

STATE OF IOWA  
 STATE HIGHWAY COMMISSION  
 DESIGN FOR  
 150'x20' CONTINUOUS I-BEAM BRIDGE  
 SECONDARY ROAD SYSTEM PROJ. SN945  
 CRAWFORD COUNTY  
 MARCH 1953

IHC  
Des. 853

DESIGN 52-2 MILFORD TWP. CRAWFORD COUNTY  
 SEC. 35-36 STA-161+22.5 OVER EAST BOYER RIVER

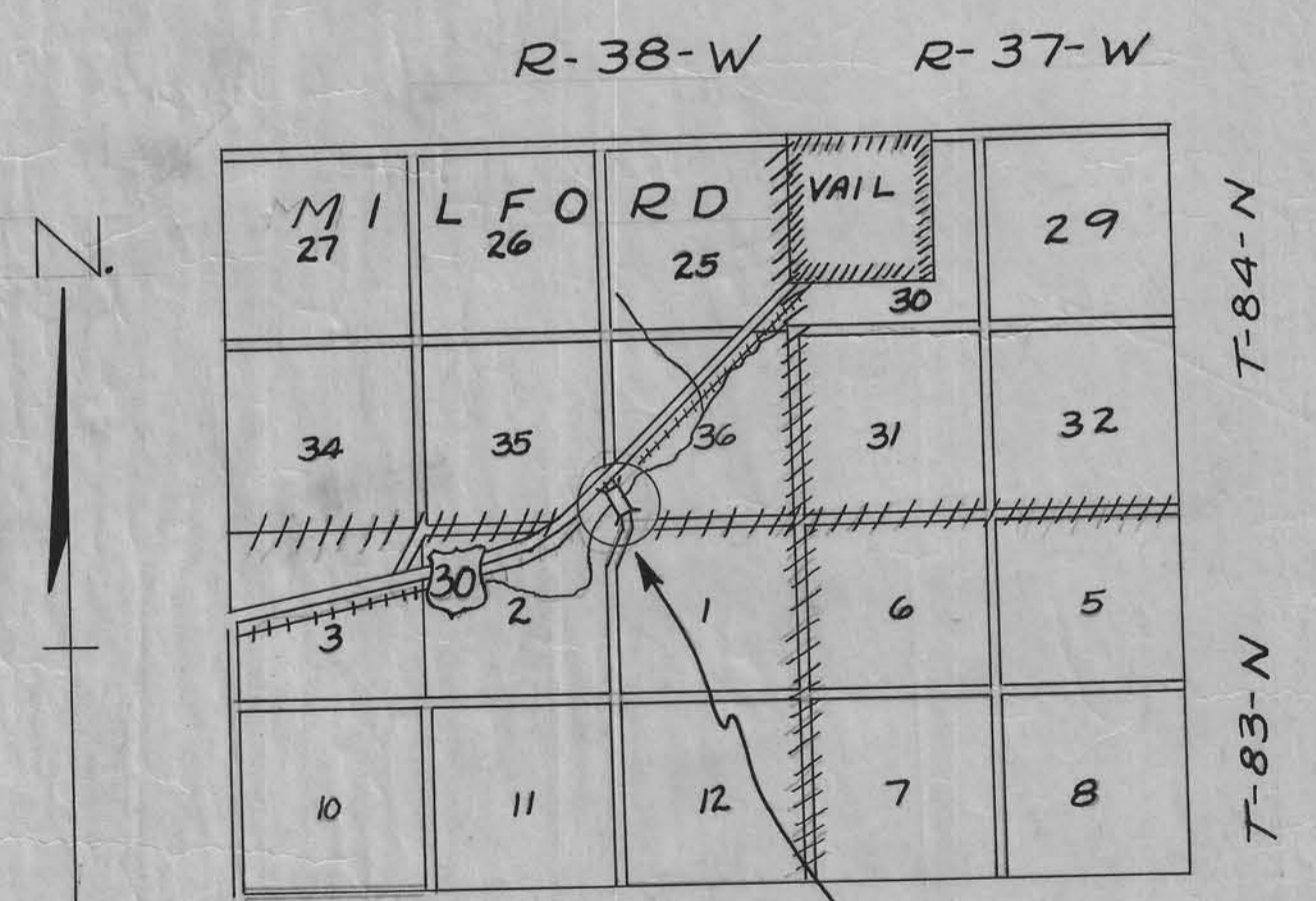
**150'x20' CONTINUOUS I-BEAM.**

DESCRIPTION	PIERS	ABUTS	SUP'STRUCT	TOTAL
Concrete Class "C"	—	160 C.Y.	—	160 C.Y.
Concrete Class "A"	53.20 C.Y.	43.00 C.Y.	89.9 C.Y.	186.10 C.Y.
Reinforcing Steel	5586 Lbs.	3090 Lbs.	16,150 Lbs.	24,826 Lbs.
Structural Steel	—	—	56,915 Lbs.	56,915 Lbs.
untreated Piling	20@25'=500 L.F.	—	—	500 L.F.
creosoted Piling	—	24@40'=960 L.F.	—	960 L.F.
Excavation Class 20	576 C.Y.	—	—	576 C.Y.
" Class 21	117 C.Y.	—	—	117 C.Y.
" Class 24	—	552 C.Y.	—	552 C.Y.
Handrail	—	—	300 L.F.	300 L.F.
Excavation Class 10	—	—	—	376 C.Y.

