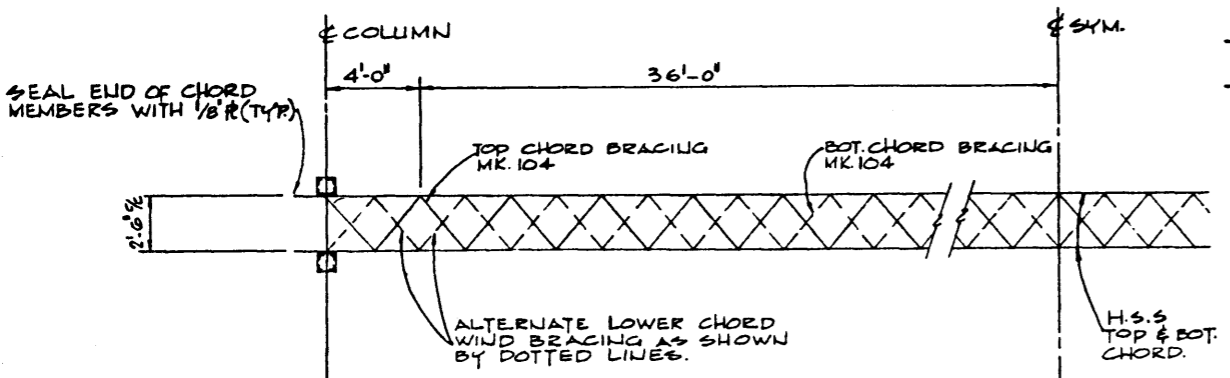


STEEL SCHEDULE FOR 8'0" SIGN STRUCTURE

MARK	SIZE	STEEL	REMARKS
101	HSS 4" x 4" x 0.188		F _{MAX} = 153 K
102	HSS 4" x 4" x 0.188		F _{MAX} = 153 K
103	HSS 2 1/2" x 2 1/2" x 0.188		F _{MAX} = 96 K
104	HSS 2 1/2" x 2 1/2" x 0.188		F _{MAX} = 96 K
105	HSS 3" x 3" x 0.188		
106	HSS 2 1/2" x 2 1/2" x 0.188		
107	HSS 2 1/2" x 2 1/2" x 0.188		
201	HSS 12" x 12" x 0.375		F _{MAX} = 175 K
202	HSS 2 1/2" x 2 1/2" x 0.188		F _{MAX} = 96 K
203	HSS 6" x 6" x 0.188		

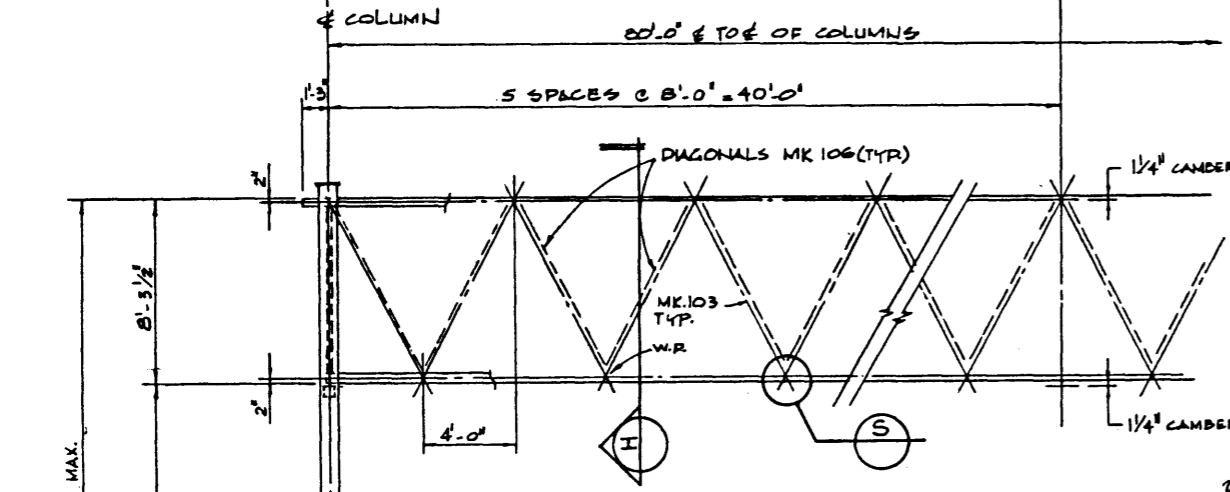
- GENERAL NOTES - APPLY TO ALL DRAWINGS**
- Materials: All steel tubing shall conform to C.S.A. G40.21M-350W. All other steel shall conform to C.S.A. G40.21M-300W.
 - Welding shall conform to current A.W.S. D1.1. All welds to be 1/4" unless otherwise noted.
 - Design Loading:
 - Wind Load: 32 lbs. per sq. ft. on sign surface; 40 lbs. per sq. ft. on projected area of truss members
 - Live Load: 500 lbs. concentrated load on walkway
 - Dead Load: Includes weight of sign and support structure
 - Ice Load: 1/2" of ice on face of each sign and the surface area of all members.
 - The sign panel and frame not supplied by structural steel fabricator.
 - All truss joints to be welded. Joints to be designed and detailed by the fabricator to carry forces indicated on the drawings and the weld shall be designed to resist fatigue cracking. The weld shall be continuous around the member and the welding design and details are to be approved by the Department.
 - Fabrication shall conform to current Bridge Branch Specification B107-M.
 - Supply bolts and washers as noted. Bolts and nuts to have hex heads. Bolts to be high strength A325 friction type connections unless noted otherwise.
 - All steel shall be blast cleaned in accordance with Specification SSPC-SP-6-3T of the Steel Structures Painting Council before painting. Painting shall not commence until cleaning has been approved by the Engineer. (Refer to B107M clause 5.1).
 - Shop Paint: All surfaces not in contact with steel or concrete shall be given one coat of paint conforming to the requirements of C.G.S.B. Specification 1-GP-166M Type III having a dry thickness of 1.5 to 2.5 mils. In addition there shall be applied one coat of aluminum paint conforming to the requirements of the C.G.S.B. Specification 1-GP-69M.
 - Field Paint: Touch up all disfigurements and field bolts.
 - All shop splices shall be shown on the shop drawings for approval by the Department. All chord splices shall be radiographed by the fabricator, at his expense, and are to meet A.W.S. requirements.
 - All column to base plate welds will be tested by the Department, either by the ultrasonic method or by the magnetic particle method. Any extra testing due to repairs which may be required will be at the expense of the fabricators.
 - Electrical conduit and fixtures not to be supplied by the structural steel supplier.
 - Concrete strength = 3,000 psi @ 28 days (20 MPa).
 - Reinforcing steel shall conform to C.S.A. G30.12M Grade 400 (minimum yield strength = 400 MPa).



