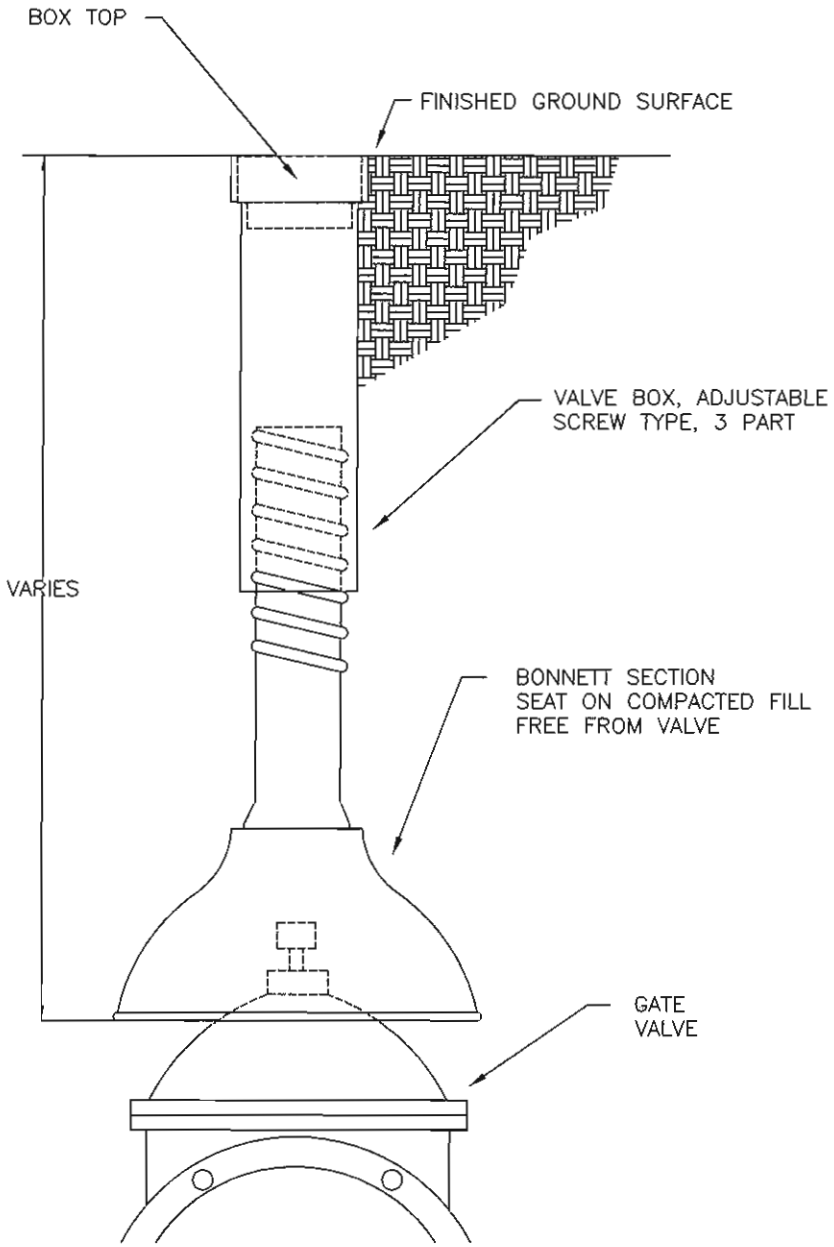
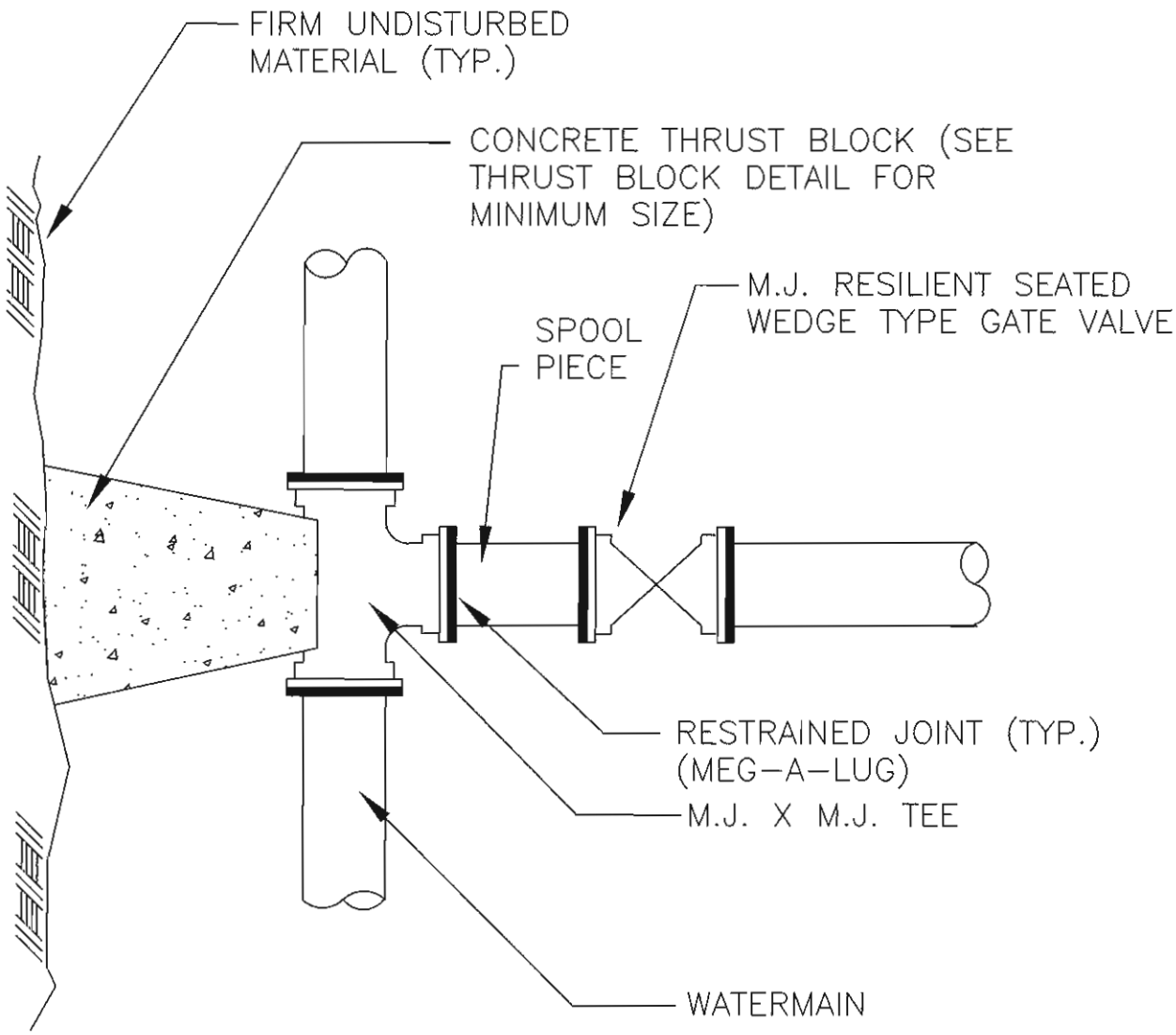


GATE BOX DETAIL

NOT TO SCALE

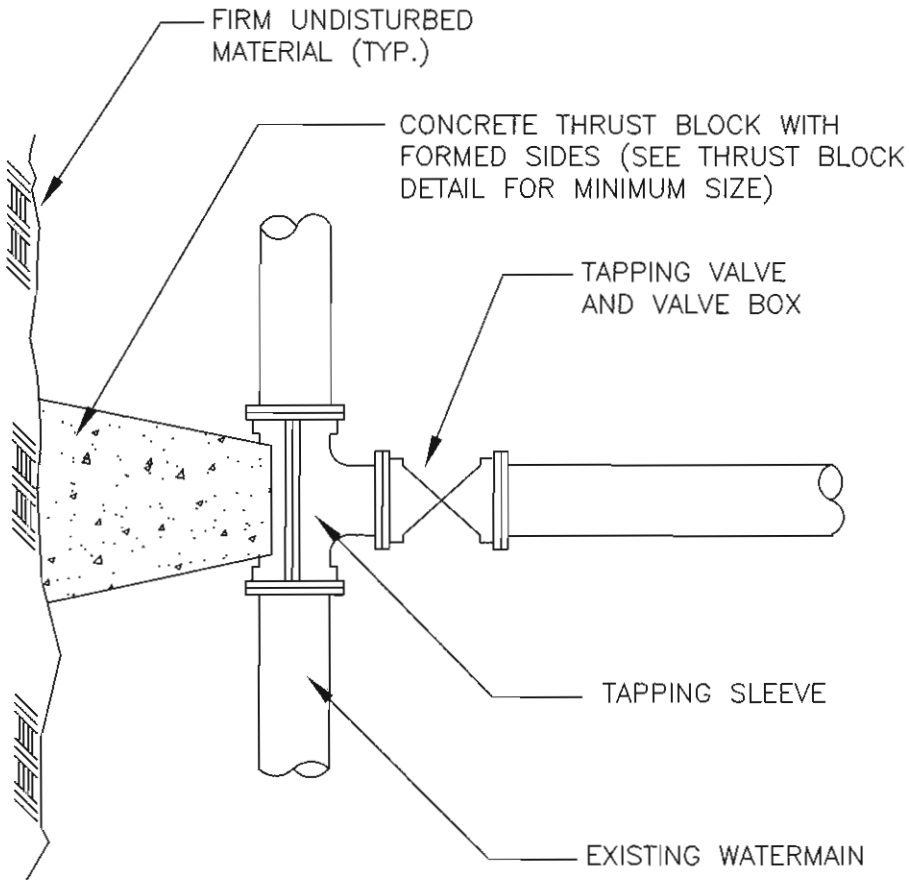
APPROVED	DATE		BY D.L.C. CHECKED
		STANDARDS	REVISED CHECKED
			DATE 1/8/01
		TYPICAL GATE BOX	1



GATE VALVE CONNECTION DETAIL

NOT TO SCALE

APPROVED	DATE			
		STANDARDS	BY D.L.C.	CHECKED
			REVISED	CHECKED
		TYPICAL GATE VALVE CONNECTION	DATE 1/8/01	
			2	

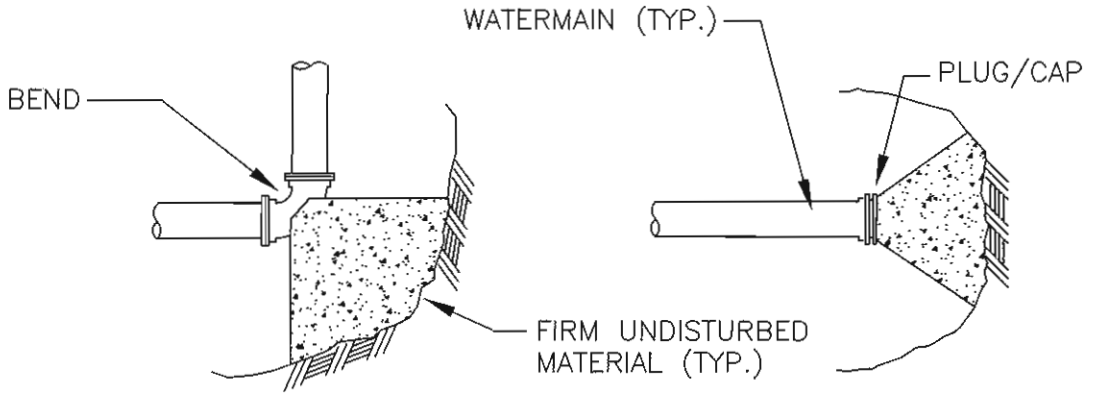


NOTE: CONTRACTOR TO VERIFY OUTSIDE DIAMETER OF EXISTING MAIN.

