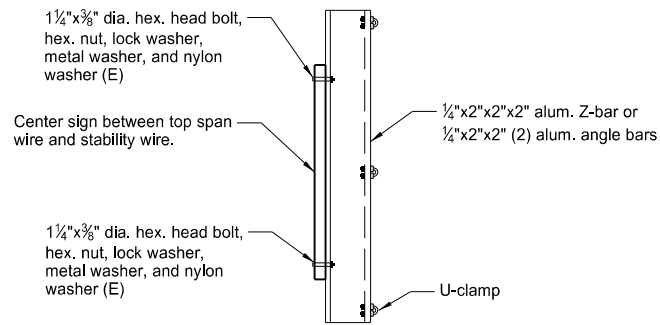
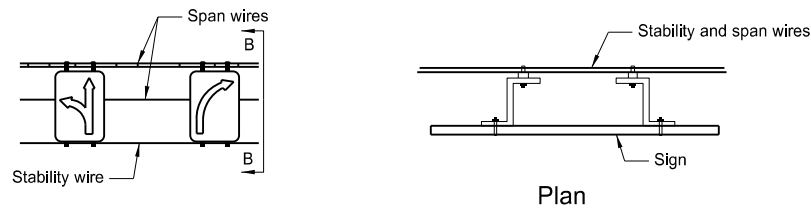
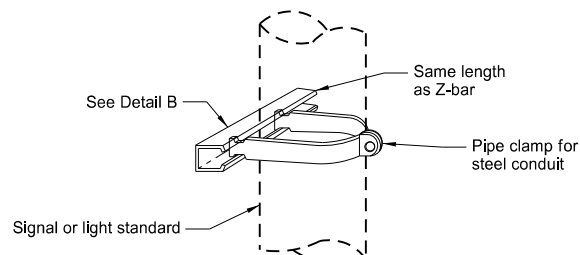


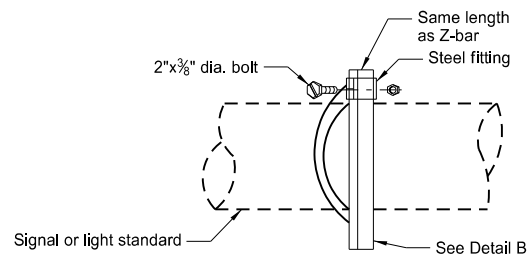
LIGHT STANDARD, SIGNAL STANDARD,
AND SPAN WIRE MOUNTED SIGN
ASSEMBLY DETAIL



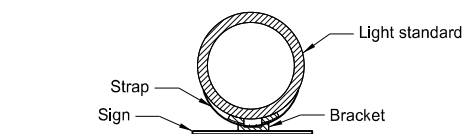
Section B-B
Span Wire Mounted Sign Detail



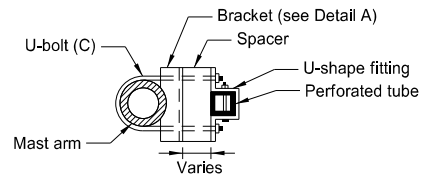
Vertical Mounting
(Use 2 clamps per sign)



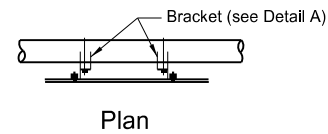
Horizontal Mounting
alternate clamp mounting
(Use 2 clamps per sign)



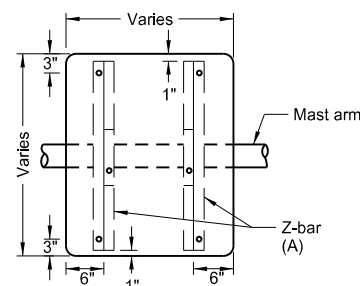
Light Standard Mounted Sign Bracket Detail
Max. 24"x30" signs (D)



