



DELAWARE ENGINEERING, D.P.C.

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Red Hook, New York 12571

Tel: 518.452.1290 x402

August 31, 2023

To: ALL PLAN HOLDERS

Re: Port Ewen Fire District

Pages: 2 (including this sheet)

Port Ewen Firehouse Construction Project

Addendum #4

Contracts for Construction

The following items in this addendum apply to the Port Ewen Firehouse Construction Project:

ITEM #83: CLARIFICATION – CONTRACT #1G – Drawing Sheet A200

- The fire department emblem mounted at the top front of the building as shown on A200 shall be made from Aluminum material. The letter style shall be arial. The components of the sign shall be 1” thick and painted.

ITEM #84: CLARIFICATION – CONTRACT #1G – Drawing Sheet C-501

- Added detail for parking bumpers. See attached sheet.

ITEM #85: CLARIFICATION – CONTRACT #1G & 1P – Elevator Sump

- See attached detail for elevator sump.

NOTE

This Addendum is being distributed through usinglesspaper.com to everyone on the plan holders list. Should there be an issue with the system, please contact Ablen Amrod, PE at aamrod@delawareengineering.com or 518-452-1290.

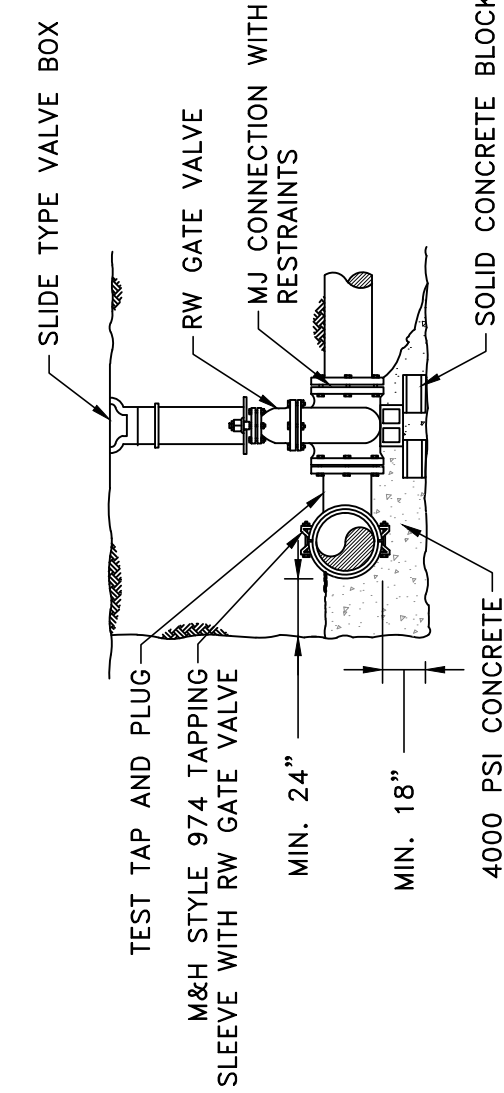
ATTENTION

PLEASE SIGN BELOW AND email to aamrod@delawareengineering.com to verify receipt of this Addendum.

