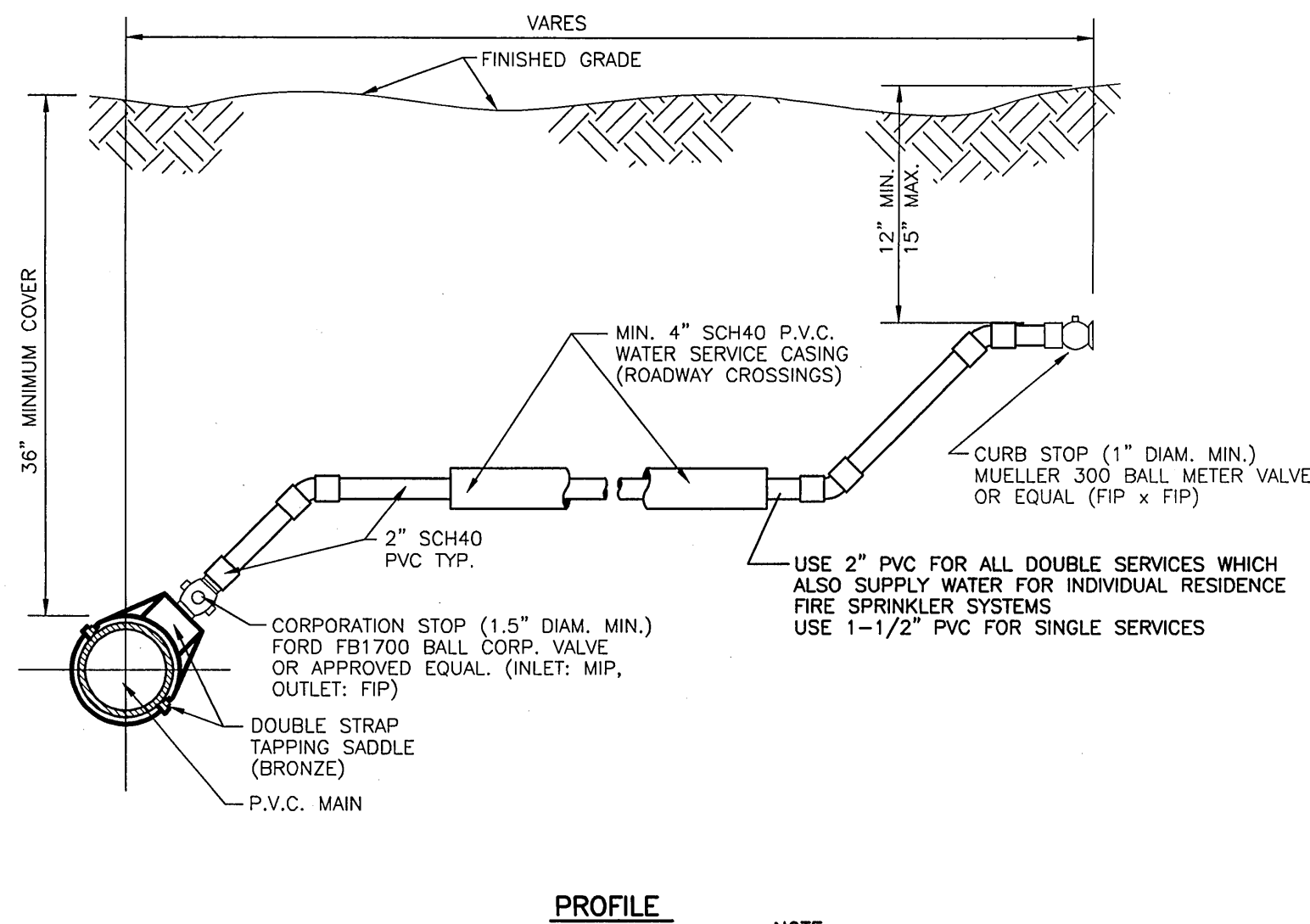


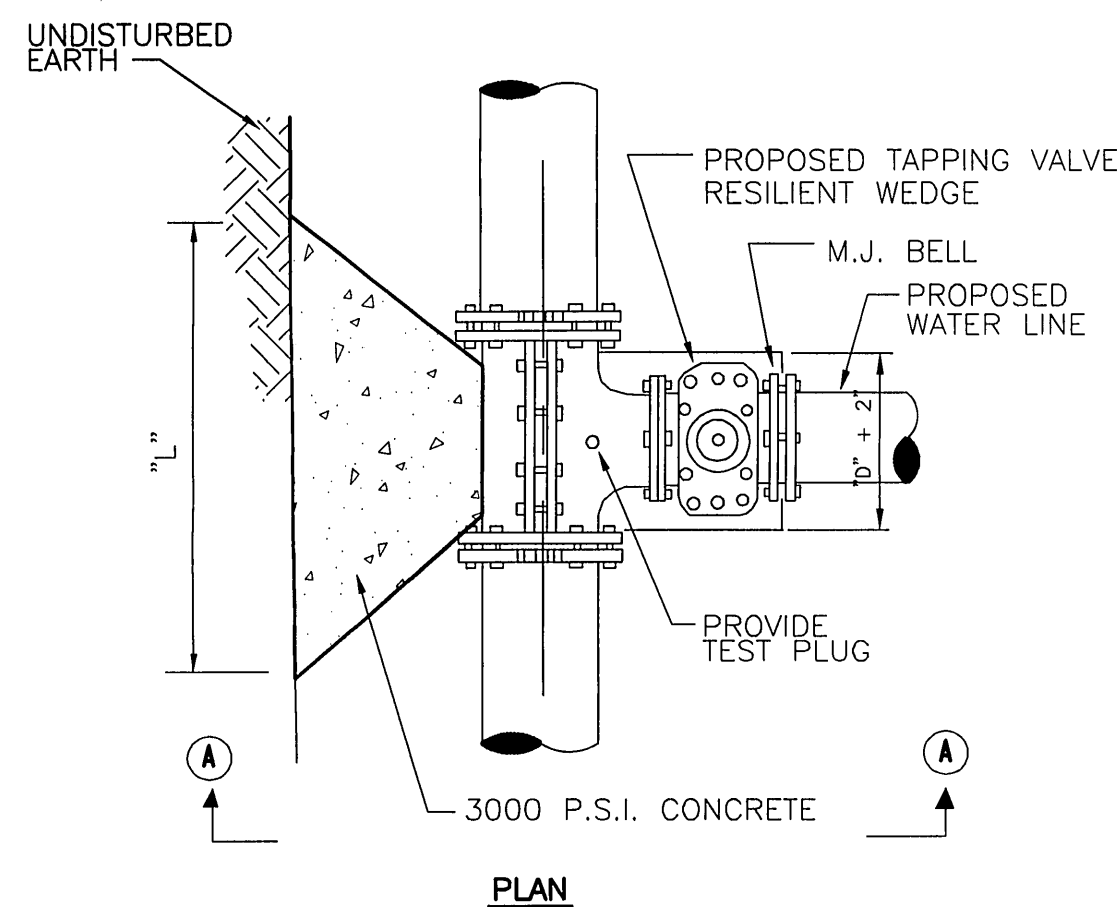
- NOTE:
 1) SERVICES TO BE LOCATED AT PROPERTY LINE.
 2) TO BE USED ONLY WITH PRIOR APPROVAL OF THE T.L.B.K. DISTRIBUTION SECTION.
 3) METER BOXES NOT TO BE SET IN DRAINAGE SWALES.
 4) SADDLES SHALL BE FORD 202B OR APPROVED EQUAL.



- NOTE:
 ALL SERVICE TAPS TO BE LOCATED IN FIELD. TAPS SHALL BE NO CLOSER THAN 2'-0" INTERVALS OR WITHIN 2'-0" FROM BEEL OR SPIGOT ENDS.

