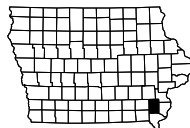


STATEWIDE COUNTY

Traffic Signs
NHSN-000-T(473)--2R-00

LETTING DATE
Aug 18, 2026



INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	Title Sheets
A.1	Title Sheet
A.2 - 3	Location Map Sheet
B Sheets	Typical Cross Sections and Details
B.1 - 12	Typicals and Sign Panel Details
C Sheets	Quantities and General Information
C.1 - 2	Estimated Project Quantities
C.3 - 5	Tabulations
C.6 - 7	Signing Notes
J Sheets	Traffic Control and Staging Sheets
J.1	Traffic Control Plan
N Sheets	Traffic Signal Sheets
N.1 - 3	Truss Mounted Sign Details
V Sheets	Bridge and Culvert Situation Plans
V.1 - 7	Sign Support Details - For Information Only



PLANS OF PROPOSED IMPROVEMENT ON THE
PRIMARY ROAD SYSTEM
STATEWIDE COUNTY
Traffic Signs
Various Locations
Statewide

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.14 of the Specifications.



REVISIONS

	TOTAL
	33
PROJECT IDENTIFICATION NUMBER	
26-00-000-220	
PROJECT NUMBER	
NHSN-000-T(473)--2R-00	
R.O.W. PROJECT NUMBER	

INDEX OF SEALS			
SHEET NO.	NAME	TYPE	BID QUANTITY SHEETS
A.1	Neal Fobian	Primary Signature Block	C.1-C.2

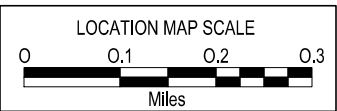
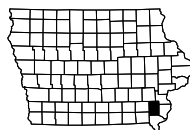
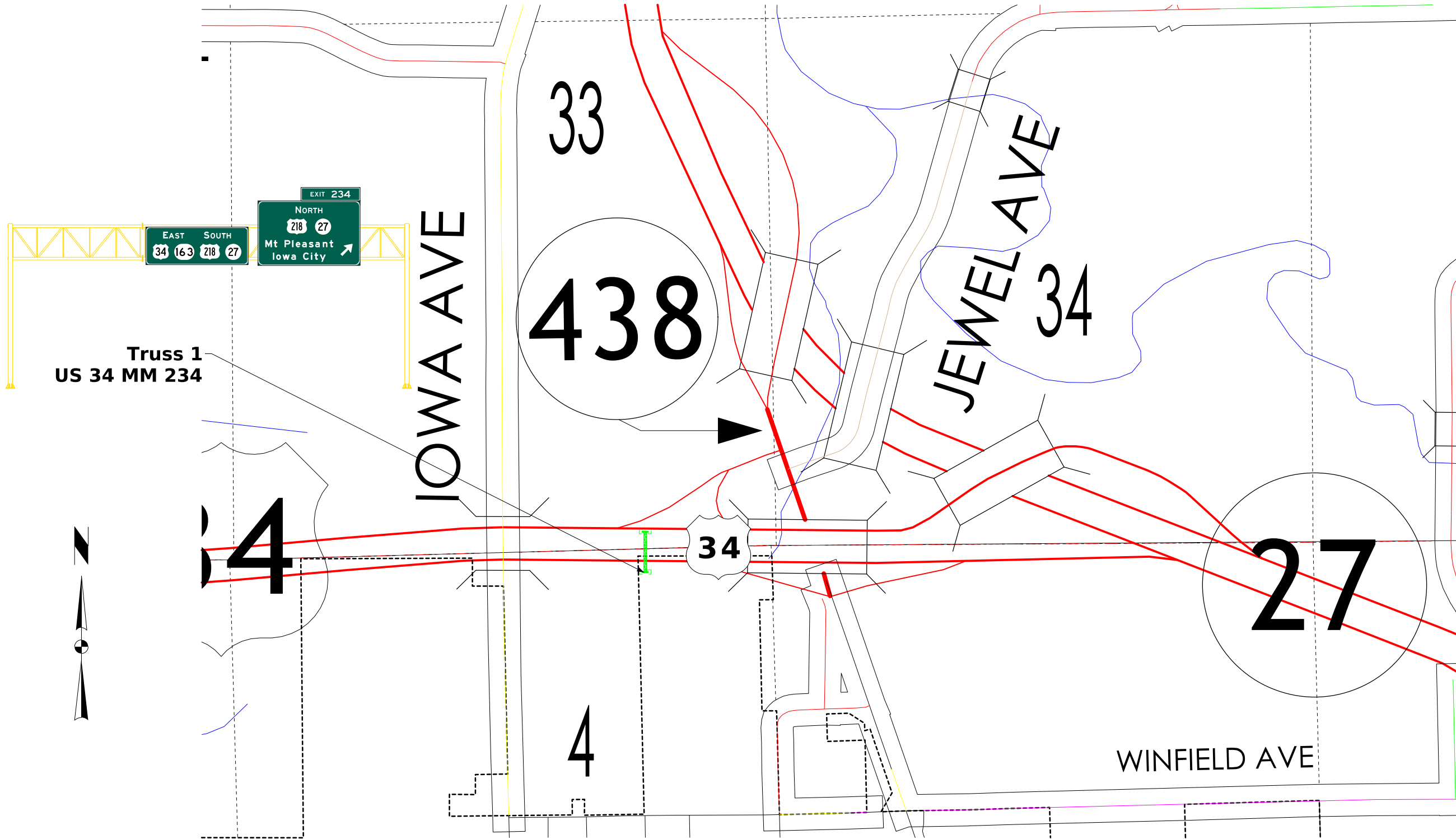
I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Neal Fobian 06-02-2026
Signature Date

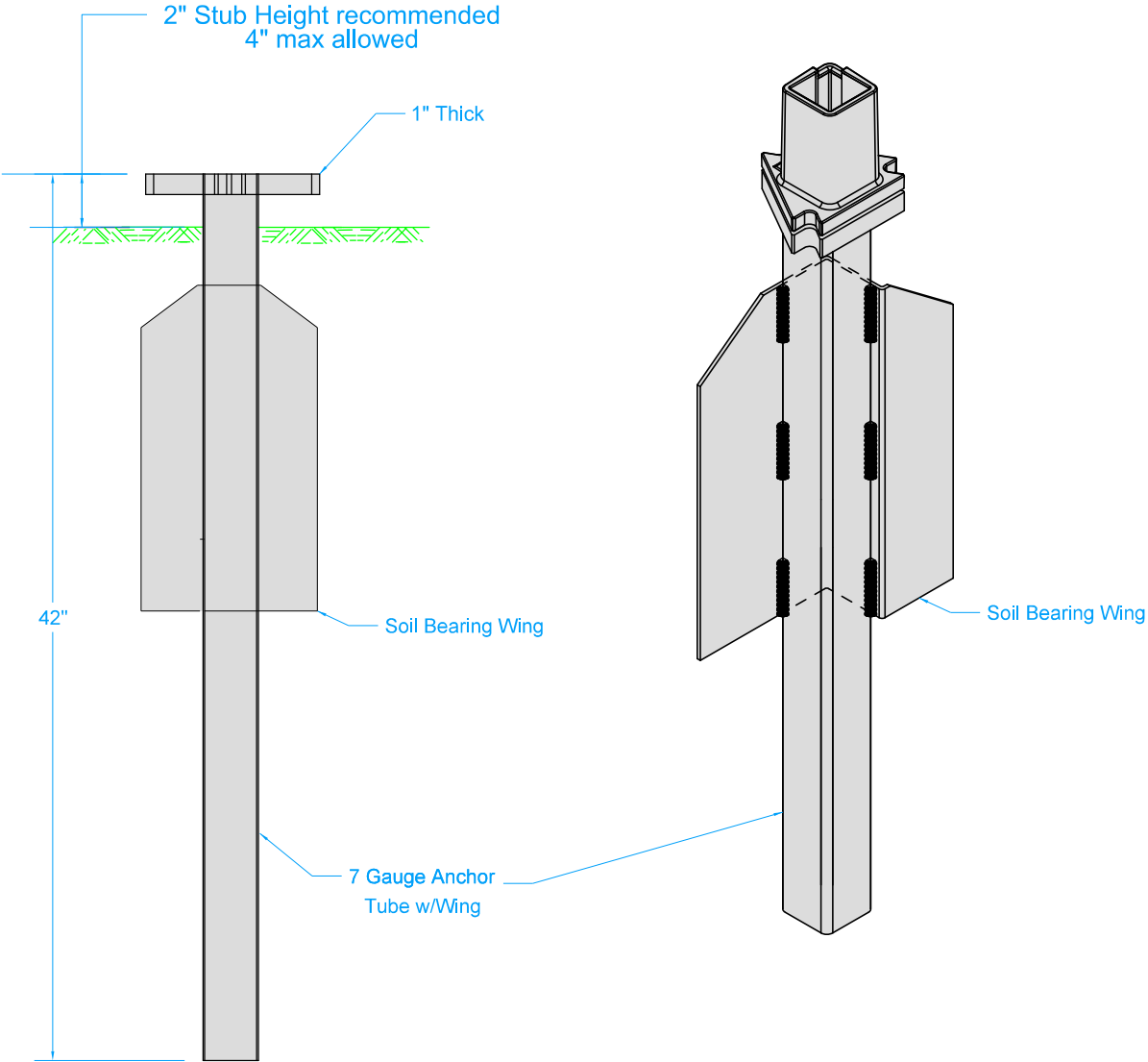
Neal Fobian
Printed or Typed Name

My license renewal date is December 31, 2026

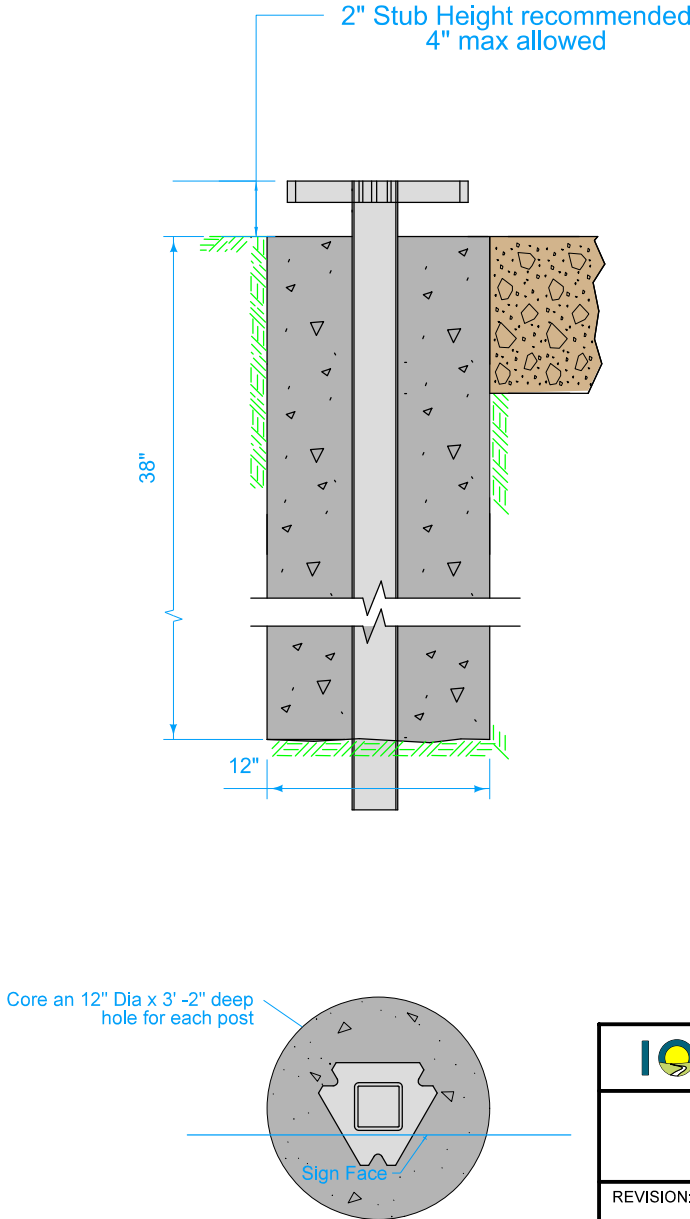
Pages or sheets covered by this seal: A.1-3, B.1-12, C.1-7, J.1, and N.1-3



TYPE 3 INSTALLATION
(TRIANGULAR SLIP BASE SOIL)

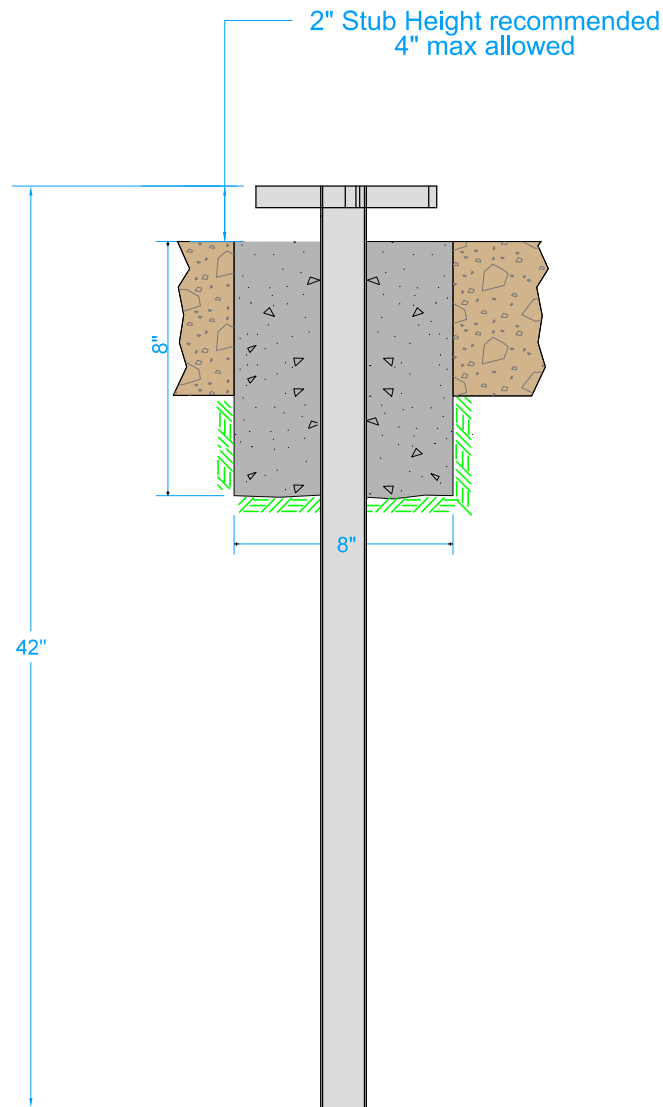


TYPE 4 INSTALLATION
(TRIANGULAR SLIP BASE CONCRETE)

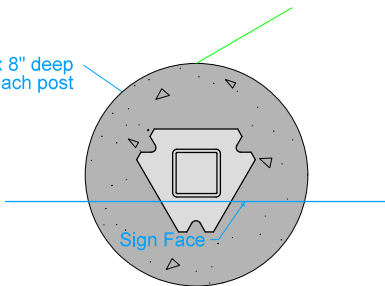


		REVISION	
		-	00-00-00
...		...	
		TAS STANDARD	
REVISION: ____			
Support Structures - Perforated Square Steel Tube Anchor and Post			

TYPE 5 INSTALLATION
(TRIANGULAR SLIP BASE CONCRETE)

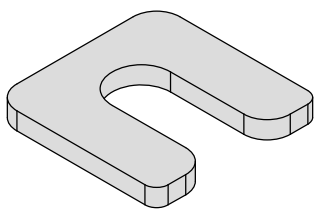


Core an 8" Dia x 8" deep
hole for each post



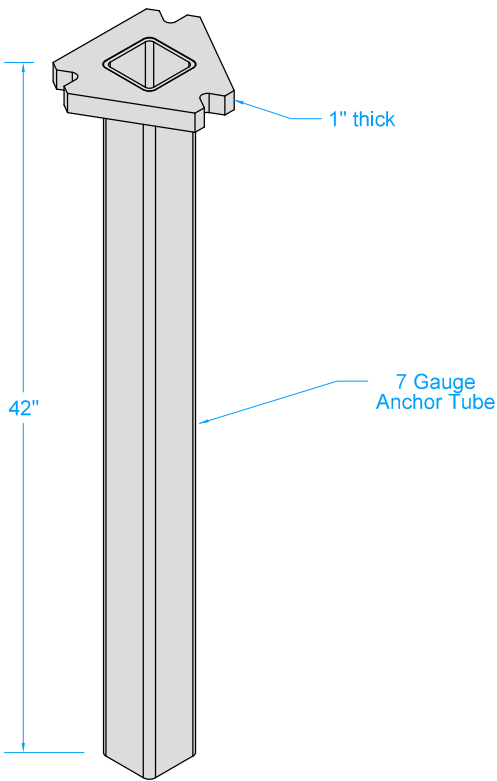
① Used in concrete islands.

 IOWA DOT	REVISION	
	-	00-00-00
---	---	
	TAS STANDARD	
REVISION: ____		
Support Structures - Perforated Square Steel Tube Anchor and Post		

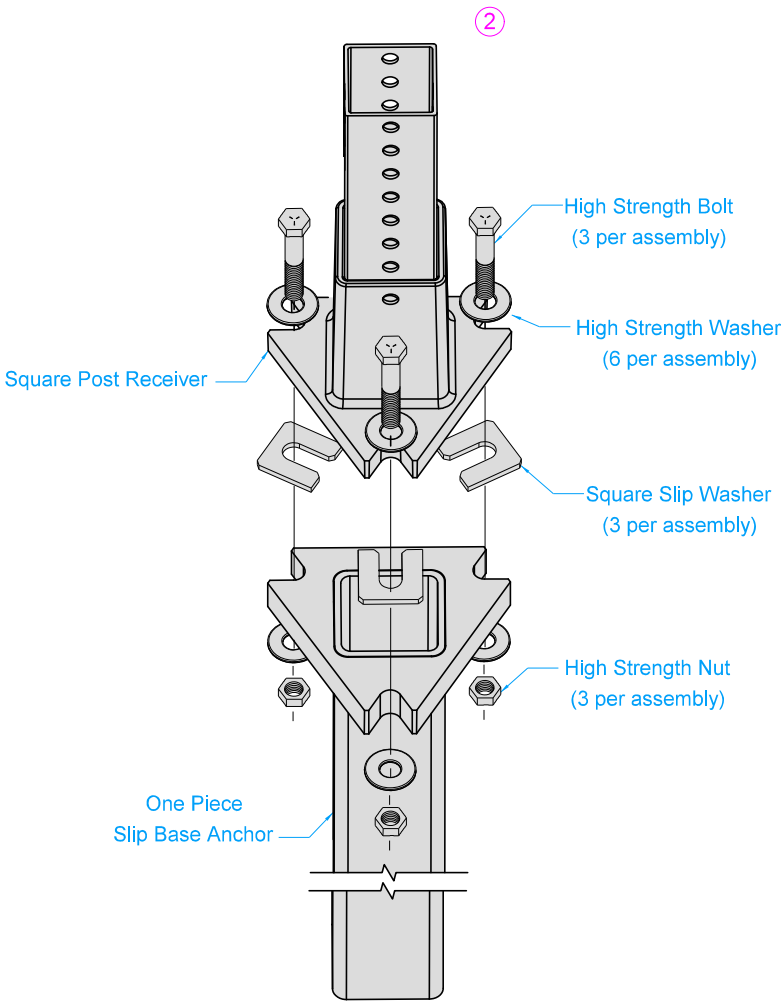


1 $\frac{3}{4}$ " SQUARE X $\frac{3}{16}$ "
SQUARE SLIP WASHER

ONE PIECE
SLIP BASE ANCHOR



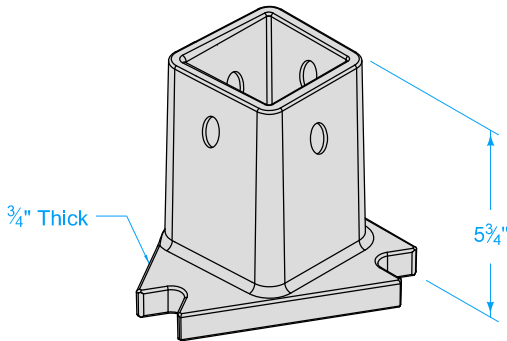
- ① Type III/IV installation
- ② Fastener size and installation procedure shall be according to manufacturer's recommendation.



