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### Proposed Revisions to a Standard Plans Index

(Please provide all information — Incomplete forms will be returned)

#### **Contact Information:**

Date: May 12, 2022 Originator: Rick Jenkins Phone: (850) 414-4355

Email: Rick.Jenkins@dot.state.fl.us

**Standard Plans:** 

Index Number: 700-020 Sheet Number (s): All of 3

Index Title: Multi-Column Ground Sign

# Summary of the changes:

Sheet 1: Added New Note 1 - "Meet requirements of Specification 700."; Renumbered Notes; Deleted Notes 3 through 6; Moved Notes 5.C., 6.A second sentence, and 6.C to Sheet 2 Notes; Updated General Note references in the

MULT-CULMN SIGN ASSEMBLY Detail.

Sheet 2: Updated Instruction Notes to "Base Connection Notes"; Added Note 3 from Sheet 1 - . "Assemble post to stub with base bolts and three flat washers per bolt (See Base Connection Details). Tighten base bolts in accordance with Note 2.", Note 4 - "Weld base plate to post and stub or if using the Alternate Connection Detail weld base plate and stiffeners to post and stub." and Note 5 - "Orient stub post according to direction of traffic."

Sheet 3: Deleted General Note reference in DETAIL "B".

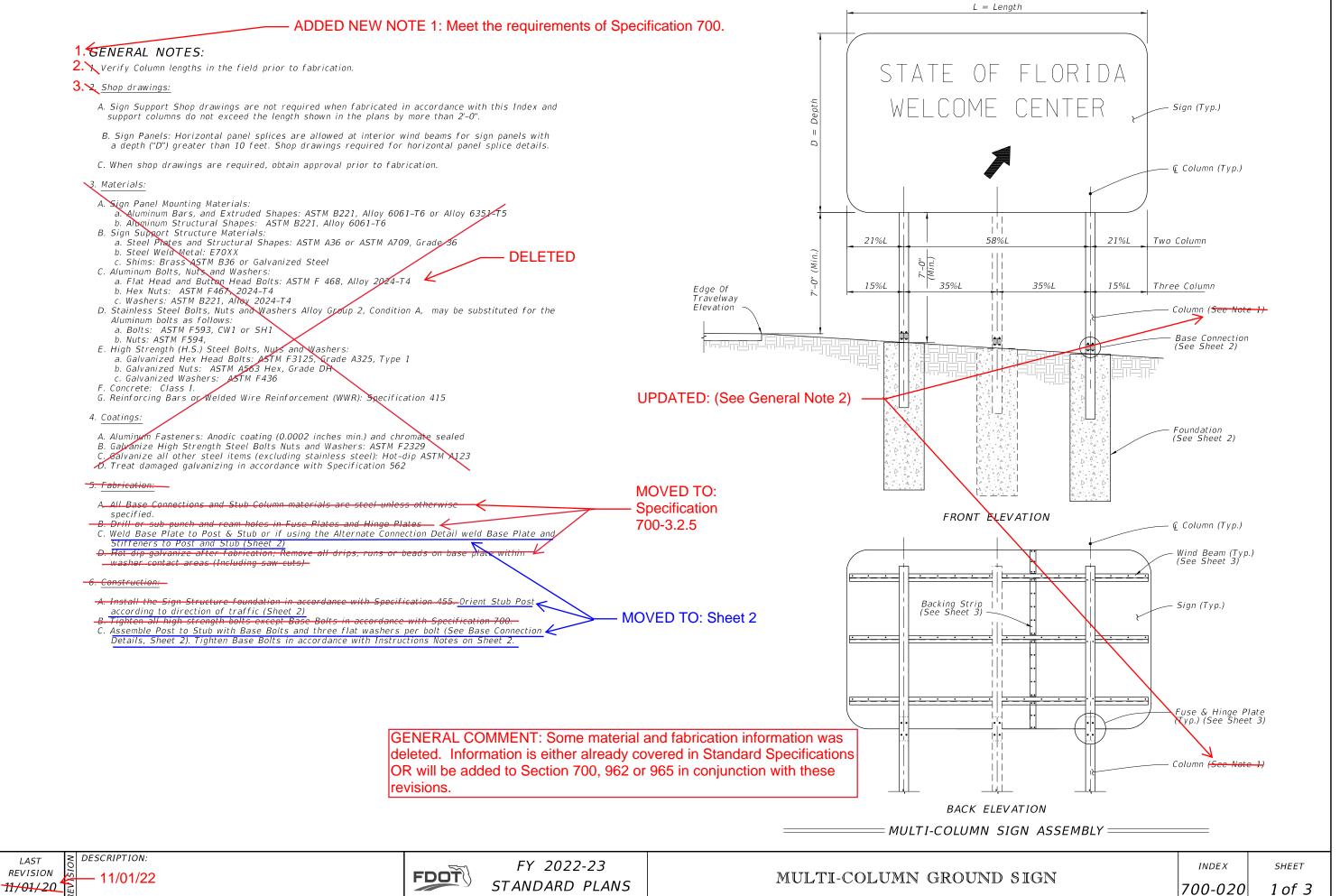
### Commentary / Background:

