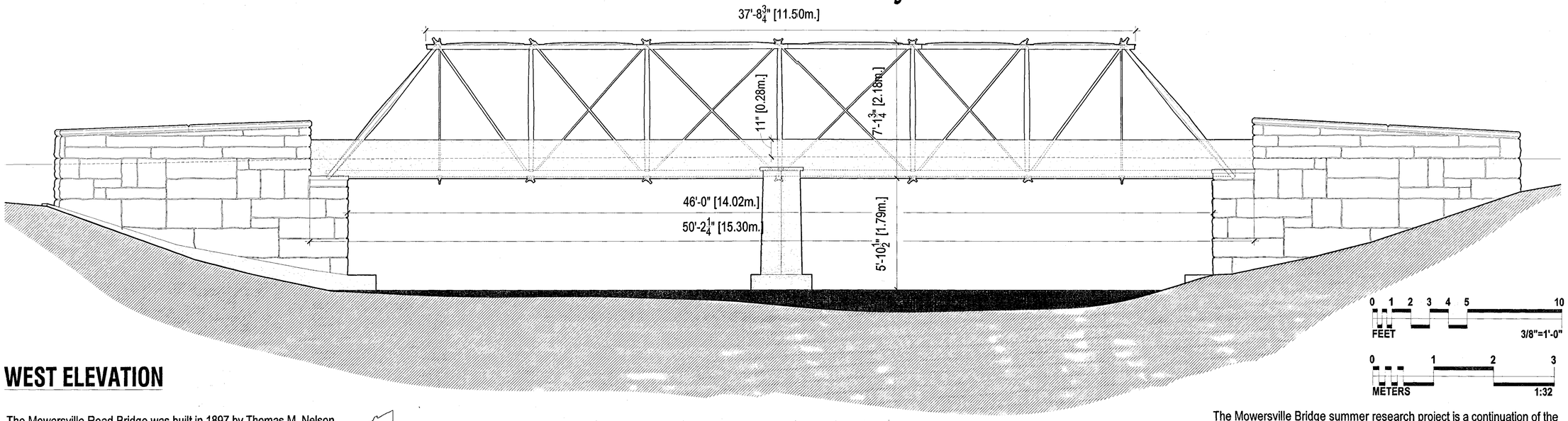
MOWERSVILLE ROAD BRIDGE - 1897

Mowersville, Pennsylvania

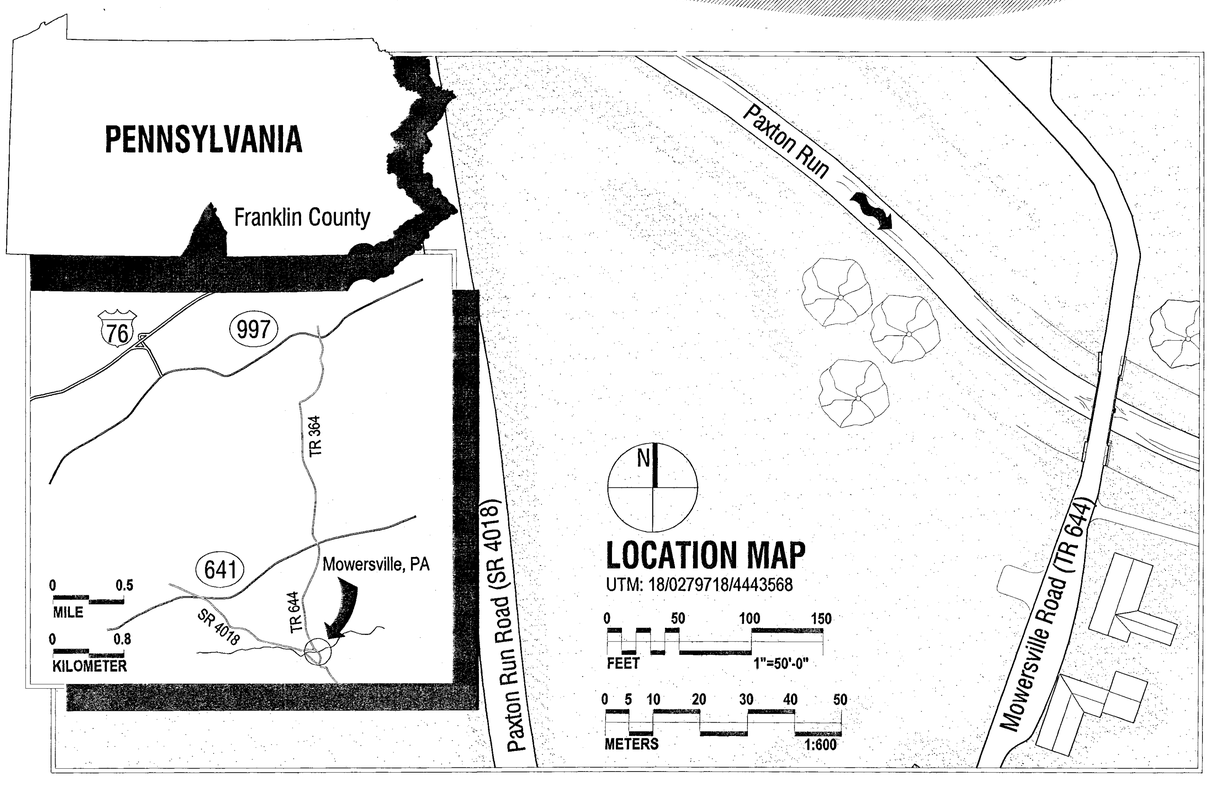


WEST ELEVATION

The Mowersville Road Bridge was built in 1897 by Thomas M. Nelson and John M. Buchanan, Chambersburg-based agents for the Pittsburgh Bridge Company. The bridge carries the two-lane Mowersville Road (TR 644) over Paxton Run, in the rural village of Mowersville, Lurgan Township, Franklin County, Pennsylvania. This Pratt pony truss structure replaced an earlier township bridge of unknown form at the same site. In 1889, after a series of summer storms damaged several bridges in the County, the villagers petitioned the Commissioners, explaining that "a bridge is much wanted over Paxton Run in the Village of Mowersville at the place where the public highway crosses the said stream in said township. The fording at that point being frequently rendered impassible by ice and high waters; and that the expense of erecting said bridge would be to heavey and burthensome upon the inhabitants of said township (sic)." Although the petition was approved, no action was taken until 1897, perhaps because the existing bridge was repaired in the interim.

Named after its founder, John Mower, Mowersville is a small, primarily agricultural village with a cluster of local businesses near the bridge. Mower established a coach-making business there in the early nineteenth century. His son, Joseph, and his sons, in turn, continued this business throughout the century. Joseph also established the Lurgan Mutual Fire Insurance Company (1852), and its modest brick headquarters remains a few steps from the bridge. A post office was established in 1868, and in 1870, a stagecoach route between Roxbury and Shippensburg began service through Mowersville.

