SECTION 1089—PA BRIDGE BARRIER RAILING

1089.1 DESCRIPTION— This work is the construction of a PA Bridge Barrier Railing.

1089.2 MATERIAL— Unless otherwise specified, galvanize steel materials as specified in Section 1105.02(s). Before fabrication, submit shop drawings as specified in Section 105.02(d) for review and acceptance.

(a) Railing.

- Steel Cold Formed Tubes. ASTM A 500, Grade B
- Threaded Welded Anchor Studs for Barrier Rail Tube. ASTM A 108
- No Thread Welded Anchor Studs for Barrier Rail Splice. ASTM A 108
- Sidewalk Rail Tubes. Section 1022.2(a)
- Threaded Welded Anchor Studs for Sidewalk Rail Tube. ASTM A 108
- Sidewalk Rail Rod. Section 1105.02(a)2
- Sidewalk Rail Rod Splice. ASTM A513 or A519
- Railing Posts and Base Plates. Section 1105.02(a)3.d, Type 1, 2, or 3 only.
- Test Requirements for Post Welds. All welds on all posts will be visually inspected. In addition, at least 10% of the posts in a lot as defined in AWS DI.5-2002, Section 6.7.1.2(2)(c), will be inspected as follows: Magnetic particle testing will be performed over the full length of the welds on all posts inspected. Ultrasonic testing of the complete joint penetration welds will also be performed. If unacceptable discontinuities are found in more than 20% of the welds tested, an additional 10% of the posts in the same lot will be inspected. If unacceptable discontinuities are found in more than 20% of the welds tested in the second group of posts, all of the remaining posts in the lot will be inspected.
- Miscellaneous. Section 1105.02(a)2

Certify as specified in Section 106.03(b)3.

(b) Anchor Bolts, Nuts, and Washers. Section 1105.02(c)3, galvanized as specified in Section 1105.02(s).

(c) U-Shaped Washer. Section 1105.02(a), galvanized as specified in Section 1105.02(s).

(d) Barrier Mount Delineation Devices. Section 937.3(b)

(e) Caulking Compound. Section 705.8

1089.3 CONSTRUCTION—As shown on the Standard Drawings, the Contract Drawings, and as follows:

Before erection, use caulking compound and thoroughly coat surfaces of posts in contact with concrete. After erection and alignment, use caulking compound and seal openings between metal surfaces and concrete.

Remove blemishes and scratches from exposed surfaces. For areas that have been damaged, exposing base metal, repair galvanizing in accordance with ASTM A 780.

Place joints, as indicated.

At bend area, do not vary the diameter of rail tubes by more than 5% of the outside dimension when rail tubes are bent to the radii indicated.

Do not open bridge to traffic until bridge railing is placed.

1089.4 MEASUREMENT AND PAYMENT—Meter (Linear Foot)

Measure from end to end of barrier railing.