The 700 Index Series is being edited to remove material information and other information that is located in the Standard Specifications. Revisions are being made to Specification Sections 700, 962 and 965 in conjunction with these changes.

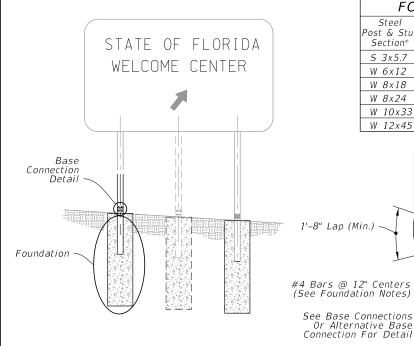
#### Other Affected Offices / Documents: (Provide name of person contacted)

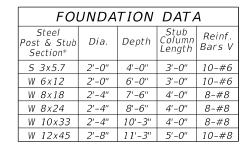
Yes	No		
$\checkmark$		Other Standard Plans –	
	$\checkmark$	FDOT Design Manual – Dewayne Carver	
		Basis of Estimates Manual – Ryan Gray	
$\checkmark$		Standard Specifications – Daniel Strickland	
	$\checkmark$	Approved Product List – Missy Hollis	
	<b>/</b>	Construction – Jason Russell	
	$\checkmark$	Maintenance – Deanna Hutchison	
<u>Origin</u>	atio	n Package Includes: (Submit package to Rick Jenkins)	Implementation:
Yes	N/A	4	Design Bulletin (Interim)
<b>~</b>		Redline Mark-ups	☐ DCE Memo
		Revised or Proposed Standard Plan Instruction (SPI)	Program Mgmt. Bulletin
		Other Support Documents	FY-Standard Plans (Next Release)

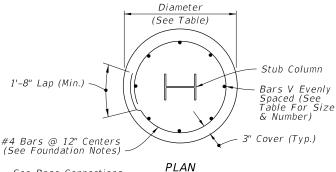
Contact the Roadway Design Office for assistance in completing this form



**REVISION** 







• Q Of Foundation & Stub Column

Finished

H.S. Base Bolt With 3 Washers & Hex Nut

Table for Bolt Dia. &

Torque, See Assembly

Remove All

Shims As

Foundation

Required

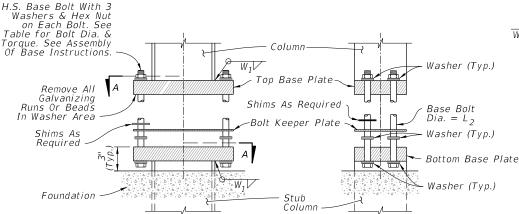
Galvanizing

Runs Or Reads

In Washer Area

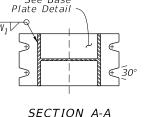
Of Base Instructions

on Each Bolt. See



→ Direction of Traffic

SIDE ELEVATION



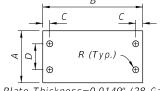
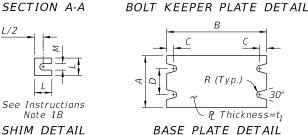


