

REVISION 07/01/13

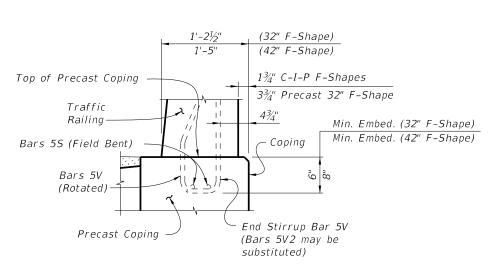
FDOT 2014 **DESIGN STANDARDS**

WALL COPING WITH TRAFFIC RAILING/JUNCTION

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SLAB

∠ DESCRIPTION:

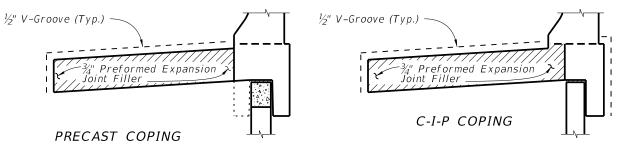


PARTIAL END VIEW OF TRAFFIC RAILING END TRANSITION FOR GUARDRAIL ATTACHMENT (Showing Bars 5V and Bars 5S) (Precast Coping Shown, C-I-P Coping Similar)

NOTE: See Index No. 420 and Index No. 425, Detail "A" for details.

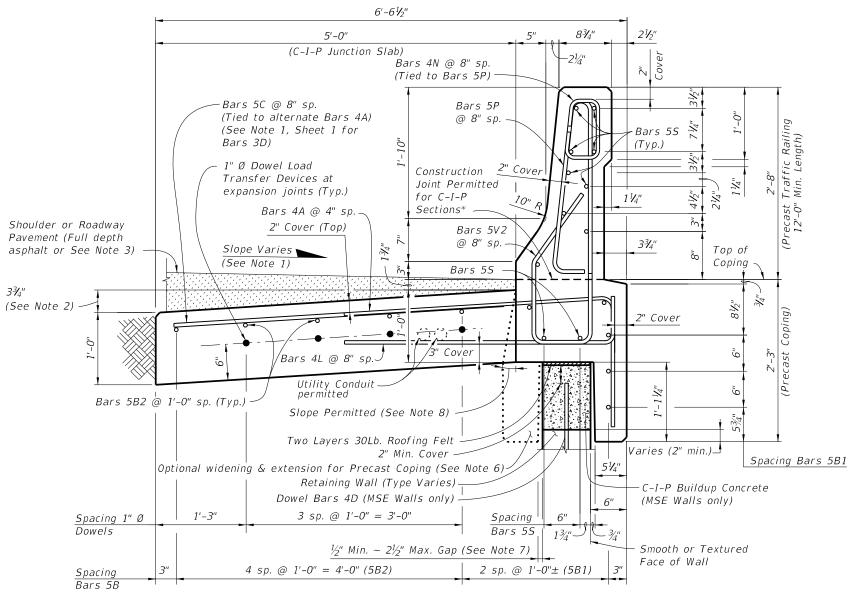
ESTIMATED QUANTITIES FOR PRECAST COPING		
ITEM	UNIT	QUANTITY
Concrete (Precast Coping Only)	CY/LF	0.083
Concrete (Precast Barrier & Coping)	CY/LF	0.169
Concrete (C-I-P Junction Slab)	CY/LF	0.185
Reinforcing Steel (Precast Coping & Traffic Railing)	LB/LF	52.67
Reinforcing Steel (C-I-P Junction Slab) (Typ.)	LB/LF	12.52
Additional Reinf. @ Expansion Joints (Dowels)	LB	21.36

(The above concrete quantities are based on a max. superelevation of 6.25% and a 32" F-Shape Traffic Railing.



