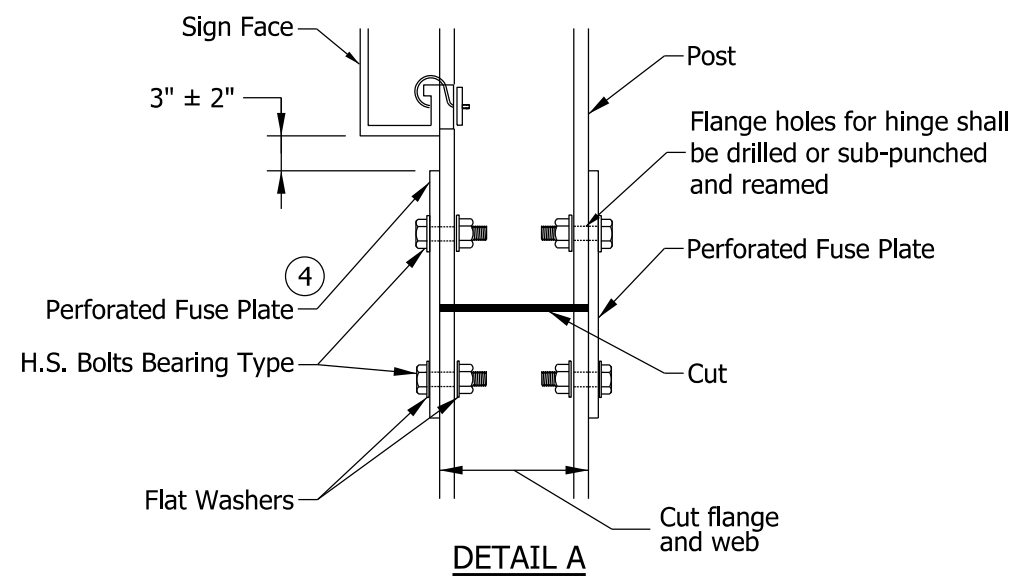
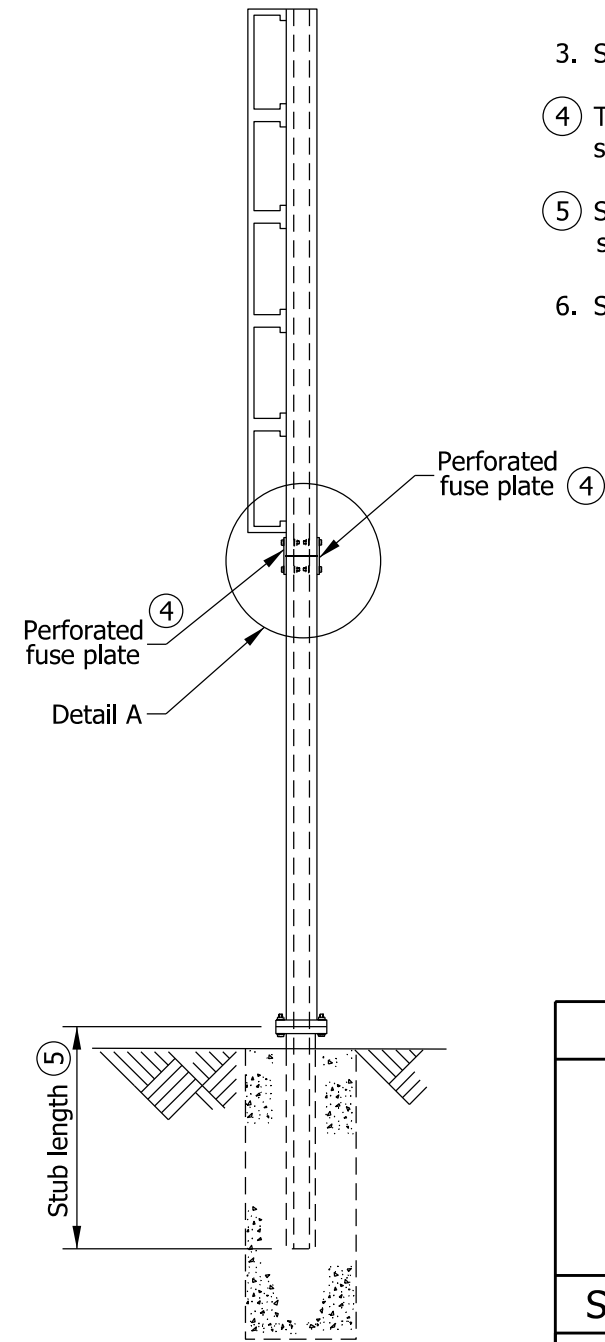