TAPPING SLEEVE & VALVE DETAIL

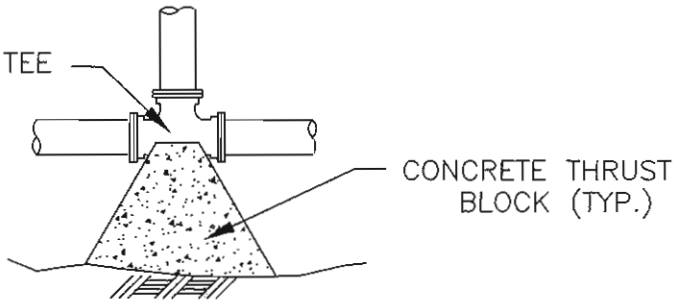
NOT TO SCALE

APPROVED	DATE			
		STANDARDS	BY D.L.C.	CHECKED
			REVISED	CHECKED
		TAPPING SLEEVE AND VALVE	DATE 1/8/01	
			3	



(TYP.) BEND–PLAN VIEW

PLUG/CAP–PLAN VIEW



TEE–PLAN VIEW

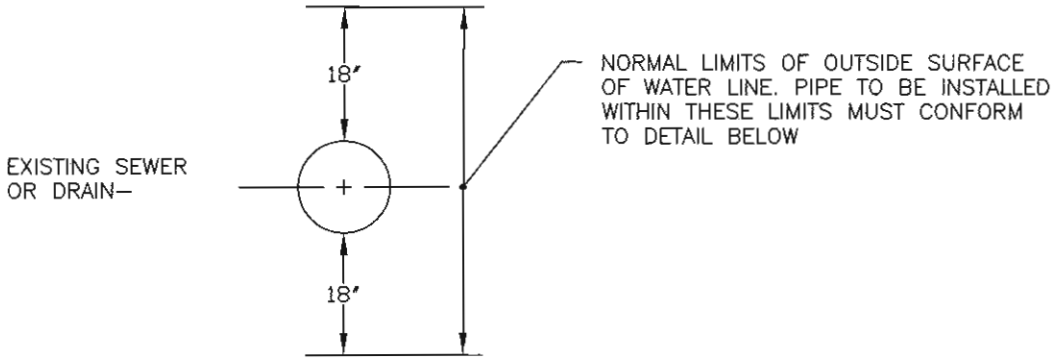
TABLE OF BEARING AREAS (S.F.)			
SIZE OF MAIN (IN.)	BEND (90)	BENDS (45 & UNDER)	TEES, CAPS OR PLUGS
8 & UNDER	6	3	4
10 & 12	12	6	9

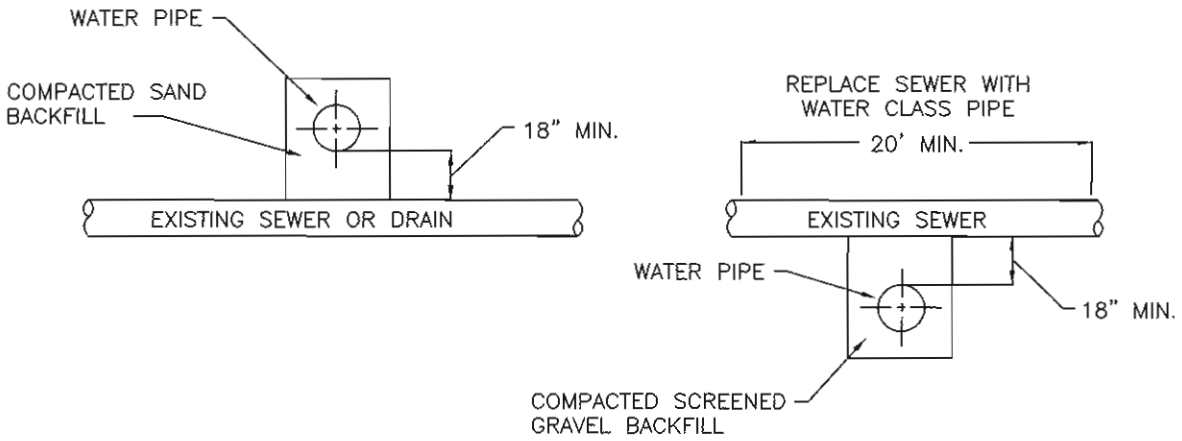
NOTES:
1. CONCRETE FOR THRUST BLOCKS SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS.
2. THRUST BLOCK BEARING AREAS TOO BE IN ACCORDANCE WITH TABLE, UNLESS DETERMINED OTHERWISE BY THE ENGINEER BECAUSE OF SOIL CONDITIONS.
3. THRUST BLOCK SIDES SHALL BE FORMED WITH PLYWOOD.

THRUST BLOCK DETAILS

NOT TO SCALE

APPROVED	DATE			
		STANDARDS	BY D.E.I.	CHECKED
			REVISED	CHECKED
		CONCRETE BACKING FOR WATER PIPE	DATE 2/4/74	
			4	

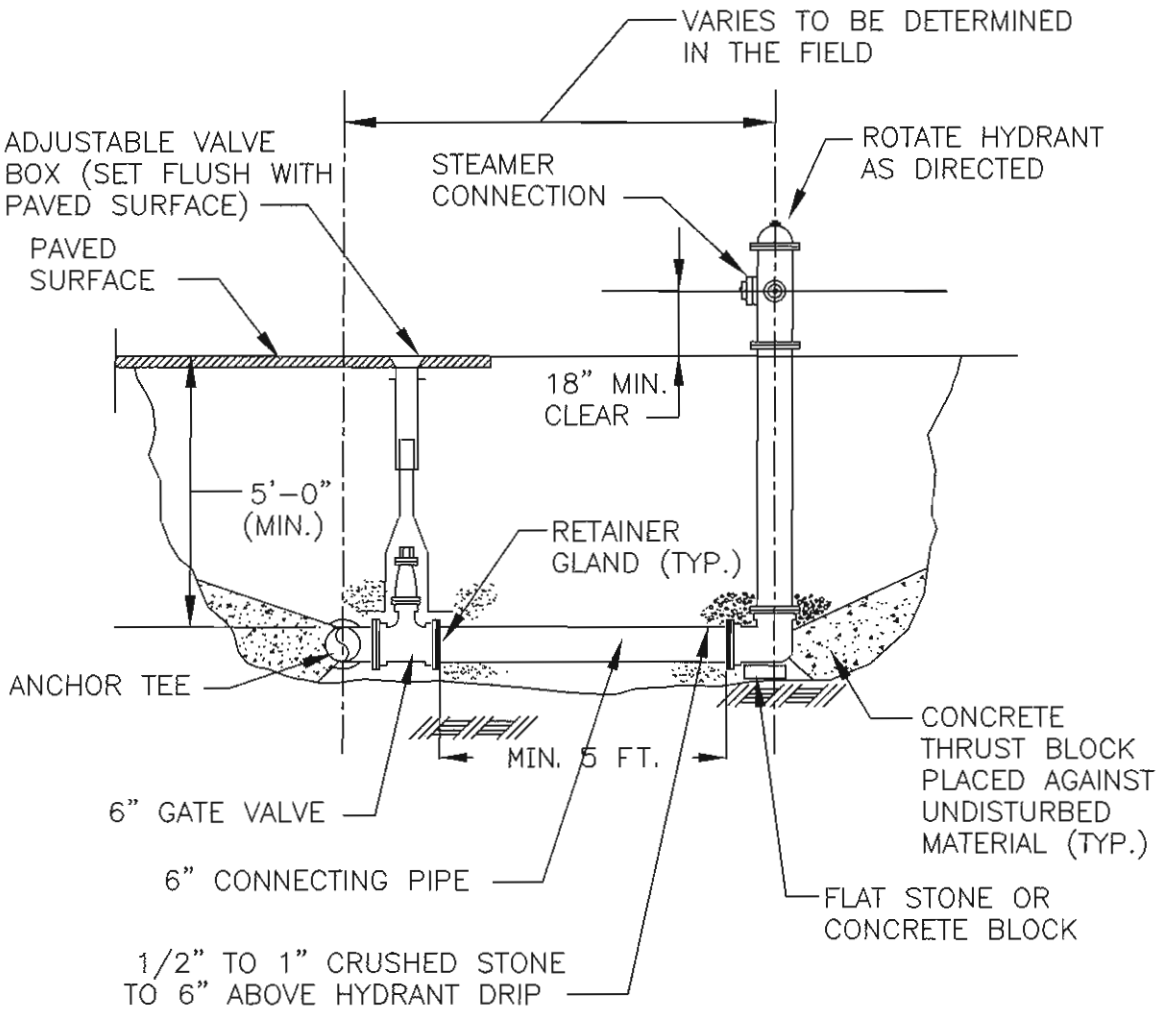




TYPICAL SEWER AND DRAIN CROSSING

NOT TO SCALE

APPROVED	DATE			
		STANDARDS	BY D.E.I.	CHECKED
			REVISED	CHECKED
		TYPICAL SEWER AND DRAIN CROSSING DETAIL	DATE 12/18/75	
			5	

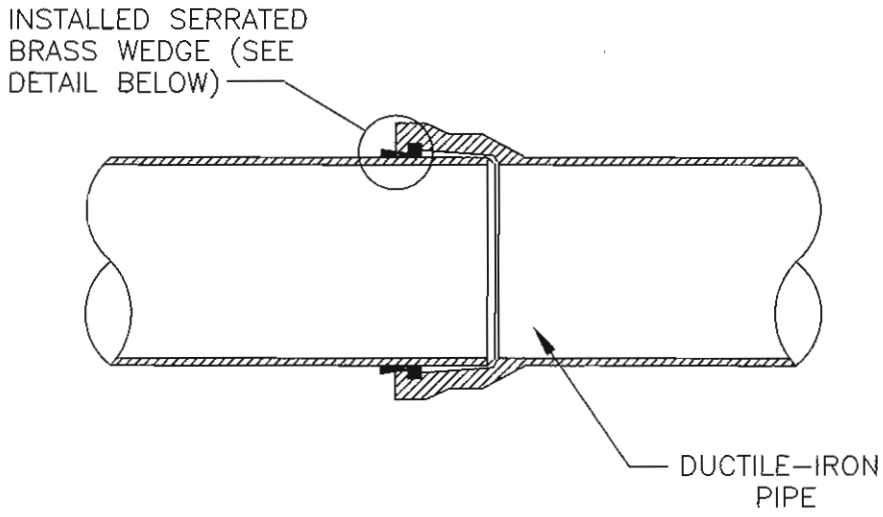


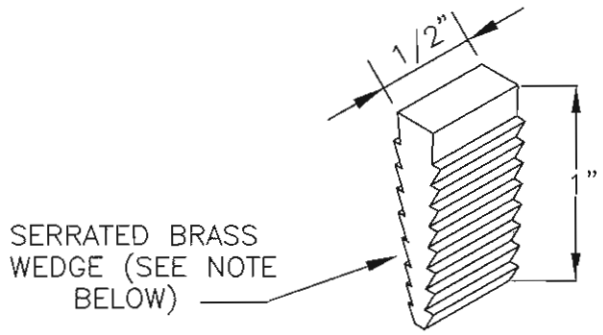
NOTE: DEPTH OF HYDRANT BURY TO SUIT INSTALLED DEPTH OF COVER OVER WATERMAIN.