In 1897, Thomas M. Nelson was awarded a contract to erect the metal superstructure of a new bridge over Paxton Run for $400 without competitive bidding. Although bids were solicited for the masonry abutments and wing walls, Nelson's comprehensive bid of $700, for the complete bridge, including masonry and the metal superstructure undercut any competing bids. Ultimately, Nelson was paid $1,100 for the bridge.



The Mowersville Bridge summer research project is a continuation of the Historic American Engineering Record (HAER) of the National Park Service and the Commonwealth of Pennsylvania Department of Transportation's (PENNDOT) historic bridge documentation program that has been in effect since 1986. Dr. Linda S. Phipps, Architectural Historian

The Pennsylvania Historic Bridges Recording Project III is part of the Historic American Engineering Record (HAER), a long-range program documenting historically significant engineering, industrial, and maritime sites in the United States. The National Park Service, U.S. Department of the Interior, administers the HAER program. The Pennsylvania Historic Bridges Recording Project III was co-sponsored during the summer of 2002 by HAER under the general direction of E. Blaine Cliver, Chief; and the Pennsylvania Department of Transportation (PENNDOT), Bureau of Design, Dean A. Schreiber, Director; and the Pennsylvania Historical and Museum Commission, Brent D. Glass, Executive Director and State Historic Preservation Officer. Ms. Kara Russell of the Bureau of Design's Environmental Quality Assurance Division served as principal liaison.

