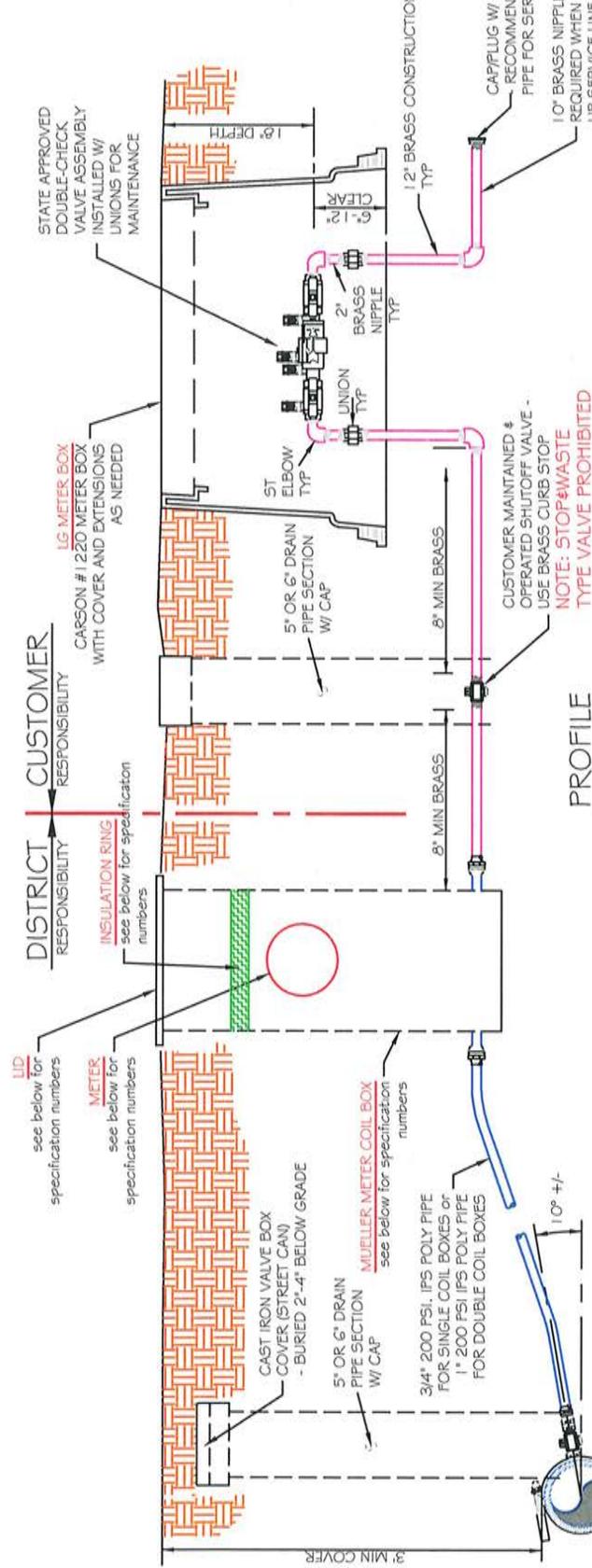


DEVELOPER/CONTRACTOR RESPONSIBILITY



PROFILE

**(DO NOT COVER UNTIL DISTRICT INSPECTS)**

COIL BOX METER SPECIFICATIONS:

SINGLE 3/4" METER INSTALLATION:

METER - 5/8" x 3/4" Badger Recordall Nutating Disc Flowmeter, LL Bronze External Thread Body, Noryl Chamber, Plastic Thrust Roller, Bronze Bottom, Meter Mounted Low Temp Register, No Connections, NSF 61, Cubic Feet Reader  
 COIL BOX - Mueller No. 250 C5 15 36 LSBSN  
 LID - Mueller No. 790007  
 INSULATION RING - Mueller No. 790022

DOUBLE 3/4" METER INSTALLATION:

(2) METERS - see single 3/4" meter installation above  
 COIL BOX - Mueller No. 250 CD 18 36 LSBSN  
 LID - Mueller No. 790018  
 INSULATION RING - Mueller No. 790153

SINGLE 1" METER INSTALLATION:

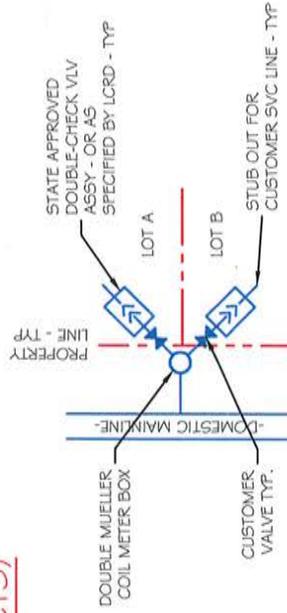
METER - 1" Badger Recordall Nutating Disc Flowmeter, LL Bronze External Thread Body, Noryl Chamber, Plastic Thrust Roller, Bronze Bottom, Meter Mounted Low Temp Register, No Connections, NSF 61, Cubic Feet Reader  
 COIL BOX - Mueller No. 330 C5 18 36 LSBSN  
 LID - Mueller No. 790018  
 INSULATION RING - Mueller No. 790153

NOTES:  
 ALL DOMESTIC DEVICES AND FITTINGS MUST BE LEAD FREE.

MATERIAL SUBSTITUTIONS OR DETERMINATION OF EQUAL ARE AT THE SOLE DISCRETION OF LAKE CHELAN RECLAMATION DISTRICT.

SERVICE LINE TO BE 90° OFF MAIN LINE.

MAGNETIC TAPE TO BE BURIED OVER SERVICE LINE FOR LOCATION.



PLAN VIEW SKETCH  
 DOUBLE SERVICE COIL BOX

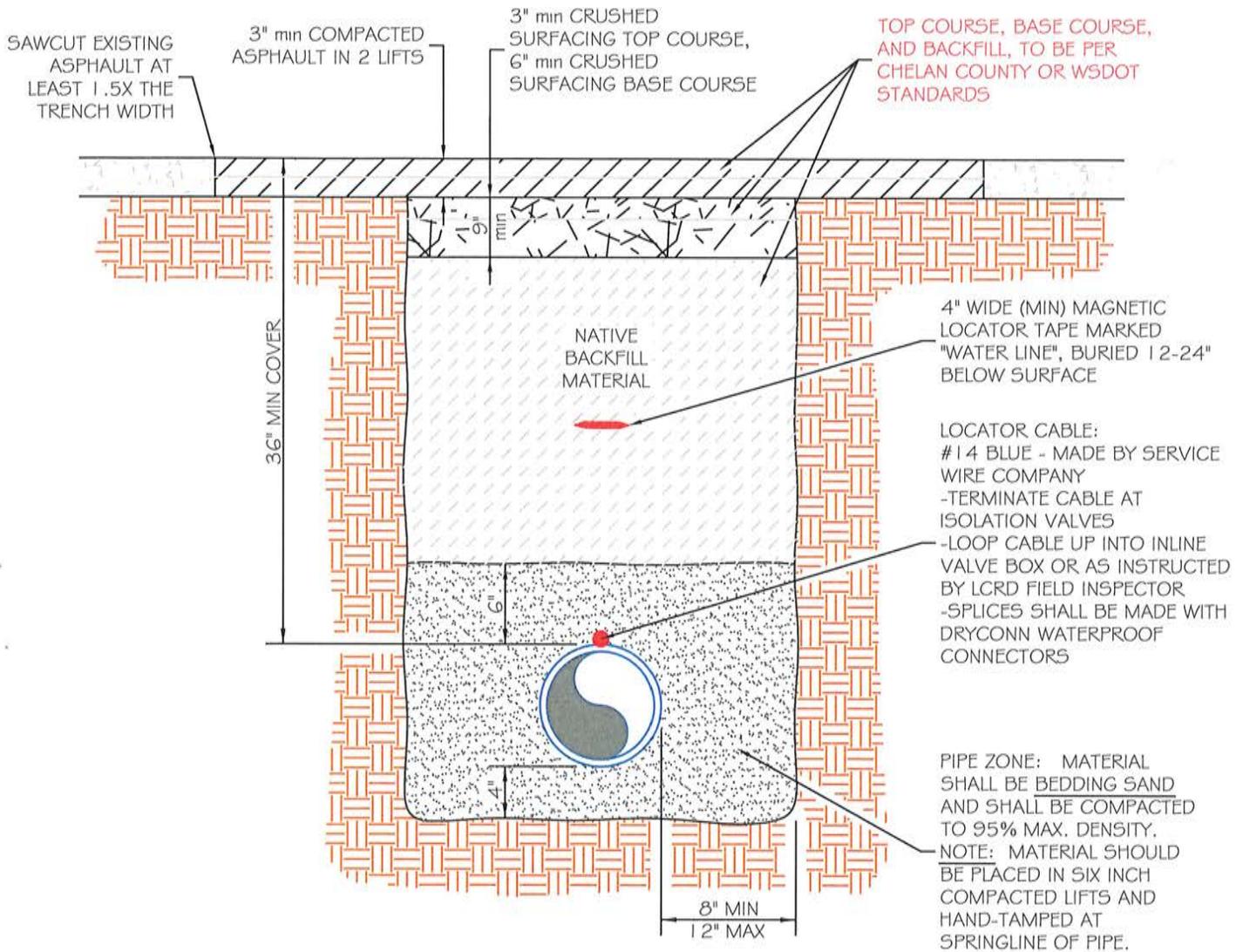
|   |        |
|---|--------|
| TITLE   |        |
| DOMESTIC WATER SERVICE W/ DCVA - CONTRACTOR VS STANDARD DOMESTIC DETAIL |        |
| SHEET DWG SCALE NO SCALE  |        |
| 1   | OF SET |



