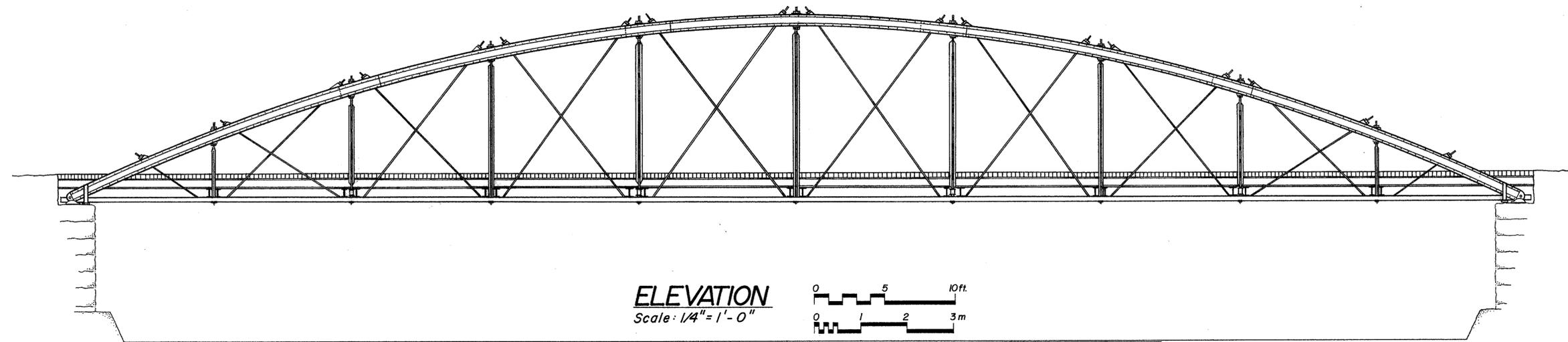


# WHETSTONE CREEK BRIDGE

• c. 1879 •

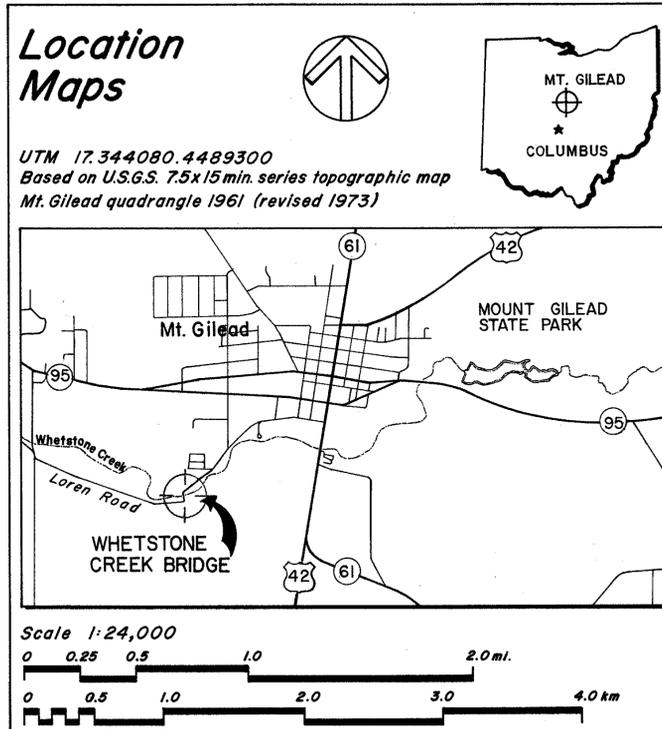
MT. GILEAD, OHIO



The Whetstone Creek Bridge is a bowstring-arch bridge built in c. 1879. It was fabricated by the Wrought Iron Bridge Company of Canton, Ohio. The bridge is almost entirely constructed of wrought iron except the cast-iron arch shoe at either end of the bow. The bow itself is an octagonal tube consisting of four sections with flanges that are riveted together.

