

CAMBER	
SPAN IN FEET	CAMBER IN INCHES
60 THRU 70	1 3/4"
71 THRU 80	2"
81 THRU 100	2 1/4"
101 THRU 110	2 1/2"
111 THRU 120	2 1/2"

PROVIDE THE ABOVE CAMBER AT MIDDLE OF SPAN OF STRUCTURES

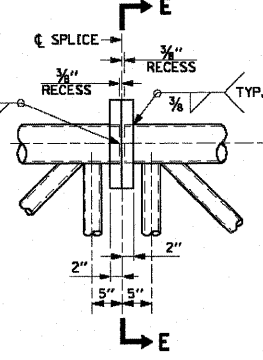
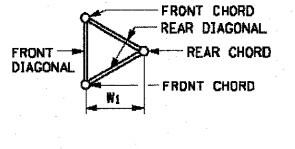
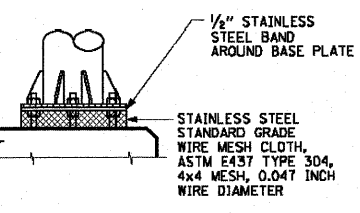
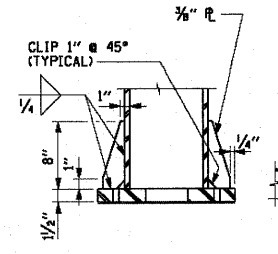
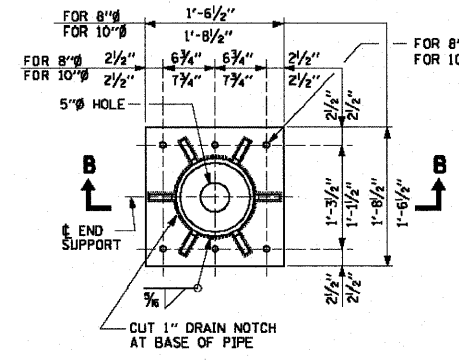
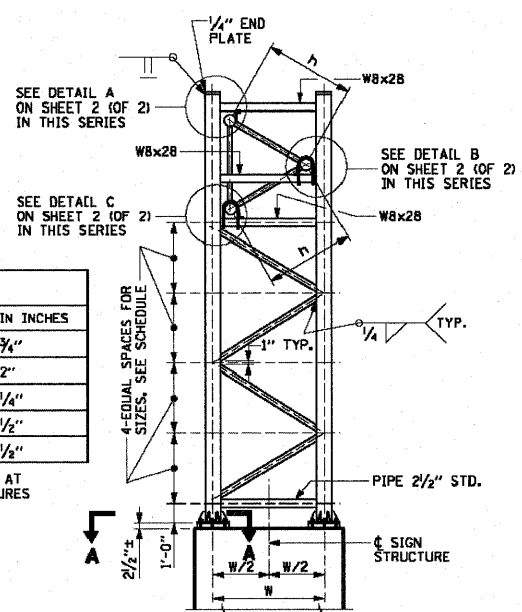


TABLE A			
CHORD SIZE E	F	G	N
3 1/2" & 3 3/4"	8 1/2"	11 1/2"	6
4 1/4", 4 3/4", 5"	9 1/4"	12 1/4"	8
6" & 6 1/2"	11"	14"	10

BOLT CIRCLE FOR 1 1/4" HOLES AND 3/8" STAINLESS STEEL (S.S.) BOLTS WITH HEX LOCKNUTS & S.S. WASHERS UNDER HEAD & NUT. FOR E, F, G & N, SEE TABLE A. REQUIRED MIN. BOLT TENSION IS 500#. 1/4" STUDS SHALL BE SUBSTITUTED WHEN DIAGONALS INTERFERE WITH BOLT LOCATION.

