

**GENERAL NOTES:**

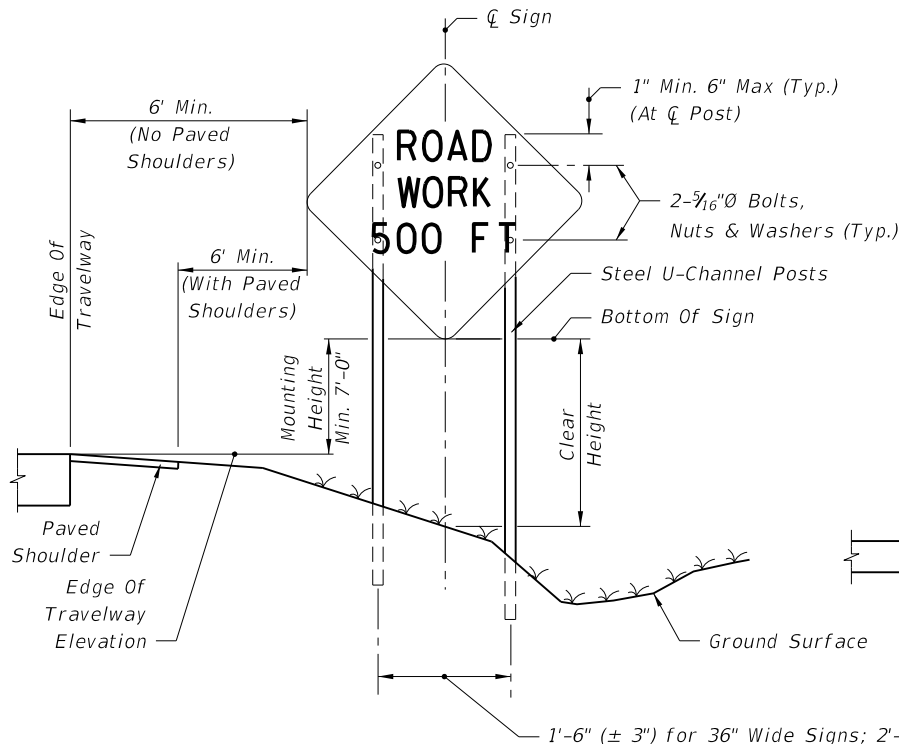
- All signs shall be mounted per this Index when work operations exceed one day except for:
  - Road closure signs mounted in accordance with the vendor drawing for the Type III Barricade shown on the APL.
  - Pedestrian advanced warning or regulatory signs mounted on sign supports in accordance with the vendor drawing shown on the APL.
  - Median barrier mounted signs per Index 11871.

**TEMPORARY SIGN SUPPORT NOTE:**

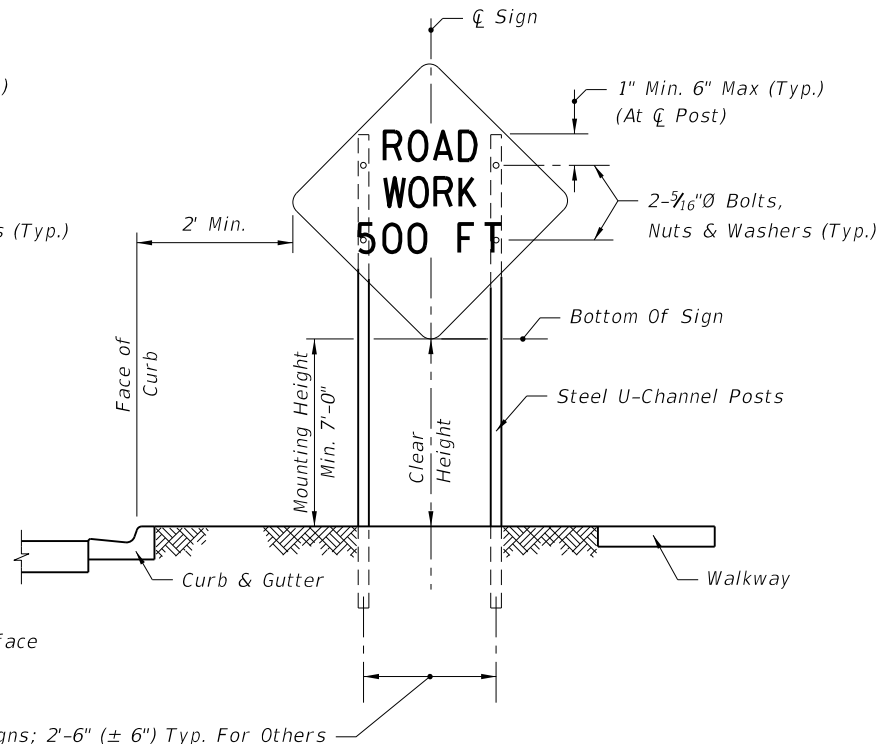
- Signs mounted on temporary supports or barricades, and barricade/sign combination shall be crashworthy in accordance with NCHRP 350 requirements and included on the Approved Products List (APL).