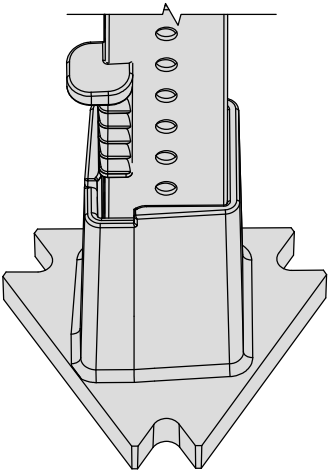
EXPLODED VIEW
SLIP BASE, RECEIVER AND
CONNECTION HARDWARE

OPTION 1

OPTION 2

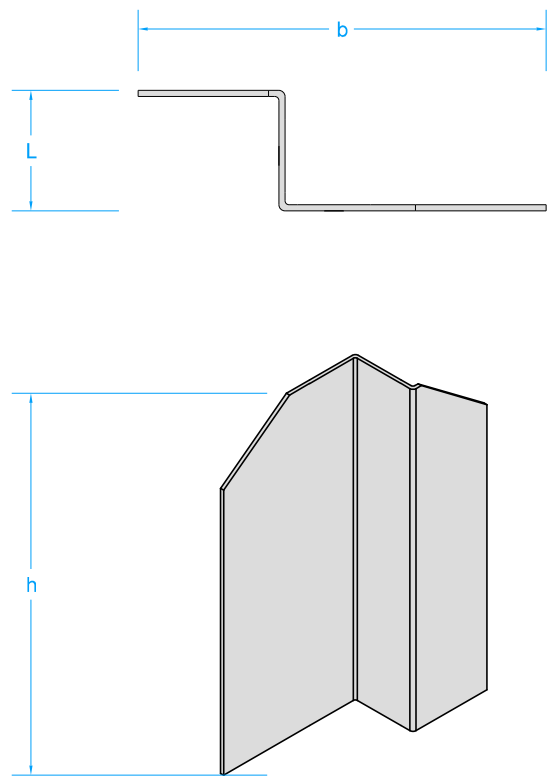
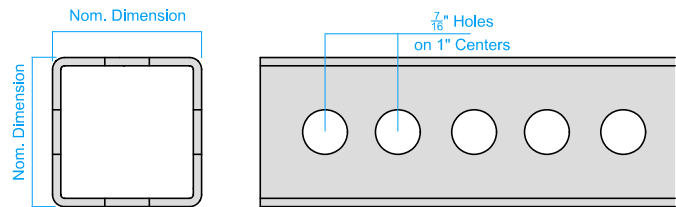


2 $\frac{1}{2}$ " SQUARE POST RECEIVER



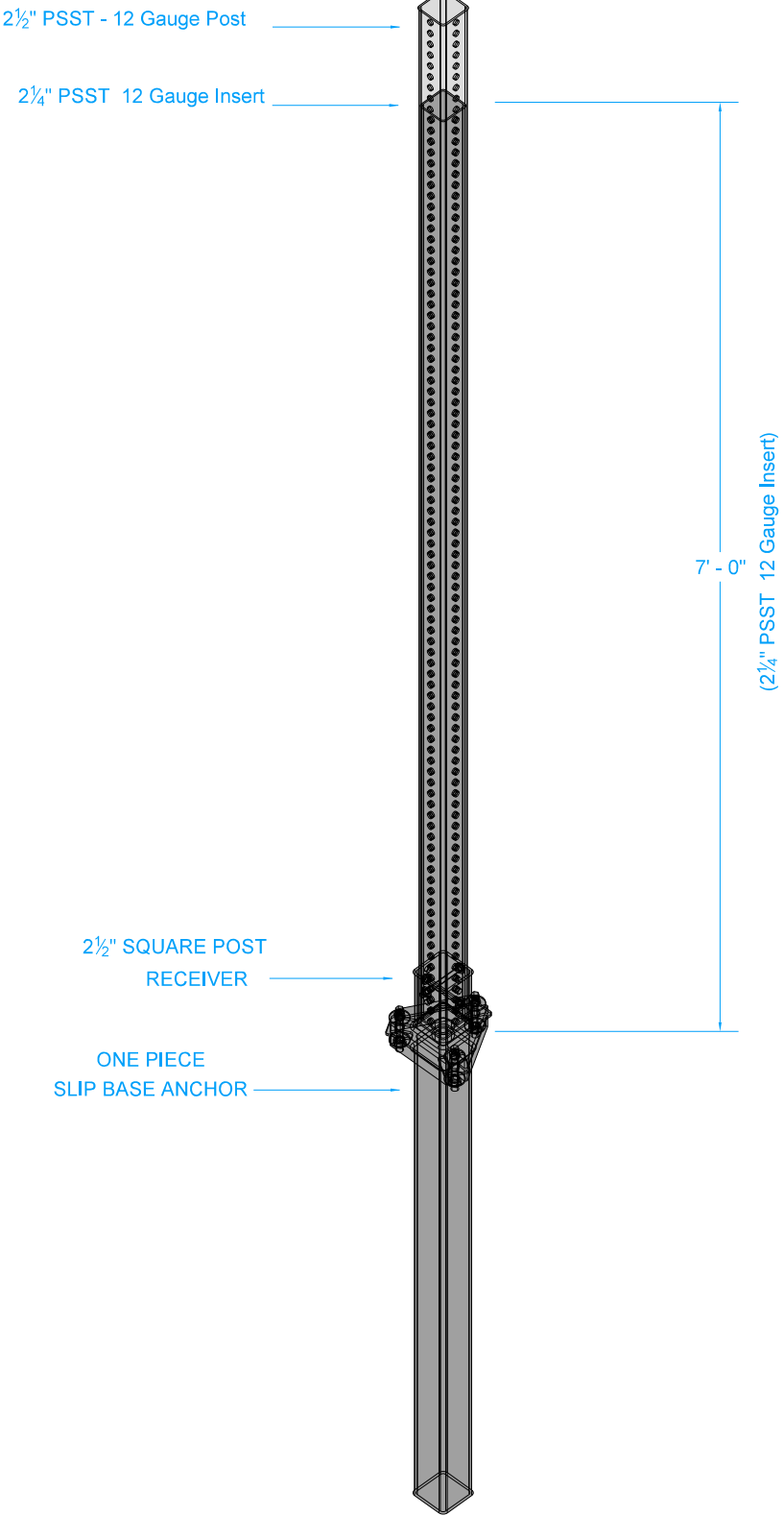
	REVISION		
	-	00-00-00	
	■■■		
TAS STANDARD			
REVISION: __			
Support Structures - Perforated Square Steel Tube Anchor and Post			

PERFORATED STEEL SQUARE TUBE POST DETAILS

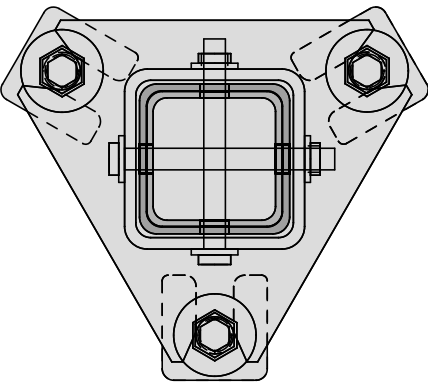
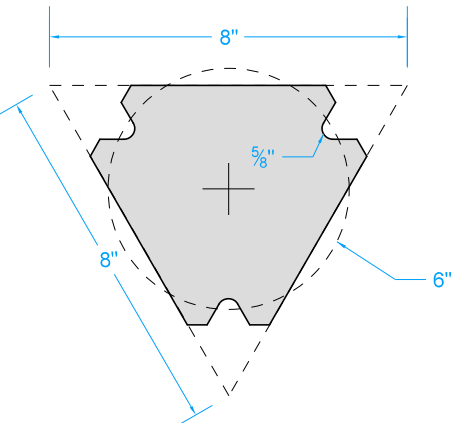


SOIL BEARING WING

SLIP BASE WITH NESTED PERFORATED SQUARE STEEL TUBE POST^①



SLIP PLATE DIMENSIONS^①

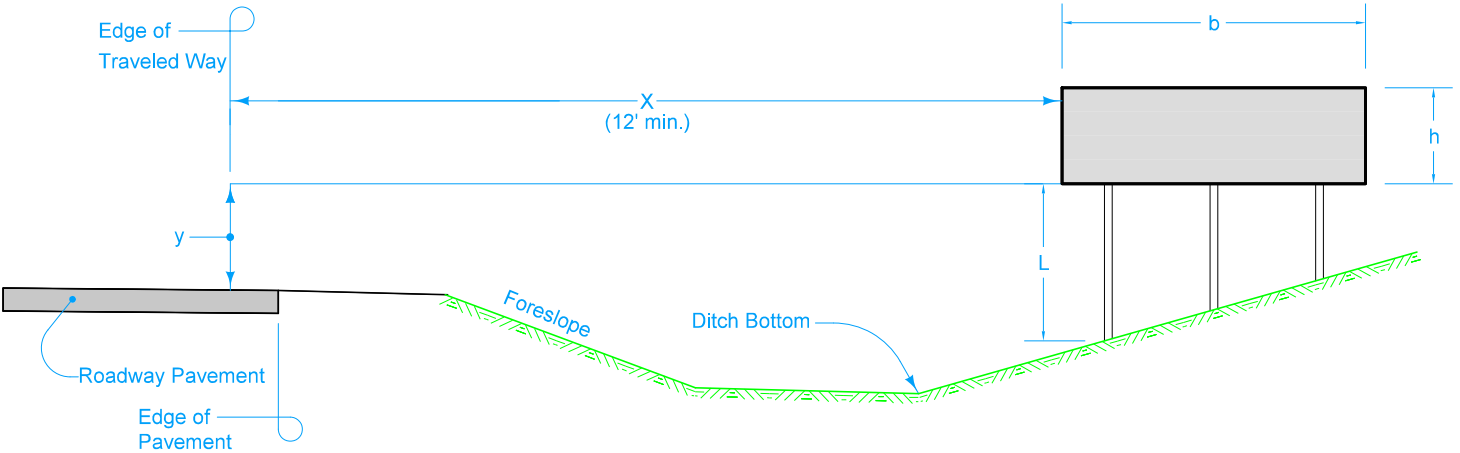


^① Type III/IV installation only

	REVISION	
	-	00-00-00
	TAS STANDARD	
...	...	
REVISION: __		
Support Structures - Perforated Square Steel Tube Anchor and Post		

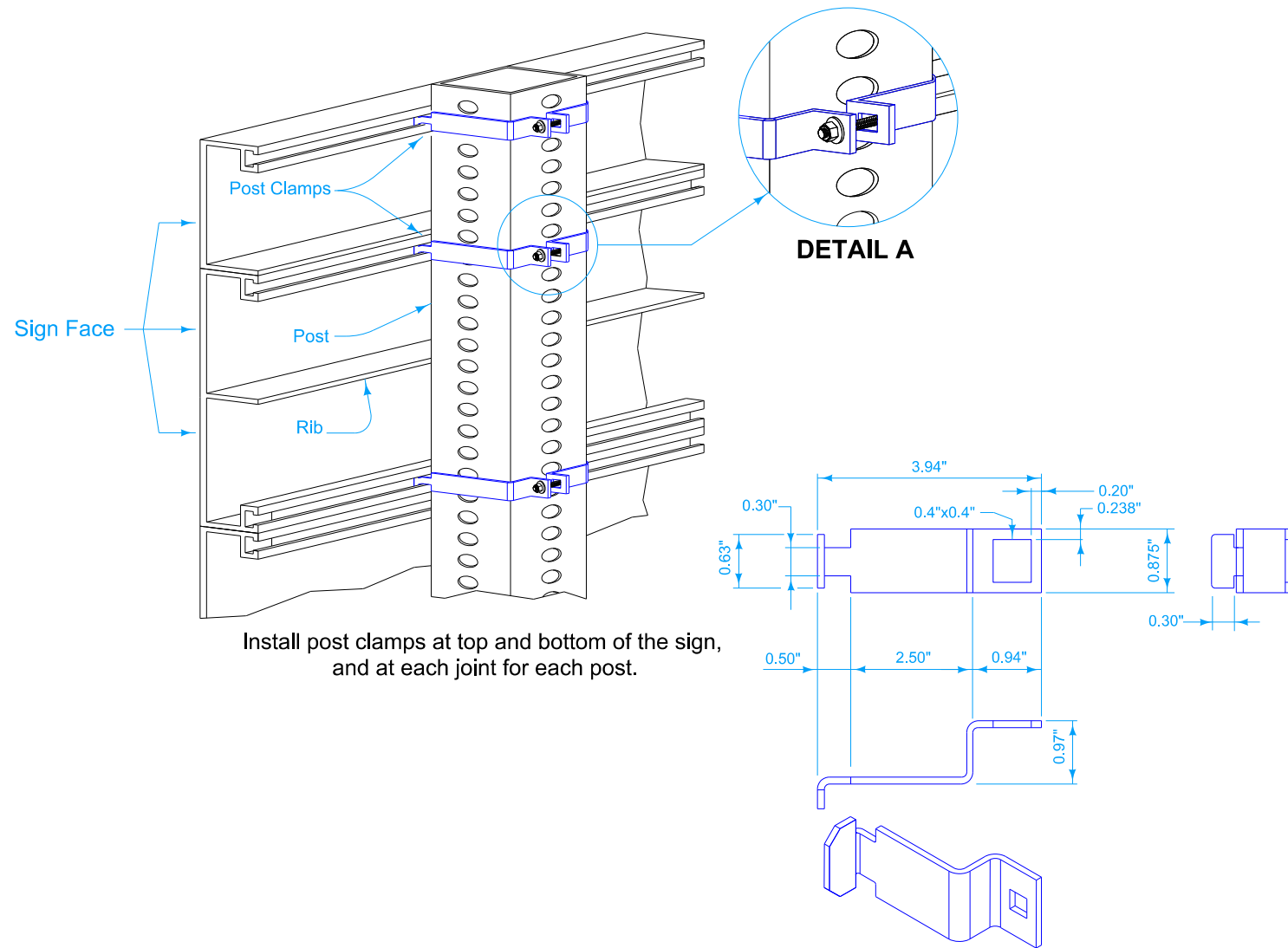
Note: The sign centroid is equivalent to $L + h/2$, (length of the longest post from the ground to the bottom of the sign plus the half the height of the sign.) and the Sign Area Yielding Design is the maximum area that the corresponding sign can have without failure. Sign Area is equivalent to $b \times h$.

POST LOADING FOR PERFORATED SQUARE STEEL TUBE POSTS						
SIGN CENTROID (FT)	SIGN AREA (SQ-FT) YIELDING DESIGN					
	TYPE 1 TYPE 2	TYPE 3/TYPE 4 (SLIP BASE REQUIRED)				
		2 1/2" x 12ga		2 1/4" x 12ga inserted into a 2 1/2" x 12 ga		
		1 Post	2 Post	3 Post	1 Post	2 Post
16.5	10.44	20.88	31.32	18.78	37.56	56.34
16	10.76	21.52	32.28	19.36	38.72	58.08
15.5	11.11	22.22	33.33	19.99	39.98	59.97
15	11.48	22.96	34.44	20.65	41.3	61.95
14.5	11.87	23.74	35.61	21.36	42.72	64.08
14	12.3	24.6	36.9	22.13	44.26	66.39
13.5	12.75	25.5	38.25	22.95	45.9	68.85
13	13.24	26.48	39.72	23.83	47.66	71.49
12.5	13.77	27.54	41.71	24.78	49.56	74.34
12	14.35	28.7	43.05	25.82	51.64	77.46
11.5	14.97	29.94	44.91	26.94	53.88	80.82
11	15.65	31.3	46.95	28.16	56.32	84.48
10.5	16.4	32.8	49.2	29.5	59	88.5
10	17.22	34.44	51.66	30.98	61.96	92.94
9.5	18.12	36.24	54.36	32.61	65.22	97.83
9	19.13	38.26	57.39	34.42	68.84	103.26
8.5	20.26	40.52	60.78	36.45	72.9	109.35
8	21.52	43.04	64.56	38.72	77.44	116.16



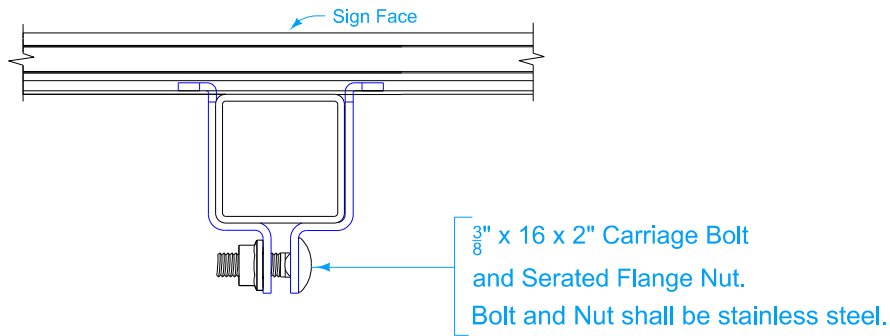
- ① Adapted from AASHTO Standard Specifications for - Highway Signs, Luminaires, and Traffic Signals. 6th Edition 2013. <Rev B 4/7/14>
- ② 90 MPH Wind Load

	REVISION	
	-	00-00-00
---	---	
	TAS STANDARD	
REVISION: __		
Support Structures - Perforated Square Steel Tube Anchor and Post		



Install post clamps at top and bottom of the sign,
and at each joint for each post.

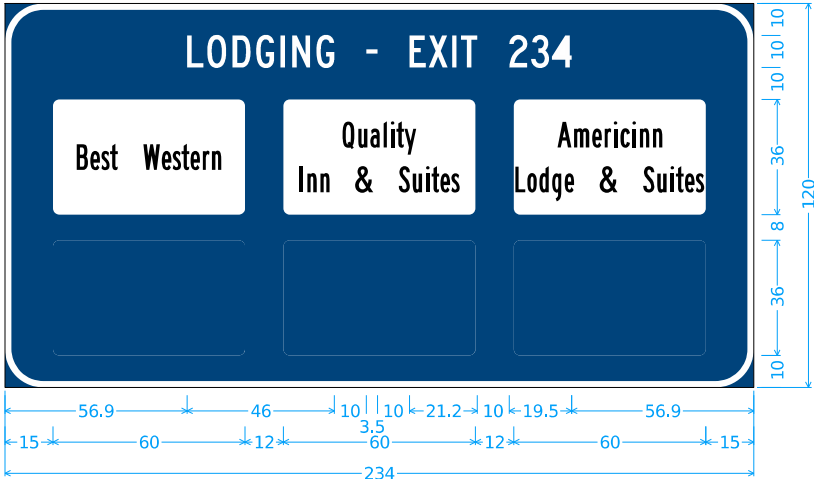
POST CLAMP DETAIL
Post clamp shall be stainless.