Mileage Summary: = 154'-0" = 0.0291 miles

In letting of May 5, 1953

Specifications:  
 Design: A.A.S.H.O.-1949 with exceptions.  
 Construction: Standard Specifications  
 Iowa State Highway Commission, Series of 1952  
 and Special Prov.



Design 52-2  
 EAST BOYER TWP IHC 853  
 SCALE: 1" = 1 MILE

APPROVED

CHIEF ENGINEER      DATE  
 IOWA HIGHWAY COMMISSION.

APPROVED.

DEPARTMENT OF COMMERCE  
 BUREAU OF PUBLIC ROADS  
 RECOMMENDED FOR APPROVAL

APPROVED

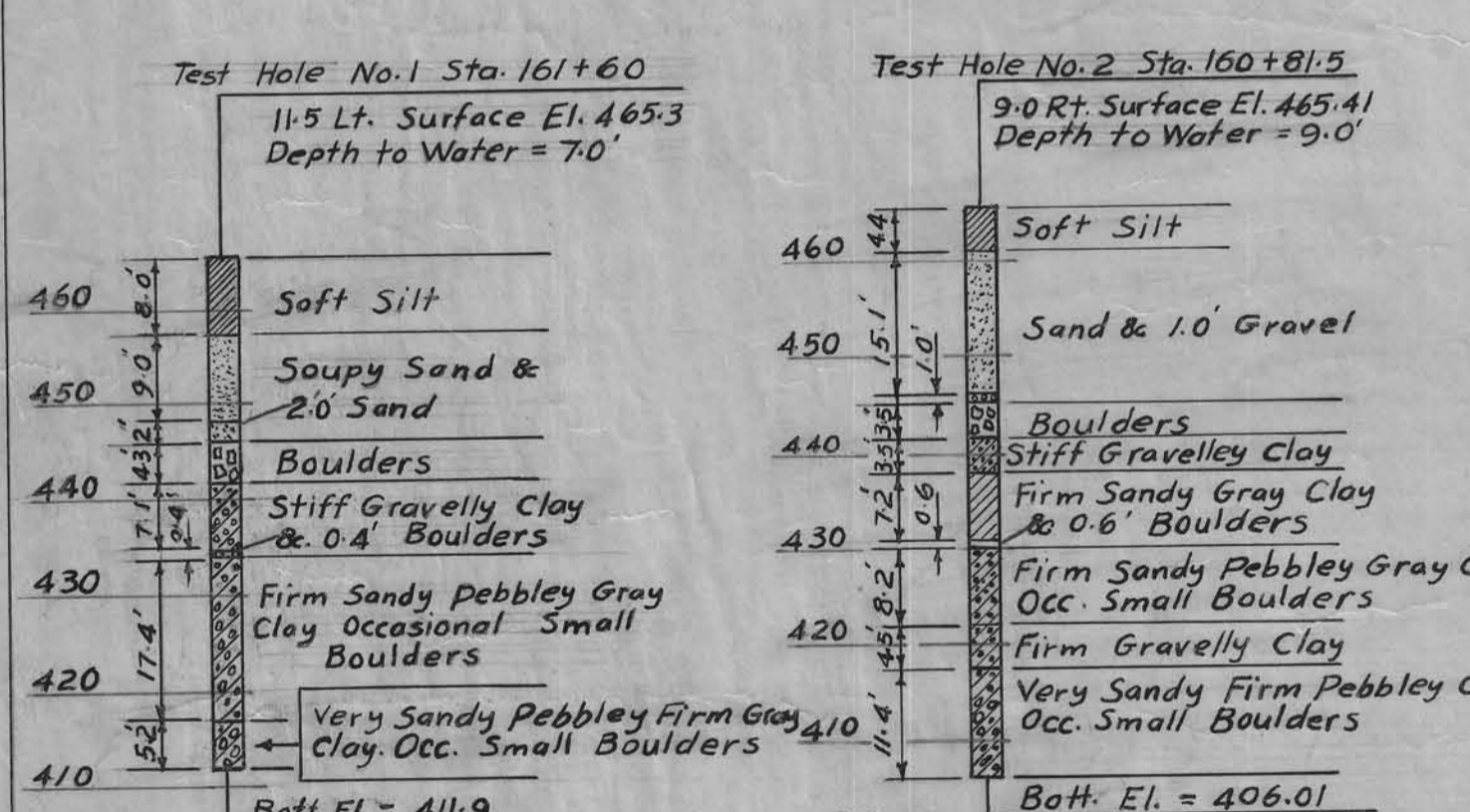
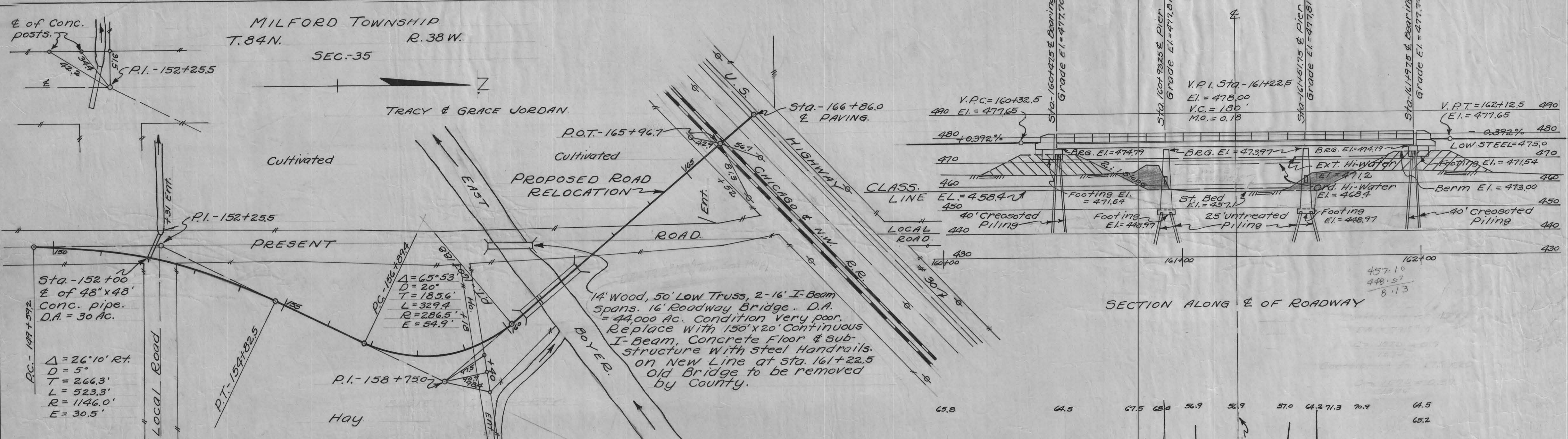
DISTRICT ENGINEER      DATE