**SIGN PLACEMENT**  
Double Support Sign (Large)



**DETAIL A**



**SECTION B-B**

**NOTES:**

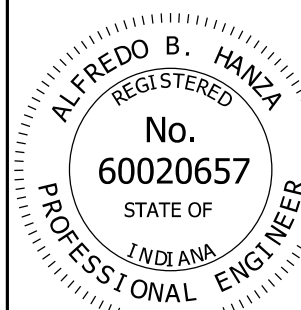
1. No more than one W10 x 19 or larger post can be used in a 7'-0" path. No more than two W8 x 18 or smaller posts can be used in a 7'-0" path.
2. For 3 post installation, the edge of sign to post is 1/6 width of sign and 1/3 width of sign between posts.
3. See Standard Drawing E 802-SNGP-04 for base plate details.
- ④ The distance from the top of the fuse plate to the bottom of the sign shall be the same for all posts.
- ⑤ See Standard Drawing E 802-SNGP-07 for required stub length.
6. See Standard Drawing E 802-SNGP-03 for Section A-A.

INDIANA DEPARTMENT OF TRANSPORTATION

SIGN PLACEMENT

SEPTEMBER 2013

STANDARD DRAWING NO. E 802-SNGP-01

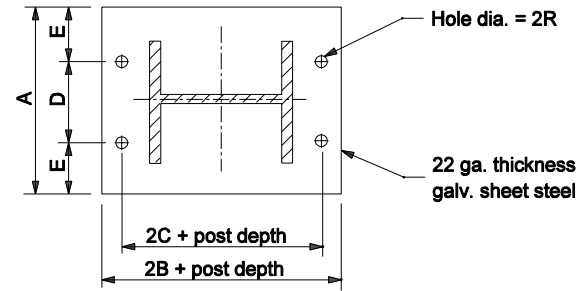
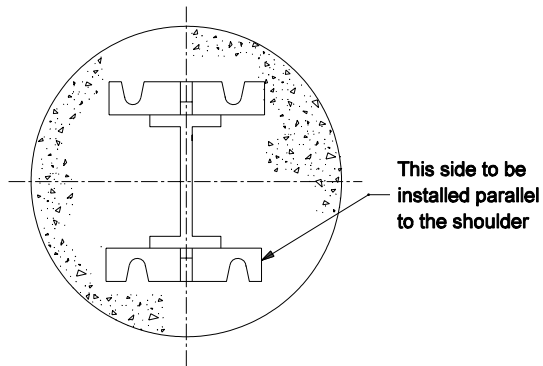


*/s/ Alfredo B. Hanza* 02/05/13

DESIGN STANDARDS ENGINEER DATE

*/s/ Mark A. Miller* 03/27/13

CHIEF ENGINEER DATE



**KEEPER PLATE**

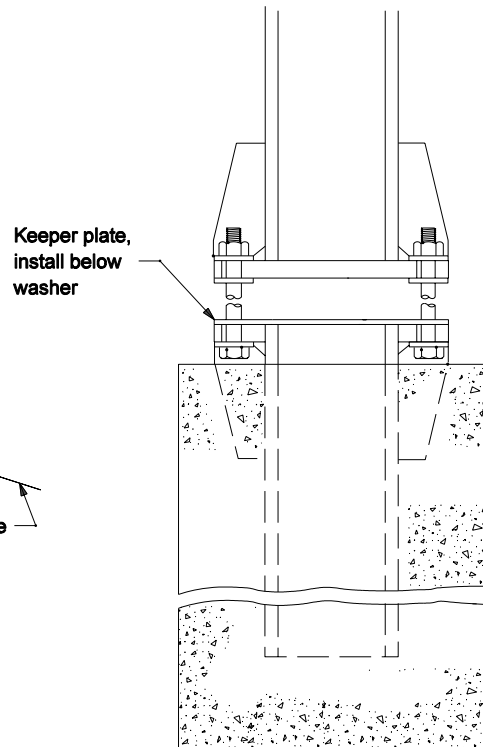
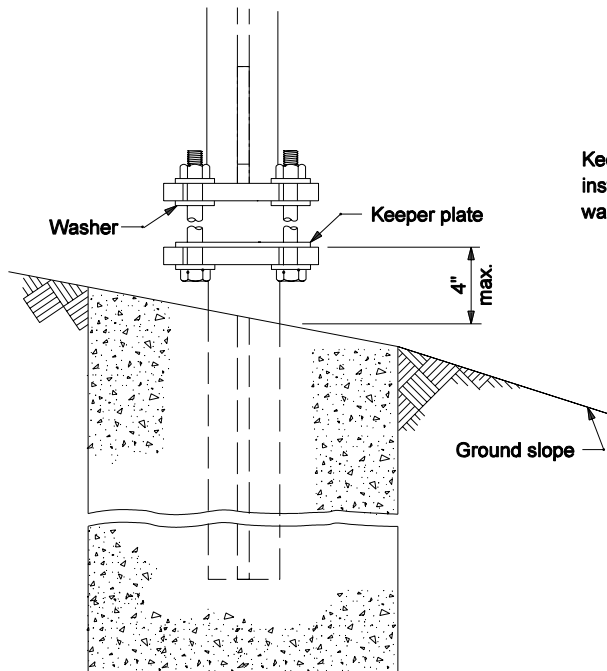
**PROCEDURE FOR ASSEMBLY OF BASE CONNECTION:**