**POST MOUNTED SIGN NOTES:**

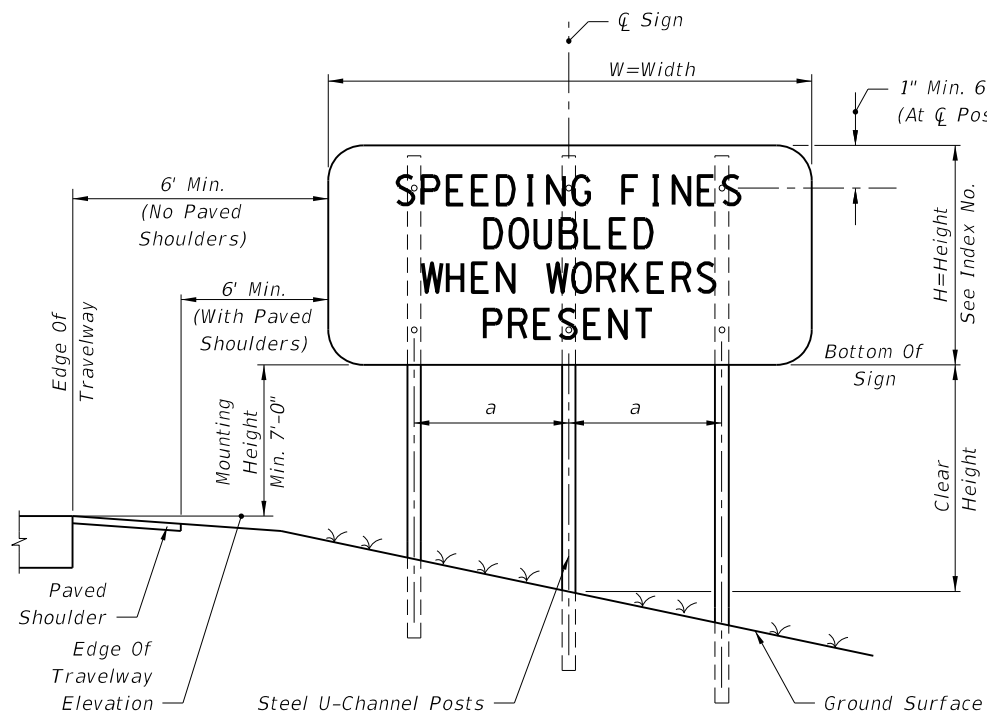
- Use only approved systems listed on the Department's Approved Products List (APL).
- Manufacturers seeking approval of U-Channel and steel square tube sign support assemblies for inclusion on the Approved Products List (APL) must submit a APL application, design calculations (for square tube only), and detailed drawings showing the product meets all the requirements of this Index.
- Provide 3 lb/ft Steel U-Channel Posts with a minimum section modulus of 0.43 in<sup>3</sup> for 60 ksi steel, a minimum section modulus of 0.37 in<sup>3</sup> for 70 ksi steel, or a minimum section modulus of 0.34 in<sup>3</sup> for 80 ksi steel.
- Provide 4 lb/ft Steel U-Channel Posts with a minimum section modulus of 0.56 in<sup>3</sup> for 60 ksi steel, or a minimum section modulus of 0.47 in<sup>3</sup> for 70 ksi or 80 ksi steel.
- U-channel posts shall conform with ASTM A 499, Grade 60, or ASTM A 576, Grade 1080 (with a minimum yield strength of 60 ksi). Square tube posts shall conform with ASTM A 653, Grade 50, or ASTM A 1011, Grade 50.
- Sign attachment bolts, washers, nuts and spacers shall conform with ASTM A307 or A 36.
- For diamond warning signs with supplement plaque (up to 5 ft<sup>2</sup> in area), use 4 lb/ft posts for up to 10 ft Clear Height (measure to the bottom of diamond warning sign).
- Install 4 lb/ft Steel U-Channel Posts with approved breakaway splice in accordance with the manufacturer's detail shown on the APL.
- The contractor may install 3 lb/ft Steel U-Channel Posts with approved breakaway splice in accordance with the manufacturer's detail shown on the APL.
- Install all posts plumb.
- The contractor may set posts in preformed holes to the specified depth with suitable backfill tamped securely on all sides, or drive 3 lb/ft sign posts and any size base post in accordance with the manufacturer's detail shown on the APL.



