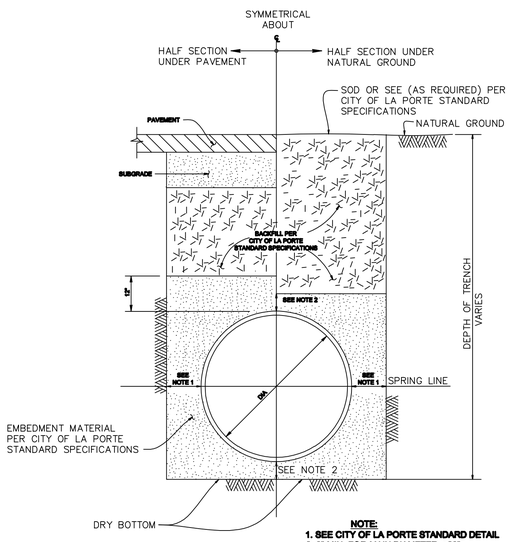


NOTE:
1. SEE CITY OF LA PORTE STANDARD DETAIL
2. 6" MIN. FOR MAIN DIAMETER <20"
   12" MIN. FOR MAIN DIAMETER >20"

WATER DISTRIBUTION MAIN BEDDING & BACKFILL FOR OPEN CUT TRENCHES

N.T.S.

SERVICE CONNECTION NOTES

THE MAIN SHALL HAVE A MINIMUM DEPTH OF 48" BELOW TOP OF CURB GRADE.

THE WATER SERVICE LINES THAT ARE INSTALLED BEFORE THE COMPLETION OF STREET CONSTRUCTION SHALL BE LAID IN THE SERVICE DITCH AT THE SAME ELEVATION AS THE WATER MAIN OR A MINIMUM COVER OF 48" BELOW TOP OF CURB GRADE, AT THE PROPER LOCATION FOR THE METER BOX. THE METER (CURB) STOP SHALL BE RAISED TO 18" BELOW TOP OF CURB GRADE WITH ENOUGH EXCESS TUBING TO RAISE THE STOP AT A FUTURE DATE TO 6" BELOW TOP OF CURB GRADE.

LOCATOR WIRE TO BE PLACED ON ALL MAINS AND SERVICES. (MIN. 20 GA. COPPER)

SINGLE METER SERVICE LINES SHALL BE 1" MIN. I.D. C.T.S. POLYETHYLENE, SDR-9.

CONTRACTOR TO FURNISH AND INSTALL DOUBLE SERVICE METER BOXES AT FINISH GRADE.

FIRE HYDRANT ASSEMBLIES SHALL NORMALLY MAINTAIN THREE FOOT CLEARANCE FROM BACK OF CURB. REQUIRED ASSEMBLY SHALL INCLUDE ONE LINE SIZE BY 6" TEE, ONE SIX INCH GATE VALVE AND BOX, ONE FIRE HYDRANT AND SIX INCH PIPING AND TIE BACKS.

WATER VALVES ON MAIN LINES SHALL BE LOCATED AS CLOSE AS POSSIBLE TO EXTENDED PROPERTY LINE AND SHALL CONFORM TO AWWA C-500, OPEN LEFT, EQUIPPED WITH PENTEGONAL OPERATING NUT.

WATERLINES 4 INCH THROUGH 12 INCH I.D. SHALL COMPLY WITH THE REQUIREMENTS OF AWWA STANDARD C-900 CLASS 150, SDR-18 WITH CAST IRON OUTSIDE DIAMETER.

ALL CONCRETE THRUST BLOCKING SHALL BE PLACED TO FORM A SOLID CONNECTION BETWEEN FITTINGS, VALVES AND FIRE HYDRANTS AND UNDISTURBED EARTH. CONCRETE FOR THRUST BLOCKING SHALL HAVE A MINIMUM OF 2500 P.S.I. COMPRESSIVE STRENGTH AT 28 DAYS.

GRAY IRON AND DUCTILE IRON FITTINGS SHALL CONFORM TO AWWA C-110 AND END JOINTS OF FITTINGS AND MAIN LINE VALVES SHALL CONFORM TO AWWA C-111 FOR RUBBER GASKETED JOINTS. GRAY IRON AND DUCTILE IRON FITTINGS SHALL BE CEMENT LINED OR EPOXY COATED. AT EACH FITTING THERE SHALL BE EBAA IRON SERIES 1500 FORCE-RESTRAINT SLEEVES.

