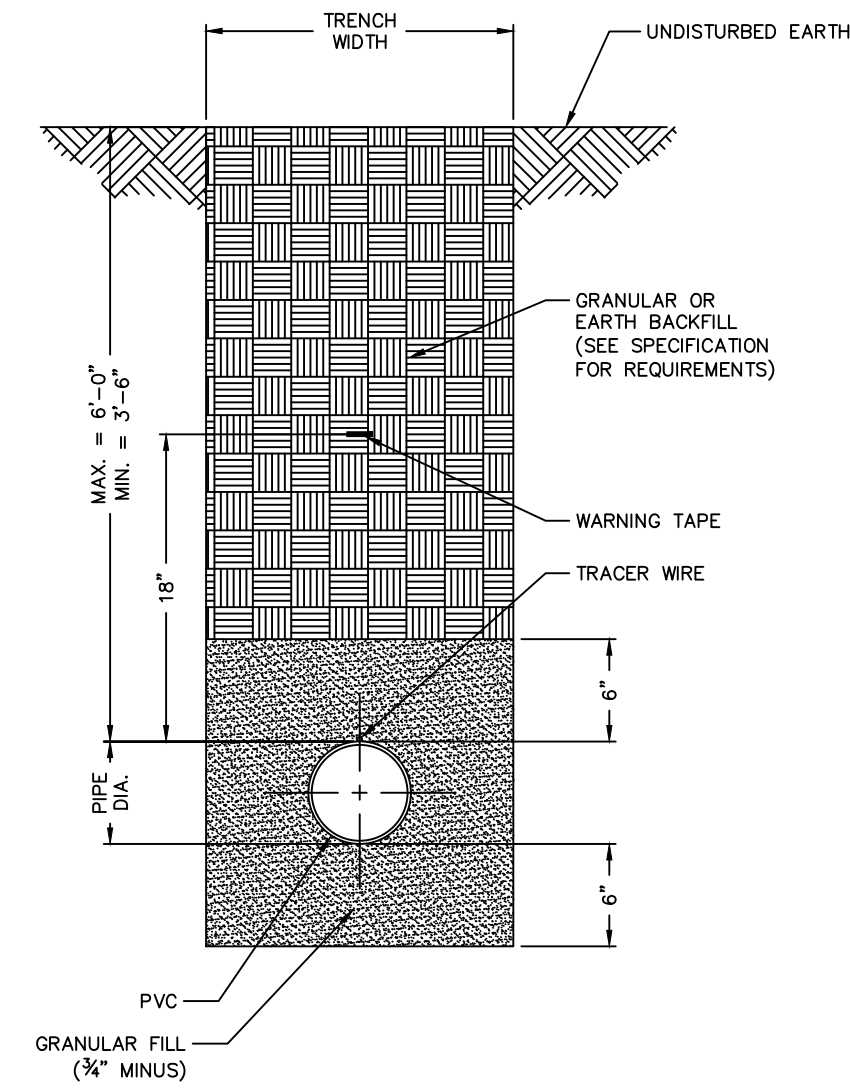


NOTE: THIS DETAIL IS FROM PWS#2

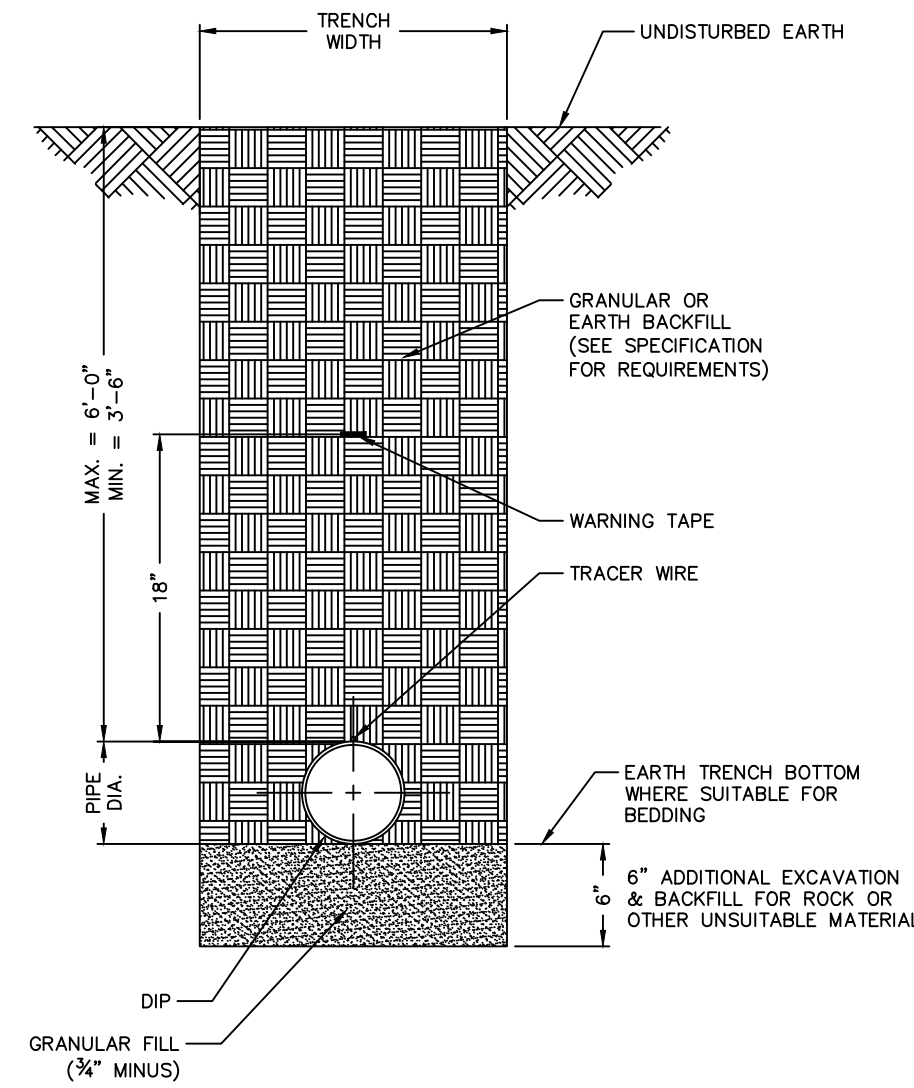


NOTES

- 1) SEE SPECIFICATIONS FOR ADDITIONAL DETAILS FOR BEDDING AND BACKFILL.

TYPICAL TRENCH SECTION FOR PVC PIPE
