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## ORIGINATION FORM

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### Proposed Revisions to a Standard Plans Index

(Please provide all information — Incomplete forms will be returned)

**Contact Information:**

Date: October 21, 2021  
Originator: Joshua Turley  
Phone: (850) 414-4475  
Email: [joshua.turley@dot.state.fl.us](mailto:joshua.turley@dot.state.fl.us)

**Standard Plans:**

Index Number: 550-013  
Sheet Number (s): 2 of 3  
Index Title: BRIDGE FENCING (OVER RAILROAD)

**Summary of the changes:**

Sheet 2: Changed the shim thickness at the base of the pole to indicate that it varies based on railing type.

**Commentary / Background:****Other Affected Offices / Documents:** (Provide name of person contacted)

Yes	No	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other Standard Plans –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	FDOT Design Manual –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Basis of Estimates Manual –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Standard Specifications –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Approved Product List –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Construction –
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Maintenance –

**Origination Package Includes:**

(Email or hand deliver package to Rick Jenkins)

Yes	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Redline Mark-ups
<input type="checkbox"/>	<input type="checkbox"/>	Proposed Standard Plan Instruction (SPI)
<input type="checkbox"/>	<input type="checkbox"/>	Revised SPI
<input type="checkbox"/>	<input type="checkbox"/>	Other Support Documents

**Implementation:**

<input type="checkbox"/>	Design Bulletin (Interim)
<input type="checkbox"/>	DCE Memo
<input checked="" type="checkbox"/>	Program Mgmt. Bulletin
<input checked="" type="checkbox"/>	FY-Standard Plans (Next Release)

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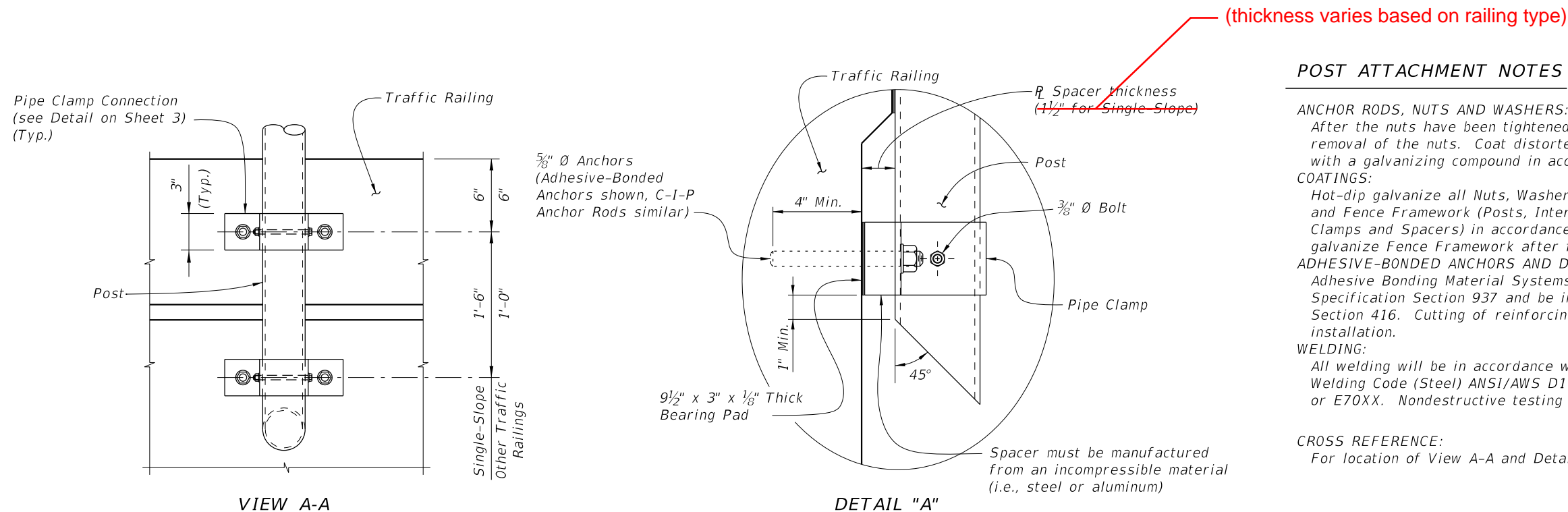
Contact the Roadway Design Office for assistance in completing this form

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Email to: Rick Jenkins [rick.jenkins@dot.state.fl.us](mailto:rick.jenkins@dot.state.fl.us) and Darren Martin [darren.martin@dot.state.fl.us](mailto:darren.martin@dot.state.fl.us)