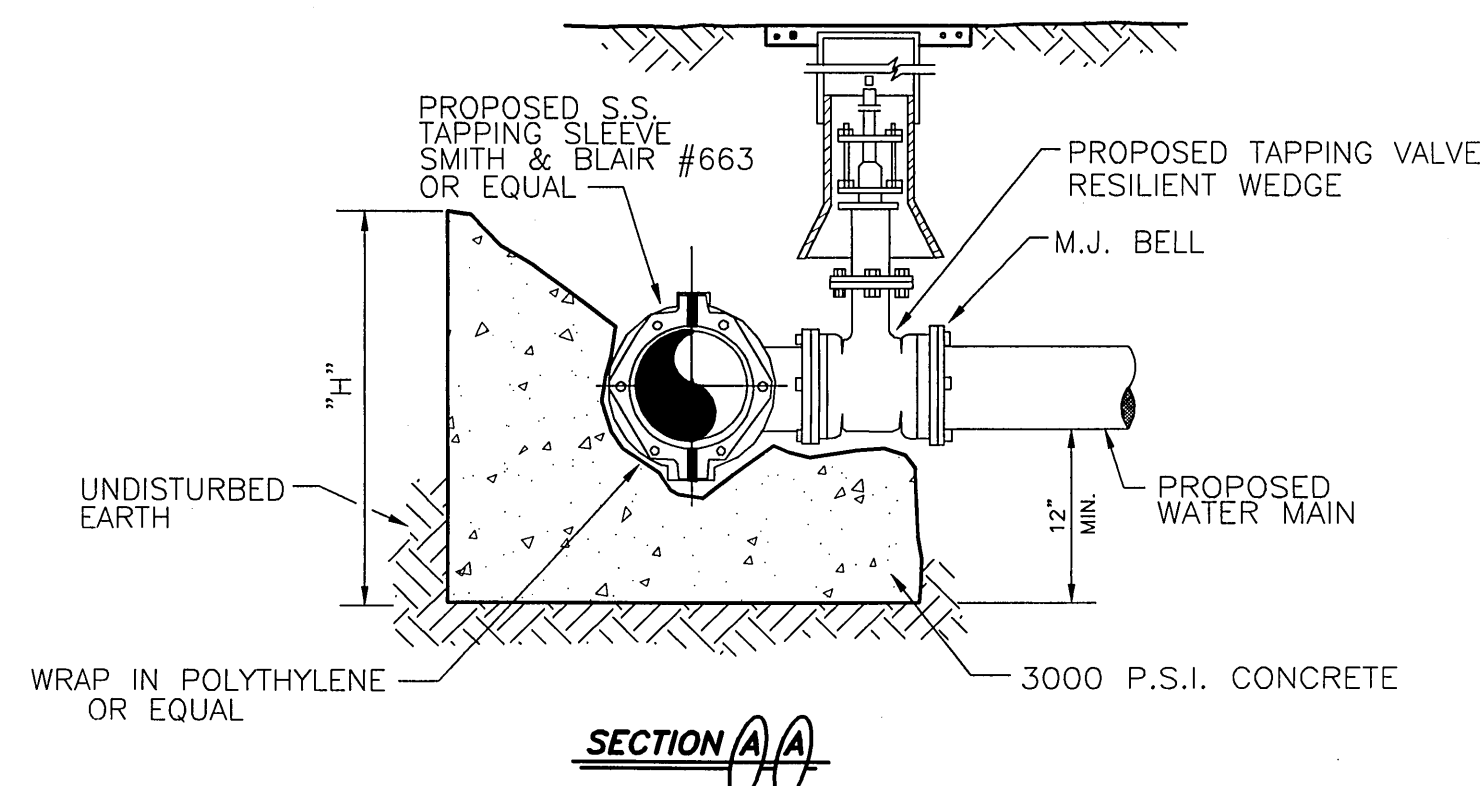
TYPICAL WATER SERVICE CONNECTION

N.T.S.



- NOTE:
 STEEL WILL BE USED AS REQUIRED BY THE ENGINEER.

