STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 55	07(97) 55-1 (R-32)(SG)	DuPAGE, WILL GRUNDY	212	182
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT:		

SHEET NO.
SHEETS

Dotted lines show direction of bracing in Bottom Chord

TYPICAL PLAN

Sign Panel

Walkway omitted for clarity

℄ Support

℄ Support

D

Edge of Pavement

3 to 1 Min.

TYPICAL ELEVATION
Looking Direction of Traffic

c. to c. Support Frames

GENERAL NOTES

SPECIFICATIONS:

DESIGN: AASHO Specifications for the Design and Construction of Structural Supports for Highway Signs, dated November, 1968.

CONSTRUCTION: Standard Specifications for Road and Bridge Construction, State of Illinois, dated January 2, 1958, Supplemental Specifications for Road and Bridge Construction, Supplemental Specifications for Highway Signing dated MARCH 1, 1963 and Special Provisions.

LOADING:

WIND LOADING: 45 p.s.f. normal to Sign Panel Area as shown below in Wind Loading Diagram plus 15 p.s.f. normal to remainder of sign truss area.

WALKWAY LOADING: Dead Load + 500 # concentrated liveload

UNIT STRESSES:

Structural Steel - 18,000 p.s.i.
Reinforcing Steel - 20,000 p.s.i.
Class X Concrete - 1,400 p.s.i.
Footing Soil Pressure - 2,500 p.s.f. max.
Structural Aluminum - per AASHO Specifications for Highway Signs, Nov. 1960.

Allowable unit stresses due to wind load in combination with other forces, are increased 1.45.

MINIMUM CLEARANCE: Vertical Roadway Clearance = 17'-3" (All Obstructions).

SIGN TRUSS UNITS shall be all welded construction.

WELDING: All welding to be continuous unless otherwise shown. All welding to be made in accordance with current AWS Specifications. Welding on ASTM A-36 Plates and Shapes or ASTM A-53 Grade B Pipe shall be done with electrodes E6010, 11 or 27 ASTM A233-64T. Aluminum alloy filler wire for welding aluminum shall conform to ASTM B-285 ER 5356.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A-53 Grade B with a minimum yield of 35,000 p.s.i.

RTRS-6

TOTAL BILL of MATERIAL

OVERHEAD SIGN STRUCTURE TYPE I-A (4'-0" x 4'-6")	Lin. Ft.	389.5
OVERHEAD SIGN STRUCTURE TYPE II-A (4'-6" x 5'-3")	Lin. Ft.	253.5
OVERHEAD SIGN STRUCTURE TYPE III-A (5'-0" x 7'-0")	Lin. Ft.	74.0
CONCRETE FOUNDATIONS	Cu. Yds.	274.9
OVERHEAD SIGN WALKWAY, TYPE A	Lin. Ft.	349.25

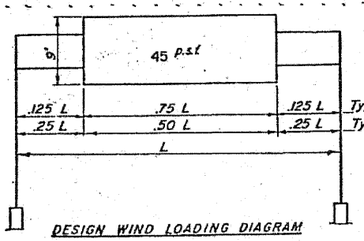
43'-0
86'-0"
15.13
0 OVERHEAD SIGN STR. TYPE IV-A (6'-0" x 8'-0") Lin. Ft.
Drilled Shaft Conc. Foundations

Existing Structure Data

Truss No.	Station	c. to c. Support	Elev. A	Dim. D
TRN-1	1563+75	85'-0"	100	20'-0"
TRS-2	1538+30	70'-0"	100	18'-0"
TRS-3	1507+00	82'-6"	100	20'-0"
TRN-2	1150+25	74'-0"	100	17'-8"
TRN-6	469+40	76'-0"	100	17'-0"
TRS-7	623+05	76'-0"	100	19'-0"
TRN-11	1025+11	74'-0"	100	18'-0"
TRE-2	625+00	88'-0"	100	15'-6"
TRW-2	649+20	91'-6"	100	17'-6"
RTRS-6	637+00	86'-0"	10232	30'-0"

New truss installed in 1975 as part of I-55 rehab.

Elev. A = Elev. High Point of Roadway. Used as reference elevation only



DESIGN WIND LOADING DIAGRAM

5B of I-112-6

OVERHEAD SIGN STRUCTURES
GENERAL PLAN & ELEVATION
ALUMINUM TRUSS & STEEL SUPPORTS

FOR INFORMATION ONLY

DESIGNED	
CHECKED	
DRAWN Wm. M. Best	
CHECKED	

EXAMINED
Engineer of Bridges and Traffic Structures
PASSED
Engineer of Design
APPROVED
Chief Highway Engineer

05-A-1 2-8-68

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FILE NAME = c:\pdot\dgn\VDSF22X34.dgn
USER NAME = wsmith
PLOT SCALE = 2.0000 '/ INCH
PLOT DATE = 2/4/2010
DESIGNED - BLB
CHECKED - BAB
DRAWN - BCD
CHECKED - BLB
REVISED -

STATE OF ILLINOIS
OVERHEAD SIGN REHABILITATION

EXISTING PLAN
SHEET NO. 8 OF 11 SHEETS

FAI RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2010-114-SG	WILL	115	106
		CONTRACT NO. 60M48		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		