

Anchor bolts 2" dia, equally spaced at 45° on a 30" dia. bolt circle. see anchor bolt on (sheet 4 of 4) for other dimensions and specifications.

MDOT
Michigan Department of Transportation

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MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

**CANTILEVER FOUNDATION
SPREAD TYPE E**

05/24/18 F.H.W.A. APPROVAL	12/17/13 PLAN DATE	SIGN-330-B	SHEET 1 OF 4
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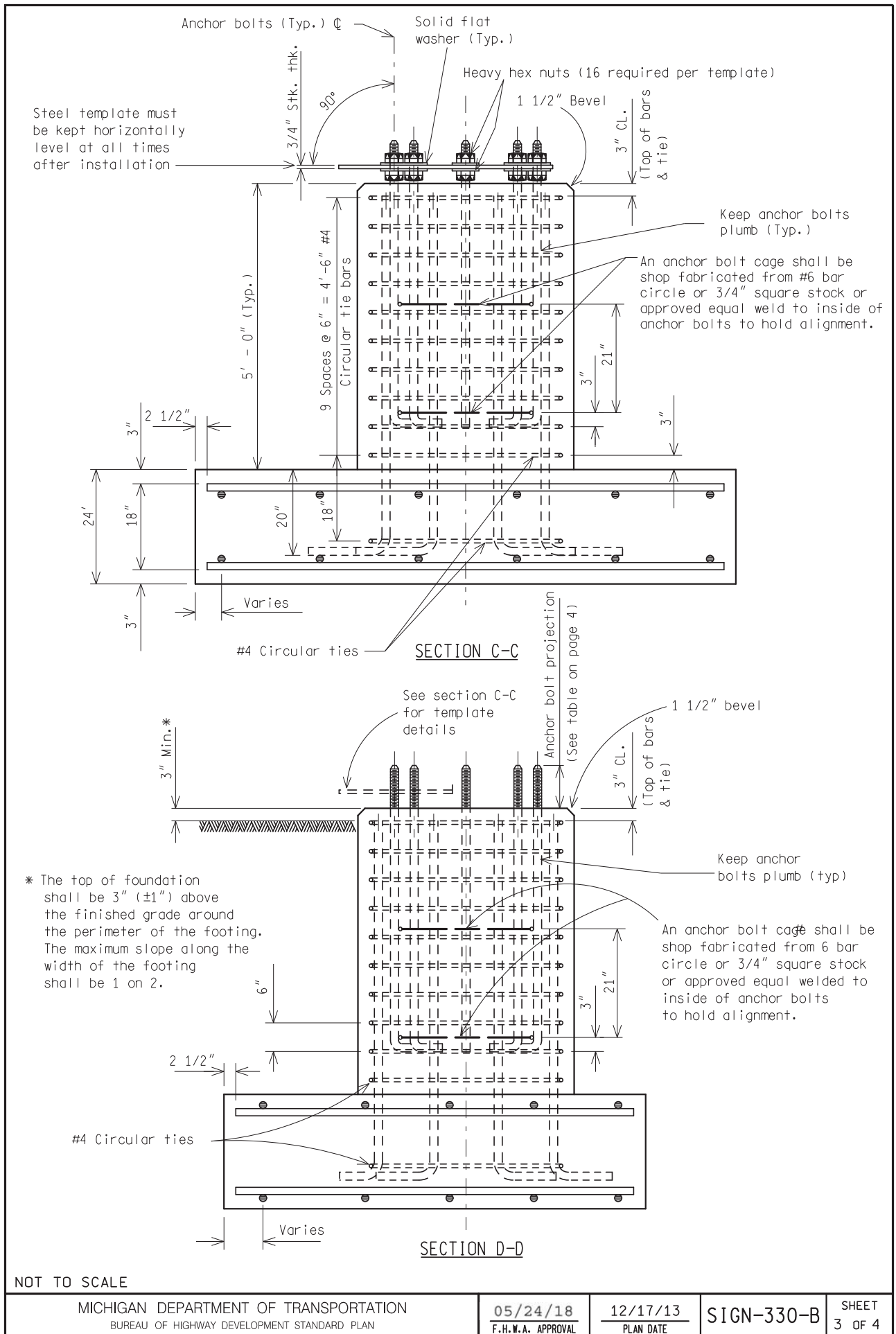
Cantilever Type	Soil Condition		Footing Length	Anchor Bolt (Dia.)	Longitudinal Footing Reinforcement Top & Bottom	Transverse Footing Reinforcement Top & Bottom	Concrete Cu. Yd. (Footing & Pedestal)	Reinforcement Steel Weight (Footing & Pedestal)
	*Sc	**N						
E-1	Sc > 500	N > 15	9'	2"	#5 BARS 8 SPA @ 1'-1/2" = 8'-4"	#5 BARS 17 SPA @ 0'-6" = 8'-6"	7.8	882 lbs
E-2	250 ≤ Sc ≤ 500	10 ≤ N ≤ 15	10'		#4 BARS 11 SPA @ 0'-9" = 8'-3"	#4 BARS 16 SPA @ 0'-7" = 9'-4"	8.4	747 lbs
E-3	100 ≤ Sc < 250	5 ≤ N ≤ 10	15'		#4 BARS 13 SPA @ 0'-7 3/4" = 8'-4 3/4"	#4 BARS 10 SPA @ 1'-5" = 14'-2"	11.8	798 lbs

*SC = Allowable shear in cohesive soils. (lbs/ft²)
 **N = Blows/ft of penetration. (astm testing procedure).

NOT TO SCALE

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BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN

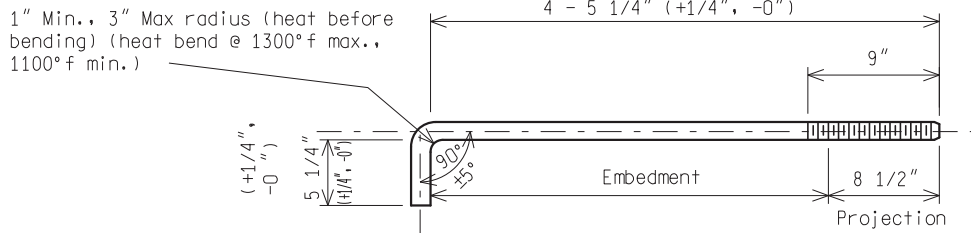
05/24/18
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SHEET
3 OF 4

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Anchor bolts: 8 per foundation
 Nuts: 2 per anchor bolt
 Washers: 2 per anchor bolt, standard flat galvanized

Anchor bolts, nuts, and washers shall be per Section 908.14 of the mdot standard specifications for construction.

ANCHOR BOLT INFORMATION

NOTES:

1. Bar reinforcement and spirals, if used for foundation, shall be per MDOT Standard Specifications for Construction.
2. A template and anchor bolt cage shall be shop fabricated and assembled prior to being approved by MDOT for shipping.
3. Diameter of bolt holes in template shall be 1/8" larger than anchor bolt diameter.
4. The template and handles shall be well supported, horizontally level and firmly anchored in place a minimum of 24 hours after the concrete placement is completed.
5. Care shall be taken during the concrete placement to avoid displacing the anchor bolts.
6. No hammering on the anchor bolts or template will be allowed.
7. After template is removed, thread nuts on to the bolt flush with the bolt end to protect threads until sign support is erected.

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