- NO CUT SHALL BE MADE BEFORE
 (A) A TEST OF 150 P.S.I. FOR 60 MINUTES IS MADE AND
 (B) THE CONCRETE BLOCK HAS CURED FOR 48 HOURS

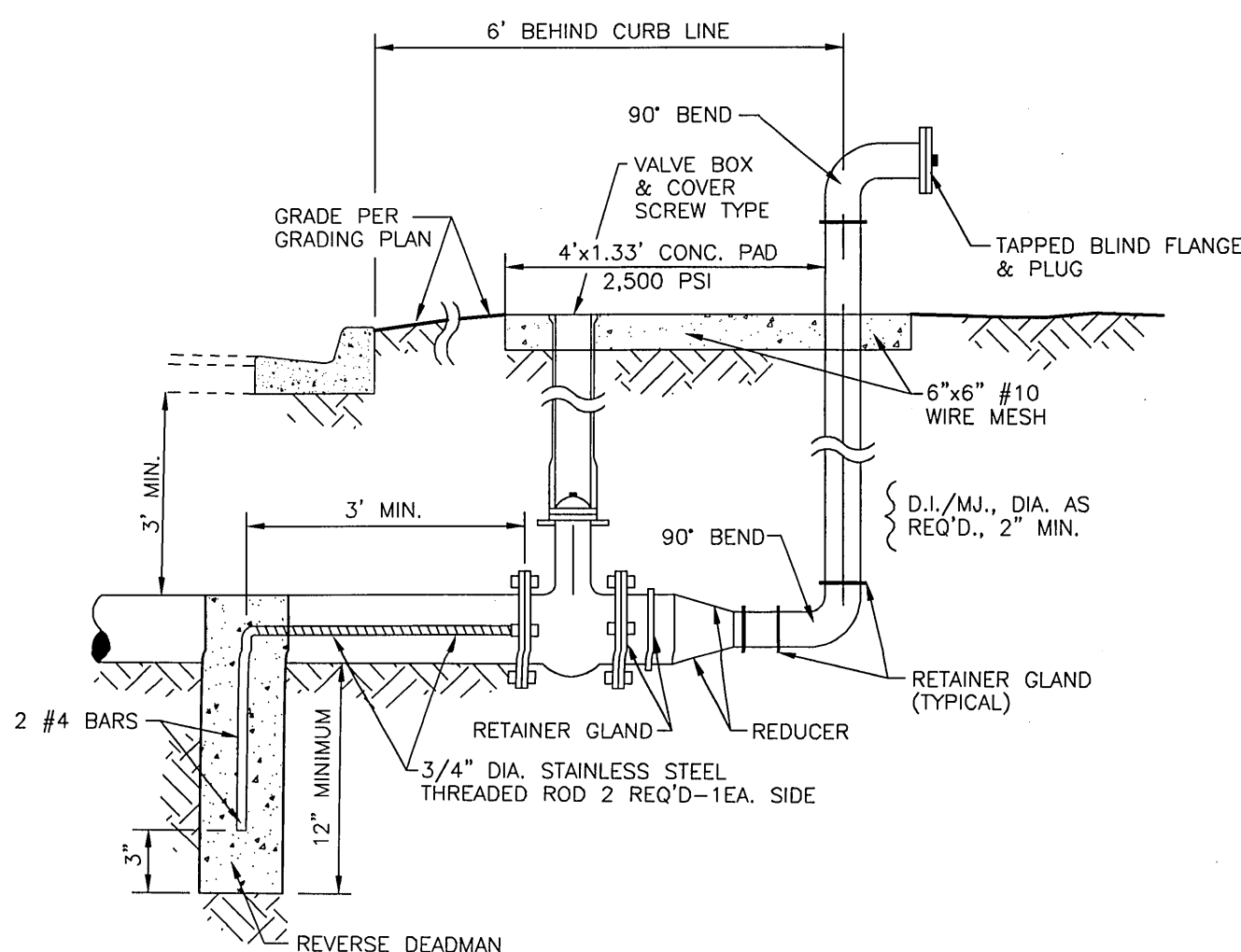


RUN	BRANCH											
	4"		6"		8"		10"		12"		16"	
	L"	H"	L"	H"	L"	H"	L"	H"	L"	H"	L"	H"
4"	15	20										
6"	15	20	23	30								
8"	15	20	23	30	31	39						
10"	15	20	23	30	31	39	40	48				
12"	15	20	23	30	31	39	40	48	48	57		
16"	15	20	23	30	31	39	40	48	48	57	62	78
18"	15	20	23	30	31	39	40	48	48	57	62	78
20"	15	20	23	30	31	39	40	48	48	57	62	78
24"	15	20	23	30	31	39	40	48	48	57	62	78
30"	15	20	23	30	31	39	40	48	48	57	62	78