ALL FIRE HYDRANTS AND VALVE BOXES ARE TO BE ADJUSTED TO FINISH GRADE AFTER PAVING IS COMPLETE. THE LOWEST HORIZONTAL FLANGE OF A FIRE HYDRANT SHALL NOT BE MORE THAN 6" ABOVE THE SURROUNDING NATURAL GROUND AT ANY POINT.

INSTALL CONCRETE BLOCK BENEATH FIRE HYDRANTS BEFORE PLACING CONCRETE THRUST BLOCKING TO INSURE THAT FIRE HYDRANTS ARE INSTALLED LEVEL.

CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS 48 HOURS BEFORE START OF CONSTRUCTION.

PIPING NOTE

FITTINGS, VALVES AND PIPE JOINTS SHALL BE SECURED WITH MECHANICAL JOINT RESTRAINTS. THESE RESTRAINTS SHALL BE EBAA IRON 2000 PV FOR FITTINGS AND EBAA IRON SERIES 1500 FOR PIPE JOINTS OR APPROVED EQUAL.

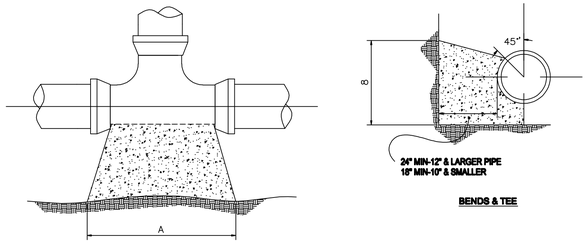
WATER DISTRIBUTION NOTES:

1. PRESSURE TEST OF WATER LINES 20" DIAMETER SHALL BE AT 125 PSI FOR A DURATION OF 8 HOURS. PRESSURE TEST OF WATER LINES GREATER THAN 20" SHALL BE AT 150 PSI FOR A DURATION OF 8 HOURS.
2. FIRE HYDRANT THREAD SIZE: PUMPER CONNECTION 4-492 SIZE = 4.492"
3. ALL WATER METER BOXES SHALL BE NDS MODEL NO. D15AM42-DISB OR APPROVED EQUAL.BOX NEEDS TO BE COMPATIBLE TO NEPTUNE PRO-READ.) LOCKING LIDS WILL NOT BE ACCEPTED.
4. PROVIDE "UNI-FLANGE" OR APPROVED EQUAL PIPE RESISTANT AND CASING SYSTEM ON UNDERGROUND PRESSURE PIPE SYSTEMS.
5. ALL WATER TAPS SHOULD BE PLACED IN LINE WITH PROPERTY CORNER OR PLACED HALFWAY BETWEEN THE FRONT LOT CORNERS, OR AT PC OF CURB RETURN IN MULTI-LOT SUBDIVISIONS.

PIPE TAPPING SCHEDULE

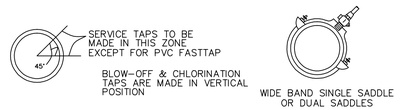
WATER MAIN TYPE AND DIAMETER	SERVICE SIZE			
	3/4"	1"	1-1/2"	2"
4" CAST IRON OR DUCTILE IRON	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
4" ASBESTOS (EXISTING) CEMENT	WBSS	WBSS	DSS, WBSS	DSS, WBSS
4" PVC (AWWA C900)	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
6" AND 8" CAST IRON OR DUCTILE IRON	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
6" AND 8" ASBESTOS (EXISTING) CEMENT	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
6" AND 8" CAST IRON OR DUCTILE IRON	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
6" AND 8" PVC (AWWA C900)	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
12" CAST IRON OR DUCTILE IRON	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
12" ASBESTOS (EXISTING) CEMENT	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
12" PVC (AWWA C900)	DSS, WBSS	DSS, WBSS	DSS, WBSS	DSS, WBSS
16" AND UP CAST IRON OR DUCTILE IRON	DWBSS	DWBSS	DWBSS	DWBSS
16" AND UP ASBESTOS (EXISTING) CEMENT	DWBSS	DWBSS	DWBSS	DWBSS
16" AND UP PVC (AWWA C900)	DWBSS	DWBSS	DWBSS	DWBSS