DRAWN BY SJA

**CALL 48 HOURS  
BEFORE YOU DIG:**

Northwest Utility Notification Center  
1-800-553-4344



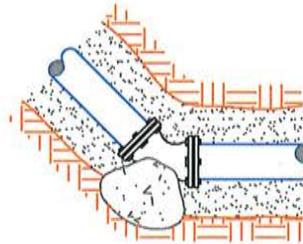
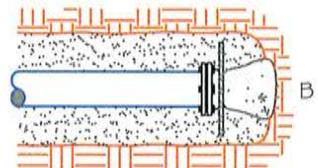
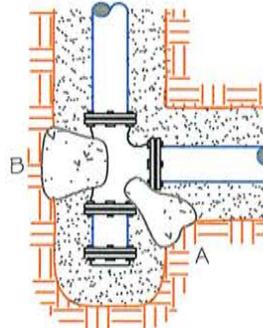
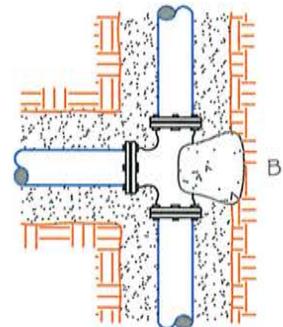
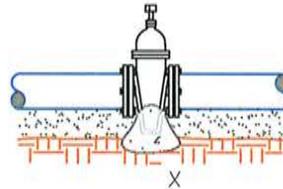
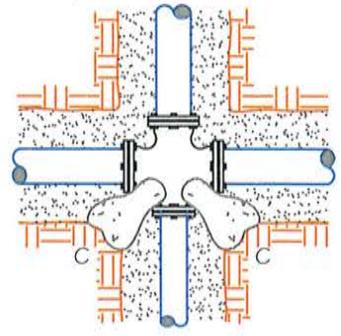
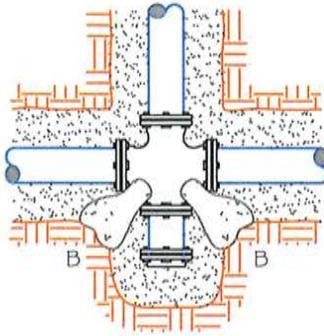
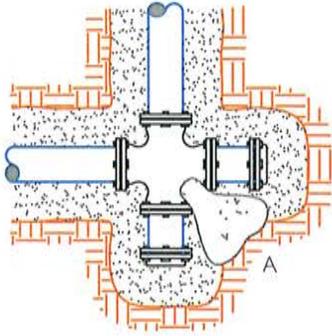
PROFILE

**NOTES:**  
MATERIAL SUBSTITUTIONS OR DETERMINATION OF EQUAL ARE AT THE SOLE DISCRETION OF LAKE CHELAN RECLAMATION DISTRICT.

BACKFILL, SURFACE RESTORATION, AND MINIMUM PIPE DEPTH SHALL CONFORM TO THE REQUIREMENTS OF THE AGENCY HAVING JURISDICTION OVER THE ROAD RIGHT-OF-WAY.

|                          |           |
|--------------------------|-----------|
| TITLE                    |           |
| TYPICAL TRENCH SECTION   |           |
| STANDARD DOMESTIC DETAIL |           |
| SHEET                    | DWG SCALE |
| 2 OF SET                 | NO SCALE  |





THRUST BLOCK TABLE  
MIN. BEARING AREA AGAINST UNDISTURBED SOIL  
(FT<sup>2</sup>)

| PIPE SIZE | A   | B   | C   | D  | E  | X    |
|-----------|-----|-----|-----|----|----|------|
| 4"        | 3   | 1   | 1   | 1  | 1  | NONE |
| 6"        | 4   | 4   | 2   | 1  | 1  | NONE |
| 8"        | 7   | 6   | 4   | 2  | 1  | 4    |
| 10"       | 11  | 10  | 6   | 3  | 2  | 6    |
| 12"       | 16  | 14  | 9   | 5  | 3  | 9    |
| 14"       | 22  | 19  | 12  | 6  | 3  | 12   |
| 16"       | 29  | 25  | 16  | 8  | 4  | 16   |
| 18"       | 36  | 31  | 20  | 10 | 5  | 20   |
| 20"       | 45  | 39  | 24  | 13 | 6  | 24   |
| 22"       | 54  | 47  | 29  | 15 | 8  | 29   |
| 24"       | 64  | 56  | 35  | 18 | 9  | 35   |
| 28"       | 87  | 76  | 48  | 24 | 12 | 48   |
| 30"       | 101 | 87  | 55  | 28 | 14 | 55   |
| 36"       | 145 | 125 | 78  | 40 | 20 | 78   |
| 42"       | 197 | 171 | 107 | 55 | 27 | 107  |
| 48"       | 257 | 223 | 140 | 71 | 36 | 140  |

NOTES:  
BEARING AREA OF CONCRETE THRUST-BLOCK BASED ON 200 PSI PRESSURE AND SAFE SOIL BEARING LOAD OF 2,000 POUNDS PER SQUARE FOOT.

AREAS MUST BE ADJUSTED FOR OTHER PIPE SIZES, PRESSURES AND SOIL CONDITIONS.

CONCRETE BLOCKING SHALL BE CAST IN PLACE AND HAVE A MINIMUM OF 1/4 SQUARE FOOT BEARING AGAINST THE FITTING.

BLOCK SHALL BEAR AGAINST FITTINGS ONLY AND SHALL BE CLEAR OF JOINTS TO PERMIT TAKING UP OR DISMANTLING OF JOINT.