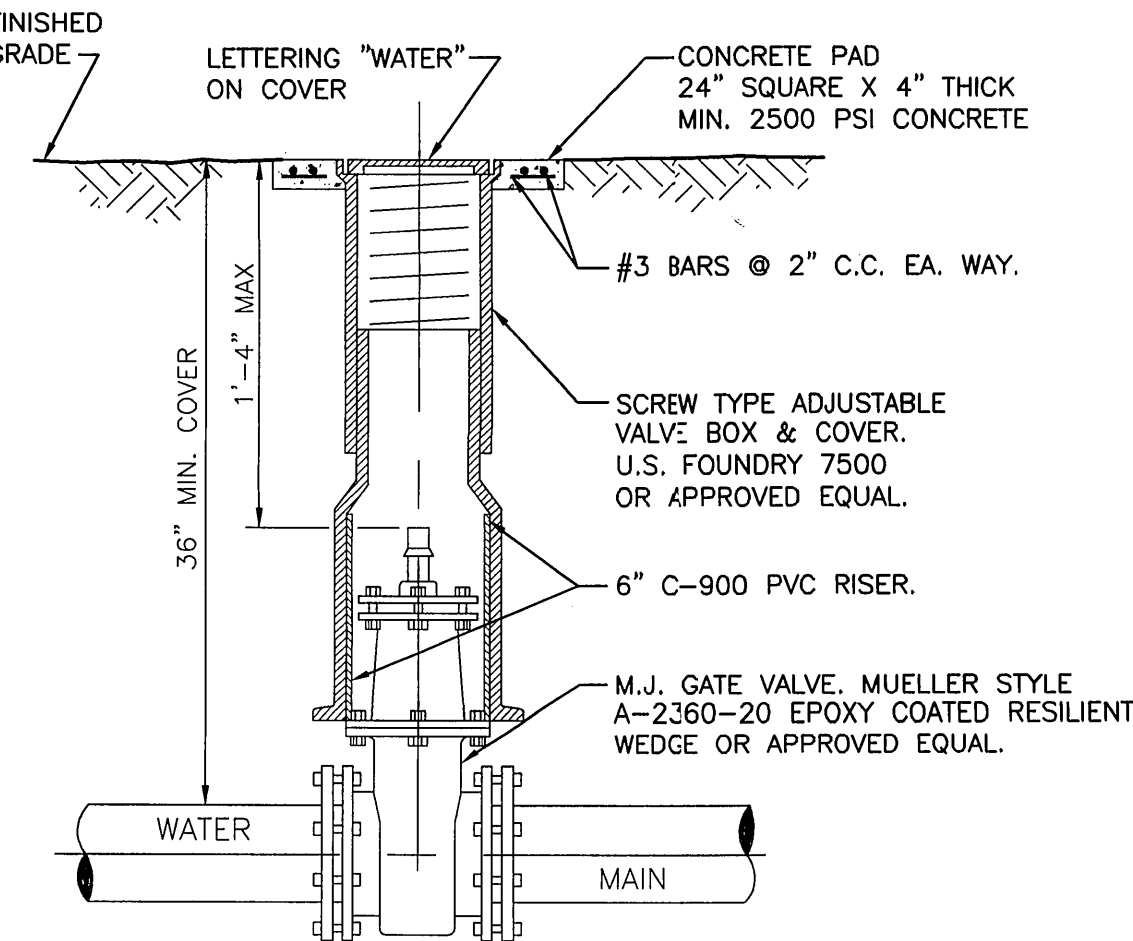
NOTE: "L" & "H" DIMENSIONS ARE IN INCHES.

