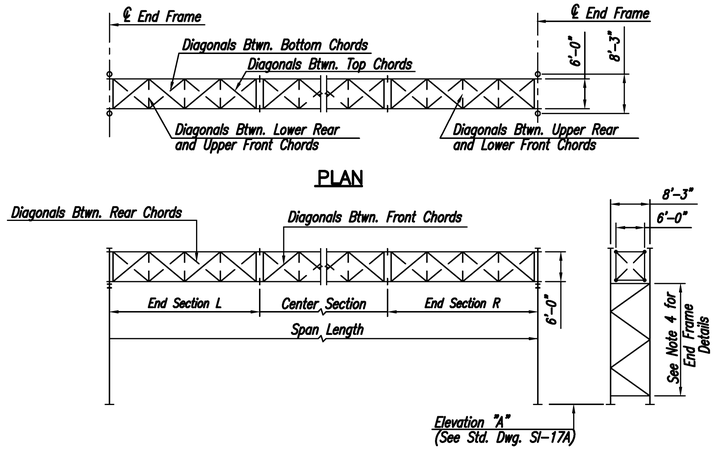
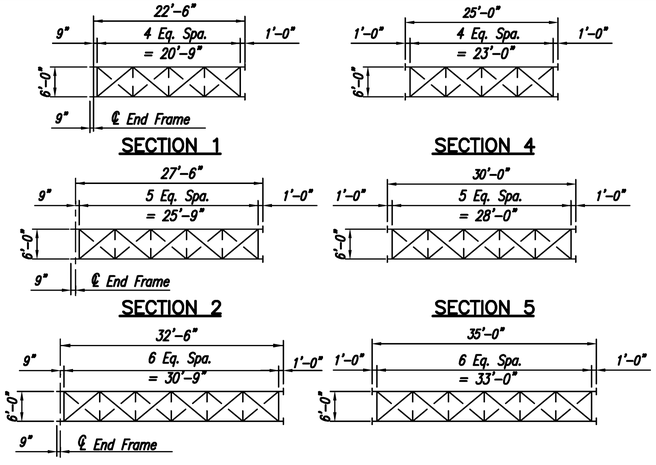


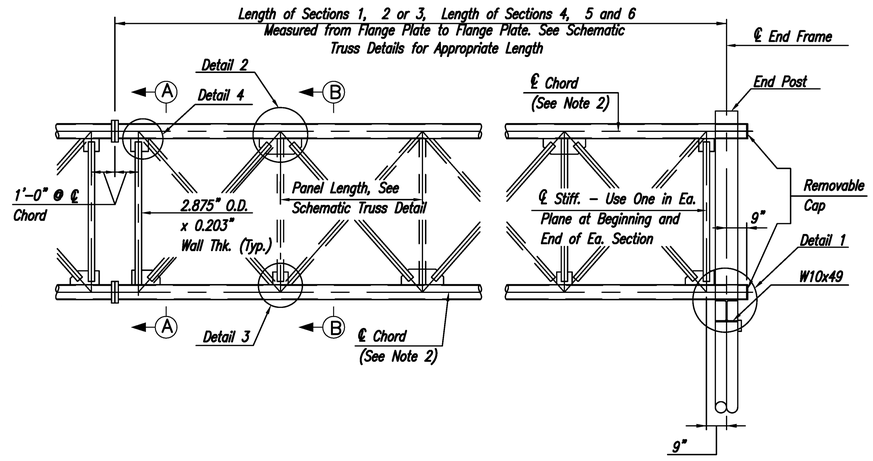
FOUR CHORD SIGN STRUCTURE

N.T.S.



SCHEMATIC TRUSS DETAILS

N.T.S.
(See Table A)



ELEVATION VIEW OF TYPICAL TRUSS

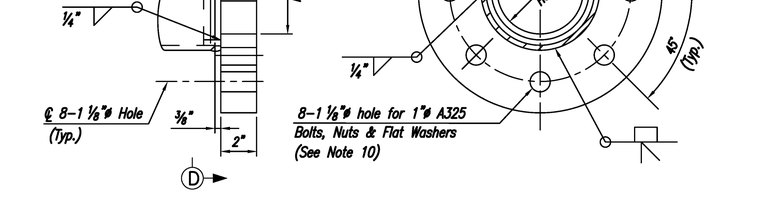
N.T.S.