APPROVED

BOARD OF SUPERVISORS      DATE

DIVISION ENGINEER      DATE

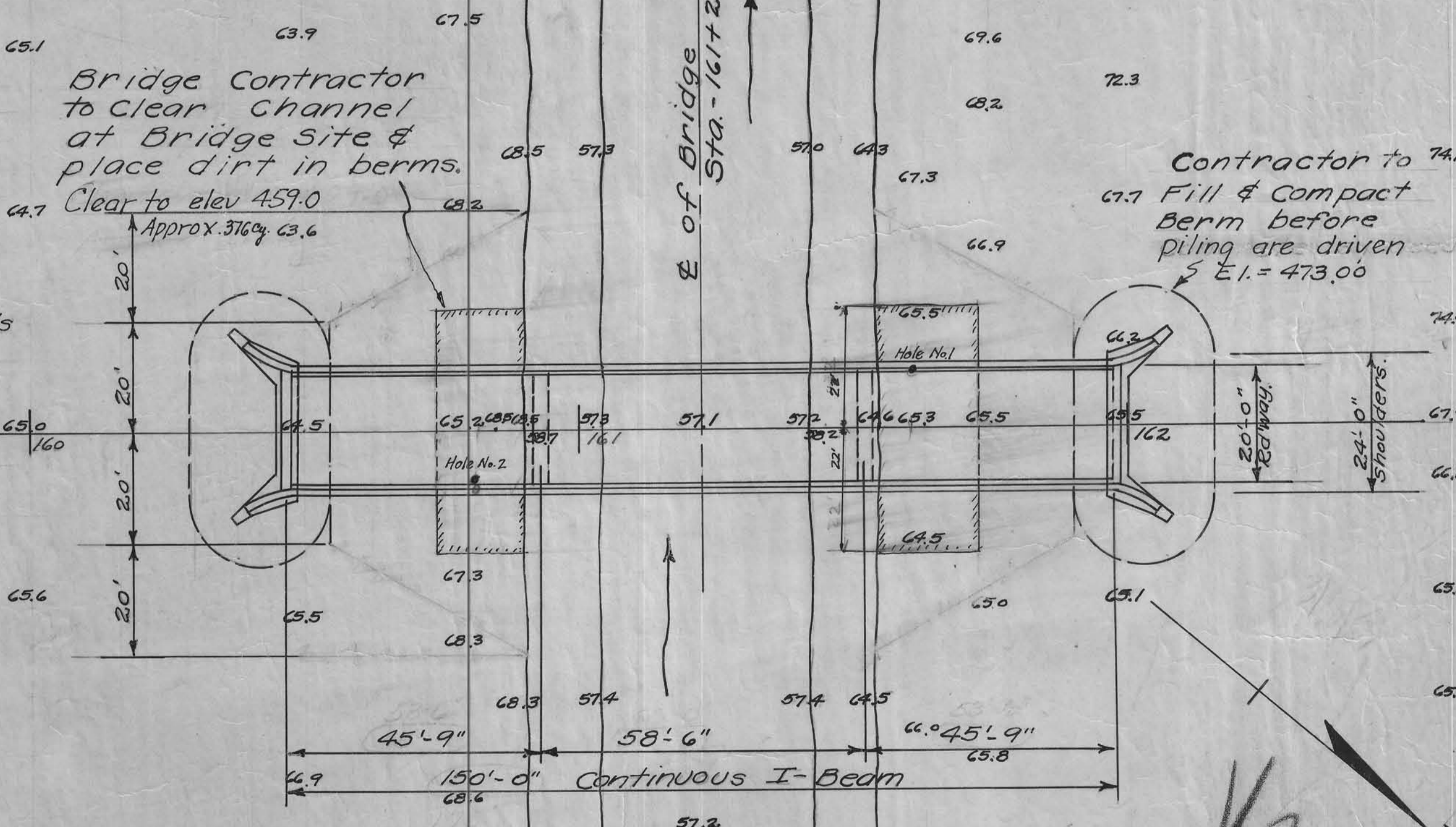
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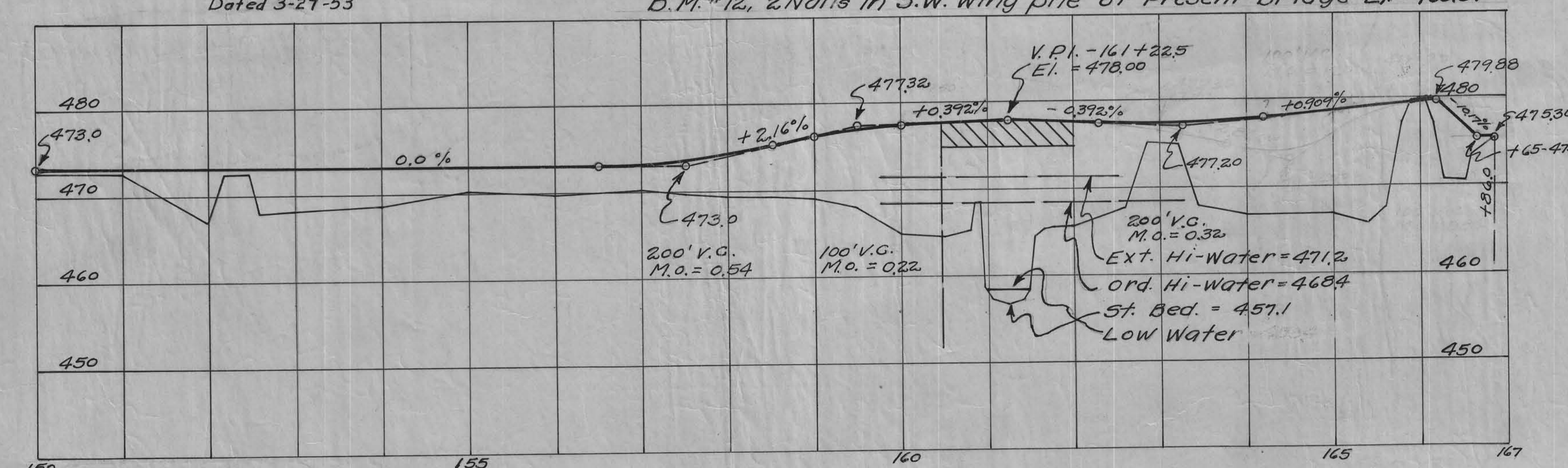
SOUNDING DATA  
Scale 1" = 20'  
Dated 3-27-53

