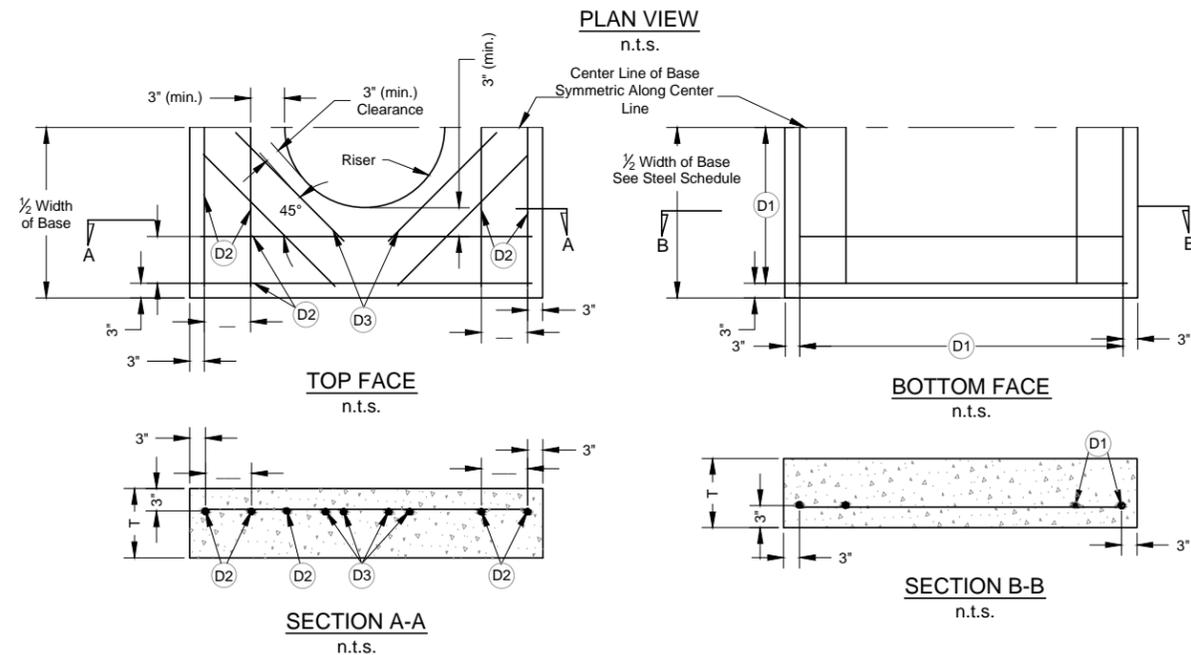
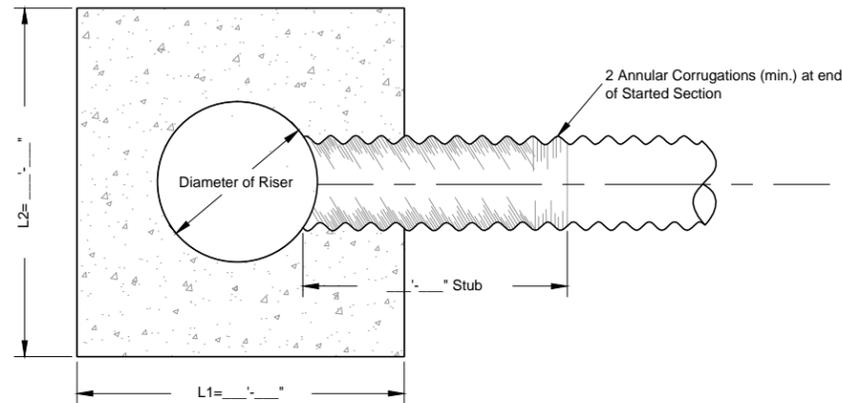
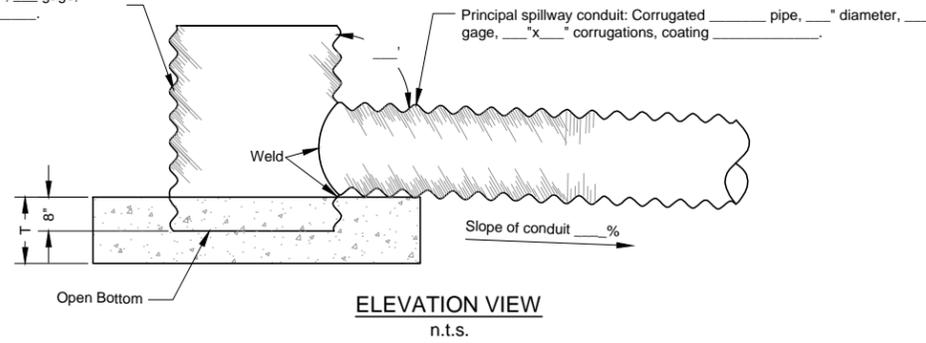