DSS - DUAL STRAP SADDLES
WBSS - WIDE BAND STRAP SADDLES
DWBSS - DUAL WIDE BAND STRAP SADDLES



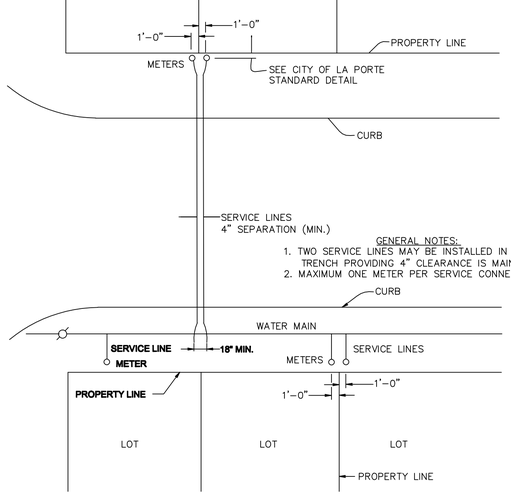
SIZE	90° BEND		45° BEND		22½° BEND		TEE		PLUGS	
	A	B	A	B	A	B	A	B	C	D
4"/8"	16"	10"	9"	10"	6"	8"	10"	12"	10"	21"
8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"
10"	26"	17"	14"	17"	10"	13"	16"	20"	14"	36"
12"	29"	21"	16"	21"	11"	16"	18"	24"	18"	41"
14"	35"	24"	19"	24"	12"	20"	22"	27"	18"	48"
16"	38"	27"	21"	27"	12"	24"	24"	30"	20"	54"
24"	48"	40"	30"	40"	20"	30"	36"	48"	36"	72"

THRUST BLOCKS SHALL BE CAST IN PLACE AGAINST UNDISTRUBED EARTH WALL. PLACE 15 lb. FELT BETWEEN CONCRETE BLOCKING AND PIPE/FITTING TO AVOID BONDING.



SERVICE TAPS

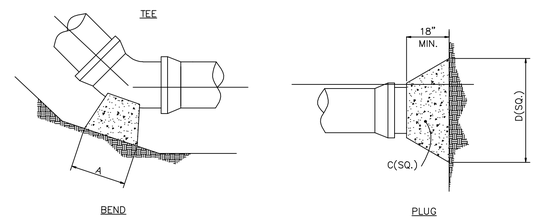
N.T.S.



GENERAL NOTES:
1. TWO SERVICE LINES MAY BE INSTALLED IN SAME TRENCH PROVIDING 4" CLEARANCE IS MAINTAINED.
2. MAXIMUM ONE METER PER SERVICE CONNECTION.

TYPICAL ¾" THROUGH 2" SERVICE ARRANGEMENTS

N.T.S.



THRUST BLOCKING DETAIL

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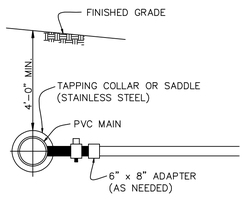
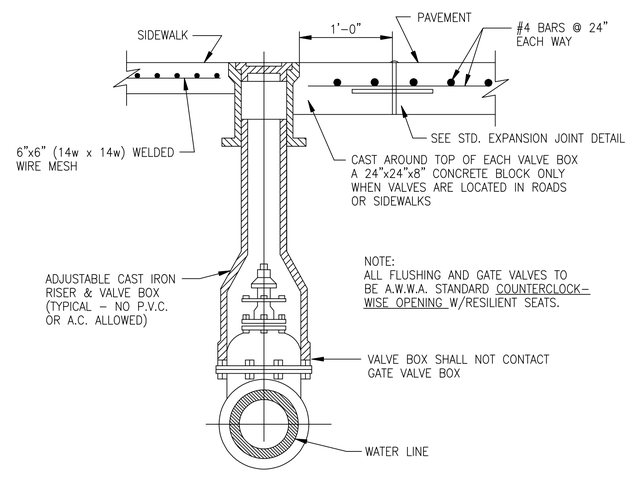


TAPPING SLEEVE & VALVE

N.T.S.



NOTE:
ALL FLUSHING AND GATE VALVES TO BE A.W.W.A. STANDARD COUNTERCLOCK-WISE OPENING W/RESILIENT SEATS.

VALVE BOX INSTALLATION DETAIL

N.T.S.

CITY OF LA PORTE
PLANNING DEPT.ENGINEERING DIV.
604 W. FAIRMONT PKWY.
LA PORTE, TEXAS, 77571
281-471-5020; FAX: 281-470-5005

DWN:	JR
CK'D:	RS
APP'D:	RS
Scale:	N.T.S.
Date:	APRIL, 2008
Project No.:	NONE
SHEET:	1 OF 1

STANDARD WATER LINE DETAILS