



MDOT
Michigan Department of Transportation

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PREPARED BY
ANCILLARY STRUCTURES

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MICHIGAN DEPARTMENT OF TRANSPORTATION

**CANTILEVER FOUNDATION
SPREAD TYPE E**

(SPECIAL DETAIL) F.H.W.A. APPROVAL

08/08/23
PLAN DATE

SIGN-330-C

SHEET
1 OF 4

Cantilever Type	Soil Type	Soil Condition		Footing Length	Anchor Rod (Dia.)	Longitudinal Footing Reinforcement Top & Bottom	Transverse Footing Reinforcement Top & Bottom	Concrete Cu. Yd. (Footing & Pedestal)	Reinforcement Steel Weight (Footing & Pedestal)
		*Su	**N60						
E-1	Sand	2000 ≥ Su	N60 ≥ 15	11'	2"	8 SPA @ 1'-1/2" = 8'-4"	21 SPA @ 0'-6" = 10'-6"	9.2	992 lbs
	Clay	1000 ≤ Su < 2000	10 ≤ N60 < 15						
E-2	Sand	1000 ≤ Su < 2000	5 ≤ N60 < 10	11'	2"	11 SPA @ 0'-9" = 8'-3"	18 SPA @ 0'-7" = 10'-6"	9.2	787 lbs
	Clay	500 ≤ Su < 1000	5 ≤ N60 < 10						
E-3	Sand	500 ≤ Su < 1000		15'	2"	13 SPA @ 0'-7 3/4" = 8'-4 3/4"	35 SPA @ 0'-5" = 14'-7"	11.8	2392 lbs
	Clay								

NOT TO SCALE

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SHEET
2 OF 4

*Su = Undrained shear strength of cohesive soils. (lbs/ft²)
 **N60 = SPT blow count corrected for hammer efficiency. (blows/ft)
 (ASTM D1856 testing procedure)