GENERAL PLAN  
Scale 1" = 100 Ft.

**GENERAL NOTES:**  
All Concrete to be Class "A" except wing post on Abutments. All reinforcing to be securely wired in place before Conc. is placed. Minimum edge distance to center of any bar to be 2" unless otherwise shown. All exposed corners 90° or sharper to be filleted 3/4".  
Design: A.A.S.H.O. H-15 loading (single Lane) Superstructure details are same as Standard V10-2. 150' x 20' Continuous I-Beam. Abutment details shown on sheet #3 & Standard V10-8. Pier details are same as Standard P-5. Use piers recommended for 120' span with H = 25'. All construction to be in accordance with the Iowa Highway Commission Standard Specifications, Series of 1952.



SITUATION PLAN  
Scale - 1" = 20 Ft.

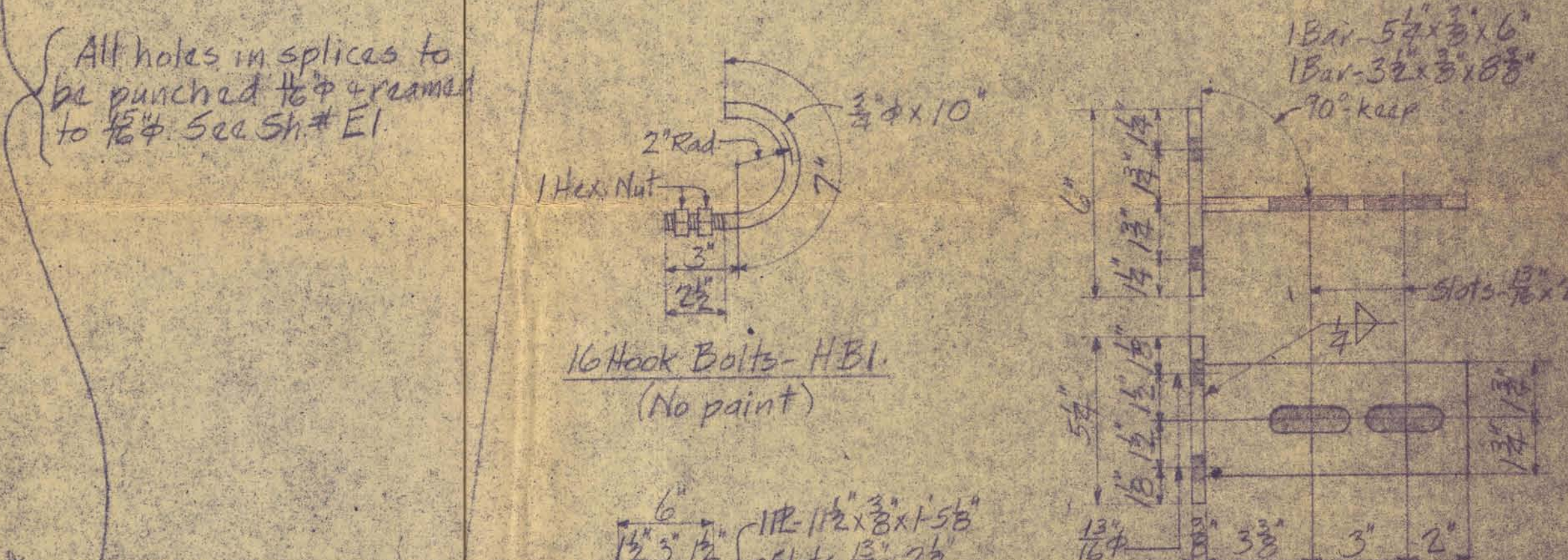
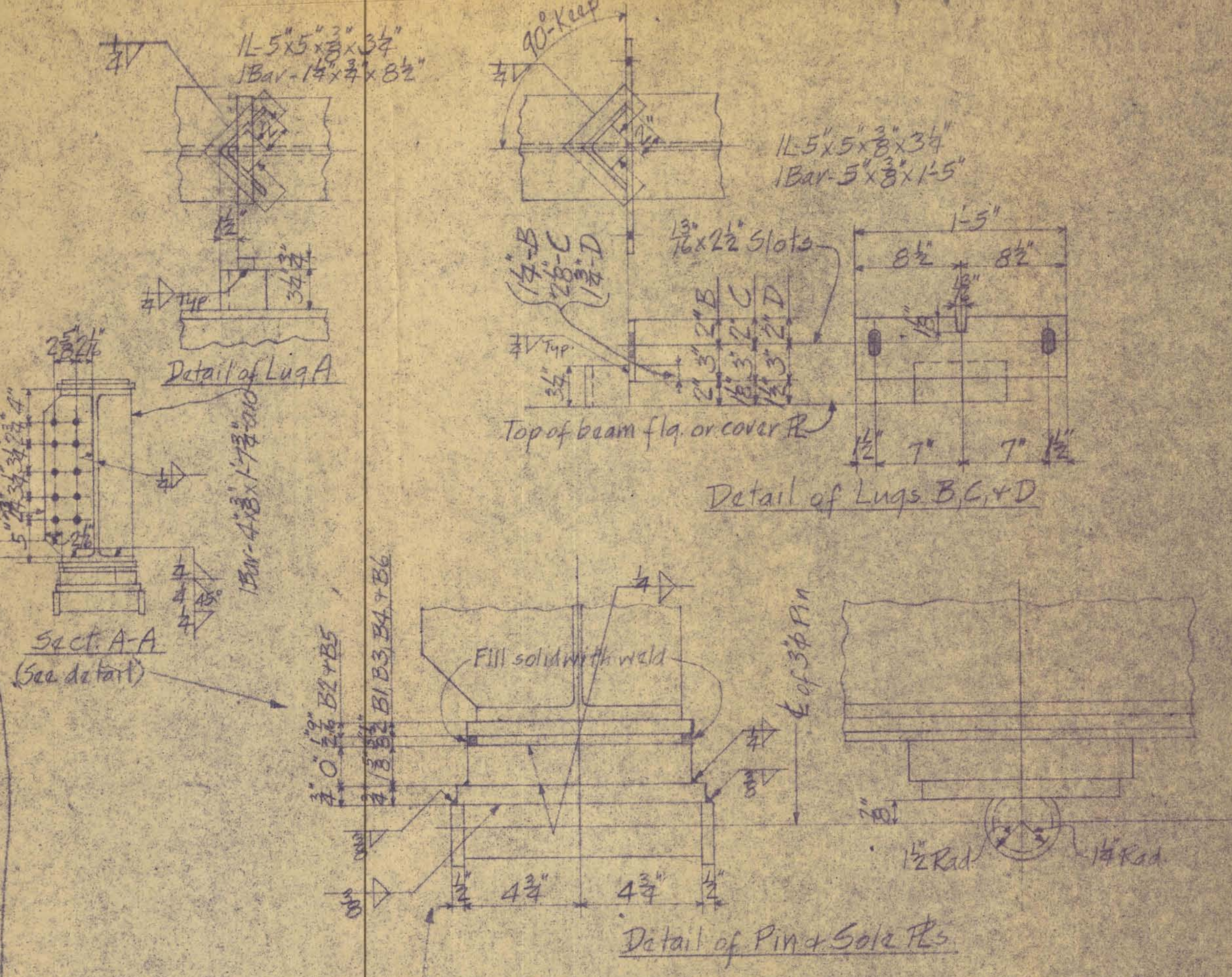
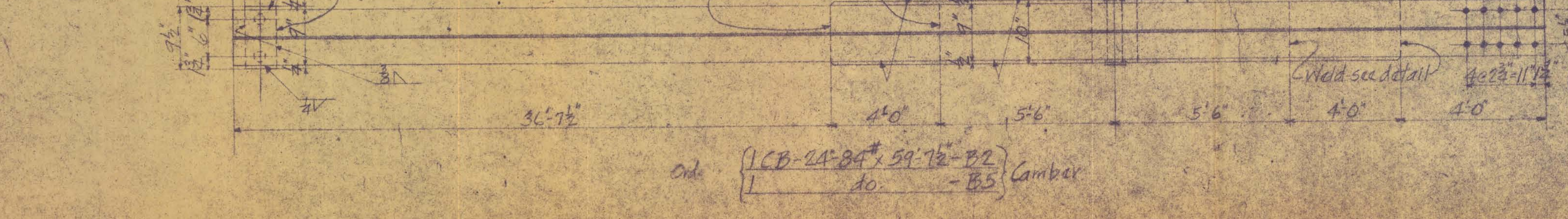
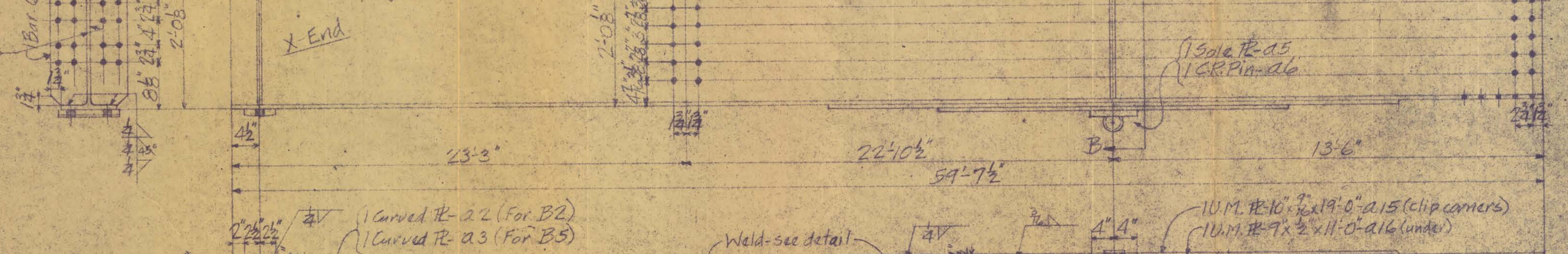
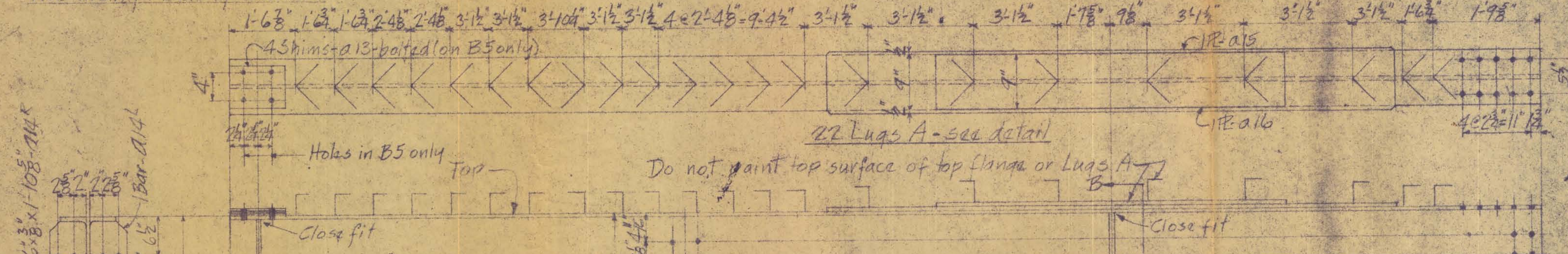
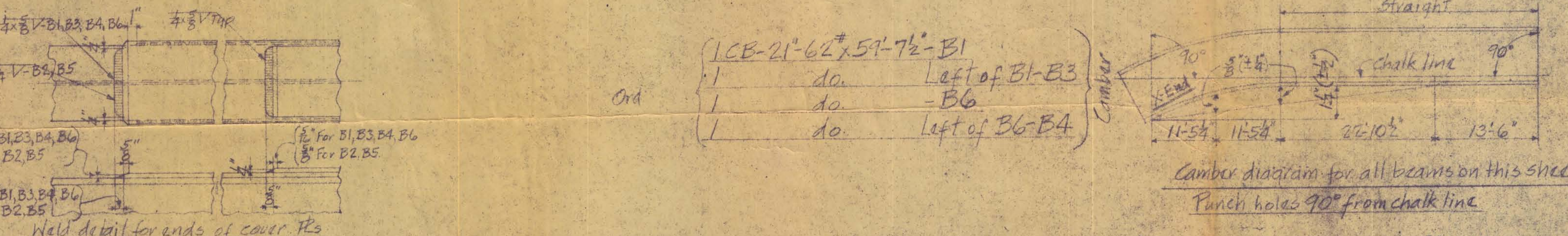
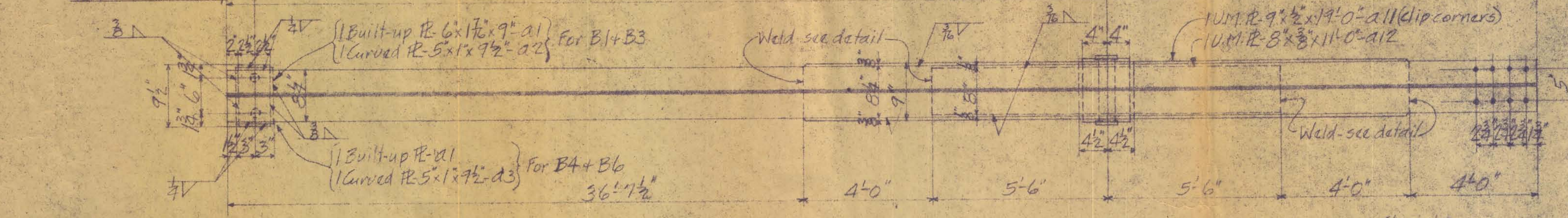
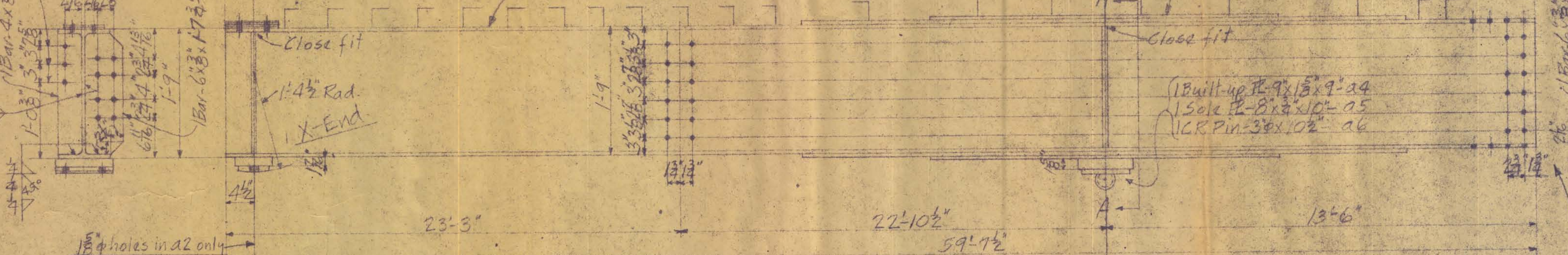
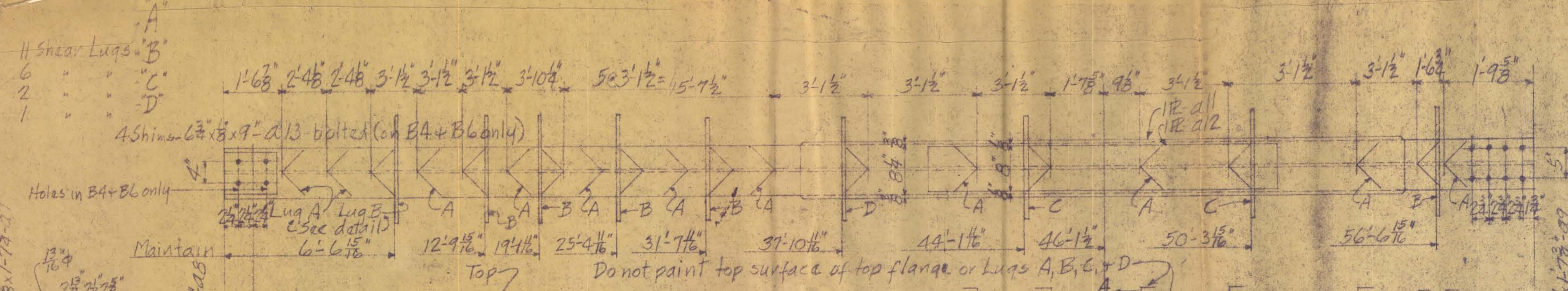