HYDRANT ASSEMBLY DETAIL

NOT TO SCALE

APPROVED	DATE HYDRANT.DWG	**STANDARDS** TYPICAL HYDRANT AND VALVE DETAIL	BY D.L.C. CHECKED
			REVISED CHECKED
			DATE 1/8/01
			6



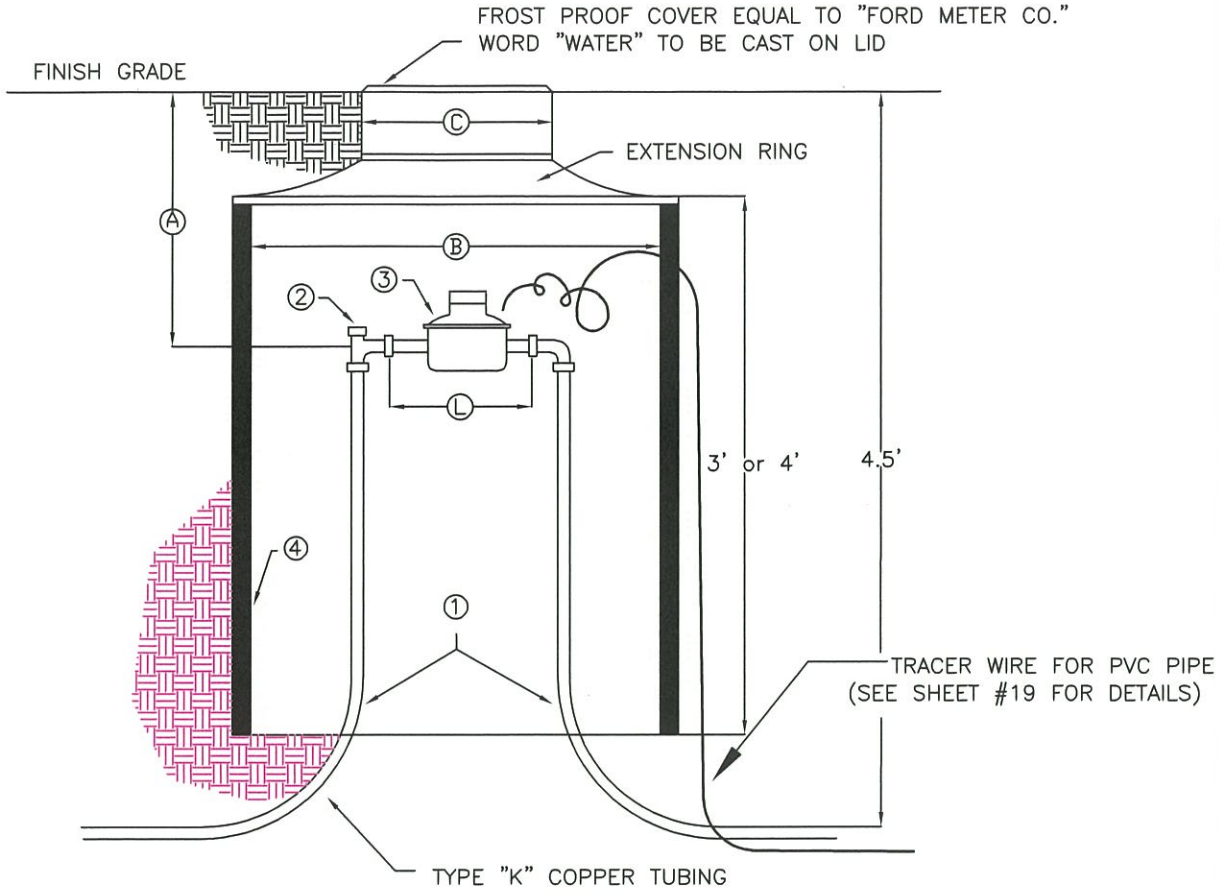


NOTE:
BRASS WEDGES ARE TO BE INSTALLED ON ALL DUCTILE–IRON, PUSH–ON PIPING, INCLUDING HYDRANT BRANCHES, ETC; TO PROVIDE FOR ELECTRICAL THAWING. FOR 2" THROUGH 12" PIPE, TWO WEDGES SHALL BE USED PER JOINT; FOR LARGER DIAMETER PIPE FOUR WEDGES SHALL BE USED PER JOINT. EACH WEDGE IS DRIVEN INTO THE OPENING BETWEEN THE PLAIN END AND THE BELL UNTIL SNUG. WHEN FOUR WEDGES ARE USED, THEY ARE INSTALLED SIDE BY SIDE, IN PAIRS.

SERRATED BRASS WEDGE DETAIL

NOT TO SCALE

APPROVED	DATE		
		STANDARDS	BY D.L.C. CHECKED D.E.I.
			REVISED CHECKED
		TYPICAL SERRATED BRASS WEDGES TO PROVIDE ELECTRICAL THAWING OF WATER PIPING	DATE 3/30/81
			7



METER PIT	COVER FORD	A	B	C	D	COUPLING NUT	ANGLE VALVE	COPPER TUBE
5/8"	NO. W3	14"	20"	11-1/2"	7-1/2"	1"	3/4"	3/4"
3/4"	NO. W3	16"	20"	11-1/2"	9"	1"	3/4"	3/4"
1"	NO. 24	18"	24"	20"	10-3/4"	1 1/4"	1"	1"

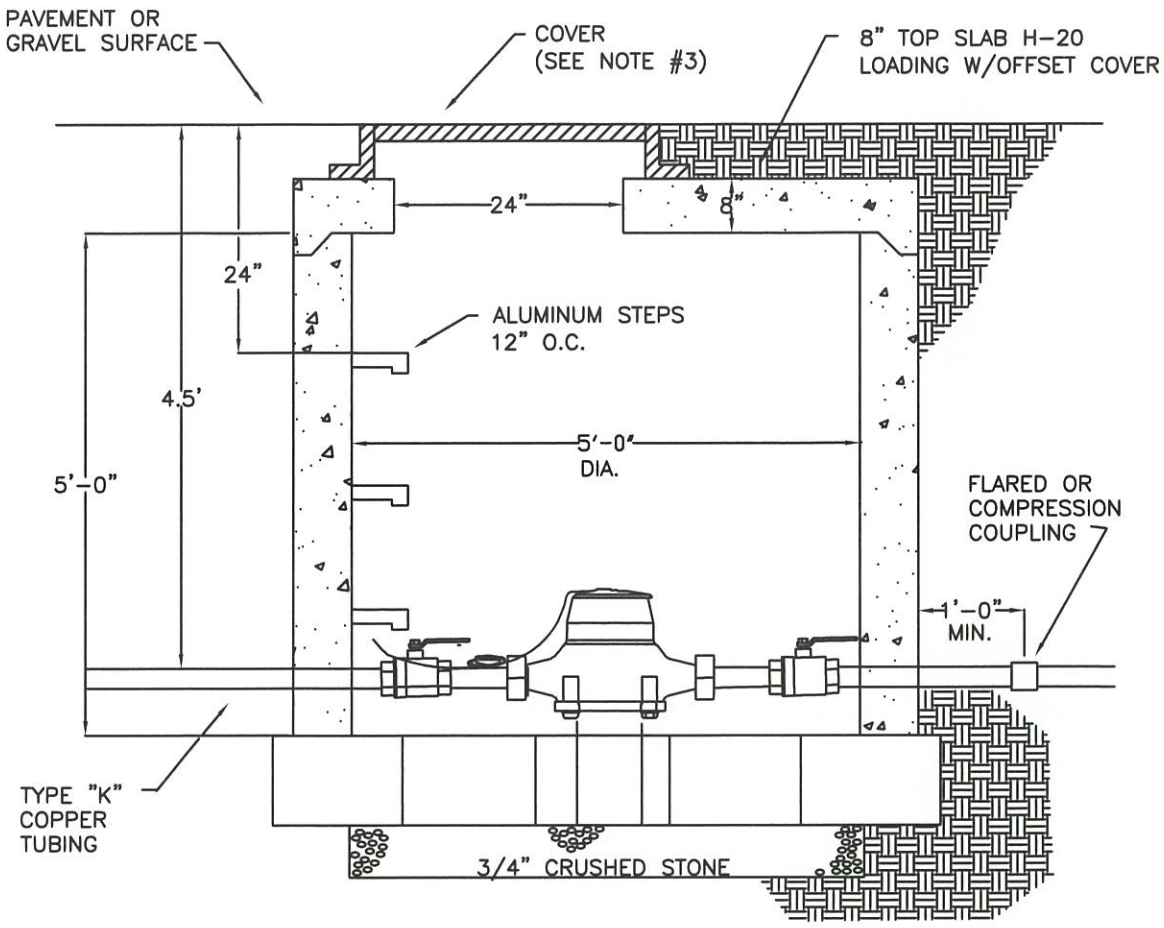
NO.	
1	COPPER TUBING - TYPE K
2	ANGLE METER STOP
3	METER
4	P.V.C. PIPE
5	COVER AND FRAME FROSTPROOF

FOR 1" METER SIZE ONLY:
AREA SUBJECT TO TRAFFIC: FORD NO. 24 HEAVY WEIGHT COVER
AREA SUBJECT TO NON-TRAFFIC: FORD NO. 24 STANDARD COVER

WATER METER PIT 5/8"-1"

NOT TO SCALE

APPROVED	DATE		
		STANDARDS	BY D.E.I. CHECKED
			REVISED M.E.D CHECKED
		WATER METER PIT 5/8" - 1"	DATE 10/29/20
			8



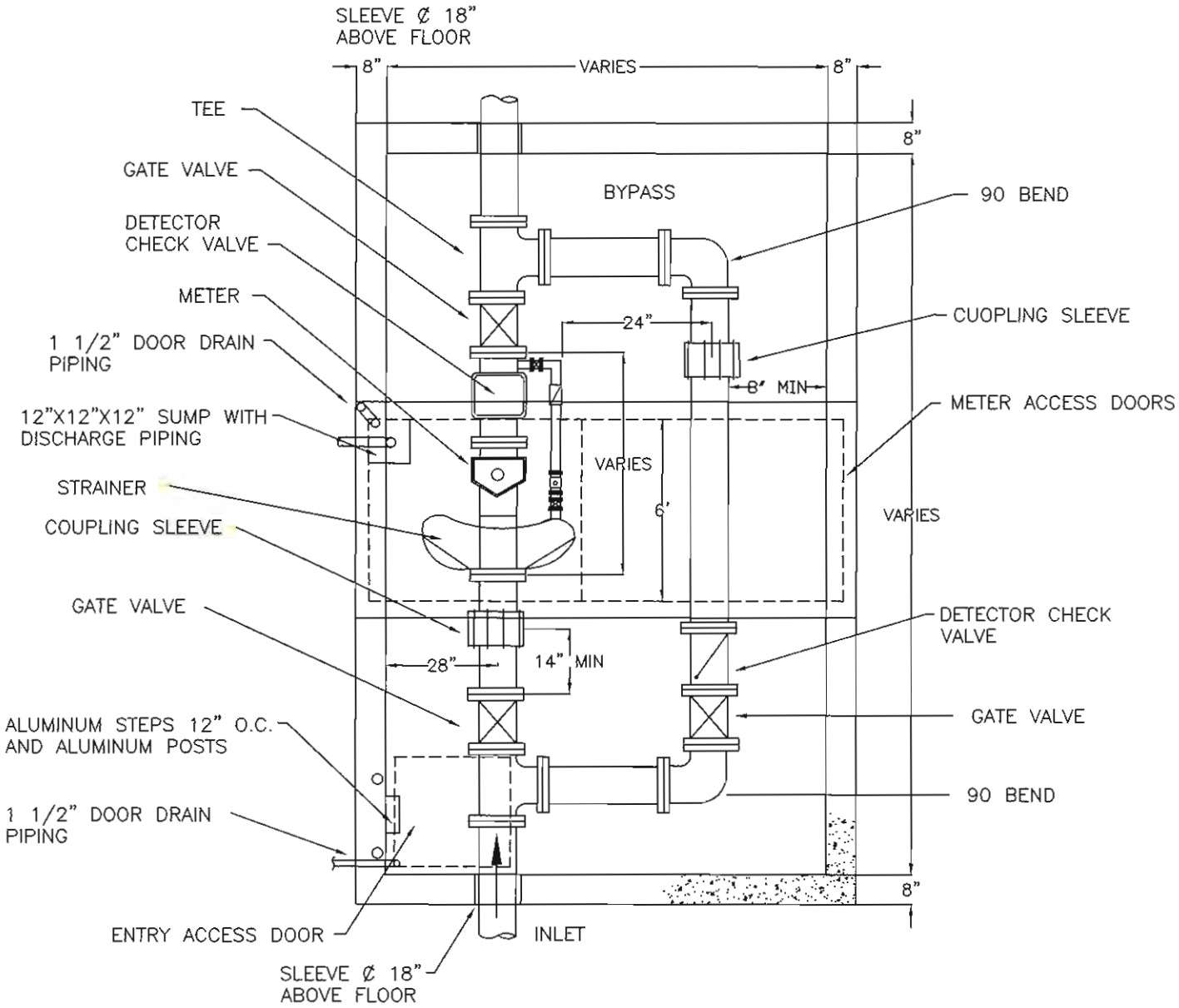
NOTES:

1. INSTALL VALVES ON BOTH SIDES OF METER (FULL FLOW VALVES)
2. METER SPACER LOANED BY UTILITIES DEPT. FOR CONSTRUCTION
3. AREAS SUBJECT TO TRAFFIC: BILCO TYPE J-2 REINFORCED STEEL DOOR (2'-6"X2'-6"), H-20 LOADING
   AREAS SUBJECT TO NON-TRAFFIC: BILCO TYPE J-2AL ALUMINUM DOOR (2"-6"X2'-6")
4. MIN. HEIGHT CLEARANCE INSIDE METER PIT 5'-8"
5. WHERE REMOTE METERS ARE REQUIRED, WIRE WILL BE INSTALLED IN PVC CONDUIT TO THE BUILDING OR 4"X4" PRESSURE TREATED POST INSTALLED 4 FT. ABOVE GRADE
6. FOR PVC SERVICES FROM METER PIT BUILDING TRACER WIRE WILL BE INSTALLED BY CONTRACTOR.
   * TRACE WIRE DIRECT BURIAL #12 AWG SOLID (0.0808" DIAMETER),STEEL CORE SOFT DRAWN TRACER WIRE, #250 AVERAGE TENSILE BREAK LOAD, 30 MIL HIGH MOLECULAR-HIGH DENSITY POLYETHYLENE JACKET COMPLYING WITH ASTM-D-1248, 30 VOLT RATING.