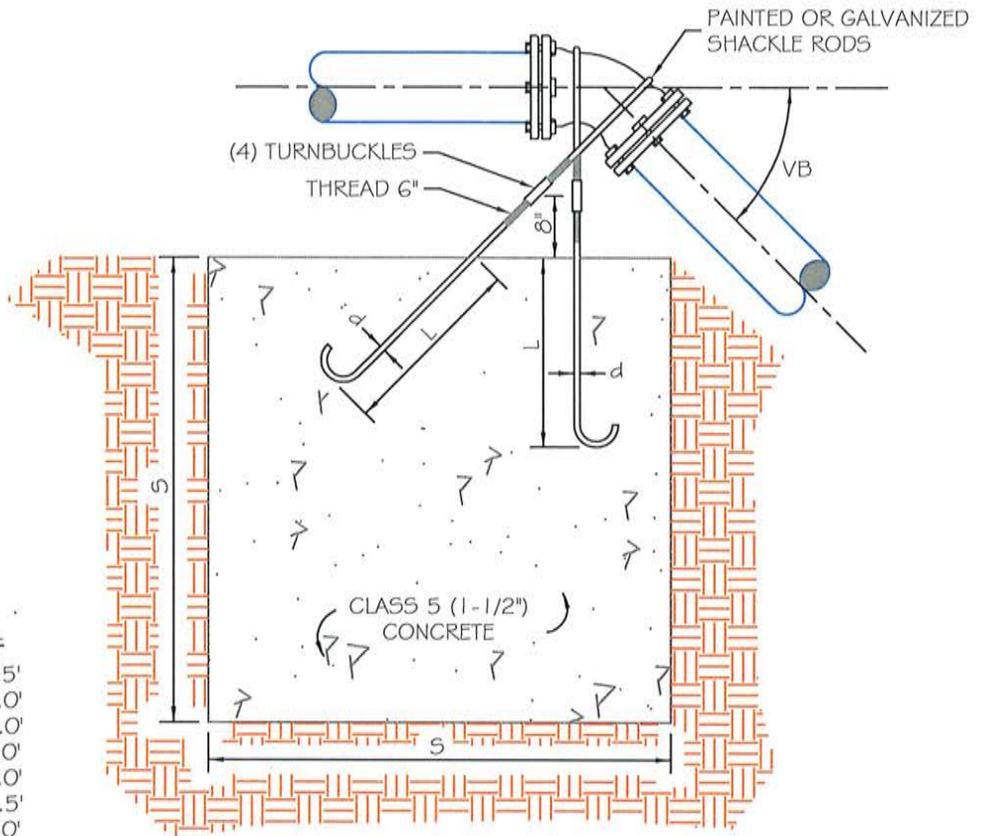
CONTRACTOR SHALL INSTALL BLOCKING ADEQUATE TO WITHSTAND FULL TEST PRESSURE AS WELL AS TO CONTINUOUSLY WITHSTAND OPERATION PRESSURE UNDER ALL CONDITIONS OF SERVICE.

MATERIAL SUBSTITUTIONS OR DETERMINATION OF EQUAL ARE AT THE SOLE DISCRETION OF LAKE CHELAN RECLAMATION DISTRICT.

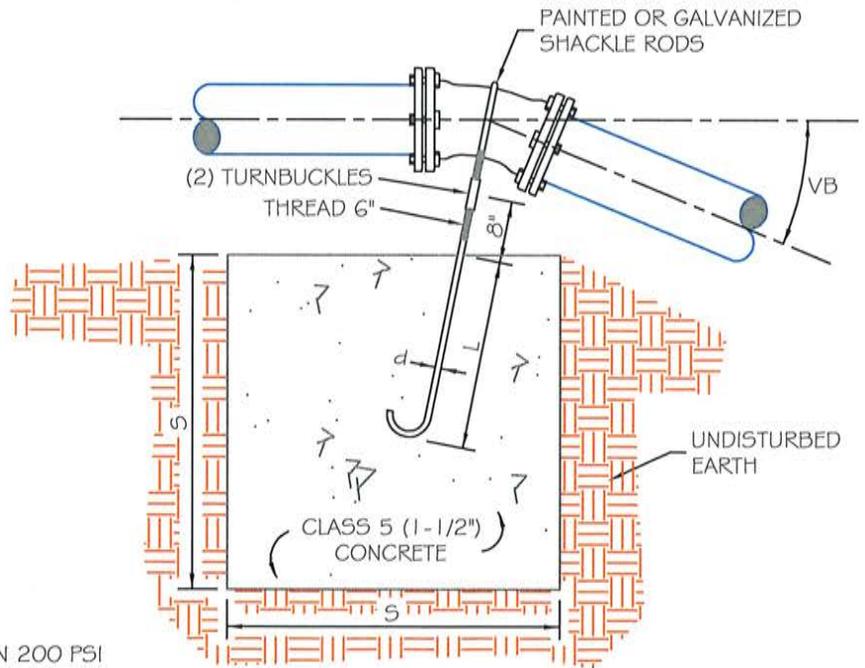
A FOR 90° BEND  
C FOR 45° BEND  
D FOR 22-1/2° BEND  
E FOR 11-1/4° BEND

|                          |           |
|--------------------------|-----------|
| TITLE                    |           |
| CONCRETE<br>BLOCKING     |           |
| STANDARD DOMESTIC DETAIL |           |
| SHEET                    | DWG SCALE |
| 3 OF SET                 | NO SCALE  |





**TYPE B BLOCKING - FOR  
45° BENDS**



**TYPE A BLOCKING - FOR  
11-1/4°, 22-1/2° BENDS**

VERTICAL BLOCKING  
FOR 11-1/4°, 22-1/2°, 45° BENDS

| PIPE SIZE | VB      | CU FT | S    | d      | L    |
|-----------|---------|-------|------|--------|------|
| 4"        | 11-1/4° | 8     | 2.0' | 3/4"   | 1.5' |
|           | 22-1/2° | 11    | 2.2' | 3/4"   | 2.0' |
|           | 45°     | 30    | 3.1' | 3/4"   | 2.0' |
| 6"        | 11-1/4° | 11    | 2.2' | 3/4"   | 2.0' |
|           | 22-1/2° | 25    | 2.9' | 3/4"   | 2.0' |
|           | 45°     | 68    | 4.1' | 3/4"   | 2.5' |
| 8"        | 11-1/4° | 16    | 2.5' | 3/4"   | 2.0' |
|           | 22-1/2° | 47    | 3.6' | 3/4"   | 2.0' |
|           | 45°     | 123   | 5.0' | 3/4"   | 2.0' |
| 12"       | 11-1/4° | 32    | 3.2' | 3/4"   | 3.0' |
|           | 22-1/2° | 88    | 4.5' | 7/8"   | 3.0' |
|           | 45°     | 232   | 6.1' | 3/4"   | 2.5' |
| 16"       | 11-1/4° | 70    | 4.1' | 7/8"   | 3.0' |
|           | 22-1/2° | 184   | 5.7' | 1-1/8" | 4.0' |
|           | 45°     | 478   | 7.8' | 1-1/8" | 4.0' |
| 20"       | 11-1/4° | 91    | 4.5' | 7/8"   | 3.0' |
|           | 22-1/2° | 225   | 6.1' | 1-1/4" | 4.0' |
|           | 45°     | 560   | 8.2' | 1-1/4" | 4.0' |
| 24"       | 11-1/4° | 128   | 5.0' | 1"     | 3.5' |
|           | 22-1/2° | 320   | 6.8' | 1-3/8" | 5.5' |
|           | 45°     | 820   | 9.4' | 1-3/8" | 4.5' |

**NOTES:**  
BEARING AREA OF CONCRETE THRUST-BLOCK BASED ON 200 PSI MAINLINE PRESSURE AND SAFE SOIL BEARING LOAD OF 2,500 POUNDS PER SQUARE FOOT.

AREAS MUST BE ADJUSTED FOR OTHER PIPE SIZES, PRESSURES AND SOIL CONDITIONS.

CONTRACTOR SHALL INSTALL BLOCKING ADEQUATE TO WITHSTAND FULL TEST PRESSURE AS WELL AS TO CONTINUOUSLY WITHSTAND OPERATION PRESSURE UNDER ALL CONDITIONS OF SERVICE.

MATERIAL SUBSTITUTIONS OR DETERMINATION OF EQUAL ARE AT THE SOLE DISCRETION OF LAKE CHELAN RECLAMATION DISTRICT.

|   |           |
|---|-----------|
| TITLE                                   |           |
| CONCRETE BLOCKING<br>FOR VERTICAL BENDS |           |
| STANDARD DOMESTIC DETAIL                |           |
| SHEET                                   | DWG SCALE |
| 4 OF SET                                | NO SCALE  |



ALTERNATE INSTALLATION:  
USE 6" GRADELOK, SPLIT  
GLANDS, AND ACCESSORIES IN  
PLACE OF DI TO MEET EXISTING  
GROUND CONTOUR. MAINTAIN  
2"-4" GROUND CLEARANCE AT  
HYDRANT

24" MIN TO ANY  
STRUCTURE

PUMPER PORT TO FACE  
STREET OR AS DIRECTED BY  
FIRE DISTRICT

2"-4"  
CLEAR

18"

3'-0" MIN COVER

6" CLASS 52 DUCTILE IRON  
- SEE DETAIL A

(2) 3/4" GALVANIZED  
STEEL SHACKLE RODS  
OR ROMAC GRIP  
RINGS FOR DI OR  
C-900

1 6x8x4  
CONC  
BLOCK

TWO PIECE CAST IRON  
VALVE BOX WITH STANDARD 24"  
BASE AND 8" OR 18" TOP  
EQUAL TO RICH VALVE BOX  
'940 SEATTLE' OR EQUAL.  
LID TO HAVE TABS.

