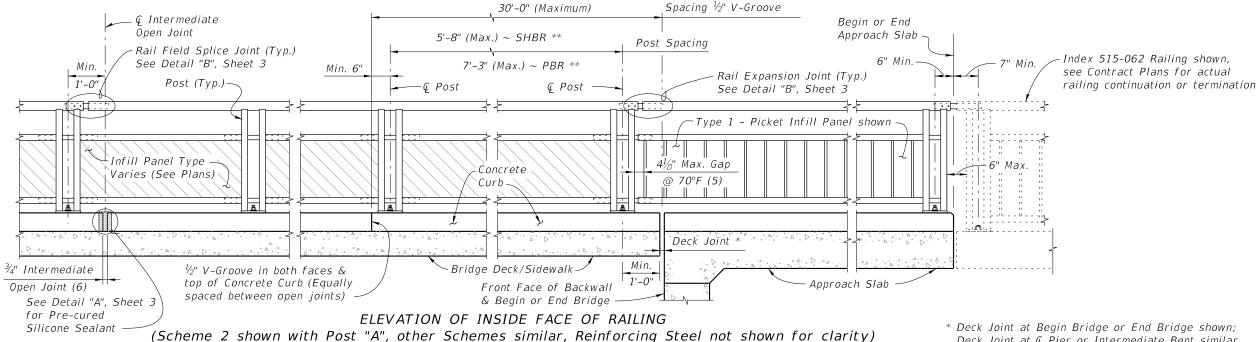
(Scheme 2 shown, other Schemes similar, Reinforcing Steel not shown for clarity)