Section A-A

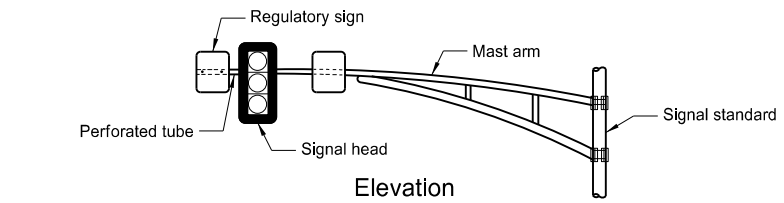


Plan

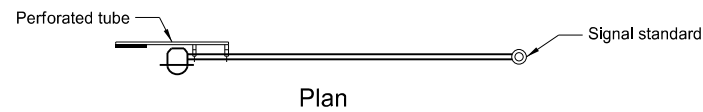


Elevation

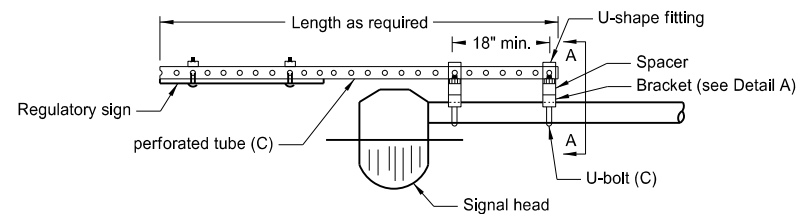
Mast Arm Mounted Regulatory Sign Detail



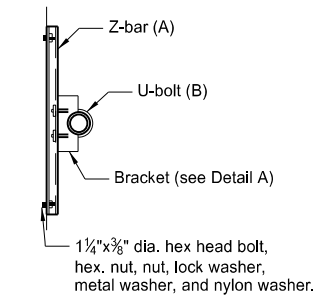
Elevation



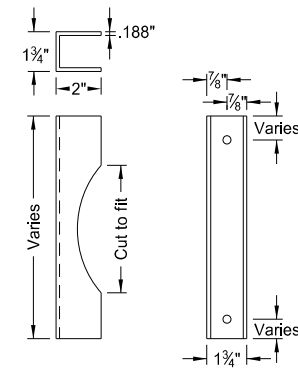
Plan



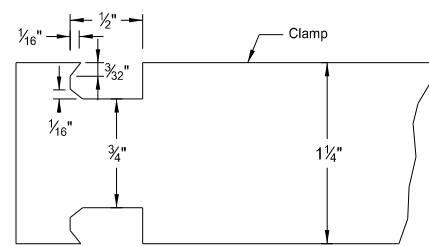
Sign Mounted Beyond End of Mast Arm Detail



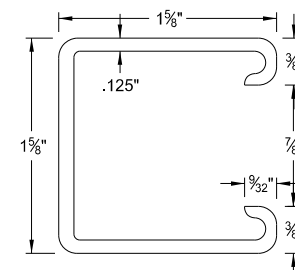
Side View



Detail A



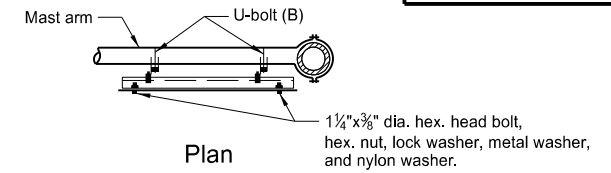
Clamp Detail



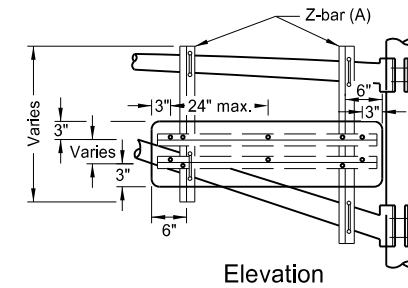
Detail B
Steel Channel

Post Size dia.	Clamp Gauge min.
3 1/2" to 5"	11
6" to 12"	10

Clamp	
Post Size dia. in.	D in.
3 1/2	3
4	3 3/16
5	5 1/8
6	7 7/16
8	13 1/16
10	20 3/4
12	29 5/8

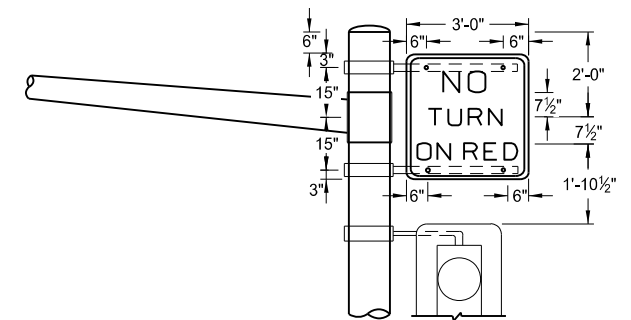


Plan



Elevation

Mast Arm Mounted Street Name Sign Detail



Signal Standard Mounted Sign Attachment Detail

Notes:

- (A) Use 1 1/4" x 3/16" thick 1.08 lb/ft aluminum alloy Z-bar. In place of Z-bar, use two 1 3/4" x 1 1/4" x 3/16" angles bolted together or a 1 1/4" x 2" x .188" channel.
 - (B) 3/8" U-bolt, hex. nut, lock washer, and bracket (U-bolt length depends on dia. of mast arm.)
 - (C) 3/8" U-bolt, hex. nut, lock washer, and bracket (U-bolt length depends on dia. of mast arm.)
- Maximum perforated tube lengths for mounting signs beyond end of mast arm:
 2" x 2" maximum support length 9.9'
 2 1/4" x 2 1/4" maximum support length 12.6'
 2 1/2" x 2 1/2" maximum support length 15.7'
- (D) Use galv. steel strap and sign attachment bracket similar to the one shown in the detail. Include all costs of bracket assembly in the price bid for flat sheet signs. Punch as shown on Standard Drawings. Provide a 7' minimum vertical clearance to the bottom of signs mounted on light standards.
 - (E) Use metal washers and nylon washers with a minimum outside dia. of 1 5/16" ± 1/16" and 10 gauge thickness on sign face.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
10-3-13	
REVISIONS	
DATE	CHANGE
8-30-18	Updated notes to active voice.
9-05-19	New Design Engineer PE Stamp.

This document was originally issued and sealed by
 Kirk J Hoff,
 Registration Number
 PE- 4683,
 on 9/05/19 and the original document is stored at the North Dakota Department of Transportation