The Whetstone bridge is similar to a patent granted to William Laird of Canton, Ohio, in 1874, although it is not known whether Laird was connected to the Wrought Iron Bridge Company. The exact tubular configuration is not featured in the Wrought Iron Bridge Company advertising literature but, it is very similar in overall design to the bridges illustrated. It may be a hybrid of their "Hexagon Plate Bridge" and the "Column Arch Bridge." The latticed sway bracing was a prominent part of all Wrought Iron Bridge Company work, the company claiming in its 1874 publication, *Book of Designs of Wrought Iron Bridges* that it "...prevents any lateral motion of the arch..."

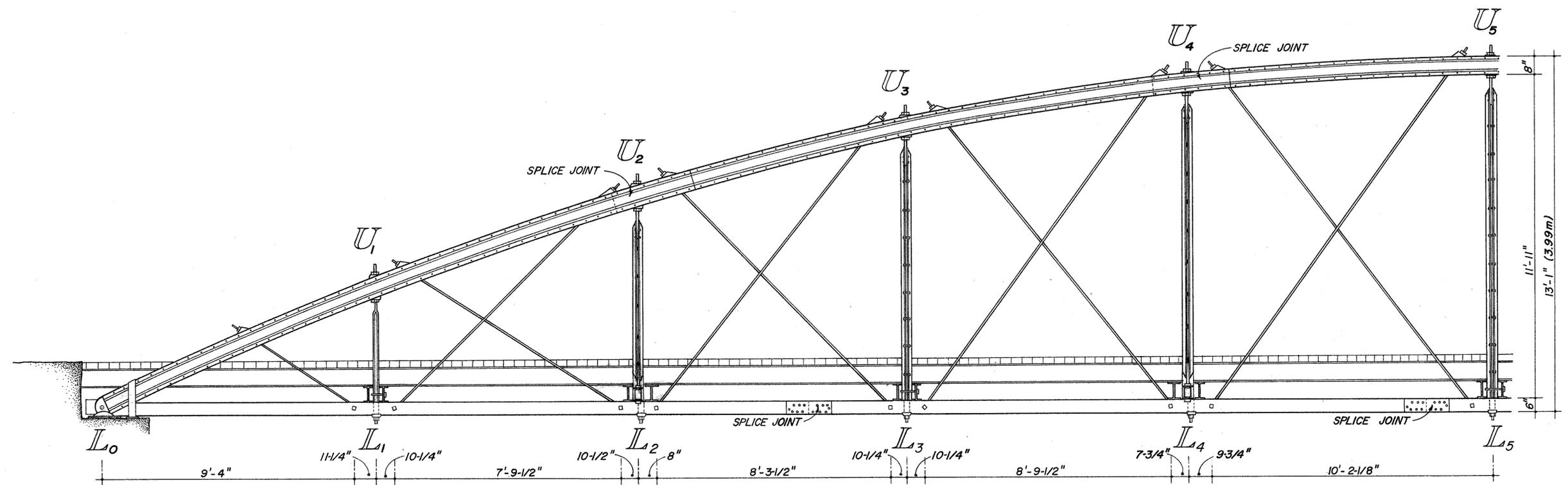
The Whetstone Creek Bridge is in fair condition and is still in use at its original site. It is likely that the flooring system originally consisted of closely spaced wooden cross beams resting on the lower chord with planks overlaid in a chevron pattern as illustrated in the advertising literature.



The Ohio Cast and Wrought Iron Bridges Project III is part of the Historic American Engineering Record (HAER), a long-range program to document historically significant engineering and industrial works in the United States. The HAER program is administered by the Historic American Buildings Survey / Historic American Engineering Record Division (HABS/HAER) of the National Park Service, U.S. Department of the Interior. The Ohio Cast and Wrought Iron Bridges Project was cosponsored during the summer of 1993 by HAER under the general direction of Dr. Robert J. Kapsch, Chief, and the Institute for the History of Technology and Industrial Archaeology, Dr. Emory L. Kemp, Director, with the assistance of the Ohio Historical Society, Gary Ness, Director, and David A. Simmons, historic bridge specialist, and the Department of Architecture and Ohio State University, José Oubrierie, Chairman.