METER PIT 1 1/2" & 2"

NOT TO SCALE

APPROVED	DATE		
		STANDARDS	BY M.S.W. CHECKED
			REVISED M.E.D CHECKED
		WATER METER PIT 1 1/2" & 2"	DATE 10/29/20
			9



INSIDE HEIGHT 6'04" 3000LB. CONCRETE
1/2" DIA. RODS 12" O.C. BOTH WAYS, DOUBLE AT EDGES.
4" CONCRETE FLOOR, SLOPE TO SUMP.
SUMP LOCATION, DISCHARGE PIPING, TO BE DETERMINED BY FIELD CONDITIONS
USE FLANGE FITTINGS INSIDE METER PIT.
SUPPORT METER AND VALVES ON CONCRETE FOUNDATIONS, VALVES OPEN LEFT.
(2) – 2 1/2" ANODIZED ALUMINUM, CONCRETE–FILLED POSTS, 36" HIGH AND 22" APART, EMBEDDED 6" IN CONCRETE

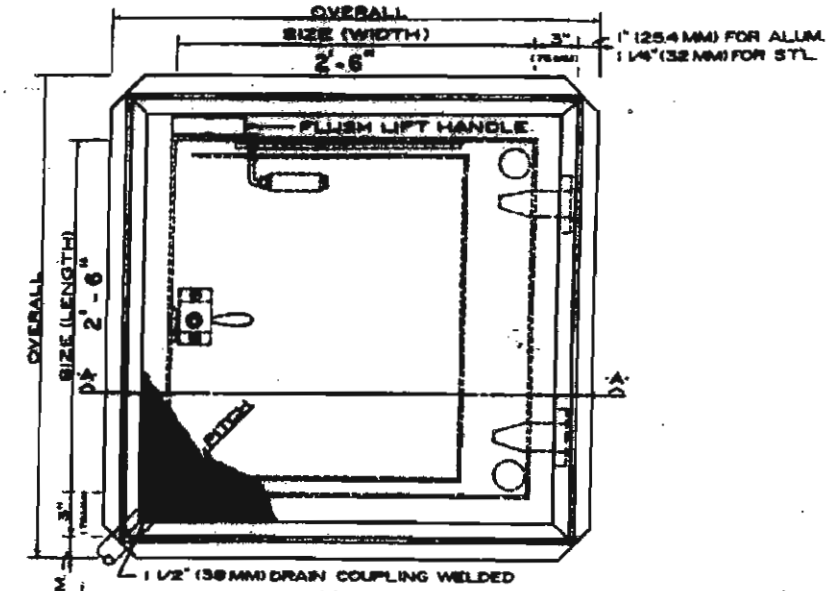
SERVICE SIZE	METER SIZE	METER LENGTH	METER PIT WIDTH	METER PIT LENGTH	BYPASS SIZE
3"	3"	19"	7'–0"	12'–0"	3"
4"	4"X1 1/2"	33"	7'–0"	12'–0"	4"
6"	6"X2"	45"	8'–0"	14'–0"	6"
8"	8"X2"	53"	8'–0"	16'–0"	8"
10"	10"X2"	68"	8'–0"	18'–0"	10"
12"	10"X2"	68"	8'–0"	19'–0"	12"

APPROVED	DATE

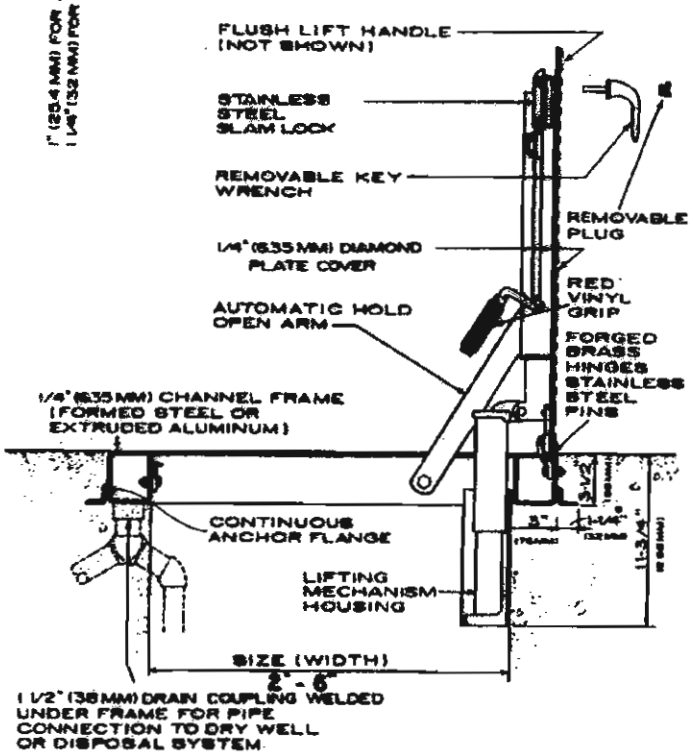
STANDARDS

WATER METER PIT
3", 4", 6", 8", 10", 12"

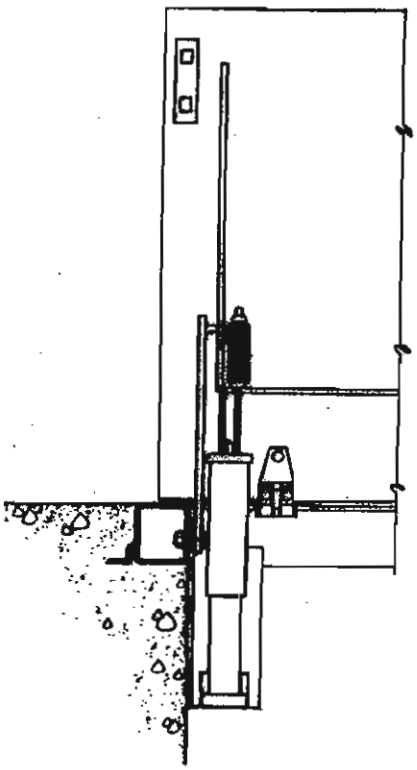
BY R.A.R.	CHECKED
REVISED	CHECKED
DATE 4/5/94	
10	



PLAN VIEW



SECTION A-A
(Cover in Open Position)

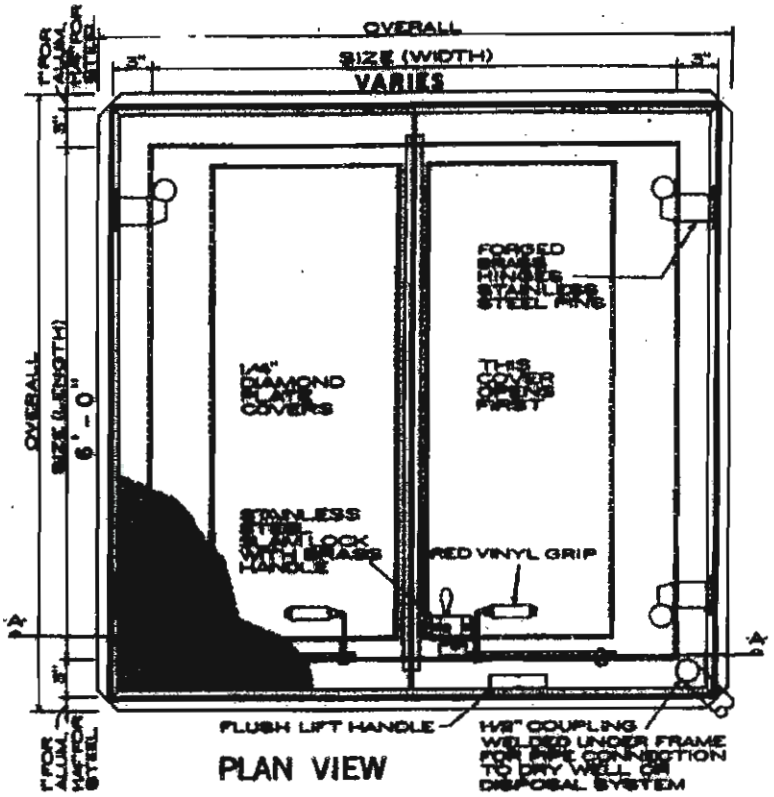


ENLARGED DETAIL
(Cover in Open Position)

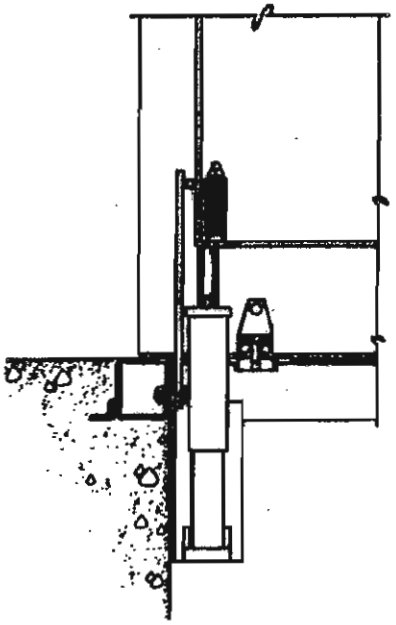
*THIS DIMENSION 1" (25.4 MM) ON ALUMINUM FRAME

AREAS SUBJECT TO TRAFFIC: BILCO TYPE J-2 REINFORCED STEEL DOOR (2'-6"x2'-6"), H-20 LOADING
AREAS SUBJECT TO NON-TRAFFIC: BILCO TYPE J-2AL ALUMINUM DOOR (2'-6"x2'-6")

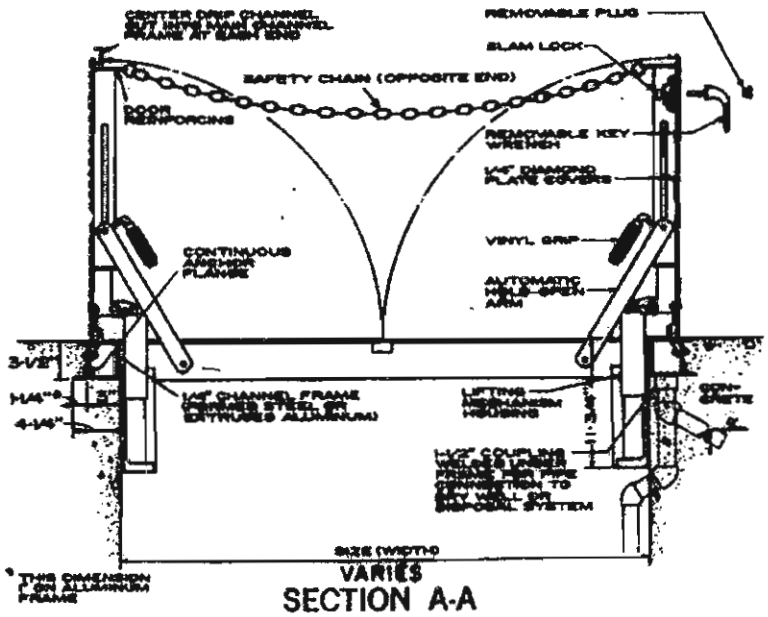
APPROVED	DATE	CITY OF GROTON, CONNECTICUT DEPARTMENT OF UTILITIES	BY R.A.R. CHECKED M.J.W
R.A.R.	4/5/94		REVISED CHECKED
		WATER METER PIT	DATE
		ENTRY ACCESS DOOR	10 A