PLAN VIEW

**DETAILS OF
PERFORATED SQUARE STEEL TUBE POST
TYPE "B" SIGN ATTACHMENT**

PSST POST - TYPE B
SIGN ATTACHMENT



34-44-234 M002

12.0" Radius, 2.0" Border, White on Blue;
"LODGING - EXIT 234", C 2K; 2.0" Radius, No border, White;
"Best Western" Black, B 2K;
2.0" Radius, No border, White;
"Quality" Black, B 2K; "Inn & Suites" Black, B 2K;
2.0" Radius, No border, White;
"Americinn" Black, B 2K; "Lodge & Suites" Black, B 2K;
2.0" Radius, No border, Blue; 2.0" Radius, No border, Blue; 2.0" Radius, No border, Blue;

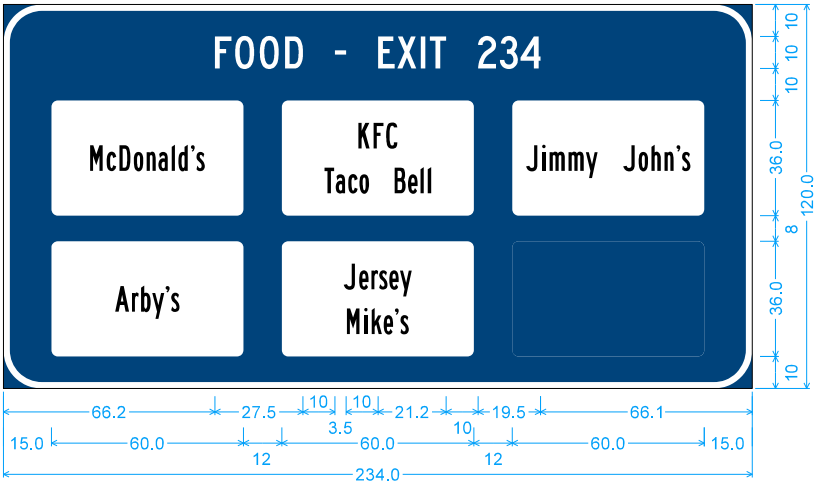


34-44-234 M001
34-44-234 M001A

E1-5P;
2.0" Border, White on Green;
"EXIT", E 2K 120% spacing; "234", E 2K;
Fin Guide - 2 Dest 2 Route Template;
12.0" Radius, 2.0" Border, White on Green;
"NORTH", E 2K; State Highway 27 M1-5;
"Mt Pleasant", E Mod 2K; "Iowa City", E Mod 2K; "1", E 2K;
"MILE", E 2K;

Note to Fabricator: Omit logo/business placards.

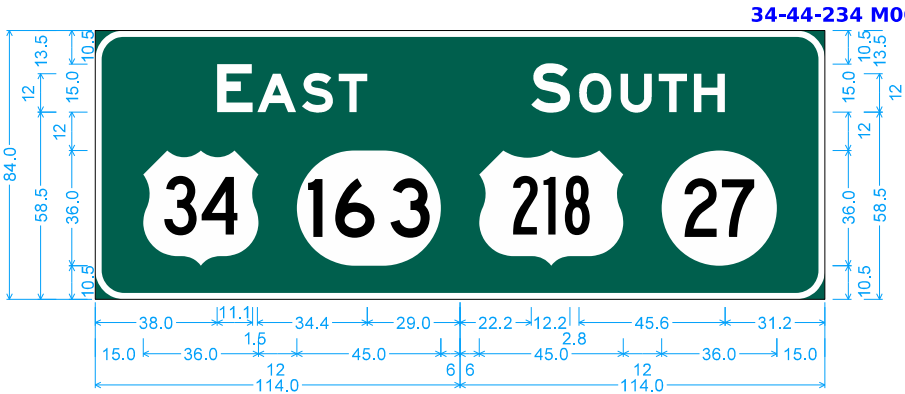
Note to Installing Contractor: Remove all logo/business placards from existing signs and reinstall on new signs as shown.



34-44-234 M004

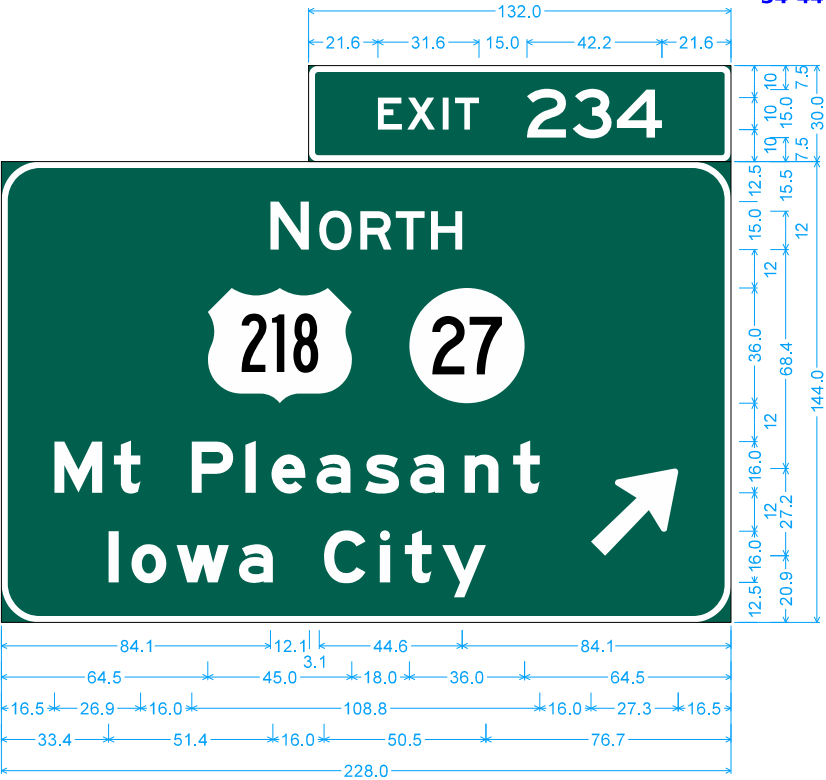
12.0" Radius, 2.0" Border, White on Blue;
"FOOD - EXIT 234", C 2K; 2.0" Radius, No border, White on White;
"McDonald's" Black, B 2K;
2.0" Radius, No border, White on White;
"KFC" Black, B 2K; "Taco Bell" Black, B 2K;
2.0" Radius, No border, White on White;
"Jimmy John's" Black, B 2K;
2.0" Radius, No border, White on White;
"Arby's" Black, B 2K;
2.0" Radius, No border, White on White;
"Jersey" Black, B 2K; "Mike's" Black, B 2K;
2.0" Radius, No border, White on Blue;

STATEWIDE TYPE B
SIGN DETAILS



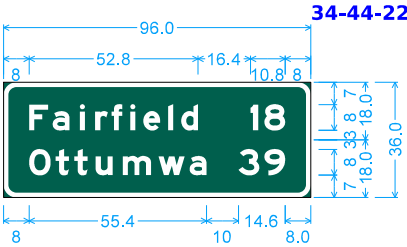
34-44-234 M006

9.0" Radius, 2.0" Border, White on Green;
"EAST", E Mod 2K; State Highway 163 M1-5;
9.0" Radius, 2.0" Border, White on Green;
"SOUTH", E Mod 2K; State Highway 27 M1-5;



34-44-234 M007
34-44-234 M007A

E1-5P;
2.0" Border, White on Green;
"EXIT", E 2K 120% spacing; "234", E 2K;
Final Guide - 2 Dest 2 Route Template;
12.0" Radius, 2.0" Border, White on Green;
"NORTH", E 2K; State Highway 27 M1-5; "Mt Pleasant", E Mod 2K;
"Iowa City", E Mod 2K; Arrow I-F - 35.0" 45°;



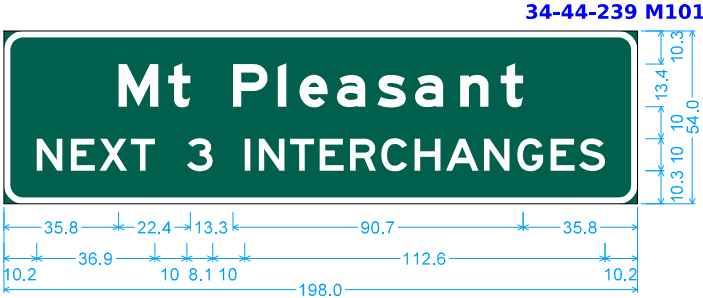
34-44-228 M101

Expressway Mileage 2 Line;
4.0" Radius, 1.5" Border, White on Green;
"Fairfield", E Mod 2K;
"18", E Mod 2K;
4.0" Radius, 1.5" Border, White on Green;
"Ottumwa", E Mod 2K;
"39", E Mod 2K;



34-44-238 M102

12.0" Radius, 2.0" Border, White on Green;
State Highway 27 M1-5; "Iowa City", E Mod 2K;
"Keokuk", E Mod 2K; "1 MILE", E Mod 2K;



34-44-239 M101

Supplemental Guide - 1 Dest Template;
6.0" Radius, 2.0" Border, White on Green;
"Mt Pleasant", E Mod 2K; "NEXT 3 INTERCHANGES", E 2K;



34-44-239 M104

12.0" Radius, 2.0" Border, White on Blue;
"GAS", E Mod 2K; "FOOD", E Mod 2K;
"LODGING", E Mod 2K; "FOLLOW", E 2K;
"BUSINESS", E 2K;

STATEWIDE TYPE B
SIGN DETAILS

34-44-229 M003
34-44-229 M003A
34-44-229 M003B

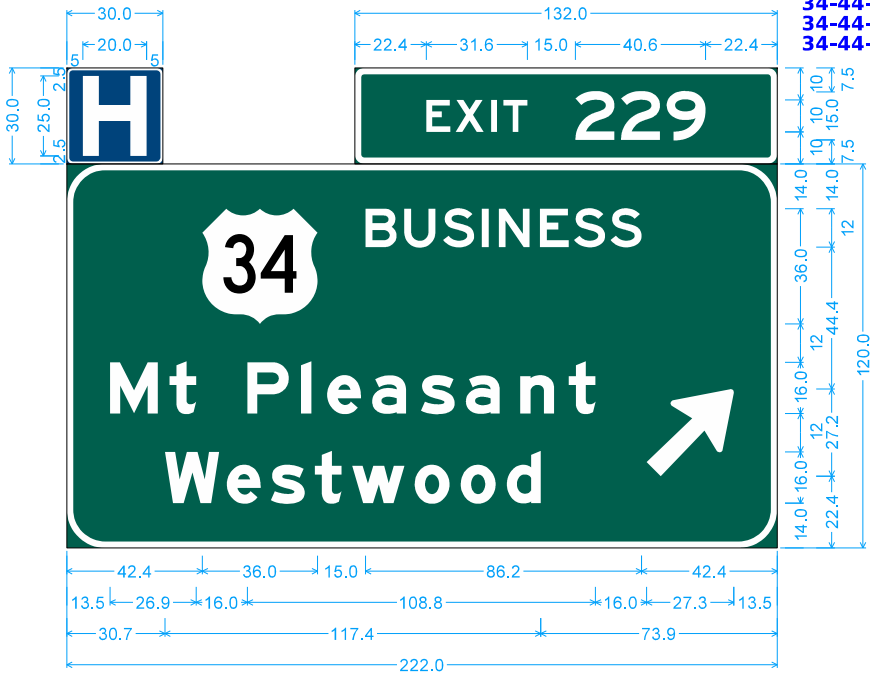


Hospital Plaque;
2.0" Radius, 0.8" Border, White on Blue;
Symbol RM085;

E1-5P;
2.0" Border, White on Green;
"EXIT", E 2K 120% spacing; "229", E 2K;

Adv Guide - 2 Dest 1 Route Template;
12.0" Radius, 2.0" Border, White on Green;
"BUSINESS", E 2K; "Mt Pleasant", E Mod 2K;
"Westwood", E Mod 2K; "1", E 2K; "MILE", E 2K;

34-44-229 M008A
34-44-229 M008B
34-44-229 M008

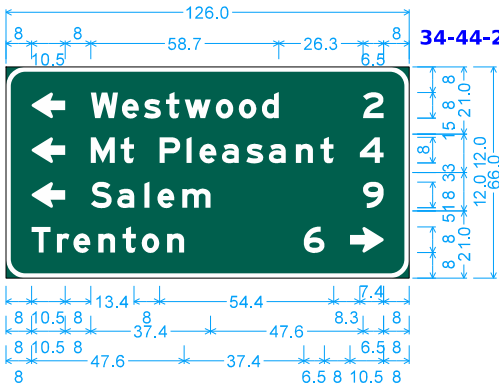


Hospital Plaque;
2.0" Radius, 0.8" Border, White on Blue;
Symbol RM085;

E1-5P;
2.0" Border, White on Green;
"EXIT", E 2K 120% spacing; "229", E 2K;

Final Guide - 2 Dest 2 Route Template;
12.0" Radius, 2.0" Border, White on Green;
"BUSINESS", E 2K; "Mt Pleasant", E Mod 2K; "Westwood", E Mod 2K;
Arrow I-F - 35.0" 45°;

34-44-231 R101



Expressway Destination 4 Line;

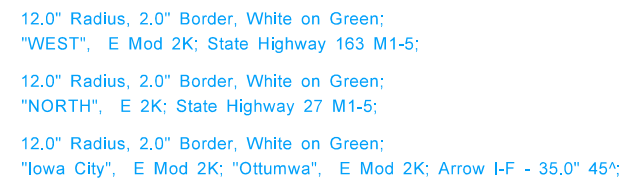
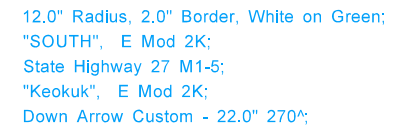
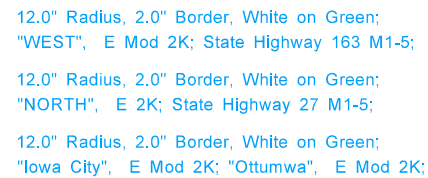
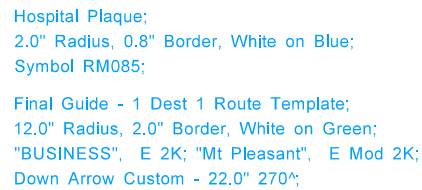
6.0" Radius, 1.5" Border, White on Green;
Arrow III-8S - 10.5" 180°;
"Westwood", E Mod 2K; "2", E Mod 2K;

6.0" Radius, 1.5" Border, White on Green;
Arrow III-8S - 10.5" 180°;
"Mt Pleasant", E Mod 2K; "4", E Mod 2K;

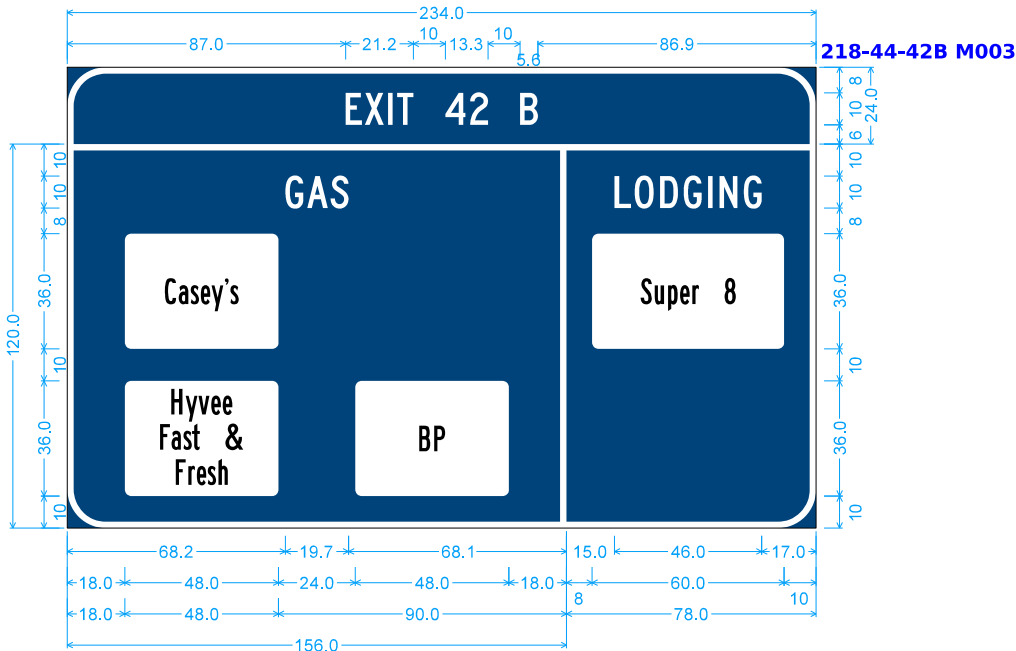
6.0" Radius, 1.5" Border, White on Green;
Arrow III-8S - 10.5" 180°;
"Salem", E Mod 2K; "9", E Mod 2K;

6.0" Radius, 1.5" Border, White on Green;
Arrow III-8S - 10.5" 0°;

STATEWIDE TYPE B
SIGN DETAILS



FILE NO.	ENGLISH	DESIGN TEAM Fobian/Hecker	STATEWIDE COUNTY	PROJECT NUMBER NHSN-000-T(473)--2R-00	SHEET NUMBER B.10	
6:17:22 AM	6/9/2026	dhecker	pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\0000022026\TrafficAndSafety\TrafficEngineering\ 473_Signing\CADD Files\SHT_00000473_B01.dgn			



12.0" Radius, 2.0" Border, White on Blue;
"EXIT 42 B", C 2K;

12.0" Radius, 2.0" Border, White on Blue;
"GAS", C 2K; 2.0" Radius, No border, White on White;
"Casey's" Black, B 2K;

2.0" Radius, No border, White on Blue; 2.0" Radius, No border, White on White;
"Hyvee" Black, B 2K; "Fast &" Black, B 2K; "Fresh" Black, B 2K;

2.0" Radius, No border, White on White;
"BP" Black, B 2K;

12.0" Radius, 2.0" Border, White on Blue;
"LODGING", C 2K; 2.0" Radius, No border, White on White;
"Super 8" Black, B 2K;

2.0" Radius, No border, White on Blue;

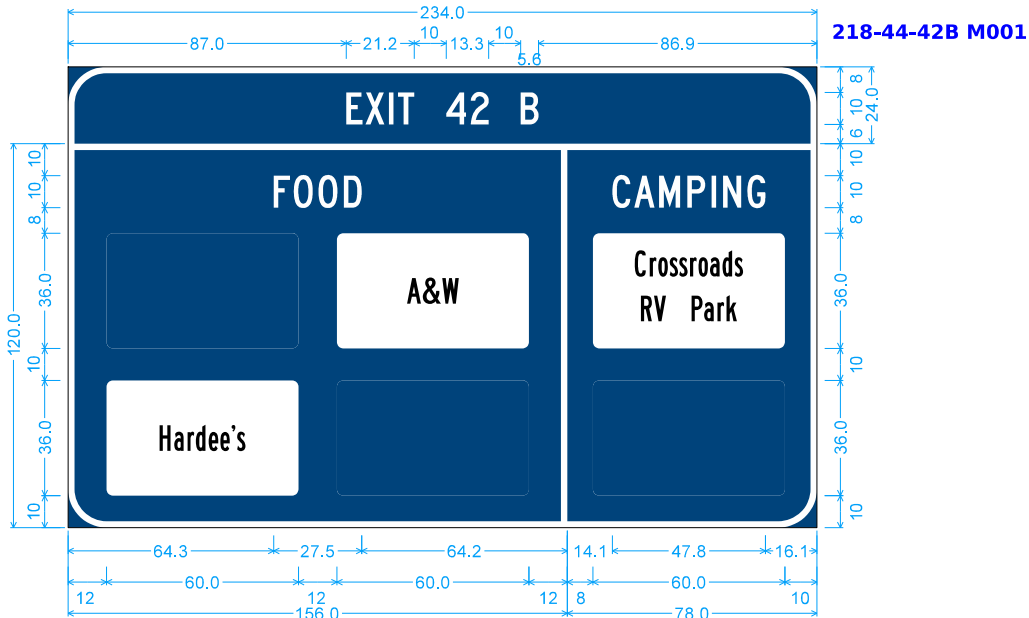
Note to Fabricator: Omit logo/business placards.

Note to Installing Contractor: Remove all logo/business placards from existing signs and reinstall on new signs as shown.



