


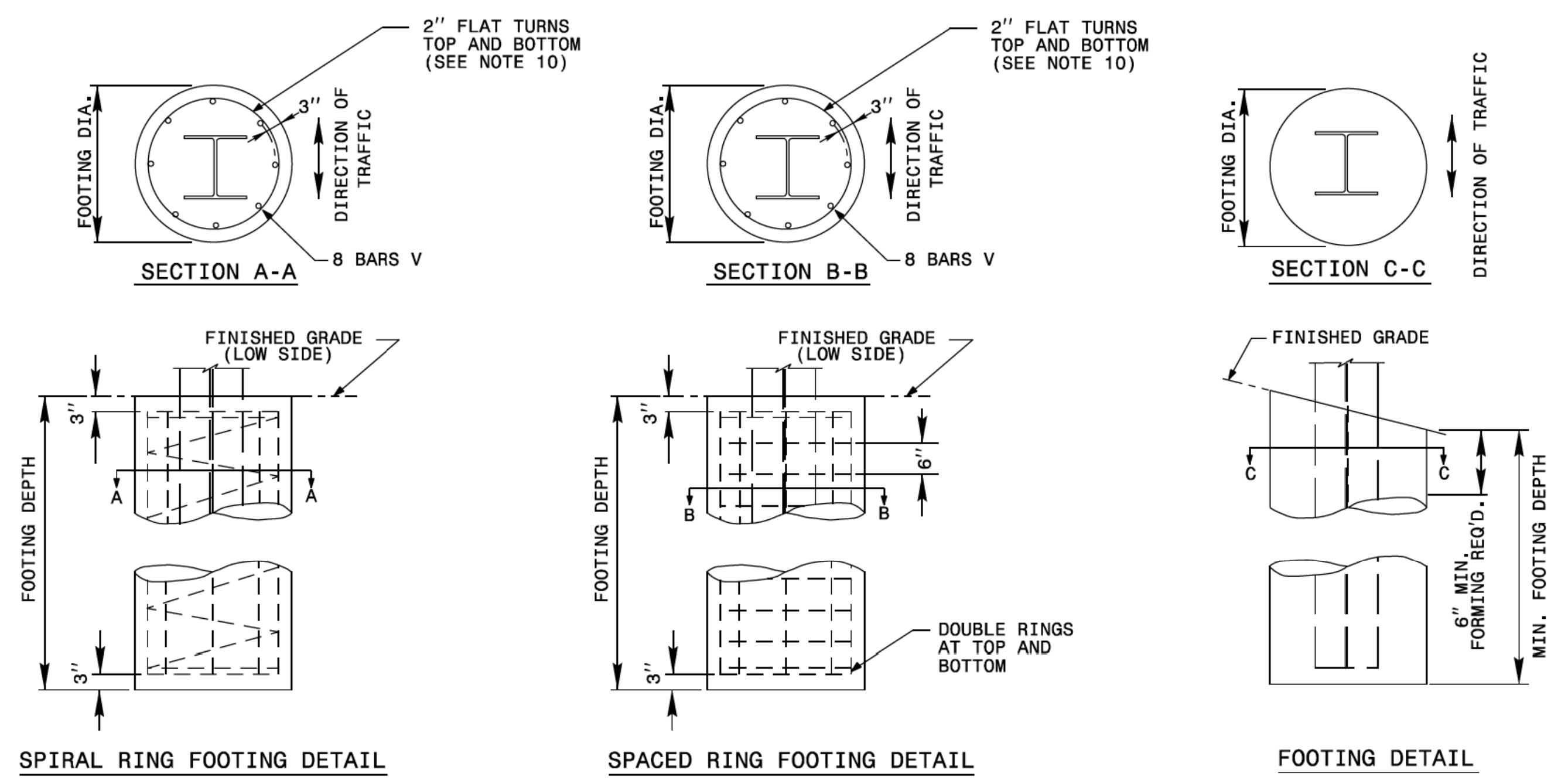
TIP NO. U-2579AA DocuSigned by: **Matthew V. Springer** SHEET NO. SIGN-4B  
 APPROVED: *Matthew V. Springer*  
 DATE: 5/26/2020  
 SEAL  


STATE OF NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.