LOCATE WIRE INSTALLED  
OUTSIDE BASE EXTENSIONS  
AND INSIDE VALVE CAN TOP

6" RS GATE VALVE W/ 2"  
SQUARE NUT NON-RISING  
STEM MJ x FL

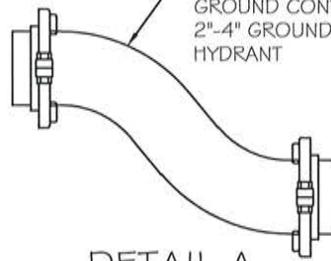
MJ TEE WITH  
6" FL BRANCH

BLOCK PER STANDARD  
DETAIL, MAINTAIN  
CLEARANCE FOR BOLTS

USE  
DRESSER  
M # H, STYLE  
929, 5-1/4"  
MVO,  
TRAFFIC  
MODEL  
AWWA C-502  
HYDRANT.  
EQUIPPED  
WITH TWO  
2-1/2"  
OUTLETS AND  
ONE 4-1/2"  
PUMPER  
OUTLET OR  
EQUAL

1/2 YARD COURSE GRAVEL OR  
CRUSHED ROCK (3/8" TO 1-1/2")

COVER DRAIN ROCK WITH  
FILTER FABRIC



DETAIL A



VALVE CAN EARS TO BE  
IN LINE WITH PIPE BELOW

NOTES:  
MATERIAL SUBSTITUTIONS OR DETERMINATION OF EQUAL ARE AT  
THE SOLE DISCRETION OF LAKE CHELAN RECLAMATION DISTRICT.

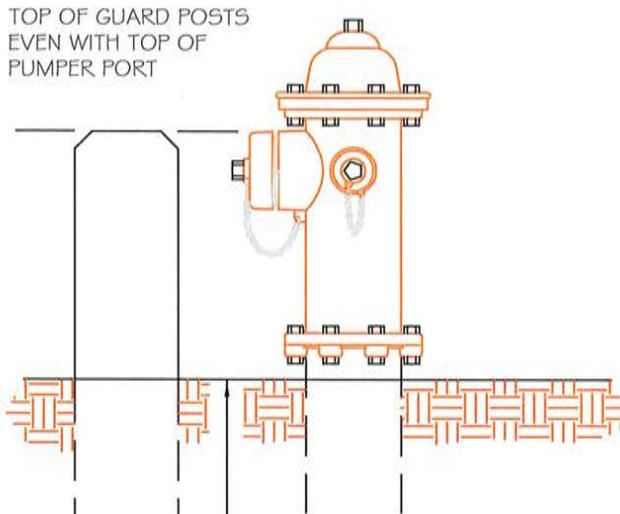
INSTALL HYDRANT GUARD POSTS PER STANDARD DETAIL.

|                          |           |
|--------------------------|-----------|
| TITLE                    |           |
| FIRE HYDRANT<br>ASSEMBLY |           |
| STANDARD DOMESTIC DETAIL |           |
| SHEET                    | DWG SCALE |
| 5 OF SET                 | NO SCALE  |



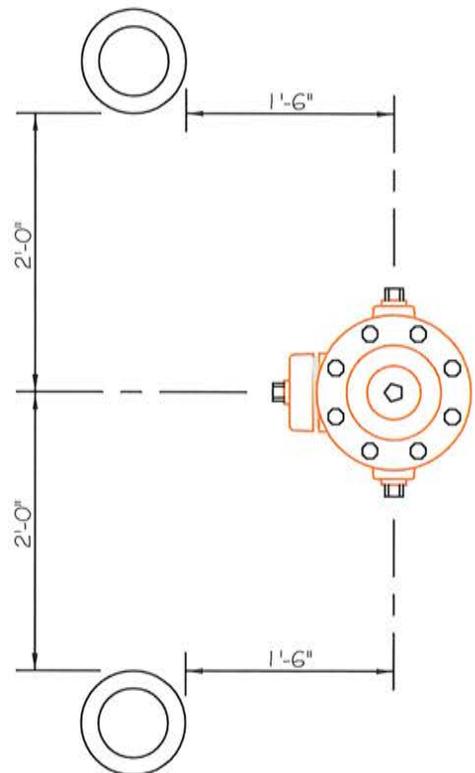
DRAWN BY RLA

12.17.20 DomesticDetailFireHydrant Assy.dwg (REV E)

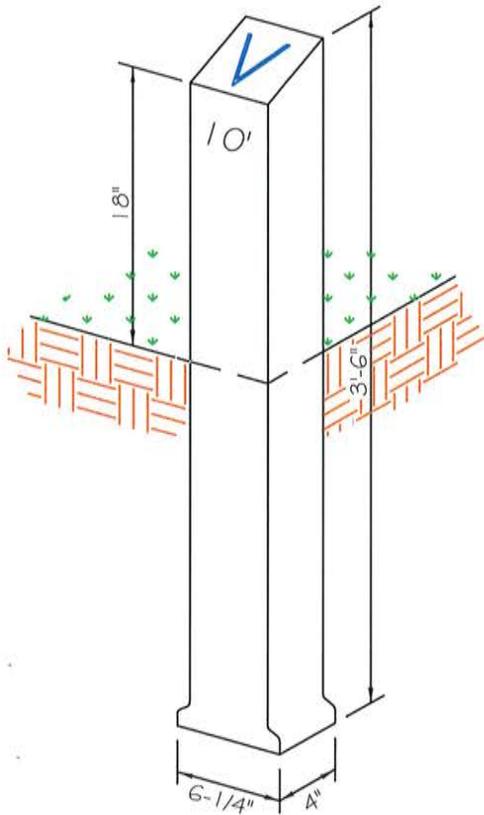


ELEVATION

HYDRANT  
GUARD  
POSTS



PLAN



VALVE  
MARKER  
POST

NOTES:  
MATERIAL SUBSTITUTIONS OR DETERMINATION OF EQUAL ARE AT THE SOLE DISCRETION OF LAKE CHELAN RECLAMATION DISTRICT.

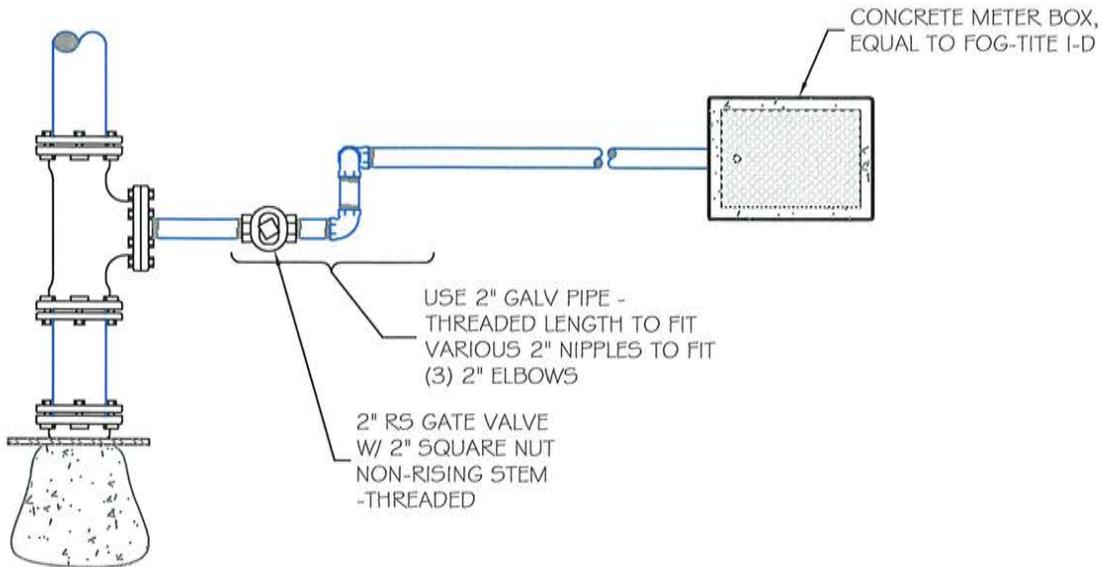
HYDRANT GUARD POST SHALL BE 6' LONG x 9" DIAMETER PRECAST CONCRETE POST OR 6' LONG x 6" DIAMETER FILLED DUCTILE IRON POSTS, PAINT WITH TWO COATS OF RUST-OLEUM NO. 2766-HI GLOSS WHITE PAINT.

