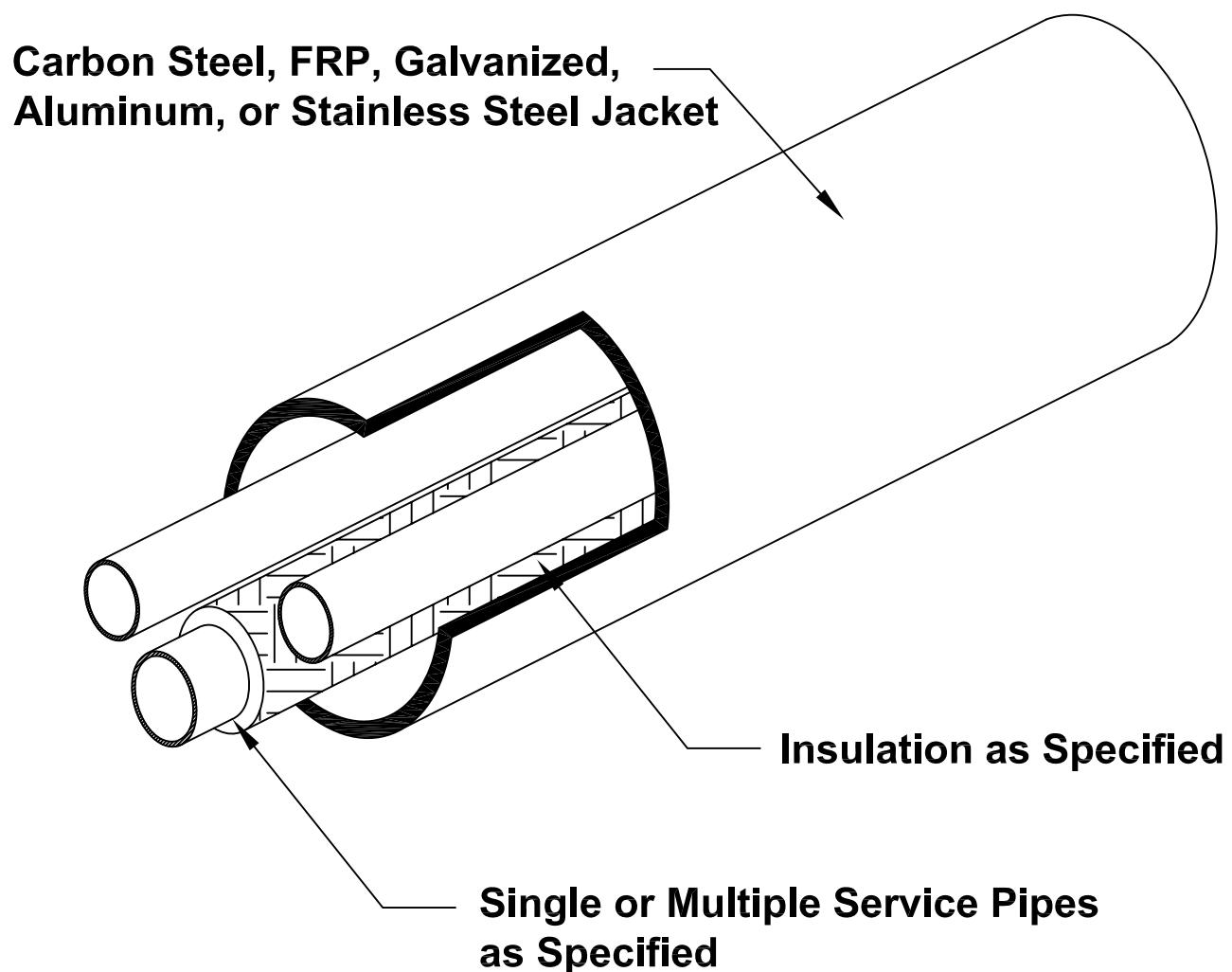


# DOUBLE-CON PIPE SYSTEM

For Applications Up To 450° F Below And Above Ground



- Chemicals
- Petroleum Products



# DOUBLE-CON

## System Specifications

**TABLE 1**

Pipe Size	Option 1		Option 2	
	FRP Jacket O.D.	FRP Jacket Wall	Steel Jacket O.D.	Steel Jacket Wall
1/2"	3.50"	.090"	3.500"	.120"
3/4"	3.50"	.090"	3.500"	.120"
1"	4.50"	.085"	4.500"	.120"
1 1/4"	4.50"	.085"	4.500"	.120"
1 1/2"	4.50"	.085"	4.500"	.120"
2"	4.50"	.085"	4.500"	.120"
2 1/2"	6.63"	.120"	6.625"	.134"
3"	6.63"	.120"	6.625"	.134"
4"	8.64"	.140"	8.625"	.134"
5"	8.64"	.140"	8.625"	.134"
6"	10.70	.170"	10.750"	.134"

**Double-Con** Containment System is a factory fabricated containment system for above and below ground transportation of hazardous fluids. The most widely used system can be designed with a steel carrier pipe and a secondary steel outer pipe.

**Carrier Pipe:**

Carbon steel service pipe shall be standard weight or extra heavy, A53 ERW or A106 seamless beveled for welding. (Stainless Steel piping shall be Type 304L or 316L. – Copper piping to be Type K cleaned and capped for medical use or Type L ) All joints for pipe 2 1/2" and larger in size shall be butt-welded. Sizes 2" and smaller shall be socket welded. Straight lengths of piping will be supplied with 6" of piping exposed at each end for field joint fabrication. Pipe lengths to be supplied in 21-42 ft. lengths.

**Containment Pipe For Above Grade:**

The outer conduit shall be a smooth wall, spiral welded steel conforming to ASTM Specification A-139, or electric resistance welded steel pipe conforming to ASTM Specification A-135, or as specified.

**Containment Pipe Coating For Above Grade:**

Red Oxide Primer, factory coated up to 3-4 mils dry film thickness.

**Containment Pipe For Below Grade:**

The outer conduit shall be a nonmetallic fiberglass conforming to ASTM 2310 standard classification TRP-11CX and ASTM D2996 specification RTRP 11CF1-5430, RTRP-11AF1-2214, RTRP-11AF1-2216.

**TABLE 2**

Pipe Size	Option 1	Option 2
	FRP Jacket O.D.	Steel O.D.
1/2" + 1/2"	4.50"	4.500"
3/4" + 3/4"	4.50"	4.500"
1" + 1"	6.63"	6.625"
1 1/4" + 1 1/4"	6.63"	6.625"
1 1/2" + 1 1/2"	6.63"	6.625"
2" + 2"	8.64"	8.625"
2 1/2" + 2 1/2"	8.64"	8.625"
3" + 3"	10.70"	10.750"

**Containment Pipe Coating For Below Grade:**

Conduit exterior shall be factory coated with a Fusion Bonded Epoxy. All exterior surfaces of the conduit shall be shot blasted prior to the application of the coating.

Fusion Bonded Epoxy is a N.A.C.E & N.A.P.C.A. approved corrosion coating.

**Installation:**

**No Piping shall be installed in standing water. Trenches shall be maintained dry until final field closure is complete.** The installing contractor shall handle the piping system in accordance with the directions furnished by the manufacturer and as approved by the architect and engineer. The service piping shall be hydrostatically tested to 1-1/2 times the operating pressure, or as specified in the contract documents. The non-metallic outer jackets shall be tested to 5 psi and 15 psi for the metallic secondary containment. The test shall be maintained for a minimum time of 1 hour. ***EXERCISE DUE CARE WHEN INSTALLING AND TESTING THE PIPING SYSTEM.***

**Accessories:**

- Heat Tracing
- Leak Detection
- Cathodic Protection

**Optional Systems:**

- Contact your Tricon representative for available sizes and system options.