Assemble post to stub with bolts. One flat washer on each bolt shall be placed between the top of the keeper plate and bottom of the top base plate. Shim as required to plumb post.

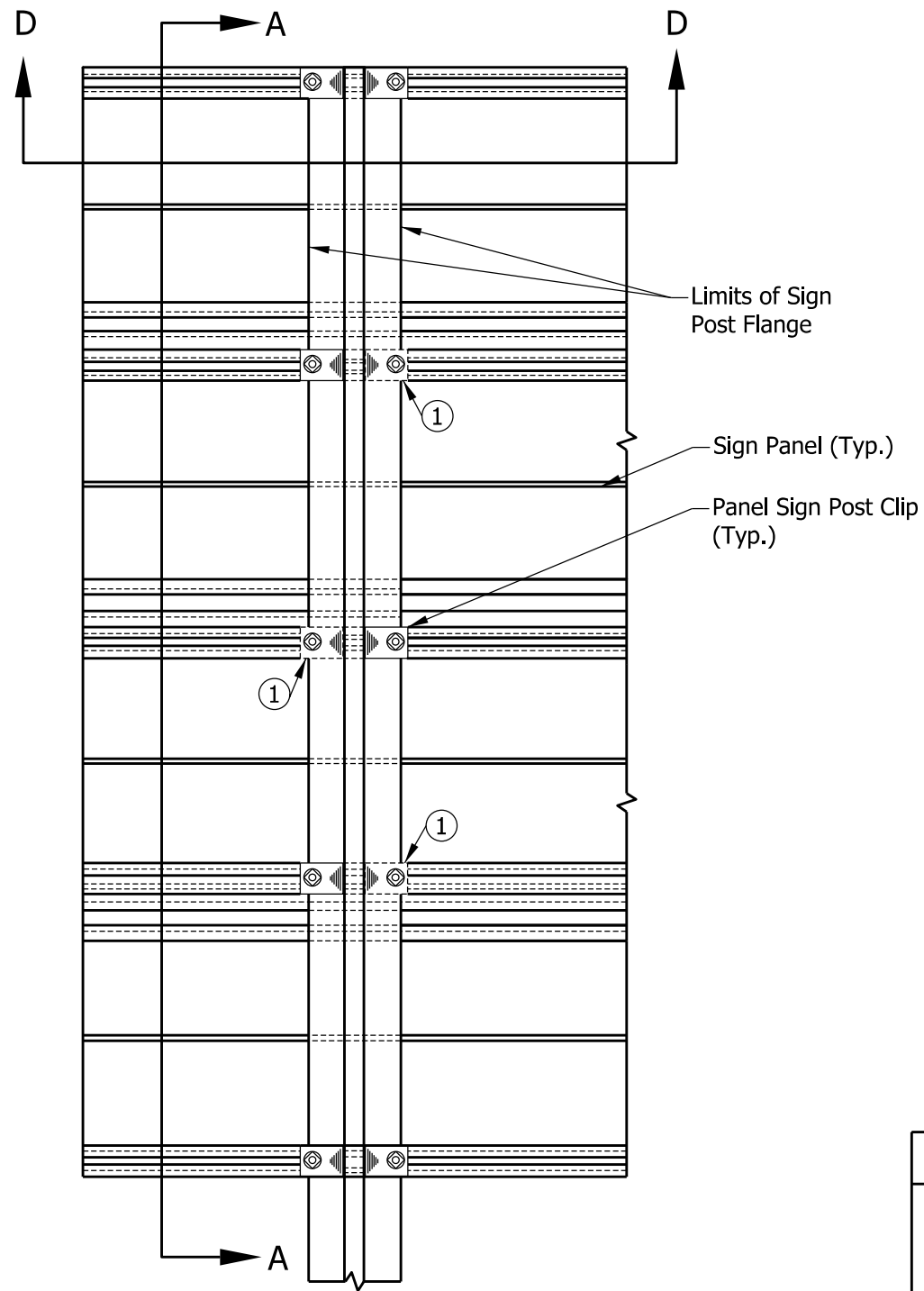
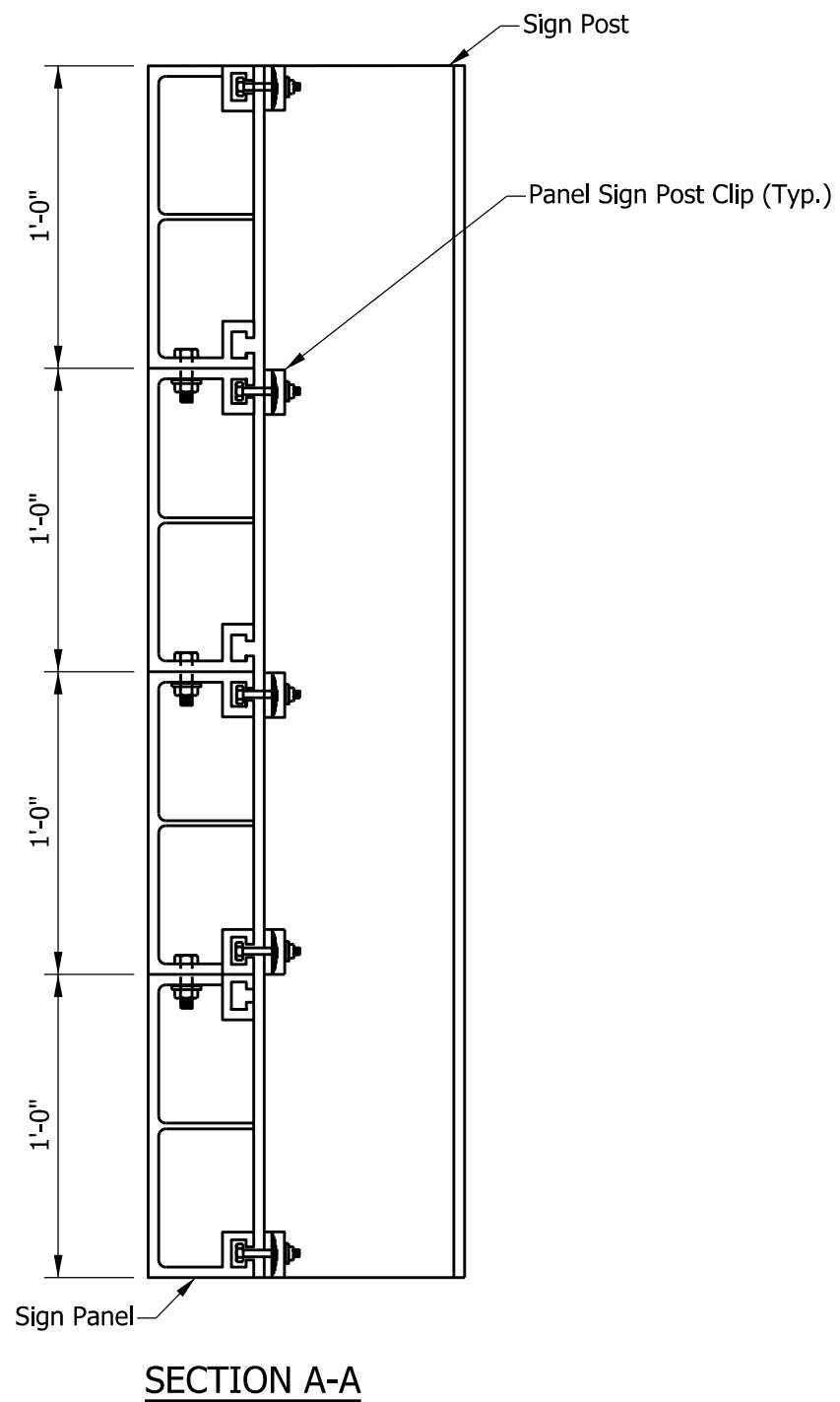
Tighten all bolts the maximum possible with 12" to 25" wrench to bed washers and shims and to clean bolt threads, then loosen each bolt in turn and retighten bolts in a systematic order to the prescribed torque. See table on Standard Drawing E 802-SNGP-05 for dimensions.