5-20

ENGLISH DETAIL DRAWING FOR  
**GROUND MOUNTED SIGN SUPPORTS**

| BEAM SHAPE | SLIP BASE PLATE DATA |                |                |                |                |                |                | KEEPER PLATE DATA |                |                |                |                |                |                | HINGE CONNECTION DATA |                  |        |        |        |        |        | BREAK AWAY SUPPORT WEIGHT CONSTANT LBS. |        |         |                |                |
|------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------------|------------------|--------|--------|--------|--------|--------|---|--------|---------|----------------|----------------|
|            | BOLT SIZE            | A <sub>1</sub> | B <sub>1</sub> | C <sub>1</sub> | D <sub>1</sub> | E <sub>1</sub> | T <sub>1</sub> | R <sub>1</sub>    | A <sub>2</sub> | B <sub>2</sub> | C <sub>2</sub> | D <sub>2</sub> | E <sub>2</sub> | R <sub>2</sub> | T <sub>2</sub>        | BOLT SIZE        | F      | G      | H      | I      | J      |   | K      | L       | R <sub>3</sub> | T <sub>3</sub> |
| S3X5.7     | 1/2"DIA.X 3/4"       | 7"             | 4"             | 1"             | 3/4"           | 2 1/2"         | 1"             | 9/32"             | 7"             | 4"             | 1"             | 3/4"           | 2 1/2"         | 9/32"          | 28 GAUGE              | 1/2"DIA.X 1 3/4" | 2 1/4" | 3 1/2" | 4"     | 1 1/2" | 1"     | 1 1/2"                                  | 2"     | 9/32"   | 3/8"           | 18             |
| S4X7.7     | 1/2"DIA.X 3/4"       | 8"             | 4"             | 1"             | 3/4"           | 2 1/2"         | 1"             | 9/32"             | 8"             | 4"             | 1"             | 3/4"           | 2 1/2"         | 9/32"          | 28 GAUGE              | 1/2"DIA.X 1 3/4" | 2 5/8" | 3 1/2" | 4"     | 1 1/2" | 1"     | 1 1/2"                                  | 2"     | 9/32"   | 3/8"           | 20             |
| W6X9       | 1/2"DIA.X 3/4"       | 10"            | 5"             | 1"             | 3/4"           | 3 1/2"         | 1"             | 9/32"             | 10"            | 5"             | 1"             | 3/4"           | 3 1/2"         | 9/32"          | 28 GAUGE              | 1/2"DIA.X 1 3/4" | 4"     | 3 1/2" | 4"     | 3/4"   | 1"     | 1 1/2"                                  | 2"     | 9/32"   | 3/8"           | 32             |
| W6X12      | 5/8"DIA.X 4"         | 11"            | 5"             | 1 1/4"         | 7/8"           | 3 1/4"         | 1 1/4"         | 1 1/32"           | 11"            | 5"             | 1 1/4"         | 7/8"           | 3 1/4"         | 1 1/32"        | 28 GAUGE              | 5/8"DIA.X 2"     | 4"     | 4"     | 4 1/2" | 3/4"   | 1 1/8" | 5/8"                                    | 2 1/4" | 1 1/32" | 3/8"           | 39             |
| W6X16      | 5/8"DIA.X 4 1/2"     | 12"            | 6"             | 1 1/4"         | 7/8"           | 4 1/4"         | 1 1/2"         | 1 1/32"           | 12"            | 6"             | 1 1/4"         | 7/8"           | 4 1/4"         | 1 1/32"        | 28 GAUGE              | 5/8"DIA.X 2 1/4" | 4"     | 4"     | 4 1/2" | 3/4"   | 1 1/8" | 5/8"                                    | 2 1/4" | 1 1/32" | 1/2"           | 47             |
| W8X18      | 5/8"DIA.X 4 1/2"     | 13 1/2"        | 6 1/2"         | 1 1/4"         | 7/8"           | 4 3/4"         | 1 1/2"         | 1 1/32"           | 13 1/2"        | 6 1/2"         | 1 1/4"         | 7/8"           | 4 3/4"         | 1 1/32"        | 28 GAUGE              | 5/8"DIA.X 2 1/4" | 5 1/4" | 4"     | 4 1/2" | 1"     | 1 1/8" | 5/8"                                    | 2 1/4" | 1 1/32" | 1/2"           | 70             |
| W8X21      | 3/4"DIA.X 4 1/2"     | 14"            | 7"             | 1 1/2"         | 1"             | 5"             | 1 1/2"         | 1 3/32"           | 14"            | 7"             | 1 1/2"         | 1"             | 5"             | 1 3/32"        | 28 GAUGE              | 3/4"DIA.X 2 1/2" | 5 1/4" | 6"     | 7"     | 1"     | 1 3/4" | 3/4"                                    | 3 1/2" | 1 3/32" | 1/2"           | 73             |