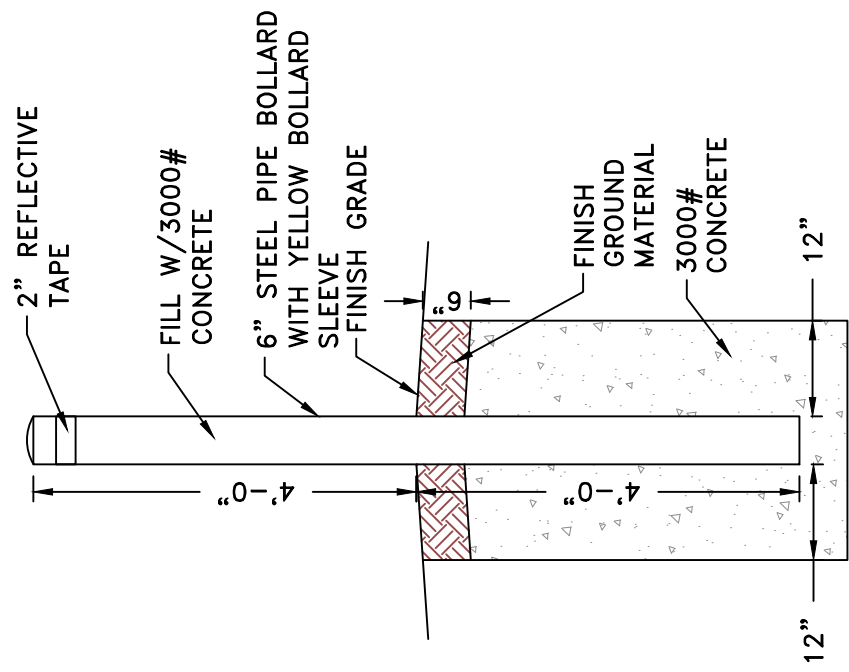
RECEIVED BY: _____

Company Name: _____

- NOTES:
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 TAPPING SLEEVE AND VALVE DETAIL
SCALE: NOT TO SCALE

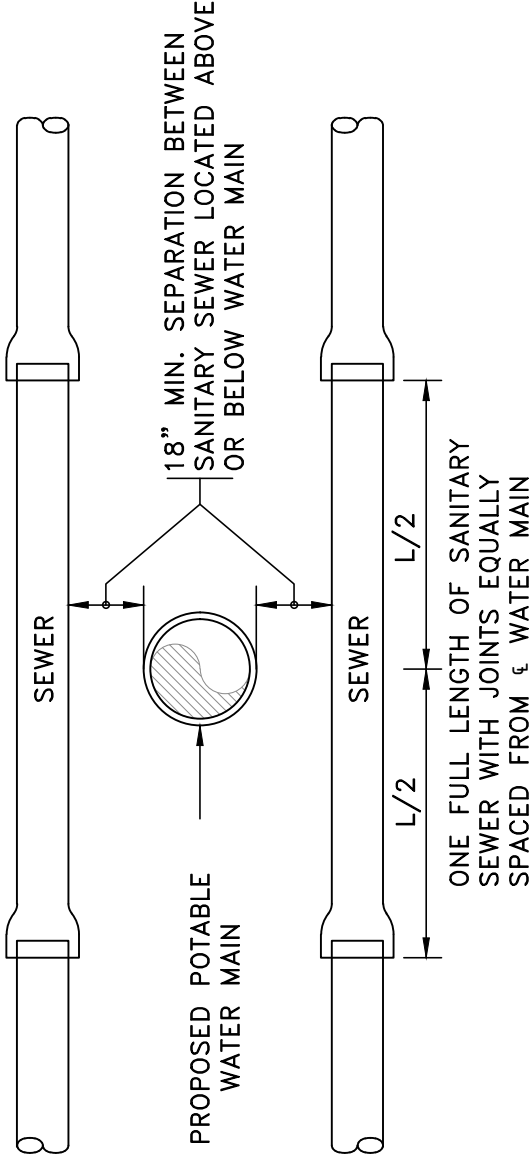


3 TYPICAL BOLLARD DETAIL
SCALE: NOT TO SCALE

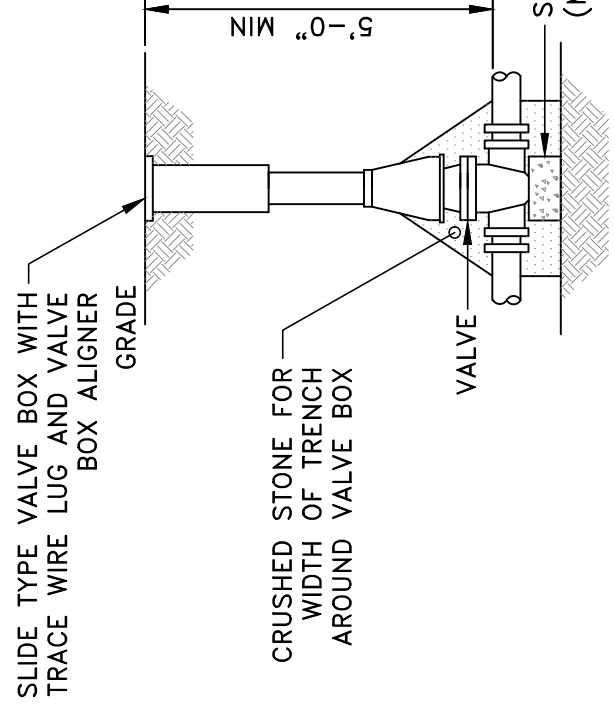
WATER NOTES:

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-SIZE

NOTE:
MAINTAIN A 10 FT. MIN. HORIZONTAL SEPARATION WHERE POTABLE WATER MAIN RUNS PARALLEL TO SANITARY SEWER

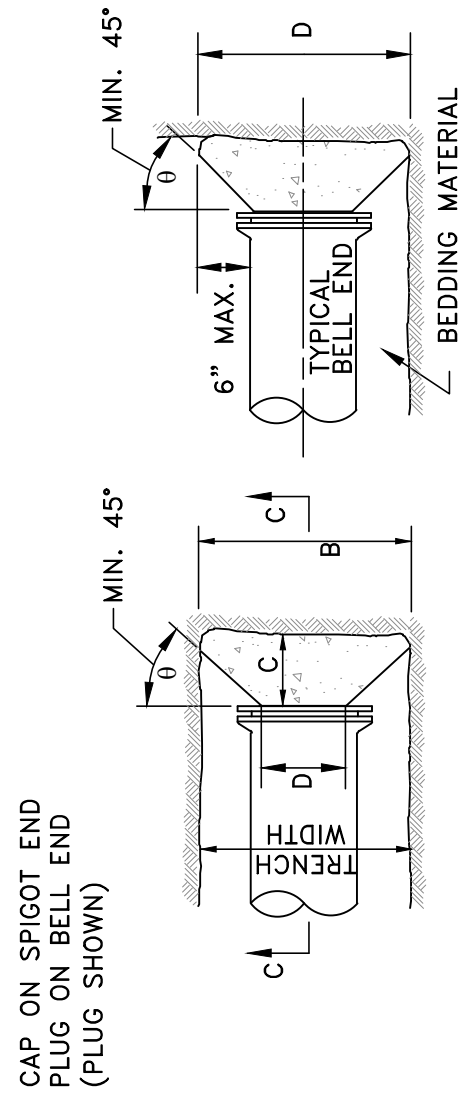


4 TYPICAL SANITARY SEWER & POTABLE WATER MAIN CROSSING
SCALE: NOT TO SCALE

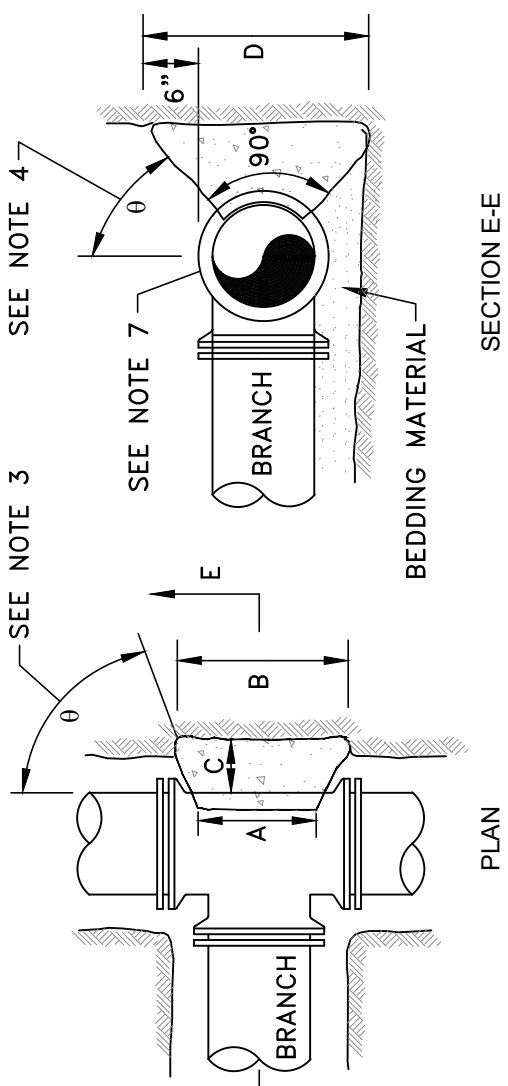


- NOTES:
1. VALVE BOX SHALL BE CENTERED ON VALVE AND SET ON COMPACTED BACKFILL.
 2. USE VALVE BOX ALIGNER.
 3. ALL BOLTS AND NUTS SHALL BE 304 S.S WITH ANTI-SIZE PER SPECS
 4. TRACER WIRE LUG REQUIRED ON VALVE BOXES ASSOCIATED WITH HDPE PIPE ONLY.