The fieldwork, measured drawings, historical reports, and photographs were prepared under the direction Eric DeLony, Chief of HAER. The team consisted of: Architects-Todd A. Croteau, Project Leader (HAER Architect), Roland S. Flores, Field Supervisor (HAER Architect), Marcy Ann Giannunzio (University of Michigan, Ann Arbor), Katherine Marie Kozarek (University of California, Berkeley), Sara Kryda (Illinois Institute of Technology), Jenna Michelle Murphy (University of Detroit-Mercy), Sandra Cristina Pires (ICOMOS- Portugal); Dr. Linda S. Phipps and Dr. Richard Vidutis served as project historians under the direction of Dr. Richard O'Connor, HAER Historian. Jose C. Colon (Pennsylvania State University, State College) was the project engineer and Prof. Thomas E. Boothby Phd, PE, RA (Pennsylavania State University, State College) was the consulting engineer. Jet Lowe (HAER photographer) took all large format photography.

DELINEATED BY: Calvin Gilbert, 2002

PENNSYLVANIA HISTORIC BRIDGES RECORDING PROJECT - III
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

MOWERSVILLE ROAD BRIDGE - 1897
T.R. 644 OVER PAXTON RUN CREEK
FRANKLIN CO.
MOWERSVILLE
PENNSYLVANIA

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HISTORIC AMERICAN ENGINEERING RECORD
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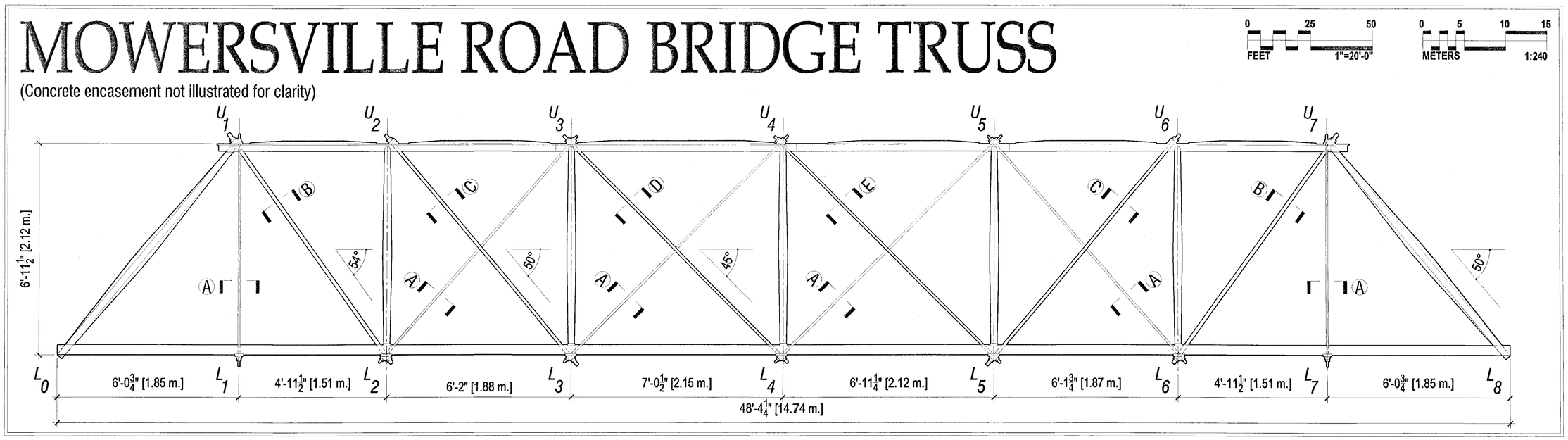
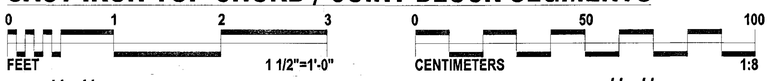
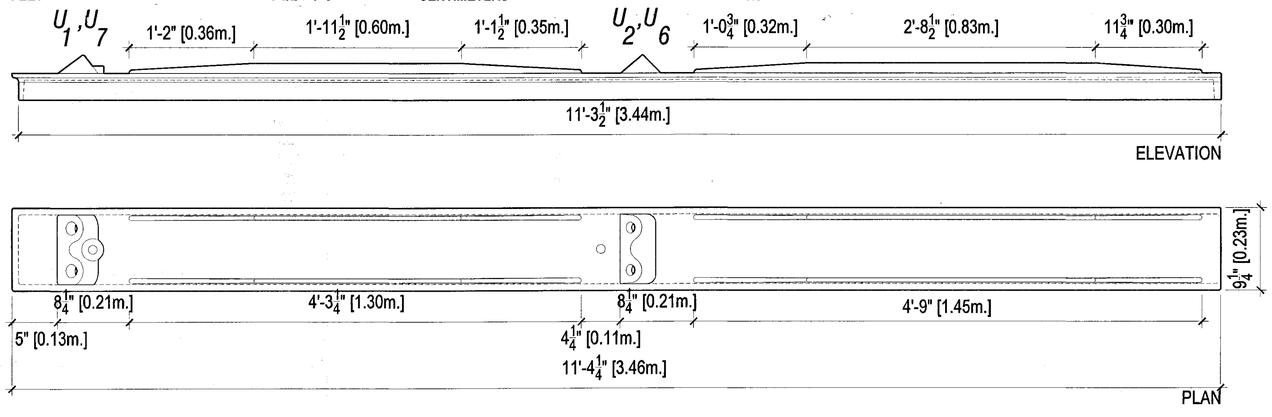
MOWERSVILLE ROAD BRIDGE TRUSS