Burr threads at junction with nuts using a center punch to prevent nut loosening.

Stubs shall be plumb and base plate shall be leveled and physically held level until the concrete sets.

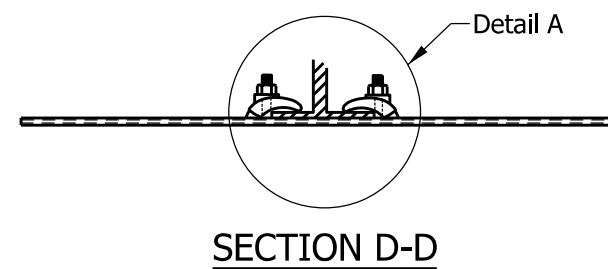
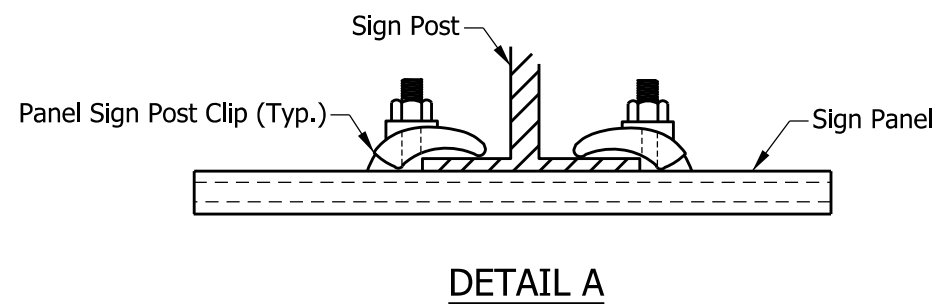


|   |  |
|---|--|
| INDIANA DEPARTMENT OF TRANSPORTATION      |  |
| <b>WIDE FLANGE SIGN<br/>SUPPORT BASE</b>  |  |
| March 2004                                |  |
| <b>STANDARD DRAWING NO. E 802-SNGP-02</b> |  |
|   | /s/ Richard L. VanCleave 3-01-04<br>DESIGN STANDARDS ENGINEER DATE |
|   | /s/ Richard K. Smutzer 3-01-04<br>CHIEF HIGHWAY ENGINEER DATE      |
| <b>DESIGN STANDARDS ENGINEER</b>          |  |

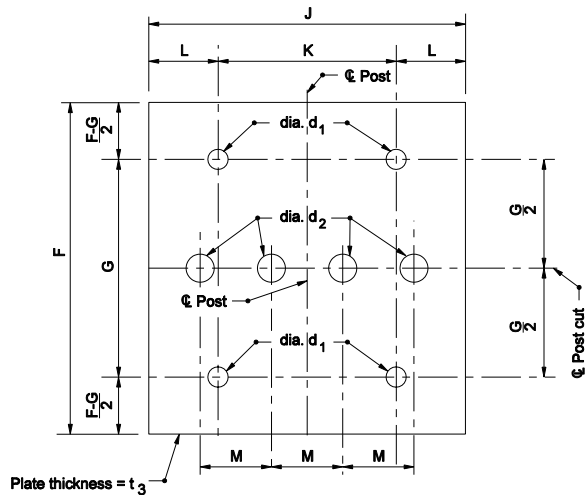


**NOTES:**

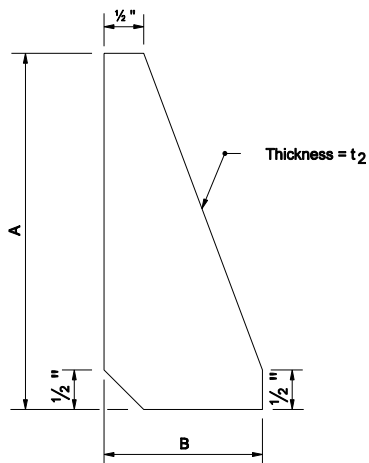
- ① Required for sign width greater than 24'.