Plate Thickness=0.0149" (28 Gauge)



SHIM DETAIL

BASE CONNECTION DATA SHIM Torque (Ibf\*in) Post & Stui Section\* S 3x5.7 3/4" 5/16" 1/2" 1/4"  $90 \pm 20$ -1/4" W 6x12 10" 3/4" 3/8" 1-5/8" 5/8" 1/4"  $270 \pm 45$ 1-3/8" W 8x18 5-1/4" | 12-1/2" 7/8" 2-3/4" 7/16" 1-3/4" 3/4" 3/8" | 445 ± 75 1-3/4" | 13/16" W 8x24 7/8" 1-3/4" 3/4" 3/8"  $|445 \pm 75| 2 - 1/8" | 13/16"$ 3-1/4" 7/16" 16" |1-1/4"|4-3/4"| 9/16" 1/2" | 580 ± 90 | 2-3/8" | 1-1/16' 18" 1-1/4" 9/16" 2" 1" 1/2"  $|580 \pm 90| 2-3/4$ " |1-1/16|

st Designations: (Nominal Depth in inches) x (weight in pounds per linear foot).

Stiffener

Base Plate

Shims As

Required

Keeper Plate

Wol

FRONT ELEVATION

# FOUNDATION NOTES:

The Contractor may use Welded Wire Reinforcement (WWR) for foundation reinforcing.

== MULTI-COLUMN SIGN ASSEMBLY ===

At the Contractors option, the #4 tie bars at 12" o.c. may be replaced by D10 Spiral Wire @ 6" pitch, with three flat turns at the top and one flat turn at the bottom in accordance with Specification 415.

## JPDATED: Base Connection Notes:

#### **INSTRUCTIONS NOTES:**

- 1. Assembly of Base Instructions.
- A. Place one washer on each Base Bolt between the Bottom Base Plate and the head of high strength Base Bolt. place the next washer between the Bottom Base Plate and the Bolt Keeper Plate; add the Top Base Plate section and place the third washer between the Top Base Plate
- B. Shim as required to plumb column. Provide 2-0.0149" thick (28 gauge) and 2-0.0329" thick (21 gauge) shims per column
- 2. H.S. Base Bolt L<sub>2</sub> Tightening Instructions:
- A. Tighten Base Bolts to the maximum possible with a 12" to 15" wrench (this will bed the washers and shims and clear the bolt threads).
- B. Loosen each Base Bolt one turn.
- C. Under the supervision of the Engineer, use a calibrated wrench to tighten bolts to the torque prescribed in the Table. Over tightened Base Bolts will not be permitted.
- D. Burr threads at junction with nut to prevent nut loosening. Treat damaged galvanizing.

= FOUNDATION =

3. Assemble post to stub with base bolts and three flat washers per bolt (See Base Connection Details). Tighten base bolts in accordance with Note 2.

· Stub Column

4. Weld base plate to post and stub or if using the Alternate Connection Detail weld base plate and stiffeners to post and stub.

5. Orient stub post according to direction of traffic.

BASE CONNECTION =

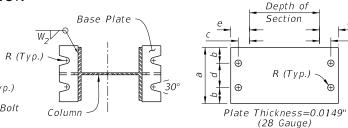
Washer (Typ.)

H.S. Base Bolt

- Washer (Typ.)

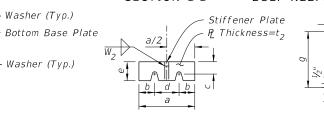
Washer (Typ.)