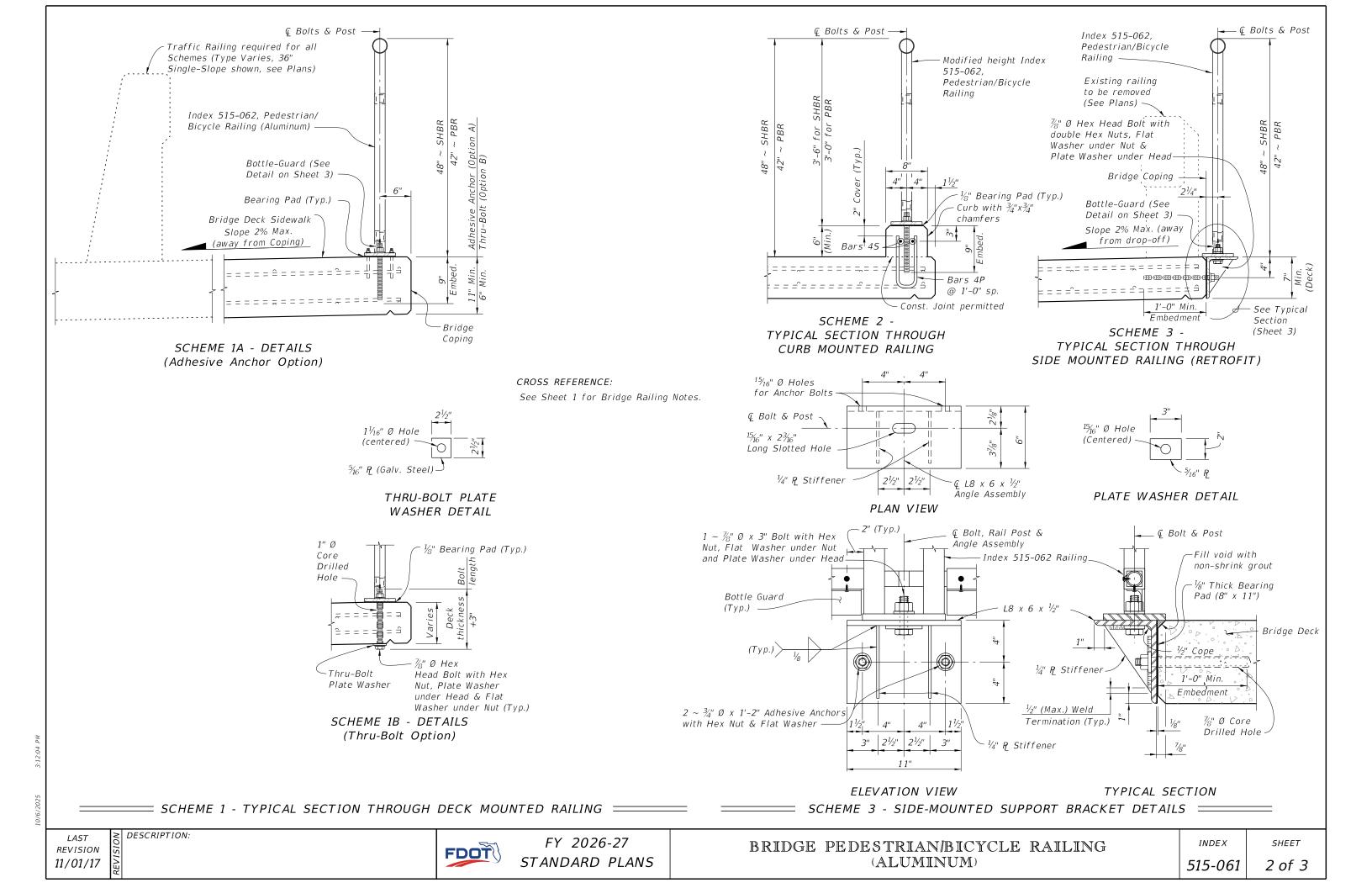


NOTES:

- * Deck Joint at Begin Bridge or End Bridge shown; Deck Joint at & Pier or Intermediate Bent similar.
- ** SHBR ~ Special Height Bicycle Railing PBR ~ Pedestrian/Bicycle Railing

- 1. Shop Drawings are required.
- 2. Work this Index with Index 515-062 Aluminum Bicycle/Pedestrian Railing Details and Specification Section 515. Refer to the IDS for Design Criteria and Limits of Use.
- 3. Materials:
 - A. Galvanized Steel Fasteners: Hex Head Bolt ASTM A307, Hex Nuts ASTM A563, Washers ASTM F436
 - B. Aluminum:
 - a. Support Bracket (Scheme 3) L-shape and Stiffener Plate: ASTM B209, Alloy 6061-T6
 - b. Bottle-guard (Schemes 1 & 3) L-shape: ASTM B209, Alloy 6061-T6 or 6063-T5
 - C. Concrete: Same as bridge deck
 - D. Pre-cured Silicone Sealant: Specification Section 932
 - E. Bearing Pads: Provide 1/8" thick Plain, Fabric Reinforced or Fabric Laminated pads meeting the requirements of Specification Section 932 for Ancillary Structures.
- 4. See Structures Plans, Superstructure Sheets for bridge information including concrete type, deck expansion joint locations and orientations, and thermal movement.
- 5. Railings:
 - A. For thermal movement greater than 4" (up to a maximum of 5"), clear opening between adjacent pickets, or panels at Rail Expansion Joints above Deck Joints must be reduced to $3\frac{1}{2}$ ".
 - B. For treatment of railings on skewed bridges see Index 521-427.
- 6. Curbs:
 - A. Match open curb joints at Deck Expansion Joint locations to the deck joint dimension.
 - B. Construct Concrete Curb (Scheme 2) vertical with the top surface finished level transversely. See Concrete Curb Details Sheet 3.
- C. Provide $\frac{3}{4}$ " Intermediate open joints in curbs coinciding with the $\frac{3}{4}$ " joints in the traffic railing.
- 7. Payment: Support bracket (Scheme 3) is incidental to the cost of railing. Curb concrete and reinforcing steel (Scheme 2) are included in the bridge deck quantities.