TAPPING SLEEVE & VALVE DETAIL

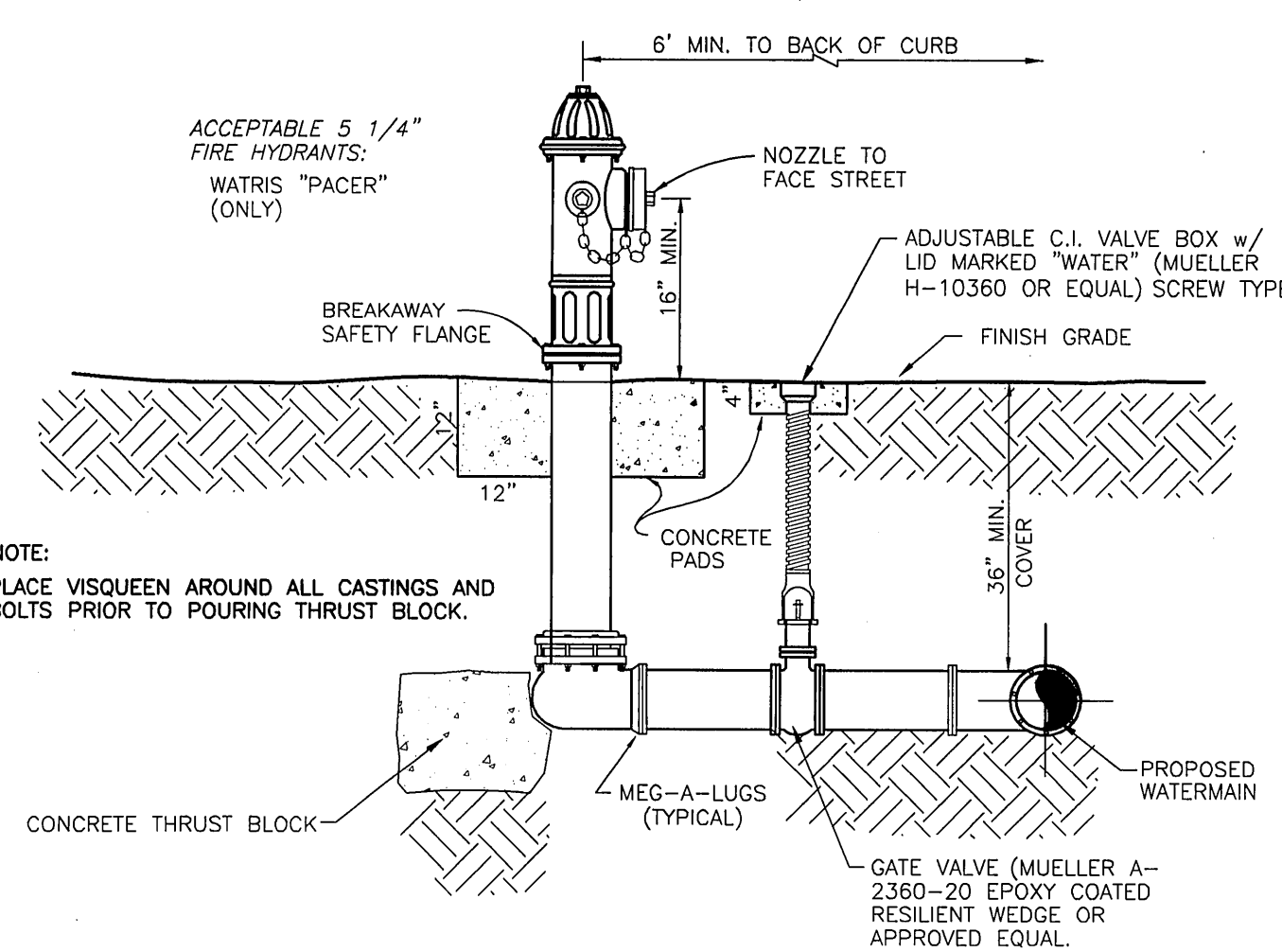
N.T.S.



N.T.S.



N.T.S.



FIRE HYDRANT & GATE VALVE DETAIL

N.T.S.