NOT TO SCALE
DETAIL "A"
PAGE 1 OF 2

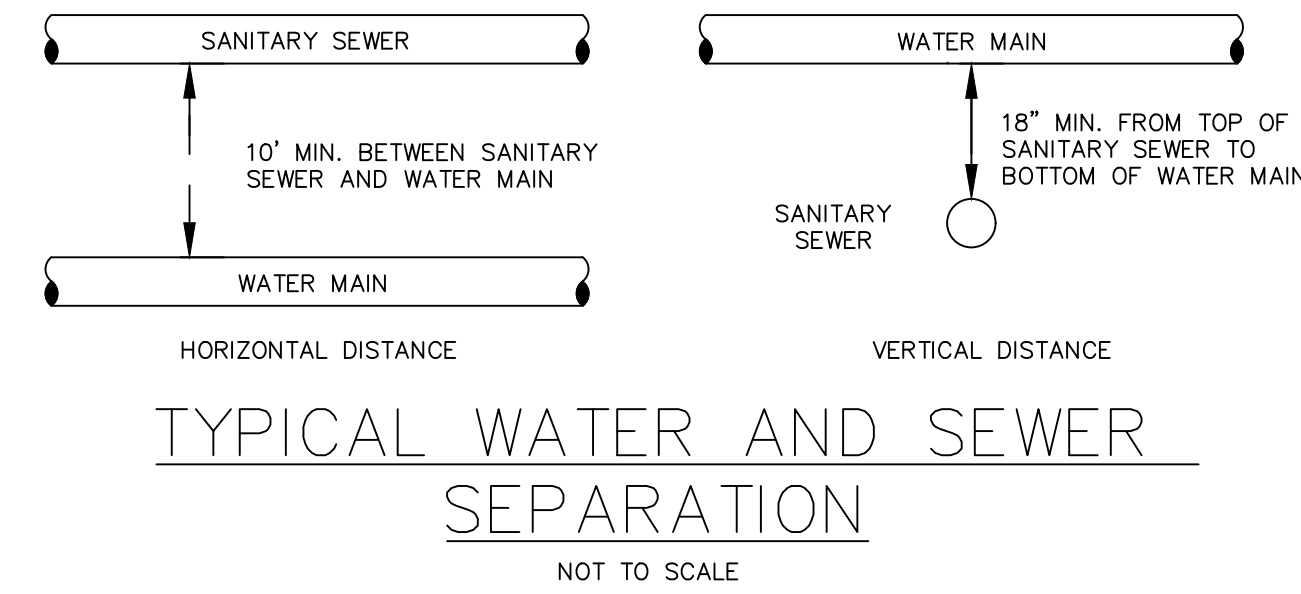
NOTE: THIS DETAIL IS FROM PWS#2



NOTES

- 1) POLYWRAP REQUIRED FOR DUCTILE IRON PIPE
- 2) SEE SPECIFICATIONS FOR ADDITIONAL DETAILS FOR BEDDING AND BACKFILL.