**New York**

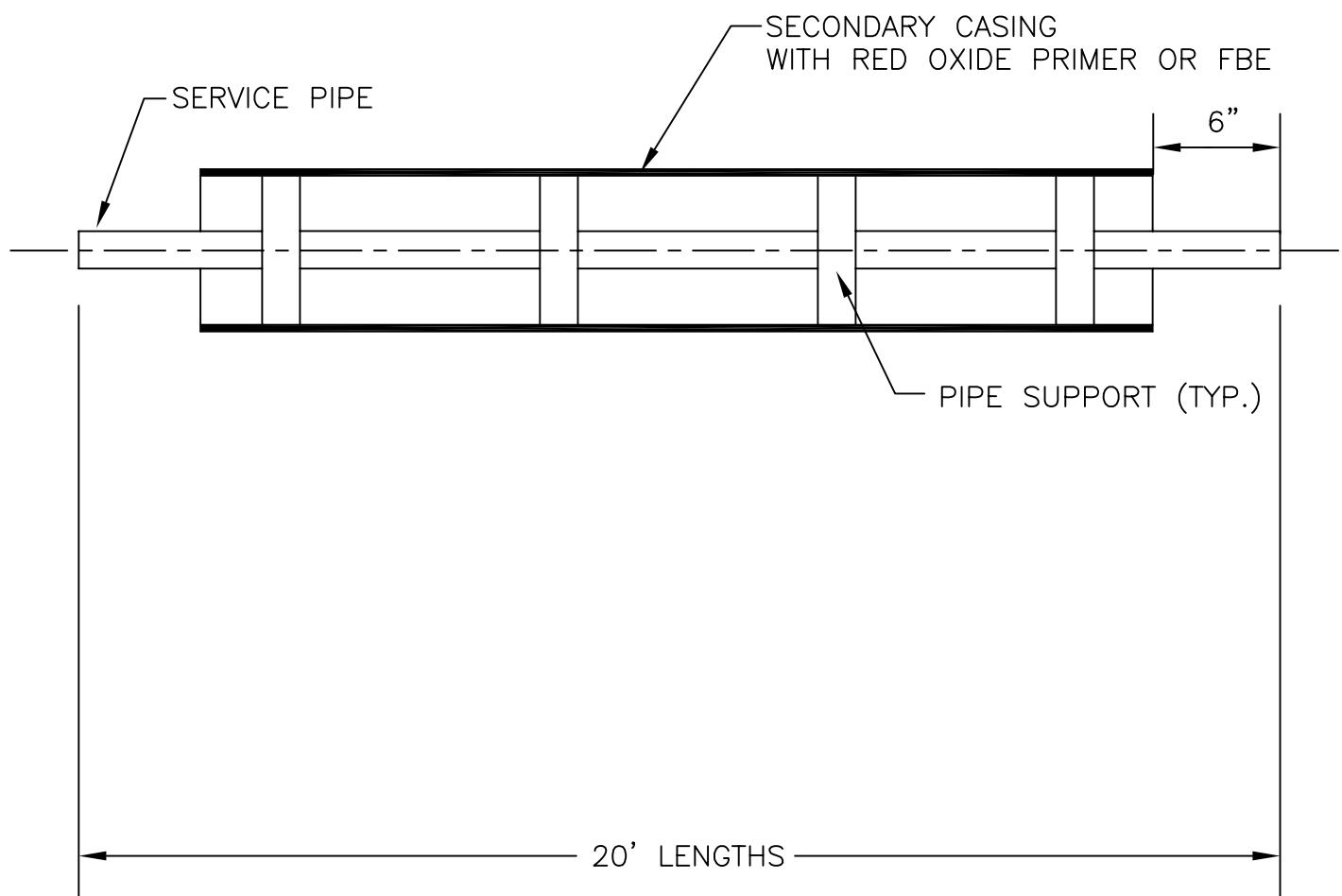
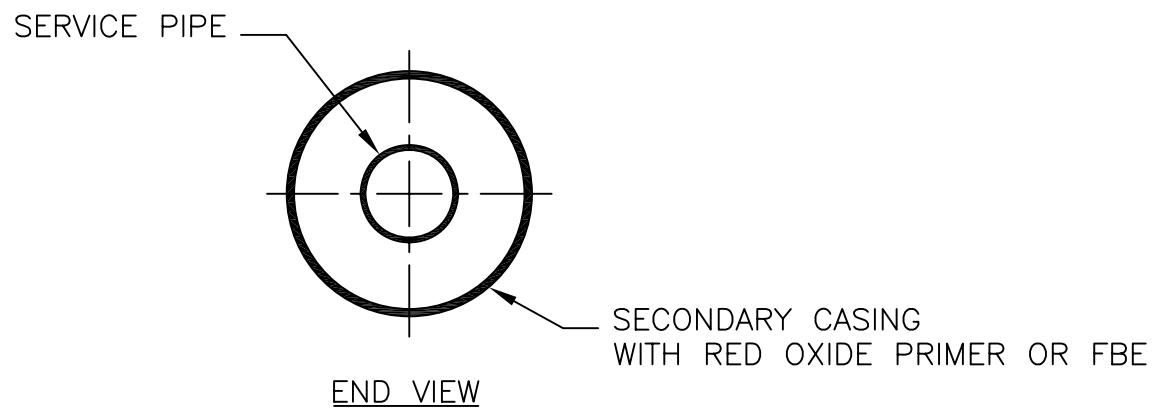
2 Technology Blvd  
Canastota, NY 13032  
Phone: 904-687-2874