Supplemental Guide - 1 Dest Template;
12.0" Radius, 2.0" Border, White on Green;
"New London", E Mod 2K; "EXIT 42 A", E 2K;

Supplemental Guide - 1 Dest Template;
12.0" Radius, 2.0" Border, White on Green;
"Mt Pleasant", E Mod 2K; "EXIT 42 B", E 2K;



12.0" Radius, 2.0" Border, White on Blue;
"EXIT 42 B", C 2K;

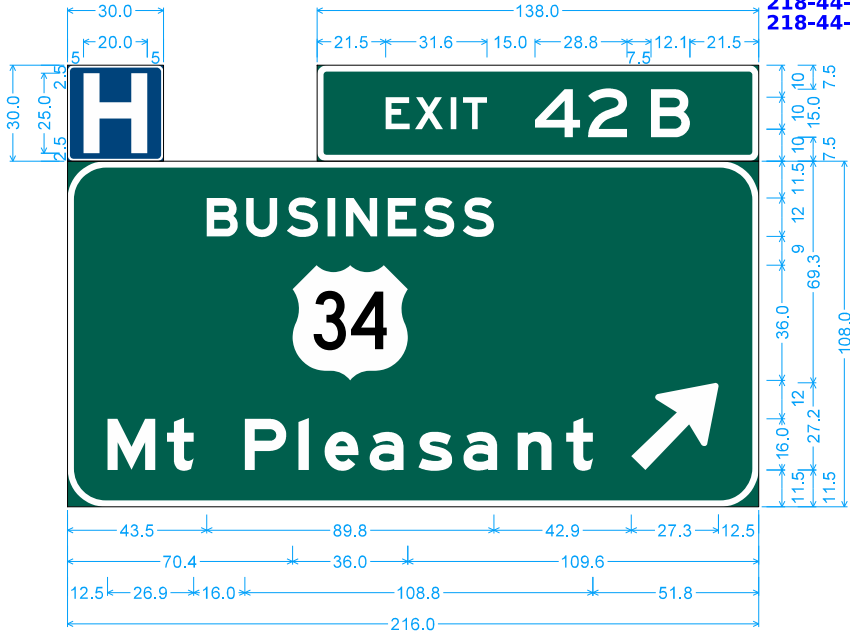
12.0" Radius, 2.0" Border, White on Blue;
"FOOD", C 2K; 2.0" Radius, No border, White on Blue;
2.0" Radius, No border, White on White;
"A&W" Black, B 2K;

2.0" Radius, No border, White on White;
"Hardee's" Black, B 2K;

2.0" Radius, No border, White on Blue;

12.0" Radius, 2.0" Border, White on Blue;
"CAMPING", C 2K; 2.0" Radius, No border, White on White;
"Crossroads" Black, B 2K; "RV Park" Black, B 2K;

2.0" Radius, No border, White on Blue;

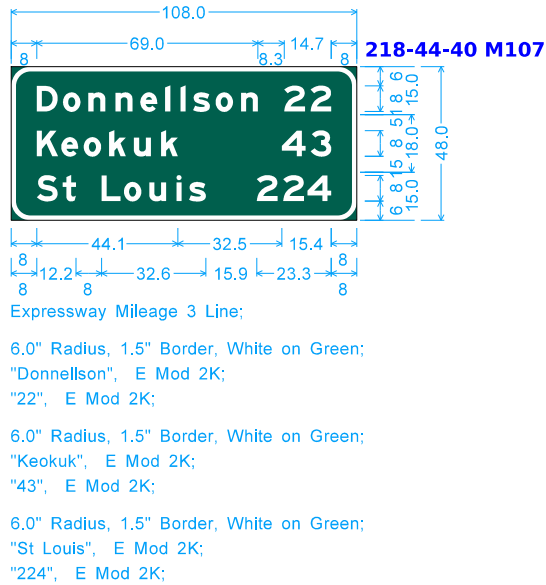
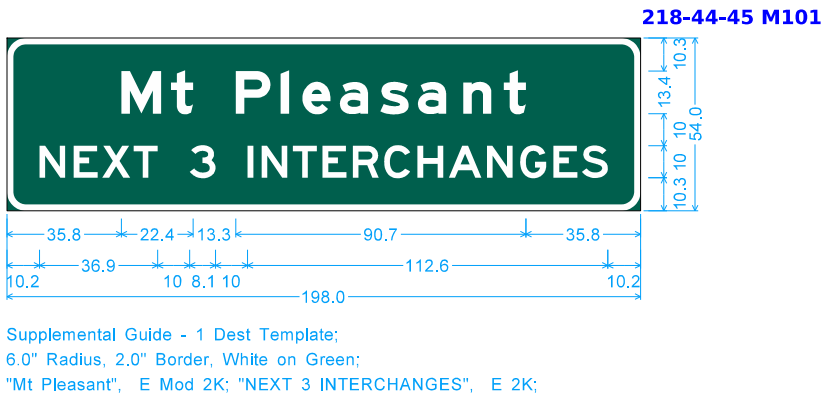
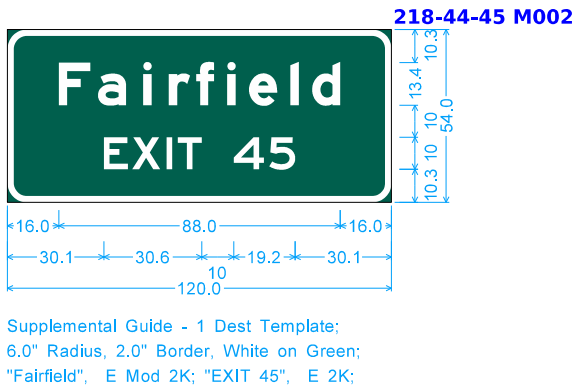
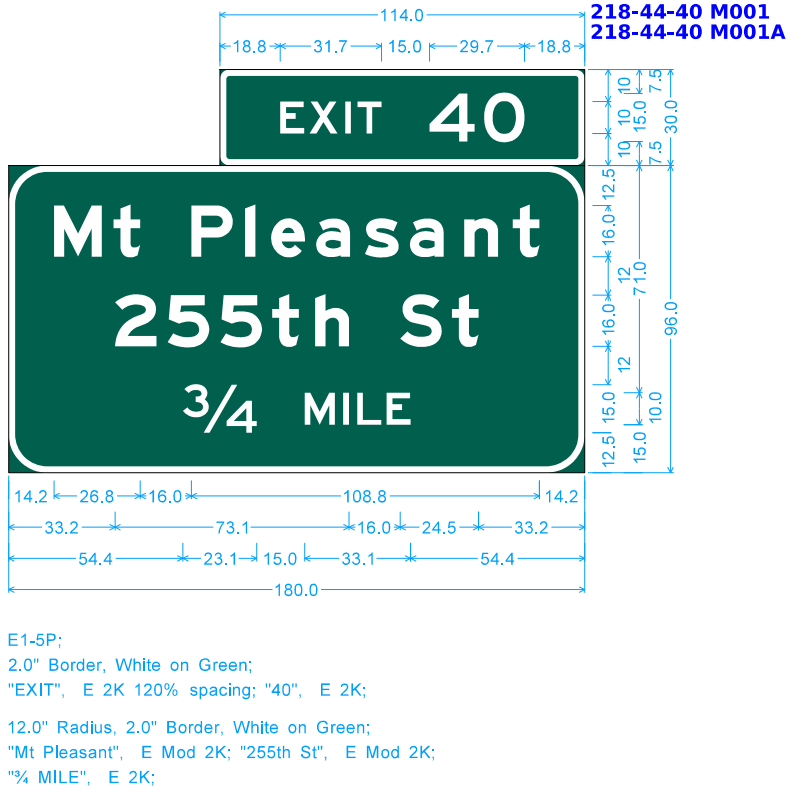
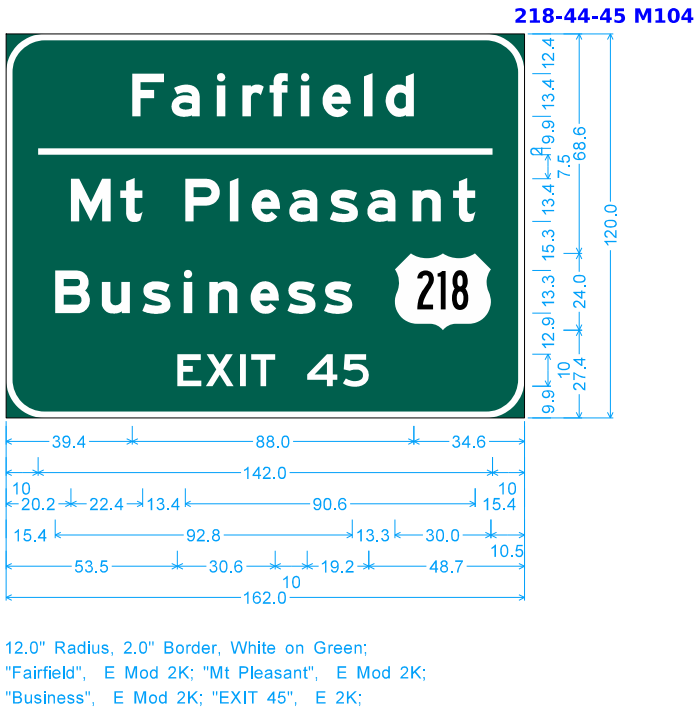
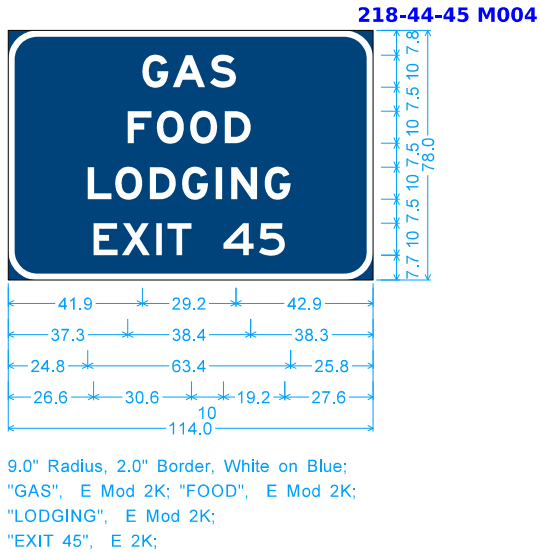


Hospital Plaque;
2.0" Radius, 0.8" Border, White on Blue;
Symbol RM085;

E1-5P;
2.0" Border, White on Green;
"EXIT", E 2K 120% spacing; "42", E 2K; "B", E 2K;

12.0" Radius, 2.0" Border, White on Green;
"BUSINESS", E Mod 2K; "Mt Pleasant", E Mod 2K; Arrow I-F - 35.0" 45°;

STATEWIDE TYPE B
SIGN DETAILS



STATEWIDE TYPE B
SIGN DETAILS

ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Traffic Sign Items : Traffic Sign Items

Item no.	Item Code	Item	Unit	Quantities	Estimate Reference Notes
				Estimated	
				Traffic Sign Items	
1	2401-6745355	REMOVAL OF CONCRETE FOOTINGS OF HIGHWAY SIGNS	EACH	21	Refer to Tabulation of Materials for Type 'B' Signs for locations and details. This item shall consist of removal of concrete footings for steel breakaway sign support posts. Concrete footings or parts of concrete footings removed shall become the property of the Contractor, and shall be removed in accordance with Article 1104.08. Unless otherwise provided or ordered, concrete footings for steel breakaway sign support posts shall be removed 1 foot below natural ground surface. Where portions of the existing concrete footings lie wholly or in part within limits for a new structure (culvert, concrete footing, or other), they shall be removed as necessary to accommodate construction of the proposed structure. Holes remaining from the removal of concrete footings for steel breakaway sign support posts shall be backfilled with suitable earth to the original level or to the natural ground surface in accordance with Article 2402.09. Measurement: The Engineer will count each concrete footing for steel breakaway sign support post removed. Payment: For each concrete footing for steel breakaway sign support post removed, the Contractor shall be paid the contract unit price. This payment shall be full compensation for furnishing all material, equipment, and labor and for the performance of all work necessary for removal of the concrete footings from the project and for any backfilling made necessary by these operations.
2	2524-6765120	REMOVAL OF TYPE B SIGN	EACH	23	Refer to Tabulation of Materials for Type 'B' Signs for location and details. Item is for the removal of extruded aluminum structural panel from its support structure ie: wood/steel posts, overhead truss or other sign. Sign panels shall become property of the contractor. Measurement: Each. The Engineer will count the number of Type B sign panels removed. Payment: The Contractor will be paid the contract unit price for each Type B sign panel removed.
3	2524-6765220	REMOVAL OF TYPE B SIGN ASSEMBLY	EACH	13	Refer to Tabulation of Materials for Type 'B' Signs for location and details. This item for the removal of Type B Sign Assemblies, including the sign panels, sign brackets, supporting structures and hardware. Contractor shall carefully dismantle each sign assembly. Sign panels, posts, brackets and hardware shall become property of the Contractor. All holes resulting from removal of posts shall be filled level with the adjacent grade with backfill material conforming to the Standard Specifications. Measurement: The Engineer will count the number of sign assemblies removed. Payment: The Contractor will be paid the contract unit price for each sign assembly removed.
4	2524-9081275	CONCRETE FOOTING FOR BREAKAWAY SIGN POST, 2'-8" DIA. X 7'-6"	EACH	6	Refer to Tabulation of Materials for Type 'B' Signs for locations and details.
5	2524-9081290	CONCRETE FOOTING FOR BREAKAWAY SIGN POST, 2'-8" DIA. X 9'-0"	EACH	15	
6	2524-9276010	PERFORATED SQUARE STEEL TUBE POSTS	LF	116.5	

Item no.	Item Code	Item	Unit	Quantities	Estimate Reference Notes
				Estimated	
				Traffic Sign Items	
7	2524-9276027	PERFORATED SQUARE STEEL TUBE POST ANCHOR, TRIANGULAR SLIP BASE ASSEMBLY	EACH	7	
8	2524-9281210	STEEL BREAKAWAY SIGN POSTS FOR TYPE A OR B SIGNS, W 8 X 21	LF	111.6	
9	2524-9281426	STEEL BREAKAWAY SIGN POSTS FOR TYPE A OR B SIGNS, W 12 X 26	LF	354.1	
10	2524-9380001	TYPE B SIGNS, EXTRUDED ALUMINUM STRUCTURAL PANEL	SF	3,908	
11	2528-8445110	TRAFFIC CONTROL	LS	1	Refer to Traffic Control Plan on Sheet J.1.
12	2533-4980005	MOBILIZATION	LS	1	--

105_04 4/21/26 STANDARDS The following Standards apply to construction work on this project.		
Number	Date	Title
SI-102	04-19-16	Locations - Type 'B' Signs
SI-112	04-19-16	Footings For Steel Breakaway Posts
SI-113	10-15-19	Support Structures - Steel Breakaway Posts
SI-121	10-16-18	Fabrication - Sign Legend Components
SI-123	10-20-20	Fabrication - Type 'B' Signs
SI-132	04-17-18	Installation - Type 'B' Signs
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-202	04-18-23	Work Within 15 ft of Traveled Way
TC-211	10-15-19	Lane Closure on Low Volume Roadway
TC-402	04-18-23	Work Within 15 ft of Traveled Way
TC-416	10-15-19	Partial Lane Closure on Ramps
TC-418	04-18-23	Lane Closure on Divided Highway
TC-420	10-16-18	Lane Closure at Ramps

Tabulation of Materials for Type 'B' Signs

Line No.	SIGN NUMBER					DIR OF TRAVEL	SIGN LOCATION				SIGN SIZE					Existing POSTS			Sig Mat	New POSTS			Sig Mat	POST INFORMATION																		NEW FOOTINGS							INSTALLATION			Remove Type B Assembly (EA)	Remove Type B Sign (EA)	Remove Reinstall Sign (EA)	Remove Footing (EA)	SEE SIGNING NOTES	Sign Text																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	RTE.	CD.	Exit	Road ID	Seq. No.		EXISTING		NEW		WIDTH (FT)	HEIGHT (FT)	WIDTH (FT)	HEIGHT (FT)	AREA (SQ. FT.)	No.Post	Met(M) Wood(W) PSST (T)	Fly(P) Alum(A)	No.Post	Met(M) Wood(W) PSST(T)	Fly(P) Alum(A)	Post Offsets			Post Elevations			Post Lengths (FT)									1'-0"				1'-6"			2'-8"		2'-8"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
							M.P.	STATION	M.P. (I)	STATION												WIDTH (FT)	HEIGHT (FT)	WIDTH (FT)	HEIGHT (FT)	AREA (SQ. FT.)	No.Post	Met(M) Wood(W) PSST (T)	Fly(P) Alum(A)	No.Post	Met(M) Wood(W) PSST(T)	Fly(P) Alum(A)	Post 1	Post 2	Post 3	Post 1	Post 2	Post 3	Post 1	Post 2	Post 3	MAASH Post 1	W6x12 Post 1	W6x12 Post 2	W8x21 Post 1	W8x21 Post 2	W12x26 Post 1	W12x26 Post 2	W12x26 Post 3	3'-2"	4'-0"							6'-0"	7'-6"	9'-0"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
1.0	218	44	40	M	1	NB	39.18		39.18		15	8	15	8	120	2	M	A			A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

Tabulation of Materials for Type 'B' Signs

[illegible]

(1) Mile post information is given for general location only. Use station numbers or stakes for exact location.
(2) Post lengths are estimates. Actual post length to be determined by field measurement.
(3) Remove and reinstall white and yellow panels under sign. See sheet B4 for details.