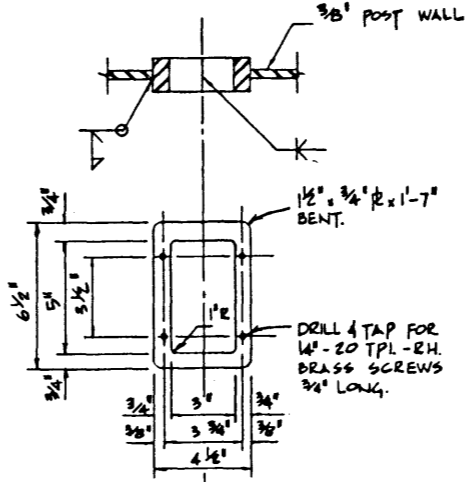
PLAN
SCALE: 1/4" = 1'-0"

WALKWAY BEAMS LOCATION
N.T.S.
SEE GENERAL LAYOUT FOR EACH SIGN STRUCTURE FOR DIM. 'X'.

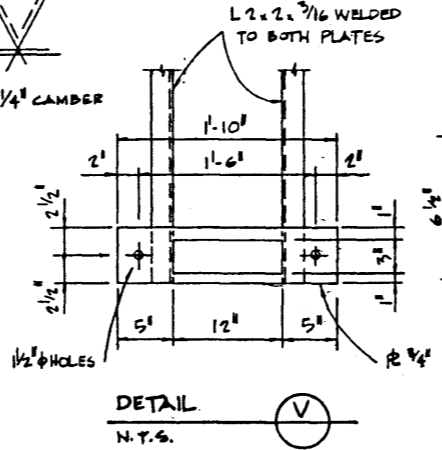
PANEL POINT SPACING DIM A = 8'-0"