Riser: Corrugated _____ riser, _____" diam., _____ gage, _____" x _____" corrugations, coating _____.



DETAILS-REINFORCING STEEL
(See Schedule For Quantities)
n.t.s.

STEEL SCHEDULE AND CONCRETE QUANTITY

All Steel, Size 4, Straight Bars

Riser Diam. Ft.	Base Dimesions	Concrete Cu. Yds.
	L1= __Ft.	
	L2= __Ft.	

No.	Qty.	Length Feet	Total Length Feet	Spacing Inches	Wt. Lbs
D1					
D2					
D3					
Total					

RISER BASE CALCULATIONS

B- Buoyant Force of Riser, ___Lbs./Ft.
W- Weight of Riser, ___Lbs./Ft.
h- Height of Riser, ___ft.
 γ - Sub.- Submerged Weight of Soil, 2* ___Lbs./Cu. Ft.
T- Thickness of Concrete Base, ___Ft. (min. 1 Ft.)
H- Height of Soil Above Riser Base, ___Ft.

D- Riser Diam. ___Ft.
SF- Safety Factor, ___
Use 1.2 On Bases with out earth Load.
Use 1.5 On bases with earth Load
L1- Dimension of Base ___Ft.
L2- Dimension of Base ___Ft.

Without Earth Load
Required area of Footing= $\frac{(B-W)(h)(SF)}{(87.6)(T)} = \text{___ Ft}^2 \leq L1 \times L2$

With Earth Load
 $(0.5 \gamma \text{ Sub.})(\pi D)H + [(L1)(L2) - .25(\pi D^2)](\gamma) + (L1)(L2)(T)(87.6) \geq (B-W)(h)(SF)$
___Lbs. \geq ___Lbs.

2* In Absence of Specific Soils Data. Use the Sub for the Following Soil Types.

SP, SC, SW, SM _____ γ Sub. = 65 Lbs./Ft³
CH, MH _____ γ Sub. = 50 Lbs./Ft³

NOTES

- Corrugated steel pipe and aluminum pipe shall be in conformance with ASTM A742, A760, A761, A762, A849, A875, A885, and A929 for the specified type, class, fabrication of pipe and coating.
- Weld a minimum 4'-0" section of principal spillway conduit into the inlet as indicated for a starter section. This starter section shall have the same grade as the conduit except that when the grade of the conduit is less than 5% (5.0 ft./100 Ft.) a perpendicular connection may be made. Weld starter section to inlet on inside and outside, then cut inside for a smooth connection. After cutting and welding damaged coatings shall be repaired as recommended by the manufacturer. Shop fabrication required. Field welding is prohibited.
- Portland cement concrete (type II recommended) for the inlet base shall have a minimum compressive strength of 4000 psi.
- Where corrugated aluminum or aluminized steel pipe is used, all areas where the pipe is to be in contact with concrete shall be painted with a black bituminous enamel paint.

Date	
Designed	
Drawn	
Checked	
Approved	

Corrugated Metal Riser
Structural Details



File No.
FL-410C1.dwg

Drawing No.

Revisions		
Date	Approved	Title

Sheet 1 of 1

Corrugated Metal Riser Structural Details	
Standard DWG. No.	FL-410C1.dwg
Date	Sheet 1 of 1