DETAIL "A"

(Showing Locations of $\frac{1}{2}$ " V-Grooves and $\frac{3}{4}$ " Preformed Expansion Joint Filler)



TYPICAL SECTION THRU PRECAST* 32" F-SHAPE TRAFFIC RAILING AND COPING WITH C-I-P JUNCTION SLAB

* C-I-P Traffic Railing and Coping Sections using precast dimensions and reinforcement are permitted at End Sections, Drainage Inlets and Light Pole Pedestals if slip forming is not used.

NOTES:

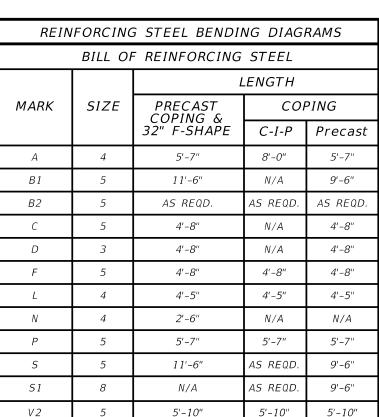
- 1. Match Cross Slope of Travel Lane or Shoulder.
- 2. The 3¾" dimension corresponds to a maximum superelevation of 6.25%. For steeper superelevations increase this dimension to match roadway superelevation.
- 3. For Rigid Pavement (Concrete), Junction Slab may be thickened to match finish grade.
- 4. Minimum length of Junction Slab between expansion joints is 30'-0".
- 5. At the Contractor's option, mechanical couplers may be used to splice reinforcing. Complete details, including reinforcement lengths are required in the Shop Drawings. Provide mechanical couplers in accordance with Specification Section 415. Mechanical couplers shall develop 125% of the bar yield strength.
- 6. Contractor to maintain stability of precast coping/traffic railing prior to junction slab completion. In the Shop Drawings, show reinforcement for optional extension required for stability, shipping and handling. Maintain 2" minimum concrete cover.
- 7. When the air gap between the precast coping extension and retaining wall exceeds $2\frac{1}{2}$, fill gap with full depth Expanded Polystyrene to provide a maximum $2\frac{1}{2}$ air gap.
- 8. Angle varies ~ 0° min., 20° max.

F-SHAPE TRAFFIC RAILINGS

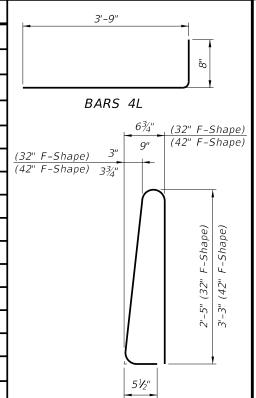
FDOT 2014 DESIGN STANDARDS

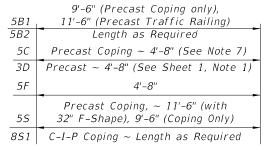
WALL COPING WITH TRAFFIC RAILING/JUNCTION SLAB

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2'-0"

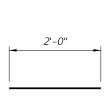




Smooth

Bar

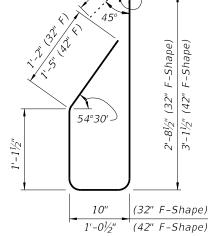
1" Ø Dowel



1" Ø DOWEL

2'-0"

2'-0"