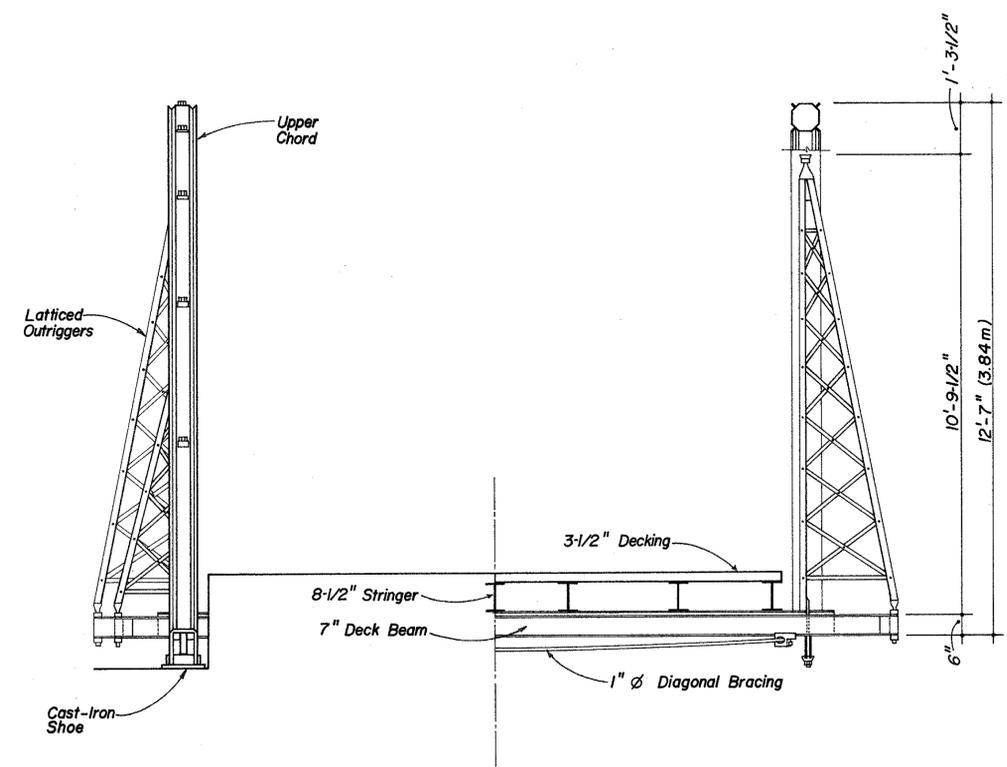
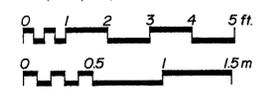
The field work and measured drawings were prepared under the direction of Eric N. DeLony, Chief of HAER, Project Leader. The recording team consisted of Elaine Pierce (Auburn University), architectural field supervisor, and Daron Fender (Miami University), Julie Willis (US/ICOMOS-University of Melbourne, Australia) and Troy Zimmermann (California Polytechnic State University at San Luis Obispo), architectural technicians.