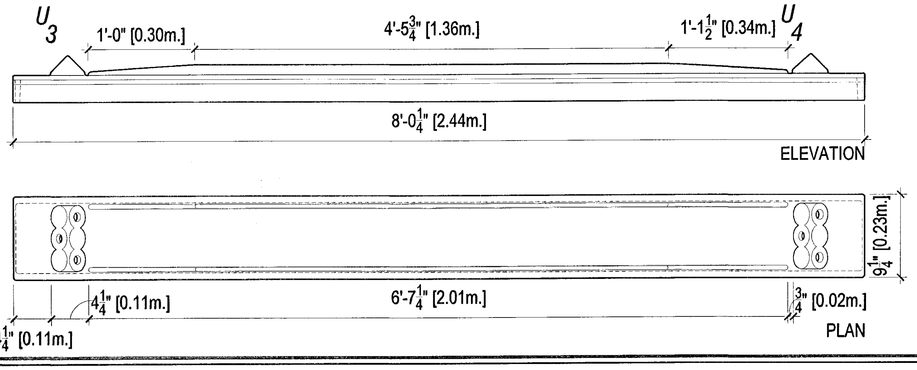
(Concrete encasement not illustrated for clarity)

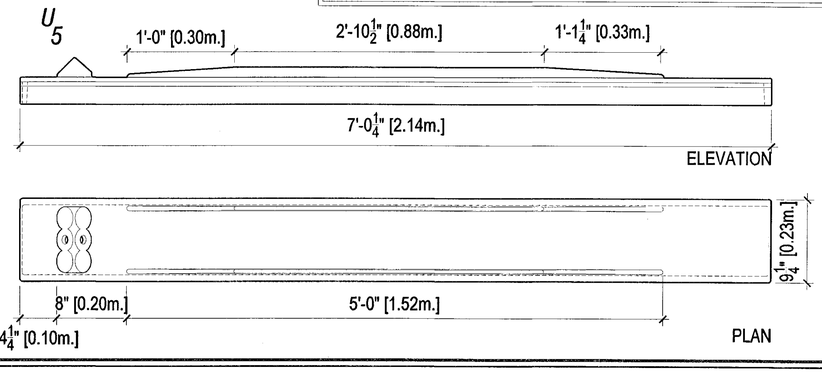


CAST IRON TOP CHORD / JOINT BLOCK SEGMENTS



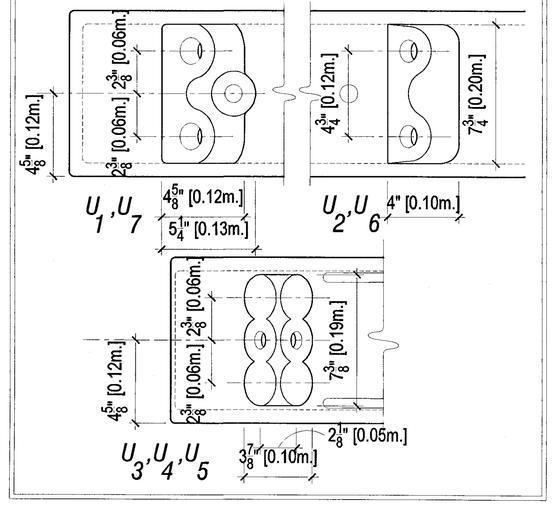






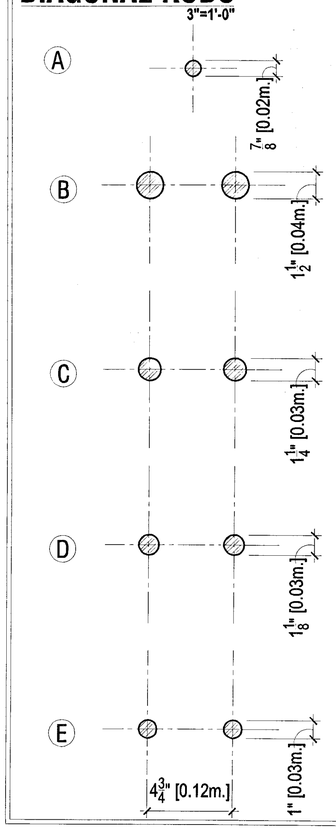
JOINT BLOCK DETAIL PLANS

3"=1'-0"



DIAGONAL RODS

3"=1'-0"



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PENNSYLVANIA

MOWERSVILLE ROAD BRIDGE - 1897
T.R. 644 OVER PAXTON RUN CREEK
FRANKLIN CO.

MOWERSVILLE

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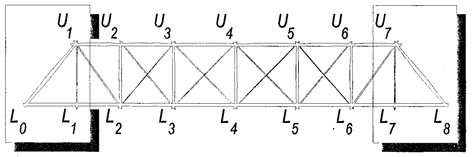
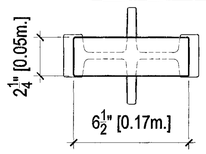
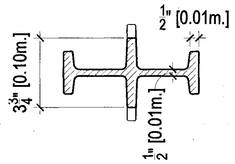
PENNSYLVANIA HISTORIC BRIDGES
RECORDING PROJECT - III
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

