

Origination Form

Proposed Revisions to a Standard Plans Index

Originator:	Turley, Joshua	Index Number:	550-013
Date:	4/23/2024	Sheet Number(s):	2
E-mail:	Joshua.Turley@dot.state.fl.us	Index Title:	BRIDGE FENCING ON BARRIER (CURVED TOP)

Summary of the changes:

Sheet 2: Added shim info to the TABLE OF POST ATTACHMENT COMPONENTS

Commentary/Background:

We needed to add some limiting parameters to edges shims so that they get installed correctly.

Other Affected Documents/Offices	Person Contacted	Affected (Yes/No)
Other Standard Plans		No
FDOT Design Manual		No
Standard Specifications		No
Basis of Estimates Manual		No
Approved Product List		No
Construction Office		No
Maintenance Office		No

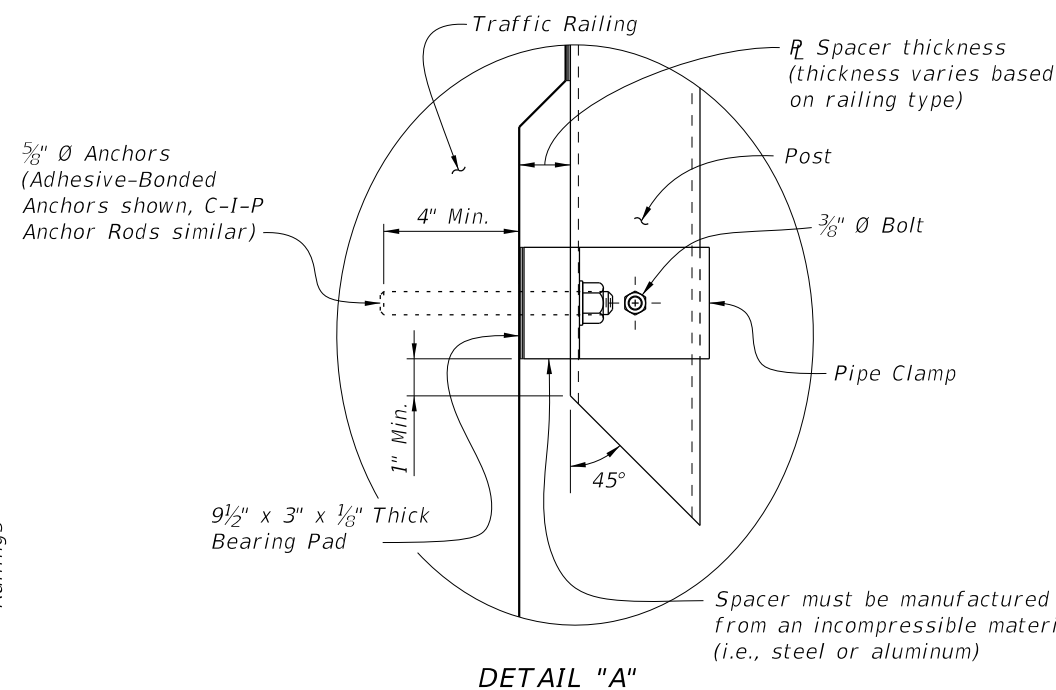
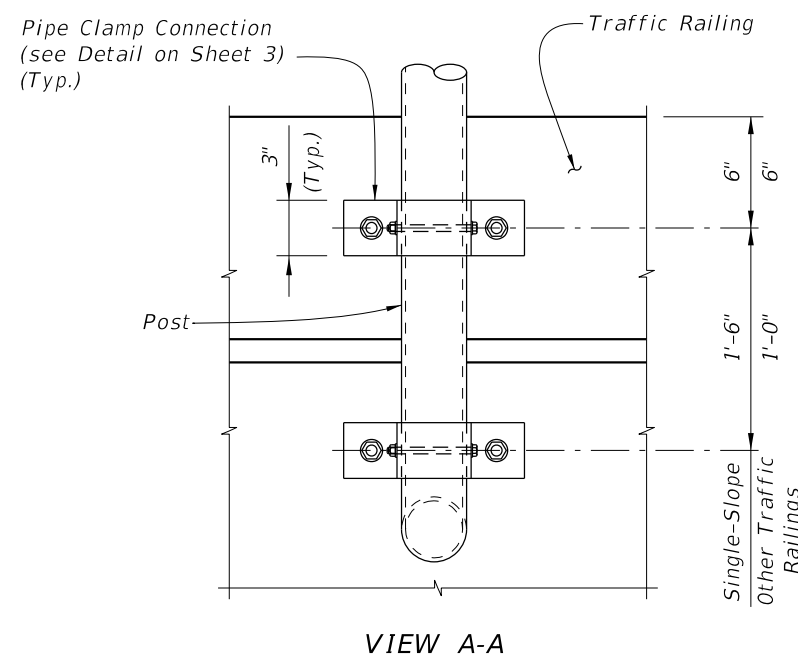
Implementation

