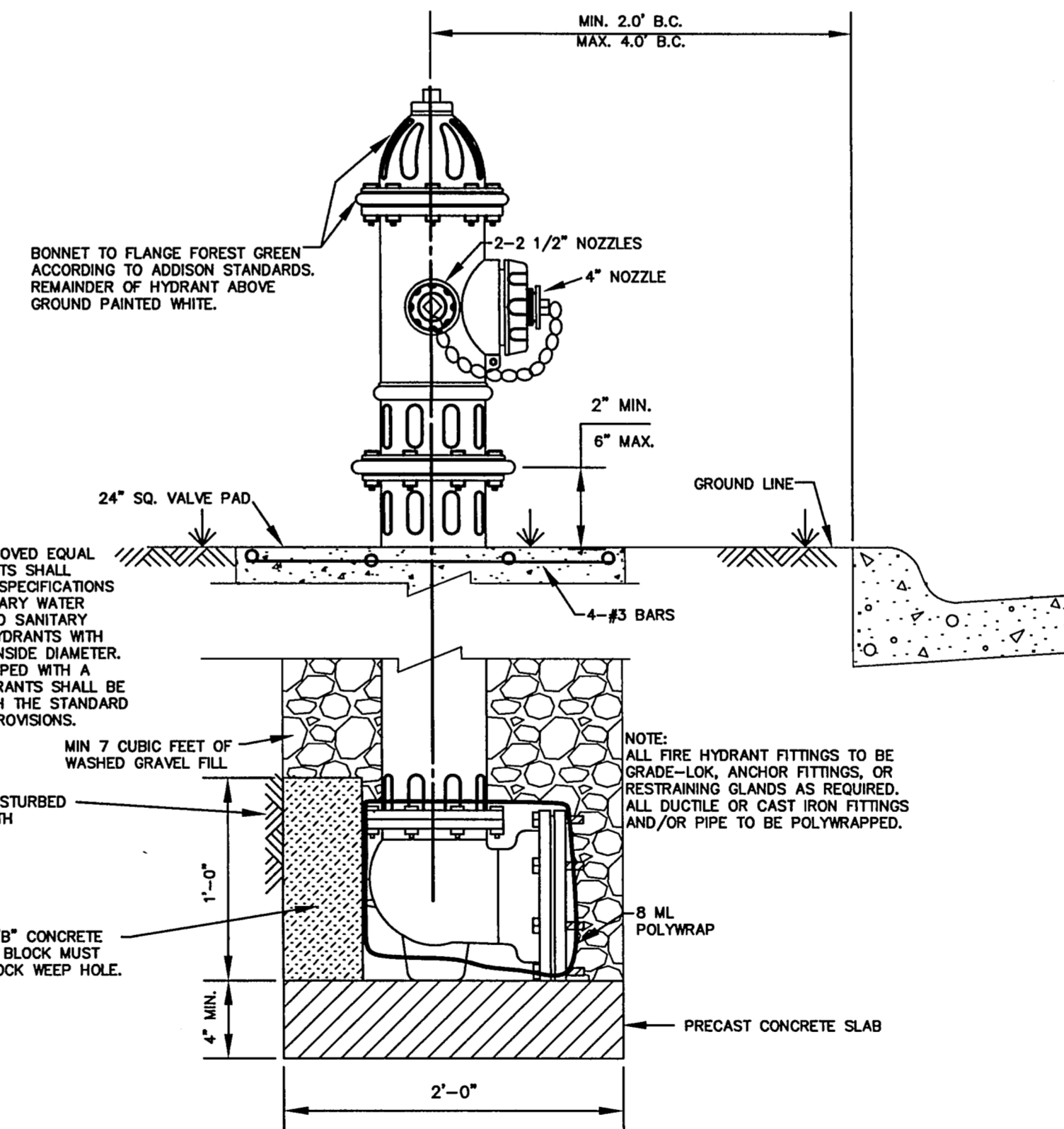
WATER LINE RELOCATION AT STORM SEWER CROSSING
TYPICAL SECTION
N.T.S.



