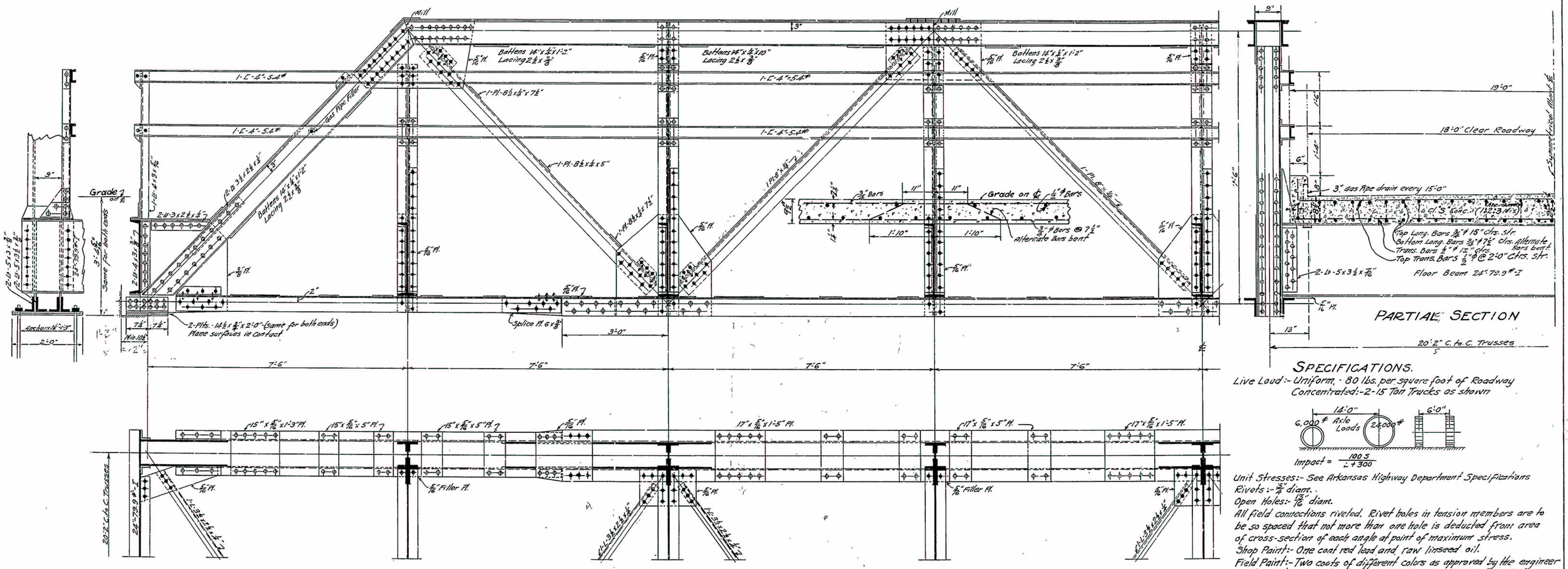
FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	ARK.				

60'-0" H.W.Y. Br. 18' Roadway, Conc. Flr. Lr. #52



SPECIFICATIONS.

Live Load:- Uniform, - 80 lbs. per square foot of Roadway
Concentrated:- 2-15 Ton Trucks as shown

$$\text{Impact} = \frac{100\,S}{L+300}$$

Unit Stresses:- See Arkansas Highway Department Specifications
Rivets:- 3/4" diam.
Open Holes:- 15/16" diam.
All field connections riveted. Rivet holes in tension members are to be so spaced that not more than one hole is deducted from area of cross-section of each angle at point of maximum stress.
Shop Paint:- One coat red lead and raw linseed oil.
Field Paint:- Two coats of different colors as approved by the engineer
Batten plates spaced not over 3'-0" c. to c. on tension members.

NOTE:- This drawing is general only. Shop drawings must be made in compliance with specifications and must be submitted and approved before fabrication begins. One (1) inch extra thickness has been added to floor slab for wear.

FLOOR BEAMS

D.L.M. = 1/8 x 1040 x 20.17² = 52,500 '#
L.L. M. = 8.58 x 24000 - 6 x 12000 = 134,000
Impact . 30% = 40,200
Total = 227,100 '#

$$\frac{227100 \times 12}{16000} = 170.5 = \text{Req'd Sec. Mod}$$

Use 24" 79.9 #I, Sec. Mod. = 173.9

Estimated weight of structural steel = 38,450 #
Estimated weight of Reinforcing steel = 6,066 # (see note below)
and 347 cu. ft. '3" Conc. in floor slab, max. avg. 1".

NOTE: This weight includes 68# for 8-3"ϕ Gas pipe drains

STANDARD PLAN

60-FT. STEEL HIGHWAY BRIDGE
18' ROADWAY - CONC. FLOOR

ARKANSAS HIGHWAY DEPARTMENT
LITTLE ROCK, ARK.

DESIGNED	N.B.G.
TRACED	C.J.P.
CHECKED	N.B.G.
REVISIONS	Rev. 1/20/24; 3/1/27 R.E.A. 2/4/27 R.E.A. (Q.-1 Sw.)

Approved: Chairman, Arkansas State Highway Commission.
By: [signature]
State Bridge Engineer
Mar. 1924.

STATE STANDARD No. E-706A

Bridge No. 3278

Drawing No. 52

K-52