FIRE HYDRANT SPECIFICATIONS

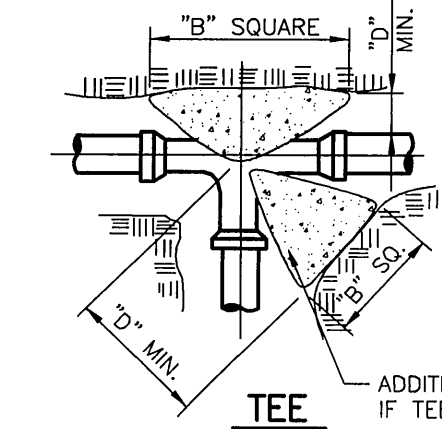
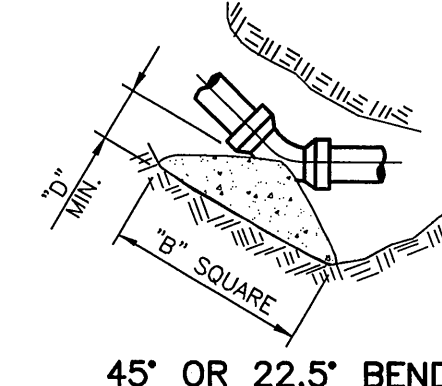
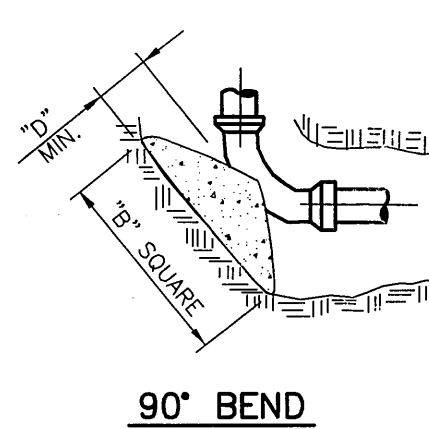
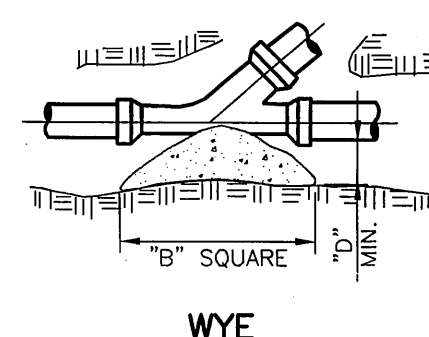
- 1.) SHALL CONFORM TO AWWA C-502
- 2.) PAINT - ONE PRIMER COAT. ONE EXTERIOR OR FINISH COAT, SAFETY YELLOW.
- 3.) NOZZLES - "TREE WAY" - (2) 2 1/2" NOZZLE, (1) 4 1/2" NOZZLE. NST. MADE OF BRONZE NOZZLE WILL SCREW INTO OR TURN LOCK INTO BARREL SEALING AGAINST A GASKET OR "O" RING.
- 4.) BARREL ROTATION - UPPER BARREL ROTATION OF 360° RADIUS WITHOUT THE NEED TO REMOVE ANY BOLTS. TRAFFIC MODEL BREAKAWAY DESIGN NOT USING MACHINED OR UNDERCUT BOLTS AS THE BREAKAWAY DESIGN.
- 5.) DRAIN HOLES TO BE PLUGGED.
- 6.) VALVE AND SEAT - 5 1/4" VALVE OPENING, BRONZE SEAT RING (THREADIN) WITH "O" RING SEAL.
- 7.) SHOE CONNECTION - 6" MJ.
- 8.) HYDRANT FLOW - HEAD LOSS OF 3 P.S.I. OR LESS OR A FLOW OF 1000 GPM THROUGH 4 1/2" NOZZLE.