VALVE MARKER POST SHALL BE EQUAL TO GREYSTONE PC 3.05 PAINT AS SPECIFIED FOR HYDRANT GUARD POST. PAINT DISTANCE FROM THE VALVE MARKER TO THE VALVE ON THE POST WITH BLACK ENAMEL PAINT.

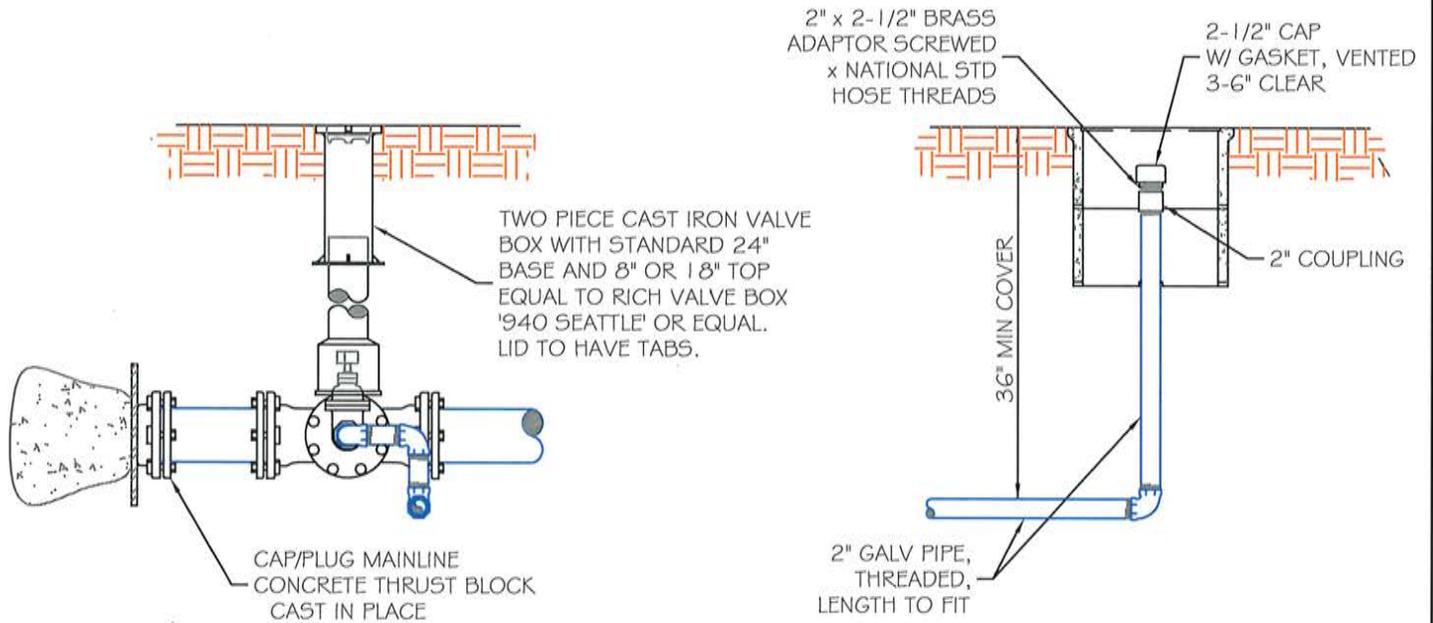
VALVE MARKER POST TO BE USED FOR ALL MAINLINE VALVES OUTSIDE PAVED AREAS.

|   |           |
|---|-----------|
| TITLE   |           |
| FIRE HYDRANT<br>GUARD POSTS<br>& VALVE MARKER<br>STANDARD DOMESTIC DETAIL |           |
| SHEET   | DWG SCALE |
| 6 OF SET  | NO SCALE  |





PLAN



PROFILE

**NOTES:**

MATERIAL SUBSTITUTIONS OR DETERMINATION OF EQUAL ARE AT THE SOLE DISCRETION OF LAKE CHELAN RECLAMATION DISTRICT.

PLASTIC METER BOXES CAN BE USED IN NON-TRAFFIC AREAS IN PLACE OF FOG-TITE I-D, USE BROOKS SERIES 1419.

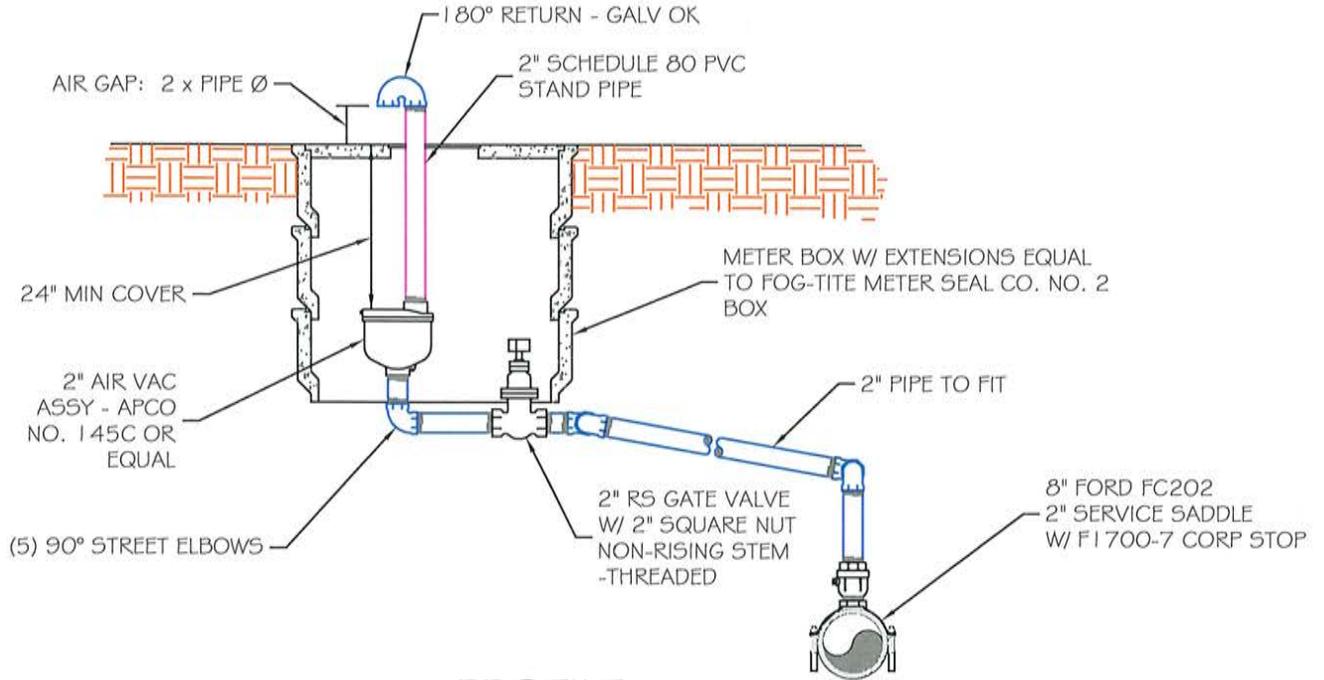
INSTALL VALVE MARKER POST PER STANDARD DETAIL AND FIELD LOCATED ADJACENT TO METER BOX PAINTED TWO COATS OF RUSTOLEUM NO. 2766 WHITE.

ALL 2" PIPE AND FITTINGS SHALL BE GALVANIZED IRON.

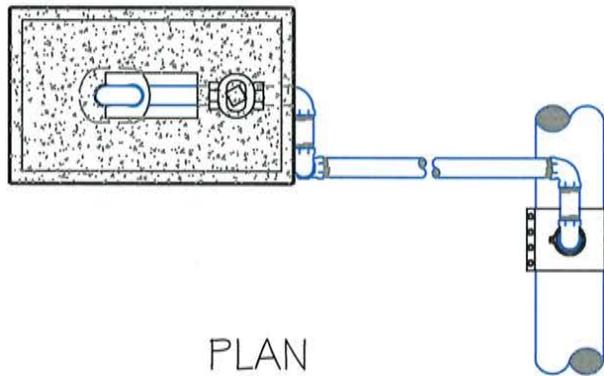
|                          |           |
|--------------------------|-----------|
| TITLE                    |           |
| (2") BLOW-OFF ASSEMBLY   |           |
| STANDARD DOMESTIC DETAIL |           |
| SHEET                    | DWG SCALE |
| 7 OF SET                 | NO SCALE  |



NOTE:  
 AIR & VACUUM VALVE ASSEMBLY MUST BE INSTALLED AT HIGHEST POINT OF LINE. IF HIGH POINT FALLS IN A LOCATION WHERE ASSEMBLY CANNOT BE INSTALLED, PROVIDE ADDITIONAL DEPTH OF LINE TO CREATE HIGH POINT AT A LOCATION WHERE ASSEMBLY CAN BE INSTALLED.