DESCRIPTION:

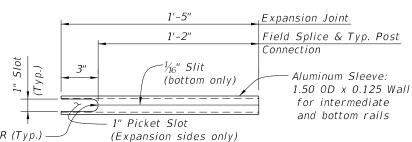


ROUND RAILS - TOP RAIL OR HANDRAIL

* $\frac{1}{4}$ " Ø x $\frac{3}{4}$ " Pan Head Aluminum (Alloy 7075-T73) or Stainless Steel (Type 316 or 18-8 Alloy) Set Screws along outside face of railing. Set screws must be set flush against the rail surface. A 3/4" Ø plug weld may be substituted for the two set screws at expansion joints.

sharp edges (Typ.)

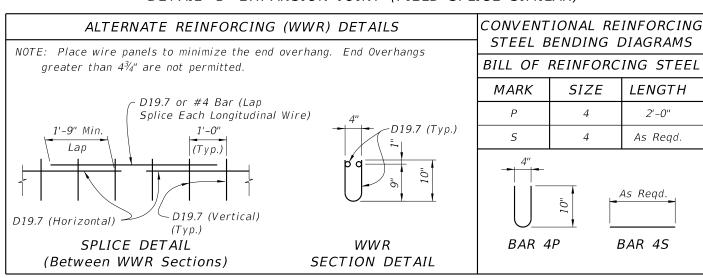
- ** Embedded length may be 4" for plug welded connection.
- *** Increase handrail sleeve embedment to 8" for Expansion Joint openings greater than 2".
- **** Expansion Joint opening shall match the clear opening in the deck joint but not greater than 3".



INTERMEDIATE OR BOTTOM RAIL - ALUMINUM SLEEVE DETAIL (Bottom Side Shown)

2'-0"

DETAIL "B" EXPANSION JOINT (FIELD SPLICE SIMILAR) =



CURB REINFORCING STEEL NOTES:

ESTIMATED CONCRETE CURB

QUANTITIES (SCHEME 2)

UNIT

CY/LF

LB/LF

ITEM

Reinforcing Steel

Concrete

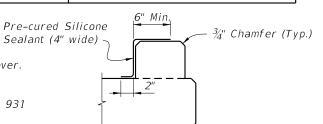
- 1. All bar dimensions in the bending diagrams are out to out.
- 2. The reinforcement for the curb on a retaining wall shall be the same as detailed for an 8" deck.
- 3. All reinforcing steel at the open joints shall have a 2" minimum cover.
- 4. Bars 4S may be continuous or spliced at the construction joints. Bar splices for Bars 4S shall be a minimum of 1'-8".

QUANTITY

0.0124

4.01

5. Deformed WWR meeting the requirements of Specifications Section 931 may be used in lieu of all Bars 4P and 4S.



DETAIL "A" - SECTION AT INTERMEDIATE OPEN JOINT

INTERMEDIATE JOINT SEAL NOTE:

At Intermediate Open Joints, seal the lower 6" portion of the open joint with Pre-cured Silicone Sealant. Apply sealant prior to any Class V finish coating and remove all curing compound and loose material from the surface prior to application of bonding agent.

SCHEME 2 - CONCRETE CURB DETAILS =

DESCRIPTION: REVISION 11/01/16

FDOT

FY 2026-27 STANDARD PLANS

BRIDGE PEDESTRIAN/BICYCLE RAILING (ALUMINUM)

© Rail, Bottle-Guard and Screws

#10 x 5/4" Pan Head

Screws (18-8 SS)

@ 2'-0" sp. —

INDEX

î Rail, Bottle-

Guard and Screws

#10 x 5/4" Pan Head

Screws (18-8 SS)

@ 2'-0" sp.

TYPICAL SECTION THROUGH BOTTOM RAIL (Post Not Shown for Clarity)

= SCHEME1 - BOTTLE GUARD DETAIL =

Bottom Rail

Bottle Guard

TYPICAL SECTION THROUGH BOTTOM RAIL

(Post Not Shown for Clarity)

= SCHEME 3 - BOTTLE GUARD DETAIL =

1½" x 2½" x ½" L

Bottom Rail

Bottle Guard

1½" x 1½" x ⅓" ∠

SHEET

515-061 3 of 3