PLAN VIEW



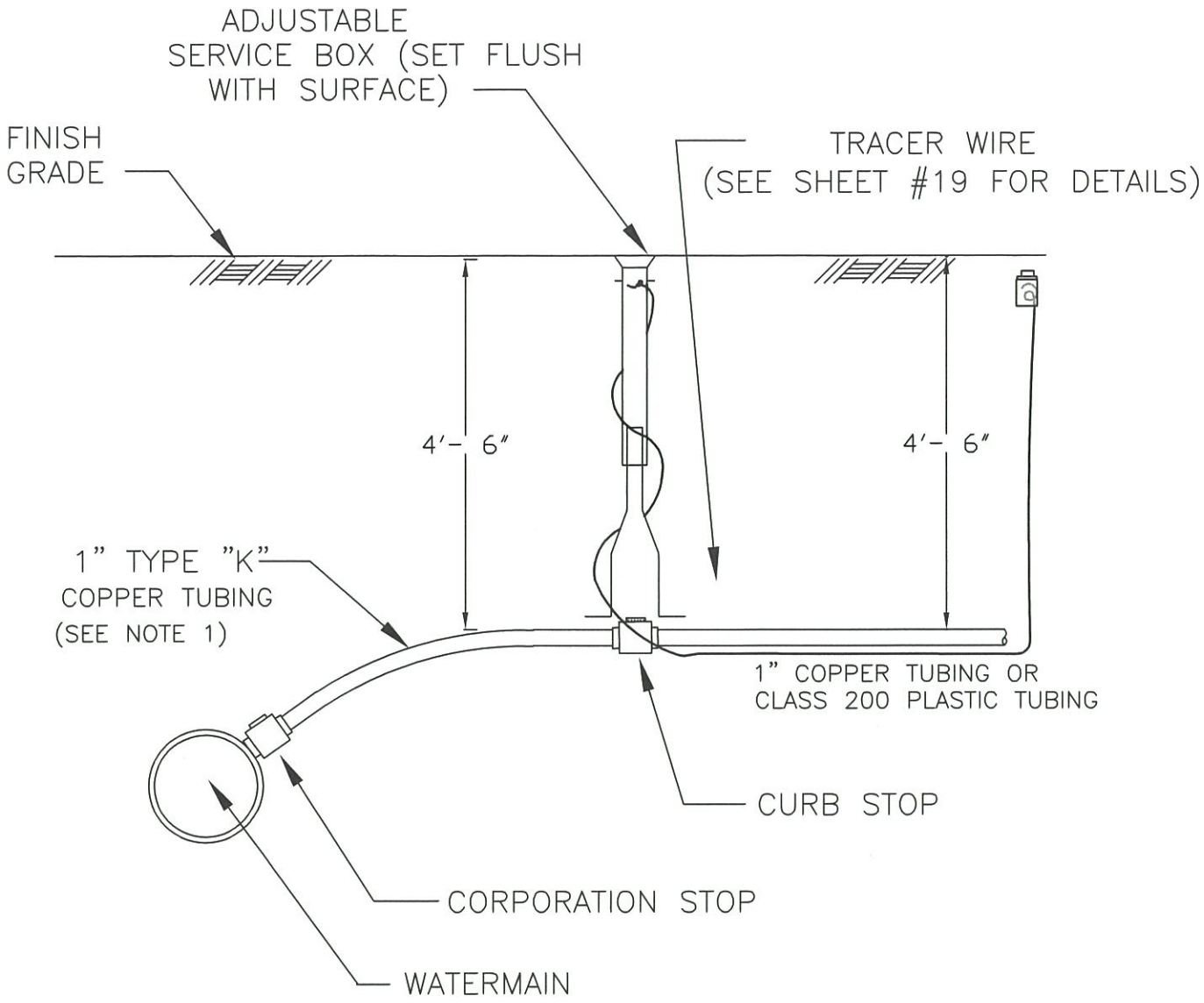
ENLARGED DETAIL



SECTION A-A
(Covers in Open Position)

AREA SUBJECT TO TRAFFIC: BILCO TYPE JD-3 REINFORCED STEEL DOOR (6'-0"x VARIES), H-20 LOADING
AREA SUBJECT TO NON-TRAFFIC: BILCO TYPE JD-3AL ALUMINUM DOOR (6'-0"x VARIES)

APPROVED	DATE	CITY OF GROTON, CONNECTICUT DEPARTMENT OF UTILITIES	BY R.A.R. CHECKED W.S.W.
R.A.R.	4/15/04		REVISED CHECKED
		WATER METER PIT	DATE
		METER ACCESS DOORS	10 3

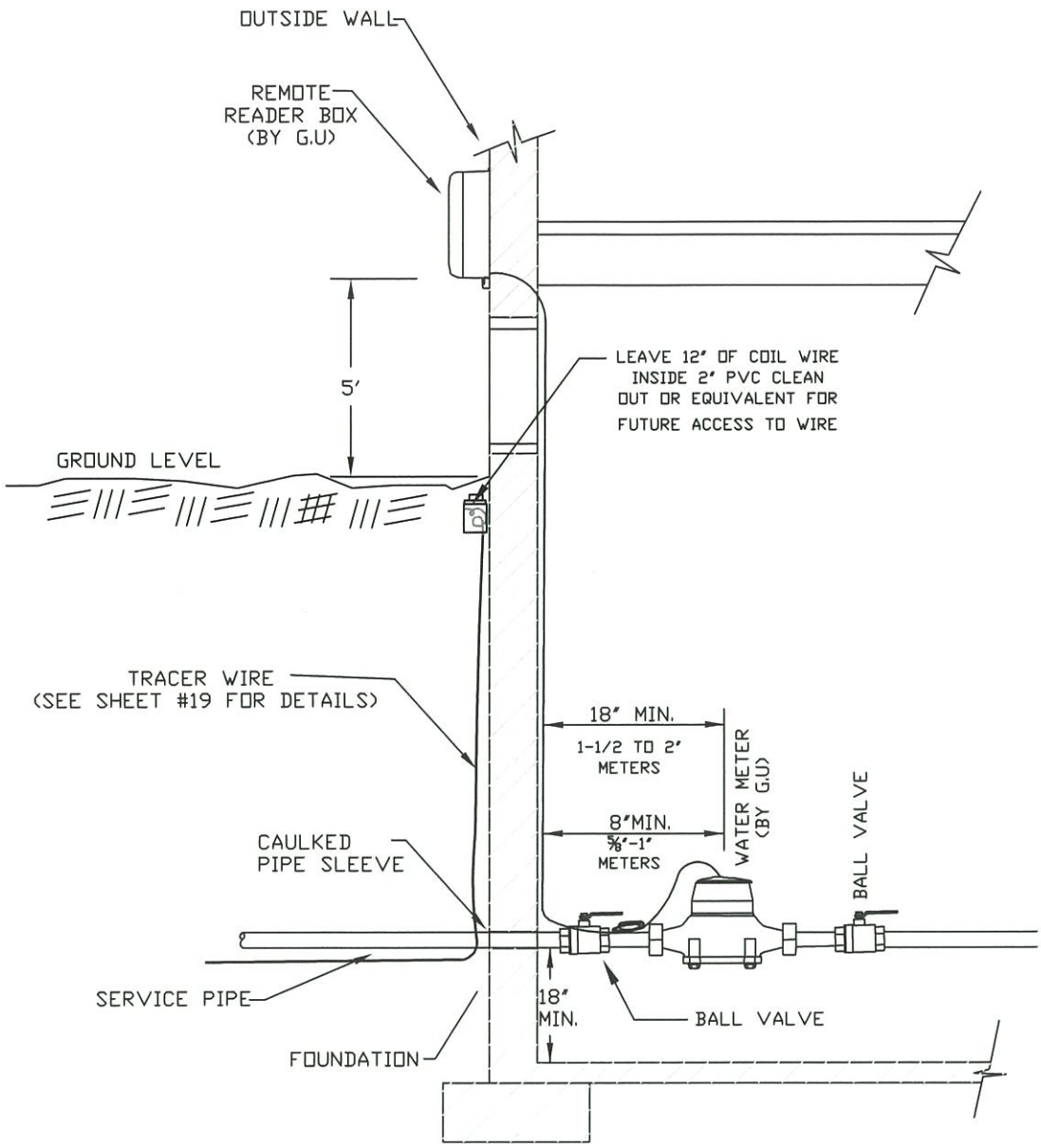


1. MINIMUM SIZE OF ANY WATER SERVICE INSTALLED FROM MAIN TO PROPERTY LINE SHALL BE 1".
2. TYPE "K" COPPER TUBING MUST BE INSTALLED FROM MAIN TO PROPERTY LINE.
   TYPE "K" COPPER TUBING OR CLASS 200 PLASTIC TUBING MUST BE INSTALLED FROM PROPERTY LINE TO BUILDING.
3. METER PIT MAY REPLACE CURB STOP, BOX, AND HOUSE METER IN BASEMENT.
4. ALL JOINTS TO METER SHALL BE FLARED OR COMPRESSION TYPE.
5. BUILDINGS WITHOUT BASEMENTS MUST HAVE EXTERIOR METER PITS.
6. SERVICE LINES MUST BE CAULKED INSIDE FOUNDATION WALL SLEEVE.
7. BACKFILL: HAND-FILL WITH SAND OR EQUAL TO 12" ABOVE PIPE.
8. TAPPED COLLARS MAY BE USED FOR SERVICE CONNECTIONS.
9. ELECTRICAL GROUNDING WILL NOT BE PERMITTED ON ANY PORTION OF AN EXISTING COPPER WATER SERVICE PARTIALLY REPLACED BY PLASTIC PIPE.

* Pipe rating shall be class 200 water service pipe manufactured to meet or exceed requirements of water service tubing Class 200 (ASTM Standard D-2737 CTS-OD). The pipe shall bear the emblem of National Sanitation Foundation for use in potable water systems. Class 200 water service pipe must be approved by I.A.P.M.D. for use as underground water service pipe and shall bear the seal of the Uniform Plumbing Code. The pipe must conform to the National Bureau of Standards Product Standard Requirements.