PROFILE



PLAN

NOTES:  
 MATERIAL SUBSTITUTIONS OR DETERMINATION OF EQUAL ARE AT THE SOLE DISCRETION OF LAKE CHELAN RECLAMATION DISTRICT.

ALTERNATE OF A TAPPED CAST IRON COUPLING MAY BE INSTALLED IN THE MAIN.

VACUUM VALVE ASSEMBLY LOCATED IN STREET REQUIRES SPECIAL VAULT.

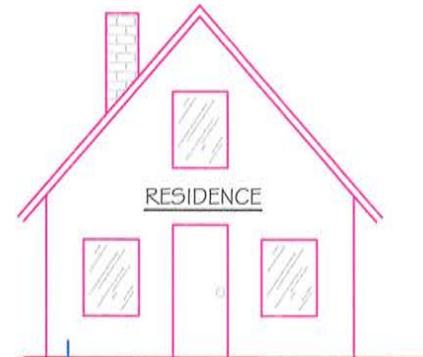
ALL 2" PIPE AND FITTINGS TO BE GALVANIZED IRON UNLESS OTHERWISE SHOWN.

|                                |           |
|--------------------------------|-----------|
| TITLE                          |           |
| (2") AIR VACUUM VALVE ASSEMBLY |           |
| STANDARD DOMESTIC DETAIL       |           |
| SHEET                          | DWG SCALE |
| 8 OF SET                       | NO SCALE  |



REDUCED PRESSURE DEVICE - WATTS SERIES 909, FEBCO 825Y, OR EQUAL

LOCATED IN AN ABOVE GROUND AND APPROVED ENCLOSURE ACCESSIBLE FOR YEARLY TESTING BY A LICENCED BACKFLOW DEVICE PROFESSIONAL - SHALL NOT BE INSTALLED BELOW GRADE



