NOTES:


WIND SPEEDS: See Index 11860 - Wind Speeds by County note.

GEOMETRY: Install signs with bottom of sign panel at 7' above the gutter line. Edge of sign panels must not extend beyond the inside face of the top of the traffic railing. Sign posts shall be installed plumb.

APPLICABILITY: Mount only to concrete traffic barriers in locations where ground mounting is not possible. Work this Index in conjunction with Index No. 11860.

SHOP DRAWINGS: Shop drawings are not required.

PAYMENT: Payment for sign support bracket shall be included in the cost of the sign.

LIMITATIONS: Signs or sign clusters shall not exceed a maximum width of 48”.

MATERIALS:

Coatings: All steel and fasteners shall be hot dip galvanized in accordance with Specification Section 643-4. Paint sign support brackets and posts when shown in the plans in accordance with Specification Section 643-4.


Sign Posts: Aluminum Association Alloy 6061-T6 (ASTM B209, B221 or B308) 5” NPS Schedule 40 Aluminum Pipe.

Steel Plates: ASTM A36 or A709 Grade 36.

Anchor Bolts: ASTM F1554 Grade 55 with a single self locking hex nut and washers. Install anchor bolts perpendicularly to the base plates on back of traffic railing. See Anchor Bolt Notes, Sheet 2 of 2.

Adhesive Bonded Anchors: Fully threaded Anchor Bolts with Type HV Adhesive Bonding Material System in accordance with Specification Section 416 & 937.

U-Bolts: ASTM A449 sized for sign post, with flat washers and locking hex nuts.

Welding: Weld in accordance with American Welding Society Structural Welding Code (Steel), ANSI/AWS D1.1 (current edition). Required weld material is E70XX. Nondestructive testing is not required.

SIGN AREA & WIND SPEED TABLE

<table>
<thead>
<tr>
<th>WIND SPEED MAX. (mph)</th>
<th>MAX. SIGN SIZE (sf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>110</td>
<td>30</td>
</tr>
<tr>
<td>130</td>
<td>25</td>
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<tr>
<td>150</td>
<td>20</td>
</tr>
</tbody>
</table>

MATERIAL SYSTEM IN ACCORDANCE WITH SPECIFICATION SECTION 416 & 937.

ADHESIVE BONDED ANCHORS: FULLY THREADED ANCHOR BOLTS WITH TYPE HV ADHESIVE BONDING MATERIAL SYSTEM IN ACCORDANCE WITH SPECIFICATION SECTION 416 & 937.

U-BOLTS: ASTM A449 SIZED FOR SIGN POST, WITH FLAT WASHERS AND LOCKING HEX NUTS.

WELDING: WELD IN ACCORDANCE WITH AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE (STEEL), ANSI/AWS D1.1 (CURRENT EDITION). REQUIRED WELD MATERIAL IS E70XX. NONDESTRUCTIVE TESTING IS NOT REQUIRED.
TYPICAL SECTION THRU EXISTING TRAFFIC RAILING AT SIGN SUPPORT BRACKET
(32" F-Shape Traffic Railing shown, other Traffic Railings & Parapet similar)
(Bridge Deck shown, Approach Slab and Retaining Wall Similar)

TYPICAL SECTION THRU TRAFFIC RAILING AT SIGN SUPPORT BRACKET (NEW CONSTRUCTION)
(32" F-Shape Traffic Railing shown, other Traffic Railings & Parapet similar)
(Bridge Deck shown, Approach Slab and Retaining Wall Similar)

ANCHOR BOLT NOTES:
1. Existing Traffic Railings:
   Locate existing conduit prior to drilling. Adjust placement as necessary to avoid existing conduit. Base plate must be flush with back of traffic railing. Maintain a minimum cover of 2" from face of traffic railing to tip of Adhesive Anchor.
   For concrete parapets less than 10" thick, through bolt 1/2" Hex Head Bolts with Nuts and Washers in lieu of Adhesive Bonded Anchors. Bolt heads shall not protrude more than 1/2" beyond traffic face of railing.

2. New Traffic Railings:
   Tie Anchor Bolts securely and use templates as necessary to maintain bolt spacing.
   Optional Couplers are shown for slipforming; keep coupler threads for Anchor Bolts free of concrete.

CROSS REFERENCES:
For Base Plate, End Plate & U-Bolt Plate Washer Details see Sheet 1.