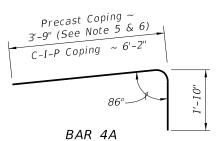


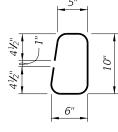
STIRRUP BAR 5P

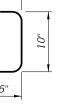
Contractor's

option







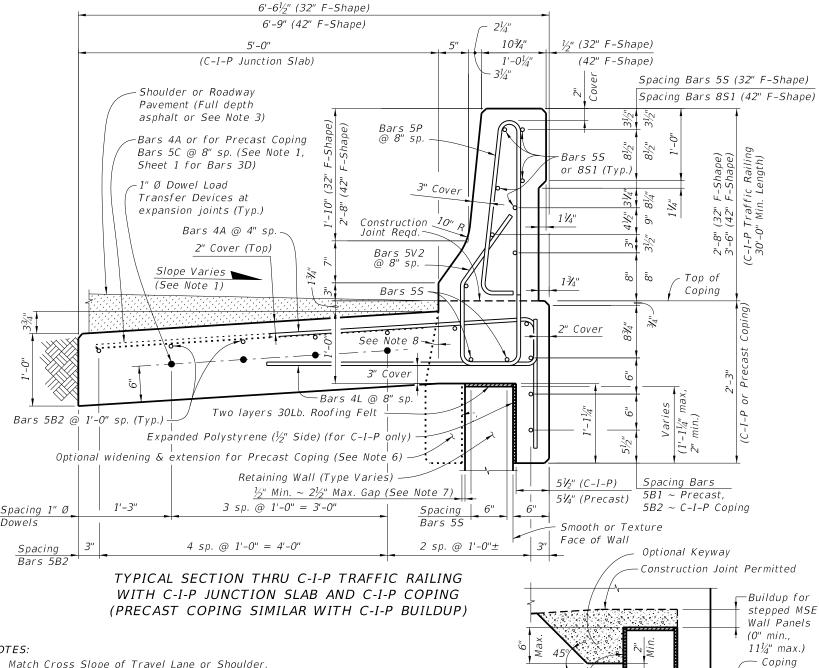


STIRRUP BAR 4N

STIRRUP BAR 5V2

REINFORCING STEEL NOTES:

- All bar dimensions in the bending diagrams are out to out.
- All reinforcing steel at expansion and open joints will have a 2" minimum cover.
- 3. Lap splices for Bars 5B & 5S will be a minimum of 2'-0".
- 4. For Precast Copings only, lap splice Bars 4A with Bars 5C. Lap splices will be a minimum of 2'-0".
- 5. The Contractor may use either full length Bars 4A or lap splice with Bars 5C at alternate Bars 4A for C-I-P Copinas.
- Dimension shown is for lap splice option. For mechanical coupler option, this dimension is 1'-4\/'' (32" F-Shape) or 1'-7" (42" F-Shape).
- Dimension shown is for lap splice option. For mechanical coupler option, this dimension is 4'-8".
- The Contractor may use Welded Wire Reinforcement (WWR) when approved by the Engineer. WWR must consist of deformed wire meeting the requirements of Specification Section 931.
- 9. Contractor may use a single #5 stirrup in lieu of two bars for 5P and 5V2.



Expanded

Polystyrene (1/5")

NOTES:

- 1. Match Cross Slope of Travel Lane or Shoulder.
- 2. The $3\frac{3}{4}$ " dimension corresponds to a maximum superelevation of 6.25% For steeper superelevations increase this dimension to match roadway superelevation.
- 3. For Rigid Pavement (Concrete), Junction Slab may be thickened to match finish grade.
- 4. Minimum length of Junction Slab between expansion joints is 30'-0" for 32" F-Shape or 60'-0" for 42" F-Shape.
- 5. See Index No. 420 & 425 for additional Traffic Railing Details.
- 6. Contractor to maintain stability of precast coping prior to junction slab completion. In the Shop Drawings, show reinforcement for optional extension required for stability, shipping and handling. Maintain 2" minimum concrete cover.
- 7. When the air gap between the precast coping extension and retaining wall exceeds $2\frac{1}{2}$, fill gap with full depth Expanded Polystyrene to provide a maximum $2\frac{1}{2}$ " air gap.
- 8. Angle varies ~ 0° min., 20° max.

BUILDUP FOR STEPPED MSE WALL PANELS AND C-I-P COPING

ESTIMATED QUANTITIES FOR C-I-P COPING			
ITEM	UNIT	QUANTITY	
Concrete (Traffic Railing not Included)	CY/LF	0.268	
Reinforcing Steel (Typical) excluding Bars 5V2 and 5S (Typ.)	LB/LF	30.89	
Additional Reinf. @ Expansion Joint (Dowels)	LB/LF	21.36	