DELINEATED BY: Daron Fender, Julie Willis, Troy Zimmermann 1993  
 CAST AND WROUGHT IRON BRIDGES RECORDING PROJECT OH  
 UNITED STATES DEPARTMENT OF THE INTERIOR  
 MT. GILEAD  
 IF REPRODUCED, PLEASE CREDIT: HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, NAME OF DELINEATOR, DATE OF THE DRAWING  
 OHIO  
 SHEET 1 of 3  
 HISTORIC AMERICAN ENGINEERING RECORD OH-90



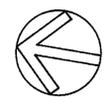
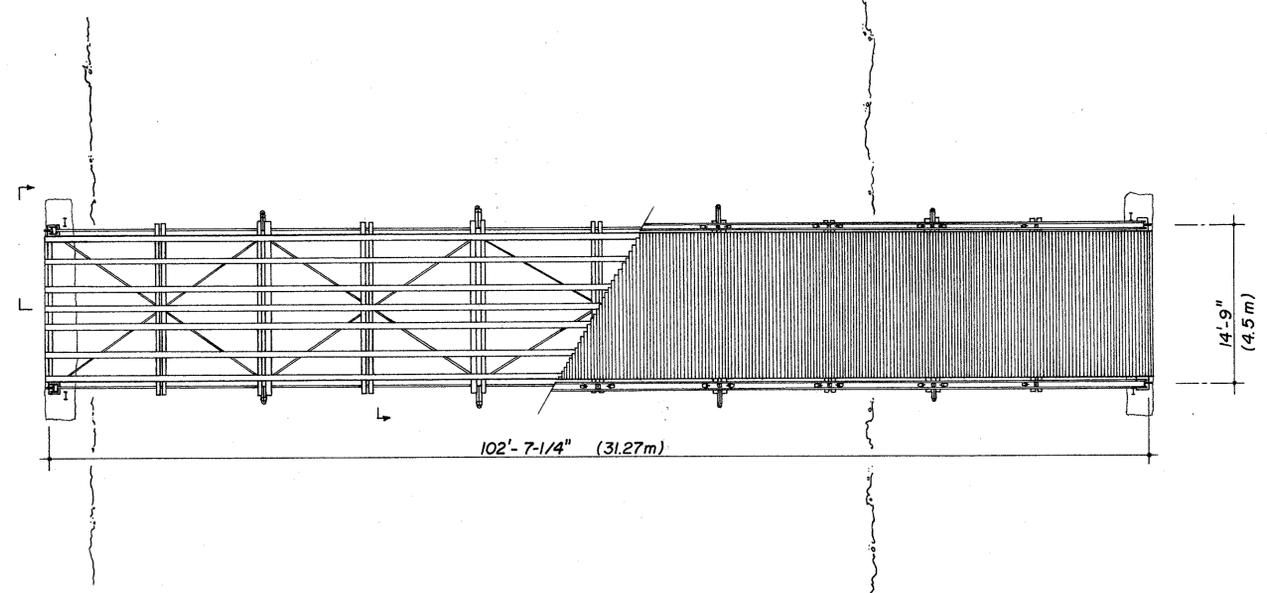
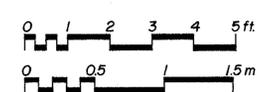
HALF ELEVATION

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



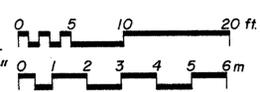
ELEVATION / SECTION

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



PLAN

SCALE: 1/8" = 1'-0"



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 CAST AND WROUGHT IRON BRIDGES  
 RECORDING PROJECT ON  
 UNITED STATES DEPARTMENT OF THE INTERIOR

