

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

ROUTE NO.	SECTION	SUBJECT	SHEET NO.	SHEET TOTAL
212	114-SG	DUPAGE, WILL	212	156
P.A.L. 55	114-SG	GRUBBY		

SHEET NO. SHEETS

GENERAL NOTES

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

CONSTRUCTION: Standard Specifications for Road and Bridge Construction, State of Illinois, dated August 1, 1968, Supplemental Specifications for Road and Bridge Construction, Supplemental Specifications for Highway Signing dated March 4, 1963 and Special Provisions.

**LOADING:**  
WIND LOADING: 45 p.s.f. normal to Sign Panel Area (9.0 ft. Sign Height x 75% Design Length) plus 15 p.s.f. normal to remainder of sign truss area.  
WALKWAY LOADING: Dead Load + 500# concentrated live load.

**UNIT STRESSES:**  
Structural Steel - 20,000 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).

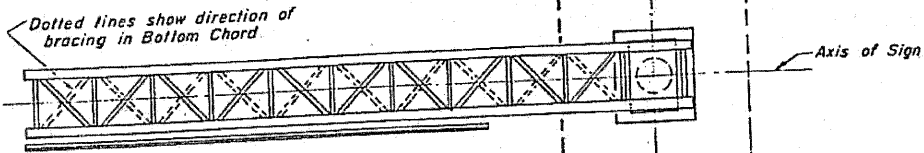
CANTILEVER TRUSS UNITS shall be all welded construction.

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 E 6010, II, 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.  
All Structural Steel Plates and Shapes shall be ASTM A-36.

TOTAL BILL OF MATERIAL

OVERHEAD SIGN STRUCTURE CANTILEVER TYPE I-C-A (a x 4'-6")	Lin. Ft.	
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE II-C-A (a x 5'-6")	Lin. Ft.	
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE III-C-A (3'-0" x 7'-0")	Lin. Ft.	420
OVERHEAD SIGN WALKWAY - CANTILEVER TYPE A	Lin. Ft.	253.5
CONCRETE FOUNDATIONS	Cu. Yds.	218.0

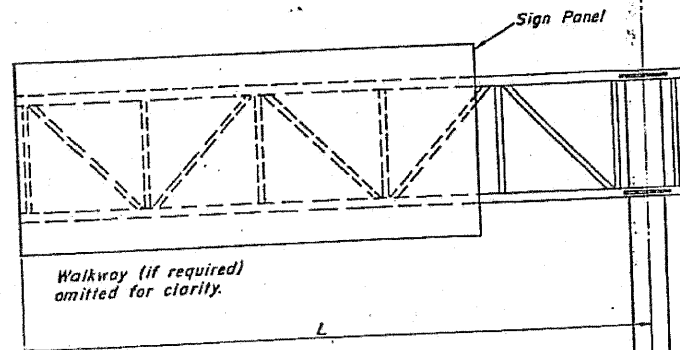


TYPICAL PLAN

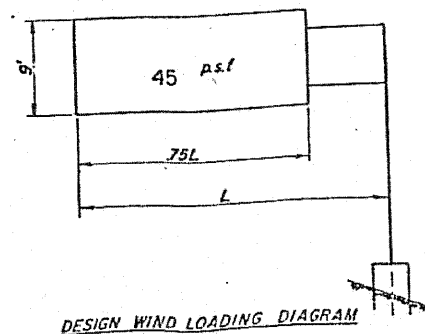
Existing Structure Data

Truss No.	Station	Length of Cantilever - L -	Elev. A	Dim. D
CLN-1	1524+37	35'-0"	100	24'-10"
CLS-1	1281+22	35'-0"	100	18'-0"
CLS-2	188+50	35'-0"	100	21'-6"
CLN-2	187+80	35'-0"	100	22'-6"
CLS-3	445+40	35'-0"	100	21'-6"
CLS-4	486+80	35'-0"	100	16'-6"
CLN-3	614+65	35'-0"	100	20'-0"
CLS-5	793+40	35'-0"	100	19'-6"
CLN-4	799+70	35'-0"	100	15'-6"
CLN-5	902+36	35'-0"	100	19'-0"
CLS-6	904+40	35'-0"	100	20'-0"
CLN-6	988+30	35'-0"	100	14'-6"

Elev. A = Elev. Highest Point of Roadway under Sign. Used as reference Elevation only.



TYPICAL ELEVATION  
Looking Direction of Traffic



DESIGN WIND LOADING DIAGRAM

OVERHEAD SIGN STRUCTURES - CANTILEVER  
GENERAL PLAN & ELEVATION  
ALUMINUM TRUSS & STEEL POST

FOR INFORMATION ONLY

DESIGNED	EXAMINED
CHECKED	PASSED

FILE NAME	USER NAME	DESIGNED - BLB	REVISED -
		CHECKED - BAB	REVISED -
		DRAWN - BCD	REVISED -
		CHECKED - BLB	REVISED -

STATE OF ILLINOIS  
OVERHEAD SIGN REHABILITATION

EXISTING  
PLAN

SHEET NO. 5 OF 8 SHEETS

FAI RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2010-114-SG	WILL	115	95
				CONTRACT NO. 60M48
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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