 $Dia. = L_2$ 



## SECTION B-B

BOLT KEEPER PLATE DETAIL



of Traffic .EVATION

FRONT ELEVATION

BASE PLATE DETAIL

STIFFENER PLATE DETAIL

١.	ALTERNATIVE BASE CONNECTION DATA												
	eel tion*	а	b	С	d	e	$t_2$	L <sub>2</sub>	R	Torque (Ibf*in)	g	h	$W_2$
	x12	4-3/4"	1-1/8"	1-3/16"	2-1/2"	2"	1/2"	5/8"	3/8"	270±45	5-1/8"	2"	1/4"
s	x18	5-3/4"	1-1/2"	1-3/8"	2-3/4"	2-3/16"	5/8"	3/4"	7/16"	445±75	6-1/4"	2-3/16"	1/4"
3	x24	7"	1-3/4"	1-3/8"	3-1/2"	2-3/8"	3/4"	3/4"	7/16"	445±75	8"	2-3/8"	5/16"
	0x33	8"	2"	1-9/16"	4"	2-3/4"	3/4"	1"	9/16"	580±90	8"	2-3/4"	5/16"
	2x45	8"	2"	1-9/16"	4"	3"	3/4"	1"	9/16"	580±90	8"	3"	5/16"

esignations: (Nominal Depth in inches) x (weight in pounds per linear foot)

ALTERNATIVE BASE CONNECTION =

# FOUNDATION AND BASE CONNECTION DETAILS

DESCRIPTION: LAST **REVISION** 11/01/22 11/01/21

FDOT

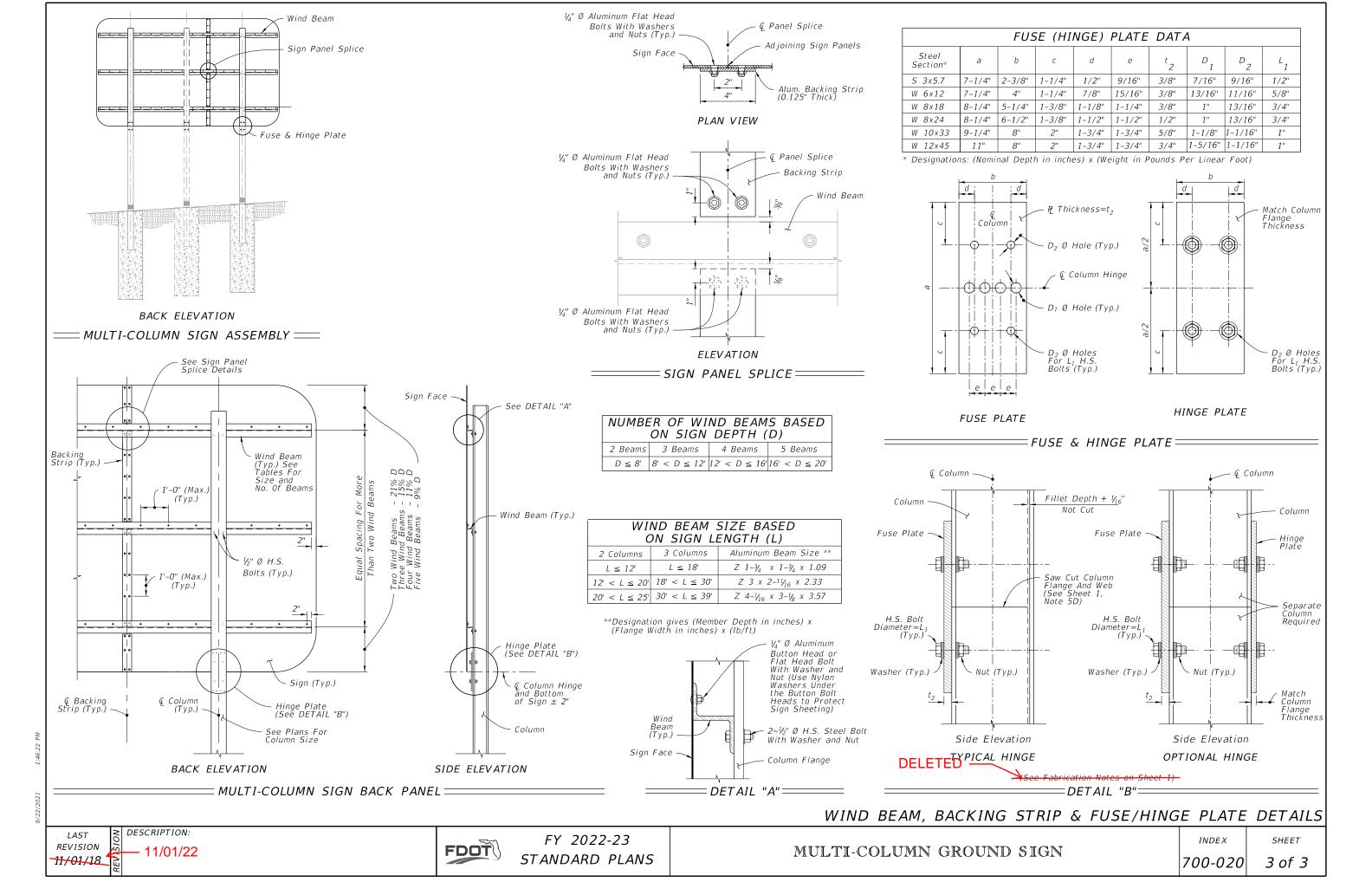
ADDED NOTES 3, 4, AND 5:

FY 2022-23 STANDARD PLANS

MULTI-COLUMN GROUND SIGN

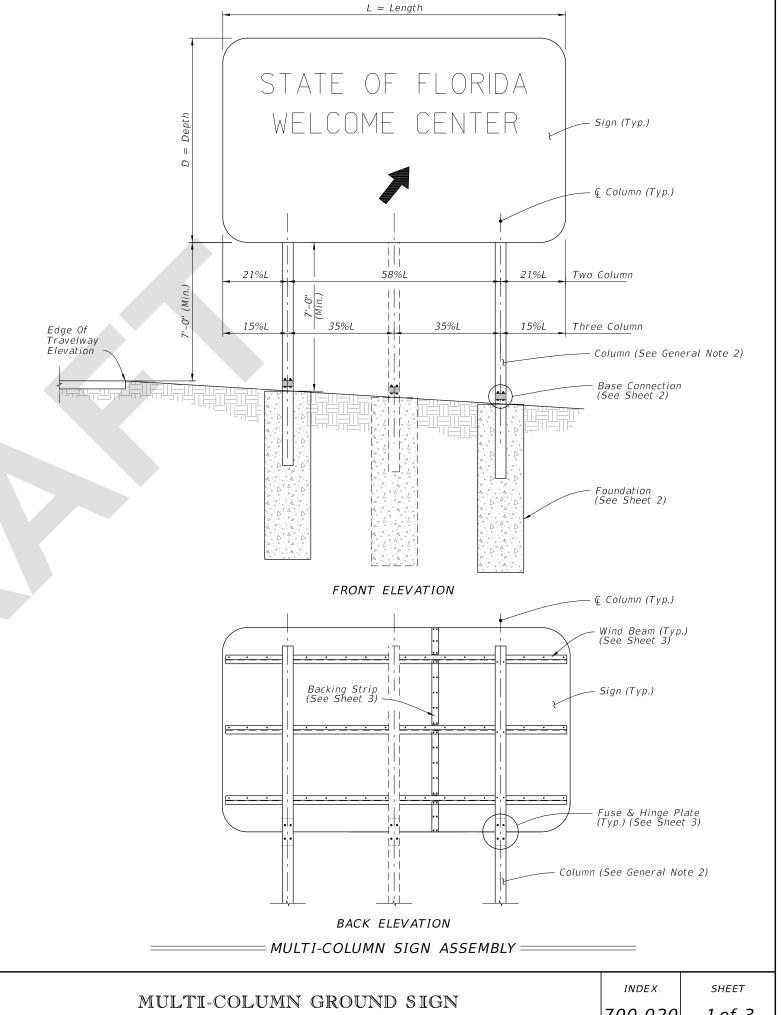
INDEX 700-020

SHEET 2 of 3



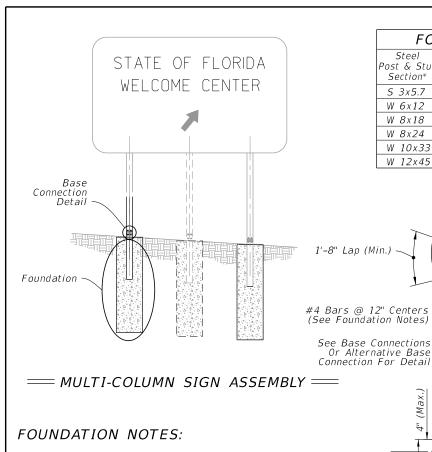
### **GENERAL NOTES:**

- 1. Meet the requirements of Specification 700.
- 2. Verify Column lengths in the field prior to fabrication.
- 3. Shop drawings:
- A. Sign Support Shop drawings are not required when fabricated in accordance with this Index and support columns do not exceed the length shown in the plans by more than 2'-0".
- B. Sign Panels: Horizontal panel splices are allowed at interior wind beams for sign panels with a depth ("D") greater than 10 feet. Shop drawings required for horizontal panel splice details.
- C. When shop drawings are required, obtain approval prior to fabrication.



REVISION 11/01/20 DESCRIPTION:

FDOT

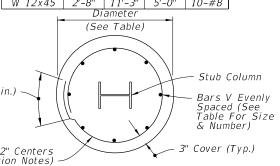


#### FOUNDATION DATA Steel Dia Depth Post & Stub Ľength Bars V S 3x5.7 4'-0" 3'-0" 2'-0" W 6x12 2'-0" 6'-0" 3'-0" 10-#6 4'-0" W 8x18 7'-6" 8-#8 W 8x24 8'-6" 4'-0" 8-#8 10'-3" 4'-0" W 10x33 11'-3" 5'-0" | 10-#8 W 12x45 2'-8"

Diameter

H.S. Base Bolt With 3 Washers & Hex Nut on Each Bolt. See