WHEATSTONE CREEK BRIDGE - c. 1879  
 TOWNSHIP ROAD 127 SPANNING WHEATSTONE CREEK  
 MORROW COUNTY

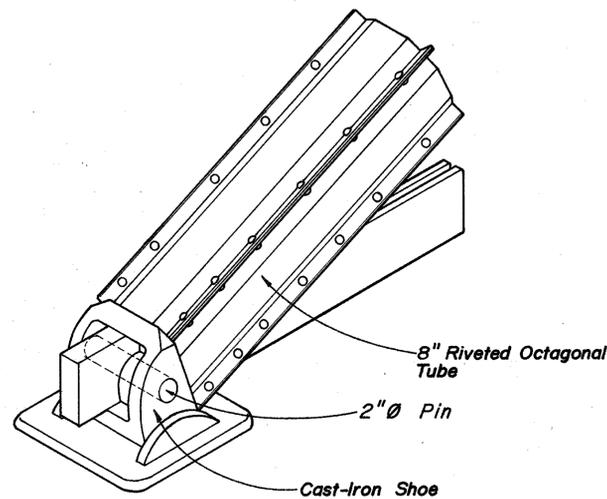
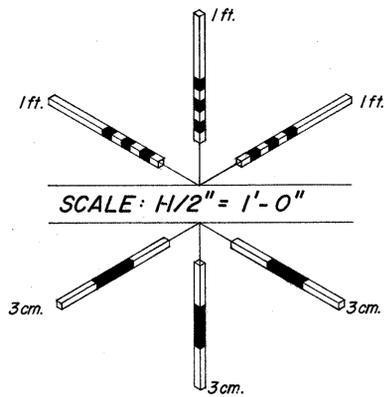
HISTORIC AMERICAN  
 ENGINEERING RECORD  
 SHEET  
 2 of 3

OHIO

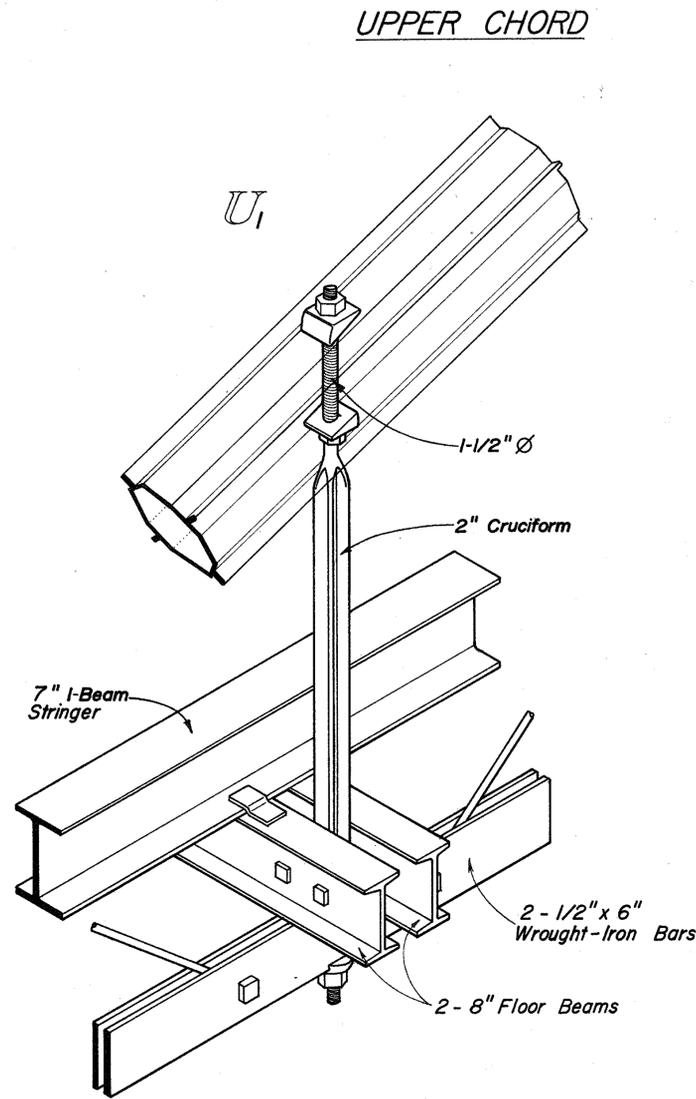
OH - 90

IF REPRODUCED, PLEASE CREDIT: HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, NAME OF DELINEATOR, DATE OF THE DRAWING