GENERAL NOTES FOR METER VAULT LIDS:

- CONTRACTOR SHALL INSTALL BILCO TYPE KD-3 DOUBLE LEAF ALUMINUM DOORS OR APPROVED EQUAL AS DIRECTED BY THE OWNER.
- CONTRACTOR SHALL SAWCUT EXISTING CONCRETE IN ORDER FOR THE NEW WATER VAULT LID TO ADEQUATELY FIT. THE CONTRACTOR SHALL GROUT AROUND THE PROPOSED WATER VAULT LID AND INSTALL ANCHORS INTO THE EXISTING CONCRETE AS REQUIRED (MIN. 2 EACH SIDE).

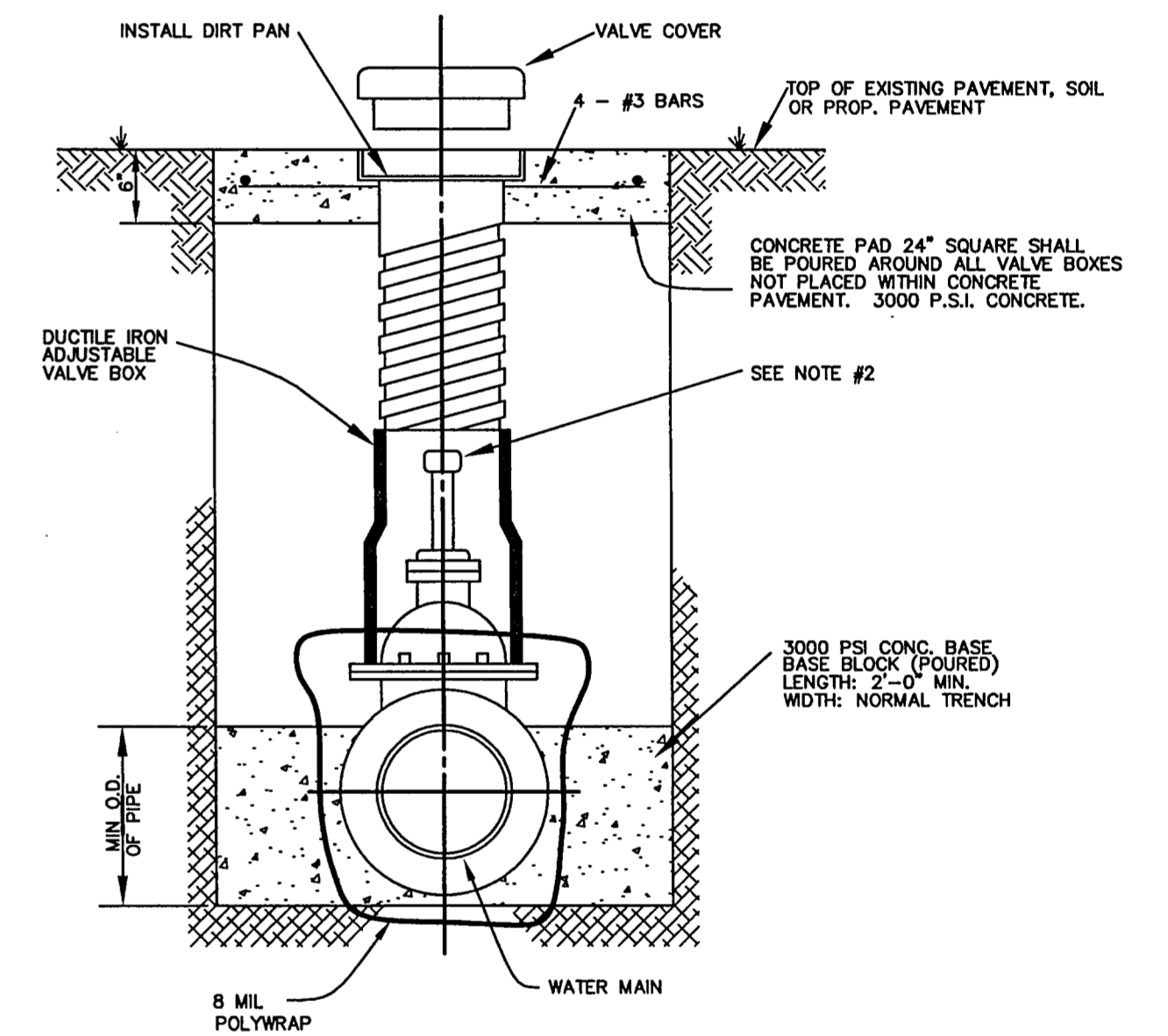
WATER VAULT LID
N.T.S.