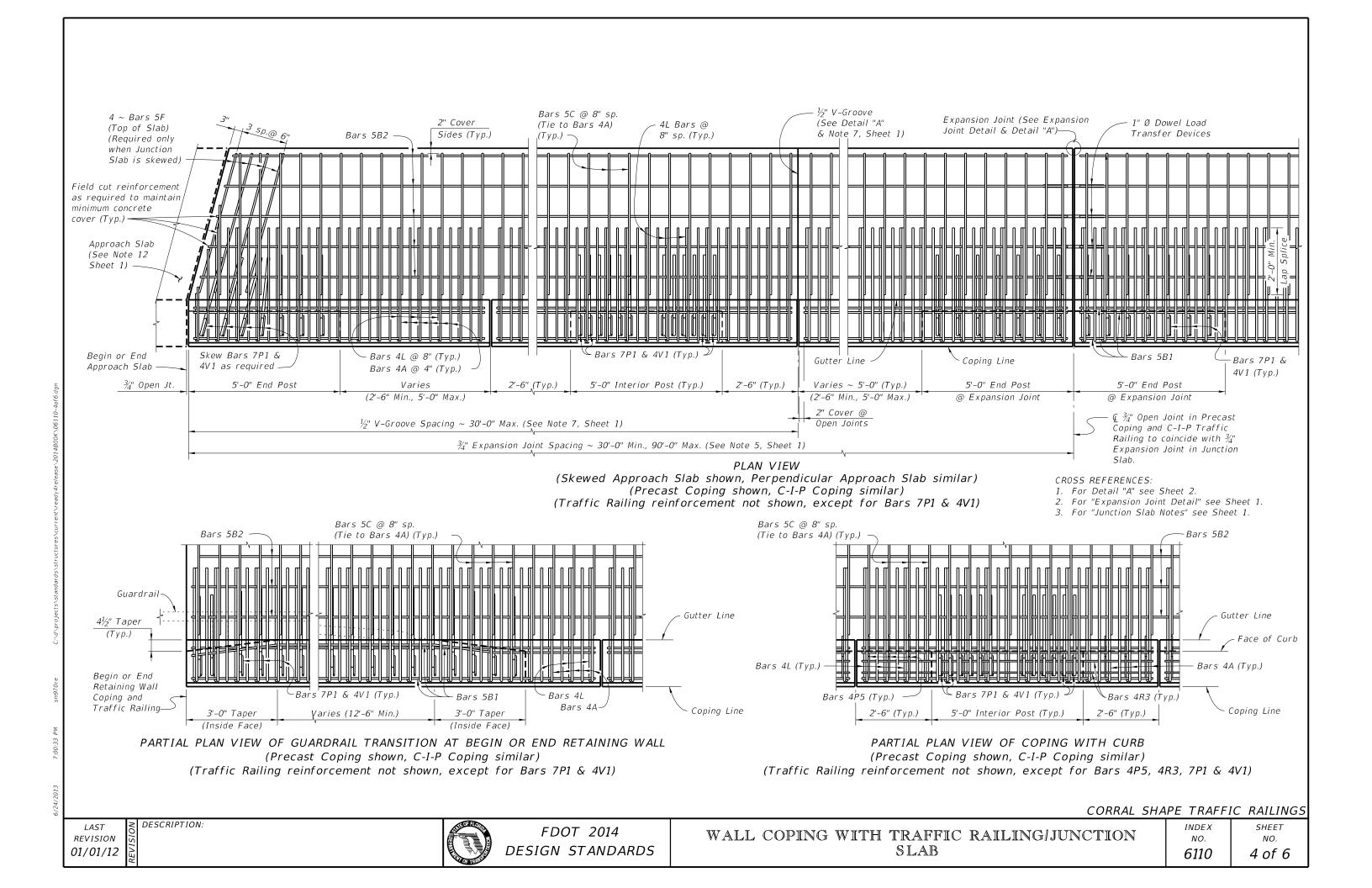
(The above concrete quantities are based on a max. superelevation of 6.25%, beneath a 32" F-Shape Traffic Railing on an MSE Wall).