Table for Bolt Dia. &



- Ç Of Foundation & Stub Column

PLAN

Torque. See Assembly Of Base Instructions. Washer (Typ.,  $W_1 V$ Top Base Plate Remove All Galvanizing Shims As Required Runs Or Reads Base Bolt In Washer Area Dia. =  $L_2$ -Bolt Keeper Plate Shims As → Washer (Typ.) Required - Bottom Base Plate Washer (Typ.) Foundation

SIDE ELEVATION

Steel

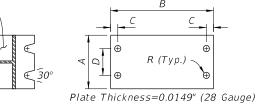
Section<sup>3</sup>

W 6x12

W 8x18

W 8x24

W 10x33



SECTION A-A BOLT KEEPER PLATE DETAIL

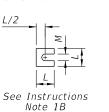
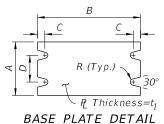


Plate Detail



SHIM DETAIL

	BASE CONNECTION DATA								SHIM		
Steel Post & Stub Section*	А	В	С	D	R	t <sub>1</sub>	L <sub>2</sub>	W <sub>1</sub>	Torque (Ibf*in)	L	М
S 3x5.7	4"	7"	3/4"	2"	5/16"	1"	1/2"	1/4"	90 ± 20	1-1/4"	9/16"
W 6x12	4"	10"	3/4"	2"	3/8"	1-5/8"	5/8"	1/4"	270 ± 45	1-3/8"	11/16"
W 8x18	5-1/4"	12-1/2"	7/8"	2-3/4"	7/16"	1-3/4"	3/4"	3/8"	445 ± 75	1-3/4"	13/16"
W 8x24	6-1/2"	12-1/2"	7/8"	3-1/4"	7/16"	1-3/4"	3/4"	3/8"	445 ± 75	2-1/8"	13/16"
W 10x33	8"	16"	1-1/4"	4-3/4"	9/16"	2"	1"	1/2"	580 ± 90	2-3/8"	1-1/16"
W 12x45	10"	18"	1-1/4"	6"	9/16"	2"	1"	1/2"	580 ± 90	2-3/4"	1-1/16"