ROAD PROFILE  
Horiz. - 1" = 100 Ft.  
Vert. - 1" = 10 Ft.

PLAN FOR  
150' x 20' CONTINUOUS I-BEAM BRIDGE  
CONCRETE FLOOR - STEEL HANDRAIL  
STA-161+22.5 PROJECT NOSN-1945  
CRAWFORD COUNTY, IOWA.  
Sheet No. 2 of 3







APPROVED  
Iowa State Highway Comm.  
By *[Signature]*  
Date 7-23-53  
The approval of this drawing does not  
the contractor of responsibility for errors  
mensations and details. Neither does it  
acceptance of material not in accordance with the  
contract specifications.

FOR APPROVAL  
DES MOINES STEEL CO.  
DES MOINES, IOWA, U.S.A.  
JUL 18 1953  
PLEASE RETURN WITH YOUR WRITTEN  
APPROVAL OR CORRECTIONS DESIRED  
WITH HEREON

Over East Boyer River  
Section 36  
Township Milford  
County Crawford  
Design #853  
Project No. SN-1945

Work this sheet with  
Sh. #2

Note: Sole PLs must be perpendicular,  
transversal to webs of beams  
Clip corners of stiffener bars as shown

Rivets Bolts Open Holes Unless Noted

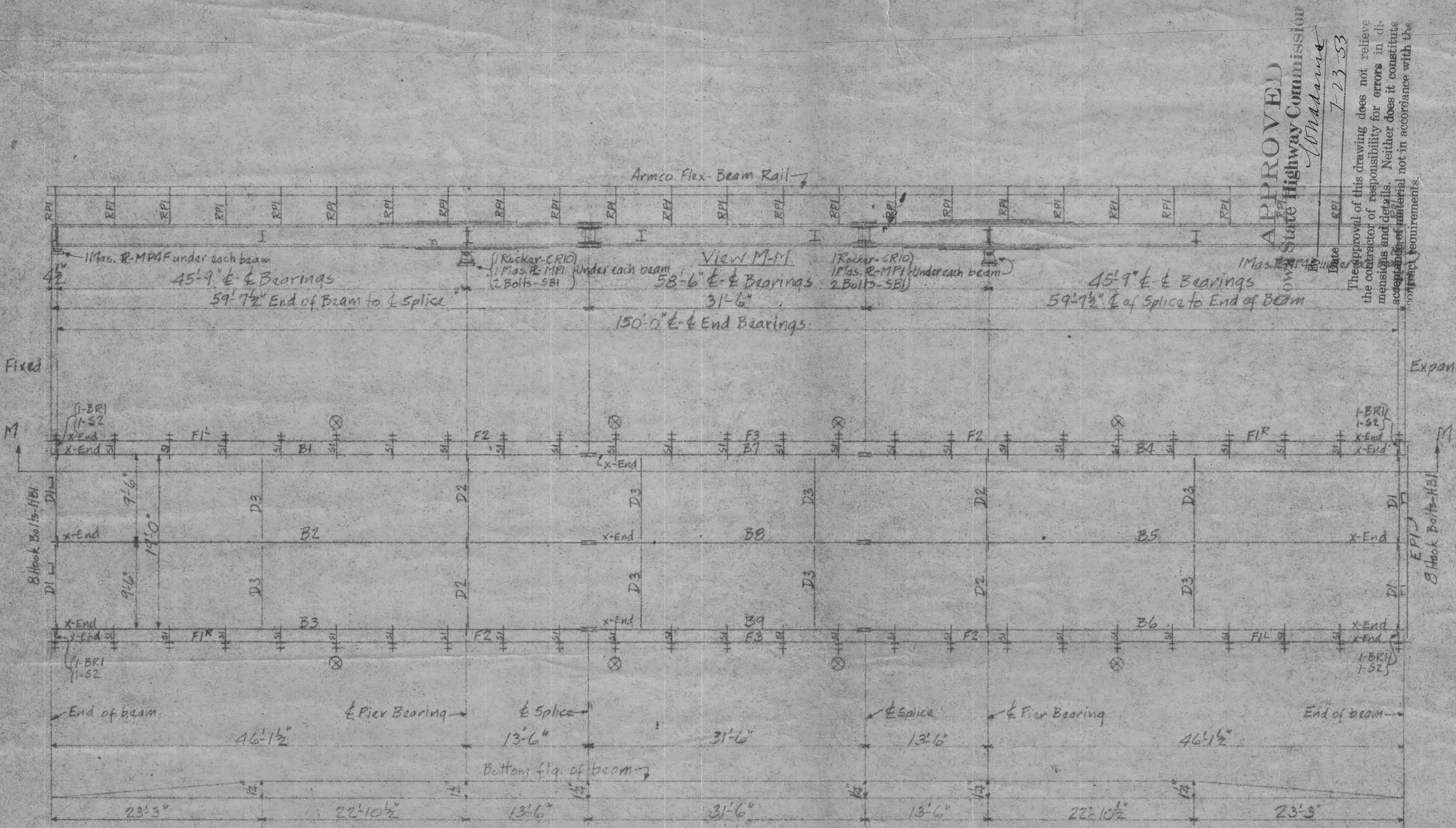
Paint Tan or Zinc Chromate as noted File Box

DO NOT PAINT CONTACT SURFACES

Billed by

DES MOINES STEEL CO.  
Des Moines, Iowa V10  
150 x 20 Cent. I-Beam Bridge  
Vail, Iowa  
For Iowa State Highway Comm.  
Graves Bldg.  
Des Moines, Iowa  
Job No. W-36713-33  
Sheet No. 1 of 5 B-172