*(CTS-OD Indicates Copper Tubing Size, Outside Diameter)

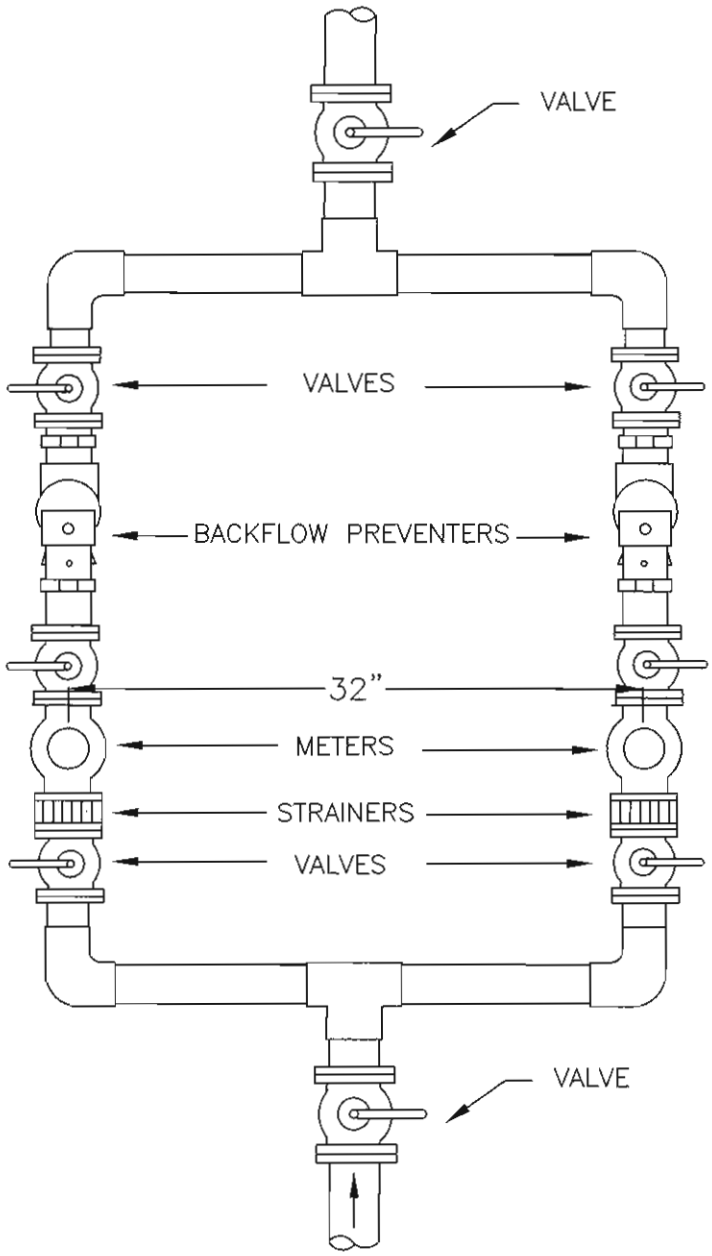
APPROVED	DATE		BY D.L.C. CHECKED
		STANDARDS	REVISED M.E.D CHECKED
		TYPICAL WATER SERVICE CONNECTION 1"	DATE 4/9/20
			11



NOTES:

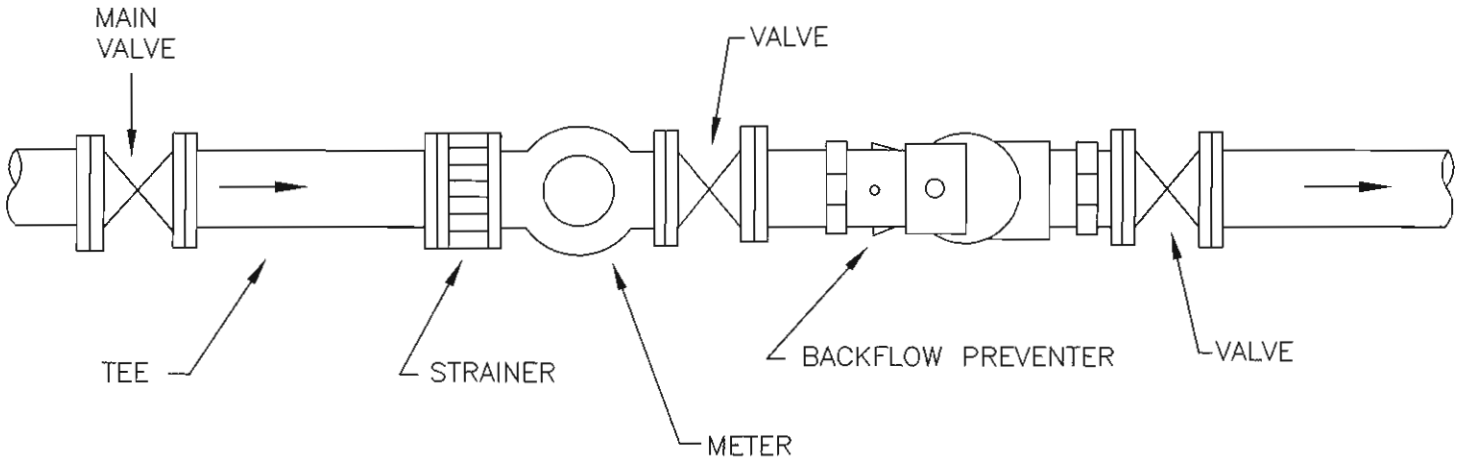
1. ALL METER TO BE INSTALLED A MINIMUM OF 18" ABOVE THE FLOOR
2. ALL 5/8" TO 1" METERS TO BE INSTALLED A MINIMUM OF 8" FROM THE WALL TO THE CENTERLINE OF THE METER.
3. ALL 1 1/2" TO 2" METERS TO BE INSTALLED A MINIMUM OF 18" FROM THE WALL TO CENTERLINE OF THE METER OR AS REQUIRED.
4. CAULK AND SEAL ANY DRILL HOLES NEATLY AND THOROUGHLY.
5. WIRE MUST BE RUN FROM THE METER TO EITHER SIDE OF FRONT OUTSIDE WALL. IF POSSIBLE LOCATE NEAR ELECTRIC METER AND IN AN ACCESSIBLE AREA.
6. INSTALL WIRE IN A NEAT ORDERLY METHOD IN ACCORDANCE WITH THE OWNERS REQUEST.

APPROVED	DATE	**STANDARDS**	BY M.S.W. CHECKED
			REVISED M.E.D CHECKED
		TYPICAL RESIDENTIAL WATER METER INSTALLATION	DATE 10/29/20
		NOT TO SCALE	12



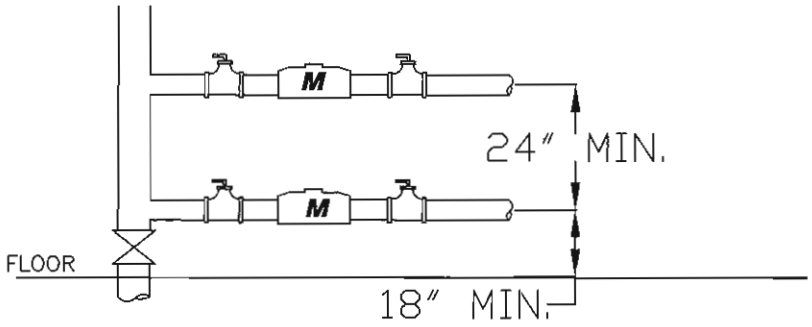
1. ALL PIPING AND FLANGED FITTINGS TO BE SUPPLIED BY CUSTOMER
2. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER FOR SIZES 3/4" THRU 6" WITH BY-PASS PIPING.
3. CENTER OF PIPE TO FLOOR 42"
4. CENTER OF PIPE TO WALL 18"

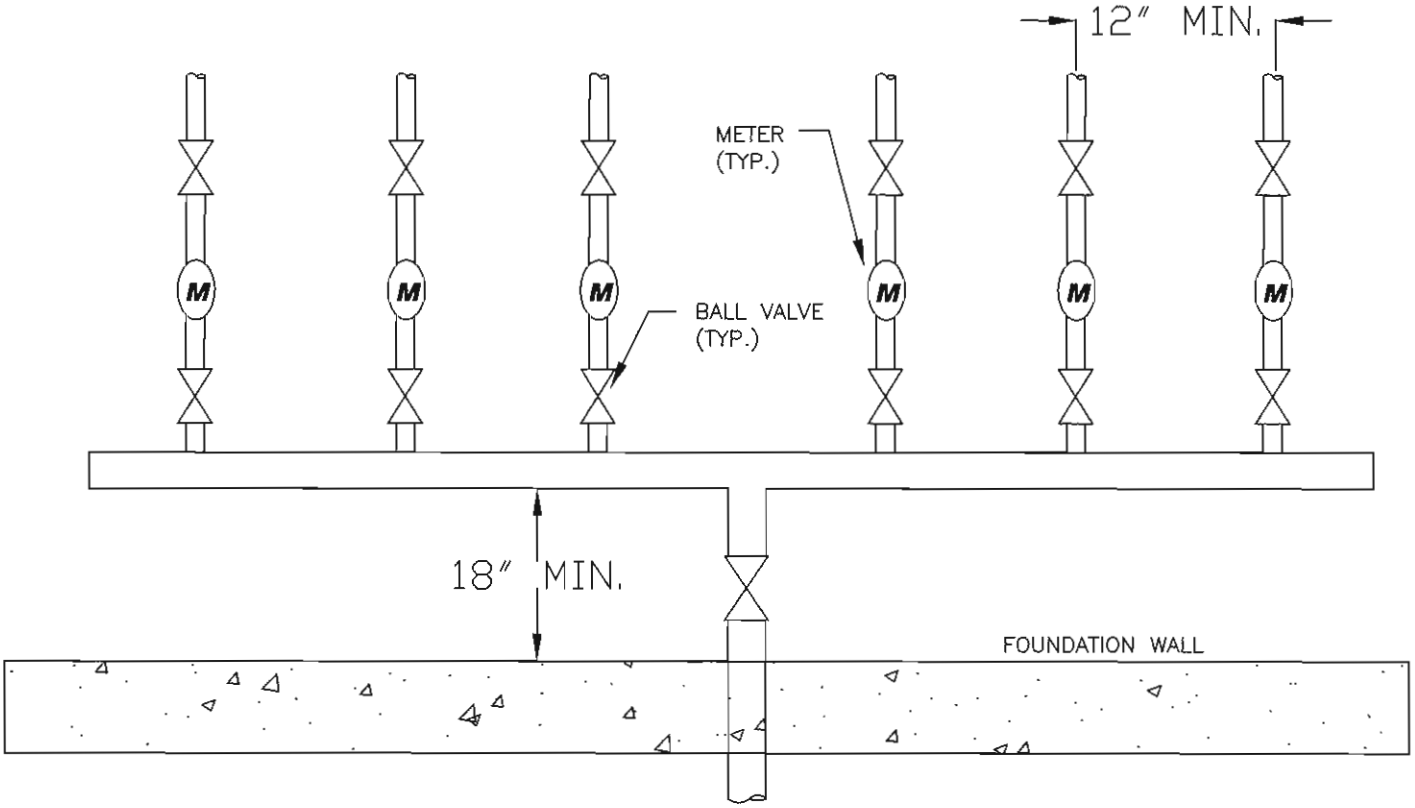
APPROVED	DATE	**STANDARDS**	BY MSW CHECKED
R.A.R.	5/21/99	TYPICAL	REVISED 5/6/99 CHECKED
		BACKFLOW PREVENTER INSTALLATION	DATE 8/21/87
		3/4" THRU 6" WITH BY-PASS PIPING	
		NOT TO SCALE	13



1. ALL PIPING AND FLANGED FITTINGS TO BE SUPPLIED BY CUSTOMER
2. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER FOR SIZES 3/4" THRU 2" FOR INSTALLATIONS NOT REQUIRING BY–PASS PIPING.
3. CENTER OF PIPE TO FLOOR 24"
4. CENTER OF PIPE TO WALL 18"

APPROVED	DATE		
R.A.R.	5/21/99	**STANDARDS** TYPICAL BACKFLOW PREVENTER INSTALLATION 3/4" THRU 2" WITHOUT BY–PASS PIPING NOT TO SCALE	BY MSW CHECKED REVISED 5/6/99 CHECKED DATE 8/21/87 13A

