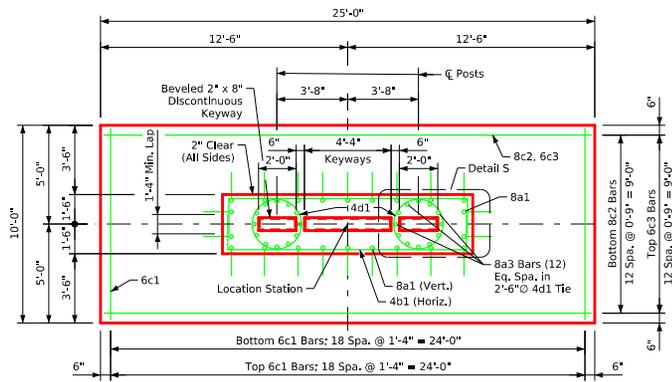


* Revised 06-2025: This sheet refocused, sheet format update.
 -steeloverheadtruss.dgn - SOST-20-11 - This sheet issued 03-2013. This sheet renamed from SOST-19-11 to SOST-20-11 on 02-2019.

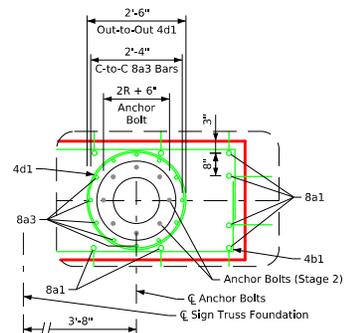


Plan

Concrete Placement Quantities
One Foundation - Stage 1

Item	C.Y.
Wall (Stage 1)	2.9
Footing	18.5
Total	21.4

	R	Bolt Circle Diameter
For 14" Posts (50'-100' Spans)	7	1'-8"
For 16" Posts (105'-130' Spans)	8	1'-10"



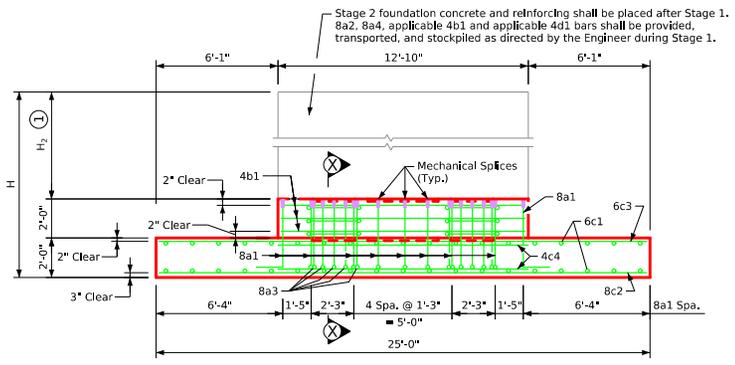
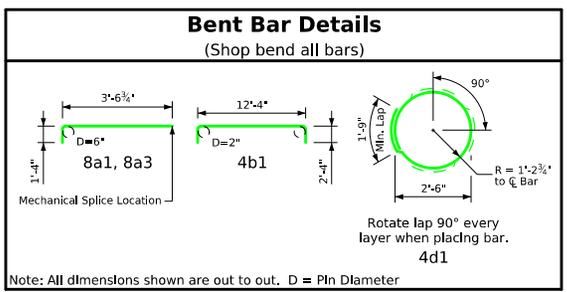
Detail S

Anchor Bolt and Anchor Reinforcing Placement
Keyway not shown.
Anchor bolts shown for information only. Anchor bolt assemblies will be placed during Stage 2.

See Standard Sheet SOST-21-11 for anchor bolt assembly details.

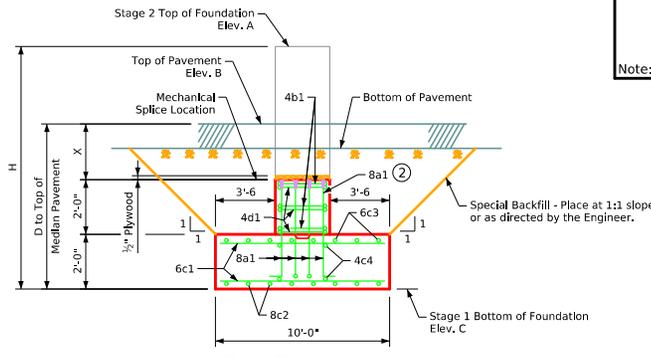
Reinforcing Bar List - Epoxy Coated							
Bar	Shape	Tabulated Value For $H_2 = 6'-0"$ and $H = 10'-0"$			Each 1'-0" of H_2 and H		
		No.	Length	Weight	No.	Length	Weight
8a1		22	4'-11"	289	See detail	---	---
8a2		22	5'-11"	348	See detail	22	1'-0" (3)
8a3		24	4'-11"	315	See detail	---	---
8a4		24	5'-11"	379	See detail	24	1'-0" (3)
4b1		20	17'-0"	227	1'-0" (5)	2(4)	17'-0" 23
6c1		38	9'-6"	542	1'-4"	---	---
8c2		13	24'-6"	850	0'-9"	---	---
6c3		13	24'-6"	478	0'-9"	---	---
4c4		4	12'-8"	34	See detail	---	---
4d1		22(6)	9'-6"	140	1'-0" (5)	2(4)	9'-6" 13
				Total 3602 LBS.	Total 159 LBS.		

- Additional length to bars 8a2 and 8a4 for $H_2 > 5'-0"$.
- Two in each 1'-0" of H_2 .
- Maintain uniform 1'-0" spacing for all values of H_2 , with remainder spacing at bottom of Stage 2 stem wall $2" \leq Y \leq 1'-0"$.
- Bundle two 4d1 circular ties in top layer.



Side Elevation

① H_2 = height of Stage 2 stem wall. H_2 shall not exceed 8'-6" nor be less than 5'-0".



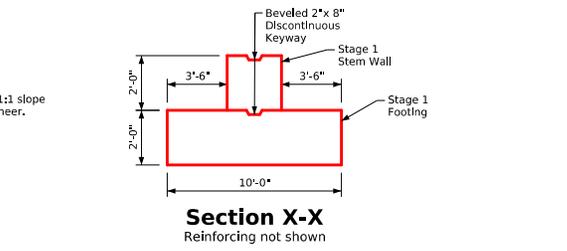
End Elevation

② The 8a1 bars shall be spliced to the 8a2 bars at the locations shown using mechanical splices. The 8a3 bars and shall also be spliced to the 8a4 bars using mechanical splices. Mechanical splices shall be selected from Materials I.M. 451 Appendix E and be flush with the top of concrete at the end of Stage 1 construction. The top of the Stage 1 stem wall shall be covered with a 1/2" thick plywood sheet to keep concrete surface and mechanical splices clean.

Elev. A = Stage 2 top of foundation elevation
 Elev. B = Top of pavement elevation
 Elev. C = Stage 1 bottom of foundation elevation
 Elev. C should be set so that [Elev. A - Elev. C] is a multiple of 1'-0".

$D = [Elev. B. - Elev. C]$
 X shall not be less than 2'-0".

Elev. A, Elev. B, and Elev. C shall be as shown elsewhere in these plans.



Section X-X
Reinforcing not shown

Work this sheet with Standard Sheets SOST-19-11 "Staged Foundation Construction Notes" and SOST-21-11 "Stage 2 Foundation Details".

06-2025 Latest Revision Date	Approved By Bridge Engineer 	IOWA DOT	
		Standard Design	
		Steel Overhead Sign Truss	
		September, 2011	
		Stage 1 Foundation Details 50'-130' Spans	SOST-20-11