["FY-Standard Plans (Next Release)"]

TABLE OF CHAIN LINK FENCE COMPONENTS		
COMPONENT	ASTM DESIGNATION	COMPONENT INFORMATION
Posts	F1083	Galvanized Steel Pipe - 3 1/2" NPS, Schedule 40 Regular Grade
Chain Link Fabric (2" mesh with twisted top and knuckled bottom selvage)	A392	Zinc Coated Steel - 9 gage (coated wire diameter), Class 2 Coating
	A491	Aluminum Coated Steel - 9 gage (coated wire diameter)
	F668	Polyvinyl Chloride (PVC) Coated Steel - 9 gage Class 2b
Tie Wires	F626	Zinc Coated Steel Wire - 9 gage
Brace Bands	F626	12 Gage (Min. thickness) x 3/4" (Min. width) Steel Bands (Beveled or Heavy)
Tension Bars	F626	3/16" (Min. thickness) x 3/4" (Min. width) x 6'-10" (Min. height) Steel Bars
Tension Bands	F626	14 Gage (Min. thickness) x 3/4" (Min. width) Steel Bands
Miscellaneous Fence Components	F626	Zinc Coated Steel ~ (includes post or loop caps, horizontal and brace rail ends, combination rail ends, boulevard clamps and all other miscellaneous fittings & hardware)
Tension Wire	A824 & A817	Type II (Zinc Coated Steel Wire) - 7 gage, Class 4 Coating
		Type I (Aluminum Coated Steel Wire) - 7 gage
Hog Rings	F626	Zinc Coated Steel Wire - 12 gage
Brace Rails	F1083	Galvanized Steel Pipe - 1 1/4" NPS, Schedule 40 Regular Grade

TABLE OF POST ATTACHMENT COMPONENTS		
COMPONENT	ASTM DESIGNATION	COMPONENT INFORMATION
Pipe Clamps	A36 or A709 Grade 36	1/4" Steel R
Base Plates	A36 or A709 Grade 36	3/4" Steel R
Shim Plates	A36 or A709 Grade 36 or B209 Alloy 6061-T6 or B221 Alloy 6063-T5	Plate thicknesses as required; Holes in shim plates will be 3/4" Ø
Spacers	-	Plate thickness varies based on traffic railing type (See Detail "A")
Pipe Clamp Connection	Adhesive Anchor Rods	F1554 Grade 36 Fully threaded Headless Anchor Rods ~ 5/8" Ø x 6" (no spacer) or 5/8" Ø x (6" + spacer thickness)
	C-I-P Anchor Rods	F1554 Grade 36 Hex Head Anchor Rods ~ 5/8" Ø x 6" (no spacer) or 5/8" Ø x (6" + spacer thickness)
Bolts	A307	3/8" Ø x 4 3/4" Hex Head Bolts for Pipe Clamp Connections to Posts
Nuts	A563	Hex Nuts for Pipe Clamp Connections
Washers	F436	Flat Washers for Pipe Clamp Connections
Bearing Pads (Plain Neoprene)	-	In accordance with Specification Section 932 for Ancillary Structures

ADDED: For edge shims match the edge length of the base plate with a min. width of 3/4". Apply adhesive bonding material bed of 1-1/2" (Min.) wide



POST ATTACHMENT NOTES

ANCHOR RODS, NUTS AND WASHERS:

After the nuts have been tightened, distort the Anchor Rod threads to prevent removal of the nuts. Coat distorted threads and exposed trimmed ends of anchors with a galvanizing compound in accordance with Specification Section 562.

COATINGS:

Hot-dip galvanize all Nuts, Washers, Bolts, C-I-P Anchor Rods, Adhesive Anchors and Fence Framework (Posts, Internal Sleeves, Shim Plates, Base Plates, Pipe Clamps and Spacers) in accordance with Specification Section 962. Hot-dip galvanize Fence Framework after fabrication.