# CONNECTION DETAILS

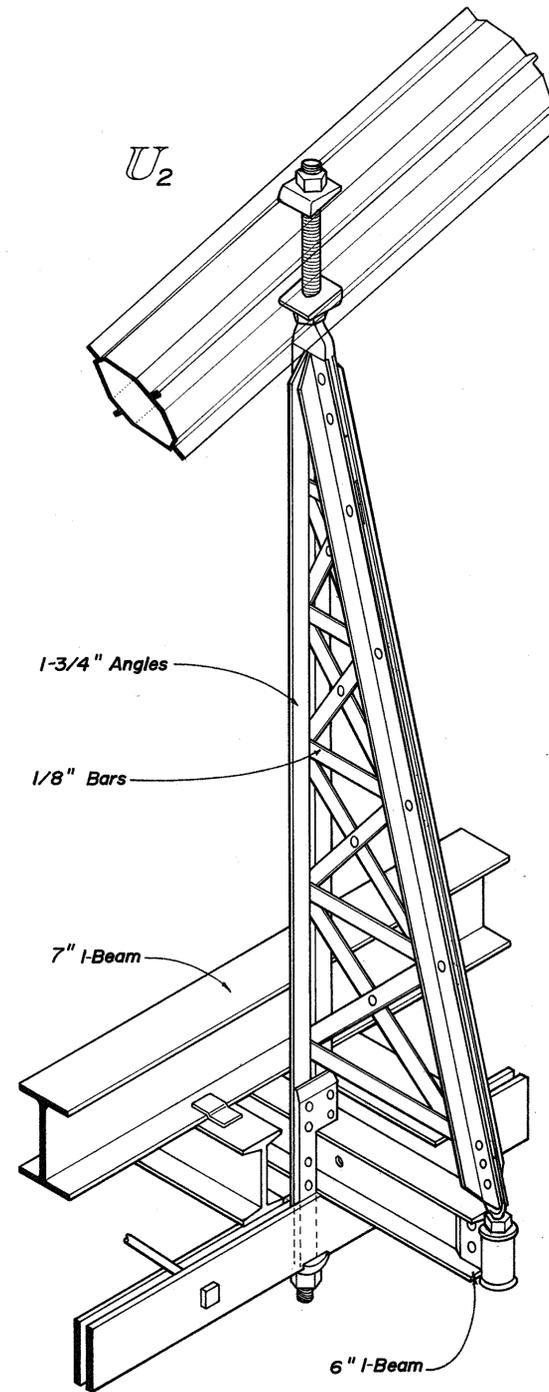


$L_0$



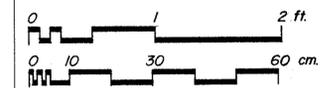
BOTTOM CHORD

$L_1$

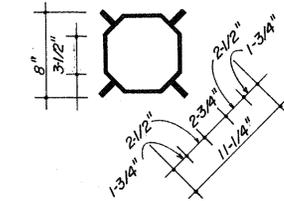


## Table of Member Sections

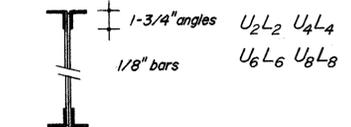
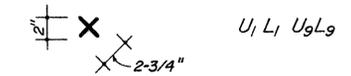
Scale: 1 1/2" = 1'-0"



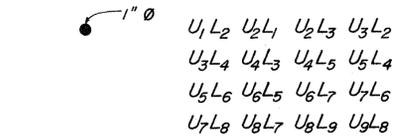
### UPPER CHORD



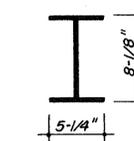
### VERTICAL WEB MEMBERS



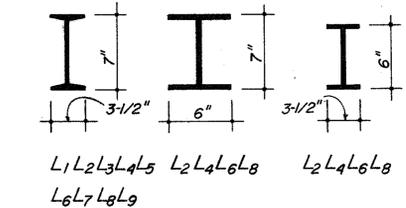
### DIAGONALS



### FLOOR BEAMS



### STRINGERS



### LOWER CHORD