2 TYPICAL VALVE
SCALE: NOT TO SCALE



7 THRUST BLOCK DETAILS--DEAD END
SCALE: NOT TO SCALE

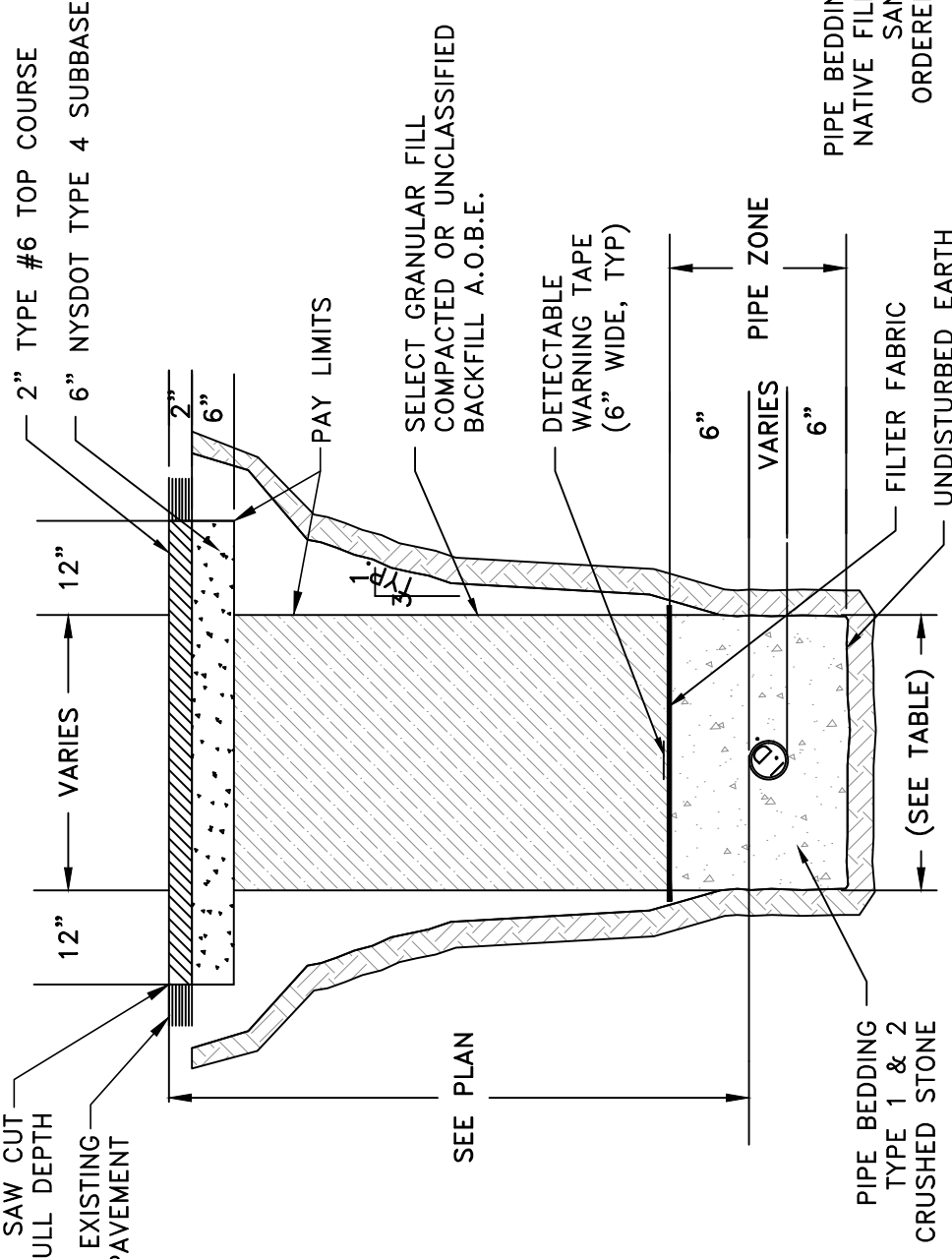


7A THRUST BLOCK DETAILS--TEES
SCALE: NOT TO SCALE

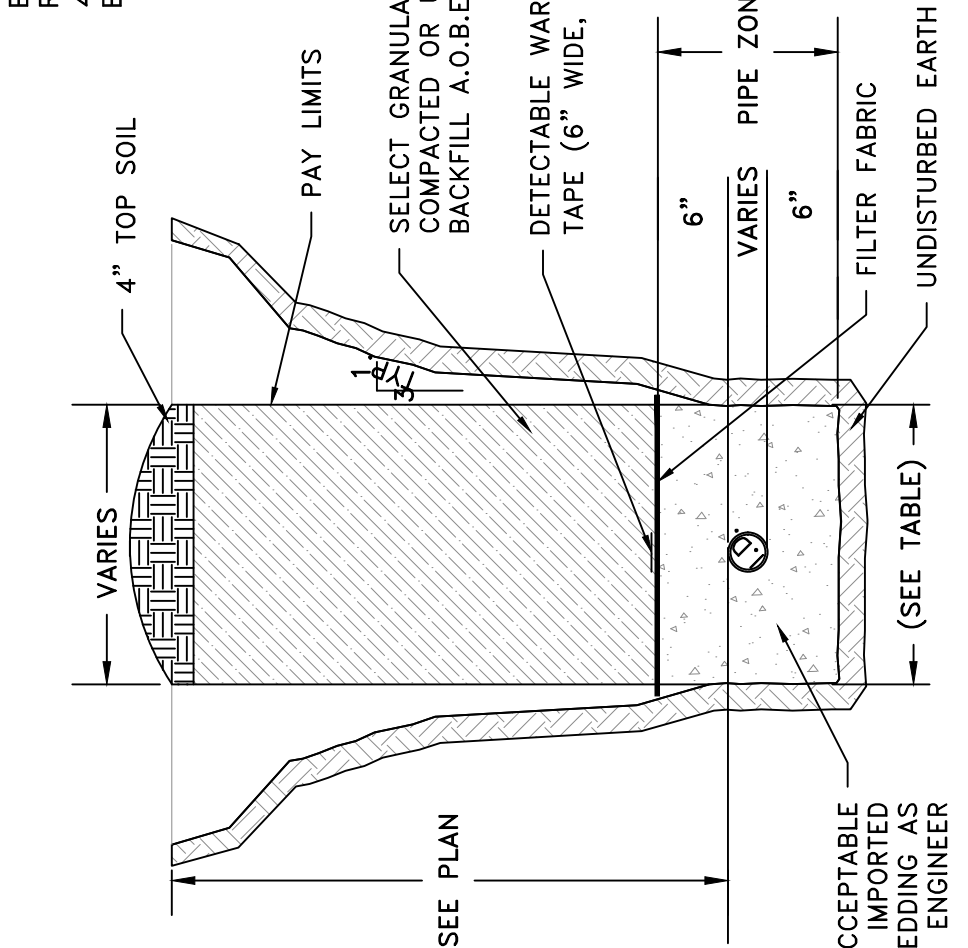
1. MINIMUM LENGTH IN FEET TO BE RESTRAINED IN EACH DIRECTION.
2. ACTUAL LENGTH SHALL BE BASED ON SOIL CONDITIONS.
3. RESTRAINT BASED ON TYPICAL SOIL CONDITIONS; 150 PSI TEST PRESSURE AND BEDDING PER PROJECT TRENCH DETAIL. FOR VALVES USE LENGTHS AS INDICATED FOR 90° BEND.
4. RESTRAINT BASED ON DUCTILE IRON PIPE WITH POLYETHYLENE ENCASEMENT
5. APPROVED RESTRAINTERS: APPROVED MEGA-LUG TYPE FOR MECHANICAL JOINTS AND FIELD LOK GASKETS FOR PUSH JOINTS
6. ALL RESTRAINT BOLTS AND NUTS SHALL BE 304 S.S WITH ANTI-SIZE 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.

JOINT RESTRAINED SCHEDULE					
PIPE SIZE	90°	45°	22 1/2°	11 1/4°	TEES (ALONG BRANCH)
6"	15'	10'	5'	5'	20'
8"	20'	10'	5'	5'	55'
10"	25'	10'	5'	5'	65'
12"	30'	15'	10'	5'	80'
8"x6"	-	-	-	-	35'
10"x8"	-	-	-	-	30'
12"x8"	-	-	-	-	50'
12"x10"	-	-	-	-	45'
					65'
					30'