259_01 10/15/25 SIGNING NOTES The following tolerances will be allowed on all signs: Accumulation error of not greater than +/-0.50" per line of copy, not greater than +/-0.50" for spacing between lines of copy, and the margin between lines of copy and the inside edge of the sign border. The following tolerances will be allowed on each letter or numeral: nominal height variation in height variation in width 4" thru 12" -1/8" to +3/8" -1/4" to +1/4" over 12" -1/8" to +3/8" -3/8" to +3/8" ----- Type B signs can be separated into two categories: - Major Guide Signs. - Minor Guide Signs. Major Guide Signs include the advance and exit direction guide signs for an interchange or intersection. Minor Guide Signs include all other guide signs such as NEXT EXIT signs, supplemental guide signs, logo signs, exit gore signs, post-interchange mileage signs, ramp destination signs, and ramp logo signs for an interchange, as well as destination signs along sideroads. Type A signs are not separated into categories, but special consideration should be given to regulatory signs. Do not remove Type B signs until replacement signs have been installed. If construction activities require the removal of a sign, the existing sign may be relocated to temporary posts, or a temporary plywood sign may be installed to replace the existing sign. Existing non-regulatory Type A signs are NOT required to remain in place until installation of replacement signs. Existing regulatory Type A signs, particularly Stop signs, should not be removed until replacement signs are installed. Where a staged traffic control plan is contrary to this guidance, follow the direction of the traffic control plan. Apply the following during the replacement or modification of signs: - No more than one of the major guide signs for each direction of travel at an interchange out of service at any one time. - No major guide sign out of service for more than 8 hours. - No minor guide out of service for more than 24 hours. Remove existing signs and posts within 24 hours following the installation of a new replacement sign. In any case where the plans call for a new sign and			259_01 10/15/25 SIGNING NOTES posts to be installed at the same station location and offset as an existing sign, install the new posts at a minimum of either 5 ft ahead or behind the existing sign installation. Signs shall not be installed more than 25 ft ahead or behind the existing sign installation. Whenever posts for a replacement sign are erected directly in front of an existing sign, install the new replacement sign and remove the existing sign installation within 24 hours of the time that the new posts are erected. Where signs are located behind guardrail, locate the near edge of the sign a minimum of 3 ft behind the guardrail posts. Unless noted otherwise, leave auxiliary panels, such as exit number panels, in place or reattach to the sign using the existing mounting hardware. Also, when replacing an existing logo sign with a new logo sign, remove the business logo panel(s) from the existing sign and attach to the new sign as directed by the Engineer. Do not damage the auxiliary or logo panels when removing and reattaching them. This work is incidental to other work and no separate payment will be made. The following notes apply to the corresponding sign installations shown on the plan sheets and listed in the tabulations. IB INSTALL NEW TYPE B SIGN IA INSTALL NEW TYPE A SIGN Install new signs at the location identified in the plans. For installation of new signs on an existing sign support structure, refer to note (L). For installation of new signs on existing posts: - if the new sign is taller than the existing sign, furnish the necessary hardware to extend the sign above the posts. Refer to Standard Road Plan SI-132. - if the new sign is shorter than the existing sign: - for wood posts and perforated square tube posts, install the sign at the proper height and cut off the excess post length. - for MASSH-400 and steel breakaway posts, install the sign at the top of the posts. For plywood signs, no vertical splices are allowed in signs less than or equal to 10 ft wide. No horizontal splices are allowed in signs less than or equal to 4 ft tall. Each new sign installed shall have a sticker applied to the back of the sign that shows the date the sign was installed. The Contractor shall supply the sticker for all contractor supplied signs. The DOT will supply date			259_01 10/15/25 SIGNING NOTES stickers on any signs supplied by the department. Payment for installing Type A signs or Type B signs includes furnishing hardware for mounting, extending signs above existing posts, and cutting posts to length. MS MODIFICATION OF EXISTING SIGNS For removal and/or installation of logo panels, and other sign modifications. Refer to the project plans and typical details for additional information. SC SIGN COVER For the installation or removal of temporary sign covers for the purposes of temporary traffic control. Sign covers shall completely cover the existing Sign. Care should be taken so that covers, fasteners, and installation practices do not damage the existing sign. Tape of any type shall not be applied to the sheeted face of the existing sign under any circumstances. Repair of damage to the existing sign caused by sign covers will be the responsibility of the Contractor. SO OVERLAY TYPE B GUIDE SIGNS MB INSTALL SPECIAL MOUNTING BRACKET Install special mounting brackets at the locations identified in the plans. Refer to Tabulations 190-51 and/or 190-65. PB INSTALL NEW BREAKAWAY STEEL POSTS AND FOOTING PP INSTALL NEW PERFORATED SQUARE TUBE POSTS AND ANCHORS PM INSTALL NEW MASSH-400 POSTS AND ANCHORS Install new breakaway steel posts and footings, perforated square tube posts and anchors, or MASSH-400 posts and anchors at the locations identified in the plans. Refer to the Standard Road Plans, Typicals, and Tabulations 190-51 and 190-50 for post size and footing information. New posts shall be installed in undisturbed soil. The new posts shall not be placed in the hole of removed posts. Remove excess soil from footing hole. Do not spread soil on adjacent seeded or vegetated areas. If note (RR) accompanies (PB), (PP), or (PM), install an existing sign on the new posts. RR REMOVE AND REINSTALL SIGN AS PER PLAN Do not remove existing major Type B guide signs on posts until the new posts are installed. Promptly remove sign and install at the new location. Existing major Type B guide signs on overhead support			259_01 10/15/25 SIGNING NOTES structures, minor Type B guide signs, plywood signs, and Type A signs may be removed and stored. Transport the signs to a DOT storage area as designated by the Engineer. Transport the signs back to the job site when ready for installation at the new location. Signs to be reinstalled shall not be stored for any length of time with the sheeted face in contact with the ground. Replace signs damaged by the Contractor's activities at no additional cost to the Contracting Authority. Payment for Remove and Reinstall Sign includes sign removal, delivery to and from the DOT storage area (if applicable), and reinstallation, including any hardware required for reinstallation. When noted in the plans, payment for delivery and stockpile of existing signs will be separate from the payment for Remove and Reinstall Sign. RA REMOVAL OF TYPE A SIGN ASSEMBLY RB REMOVAL OF TYPE B SIGN ASSEMBLY Type A Sign Assembly consists of one or more signs installed on one or more posts, either directly mounted to the post or mounted to the post with special sign mounting brackets. Type B Sign Assembly consists of the main sign, all auxiliary signs and brackets, and posts. Unless stated otherwise in the plans, remove all posts with the signs and brackets. Remove each sign assembly identified in the plans. Sign posts removed become the property of the Contractor. All other materials removed remain the property of the DOT. For each sign assembly removed, disassemble each assembly before delivering to the DOT. * For Type A sign assemblies, unbolt all signs, special mounting brackets, and posts from each other. * For Type B assemblies, unbolt all extruded aluminum panels, brackets, and posts from each other. Do not damage the disassembled materials. When the plans call for the removal of posts, the entire existing post shall be removed. The post shall not be broken off or cut off at the ground line. Place backfill in holes remaining from the removal of posts and restore to the surrounding conditions. Deliver the removed signs, special sign mounting brackets, and extruded aluminum panels to a DOT storage area, as designated by the Engineer.		
FILE NO.	ENGLISH	DESIGN TEAM	Fobian\Hecker	STATEWIDE	COUNTY	PROJECT NUMBER	NHSN-000-T(473)- -2R-00	SHEET NUMBER	C.6		

259_01 10/15/25 SIGNING NOTES				259_01 10/15/25 SIGNING NOTES							
The concrete footings for steel posts are not considered part of the sign assembly. Refer to note RF for concrete footing removal. Payment for Removal of Type A Sign Assembly or Removal of Type B Sign Assembly includes sign assembly removal and disassembly, post removal (if applicable), delivery to the DOT storage area, placing backfill in holes, and restoration of the surrounding conditions. RF REMOVE EXISTING CONCRETE FOOTING FOR STEEL POST Remove existing concrete footings to a depth of at least 1 ft below the natural groundline. Place backfill in holes remaining from removal and restore to the normal surrounding conditions. This work is incidental to other work and no separate payment will be made. RS REMOVE EXISTING TYPE B SIGN SUPPORT STRUCTURE The following are considered Type B Sign Support Structures: - Overhead sign trusses and foundations - Cantilever sign trusses and foundations - Bridge-mounted brackets Unless stated otherwise in the plans, existing overhead trusses, cantilever trusses, and bridge brackets which are removed become the property of the Contractor. If stated in the plans, deliver overhead trusses, cantilever trusses, and bridge brackets to a DOT storage area, as designated by the Engineer. Payment for Removal of Sign Support Structure and Foundation includes sign support structure removal, delivery to the DOT storage area (if applicable), and restoration of the surrounding conditions. Removal of the foundation includes removal of the stem to a minimum of 1 ft below the natural groundline. L MODIFY SIGN SUPPORT ANGLES NEEDED TO INSTALL SIGNS ON EXISTING SIGN SUPPORT STRUCTURES Refer to the sign support structure details for information on the required angle brackets. Provided all specifications are met, the existing sign support angles may be reused. Install existing sign support angles to be reused only on the sign support structure from which they were removed. Sign support angles removed and not reused become the property of the Contractor. When reusing the existing sign support angles with a shorter replacement sign, the sign support angles may				need to be trimmed. Refer to the sign support details to determine if and where to trim the sign support angles. Do not use existing fasteners. Use new U-Bolts, stainless steel bolts and nuts to install the existing or new sign support angles to the sign support structure. Removal of existing sign support angles is incidental to removal of the sign. Reinstalling and/or modifying existing sign support angles; furnishing and installing new sign support angles (if required); and furnishing and installing new fasteners is incidental to work associated with Type B signs. SIGN INSTALLATION QUALITY CONTROL NOTES Post lengths have been derived from the proposed grading cross sections. Verify post lengths in the field prior to ordering or fabrication. Slight differences between the design template and the actual conditions should be expected. These variations should be resolved by doing some localized shaping and grading. Obtain material needed to meet the site requirements of SI-112 from the excavation and/or the area immediately adjacent to the work. Ensure reshaping work does not substantially change foreslopes or the drainage in the vicinity of the sign. Significant differences between the plan design and the actual field conditions shall be resolved in this manner: Survey the location and draw the actual template on the cross section. Recalculate each post length and compare to the maximum allowable leg length. If all of the maximum leg lengths are less than or equal to the maximum allowable leg length, then the proposed post design will be sufficient. If any leg is greater than the maximum allowable leg length, then submit the cross section with the actual template drawn (including offsets and elevation from the survey shown) to the Engineer. The Engineer may forward this information to the Engineer of Record in order to complete a new post design. Install the footings, stub posts, and posts according to the tolerances shown on the applicable SI Series Standard Road Plans. Footing construction is the controlling activity that substantially affects the quality of the site installation. Verify the elevation difference between the stubs is exactly the same as the elevation difference between the post lengths. If the Engineer requests, submit documentation detailing the site cross section in order to verify site installation.							
FILE NO.		ENGLISH	DESIGN TEAM	STATEWIDE		COUNTY	PROJECT NUMBER	NHSN-000-T(473)--2R-00		SHEET NUMBER	C.7
Fobian\Hecker											

4/24/2026 9:29:01 AMdallen.hecker@iowadot.us

108_23A
8/15/22

TRAFFIC CONTROL PLAN

Traffic Shall be maintained at all times except as noted.

Traffic control on this project shall be in accordance with the Standard Road Plans included in Tabulation 105-4. For additional information, refer to Part 6 of the Manual on Uniform Traffic Control Devices and the Standard Specifications. The contractor shall coordinate traffic control with other projects in the area as needed.

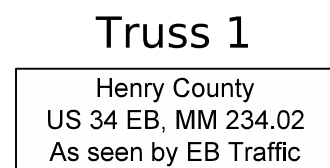
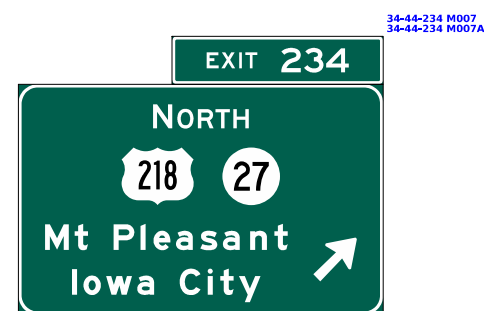
No traffic control devices shall be placed before any of the time restrictions.

All lane and/or shoulder closures shall be coordinated with District Staff or as approved by the Engineer.

Steel Sign Support Angles¹

Structure No.	Truss Length	Chord Diameter	Sign	Sign Support						Support Bracket			U-Bolts	
				Support No.	Left or Right	A	B	Overall Length	Angle Size	Top or Bottom	Overall Length	D	S	R
Truss 1	73.8'	5 1/2"	34-44-234 M006	1	L	1' - 11 1/2"	5' - 1 7/8"	7' 11"	5" x 3" x 3/8"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
				2	R	1' - 11 1/2"	5' - 1 7/8"	7' 11"	5" x 3" x 3/8"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
				3	L	1' - 11 1/2"	5' - 1 7/8"	7' 11"	5" x 3" x 3/8"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
				4	R	1' - 11 1/2"	5' - 1 7/8"	7' 11"	5" x 3" x 3/8"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
			34-44-234 M007	1	L	1' - 11 1/2"	5' - 1 7/8"	12' - 2"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
				2	R	1' - 11 1/2"	5' - 1 7/8"	12' - 2"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
				3	L	1' - 11 1/2"	5' - 1 7/8"	14' - 8"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
				4	R	1' - 11 1/2"	5' - 1 7/8"	14' - 8"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
				5	L	1' - 11 1/2"	5' - 1 7/8"	14' - 8"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
Truss 2	73.8'	5 1/2"	34-44-238 M106	1	L	1' - 11 1/2"	5' - 1 7/8"	11' - 8"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
				2	R	1' - 11 1/2"	5' - 1 7/8"	11' - 8"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
				3	L	1' - 11 1/2"	5' - 1 7/8"	11' - 8"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
			34-44-238 M107	1	L	1' - 11 1/2"	5' - 1 7/8"	11' - 8"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
				2	R	1' - 11 1/2"	5' - 1 7/8"	11' - 8"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
				3	L	1' - 11 1/2"	5' - 1 7/8"	14' - 2"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
			34-44-238 M108	1	L	1' - 11 1/2"	5' - 1 7/8"	12' - 2"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
				2	R	1' - 11 1/2"	5' - 1 7/8"	12' - 2"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
				3	L	1' - 11 1/2"	5' - 1 7/8"	12' - 2"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"
				4	R	1' - 11 1/2"	5' - 1 7/8"	12' - 2"	6" x 3 1/2" x 1/2"	T & B	1' - 6"	6 5/16"	5 1/4"	3 5/32"

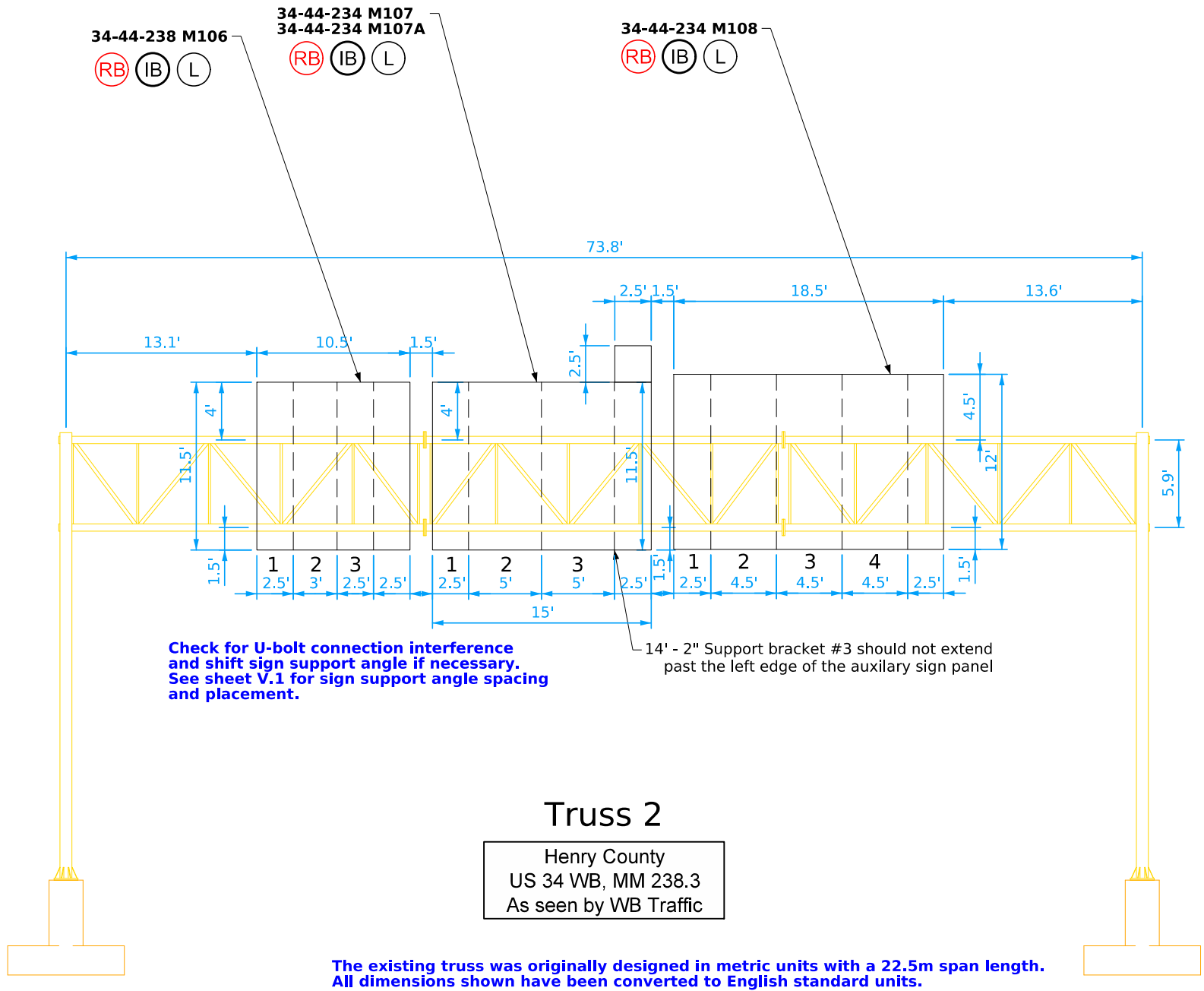
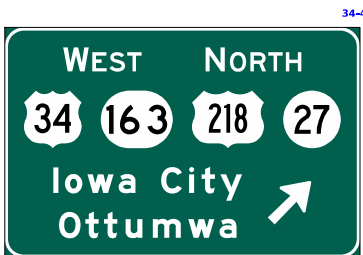
1. Steel angles shall comply with ASTM A992, ASTM A572 Grade 50, or ASTM A36.
Steel angles shall be hot-dip galvanized after fabrication in accordance with ASTM A123.