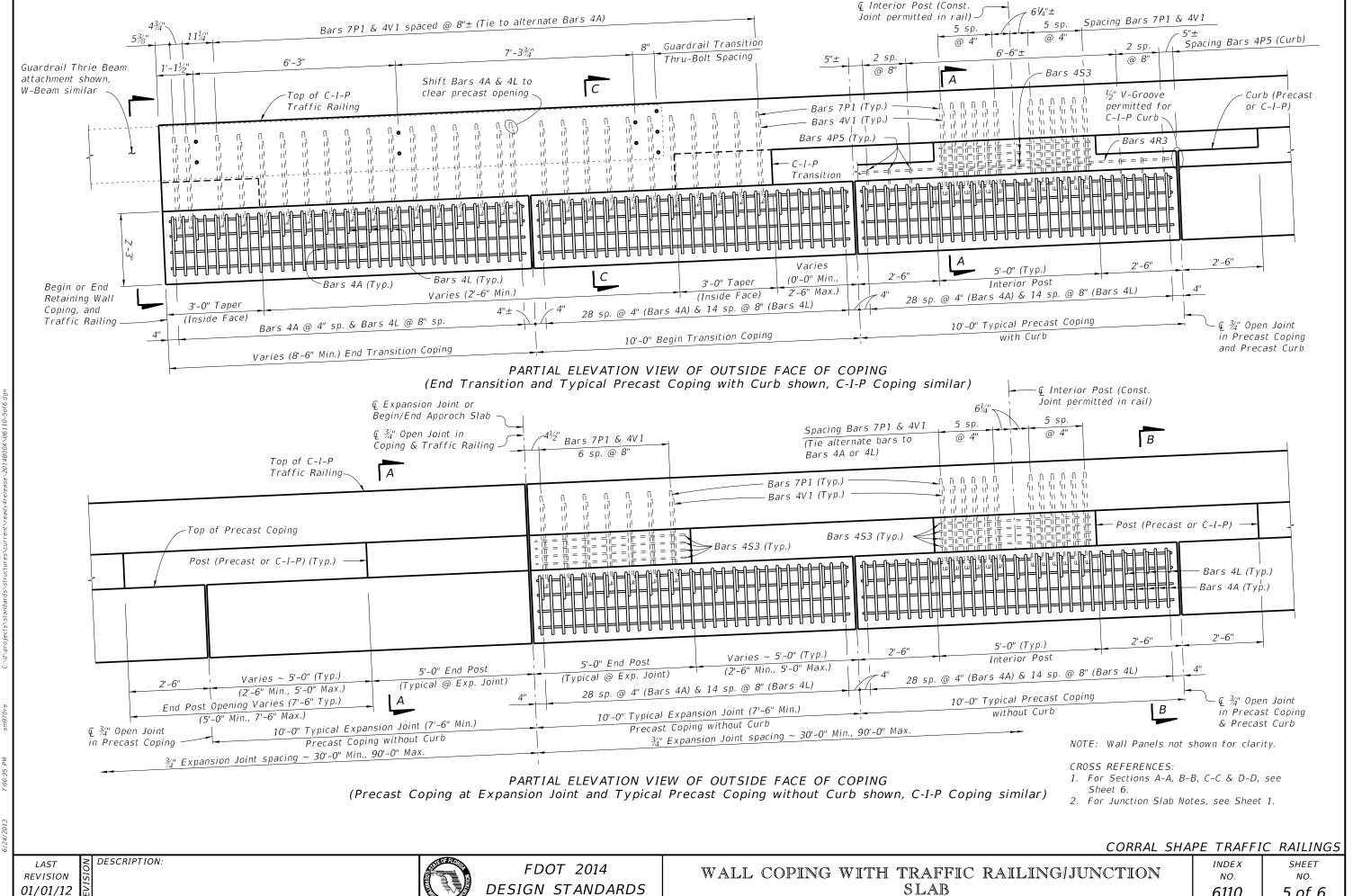
F-SHAPE TRAFFIC RAILINGS

∠ DESCRIPTION: LAST REVISION 07/01/13



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DESIGN STANDARDS

SLAB

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