| W10X22     | 3/4"DIA.X 4 1/2"     | 16"            | 8"             | 1 1/2"         | 1"             | 6"             | 1 1/2"         | 1 3/32"           | 16"            | 8"             | 1 1/2"         | 1"             | 6"             | 1 3/32"        | 28 GAUGE              | 3/4"DIA.X 2 1/2" | 5 3/4" | 6"     | 7"     | 1"     | 1 3/4" | 3/4"                                    | 3 1/2" | 1 3/32" | 1/2"           | 119            |
| W10X26     | 3/4"DIA.X 5 1/2"     | 16 1/2"        | 8"             | 1 1/2"         | 1"             | 6"             | 1 3/4"         | 1 3/32"           | 16 1/2"        | 8"             | 1 1/2"         | 1"             | 6"             | 1 3/32"        | 28 GAUGE              | 3/4"DIA.X 2 3/4" | 5 3/4" | 6"     | 7"     | 1"     | 1 3/4" | 3/4"                                    | 3 1/2" | 1 3/32" | 5/8"           | 140            |
| W12X26     | 3/4"DIA.X 5 1/2"     | 18 1/2"        | 9"             | 1 1/2"         | 1"             | 7"             | 1 3/4"         | 1 3/32"           | 18 1/2"        | 9"             | 1 1/2"         | 1"             | 7"             | 1 3/32"        | 28 GAUGE              | 3/4"DIA.X 2 3/4" | 6 1/2" | 6"     | 7"     | 1"     | 1 3/4" | 3/4"                                    | 3 1/2" | 1 3/32" | 5/8"           | 176            |
| W14X30     | 1"DIA.X 6"           | 22"            | 9"             | 2"             | 1 1/2"         | 6"             | 2"             | 1 7/32"           | 22"            | 9"             | 2"             | 1 1/2"         | 6"             | 1 7/32"        | 28 GAUGE              | 1"DIA.X 3"       | 6 3/4" | 7"     | 8"     | 1 1/4" | 2"     | 1"                                      | 4"     | 1 7/32" | 5/8"           | 205            |
| W16X31     | 1"DIA.X 6"           | 24"            | 9"             | 2"             | 1 1/2"         | 6"             | 2"             | 1 7/32"           | 24"            | 9"             | 2"             | 1 1/2"         | 6"             | 1 7/32"        | 28 GAUGE              | 1"DIA.X 3"       | 5 1/2" | 7"     | 8"     | 1 1/4" | 2"     | 1"                                      | 4"     | 1 7/32" | 3/4"           | 223            |
| W18X35     | 1"DIA.X 6"           | 25"            | 9"             | 2"             | 1 1/2"         | 6"             | 2"             | 1 7/32"           | 25"            | 9"             | 2"             | 1 1/2"         | 6"             | 1 7/32"        | 28 GAUGE              | 1"DIA.X 3"       | 6"     | 7"     | 8"     | 1 1/4" | 2"     | 1"                                      | 4"     | 1 7/32" | 3/4"           | 243            |
| W18X40     | 1"DIA.X 6 1/2"       | 26"            | 9"             | 2"             | 1 1/2"         | 6"             | 2 1/4"         | 1 7/32"           | 26"            | 9"             | 2"             | 1 1/2"         | 6"             | 1 7/32"        | 28 GAUGE              | 1"DIA.X 3 1/2"   | 6"     | 7"     | 8"     | 1 1/4" | 2"     | 1"                                      | 4"     | 1 7/32" | 7/8"           | 278            |
| W21X44     | 1"DIA.X 7"           | 29"            | 9"             | 2"             | 1 1/2"         | 6"             | 2 1/2"         | 1 7/32"           | 29"            | 9"             | 2"             | 1 1/2"         | 6"             | 1 7/32"        | 28 GAUGE              | 1"DIA.X 3 1/2"   | 6 1/2" | 7"     | 8"     | 1 1/4" | 2"     | 1"                                      | 4"     | 1 7/32" | 7/8"           | 310            |



| FOOTING DIAMETER | REINFORCEMENT | SPIRAL BAR       | SPACED BAR       |
|------------------|---------------|------------------|------------------|
| 1'-6"            | 8 # 6 BARS    | #3 BAR, 6" PITCH | #3 BAR, 6" SPACE |
| 2'               | 8 # 7 BARS    | #3 BAR, 6" PITCH | #3 BAR, 6" SPACE |
| 2'-6"            | 8 # 9 BARS    | #3 BAR, 6" PITCH | #3 BAR, 6" SPACE |
| 3'               | 8 # 11 BARS   | #3 BAR, 6" PITCH | #3 BAR, 6" SPACE |
| 3'-6"            | 8 # 12 BARS   | #3 BAR, 6" PITCH | #3 BAR, 6" SPACE |
| 4'               | 8 # 14 BARS   | #3 BAR, 6" PITCH | #3 BAR, 6" SPACE |

\* FOUNDATION DIMENSIONS ARE SHOWN IN PLANS

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