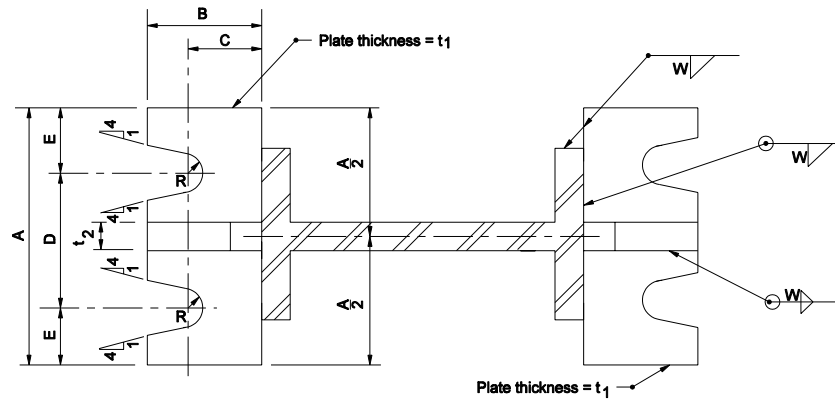
|                                      |  |
|--------------------------------------|--|
| INDIANA DEPARTMENT OF TRANSPORTATION |  |
| SIGN PLAN DETAILS                    |  |
| SEPTEMBER 2013                       |  |
| STANDARD DRAWING NO.                 | E 802-SNGP-03  |
|                                      | /s/ <i>Alfredo B. Hanza</i> 02/05/13<br>DESIGN STANDARDS ENGINEER DATE |
|                                      | /s/ <i>Mark A. Miller</i> 03/27/13<br>CHIEF ENGINEER DATE              |



PERFORATED FUSE PLATE DETAIL (3)

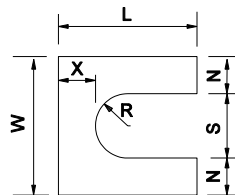


STIFFENER PLATE DETAIL



BASE PLATE DETAIL

| SHIM DETAIL   |        |        |        |        |        |        |
|---------------|--------|--------|--------|--------|--------|--------|
| BOLT DIAMETER | L      | W      | N      | R      | S      | X      |
| 1/2" to 3/4"  | 1 3/4" | 1 3/4" | 15/32" | 13/32" | 13/16" | 15/32" |
| 1"            | 2"     | 2"     | 3/8"   | 5/8"   | 1 1/4" | 15/32" |



Furnish 2-0.012 ± thick and 2-0.03 ± thick shims per post.

SHIM DETAIL

Notes:

1. See table on Standard Drawing E 802-SNGP-05 for dimensions and weight of stiffener plate and base plate.
2. See table on Standard Drawing E 802-SNGP-06 for dimensions and weight of perforated fuse plate.
3. Use H.S. bolts with hex head, & hex nut, one flat washer under each bolt head and beveled or flat washer (where required) under nut.
4. Dimensional tolerances excluding the thickness for shims is ± 1/32".

|                                      |   |
|--------------------------------------|---|
| INDIANA DEPARTMENT OF TRANSPORTATION |   |
| SIGN DETAILS                         |   |
| SEPTEMBER 2004                       |   |
| STANDARD DRAWING NO. E 802-SNGP-04   |   |
|                                      | <i>/s/ Richard L. VanCleave</i> 9-01-04<br>DESIGN STANDARDS ENGINEER DATE |
|                                      | <i>/s/ Richard K. Smutzer</i> 9-01-04<br>CHIEF HIGHWAY ENGINEER DATE      |
| DESIGN STANDARDS ENGINEER            |   |

**BASE PLATE & STIFFENER PLATE DATA TABLE**

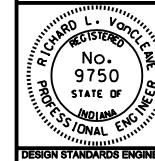
| Post Size | Bolt Size   | Torque in. - lb | Wt. of 4 Plates (One Post) ,lb | Wt. of 4 Stiffeners (One Post) ,lb | A   | B   | C   | D   | E   | R      | d4  | t <sub>1</sub> | t <sub>2</sub> | W  |
|-----------|-------------|-----------------|--------------------------------|------------------------------------|-----|-----|-----|-----|-----|--------|-----|----------------|----------------|----|
| W6 x 9    | ½" ø x 2¼"  | 140             | 5.10                           | 3.33                               | 4½" | 2"  | 1⅜" | 2½" | 1"  | 9/23"  | 1⅜" | ½"             | ½"             | ⅜" |
| W8 x 10   | ⅝" ø x 2½"  | 300             | 6.38                           | 4.07                               | 5"  | 2¼" | 1½" | 2⅞" | 1¼" | 11/32" | 1½" | "              | "              | "  |
| W8 x 13   | ¾" ø x 3"   | 500             | 12.6                           | 7.97                               | 6"  | 2½" | "   | 3⅜" | 1⅞" | 13/32" | 1¾" | ¾"             | ¾"             | ¼" |
| W8 x 15   |             | "               | "                              | "                                  | "   | "   | "   | "   | "   | "      | "   | "              | "              | "  |
| W8 x 18   |             | "               | "                              | "                                  | "   | "   | "   | "   | "   | "      | "   | "              | "              | ⅝" |
| W10 x 19  | 1" ø x 3.¼" | 700             | 14.04                          | 8.66                               | "   | 2¾" | 1½" | 3⅝" | 1⅜" | 17/32" | 2¼" | ¾"             | ¾"             | ⅝" |