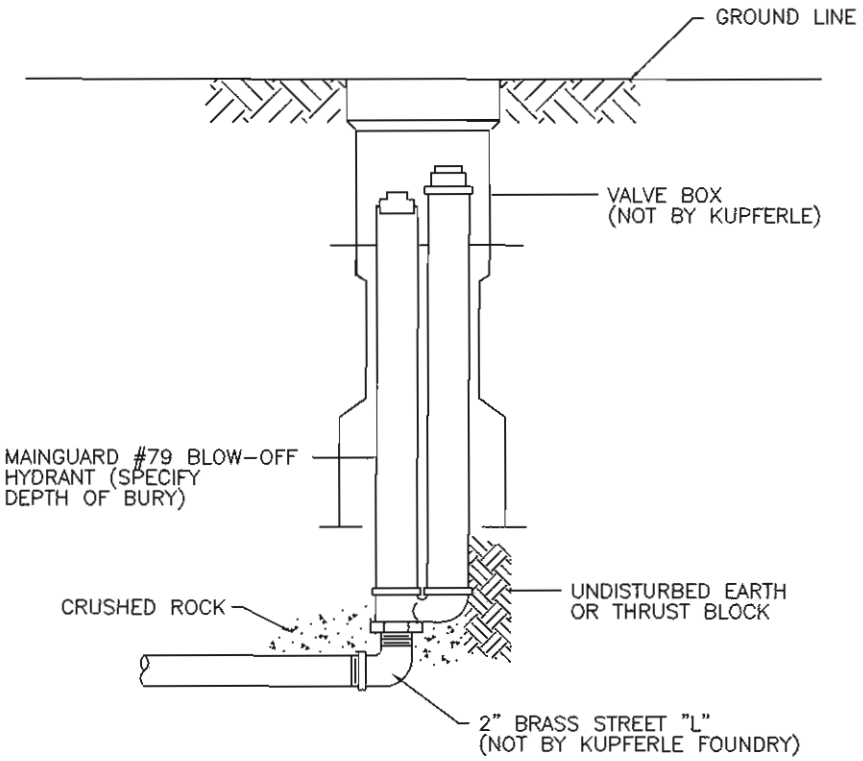




1. ALL VALVES TO BE FULL FLOW BALL VALVES.
2. ALL METERS TO BE INSTALLED HORIZONTALLY.
3. EACH METER AND SERVICE PIPE TO BE NUMBERED WITH THE CORRESPONDING CONDO NUMBER, AS WELL AS THE REMOTE READ BOX ON THE OUTSIDE OF THE BUILDING.
4. THE METERS ARE TO BE INSTALLED AS CLOSE AS POSSIBLE TO THE POINT OF ENTRY OF THE SERVICE PIPE INTO THE BUILDING. ANY VARIATION MUST BE APPROVED BY THE DEPARTMENT OF UTILITIES.

APPROVED	DATE		BY D.L.C. CHECKED
		STANDARDS	REVISED CHECKED
			DATE 1/8/01
		TYPICAL MULTIPLE METER INSTALLATION	14

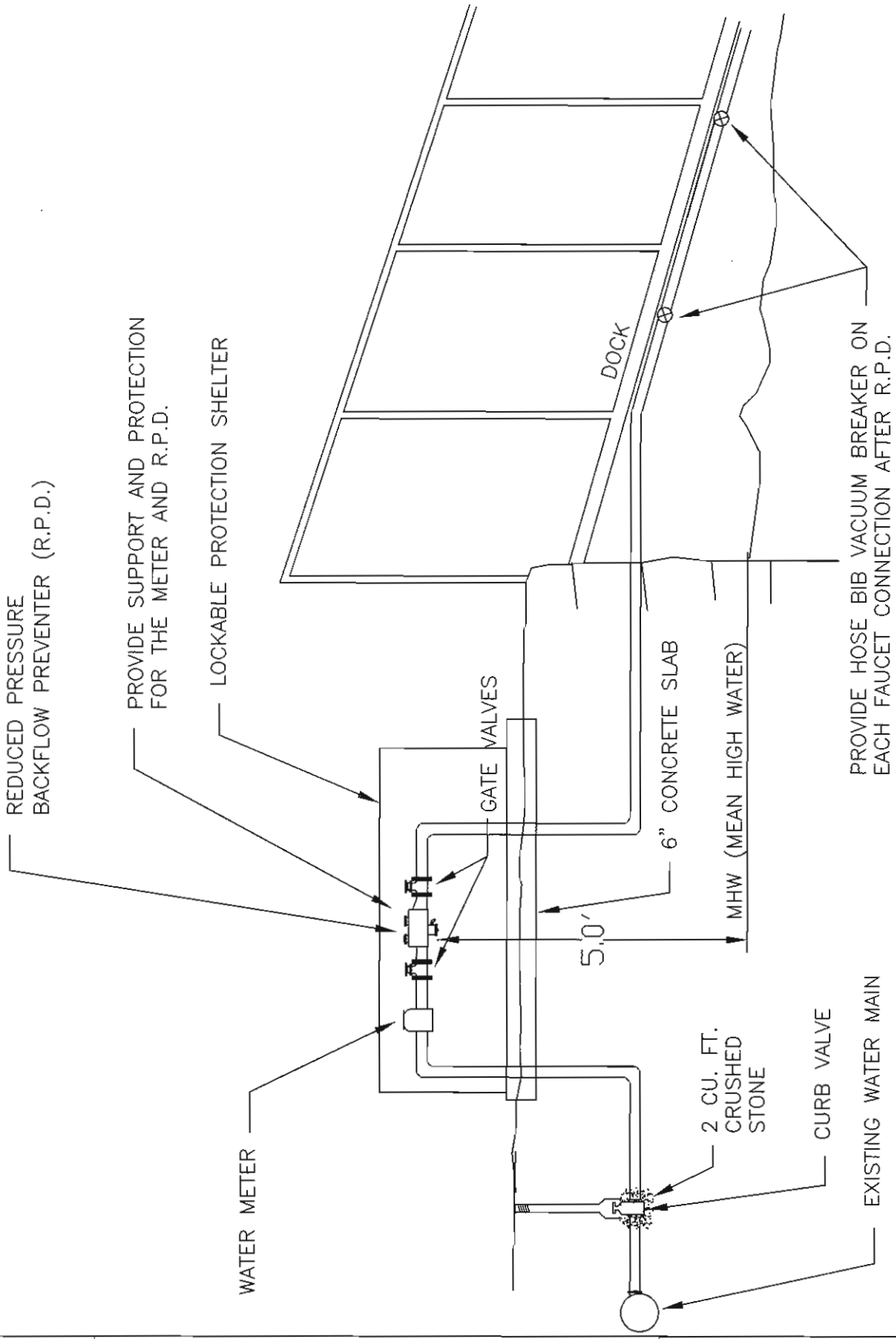
ECLIPSE NO. 79 (MAINGUARD) BLOW–OFF HYDRANT



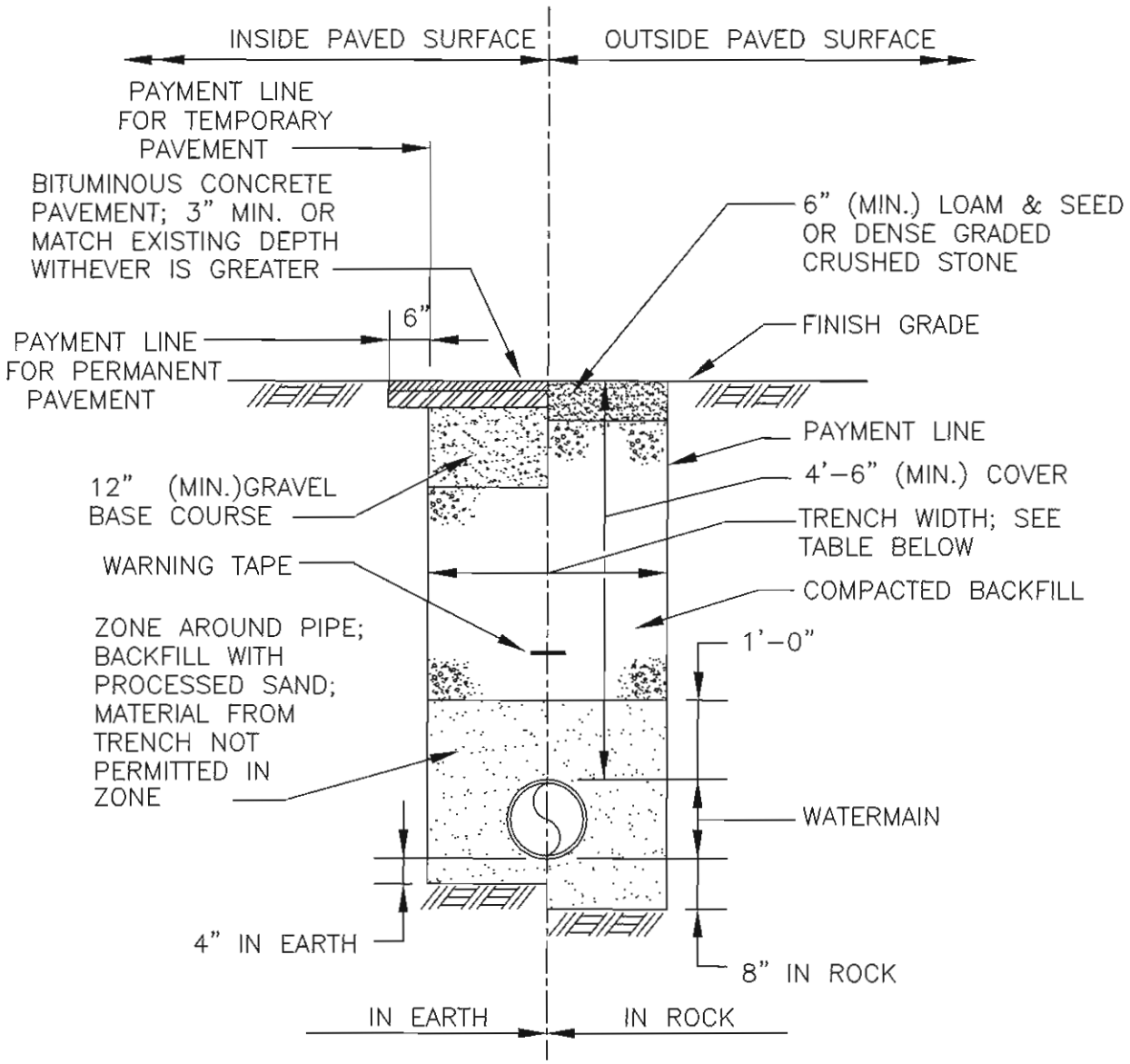
Blow–Off Hydrants shall be non–freezing, self draining type. Set underground in a 5 1/4" valve box, these hydrants will be furnished with a 2" FIP inlet, a non–turning operating rod, and shall open to the left. All of these working parts shall be of bronze–to–bronze design, and be servicable from above grade with no digging. The outlet shall be a 2" FIP coupling with plug, as manufactured by Kupferle Foundry Co., St. Louis, MO, or approved equal.

(Specify overall length 6" shorter than normal depth of bury.)