ADHESIVE-BONDED ANCHORS AND DOWELS:

Adhesive Bonding Material Systems for Anchors and Dowels will comply with Specification Section 937 and be installed in accordance with Specification Section 416. Cutting of reinforcing steel is permitted for drilled hole installation.

WELDING:

All welding will be in accordance with the American Welding Society Structural Welding Code (Steel) ANSI/AWS D1.1 (current edition). Weld metal will be E60XX or E70XX. Nondestructive testing of welds is not required.

CROSS REFERENCE:

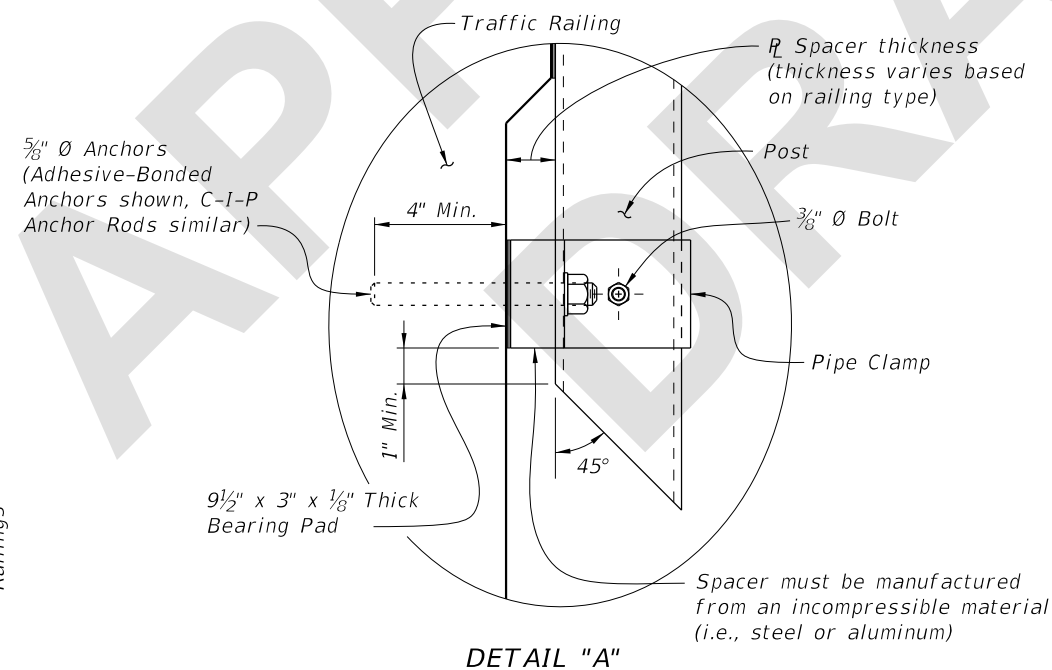
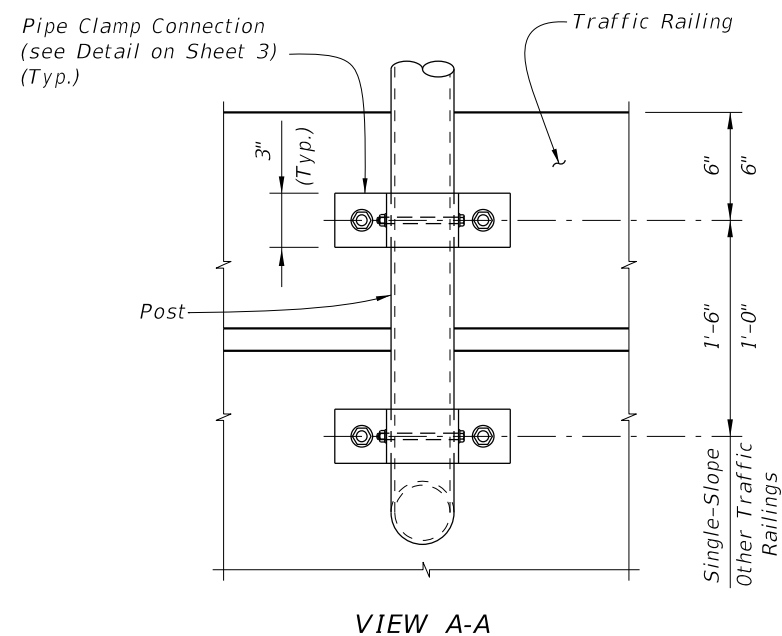
For location of View A-A and Detail "A" see Sheet 1.