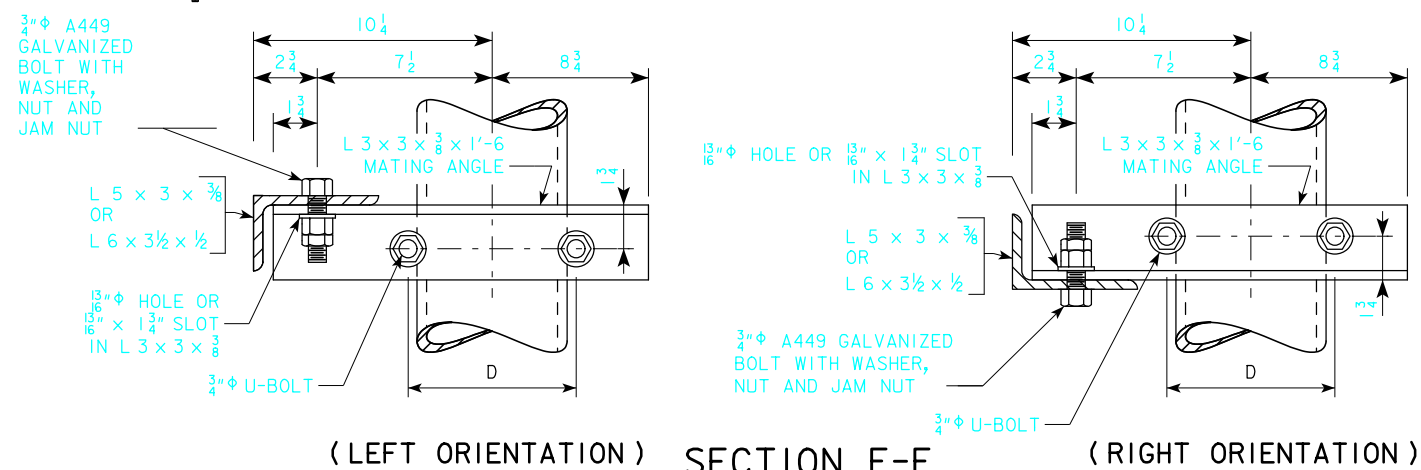
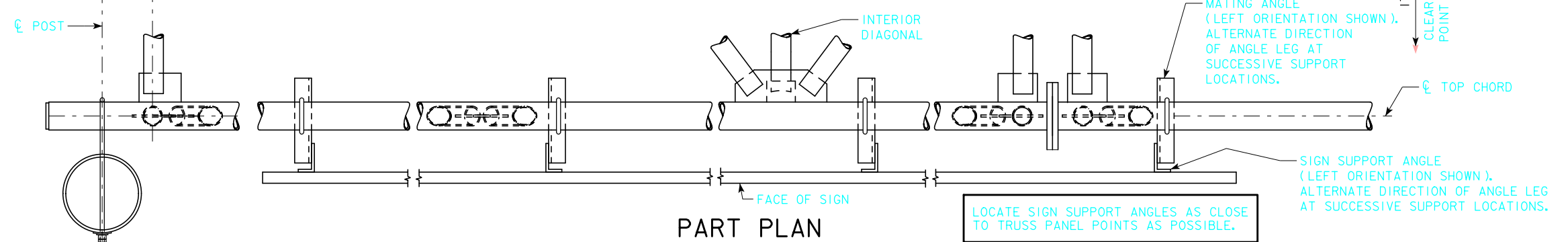
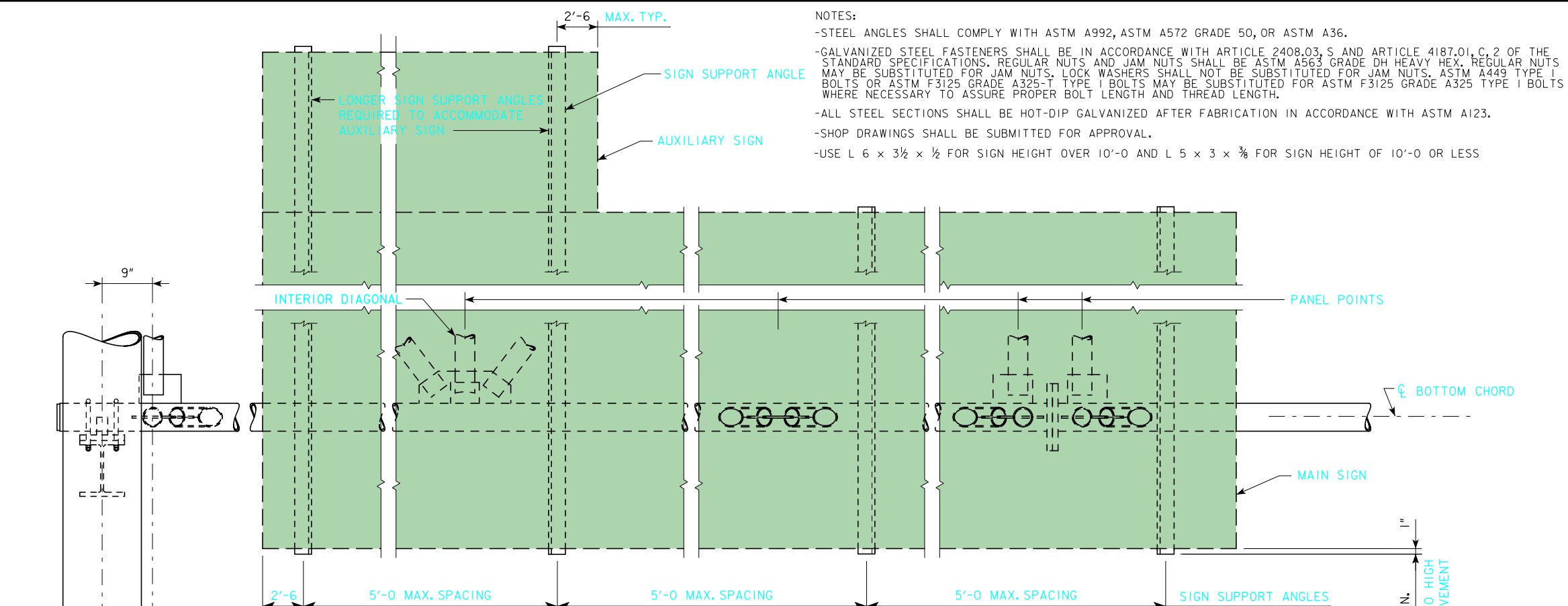
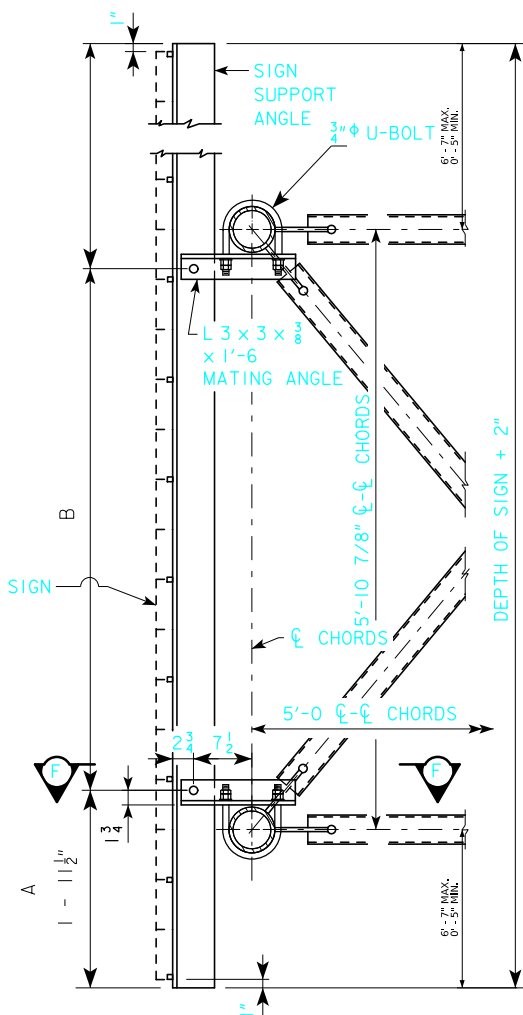
Check for U-bolt connection interference and shift sign support angle if necessary. See sheet V.1 for sign support angle spacing and placement.

The existing truss was originally designed in metric units with a 22.5m span length. All dimensions shown have been converted to English standard units.

SIGN AND TRUSS DETAILS



SIGN AND TRUSS
DETAILS

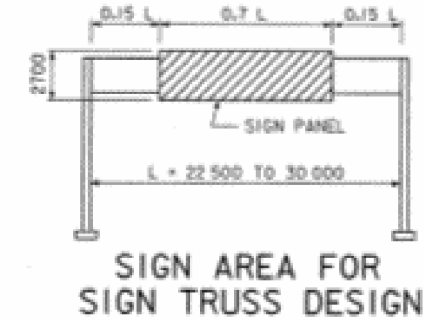
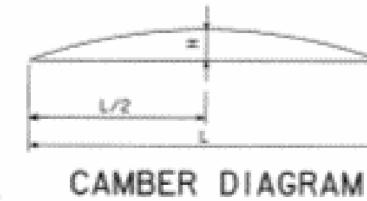
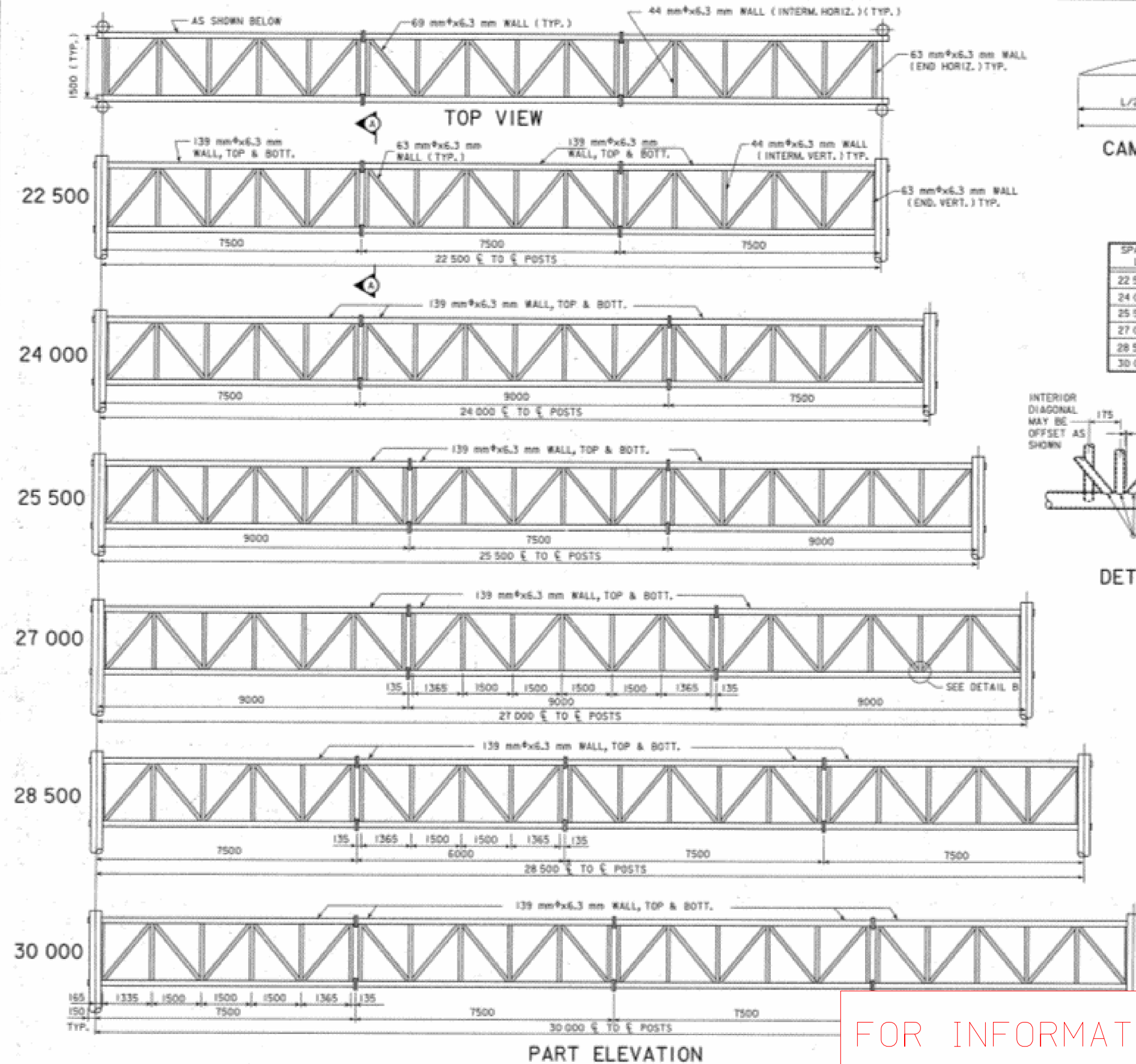


FOR INFORMATION ONLY

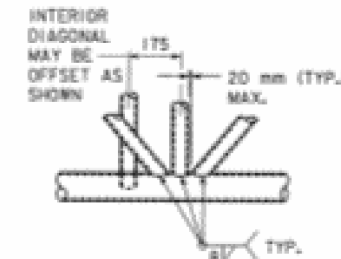
ALUMINUM OVERHEAD SIGN TRUSS
FOR TRUSSES 1 AND 2

SIGN SUPPORT DETAILS

HM5107.501 - REVISED 10-00 - RENAMED SHEET, ELEC. DETAILS, CONNECTIONS & WALKWAY DETAILS DELETED.
HM5107.501 - ISSUED 11-97



SPAN L	CAMBER R
22 500	40
24 000	45
25 500	50
27 000	55
28 500	65
30 000	75



GENERAL NOTES:
ALL SIGN TRUSSES ARE DESIGNED FOR 170 kg/m² WIND PRESSURE ON TRUSS MEMBERS AND SIGN PANELS.

ALL MATERIAL SHALL BE 6061-T6 ALUMINUM ALLOY UNLESS OTHERWISE SPECIFIED.

ALL DIMENSIONS IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED OR SHOWN.

SIGN SUPPORT MAY BE LOCATED ON BOTH SIDES OF SIGN TRUSS.

SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL.

ALL DIAMETERS OF ALUMINUM TUBING SHOWN ARE OUTSIDE DIAMETERS.

SPECIFICATIONS:
DESIGN: A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, SERIES OF 1994.

CONSTRUCTION: IOWA D.O.T. STANDARD SPECIFICATIONS, SERIES 1995, PLUS CURRENT SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS.

DESIGN STRESSES:
DESIGN STRESSES FOR MATERIALS ARE IN ACCORDANCE WITH A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, SERIES OF 1994.

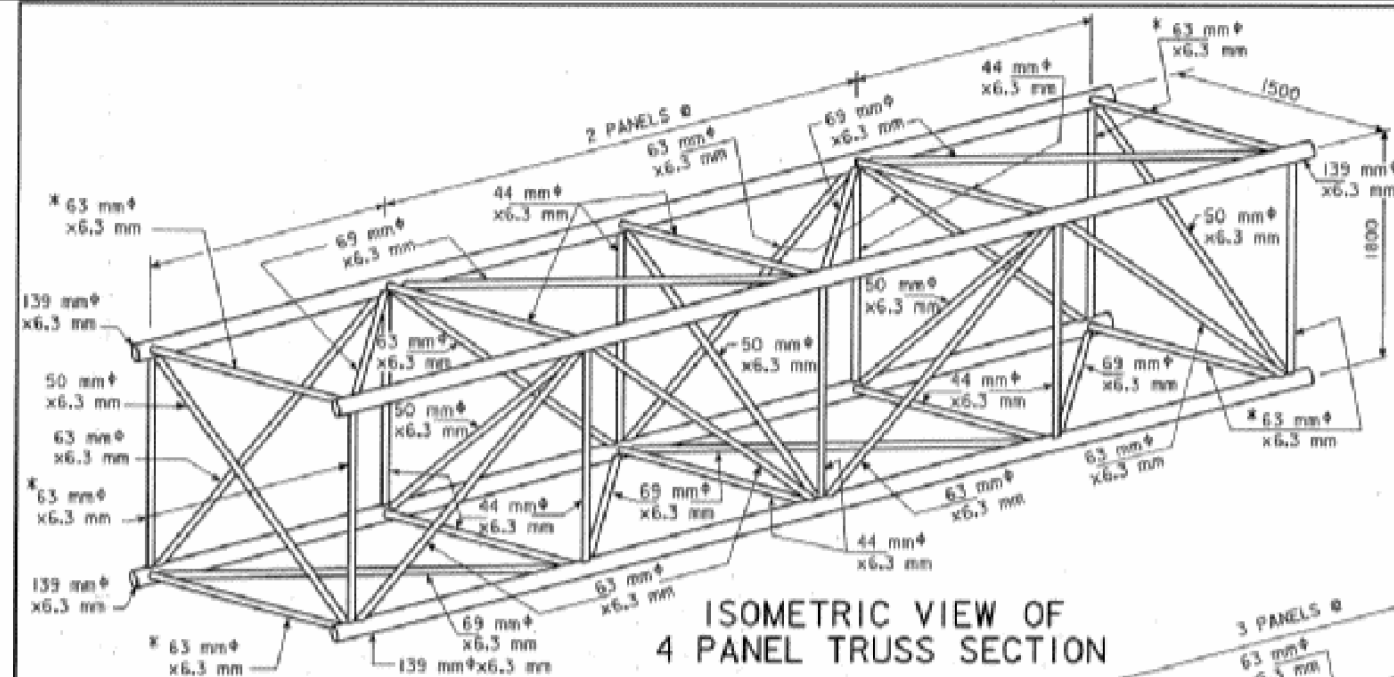
NOTE:
SEE STANDARD SHEET MS108 FOR SECTION A-A.

STRUCTURAL DESIGN	
	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa. <i>William D. Tucker</i> 11/28/00 Signature William D. Tucker Printed or Typed Name My license renewal date is December 31, 2001 Pages or sheets covered by this seal: 1-6 OF 6

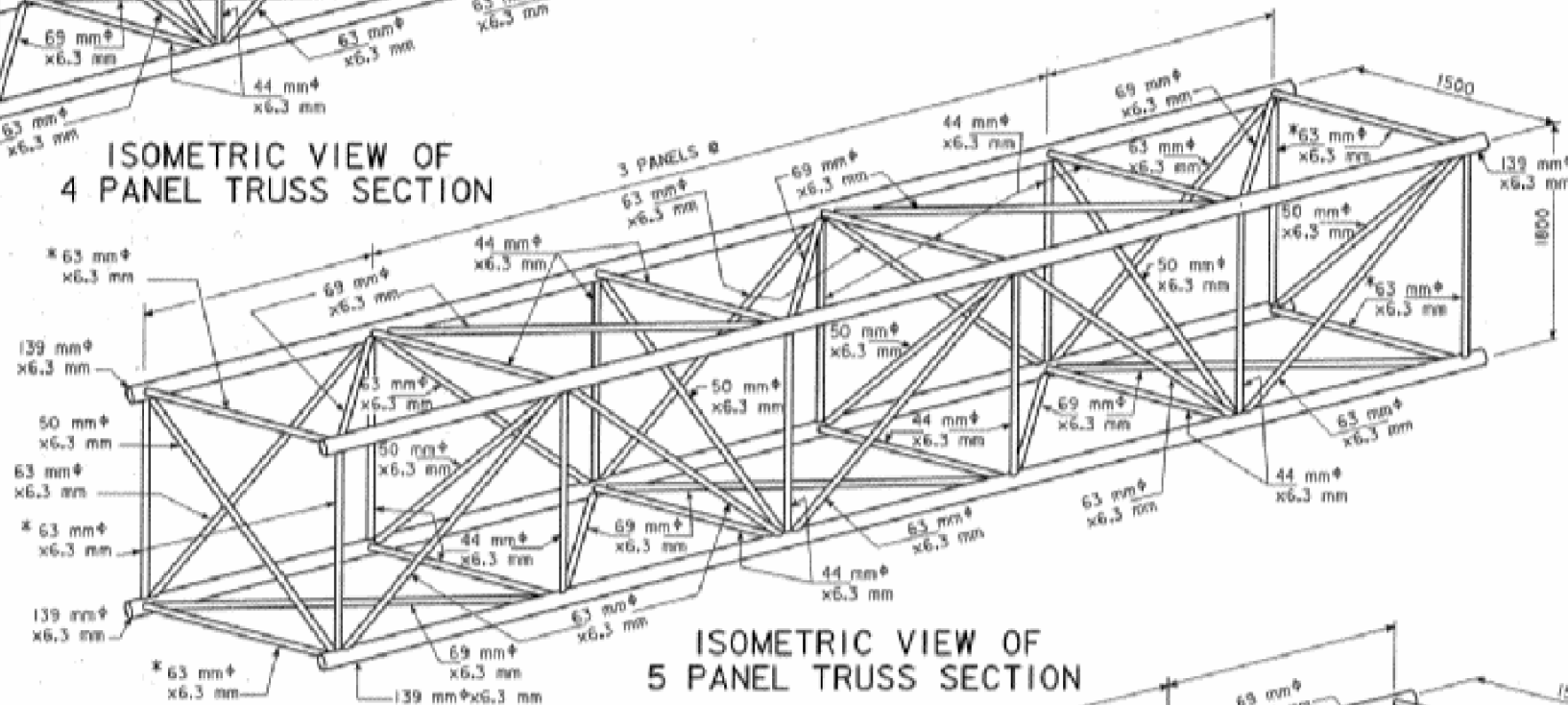
DESIGN FOR 22.5 m TO 30 m SPANS
ALUMINUM OVERHEAD SIGN TRUSS

HENRY COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
SIGN SHEET NO. 1 OF 5