TABLE A					
SPAN LENGTH	END SECTION L	CENTER SECTIONS		END SECTION R	CAMBER (IN.)
45'	1	–	–	1	5/8
50'	1	–	–	2	3/4
55'	2	–	–	2	7/8
60'	2	–	–	3	1
65'	3	–	–	3	1 1/8
70'	1	4	–	1	1 1/4
75'	1	5	–	1	1 1/2
80'	2	4	–	2	1 3/4
85'	2	5	–	2	1 7/8
90'	3	4	–	3	2 1/8
95'	3	5	–	3	2 3/8
100'	3	6	–	3	2 5/8
105'	2	4	4	2	2 3/4
110'	2	4	5	2	3 1/8
115'	2	5	5	2	3 3/8
120'	2	5	5	3	3 3/4
125'	3	5	5	3	4 1/8
130'	2	6	6	3	4 1/2
135'	3	6	6	3	5

See Schematic Truss Detail for Section Lengths.
See Camber Diagram and Detail on Standard Drawing S1–16B.

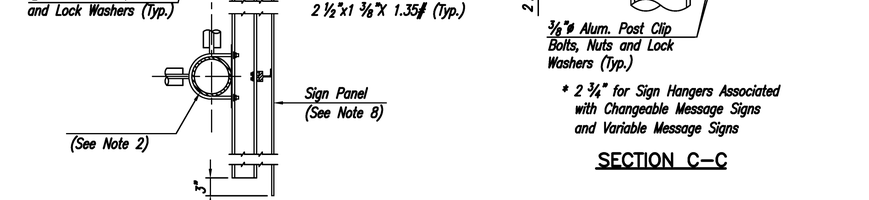
NOTE FOR TABLE A:

1. These Standard Overhead Sign Structures shall not be used, with Fixed Message Signs, for spans exceeding 135' or for sign areas exceeding 800 Sq. Ft. . When used with Changeable Message Signs, these limits shall be 135 Ft. and 600 Sq. Ft.. When used with both Changeable Message Signs and Fixed Message Signs, these limits shall be 135' and 800 Sq. Ft. while the maximum area of Changeable Message Signs is limited up to 300 Sq. Ft..
2. These Standard Overhead Sign Structures shall not be used, with Variable Message Signs, for spans exceeding 135 Ft. or for sign areas exceeding 600 Sq. Ft. plus for a projected area of Variable Message Signs on a horizontal plan exceeding 150 Sq. Ft. within any 36 Ft. width. When used with both Variable Message Signs and Fixed Message Signs, these limits shall be 135 Ft. and 800 Sq. Ft. while the maximum area of Variable Message Signs is limited up to 300 Sq. Ft. plus the projected area of Variable Message Signs up to 150 Sq. Ft. within any 36 Ft. width.



FLANGE PLATE DETAILS

3" = 1'-0"



SIGN HANGER CONNECTION DETAIL

N.T.S.

NOTES:

1. Sign Support Structures shall conform to section 406.
2. Truss chords shall be 6.625" O.D. with 0.280" wall thickness for all spans up to and including 100 feet. 6.625" O.D. with 0.432" wall thickness chords shall be used for spans ranging from 105 feet up to and including 135 feet.
3. S.S. denotes Stainless Steel.
4. For End Frame Detail, Removable Cap Details, End Frame Connection Details 1 to 5, Base Plate Details, Anchor Plate and Anchor Bolt Details, see Standard Drawings SI–17A and SI–17B.
5. Pipe for sign structures shall meet the requirements of either ASTM A714 or ASTM A847. As an alternate, cylindrical tubes produced by forming and longitudinally seam welding steel plate conforming to the requirements of ASTM A709, Grade 50W (A588) or ASTM A242 may be used. Only one longitudinal seam permissible per post.
6. Full–penetration welded truss chord to flange plate connection with the backing ring attached to the plate with a continuous fillet weld around the interior face of the backing ring. The thickness of the backing ring shall not be over 3/8 ".
7. For Sections A–A and B–B, Details 1 to 4 and Cope Hole Detail for Truss, see Standard Drawing SI–16B.
8. For sign panel to stringer connection details, see Standard Drawing SI–13. For stringer to hanger connection details, see Section C–C.
9. For Changeable Message Signs and Variable Message Signs, Aluminum Sign Hanger W5X5.366 shall be used at the maximum spacing of 4'–1 1/2" o.c.
10. 1" diameter splice bolts shall be required to have 51 Kips in tension, and provided with heavy hexagon nuts and washers.
11. Structural steel plates and shapes shall conform to the requirements of ASTM A709, Grade 50W unless otherwise noted.
12. Sign panels shall not cantilever more than 2'–3" past the centerline of the aluminum sign hanger.

0 1/2 1 2 3 4
ORIGINAL SIZE IN INCHES

NEW JERSEY TURNPIKE AUTHORITY
NEW JERSEY TURNPIKE

SPAN TYPE SIGN STRUCTURE (STEEL)
TRUSS DETAILS–1

APP.	NO.	DATE	REVISION
		04/09	ORIGINAL DRAWING

OFFICE OF THE CHIEF ENGINEER
WOODBRIDGE, NEW JERSEY

2009 STANDARD DRAWING
SI–16A

CONTRACT NO. SHEET NO. OF