NOTE: MUELLER "CENTURIAN" OR APPROVED EQUAL IN GENERAL. ALL FIRE HYDRANTS SHALL CONFORM TO AWWA STANDARD SPECIFICATIONS FOR FIRE HYDRANTS FOR ORDINARY WATER WORKS SERVICE FOR WATER AND SANITARY SEWER IMPROVEMENTS. FIRE HYDRANTS WITH A BARREL APPROXIMATELY 7" INSIDE DIAMETER. ALL HYDRANTS SHALL BE EQUIPPED WITH A BREAKAWAY FLANGE. ALL HYDRANTS SHALL BE APPROVED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

NOTE: ALL FIRE HYDRANT FITTINGS TO BE GRADE-LOK, ANCHOR FITTINGS, OR RESTRAINING GLANDS AS REQUIRED. ALL DUCTILE OR CAST IRON FITTINGS AND/OR PIPE TO BE POLYWRAPPED.

TYPICAL FIRE HYDRANT INSTALLATION
N.T.S.



NOTE:

- GATE VALVES SHALL BE IN ACCORDANCE WITH AWWA STANDARD C-509-80 OR LATEST THEREOF. ALL VALVES SHALL BE "MUELLER" OR EQUAL.
- A PERMANENTLY ATTACHED VALVE EXTENSION STEM SHALL BE REQUIRED FOR ANY VALVE WHOSE OPERATING NUT IS LOCATED IN EXCESS OF 4 FEET BELOW THE VALVE BOX. THIS EXTENSION SHALL BE OF SUFFICIENT LENGTH TO INSURE THAT ITS TOP IS WITHIN 4 FEET OF VALVE BOX LID. MANUFACTURED VALVE STACK DUCTILE IRON PIPE TO BE USED FOR EXTENSION GREATER THAN 4". BELL END OF STACK TO BE FITTED OVER VALVE, AND VALVE STACK IS TO BE POLYWRAPPED.
- VALVES SHALL BE OF DUCTILE IRON W/RUBBER ENCAPSULATED DISK. BOLTS SHALL BE STAINLESS STEEL OF SAME SIZE ON EACH VALVE.
- VALVE COVERS SHALL BE MARKED "WATER".

TYPICAL VALVE SETTING & BOX
N.T.S.

Q:\LDD\ADD01333\dwg\sheets\WDETAILS.dwg, 07/11/2002 05:17:17 PM, HP1050C.pcc, l.c.

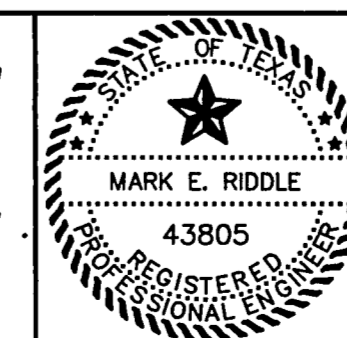
NO.	REVISION	BY	DATE

MSW
DESIGNED
DAS
DRAWN
JRP
CHECKED

TOWN OF
ADDISON

SCALE
HORIZ
N/A
VERT
N/A
DATE
JULY 2002

TEAGUE NALL AND PERKINS
CONSULTING ENGINEERS
1100 Macon Street Fort Worth, Texas 76102 (817) 336-5773
2001 West Irving Blvd. Irving, Texas 75061 (972) 254-1765



DATE: 07.10.02

TOWN OF ADDISON
WRIGHT BROTHERS / WILEY POST
WATER LINE REPLACEMENT
MISCELLANEOUS DETAILS 1

TNP PROJECT
ADD01333
SHEET
11
OF
12