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



**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.

10/01/2020 9:38:16 AM

LAST REVISION	DESCRIPTION:
11/01/20	11/01/22



FY 2021-22  
STANDARD PLANS

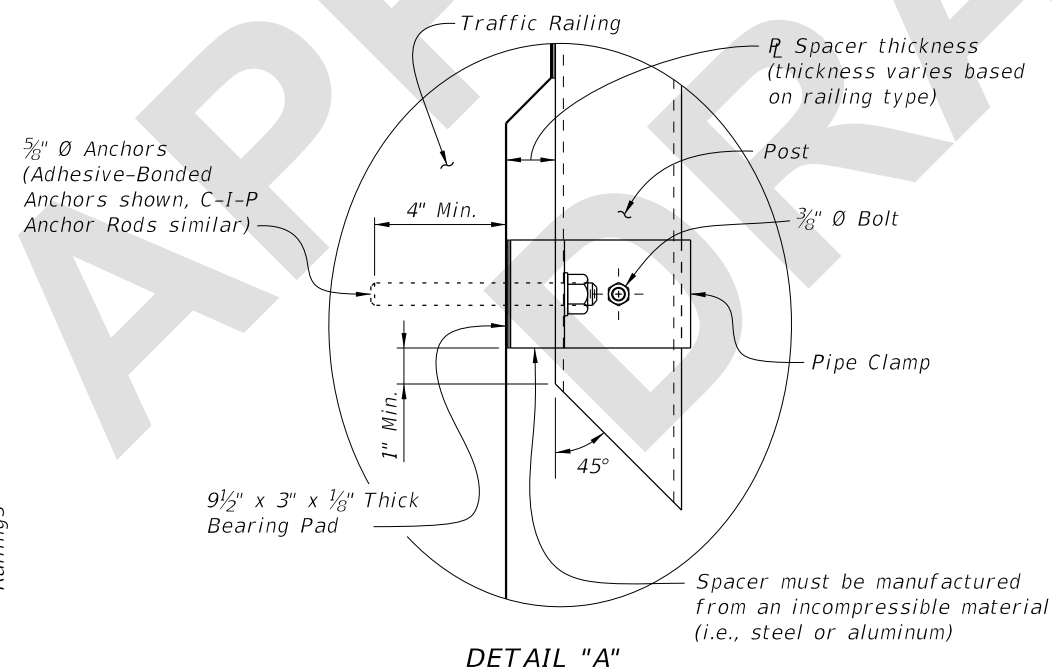
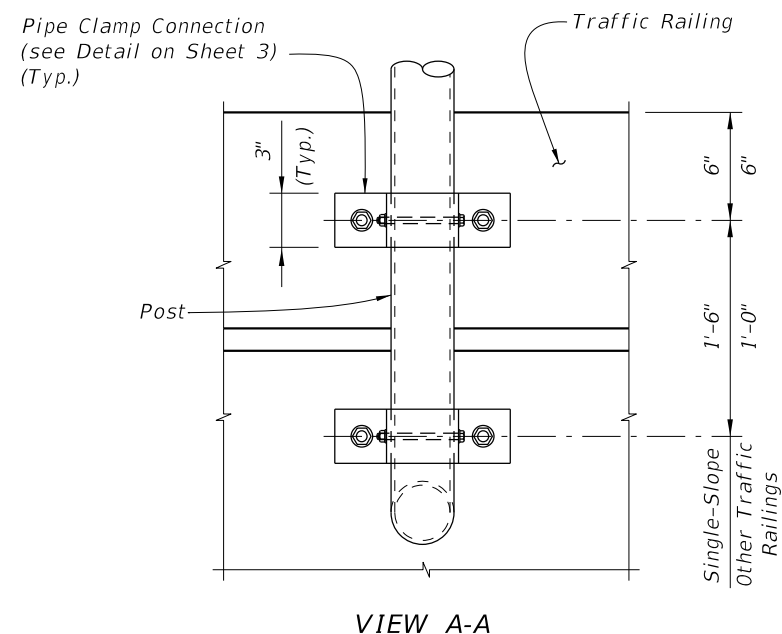
BRIDGE FENCING (OVER RAILROAD)

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550-013

SHEET  
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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 $\bar{r}$
Base Plates	A36 or A709 Grade 36	¾" Steel $\bar{r}$
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" $\bar{O}$
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 ~ ⅝" $\bar{O}$ x 6" (no spacer) or ⅝" $\bar{O}$ x (6" + spacer thickness)
	C-I-P Anchor Rods	F1554 Grade 36 Hex Head Anchor Rods ~ ⅝" $\bar{O}$ x 6" (no spacer) or ⅝" $\bar{O}$ x (6" + spacer thickness)
Bolts	A307	⅜" $\bar{O}$ x 4¾" Hex Head Bolts for Pipe Clamp Connections to Posts
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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.

7/27/16 AM  
7/22/2022

LAST REVISION 11/01/22	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	BRIDGE FENCING (OVER RAILROAD)	INDEX 550-013	SHEET 2 of 3
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