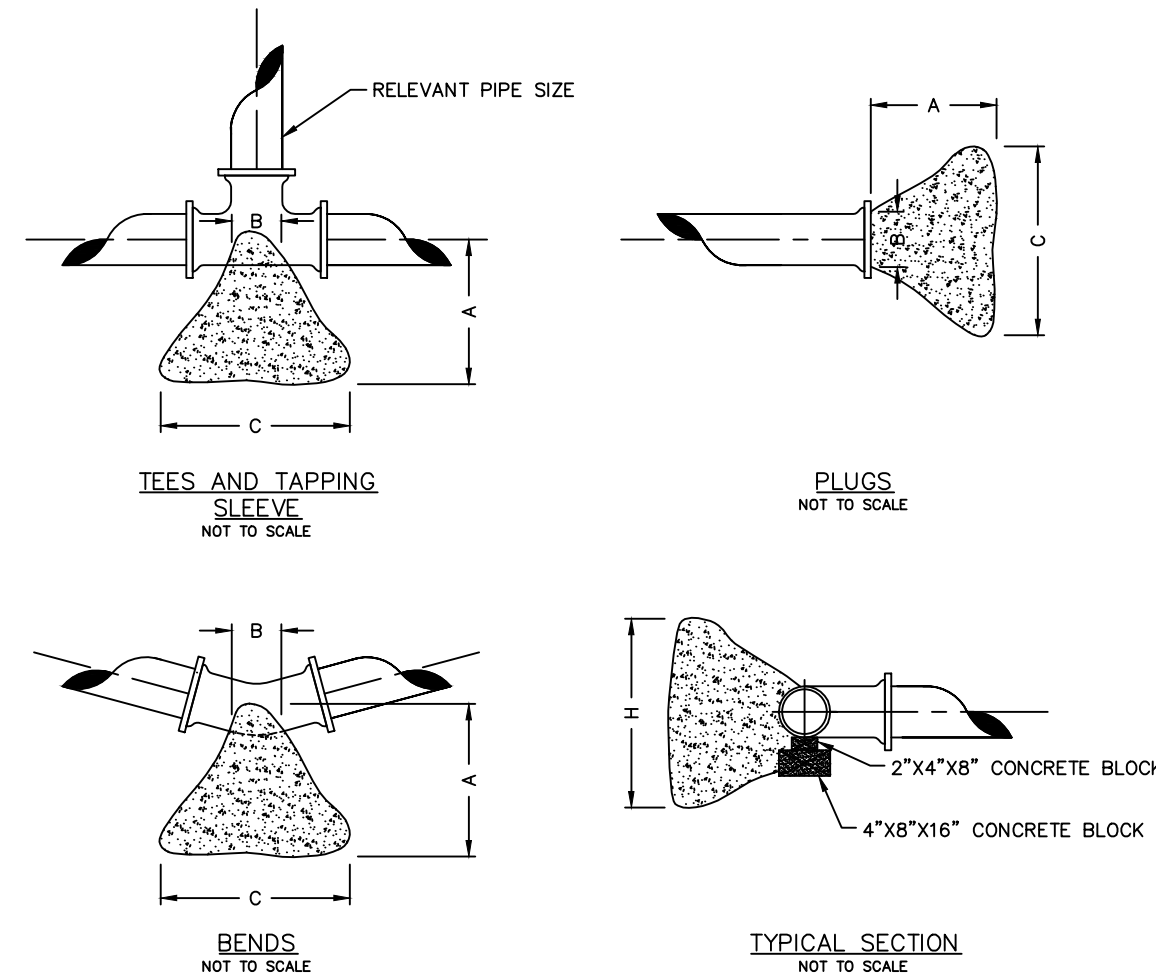
TYPICAL TRENCH SECTION FOR DUCTILE IRON PIPE
NOT TO SCALE
DETAIL "A"
PAGE 2 OF 2



CITY OF O'FALLON
ENGINEERING DEPARTMENT
O'FALLON, MISSOURI
WATER AND SEWER SEPARATION DETAIL

Ductile Iron Pipe installation shall follow the Ductile Iron Research Association (DIPRA) guide line.
The Installation of PVC Pipe shall follow the Uni-Bell PVC Pipe Association Handbook of PVC Design and Construction.