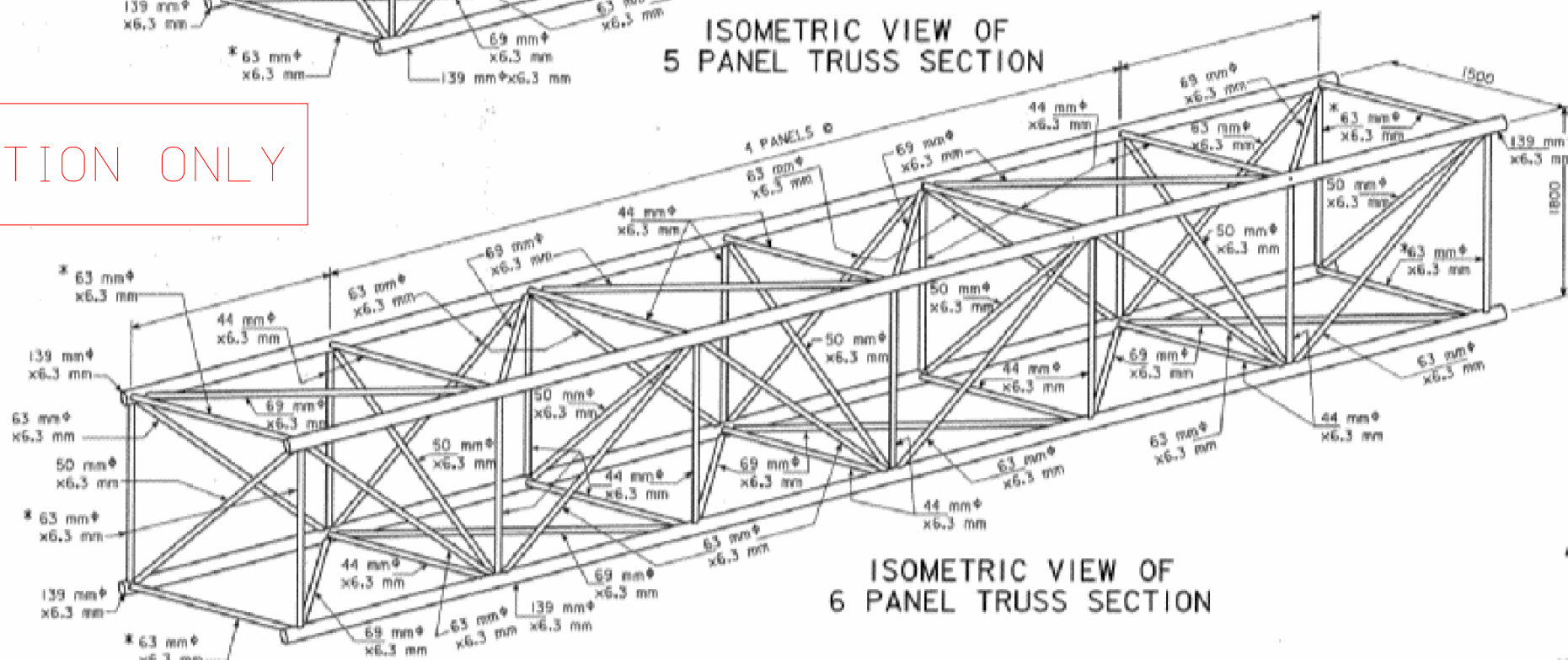
FOR INFORMATION ONLY



ISOMETRIC VIEW OF
4 PANEL TRUSS SECTION

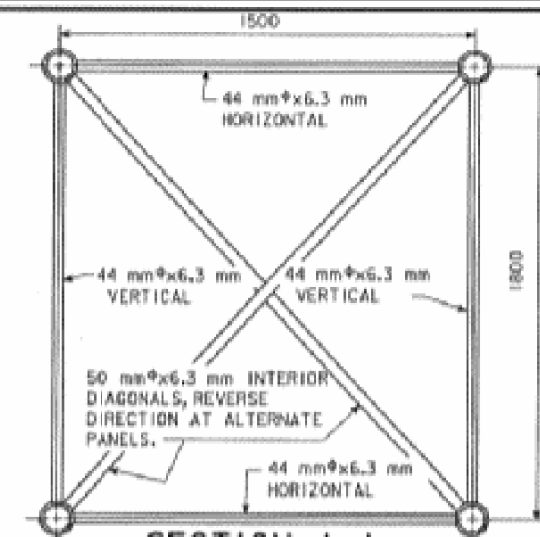


ISOMETRIC VIEW OF
5 PANEL TRUSS SECTION

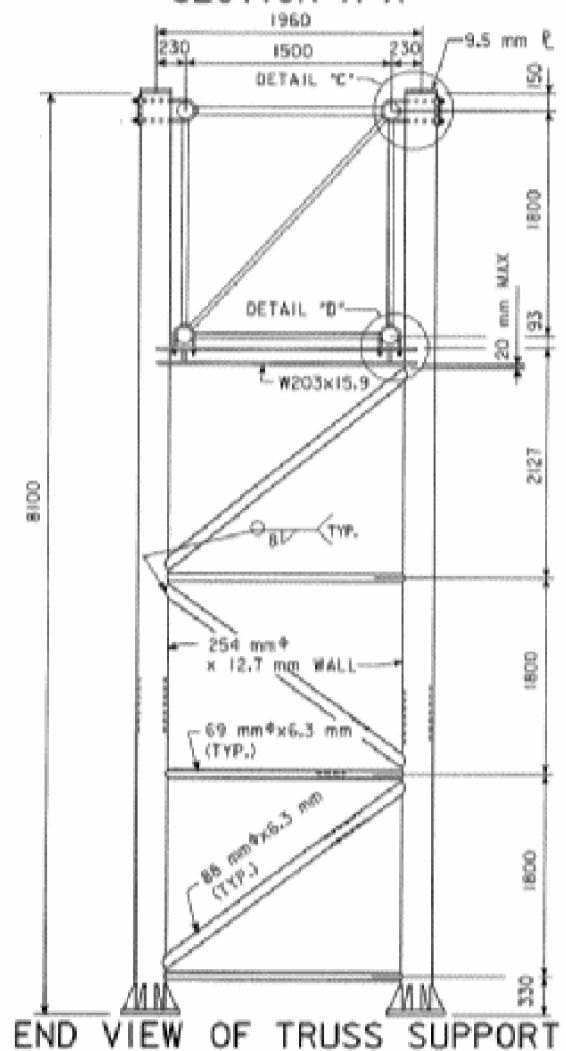


ISOMETRIC VIEW OF
6 PANEL TRUSS SECTION

NOTE:
SEE STANDARD SHEET M5107 FOR LOCATION
OF SECTION A-A.
SEE STANDARD SHEET M5109 FOR DETAILS "C" & "D".



SECTION A-A



END VIEW OF TRUSS SUPPORT

DESIGN FOR 22.5 m TO 30 m SPANS
ALUMINUM OVERHEAD SIGN TRUSS
END VIEW AND ISOMETRIC VIEWS
HENRY COUNTY

IGNA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. 3 OF 6

ALUMINUM OVERHEAD SIGN TRUSS - 22.5 m TO 30 m SPANS

STANDARD SHEET M5108

HENRY COUNTY

PROJECT NUMBER

NHSX-218-2187--3H-44

SHEET NUMBER

68

FILE NO.

ENGLISH

DESIGN TEAM **Fobian/Hecker**

STATEWIDE COUNTY

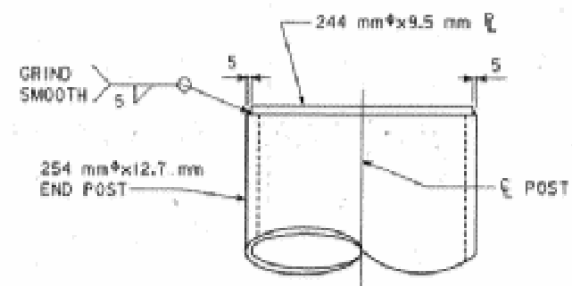
PROJECT NUMBER **NHSN-000-T(473)--2R-00**

SHEET NUMBER **V.3**

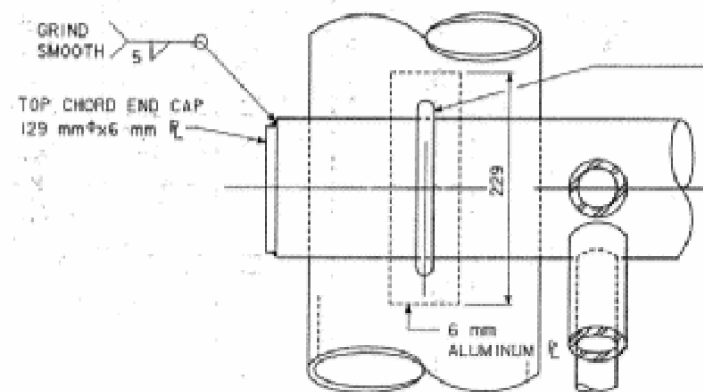
7:04:05 AM 6/9/2026

dhecker

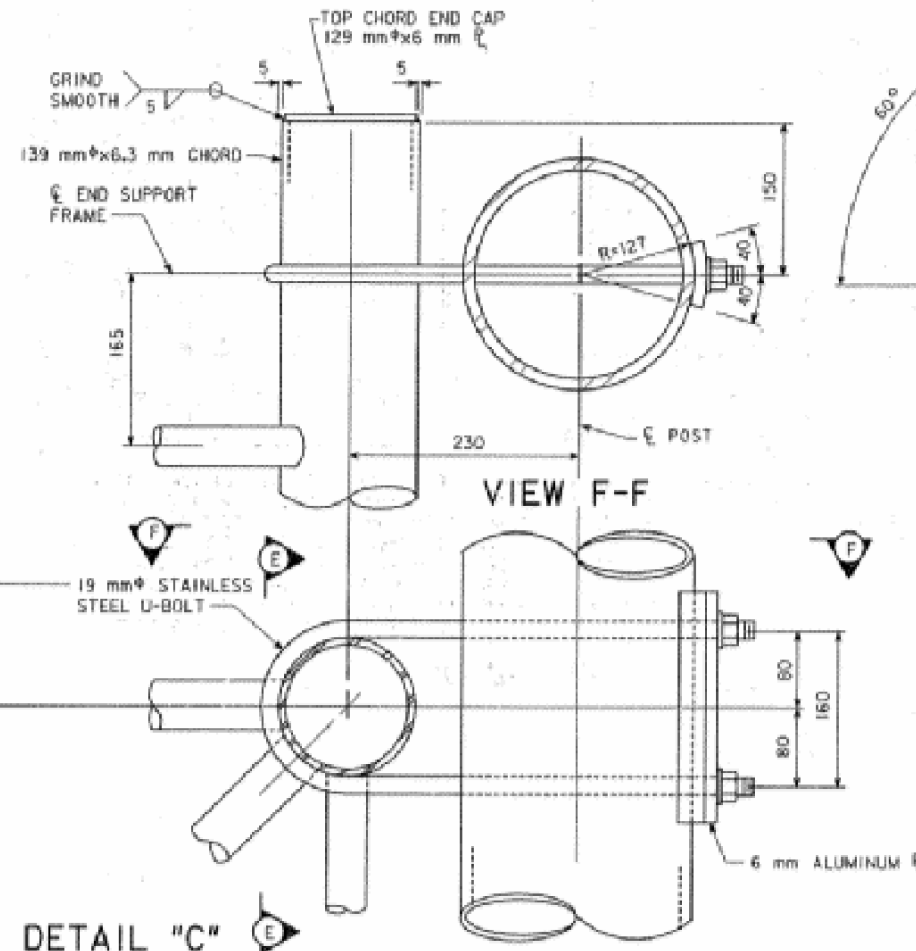
pw:\NTPwint1.dot\int.lan:PWMain\Documents\Projects\0000022026\TrafficAndSafety\TrafficEngineering\473_Signing\CADD Files\SHT_00000473_V01.dgn



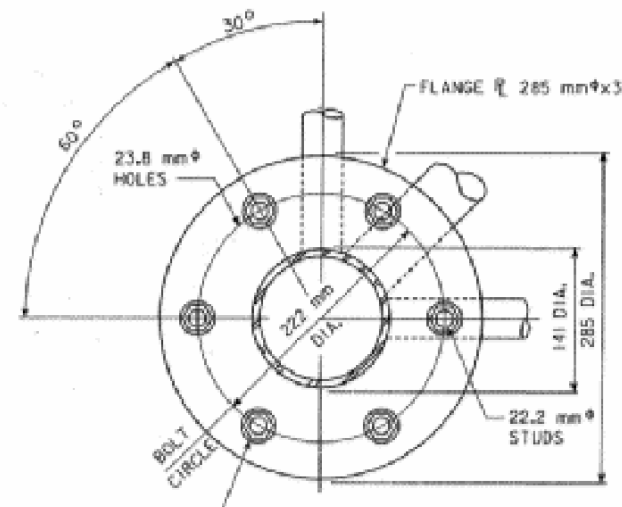
END POST TOP DETAIL



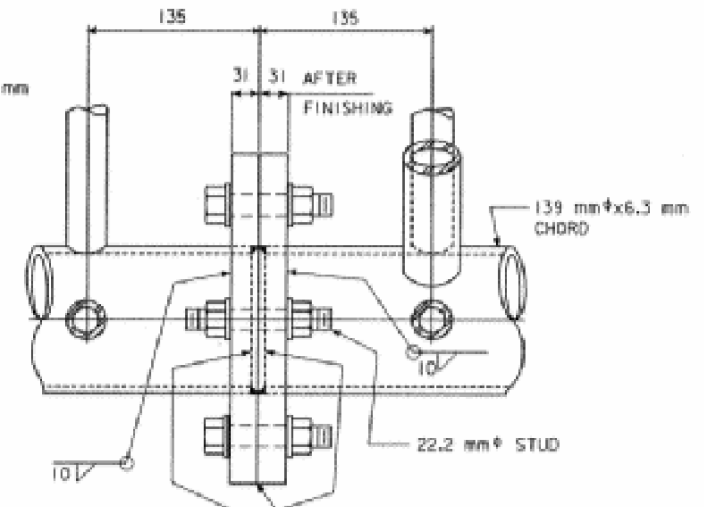
VIEW E-E



DETAIL "C"
(TOP CHORD)

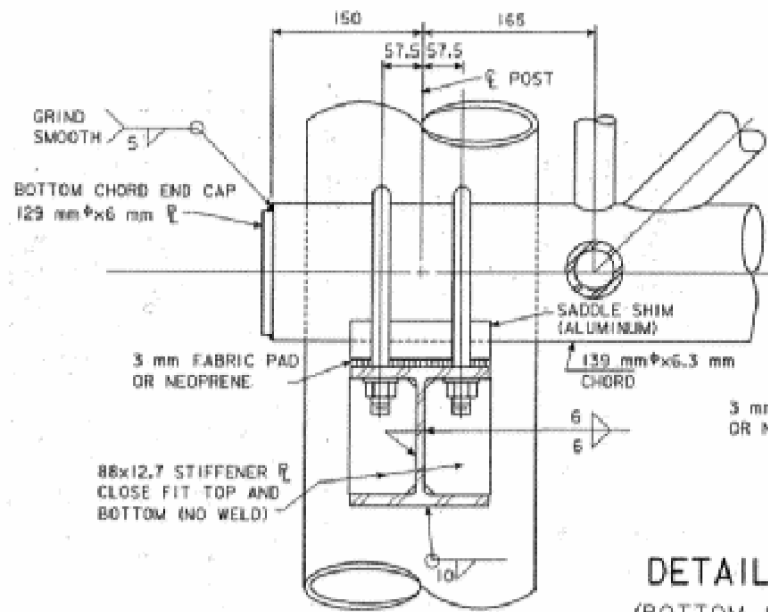


CHORD SPLICE

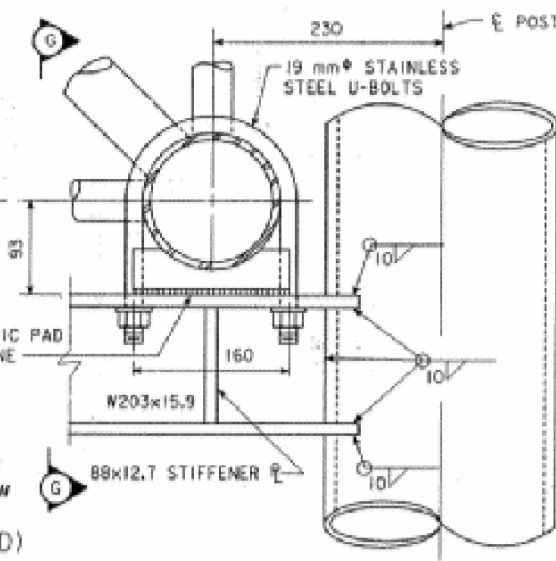


NOTE:
FLANGES MAY BE WELDED TO CHORD MEMBERS
AFTER FINISHING PROVIDED PROPER ALIGNMENT
IS SECURED.

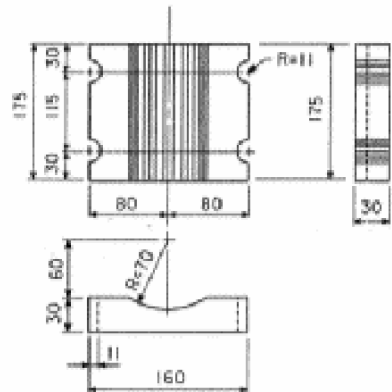
FOR INFORMATION ONLY



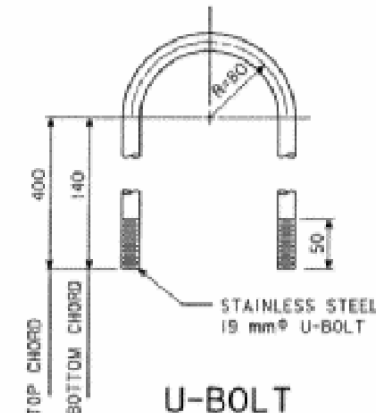
VIEW G-G



DETAIL "D"
(BOTTOM CHORD)



ALUMINUM SADDLE
SHIM DETAIL



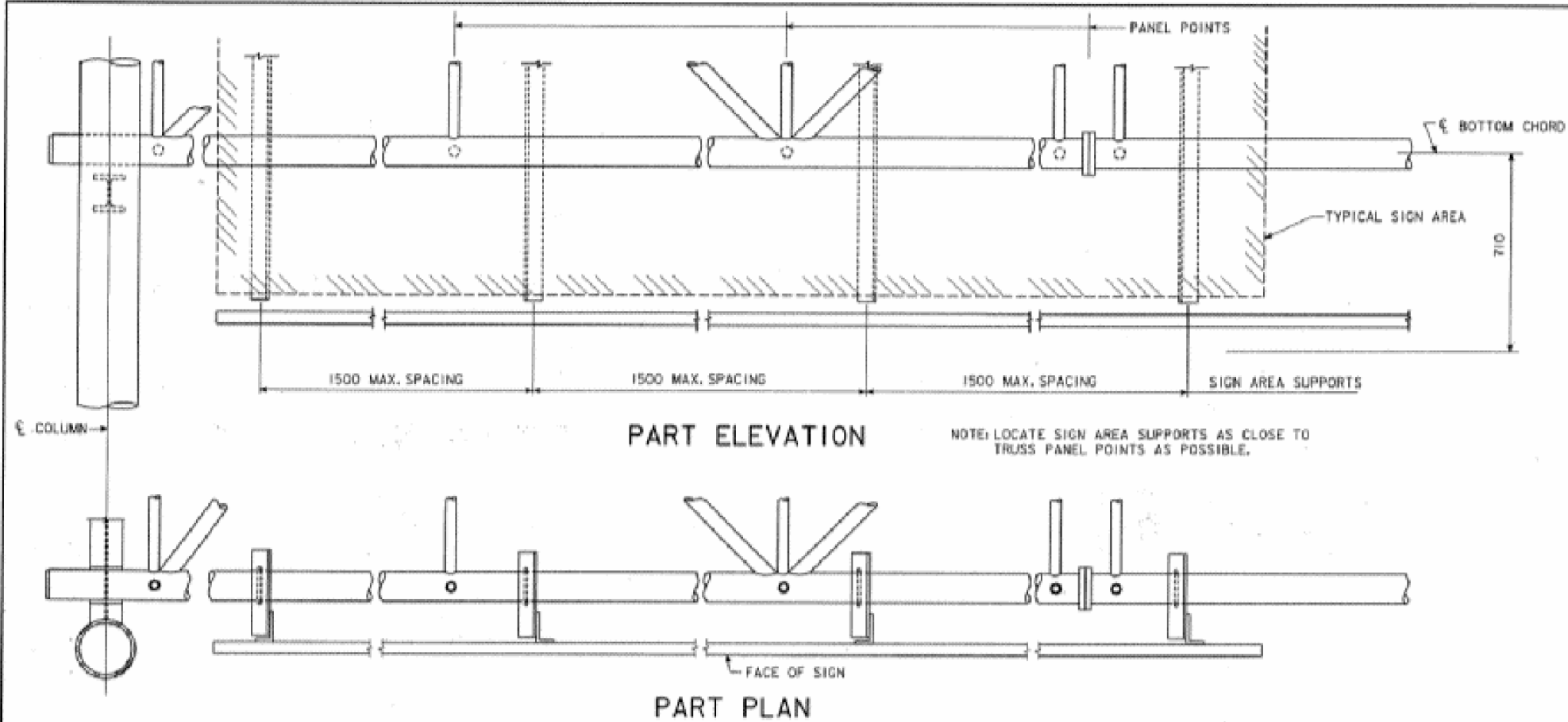
U-BOLT
DETAIL

NOTE:
SEE STANDARD SHEET M5108 FOR LOCATIONS
OF DETAILS "C" AND "D".