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LAST REVISION 11/01/23 11/01/24	DESCRIPTION:	FDOT FY 2024-25 STANDARD PLANS	BRIDGE FENCING ON BARRIER (CURVED TOP)	INDEX 550-013	SHEET 2 of 3
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TABLE OF CHAIN LINK FENCE COMPONENTS		
COMPONENT	ASTM DESIGNATION	COMPONENT INFORMATION
Posts	F1083	Galvanized Steel Pipe - 3½" NPS, Schedule 40 Regular Grade
Chain Link Fabric (2" mesh with twisted top and knuckled bottom selvage)	A392	Zinc Coated Steel - 9 gage (coated wire diameter), Class 2 Coating
	A491	Aluminum Coated Steel - 9 gage (coated wire diameter)
	F668	Polyvinyl Chloride (PVC) Coated Steel - 9 gage Class 2b
Tie Wires	F626	Zinc Coated Steel Wire - 9 gage
Brace Bands	F626	12 Gage (Min. thickness) x ¾" (Min. width) Steel Bands (Beveled or Heavy)
Tension Bars	F626	¾" (Min. thickness) x ¾" (Min. width) x 6'-10" (Min. height) Steel Bars
Tension Bands	F626	14 Gage (Min. thickness) x ¾" (Min. width) Steel Bands
Miscellaneous Fence Components	F626	Zinc Coated Steel ~ (includes post or loop caps, horizontal and brace rail ends, combination rail ends, boulevard clamps and all other miscellaneous fittings & hardware)
Tension Wire	A824 & A817	Type II (Zinc Coated Steel Wire) - 7 gage, Class 4 Coating
		Type I (Aluminum Coated Steel Wire) - 7 gage
Hog Rings	F626	Zinc Coated Steel Wire - 12 gage
Brace Rails	F1083	Galvanized Steel Pipe - 1¼" NPS, Schedule 40 Regular Grade

TABLE OF POST ATTACHMENT COMPONENTS		
COMPONENT	ASTM DESIGNATION	COMPONENT INFORMATION
Pipe Clamps	A36 or A709 Grade 36	¼" Steel R
Base Plates	A36 or A709 Grade 36	¾" Steel R
Shim Plates	A36 or A709 Grade 36 or B209 Alloy 6061-T6 or B221 Alloy 6063-T5	Plate thicknesses as required. Holes in shim plates will be ¾" Ø. For edge shims match the edge length of the base plate with a min. width of ¾". Apply adhesive bonding material bed of 1-1/2" (Min.) wide
Spacers	-	Plate thickness varies based on traffic railing type (See Detail "A")
Pipe Clamp Connection	Adhesive Anchor Rods	F1554 Grade 36 Fully threaded Headless Anchor Rods ~ 5/8" Ø x 6" (no spacer) or 5/8" Ø x (6" + spacer thickness)
	C-I-P Anchor Rods	F1554 Grade 36 Hex Head Anchor Rods ~ 5/8" Ø x 6" (no spacer) or 5/8" Ø x (6" + spacer thickness)
Bolts	A307	¾" Ø x 4¾" Hex Head Bolts for Pipe Clamp Connections to Posts
Nuts	A563	Hex Nuts for Pipe Clamp Connections
Washers	F436	Flat Washers for Pipe Clamp Connections
Bearing Pads (Plain Neoprene)	-	In accordance with Specification Section 932 for Ancillary Structures



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COATINGS:

Hot-dip galvanize all Nuts, Washers, Bolts, C-I-P Anchor Rods, Adhesive Anchors and Fence Framework (Posts, Internal Sleeves, Shim Plates, Base Plates, Pipe Clamps and Spacers) in accordance with Specification Section 962. Hot-dip galvanize Fence Framework after fabrication.

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WELDING:

All welding will be in accordance with the American Welding Society Structural Welding Code (Steel) ANSI/AWS D1.1 (current edition). Weld metal will be E60XX or E70XX. Nondestructive testing of welds is not required.

CROSS REFERENCE:

For location of View A-A and Detail "A" see Sheet 1.

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LAST REVISION 11/01/24	DESCRIPTION:	FDOT FY 2025-26 STANDARD PLANS	BRIDGE FENCING ON BARRIER (CURVED TOP)	INDEX 550-013	SHEET 2 of 3
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