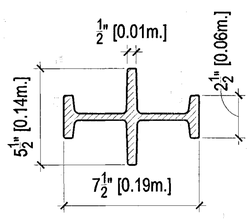
TYPICAL END PANEL AND END POST

Key Elevation

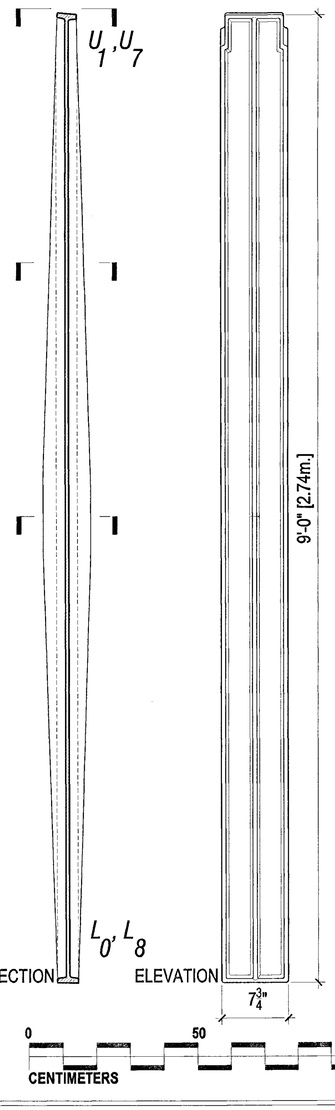








End Post Cross Sections

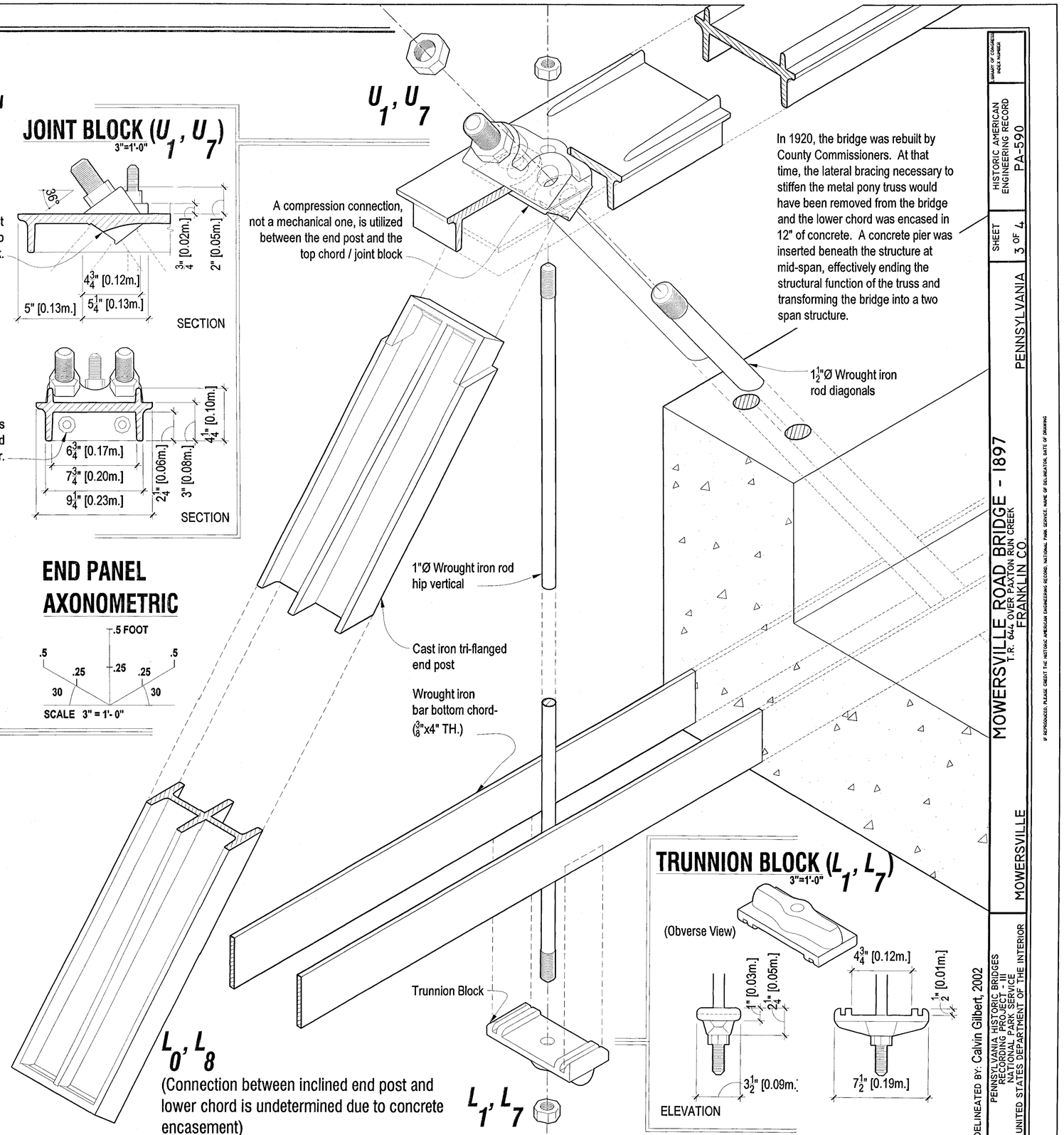


CAST IRON END POST

JOINT BLOCK (U_1, U_7)

3"=1'-0"

END PANEL AXONOMETRIC



TRUNNION BLOCK (L_1, L_7)

3"=1'-0"