RESIDENCE

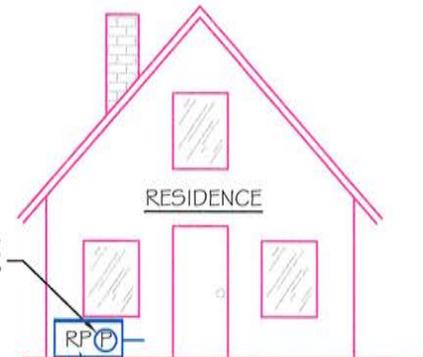
DOMESTIC SERVICE BOOSTER PUMP

CUSTOMER SERVICE LINE

RPD

MINIMUM 30psi AT THE METER

LAKE CHELAN RECLAMATION DISTRICT DOMESTIC MAINLINE



RESIDENCE

DOMESTIC SERVICE BOOSTER PUMP

RPD

REDUCED PRESSURE DEVICE - WATTS SERIES 909, FEBCO 825Y, OR EQUAL

LOCATED IN AN ACCESSIBLE PLACE FOR YEARLY TESTING BY A LICENCED BACKFLOW DEVICE PROFESSIONAL

MINIMUM 30psi AT THE METER

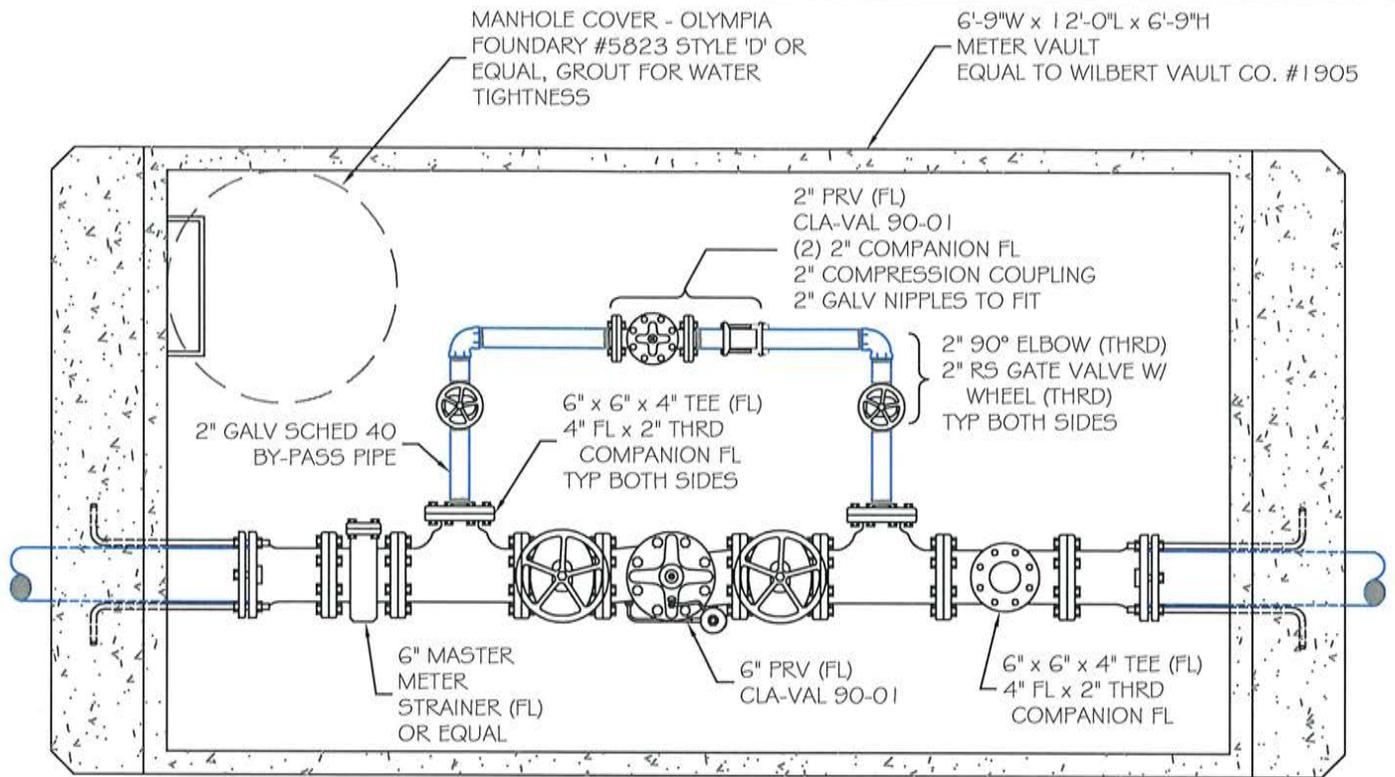
CUSTOMER SERVICE LINE

LAKE CHELAN RECLAMATION DISTRICT DOMESTIC MAINLINE

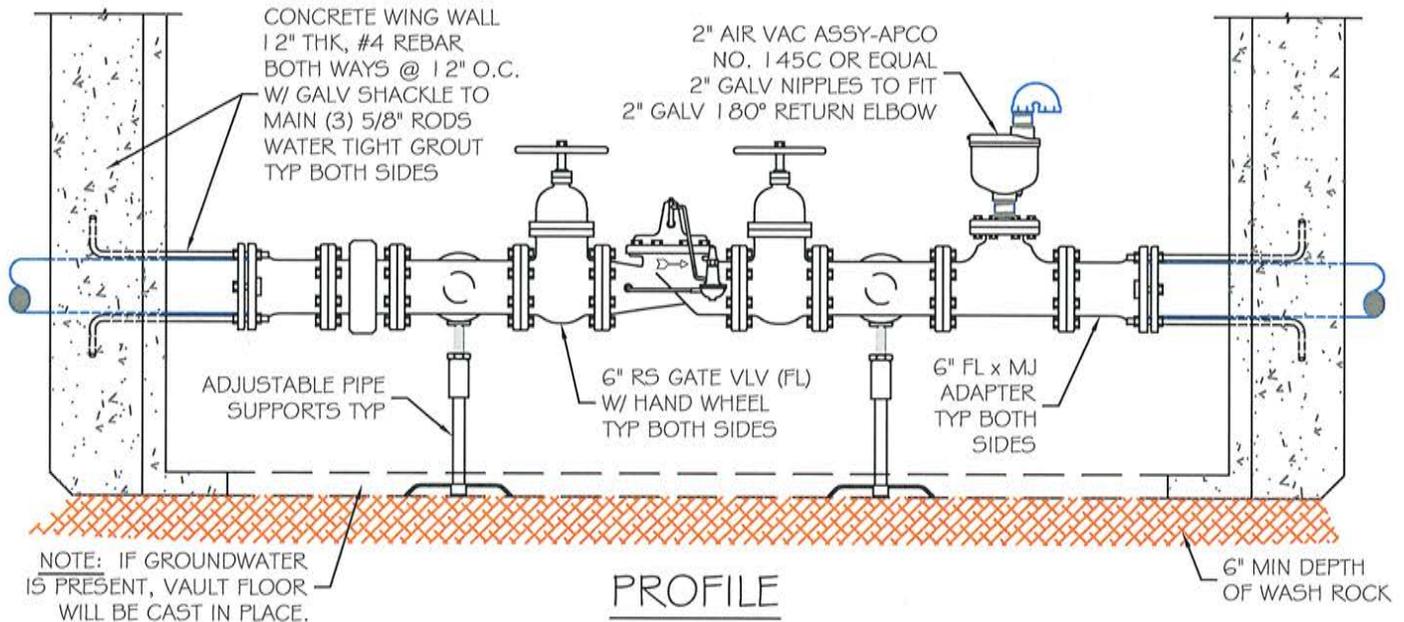
- NOTES:**
1. MATERIAL SUBSTITUTIONS OR DETERMINATION OF EQUAL ARE AT THE SOLE DISCRETION OF LAKE CHELAN RECLAMATION DISTRICT.
  2. MAY BE INSTALLED IN A SEMI-BURIED PIT OR VAULT IF:
    - A. RELIEF VALVE IS INSTALLED ABOVE GROUND OR MAXIMUM FLOOD LEVEL
    - B. INSTALLED WITH APPROVED AIRGAP BETWEEN RELIEF VALVE VENT & TOP OF DAYLIGHT DRAIN
    - C. DRAIN MUST BE BORE SIGHTED TO THE DISCHARGE POINT ABOVE GROUND OR MAX FLOOD LEVEL - WHICHEVER IS HIGHER
    - D. DRAIN MUST BE ABLE TO HANDLE ALL WATER THAT COULD BE DISCHARGED FROM RELIEF VALVE
    - E. RPBA SHOULD NOT BE INSTALLED WHERE WATER DISCHARGED FROM ASSEMBLY WOULD BE OBJECTIONABLE

|                                 |           |
|---------------------------------|-----------|
| TITLE                           |           |
| BOOSTER PUMP SERVICE CONNECTION |           |
| STANDARD DOMESTIC DETAIL        |           |
| SHEET                           | DWG SCALE |
| 9 OF SET                        | NO SCALE  |





PLAN



PROFILE

NOTE:  
MATERIAL SUBSTITUTIONS OR DETERMINATION OF EQUAL ARE AT THE SOLE DISCRETION OF LAKE CHELAN RECLAMATION DISTRICT.

ALL 2" PIPE AND FITTINGS SHALL BE GALVANIZED IRON.

|                                |           |
|--------------------------------|-----------|
| TITLE                          |           |
| (6") PRESSURE REDUCING STATION |           |
| STANDARD DOMESTIC DETAIL       |           |
| SHEET                          | DWG SCALE |
| 10 OF SET                      | NO SCALE  |



1. RESTRAINED JOINTS ARE PREFERRED IN MOST CASES, HOWEVER, THE DISTRICT WILL BE THE SOLE DETERMINER IF THE APPLICATION IS APPROPRIATE ON A GIVEN JOB. APPLICATIONS WHERE RESTRAINED JOINTS WOULD ALWAYS BE A REQUIREMENT WOULD INCLUDE:
  - 1.1. DEAD END MAINS THAT MAY BE EXTENDED IN THE FUTURE.
  - 1.2. SOILS NOT SUPPORTIVE OF THRUST BLOCKING OR INSUFFICIENT BEARING SOIL BEHIND FITTINGS (e.g. NEAR TOP OF A SLOPE).
2. MECHANICAL JOINT AND EXTERIOR BELL RESTRAINTS SHALL BE COATED WITH FUSION BONDED POLYESTER, OR ZINC & EPOXY COATING. EBAA MEGABOND, ROMAC ROMABOND, FORD ARMORGUARD E-COAT, OR APPROVED EQUAL.
3. TYLER TUFGRIP RESTRAINTS ARE NOT ALLOWED. SET-SCREW STYLE RESTRAINTS ARE NOT ALLOWED.
4. THE FOLLOWING TABLES ARE BASED ON EQUATIONS FROM THE DUCTILE IRON PIPE RESEARCH ASSOCIATIONS 2016 THRUST RESTRAINT DESIGN FOR DI AND PVC PIPE, WITH MODIFICATIONS OF SOIL PROPERTIES PER ASTM D2487. THE FOLLOWING CONDITIONS MUST BE MET FOR THESE RESULTS TO BE VALID. IF ANY OF THESE CONDITIONS CANNOT BE MET, PROJECT SPECIFIC CALCULATIONS MUST BE PROVIDED:
  - 4.1. PIPE LAYING CONDITION TYPE 4 or 5, DEFINED AS:
    - 4.1.1. SELECT GRANULAR BEDDING MATERIAL BELOW PIPE.
    - 4.1.2. PIPE ZONE MATERIAL EXTENDING TO TOP OF PIPE MECHANICALLY COMPACTED.
  - 4.2. PIPE RESTING DIRECTLY ON NATIVE TRENCH BOTTOM IS NOT ACCEPTABLE.
  - 4.3. BEDDING MATERIAL IS SANDY SILT. IF USING CLEAN SAND OR 5/8" MINUS CRUSHED SURFACING, LENGTHS MAY BE REDUCED BY 25%.
  - 4.4. DEPTH OF COVER IS 3.0 FEET MINIMUM. IF DEPTH IS 2.5 FEET AT TIME OF TESTING, MULTIPLY LENGTHS BY 120%.
  - 4.5. 200<sub>psi</sub> TEST PRESSURE MAXIMUM. FOR OTHER PRESSURE, TABLE LENGTHS ARE MULTIPLIED BY THE PROPORTIONAL DIFFERENCE.
5. VERTICAL BENDS WITH THE FORCE DIRECTION UPWARDS ARE NOT COVERED HERE. MUST BE DESIGNED BY ENGINEER FOR EACH CASE.

THE LENGTH "L" GIVEN BELOW IS THE DISTANCE THAT PIPE MUST BE RESTRAINED PAST THE FITTING JOINT. ALL JOINTS WITHIN THIS DISTANCE MUST BE RESTRAINED, INCLUDING THE FITTING.