NOTE: THIS DETAIL IS FROM PWS#2



| THRUST BLOCK DIMENSIONS - INCHES | | | | | | | | | | | | |
|----------------------------------|-----------|----|------------------|----|----------------|----|----------------|----|-------------|----|-------------|----|
| PIPE DIA. | ALL FTGS. | | TEE PLUG TAPPING | | 90 DEGREE BEND | | 45 DEGREE BEND | | 22-1/2 BEND | | 11-1/4 BEND | |
| | A | B | C | H | C | H | C | H | C | H | C | H |
| 4 | 14 | 4 | 24 | 12 | 26 | 15 | 18 | 12 | 12 | 12 | 12 | 12 |
| 6 | 16 | 6 | 30 | 18 | 36 | 24 | 30 | 18 | 24 | 12 | 12 | 12 |
| 8 | 20 | 8 | 36 | 30 | 42 | 36 | 36 | 24 | 24 | 18 | 18 | 12 |
| 10 | 20 | 10 | 48 | 36 | 66 | 36 | 36 | 36 | 28 | 24 | 18 | 18 |
| 12 | 24 | 12 | 66 | 36 | 82 | 42 | 52 | 36 | 40 | 24 | 28 | 18 |

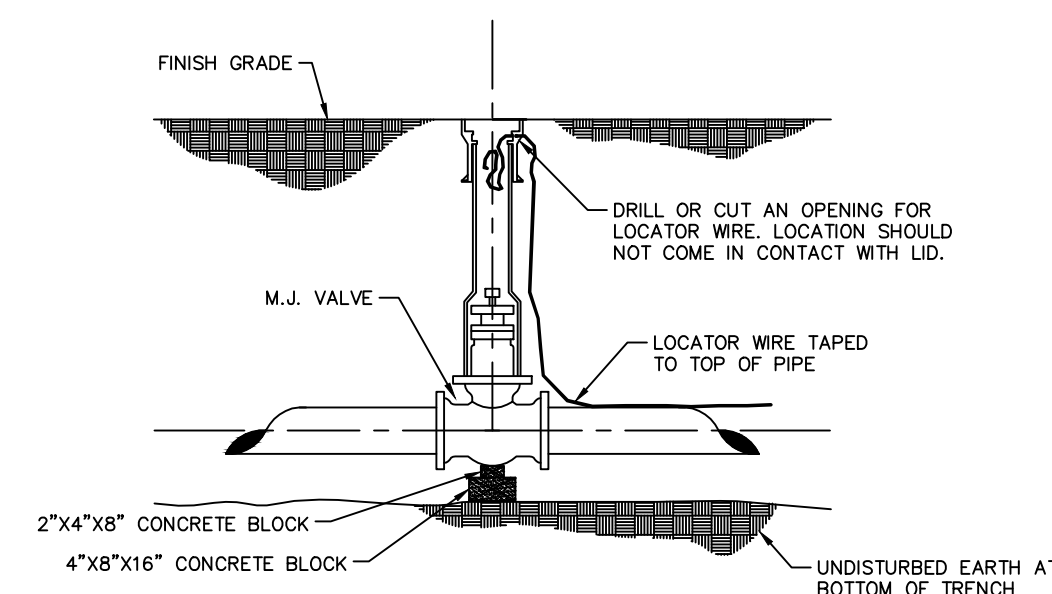
NOTE

FOR FITTINGS LARGER THAN 12", SPECIAL RESTRAINT DESIGNS ARE REQUIRED.

HORIZONTAL THRUST BLOCKING
DETAIL "C"

NOTE: THIS DETAIL IS FROM PWS#2

Buffalo box is an acceptable product to use.
Tyler 562-S and 564-S are acceptable products.



GATE VALVE DETAIL
NOT TO SCALE
DETAIL "D"

PROJECT TITLE:
MIKE CLEMENS CENTER FOR ADAPTIVE LEARNING ADDITION

ENGINEERING PLANNING SURVEYING
221 Point View Blvd.
St. Charles, MO 63301
636-928-5562 FAX 928-1718



DISCLAIMER OF RESPONSIBILITY
I hereby specify that the documents intended to be authenticated by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

REFERENCE ONLY

Clifford L. Heitmann
Civil Engineer
E29817

Copyright 2023
Box Engineering Company, Inc.
Engineering Authority No. 000655
Surveying Authority No. 000144
All Rights Reserved

ORIGINAL ISSUE DATE
01-18-2023

| REVISIONS | |
|------------|---------------|
| DATE | DESCRIPTION |
| 01-10-2023 | PERMIT SET |
| 01-18-2023 | BID SET |
| 02-10-2023 | ADDENDUM 2 |
| 02-14-2023 | CITY COMMENTS |
| 02-24-2023 | ADDENDUM 4 |
| 02-28-2023 | CITY COMMENTS |

Developer / Owner:
FORT ZUMWALT SCHOOL DISTRICT
555 EAST TERRA LANE
O'FALLON, MO 63366

WATER DETAILS

P+Z No. #22-010172
APPROVED 11-03-22
City No. #14-400

Page No. **C11.0**
MIKE CLEMENS CENTER
ADDITIONS AND RENOVATIONS

DETAILS ON THIS SHEET ARE REFERENCE ONLY

BID SET

Box Project # 99-0000ML Issue Date: 01/18/2023