Blocking Diagram.

Shop to assemble beams to above diagram + readin + matchmark splices with splice Rs + splice bars bolted in position.

Erection Diagram

Beam splices to be bolted with high tensile steel bolts - all other connections to be bolted with machine bolts except rail, which will be bolted with special bolts furnished by Armco.

Note: ⊗ indicates splice points for fascia Cs (7" Cs).

Over East Boyar River  
 Section 36  
 Township Milford  
 County Crawford  
 Design # 853  
 Project No. SN-1945

APPROVED  
 Iowa State Highway Commission  
 Conaway

Date 7-23-53  
 The approval of this drawing does not relieve the contractor of responsibility for errors in dimensions and details. Neither does it constitute acceptance of material not in accordance with the contract requirements.

FOR APPROVAL FROM  
 DES MOINES STEEL CO.  
 DES MOINES IOWA  
 JUL 18 1953  
 PLEASE RETURN WITH YOUR WRITTEN APPROVAL OR CORRECTIONS DESIRED NOTED HEREON.

RECORD	No.	Date

DES MOINES STEEL CO.  
 Des Moines, Iowa  
 V10  
 150' x 20' Cent. I-Beam Bridge  
 Vail, Iowa  
 Engineer Graves Bros.  
 Made by W.B.B. 7-14-53  
 Sheet No. E1  
 B-172

Paint  
 Rivets  
 Bolts  
 Open Holes  
 Unless Noted

File Box  
 DO NOT PAINT CONTACT SURFACES

Billed by