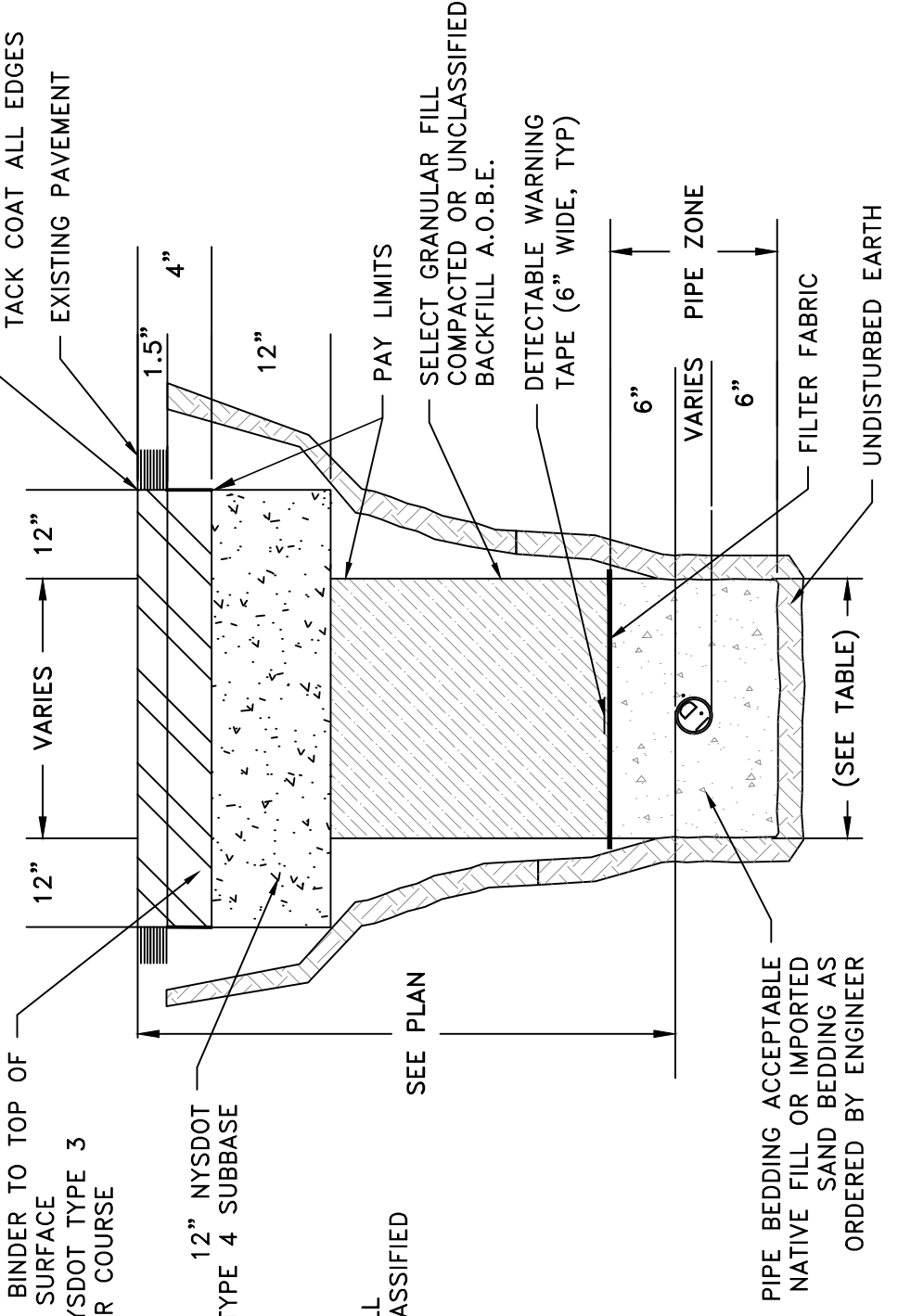
JOINT RESTRAINT SCHEDULE



1 TRENCH IN DRIVEWAYS DETAIL
SCALE: NOT TO SCALE



2 TRENCH IN EARTH DETAIL
SCALE: NOT TO SCALE



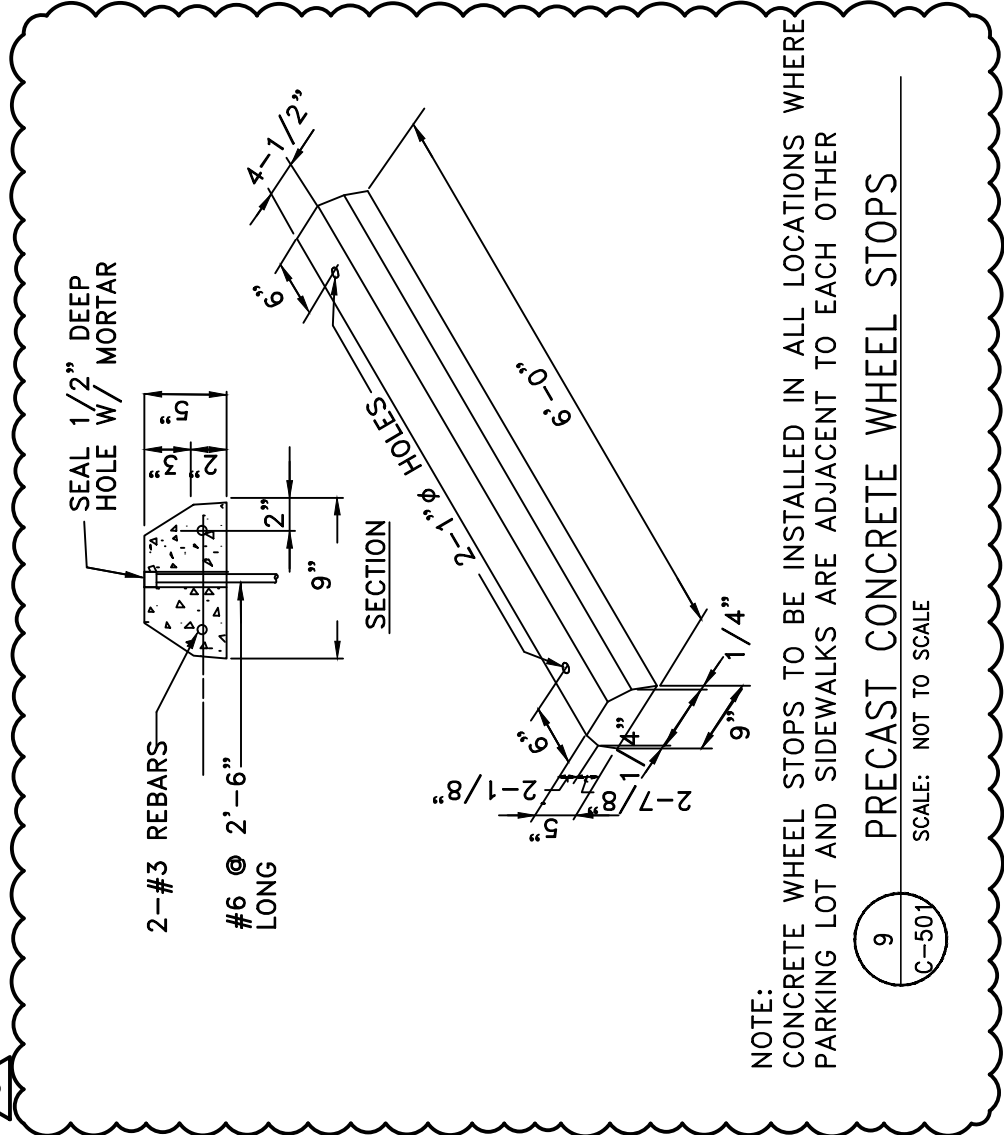
3 TRENCH IN LOCAL ROADWAYS DETAIL
SCALE: NOT TO SCALE

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 FT²	
NOMINAL PIPE DIAMETER	DEAD END AND TEES
4	2.0
6	3.0
8	5.0
10	8.0
12	12.0

- NOTE:
1. WHEN VERTICAL FACED CURB LESS THAN 4" WIDE IS USED CURB SHALL BE 4" MIN. WIDE. CURB AND MORTAR SUBPAVK" IS PLACED ADJACENT TO THIS CURB. SEE STANDARD SHEET MISCELLANEOUS CURB DETAILS FOR CURB BOX JOINTS.

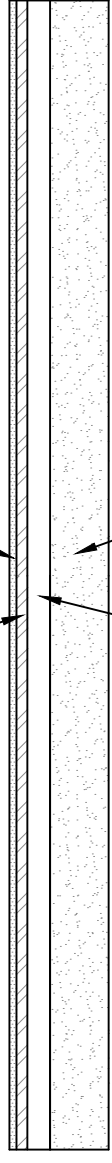
5 CONCRETE CURB DETAIL
SCALE: NOT TO SCALE



- NOTE:
1. CONCRETE WHEEL STOPS TO BE INSTALLED IN ALL LOCATIONS WHERE PARKING LOT AND SIDEWALKS ARE ADJACENT TO EACH OTHER

9 PRECAST CONCRETE WHEEL STOPS
SCALE: NOT TO SCALE

4" NYSDOT ITEM NO. 403.1138902
HMA TYPE 3 BINDER COURSE



12" NYSDOT ITEM NO. 733.04002
SUBBASE COURSE TYPE 2

SLOPE PER PLANS

8 PAVEMENT DETAIL
SCALE: NOT TO SCALE

DATE: 6/30/2023
DRAWN BY: ERNSTJ
SCALE: AS SHOWN
REVIEWED BY:
PROJECT NO.: 21-2343
FILE: C-501-SITE-DETAILS.DWG

WWW.HESNOR.COM
HESNOR
ENGINEERING ASSOCIATES

WWW.KEYSTONE-PC.COM
KEYSTONE-PC
ASSOCIATES

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DELAWARE-ENGINEERING, P.C.
ENGINEERING