TRUSS NO.	DIMENSIONS							ALUMINUM TRUSS				STEEL END SUPPORT			FOUNDATION TYPE
	SPAN L	P	N	h	W ₁	W	DL (TRUSS) DEFLECTION	MIDDLE SEGMENT OR END SEGMENT				PIPE COLUMN (NOMINAL DIAMETER)			
								CHORD (O.D.)		DIAGONAL (O.D.)		H OR H ₁	H OR H ₁	H OR H ₁	
T-60	60'-0"	6'-8"	2'-8"	3'-4"	2'-10 1/2"	4'-4 1/2"	1 1/8"	3 1/2" x 1/4"	3 3/4" x 1/4"	2" x 3/8"	2" x 3/8"	8" STD. (28.58#/FT.)	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	80
T-65	65'-0"	7'-4"	2'-6"	3'-8"	3'-2 1/8"	4'-8"	1 3/8"	3 1/2" x 1/4"	3 3/4" x 1/4"	2" x 3/8"	2" x 3/8"	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	80
T-70	70'-0"	8'-0"	2'-4"	4'-0"	3'-5 3/8"	5'-0"	1 1/8"	3 3/4" x 1/4"	3 3/4" x 1/4"	2" x 3/8"	2" x 3/8"	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	80
T-75	75'-0"	8'-6"	2'-10"	4'-3"	3'-8 1/4"	5'-3"	1 3/8"	4 1/4" x 1/4"	4 3/4" x 3/8"	2" x 3/8"	2" x 3/8"	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	80
T-80	80'-0"	9'-0"	3'-4"	4'-6"	3'-10 3/4"	5'-6"	2"	4 3/4" x 3/8"	5" x 1/4"	2 1/4" x 3/8"	2" x 3/8"	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	10" X.S. (54.74#/FT.)	80
T-85	85'-0"	9'-6"	3'-10"	4'-9"	4'-1 1/8"	5'-9"	2 1/8"	5" x 1/4"	5" x 3/8"	2 1/4" x 3/8"	2 1/4" x 3/8"	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	10" X.S. (54.74#/FT.)	100
T-90	90'-0"	10'-0"	4'-4"	5'-0"	4'-4"	5'-11 1/2"	2 1/4"	5" x 3/8"	5" x 3/8"	2 1/2" x 3/8"	2 1/4" x 3/8"	10" STD. (40.48#/FT.)	10" STD. (40.48#/FT.)	10" X.S. (54.74#/FT.)	100
T-95	95'-0"	10'-6"	4'-10"	5'-3"	4'-6 3/8"	6'-2"	2 3/8"	5" x 3/8"	5" x 3/8"	2 1/2" x 3/8"	2 1/2" x 3/8"	10" STD. (40.48#/FT.)	10" X.S. (54.74#/FT.)	10" X.S. (54.74#/FT.)	100
T-100	100'-0"	11'-4"	4'-0"	5'-8"	4'-10 1/8"	6'-7 1/2"	2 1/4"	6" x 1/4"	6" x 1/4"	2 3/4" x 3/8"	2 1/2" x 3/8"	10" STD. (40.48#/FT.)	10" X.S. (54.74#/FT.)	10" X.S. (54.74#/FT.)	100
T-105	105'-0"	12'-0"	3'-10"	6'-0"	5'-2 3/8"	6'-11"	2 3/8"	6" x 3/8"	6" x 3/8"	3" x 3/8"	2 3/4" x 3/8"	10" X.S. (54.74#/FT.)	10" X.S. (54.74#/FT.)	10" X.S. (54.74#/FT.)	120
T-110	110'-0"	12'-6"	4'-4"	6'-3"	5'-5"	7'-1 1/2"	2 3/8"	6" x 3/8"	6" x 3/8"	3" x 3/8"	2 3/4" x 3/8"	10" X.S. (54.74#/FT.)	10" X.S. (54.74#/FT.)	10" X.S. (54.74#/FT.)	120
T-115	115'-0"	13'-0"	4'-10"	6'-6"	5'-7 3/8"	7'-4 1/2"	2 3/8"	6 1/2" x 3/8"	6" x 3/8"	3 1/4" x 1/4"	3" x 3/8"	10" X.S. (54.74#/FT.)	10" X.S. (54.74#/FT.)	10" X.S. (104.13#/FT.)	120
T-120	120'-0"	13'-8"	4'-8"	6'-10"	5'-11"	7'-8"	2 3/8"	6 1/2" x 3/8"	6 1/2" x 3/8"	3 1/2" x 3/8"	3" x 3/8"	10" X.S. (54.74#/FT.)	10" X.S. (104.13#/FT.)	10" X.S. (104.13#/FT.)	120

NOTES:

DESIGN SPECIFICATIONS:
 THESE STRUCTURES ARE DESIGNED TO SATISFY THE 2001 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, 4TH EDITION WITH 2002 AND 2003 INTERIMS. TRUSSES ARE DESIGNED FOR A NINE FOOT DEEP SIGN PANEL OVER 75% OF SPAN LENGTH, BOTH END SUPPORTS ARE DESIGNED FOR 60% OF THE TOTAL LOAD.

LOADING:
 ORIGINAL DESIGN LOADING WAS 35 PSF ON SIGN PANELS AND 10 PSF ON GROSS AREAS DEFINED BY THE PERIMETER OF TRUSS MEMBERS NOT COVERED BY SIGN PANEL AREAS. THE AASHTO GROUP II ALLOWABLE OVERSTRESS WAS 140% (ALLOWABLE STRESS DESIGN).

CONSTRUCTION SPECIFICATIONS:
 ALL MATERIALS, EXCEPT AS SHOWN, FABRICATION, ERECTION AND CONSTRUCTION REQUIREMENTS SHALL BE IN ACCORDANCE WITH SECTION 733 OF THE IDOT STANDARD SPECIFICATIONS.

ITEM	UNIT	TOTAL
REMOVE CONCRETE FOUNDATION OVERHEAD	EACH	6
REINFORCEMENT BARS, EPOXY COATED	POUNDS	18,470
STRUCTURAL STEEL SUPPORT FOR OVERHEAD SIGN STRUCTURE, SPAN	EACH	4
REMOVE OVERHEAD SIGN STRUCTURE END SUPPORT	EACH	4
ANCHOR RODS, 1 1/2"	EACH	72
RELOCATE OVERHEAD SIGN STRUCTURE SPAN TYPE (ALUMINUM 90 FT)	EACH	1
OVERHEAD SIGN STRUCTURE SPAN TYPE (ALUMINUM 90 FT)	FOOT	90
OVERHEAD SIGN STRUCTURE SPAN TYPE (ALUMINUM 105 FT)	FOOT	105
FOUNDATION FOR OVERHEAD SIGN STRUCTURE, SPAN TYPE	CU.YD.	156.6

SIGN LOCATION	TRUSS NO.	H	H ₁
STA: 120+90 RT	T-90	22'	27'-4 1/3"
STA: 126+72 RT	T-105	23'-1 1/2"	28'-11 1/8"
STA: 147+40 RT	T-90	22'-6 3/4"	22'-10"

* RELOCATED EXISTING SIGN STRUCTURE FROM STA: 147+54 RT

APPROVED: *Jeff Daley* DATE: 1-1-2007
 CHIEF ENGINEER

SHEET 1 OF 2



DATE	REVISIONS

OVERHEAD SIGN STRUCTURE
 SPAN TYPE, ALUMINUM

STANDARD F1-00

Rev. 1-9-12