**2 POST SIGN SUPPORT MOUNTING DETAILS  
(SINGLE POST SIMILAR)  
RURAL**



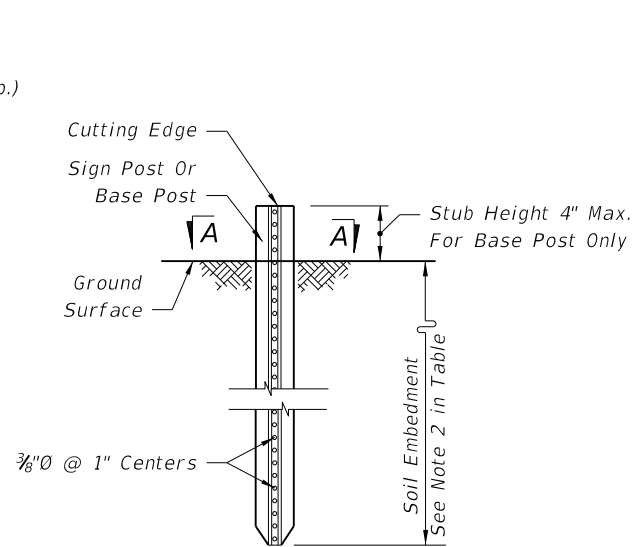
**2 POST SIGN SUPPORT MOUNTING DETAILS  
(SINGLE POST SIMILAR)  
URBAN**



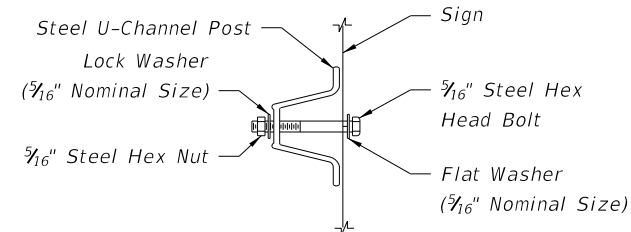
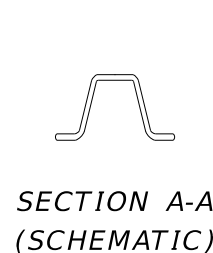
**3 POST SIGN SUPPORT MOUNTING DETAILS**

Where  $W = 48": a = 1' - 4\frac{1}{2}" (\pm 1")$   
 $W = 60": a = 1' - 9" (\pm 1")$   
 $W = 72": a = 2' - 1" (\pm 1")$

**WORK ZONE SIGN SUPPORTS**



**TYPICAL FOUNDATION DETAIL**  
See APL for post, splice and connection details.  
No bolts installed closer than 1" to cutting edge.



**SIGN ATTACHMENT DETAIL  
(WITHOUT Z-BRACKET)**

**POST AND FOUNDATION  
TABLE FOR  
WORK ZONE SIGNS**

SIGN SHAPE	SIGN SIZE (inches)	NUMBER OF STEEL U CHANNEL POSTS
Octagon	30x30	1
Triangle	36x36x36	1
	48x48x48	1
Rectangle (W x H)	60x60x60	2
	24x18	1
	24x30	1
	30x24	1
	36x18	1
	36x24	1
	48x18	1
	48x24	1
	36x48	2
	48x30	2
	48x36	2
	54x36	2
	48x60	3
	60x54	3
72x48	3	
120x60*	4*	
Square	30x30	1
	36x36	2
	48x48	2
Diamond (See Note 6)	48x48	2
Circle	36Ø	2

**Notes For Table:**

- Use 3 lb/ft posts for Clear Height up to 10' and 4 lb/ft posts for Clear Height up to 12'.
- \* Use 4 lb/ft U-channel sign post with a mounting height of 7' min. and 8' max. Attach sign panel using Z-bracket detail on Sheet 7.
- Minimum foundation depth is 4.0' for 3 lb/ft posts and 4.5' for 4 lb/ft posts.
- For both 3 lb/ft and 4 lb/ft base or sign posts installed in rock, a minimum cumulative depth of 2' of rock layer is required.
- The soil plate as shown on the APL vendor drawing is not required for base posts or sign posts installed in existing rock (as defined in note 3), asphalt roadway, shoulder pavement or soil under sidewalk.

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