INDIANA DEPARTMENT OF TRANSPORTATION

**SIGN DATA TABLES**

SEPTEMBER 2002

STANDARD DRAWING NO. E 802-SNGP-05



/s/ Richard L. VanCleave 9-03-02  
DESIGN STANDARDS ENGINEER DATE

/s/ Richard K. Smutzer 9-03-02  
CHIEF HIGHWAY ENGINEER DATE

DESIGN STANDARDS ENGINEER

**PERFORATED FUSE PLATE DATA TABLE**

| Post Size | BOLT SIZE     | Wt. of Plate* (One Post), lb | F      | G      | J      | K      | L      | M      | d <sub>1</sub> | d <sub>2</sub> | t <sub>3</sub> | Bolt Tension, lbs |
|-----------|---------------|------------------------------|--------|--------|--------|--------|--------|--------|----------------|----------------|----------------|-------------------|
| W6 x 9    | 1/2" x 1 1/2" | 1.01                         | 4 1/4" | 2"     | 4"     | 2 1/4" | 7/8"   | 1"     | 9/16"          | 3/4"           | 1/4"           | 12000             |
| W8 x 10   | 1/2" x 1 1/2" | 1.01                         | 4 1/4" | 2"     | 4"     | 2 1/4" | 7/8"   | 1"     | 9/16"          | 3/4"           | 1/4"           | 12000             |
| W8 x 13   | 1/2" x 1 1/2" | 1.01                         | 4 1/4" | 2"     | 4"     | 2 1/4" | 7/8"   | 1"     | 9/16"          | 3/4"           | 1/4"           | 12000             |
| W8 x 15   | 5/8" x 2 1/4" | 1.72                         | 5"     | 2 1/2" | 4"     | 2 1/4" | 7/8"   | 1"     | 11/16"         | 3/4"           | 3/8"           | 19000             |
| W8 x 18   | 5/8" x 2 1/4" | 2.27                         | 5"     | 2 1/2" | 5 1/4" | 2 3/4" | 1 1/4" | 1 1/4" | 11/16"         | 1 1/16"        | 3/8"           | 19000             |
| W10 x 19  | 5/8" x 2 1/4" | 1.72                         | 5"     | 2 1/2" | 4"     | 2 1/4" | 7/8"   | 1"     | 11/16"         | 3/4"           | 3/8"           | 19000             |

\* Gross weight with holes deducted from weight. Incidental weights of bolts and washers are not included in plan quantities.

**NOTES:**

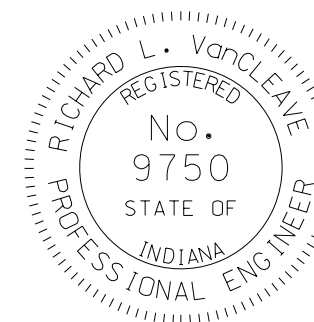
- See Standard Drawing E 802-SNGP-01 through 07 for details and notes for posts, bolts, washers, etc.

**INDIANA DEPARTMENT OF TRANSPORTATION**

**SIGN DATA TABLES**

**SEPTEMBER 2008**

**STANDARD DRAWING NO. E 802- SNGP-06**



**DESIGN STANDARDS ENGINEER**

*/s/ Richard L. VanCleave*      **09/02/08**  
 DESIGN STANDARDS ENGINEER      DATE

