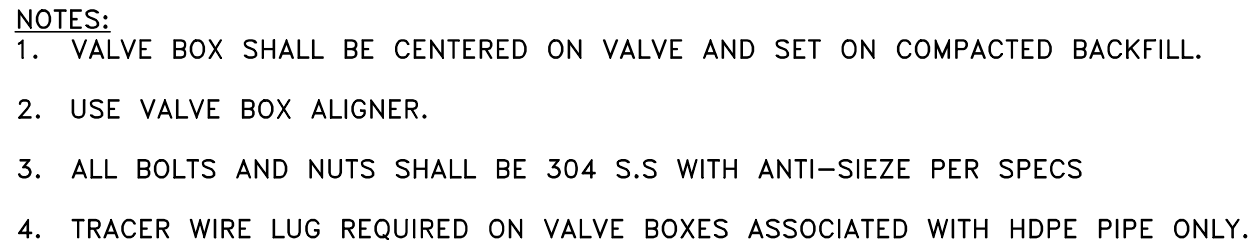


1. TEMPORARILY SUPPORT TAPPING SADDLE AND VALVE AND APPLY STANDARD HYDROSTATIC TEST.
2. IF NO LEAKS, POUR INDICATED PERMANENT CONCRETE BLOCK AND SUPPORT PAD.
3. MAKE TAP, LINE EXTENSION AND BACKFILL.
4. COVER GLANDS AND BOLTS WITH HEAVY POLYETHYLENE SHEETING TO KEEP CONCRETE FROM BONDING. TYPICAL WHENEVER BOLTS OR GLANDS MAY BE "WRAPPED-UP" IN CONCRETE.
5. COAT TAPPING SLEEVE AND BOLTS WITH AN APPROVED BITUMASTIC COATING BEFORE POURING CONCRETE. TYPICAL FOR ALL STEEL INCLUDING RODS, COUPLINGS, STRAPS, AND OTHER BURIED STEEL.



1. "A", "B" AND "D" DIMENSIONS SHALL BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH THE MECHANICAL JOINTS OR THE BOLTS.
2. "C" DIMENSIONS SHALL BE LARGE ENOUGH TO MAKE ANGLE θ EQUAL TO OR LARGER THAN 45°

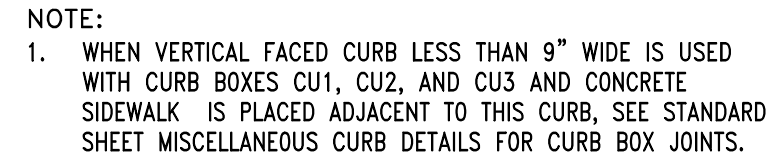


TABLE NO. 1 THRUST BLOCK AREA REQUIRED	
100-150 PSI TEST PRESSURE THRUST AREA REQ'D FT ²	
NOMINAL PIPE DIAMETER	DEAD END AND TEES
4	2.0
6	3.0
8	5.0
10	8.0
12	12.0



JOINT RESTRAINED SCHEDULE							
PIPE SIZE	90°	45°	22 ½°	11 ¼°	TEES (ALONG BRANCH)	REDUCER (LARGER O.D.)	DEAD ENDS
6"	15'	10'	5'	5'	20'	—	60'
8"	20'	10'	5'	5'	55'	—	70'
10"	25'	10'	5'	5'	65'	—	85'
12"	30'	15'	10'	5'	80'	—	95'
8"x6"	—	—	—	—	35'	30'	—
10"x8"	—	—	—	—	50'	30'	—
12"x8"	—	—	—	—	45'	55'	—
12"x10"	—	—	—	—	65'	30'	—

JOINT RESTRAINT SCHEDULE
NTS

1. MINIMUM LENGTH IN FEET TO BE RESTRAINED IN EACH DIRECTION.
2. ACTUAL LENGTH SHALL BE BASED ON SOIL CONDITIONS.
3. RESTRAINT BASED ON TYPICAL SOIL CONDITIONS, 150 PSI TEST PRESSURE AND BEDDING PER PROJECT TRENCH DETAIL. FOR VALVES USE LENGTHS AS INDICATED FOR 90° BEND.
4. RESTRAINT BASED ON DUCTILE IRON PIPE WITH POLYETHYLENE ENCASEMENT
5. APPROVED RESTRAINERS: APPROVED MEGA-LUT TYPE FOR MECHANICAL JOINTS AND FIELD LOG GASKETS FOR PUSH JOINTS
6. ALL RESTRAINT BOLTS AND NUTS SHALL BE 3/4 S.S WITH ANTI-SIZEE PER SPECS.
7. THRUST BLOCKS SHALL ONLY BE USED ON DEAD ENDS PER CONTRACT PLANS.
8. MIN 5' GROUND COVER REQUIRED.
9. IF RESTRAINT LENGTH IS LESS THAN THE LENGTH OF PIPE, CONTRACTOR SHALL RESTRAIN THE NEXT JOINT.
10. ALL RESTRAINTS FOR ELBOWS ARE FOR HORIZONTAL INSTALLATION. CONTRACTOR SHALL CONSULT ENGINEER FOR VERTICAL RESTRAINT SCHEDULE.



1. THE CONTRACTOR SHALL REFER TO THE LATEST EDITION OF "A GUIDE FOR THE INSTALLATION OF DUCTILE IRON PIPE" PUBLISHED BY THE CAST IRON PIPE RESEARCH ASSOCIATION FOR DESIGN AND INSTALLATION OF RESTRAINT SYSTEM.
2. THRUST BLOCKS SHALL BE USED.
3. ALL JOINTS SHALL BE MECHANICALLY RESTRAINED PER RESTRAINT SCHEDULE.
4. ALL DUCTILE IRON PIPE SHALL BE ENCASED WITH POLYWRAP.
5. ALL BOLTS AND NUTS SHALL BE 304 S.S WITH ANTI-SIEZE

Diagram illustrating the required separation between a proposed potable water main and an existing sanitary sewer.

The diagram shows a cross-section of the water main (a circle) and the sewer (a horizontal pipe). A vertical line indicates the 18" MIN. SEPARATION BETWEEN SANITARY SEWER LOCATED ABOVE OR BELOW WATER MAIN.

The sewer is shown with joints, and the distance between joints is labeled as $L/2$.

ONE FULL LENGTH OF SANITARY SEWER WITH JOINTS EQUALLY SPACED FROM ϵ WATER MAIN



BID PLANS

PORT JEWEN FIRE
DEPARTMENT
ULSTER COUNTY, NY

GENERAL DETAILS

SHEET:

C-501

REVISIONS

9

PORT EWEN FIRE
DEPARTMENT
ULSTER COUNTY, NY

GENERAL DETAILS

SHEET:

C-501

DATE: 6/28/2023
DRAWN BY: AMRODA
SCALE: AS SHOWN
REVIEWED BY:
PROJECT NO.: 21-2343



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WARNING - IT IS A VIOLATION OF NEW YORK EDUCATION LAW SECTION 7209.2, FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED THIS ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW SECTION 7209.2