STATE OF NEW YORK
PROFESSIONAL ENGINEER
J. AMADOR

NO. 8-30-2023
DATE
DESCRIPTION
REVISED

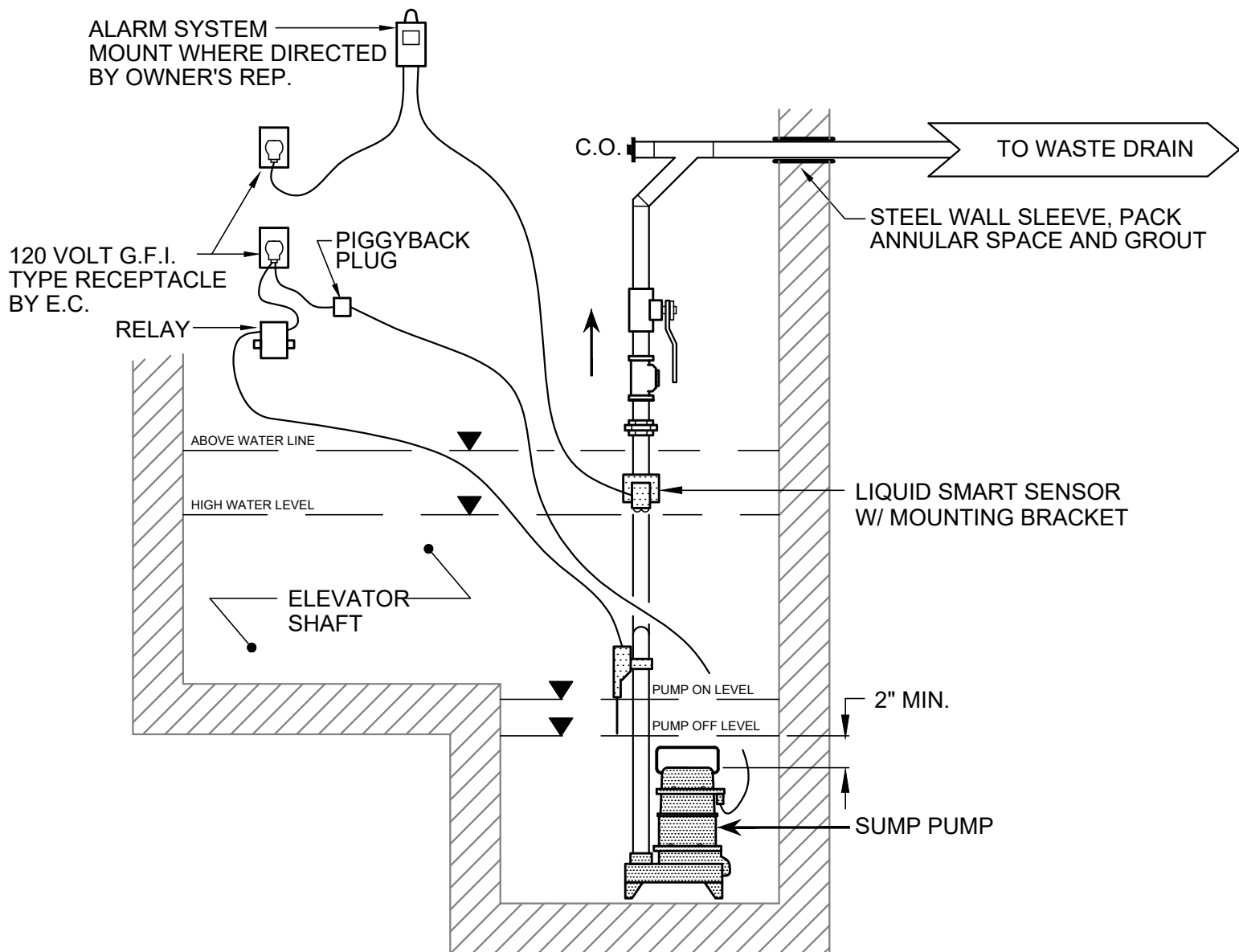
PORT EWEEN FIRE
DEPARTMENT, NY
ULSTER COUNTY, NY

GENERAL DETAILS

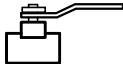
BID PLANS

SHEET:
C-501

WARNING: IT IS A VIOLATION OF NEW YORK EDUCATION LAW SECTION 200.2 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE AUTHORITY OF A LICENSED PROFESSIONAL ENGINEER, TO PREPARE, SIGN, SEAL, OR ISSUE ANY ENGINEERING DRAWING OR SPECIFICATION FOR A PROJECT OF ANY TYPE, IF HE IS NOT THE LICENSED PROFESSIONAL ENGINEER WITH THE REQUIREMENTS OF NEW YORK EDUCATION LAW, SECTION 200.2.



LEGEND:

-  BALL VALVE
-  UNION
-  CHECK VALVE

ELEVATOR SUMP PUMP DETAIL