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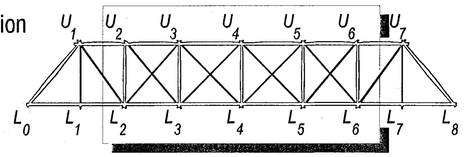
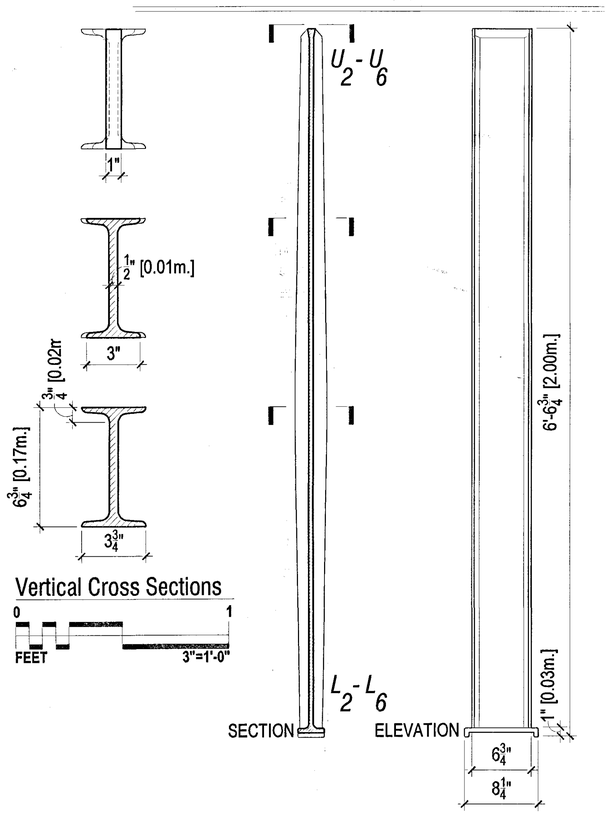
MOWERSVILLE ROAD BRIDGE - 1897
T.R. 644 OVER PAXTON RUN CREEK
FRANKLIN CO.
PENNSYLVANIA
MOWERSVILLE

DELINEATED BY: Calvin Gilbert, 2002
PENNSYLVANIA HISTORIC BRIDGES RECORDING PROJECT - III
NATIONAL PARK SERVICE
UNITED STATES DEPARTMENT OF THE INTERIOR

TYPICAL PANEL AND VERTICAL

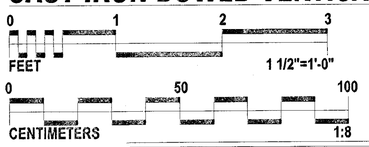
Key Elevation





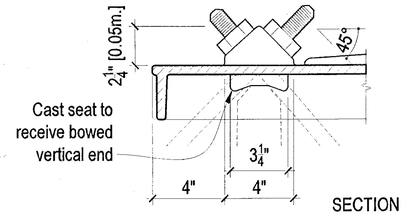
Vertical Cross Sections

CAST IRON BOWED VERTICAL



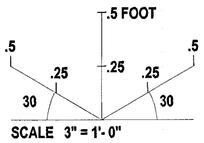
JOINT BLOCK (U_3 - U_5)

3"=1'-0"



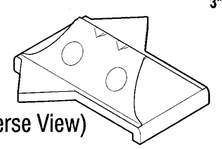
Nelson erected several Pratt truss structures in Franklin County annually for the Pittsburgh Bridge Company. Yet the Mowersville Bridge differs significantly from these other bridges. Rather, it resembles many earlier bridges designed and erected by the heads of local foundries such as Calvin Gilbert of Chambersburg, PA. Thus, the Mowersville bridge appears to represent an important survival of earlier metal truss forms. It also suggests that these founders relied on patterns leading to early prefabrication in rural bridge design.