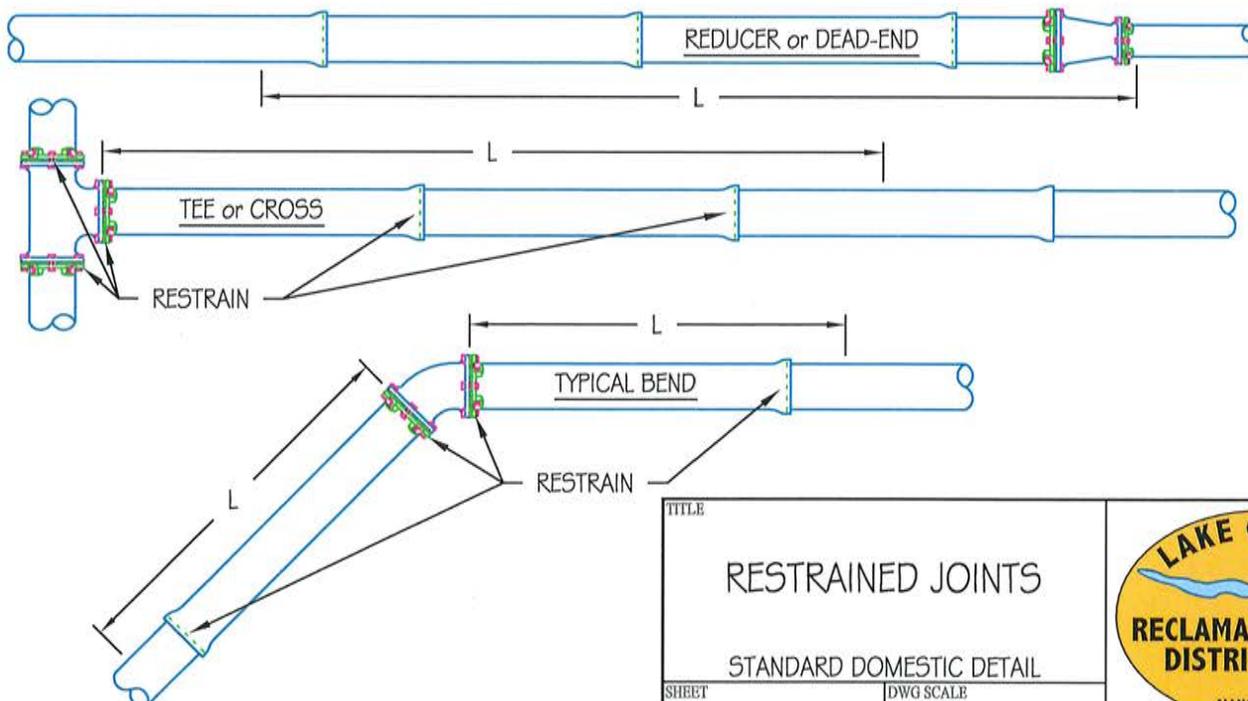
| DIAMETER | 1 1/4° BEND | 22 1/2° BEND | 45° BEND | 90° BEND | DEAD END | REDUCER * |
|----------|-------------|--------------|----------|----------|----------|-----------|
| 4"       | 3'          | 5'           | 10'      | 22'      | 65'      | 20'       |
| 6"       | 4'          | 7'           | 13'      | 32'      | 92'      | 62'       |
| 8"       | 5'          | 9'           | 17'      | 40'      | 119'     | 85'       |
| 10"      | 5'          | 10'          | 20'      | 48'      | 143'     | 88'       |
| 12"      | 6'          | 12'          | 23'      | 56'      | 168'     | 90'       |
| 16"      | 8'          | 14'          | 30'      | 70'      | 215'     | 92'       |
| DI **    | 0.83x       | 0.83x        | 0.83x    | 0.83x    | 0.71x    | 0.71x     |

\* Assumes reducer down 2 sizes. (example 12"x8"). Larger reductions shall be treated as a tee equal to the larger size.

\*\* For Ductile Iron (DI) pipe, multiply the lengths by the value shown in the DI row.

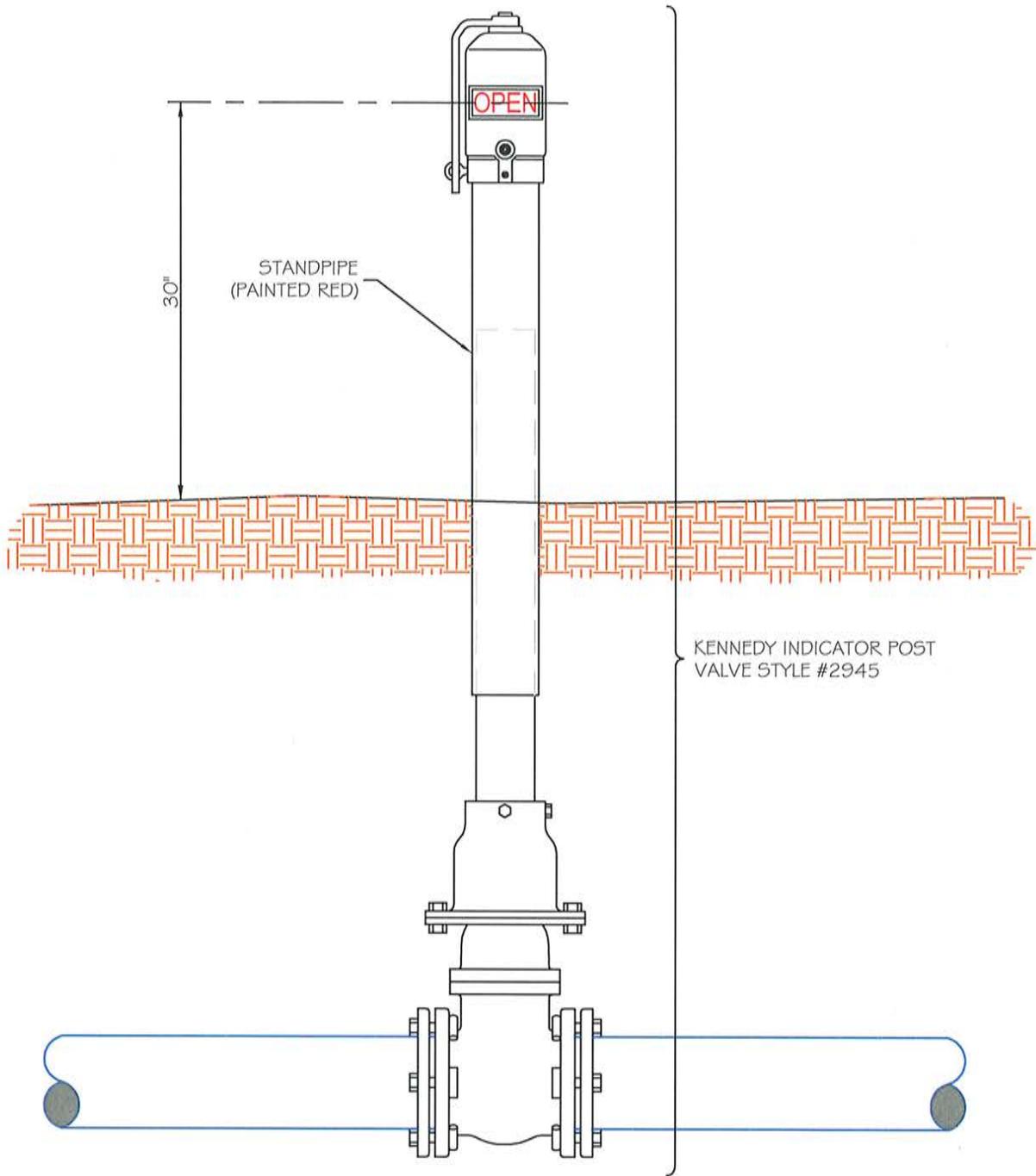
| BRANCH REDUCING TEE TABLE (0.71x for DI) |    |     |      |      |      |      |    |
|--|----|-----|------|------|------|------|----|
| RUN DIAMETER                             |    |     |      |      |      |      |    |
| 4" 6" 8" 10" 12" 16"                     |    |     |      |      |      |      |    |
| BRANCH DIAMETER                          | 4" | 48' | 39'  | 31'  | 22'  | 13'  | 1' |
| 6"                                       | -  | 74' | 68'  | 63'  | 56'  | 43'  |    |
| 8"                                       | -  | -   | 101' | 96'  | 92'  | 82'  |    |
| 10"                                      | -  | -   | -    | 125' | 122' | 118' |    |
| 12"                                      | -  | -   | -    | -    | 150' | 143' |    |
| 16"                                      | -  | -   | -    | -    | -    | 197' |    |

Restrain all tee/cross legs with min 5' stick of pipe in each leg. "Bullhead" tees restrained per dead-end length for largest leg.



|                          |           |
|--------------------------|-----------|
| TITLE                    |           |
| RESTRAINED JOINTS        |           |
| STANDARD DOMESTIC DETAIL |           |
| SHEET                    | DWG SCALE |
| 11 OF SET                | NO SCALE  |





NOTES:  
 MATERIAL SUBSTITUTIONS OR DETERMINATION OF EQUAL ARE AT  
 THE SOLE DISCRETION OF LAKE CHELAN RECLAMATION DISTRICT.

|                          |           |
|--------------------------|-----------|
| TITLE                    |           |
| POST INDICATOR VALVE     |           |
| STANDARD DOMESTIC DETAIL |           |
| SHEET                    | DWG SCALE |
| 12 OF SET                | NO SCALE  |