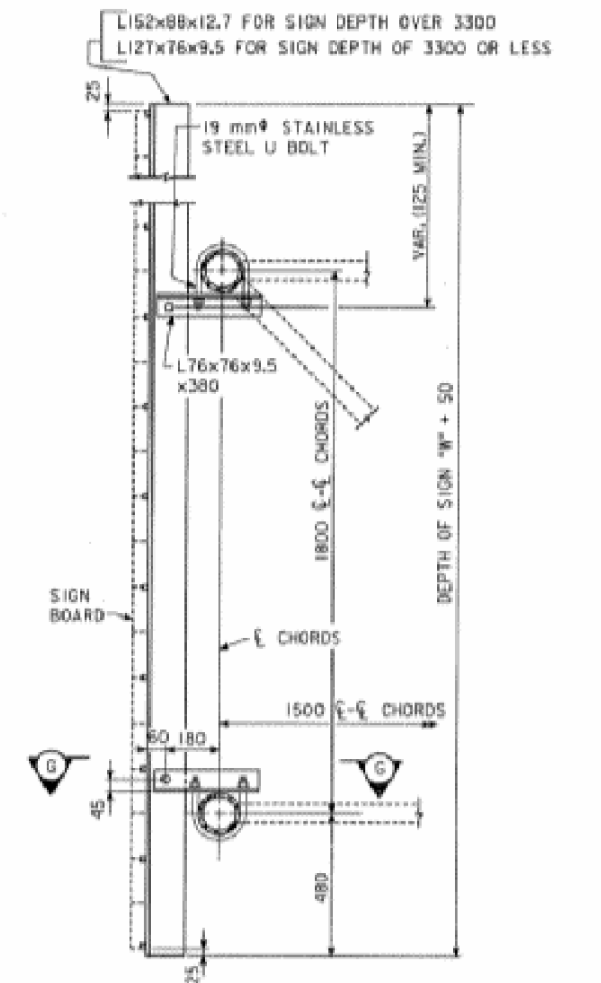
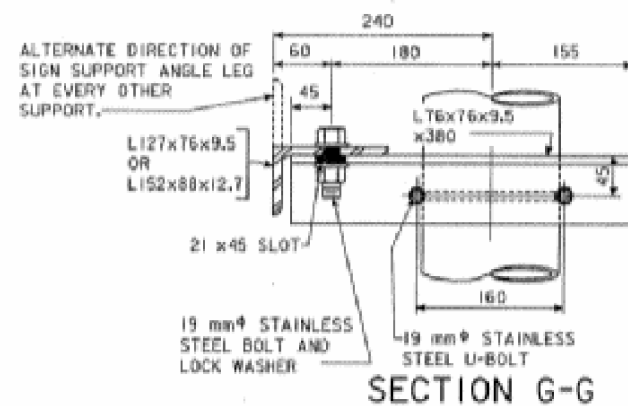
DESIGN FOR 22.5 m TO 30 m SPANS
ALUMINUM OVERHEAD SIGN TRUSS
CHORD SPLICE DETAILS
HENRY COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. 3 OF 6

ALUMINUM OVERHEAD SIGN TRUSS - 22.5 m TO 30 m SPANS	STANDARD SHEET M5109	HENRY COUNTY	PROJECT NUMBER	MHSX-218-2(8T)--3H-44	SHEET NUMBER	69
---	----------------------	--------------	----------------	-----------------------	--------------	----



FOR INFORMATION ONLY



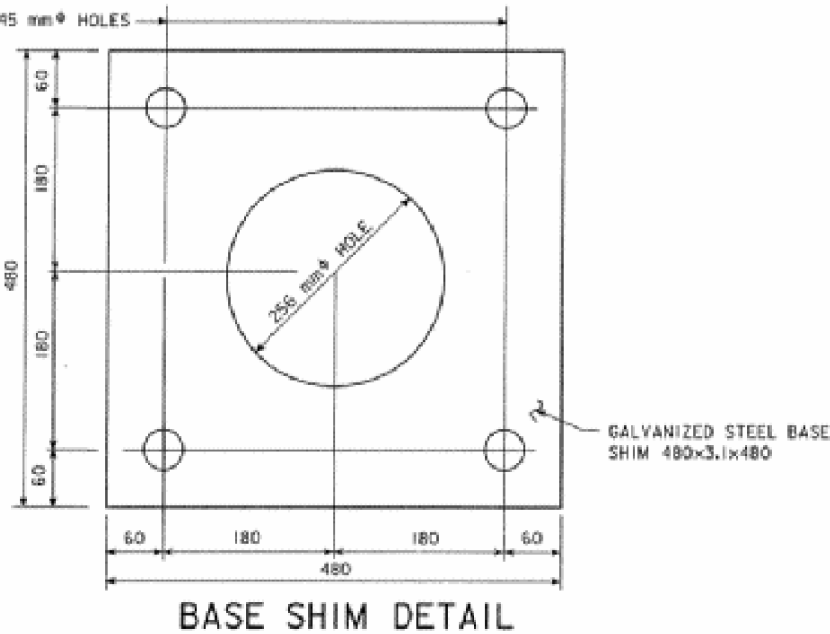
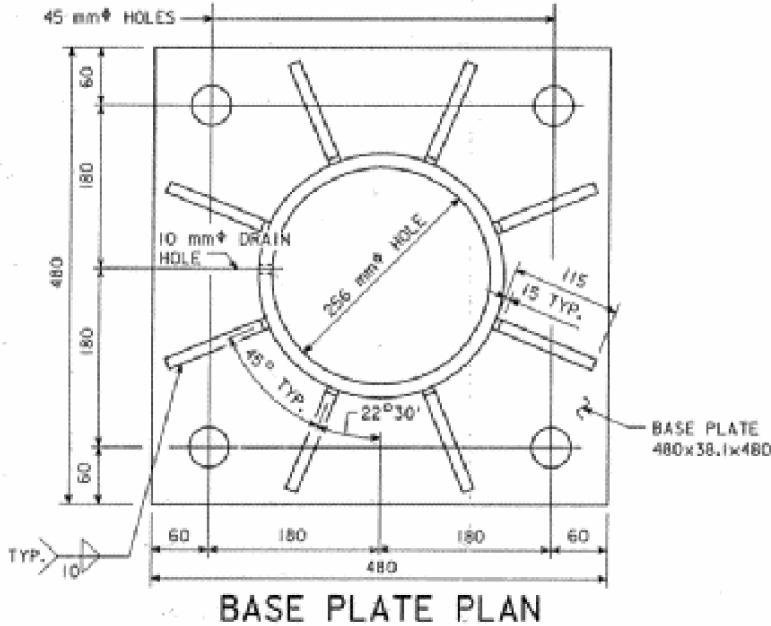
DESIGN FOR 22.5 m TO 30 m SPANS
ALUMINUM OVERHEAD SIGN TRUSS
SIGN SUPPORT DETAILS
HENRY COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 4 OF 6

ALUMINUM OVERHEAD SIGN TRUSS - 22.5 m TO 30 m SPANS	STANDARD SHEET M5110	HENRY COUNTY	PROJECT NUMBER	NHSX-218-2187--3H-44	SHEET NUMBER	70
---	----------------------	--------------	----------------	----------------------	--------------	----

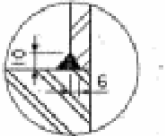
ALUMINUM WELDING NOTES:

- (1) FABRICATION SHALL CONFORM TO SECTION 1.5.3 OF AASHTO 1994 STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, EXCEPT AS MODIFIED BY THE FOLLOWING NOTES.
- (2) ALL WELDING SHALL BE DONE BY GAS METAL-ARC WELDING (GMAW) PROCESS.
- (3) ONLY STRINGER BEAD TECHNIQUE SHALL BE USED IN WELDING. NO WEAVE BEAD TECHNIQUE IS ALLOWED.
- (4) INTERPASS TEMPERATURE SHALL NOT EXCEED 93° C.
- (5) TACK WELD ENDS SHALL BE FILLED AND NOT TERMINATE IN CRATERS. IF A TACK WELD IS CRACKED, THE CRACK SHALL BE REMOVED BEFORE WELDING BEGINS.
- (6) ALL INITIAL ROOT PASSES SHALL NOT EXCEED 8 mm AND MUST PENETRATE THE ROOT.
- (7) THE CONVEXITY OF FILLET WELD SHALL NOT EXCEED 2 mm.
- (8) THE ENTIRE STRUCTURE SHALL BE CLEANED BEFORE SHIPPING.
- (9) TUBES SHOULD BE MILLED TO THE REQUIRED RADIUS WITH THE MAXIMUM GAP AT ANY POINT NOT GREATER THAN 1.6 mm.
- (10) ALL AREAS OF WELDING MUST BE BRUSHED WITH STAINLESS STEEL BRUSHES IMMEDIATELY PRIOR TO MAKING THE WELDS.
- (11) ONLY MICROSCOPICALLY CLEAN WELDING WIRES (THOSE WHICH HAVE BEEN SHAVED AFTER DRAWING) SHOULD BE USED AND SPOOLS OF WIRE REMAINING AT THE END OF THE DAY'S PRODUCTION SHOULD BE SEALED IN POLYETHYLENE BAGS. WIRE NOT SO PROTECTED SHOULD BE DISCARDED. THIS INCLUDES WIRE IN THE DRIVE ROLLS AND GUN.
- (12) FORCED FITS MUST BE AVOIDED AND ONLY DOWN HAND WELDING IS ALLOWED.
- (13) ALL WELD CRATERS MUST BE ELIMINATED AND WELDS SHOULD CARRY THROUGH TIGHT AREAS WITHOUT STOPPING WHEN POSSIBLE.
- (14) ALUMINUM FILLER ALLOY ER5356 OR ER5556 SHALL BE USED.

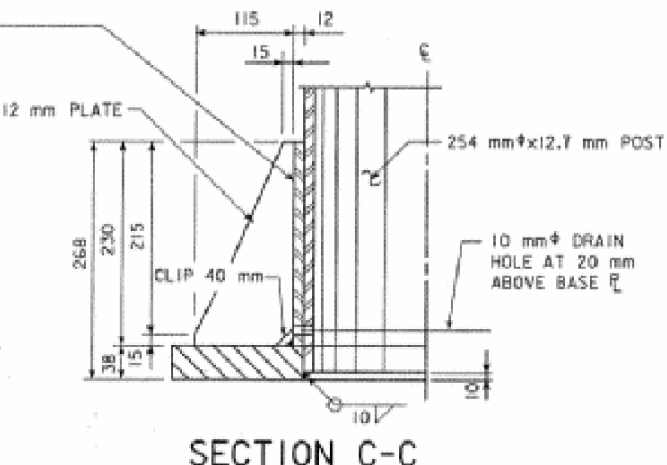
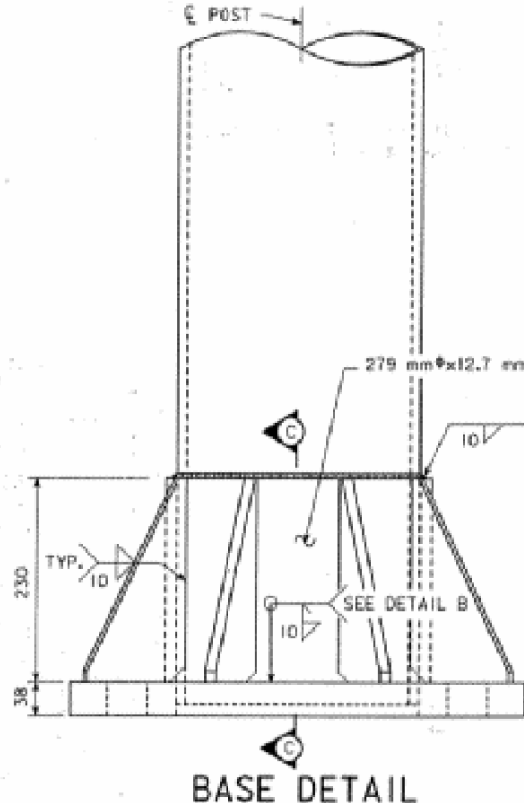


NOTE:
FOR EACH SIGN TRUSS FURNISH FOUR SHIMS AS SHOWN AND FOUR SHIMS WITH CENTER HOLE OMITTED.

FOR INFORMATION ONLY



DETAIL B



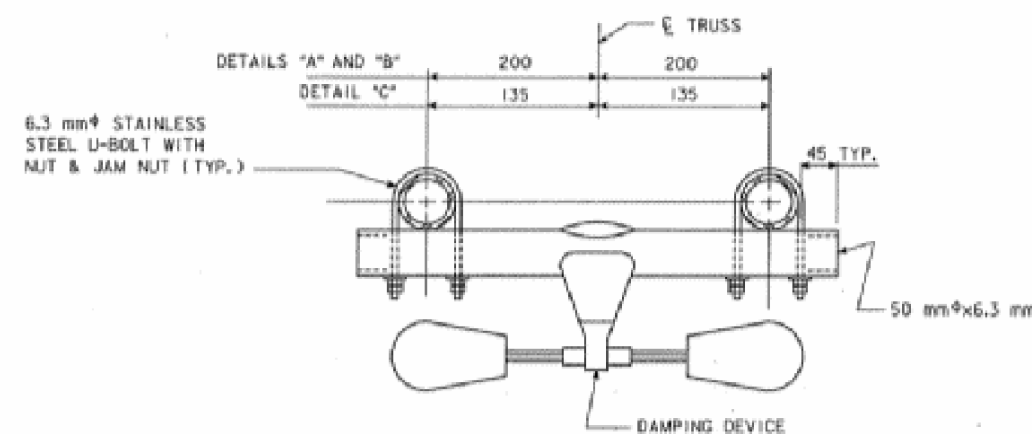
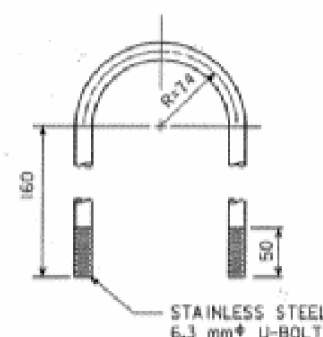
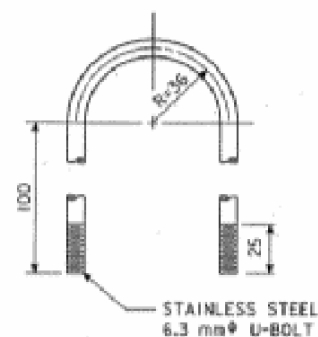
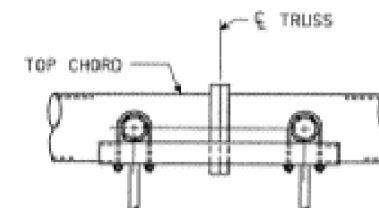
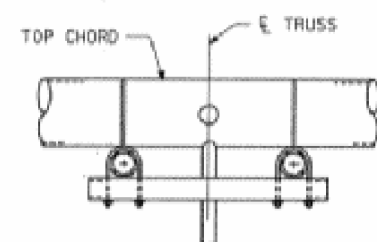
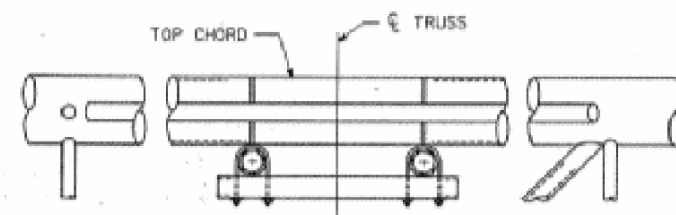
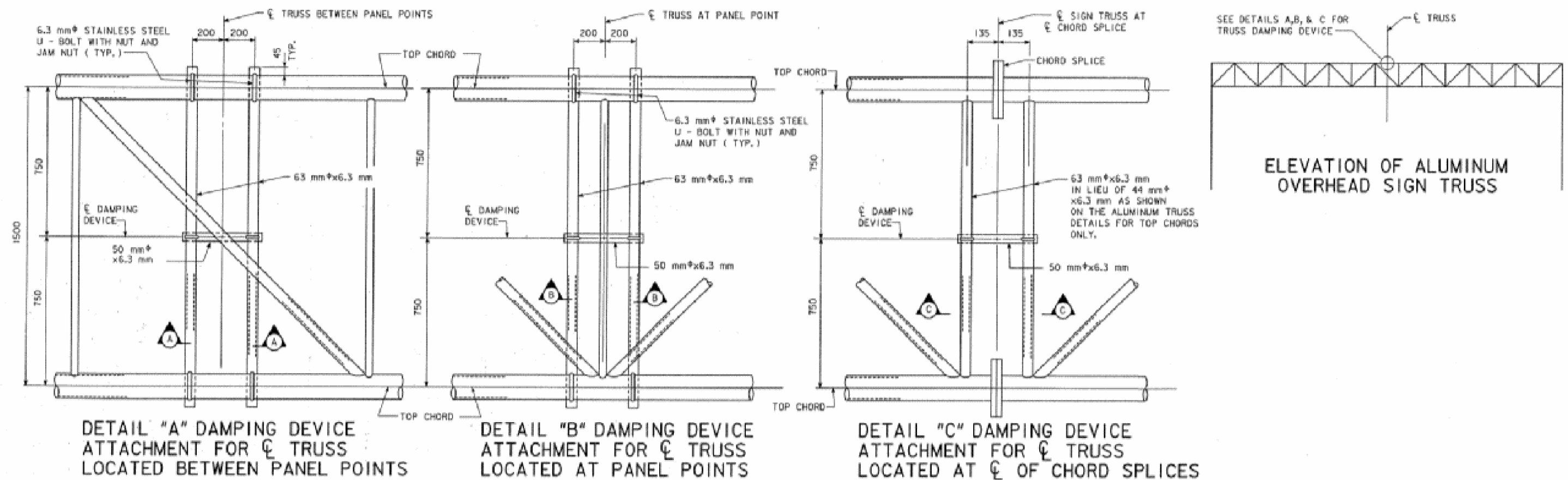
NOTE:
1. UNLESS OTHERWISE NOTED ON THE PLAN, ALL STAINLESS STEEL BOLTS AND U-BOLT SHALL BE FURNISHED WITH STAINLESS STEEL REGULAR HEXAGONAL NUTS, JAM NUTS AND WASHERS UNDER BOTH HEADS AND NUTS.
2. IN CASE THE STAINLESS STEEL LOCK WASHERS ARE USED IN LIEU OF JAM NUTS, THE REGULAR WASHERS UNDER NUTS ARE TO BE OMITTED.

DESIGN FOR 22.5 m TO 30 m SPANS
ALUMINUM OVERHEAD SIGN TRUSS
BASE DETAILS
HENRY COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. 5 OF 6

ALUMINUM OVERHEAD SIGN TRUSS - 22.5 m TO 30 m SPANS	STANDARD SHEET MS111	HENRY COUNTY	PROJECT NUMBER	NHSX-218-2087--3H-44	SHEET NUMBER	71
---	----------------------	--------------	----------------	----------------------	--------------	----

FILE NO.	ENGLISH	DESIGN TEAM	Fobian/Hecker	STATEWIDE	COUNTY	PROJECT NUMBER	NHSN-000-T(473)--2R-00	SHEET NUMBER	V.6
----------	---------	-------------	---------------	-----------	--------	----------------	------------------------	--------------	-----



FOR INFORMATION ONLY

NOTE:
ONE TRUSS DAMPER LOCATED AT $\frac{1}{4}$ OF TRUSS IS REQUIRED PER TRUSS. ALCOA ALUMINUM TRUSS DAMPER 1708-17.1 (14 kg STOCKBRIDGE TYPE) OR APPROVED EQUAL SHALL BE USED.
THE COST OF DAMPING DEVICE IS TO BE INCLUDED IN THE PRICE BID FOR SIGN TRUSS.

NOTE:
IN SECTIONS A-A, B-B AND
C-C, THE DAMPING DEVICE IS
NOT SHOWN.

DESIGN FOR 22.5 m TO 30 m SPANS
ALUMINUM OVERHEAD SIGN TRUSS
DAMPING DEVICE DETAILS
HENRY COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. 6 OF 6