**Texas**

10606 Goodnight Lane  
Dallas, Texas 75220  
Phone: 904-687-2874

**Florida**

2501 Clark St.  
Apopka, Florida 32703  
Phone: 904-687-2874

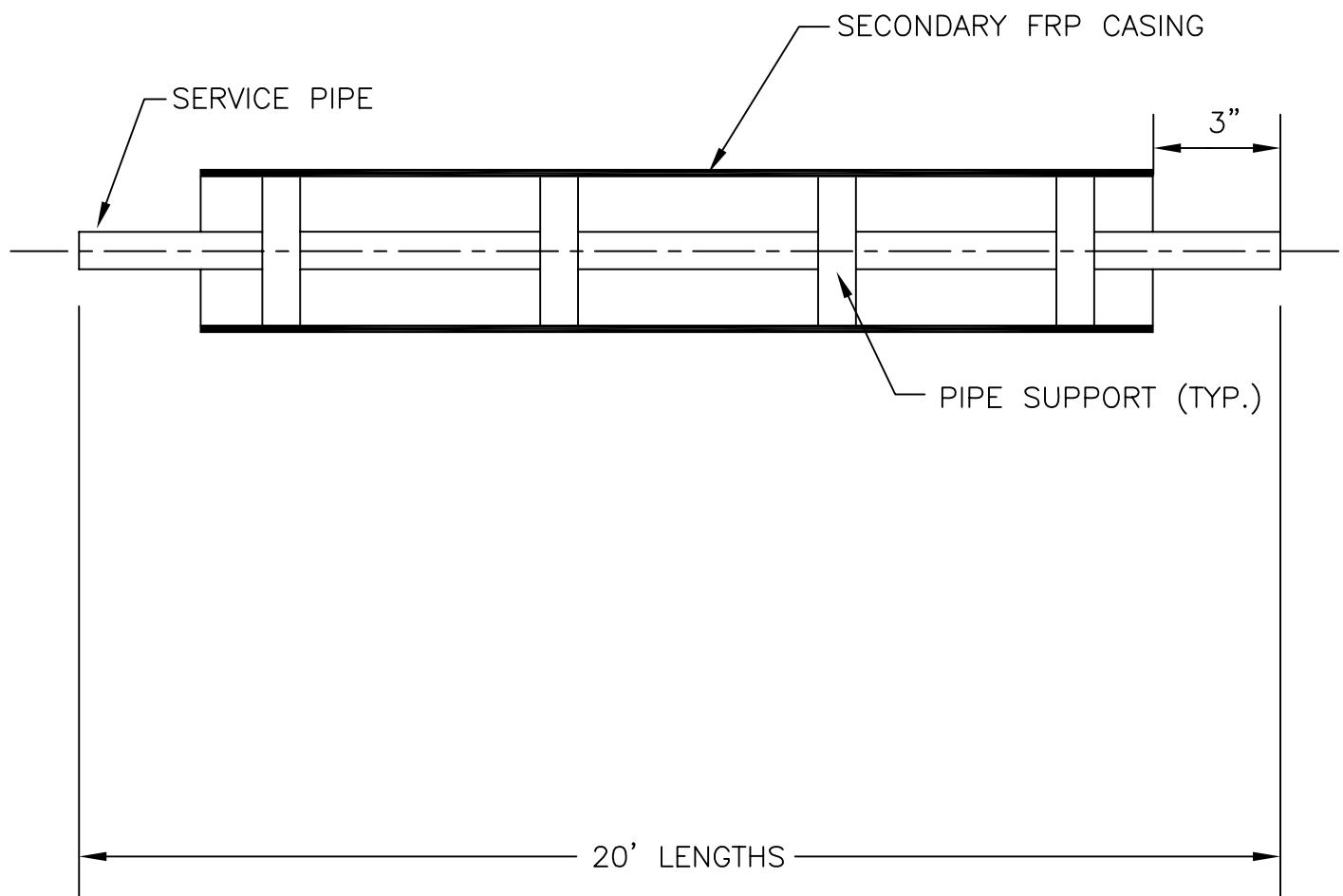
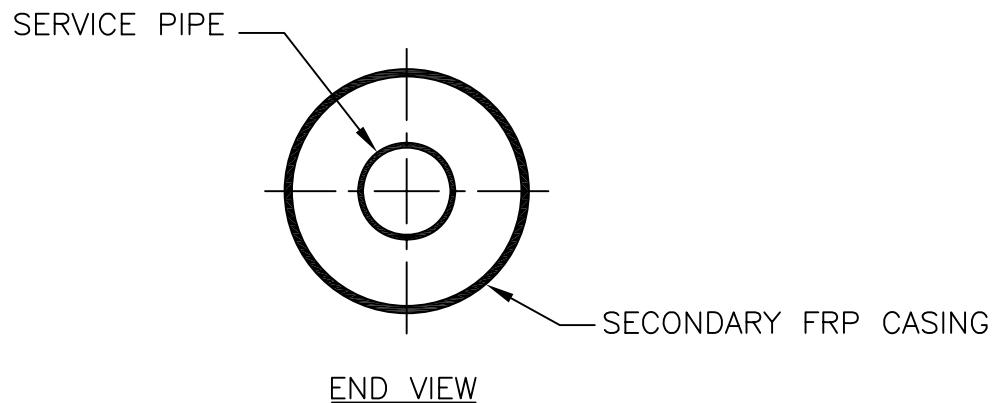


STRAIGHT LENGTH DETAIL FOR ABOVE GRADE APPLICATIONS

**DOUBLE-CON**

Date: 03/09/06	Dwg. No.: DC-1A
Rev.:	

**TRICON FORCE**  
PIPING SOLUTIONS  
tfpiping.com

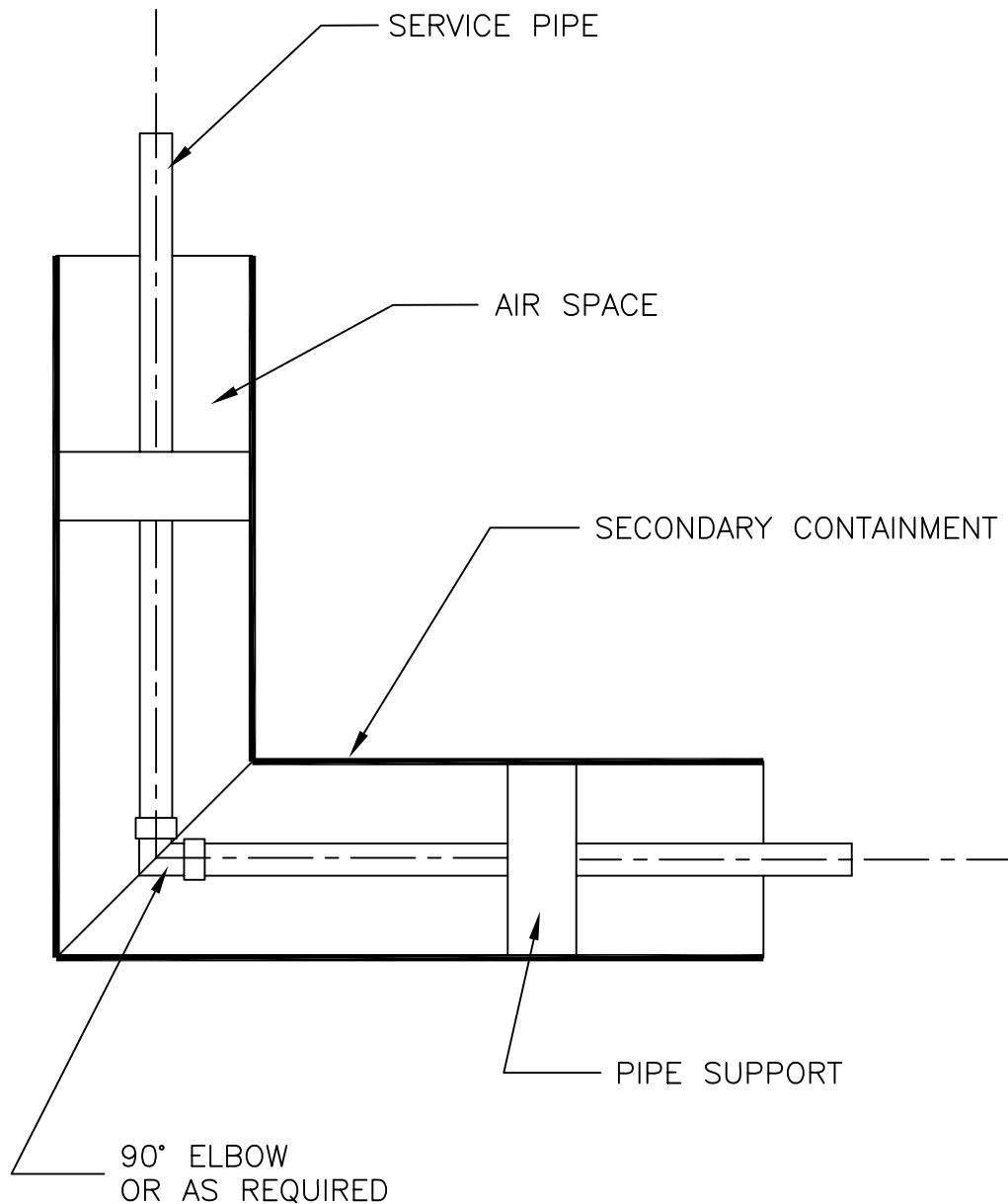
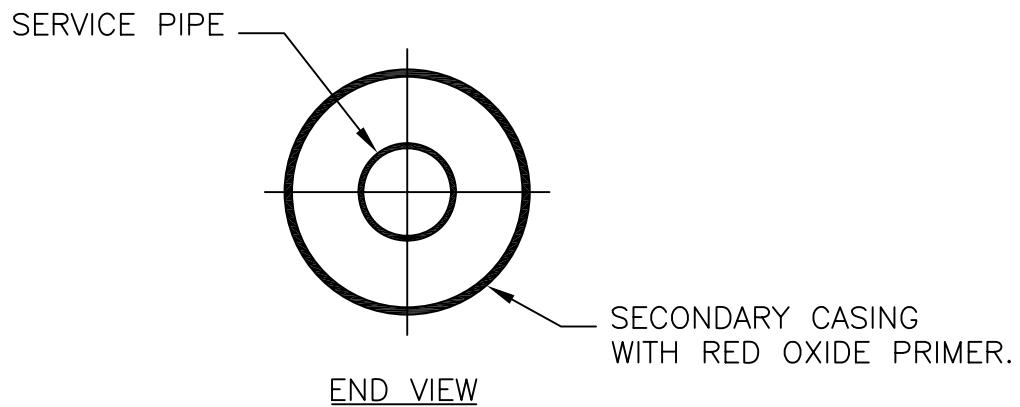