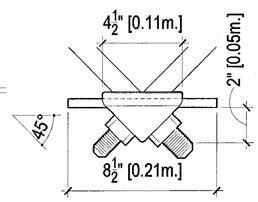
TYPICAL PANEL AXONOMETRIC

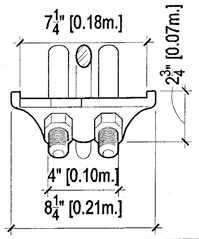


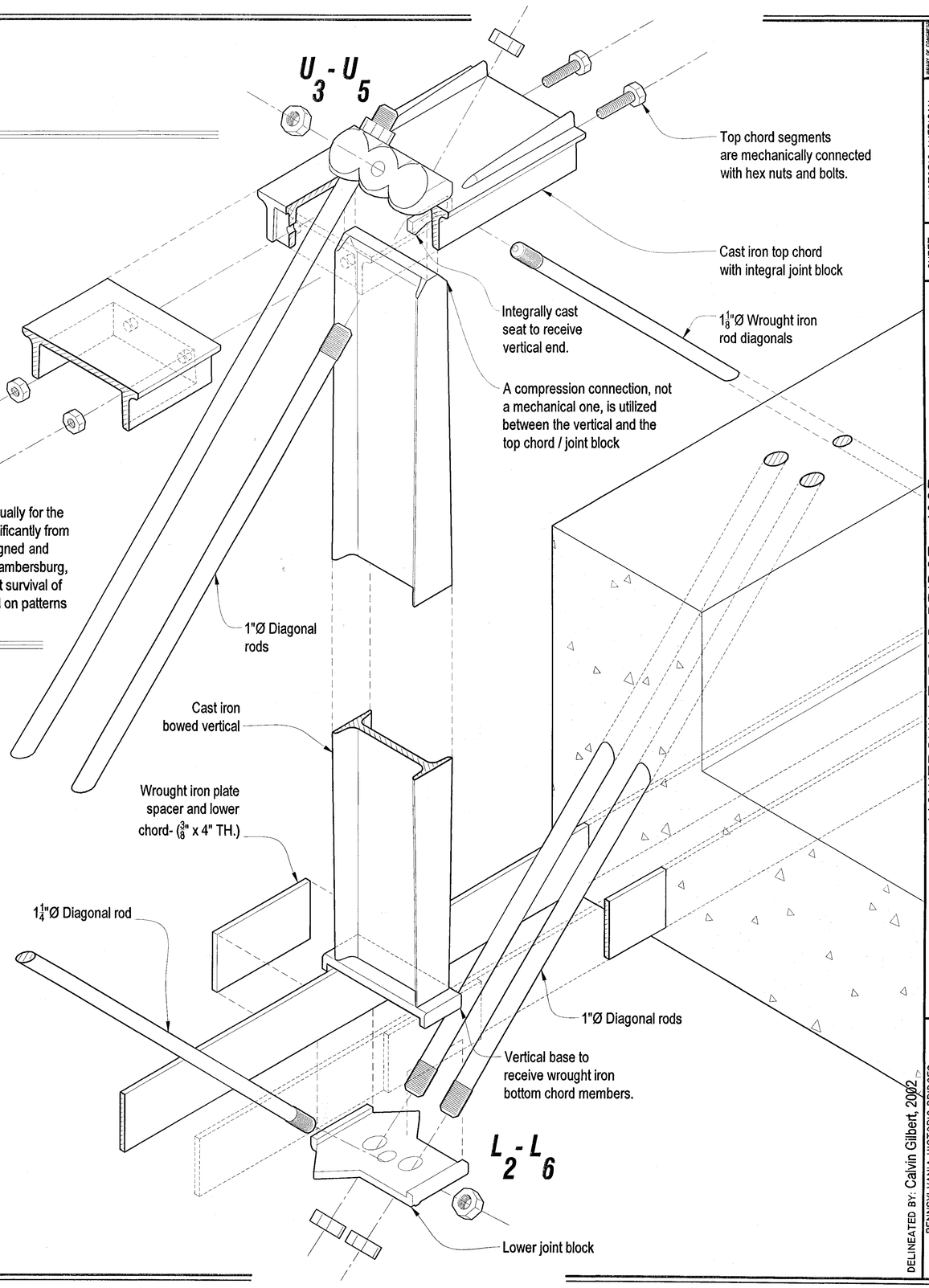
LOWER JOINT BLOCK (L_2 - L_6)

3"=1'-0"









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MOWERSVILLE ROAD BRIDGE - 1897
T.R. 644 OVER PAXTON RUN
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