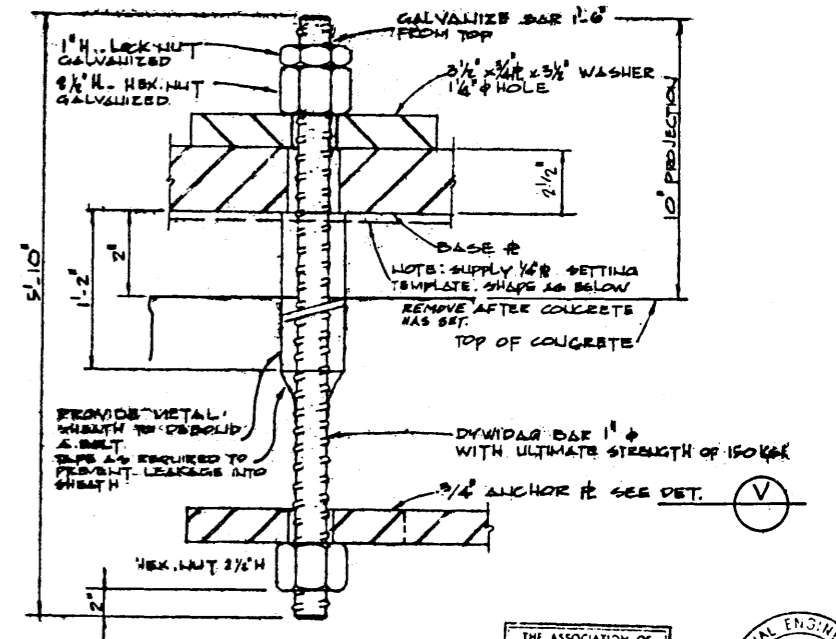
ELEVATION
SCALE: 1/2" = 1'-0"



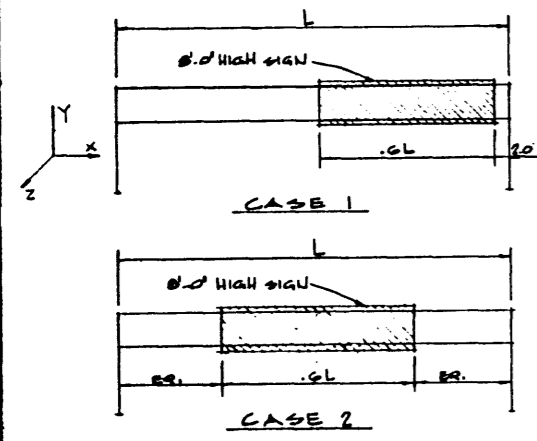
HANDHOLE AND COVER DETAILS
SCALE: 3/4" = 1'-0"



DETAIL U
N.T.S.



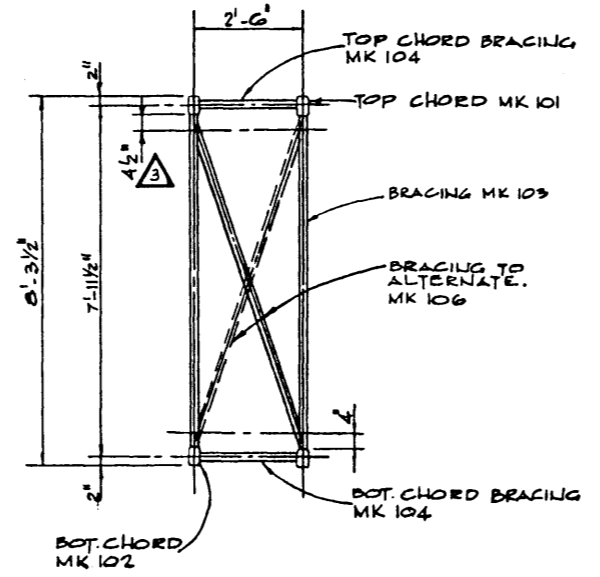
DETAIL W
N.T.S.



TRUSS LOADING CONDITIONS

MAX. TRUSS MTS. M_x = 74 K.F.T. M_y = 73 K.F.T.

THE MAX COLUMN MOMENT OCCURS WHEN WIND STRIKES SIGN AT AN ANGLE OF 40° TO A LINE PERPENDICULAR TO THE SIGN. (REFER TO FIG C1-10 COMMENTARY NO. 1, SUPPLEMENT NO. 4 OF U.B.C. OF CANADA 1970)



SECTION H
SCALE: 1/2" = 1'-0"

DETAIL U
SCALE: FULL SIZE

WORK THIS DWG. IN CONJUNCTION WITH DWG. NO. S-1158

CARSWELL ENGINEERING LTD. CONSULTING ENGINEERS CALGARY ALBERTA	DESIGNED	DRAWN BY	DATE	CHECKED BY	DATE	STREAM	LOCATION	HWY. NO.	SCALE	FILE NO.	SHEET	DWG. NO.
	E.C.	R.B.	OCT. 78	E.F.C.	OCT. 78				AS NOTED		OF	S-1159
APPROVED						HIGHWAYS AND TRANSPORT BRIDGE BRANCH						
CHIEF BRIDGE ENGINEER						STANDARD SIGN BRIDGE						
						8'0" SPAN TRUSS DETAILS						

THE ASSOCIATION OF PROFESSIONAL ENGINEERS OF ALBERTA
PERMIT NUMBER P442
CARSWELL ENGINEERING LTD.