STRAIGHT LENGTH DETAIL FOR BELOW GRADE APPLICATIONS

**DOUBLE-CON**

Date: 03/09/06	Dwg. No.: DC-1B
Rev.:	

**TRICON FORCE**  
PIPING SOLUTIONS  
tfpiping.com

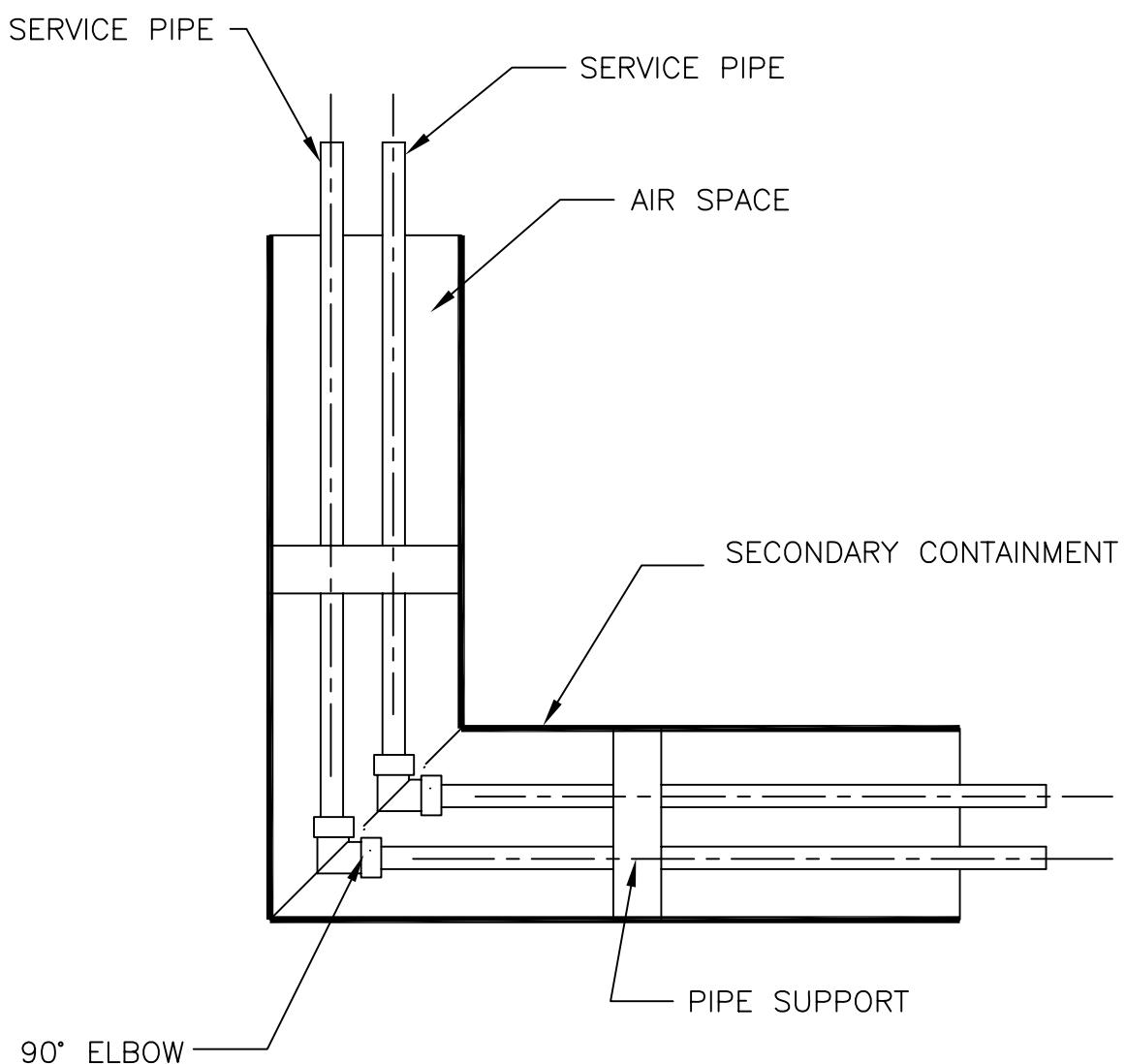
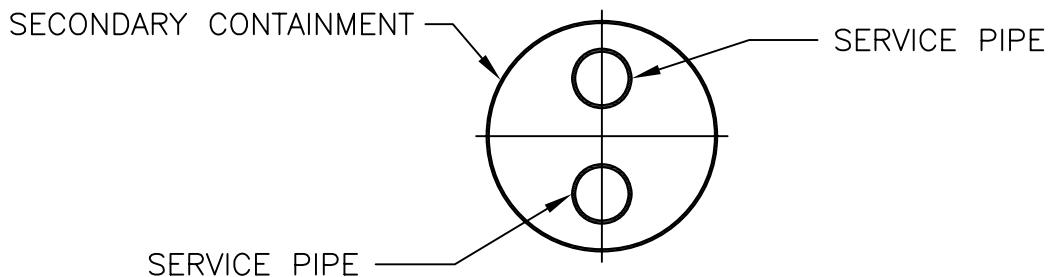


90° ELBOW DETAIL

**DOUBLE-CON**

Date: 03/09/06	Dwg. No.: DC-2A
Rev.:	