*/s/ Mark A. Miller*      **09/02/08**  
 CHIEF HIGHWAY ENGINEER      DATE

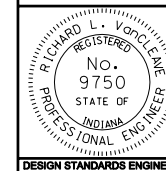
| FOUNDATION DATA |           |             |      |       |
|-----------------|-----------|-------------|------|-------|
| Type            | Post Size | Stub Length | Dia. | Depth |
| VII             | W6 x 9    | 2'-0        | 20"  | 5'    |
| VIII            | W8 x 10   | 2'-0        | 20"  | 5'    |
| IX              | W8 x 13   | 2'-0        | 20"  | 5'    |
| X               | W8 x 15   | 2'-6        | 24"  | 6'    |
| XI              | W8 x 18   | 2'-6        | 24"  | 6'    |
| XII             | W10 x 19  | 2'-6        | 24"  | 7'    |

INDIANA DEPARTMENT OF TRANSPORTATION

**WIDE FLANGE SIGN POST  
SUPPORT FOUNDATION DATA**

**MARCH 2004**

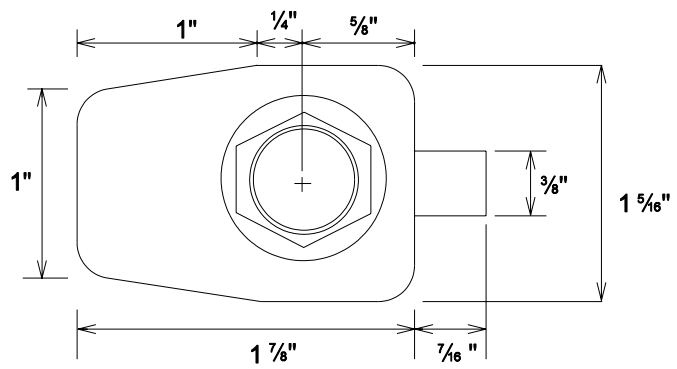
**STANDARD DRAWING NO. E 802-SNGP-07**



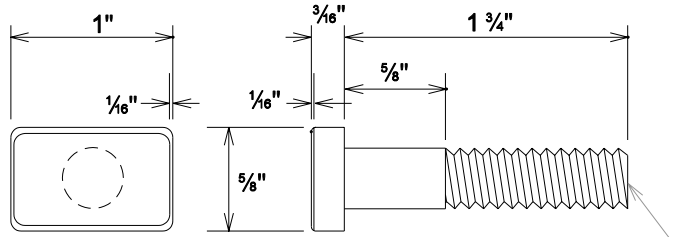
/s/ Richard L. VanCleave 3-01-04  
DESIGN STANDARDS ENGINEER DATE

/s/ Richard K. Smutzer 3-01-04  
CHIEF HIGHWAY ENGINEER DATE

DESIGN STANDARDS ENGINEER

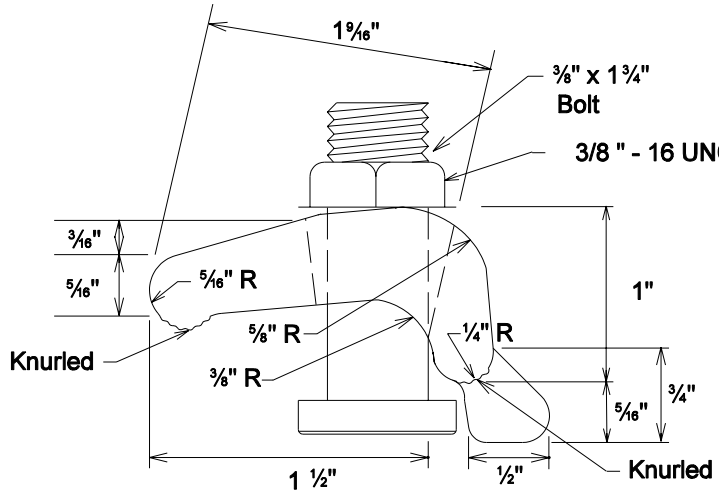


**PLAN VIEW**



**3/8"-16 UNC-2A Thread**

**SIDE VIEW**



**ELEVATION VIEW**

**POST CLIP BOLT**

|                                      |   |
|--------------------------------------|---|
| INDIANA DEPARTMENT OF TRANSPORTATION |   |
| Panel Sign Post Clip                 |   |
| SEPTEMBER 2004                       |   |
| STANDARD DRAWING NO. E 802-SNGP-10A  |   |
|                                      | <i>/s/ Richard L. VanCleave</i> 9-01-04<br>DESIGN STANDARDS ENGINEER DATE |
|                                      | <i>/s/ Richard K. Smutzer</i> 9-01-04<br>CHIEF HIGHWAY ENGINEER DATE      |
| DESIGN STANDARDS ENGINEER            |   |