PIPE SIZE (IN.)	THRUST BLOCK DIMENSIONS (FEET)											
	90° BEND		45° BEND		22.5° BEND		11.25° BEND		DEAD END		TEE/WYE	
	"B"	"D"	"B"	"D"	"B"	"D"	"B"	"D"	"B"	"D"	"B"	"D"
4	1.5	0.5	1.0	0.5	1.0	0.5	0.5	0.5	1.0	0.5	1.0	0.5
6	2.0	0.5	1.5	0.5	1.0	0.5	1.0	0.5	2.0	0.5	2.0	0.5
8	2.5	0.5	2.0	0.5	1.5	0.5	1.0	0.5	2.0	1.0	2.0	0.5
10	3.0	0.5	2.5	1.0	2.0	0.5	1.0	0.5	3.0	1.0	3.0	0.5
12	4.0	1.0	3.0	1.0	2.0	0.5	1.5	0.5	3.0	1.0	3.0	0.5
14	4.5	1.0	3.0	1.0	2.5	0.5	2.0	0.5	4.0	1.5	4.0	1.0
16	5.0	1.5	4.0	1.0	3.0	1.0	2.0	0.5	4.5	1.5	4.5	1.0
18	5.7	1.7	4.2	1.4	3.1	1.4					6.9	1.7
24	7.7	1.7	5.6	1.4	4.1	1.4					9.1	2.1
30	9.5	2.1	7.0	1.7	5.1	1.4					11.3	2.4
36	11.5	2.4	8.4	1.8	6.0	1.7					13.6	2.5

THRUST BLOCK NOTES:

THRUST BLOCK BEARING AREAS SHALL BE POURED AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALLS HAVE BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL AND EXTEND TO UNDISTURBED MATERIAL.

EXTEND THRUST BLOCK FULL LENGTH OF FITTINGS. PUT BOARD IN FRONT OF PLUG BEFORE POURING CONCRETE. JOINT FITTINGS SHALL NOT BE COVERED BY THRUST



ROUGH BLOCKING FORMS SHALL BE USED ALONG SIDES OF THRUST BLOCKS.

THRUST BLOCKS SHALL BE USED IN COMBINATION, AS REQUIRED TO SUIT THE SPECIFIC FITTING ARRANGEMENT.

WHERE THRUST BLOCK IS NOT PRACTICAL DUE TO SOIL CONDITIONS, A HARNESSING DETAIL SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL.

WATER MAIN THRUST BLOCK DETAILS

N.T.S.

NOTES TO CONTRACTOR

- 1.) ALL WATER LINES WITH OVER THREE FEET OF COVER MUST HAVE DEPTH SHOWN ON AS-BUILT.
- 2.) RECORD DATA: ALL FITTING LOCATIONS MUST BE RECORDED ON THE AS-BUILTS.
- 3.) CULVERTS MUST BE INSTALLED FOR FIRE HYDRANT PROTECTION IF HYDRANT WATER LINE CROSSES A SWALE.
- 4.) INSTALL 4 INCH SLEEVE FOR SERVICES THAT CROSS THE ROADWAY. SLEEVE SHALL BE SCHEDULE 40 P.V.C.
- 5.) IF WATER LINES ARE TO BE DEDICATED TO THE T.L.B.K. ALL WATER METER BOXES MUST BE SET TO GRADE PRIOR TO THIS OFFICE ISSUING FINAL CONSTRUCTION APPROVAL UNLESS OTHER ARRANGEMENTS HAVE BEEN MADE WITH THE T.L.B.K.
- 6.) WATER MAIN SHALL BE C-900, DR 18 P.V.C. OR 150 P.S.I. CLASS 52 DUCTIBLE IRON PIPE.
- 7.) 2" ALUMINIUM DISC (BLUE) SHALL BE PLACED ON CURB WITH FOOTAGE TO EACH WATER SERVICE.
- 8.) ALL D.I. PIPE AND/OR FITTINGS SHALL BE WRAPPED W/ 8 MIL BLACK VISQUEEN FOR CORROSION PROTECTION.
- 9.) T.L.B.K. DENOTES: TOWN OF LONGBOAT KEY.

CYRIX ENGINEERING, INC.
 Engineers & Surveyors
 1144 Tallevast Rd., #111
 Sarasota, Fla 34243

PROJECT NO. 08030	DRAWN BY L.E.M.	DATE 12 APRIL 2004
CHECKED BY J.M.P.	DATE	BY
REVISIONS	DATE	BY

SEAL:

COQUINA BEACH SUBDIVISION

POTABLE WATER CONSTRUCTION DETAILS