**TRICON FORCE**  
PIPING SOLUTIONS

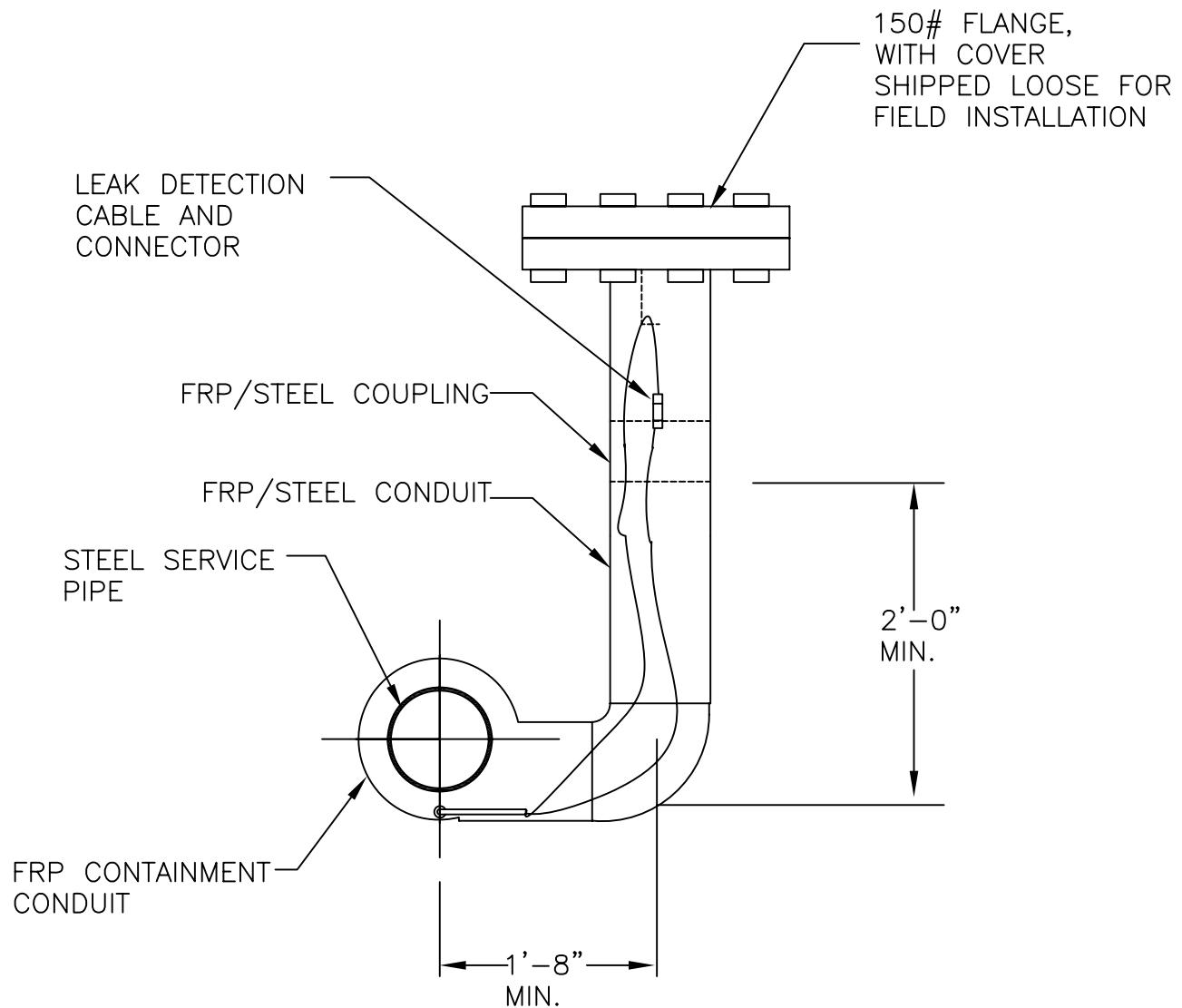


90° ELBOW DETAIL

**DOUBLE-CON**

Date: 03/09/06	Dwg. No.: DC-2B
Rev.:	

**TRICON FORCE**  
PIPING SOLUTIONS



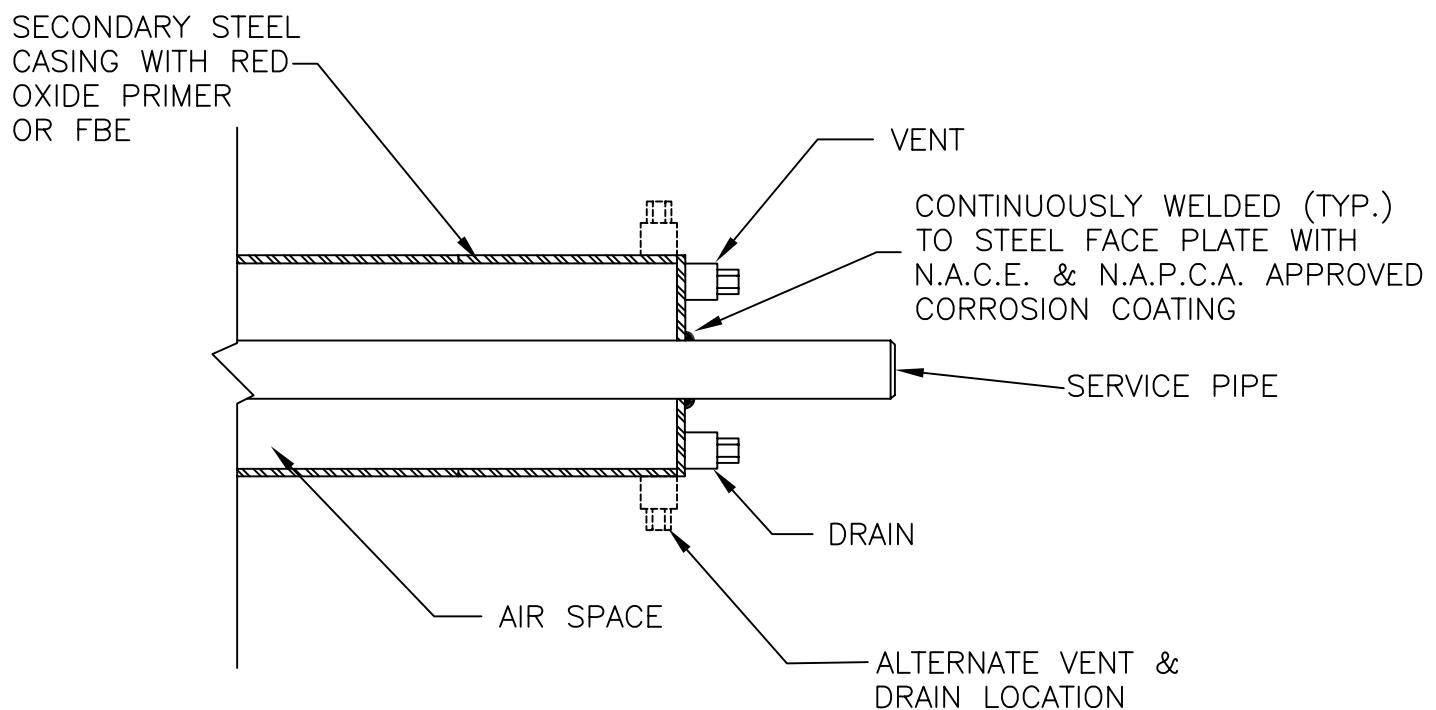
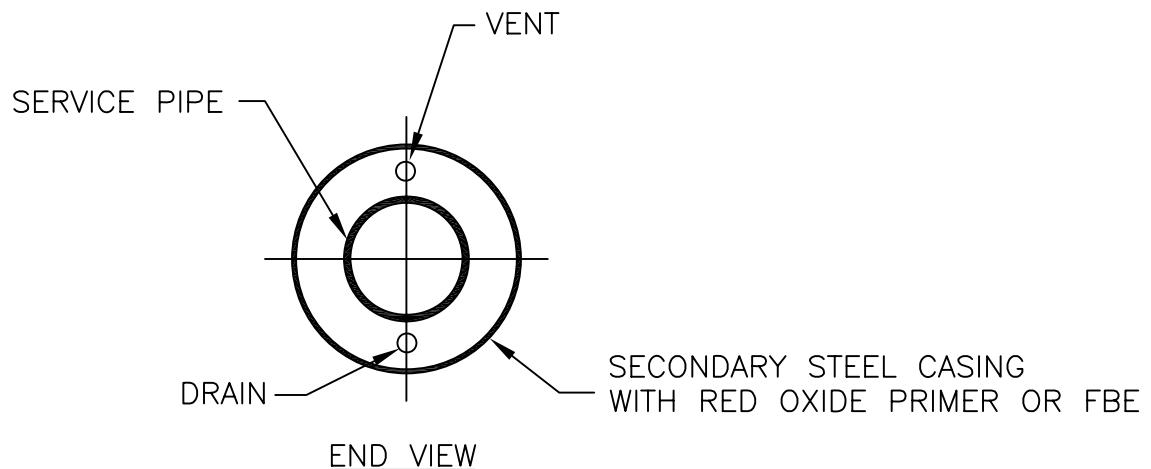
PULL PORT TEE DETAIL

**DOUBLE-CON**

Date:03/09/06 Dwg. No.: DC-3

Rev.:

**TRICON FORCE**  
PIPING SOLUTIONS  
tfpiping.com

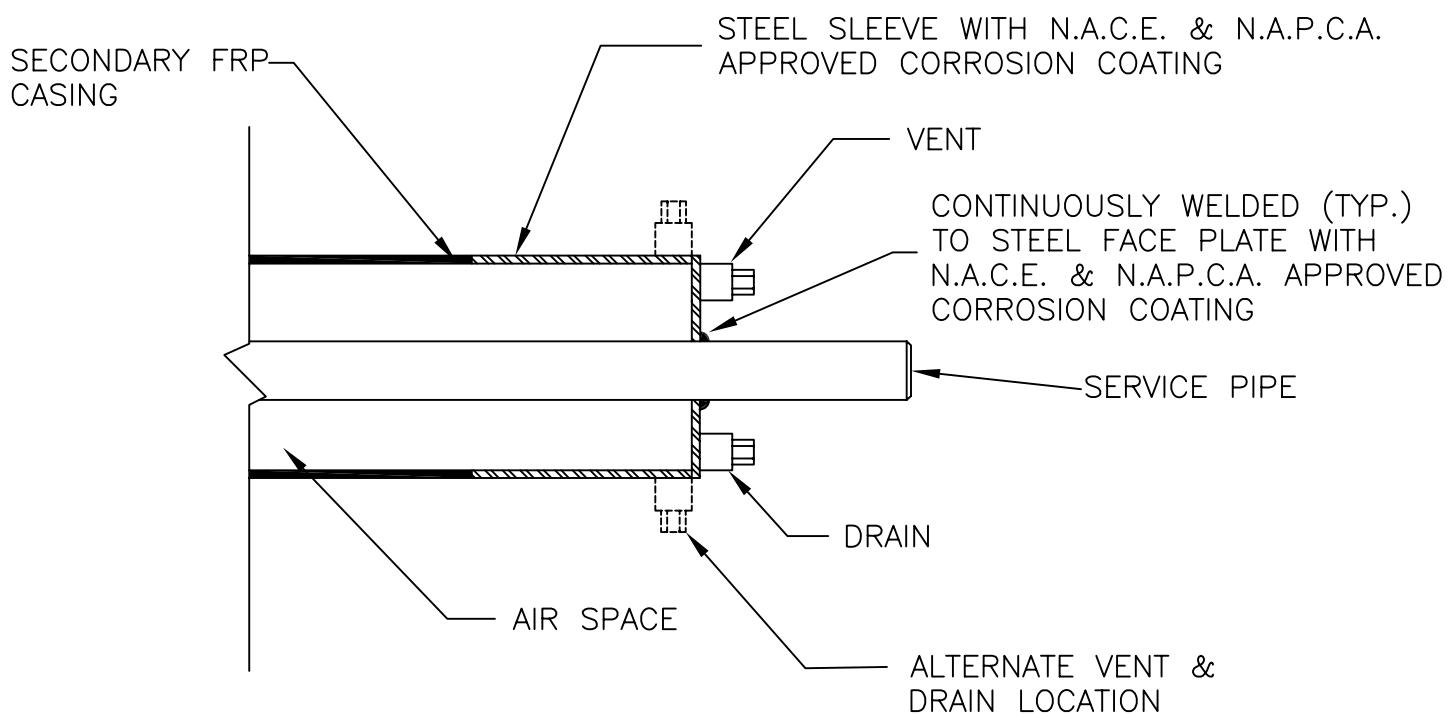
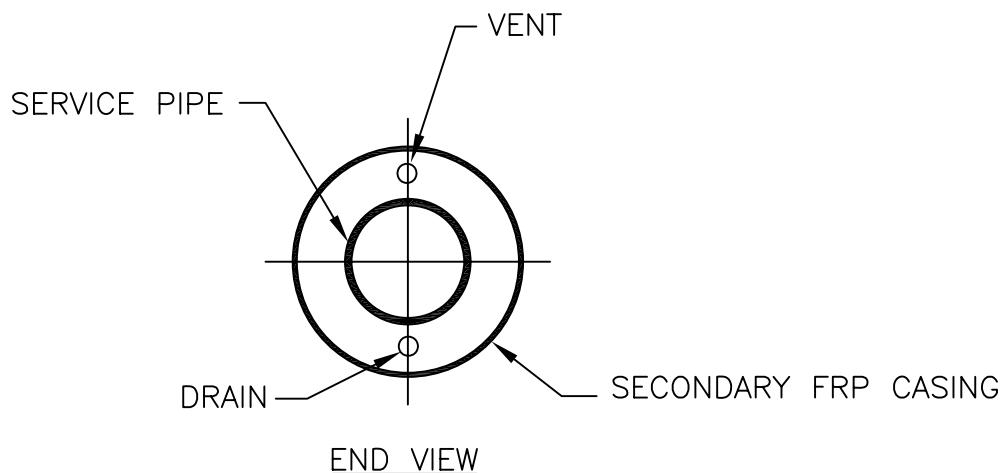


END SEAL DETAIL FOR ABOVE GRADE APPLICATIONS

**DOUBLE-CON**

Date: 03/09/06	Dwg. No.: DC-4A
Rev.:	

**TRICON FORCE**  
PIPING SOLUTIONS  
tfpiping.com



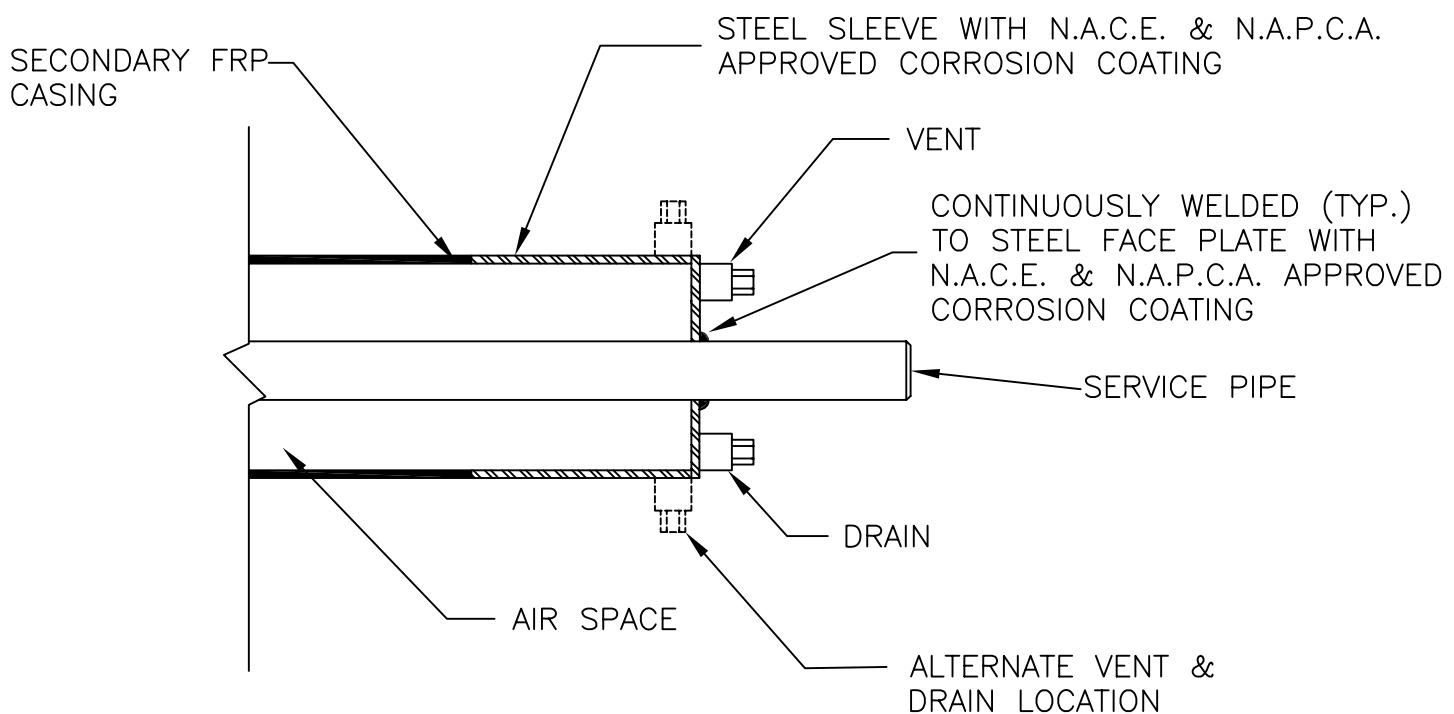
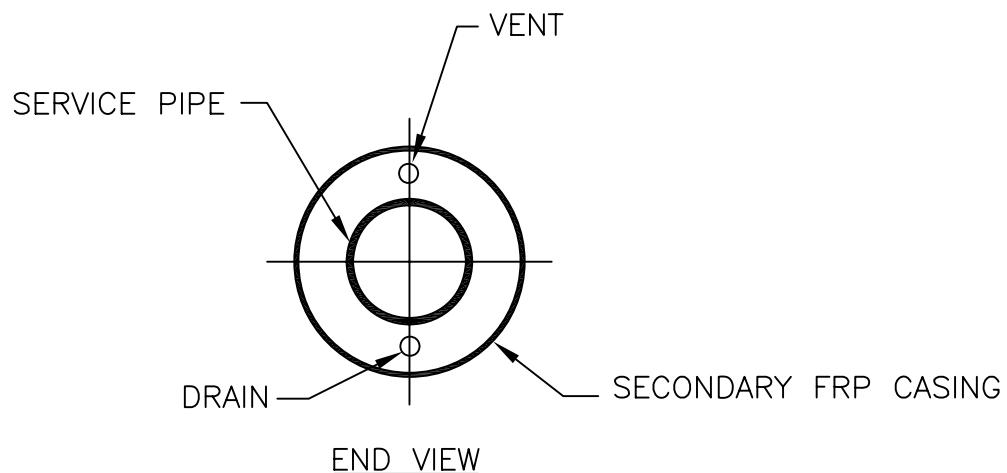
END SEAL DETAIL FOR BELOW GRADE APPLICATIONS