APPROVED	DATE		BY D.L.C. CHECKED
		STANDARDS	REVISED CHECKED
		2" MANUAL AIR RELEASE	DATE 1/9/01
			15



APPROVED	DATE	**STANDARDS**	BY D.E.I. CHECKED
			REVISED CHECKED
		TYPICAL BACKFLOW PREVENTER INSTALLATION FOR MARINE FACILITIES	DATE 10/9/87
			16



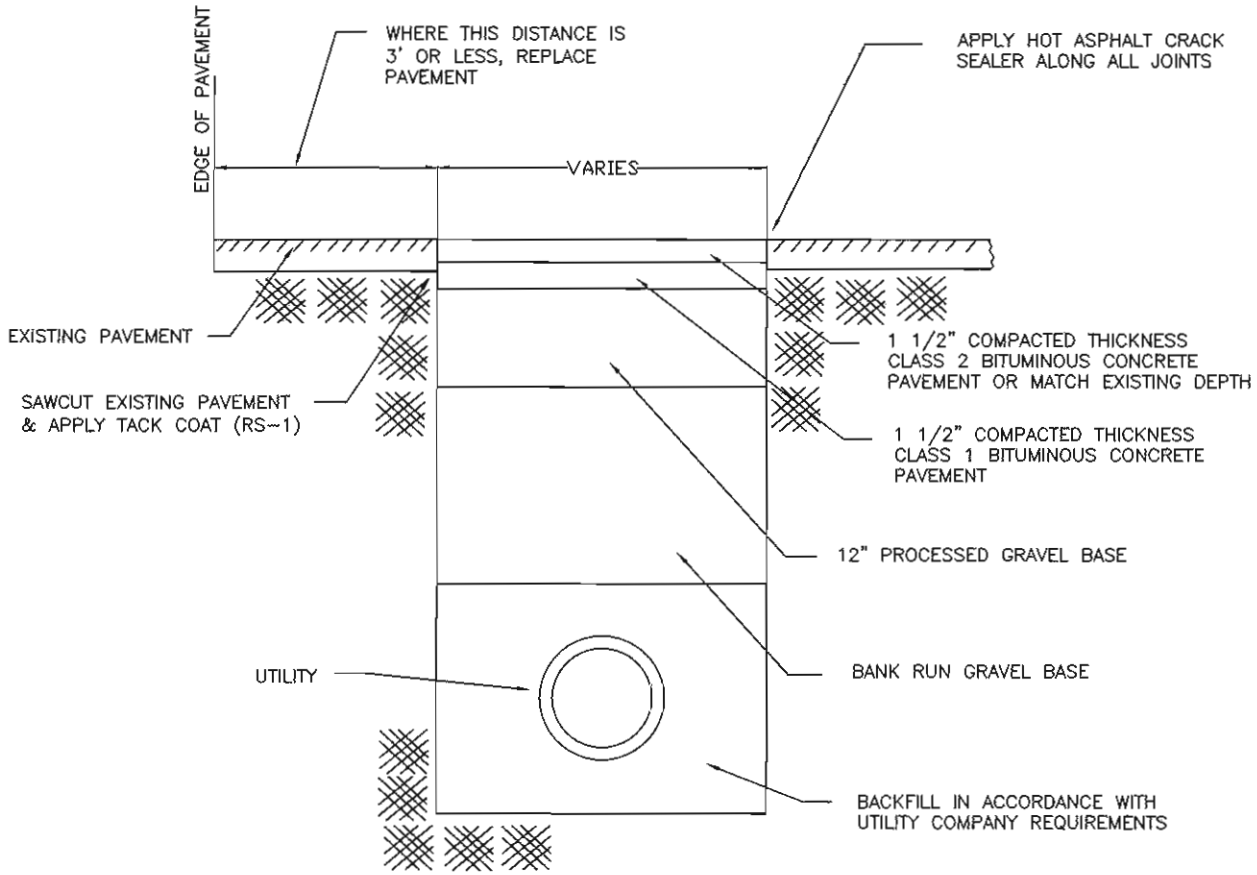
TRENCH WIDTH TABLE		
PIPE DIA.	12" & UNDER	16"
TRENCH WIDTH	3'-0"	3'-4"

NOTE: PAYMENT FOR PAVEMENT INSTALLED BEYOND PAYMENT LINE WILL BE MADE ONLY WHEN SUCH INSTALLATION IS APPROVED BY THE ENGINEER.

WATERMAIN TRENCH DETAIL

NOT TO SCALE

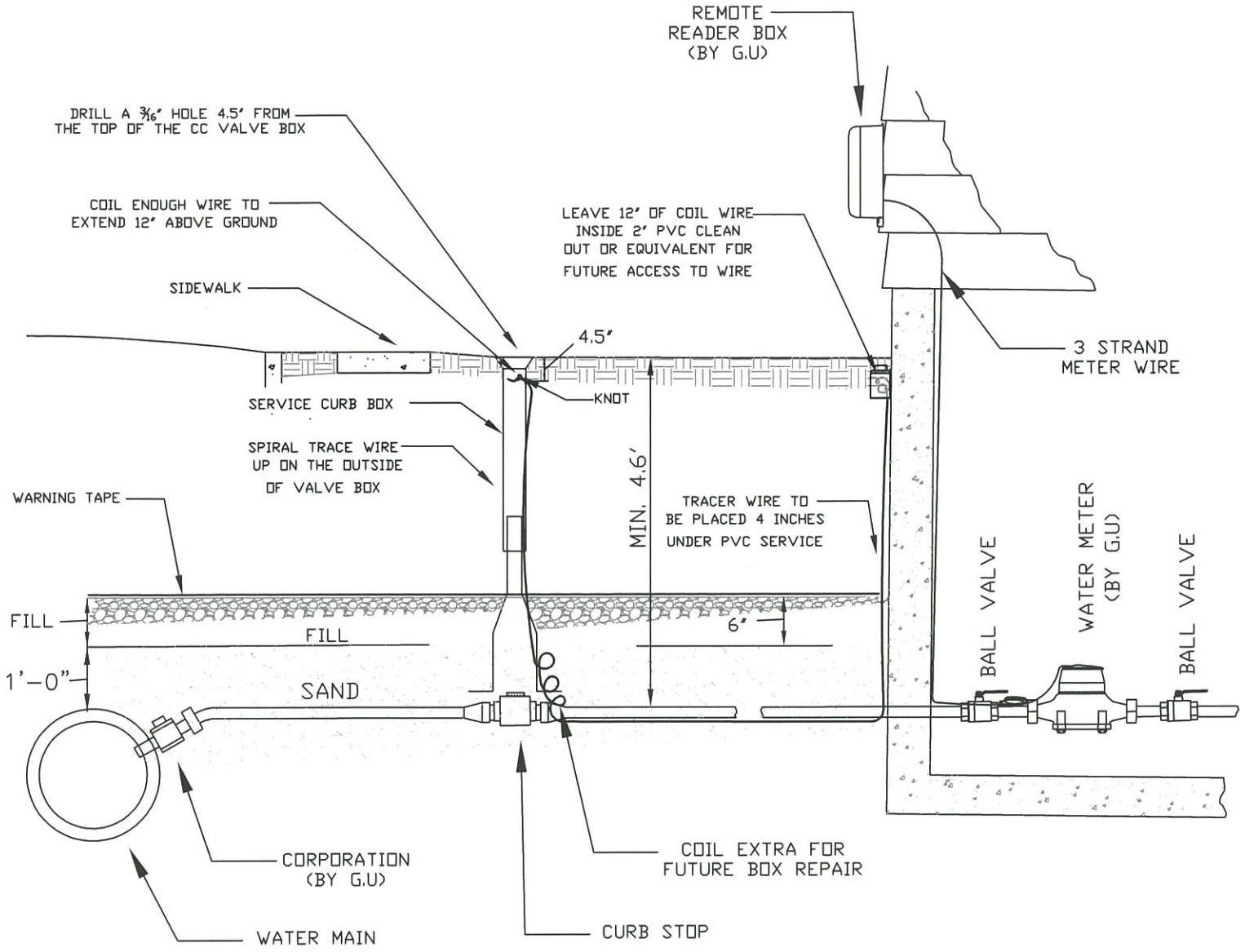
APPROVED	DATE		
		STANDARDS	BY D.L.C. CHECKED
			REVISED CHECKED
		TYPICAL TRENCH DETAIL	DATE 1/8/01
			17



UTILITY TRENCH PATCH

NOT TO SCALE

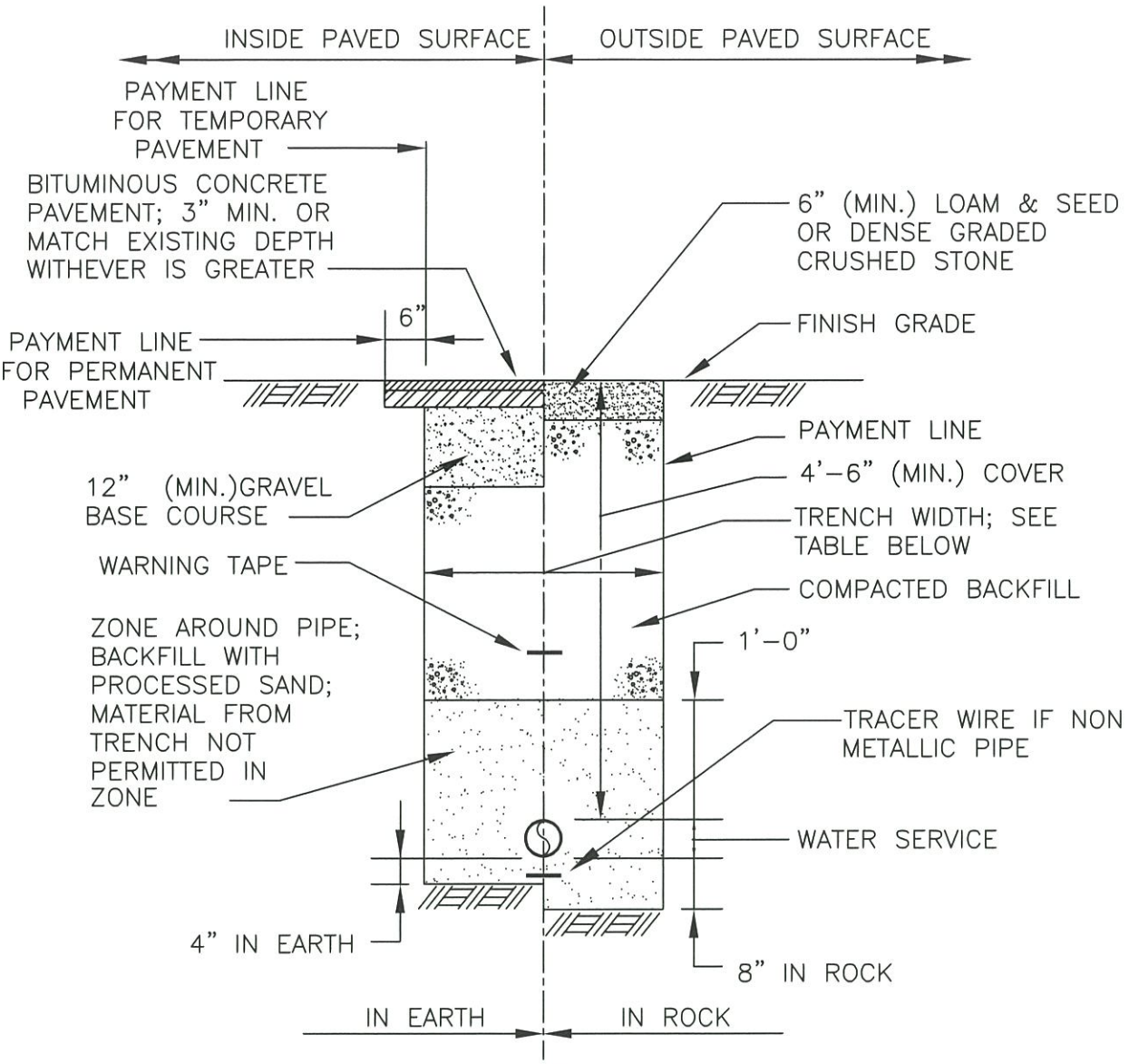
APPROVED	DATE		
		STANDARDS	BY D.L.C. CHECKED
			REVISED CHECKED
		TYPICAL PAVEMENT REPLACEMENT	DATE 1/8/01
			18



TYPE K COPPER TUBING WATER SERVICE
CLASS 200 (ASTM D-2737 CTS-OD) PVC PIPE

*TRACE WIRE DIRECT BURIAL #12 AWG SOLID (0.0808" DIAMETER), STEEL CORE SOFT DRAWN TRACER WIRE, 250# AVERAGE TENSILE BREAK LOAD, 30 MIL HIGH MOLECULAR- HIGH DENSITY POLYETHYLENE JACKET COMPLYING WITH ASTM-D-1248, 30 VOLT RATING.

APPROVED	DATE	**STANDARDS**	BY M.E.D CHECKED
			REVISED CHECKED
		TYPICAL TRACER WIRE DETAIL	DATE 10/29/20
		(WITHIN G.U SERVICE AREA)	19



TRENCH WIDTH TABLE	
PIPE DIA.	2" & UNDER
TRENCH WIDTH	3'-0"

NOTE: PAYMENT FOR PAVEMENT INSTALLED BEYOND PAYMENT LINE WILL BE MADE ONLY WHEN SUCH INSTALLATION IS APPROVED BY THE ENGINEER.

WATER SERVICE TRENCH DETAIL

NOT TO SCALE

APPROVED	DATE		BY M.E.D CHECKED
		STANDARDS	REVISED CHECKED
		TYPICAL TRENCH DETAIL	DATE 10/29/2020
			20