FRONT ELEVATION

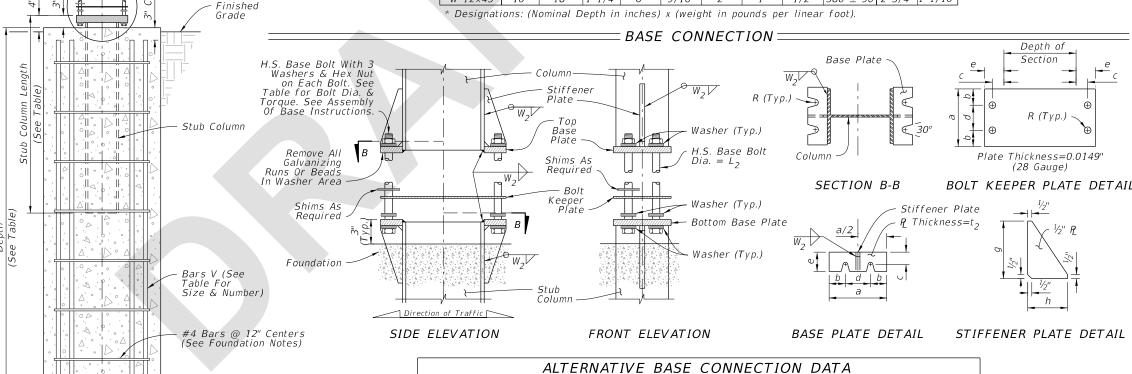
The Contractor may use Welded Wire Reinforcement (WWR) for foundation reinforcing

At the Contractors option, the #4 tie bars at 12" o.c. may be replaced by D10 Spiral Wire @ 6" pitch, with three flat turns at the top and one flat turn at the bottom in accordance with Specification 415.

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- C. Under the supervision of the Engineer, use a calibrated wrench to tighten bolts to the torque prescribed in the Table. Over tightened Base Bolts will not be permitted.
- D. Burr threads at junction with nut to prevent nut loosening. Treat damaged galvanizing.
- 3. Assemble Post to Stub with Base Bolts and three flat washers per bolt (See Base Connection Details). Tighten Base Bolts in accordance with Instructions with
- 4. Weld Base Plate to Post & Stub or if using the Alternate Connection Detail weld Base Plate and Stiffeners to Post
- 5. Orient Stub Post according to direction of traffic.

DESCRIPTION:



4-3/4" | 1-1/8" | 1-3/16" | 2-1/2"

1-3/8"

1-3/8"

1-9/16"

1-9/16"

2-3/4"

3-1/2"

arepsilon Designations: (Nominal Depth in inches) x (weight in pounds per linear foot).

ALTERNATIVE BASE CONNECTION =

2-3/16"

2-3/8"

2-3/4"

1/2"

5/8"

3/4"

3/4"

3/4"

5/8"

1"

FOUNDATION AND BASE CONNECTION DETAILS

Torque

(lbf\*in)

3/8" | 270±45 | 5-1/8"

3/4" | 7/16" | 445±75 | 6-1/4"

9/16" | 580±90

3/4" | 7/16" | 445±75 |

1" | 9/16" | 580±90 |

REVISION 11/01/22



ELEVATION

FOUNDATION =

FY 2023-24 STANDARD PLANS

Class II

MULTI-COLUMN GROUND SIGN

*INDEX* 700-020

 $W_2$ 

1/4"

1/4"

5/16"

5/16"

2-3/8"

2-3/4"

2 of 3

SHEET