**DOUBLE-CON**

Date: 03/09/06 Dwg. No.: DC-4B

Rev.:

**TRICON FORCE**  
PIPING SOLUTIONS  
tfpiping.com



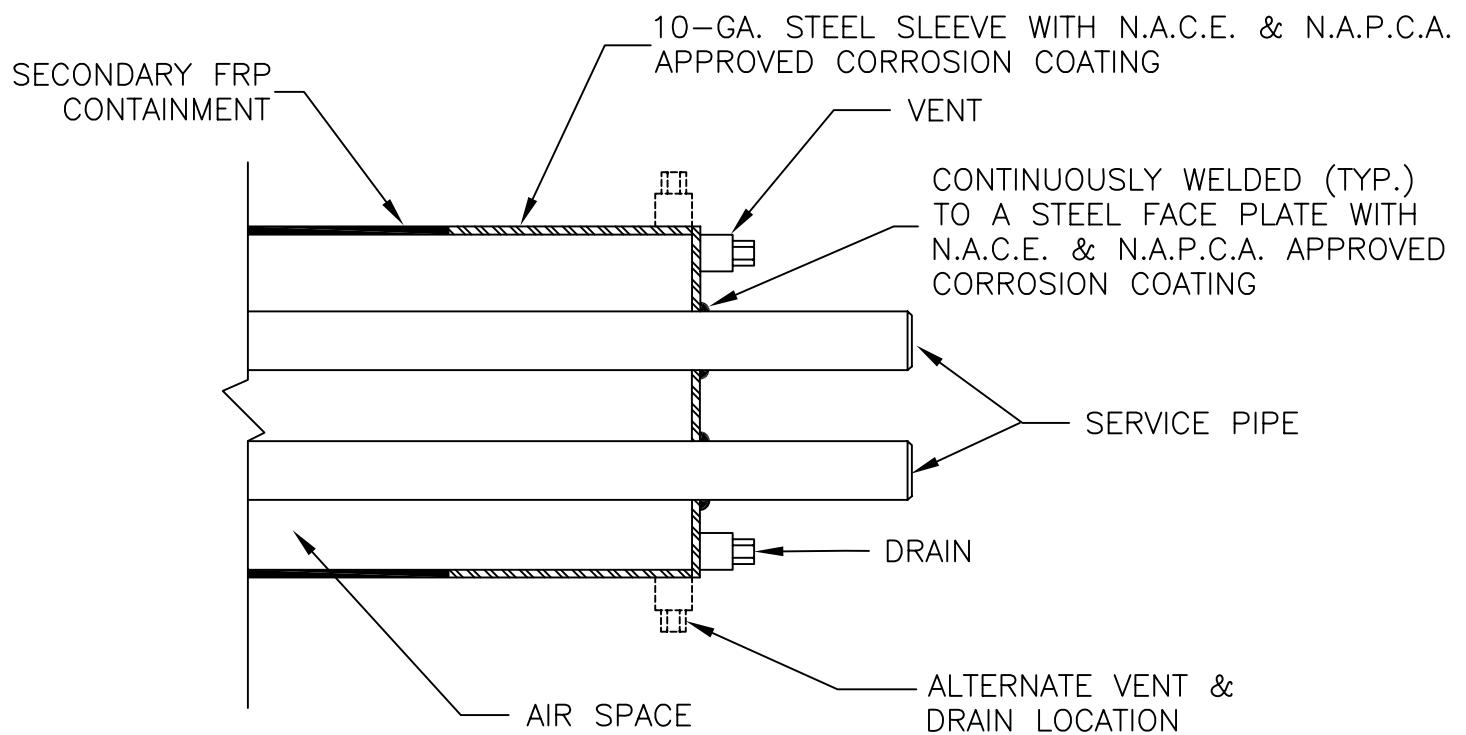
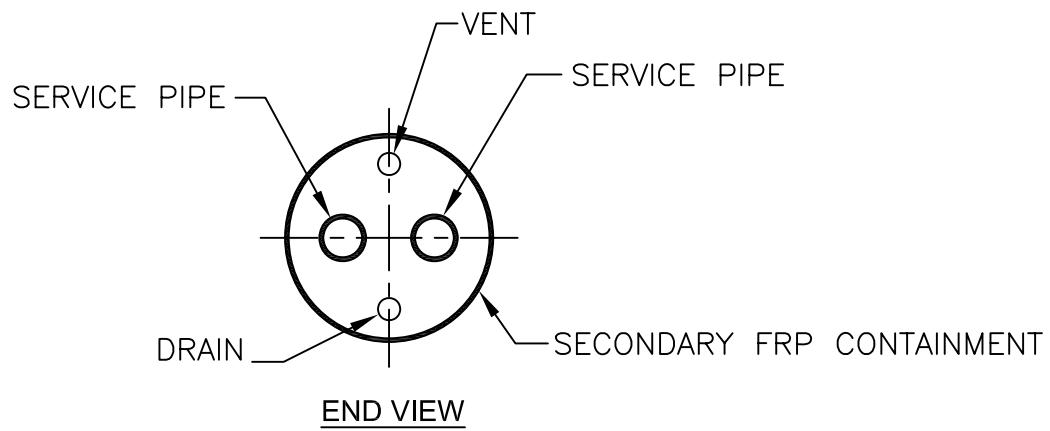
END SEAL DETAIL FOR BELOW GRADE APPLICATIONS

**DOUBLE-CON**

Date: 03/09/06 Dwg. No.: DC-4B

Rev.:

**TRICON FORCE**  
PIPING SOLUTIONS  
tfpiping.com



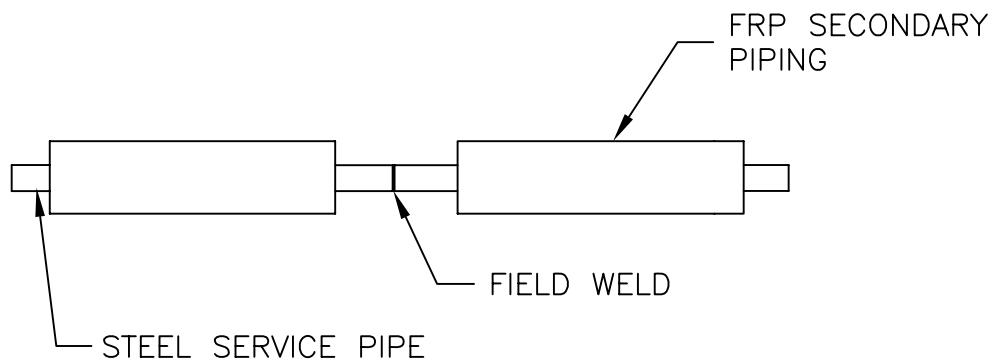
END SEAL DETAIL FOR BELOW GRADE APPLICATIONS

**DOUBLE-CON**

Date: 03/09/06	Dwg. No.: DC-4D
Rev.:	

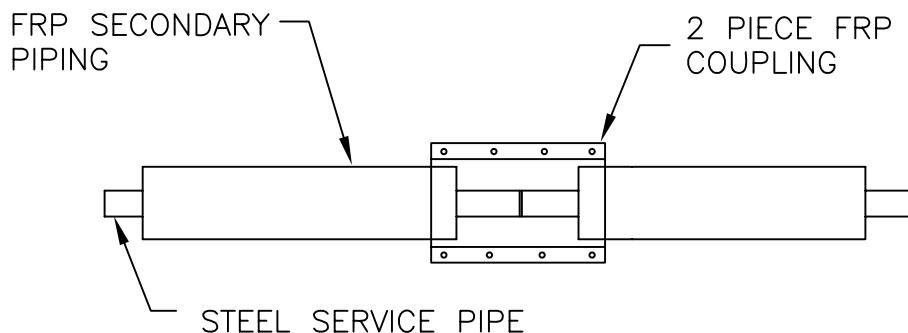
**TRICON FORCE**  
PIPING SOLUTIONS  
[tfpiping.com](http://tfpiping.com)

PHASE 1

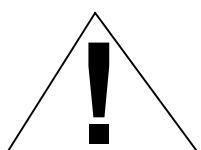


WELD SERVICE PIPE AND TEST AS REQUIRED.

PHASE 2



PLACE 2-PC FRP COUPLING OVER JOINT FOR DRY FIT.  
LIGHTLY SAND HIGH SPOTS IF REQUIRED.  
REMOVE FRP COUPLING AND APPLY ADHESIVE (PER INSTRUCTIONS)  
TO COUPLING AND REAPPLY TO JOINT AND TIGHTEN BOLTS.



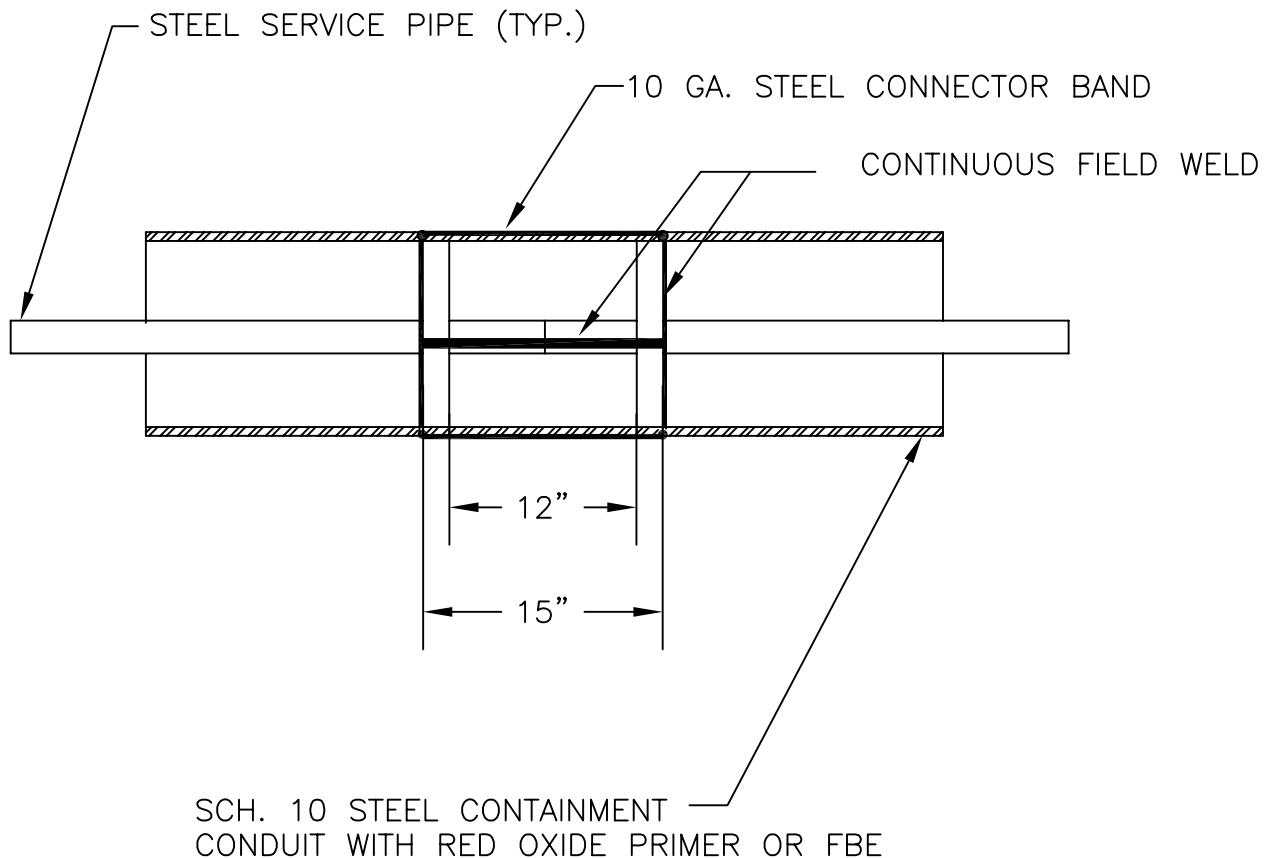
TRICON PIPING RECOMMENDS THAT YOU  
**DO NOT** TEST ANY INSTALLATION WITH AIR  
OR GAS DUE TO SAFETY HAZARDS

BELLOW GRADE FIELD JOINT DETAIL  
WITH FRP SECONDARY PIPING

**DOUBLE-CON**

Date: 03/09/06	Dwg. No.: DC-5
Rev.:	

**TRICON FORCE**  
PIPING SOLUTIONS  
[tfpiping.com](http://tfpiping.com)



## INSTALLATION PROCEDURE

1. SLIDE 10 GA. SLEEVE OVER CONTAINMENT CASING PRIOR TO WELDING SERVICE PIPE.
2. WELD SERVICE PIPE AND TEST AS REQUIRED.
3. APPLY 10 GA. STEEL CONNECTOR BAND OVER THE SECONDARY PIPE.
4. WELD CONNECTOR BAND HORIZONTALLY AND CIRCUMFERENTIALLY.  
PAINT BAND WITH PRIMER.

ABOVE GRADE FIELD JOINT DETAIL

**DOUBLE-CON**

Date: 03/09/06	Dwg. No.: DC-6
Rev.:	

**TRICON FORCE**  
PIPING SOLUTIONS  
tfpiping.com