

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	ARK	198-A	1924	1	11

374

STATE OF ARKANSAS
STATE HIGHWAY DEPARTMENT

PLAN OF PROPOSED BRIDGES
OVER
FOURCHE RIVER AND SLOUGH

14 MILES SOUTH OF WALDRON, 2½ MILES FROM BOLES SCOTT CO, ARK.

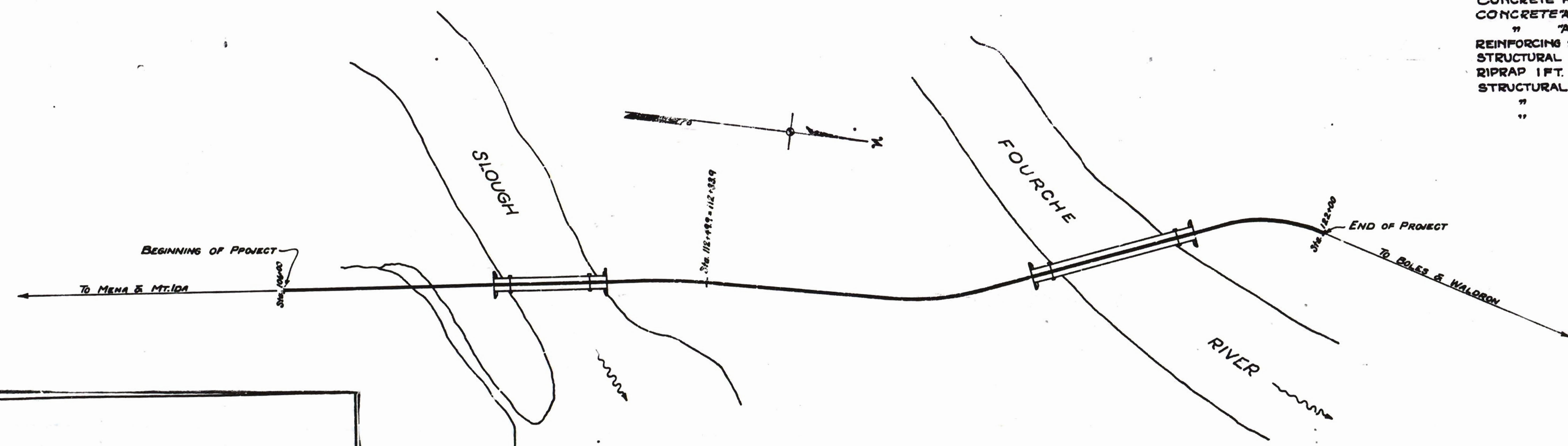
FEDERAL AID PROJECT No. 198-A

INDEX OF SHEETS

- SHEET NO. 1 Title Sheet
- " " 2 Map of Vicinity.
- " " 3 Plan and Profile.
- " " 4 Layout of Bridge over Slough.
- " " 5 Layout of Bridge over Fourche River.
- " " 6 Design of 120 Ft. Steel Truss Span.
- " " 7 Design of 200 Ft. Steel Truss Span.
- " " 8 Design of Substructure and Approaches, Slough Bridge.
- " " 9 Design of Substructure and Approaches, River Bridge.
- " " 10 Cross Sections.
- " " 11 Cross Sections - Typical Graded Section.

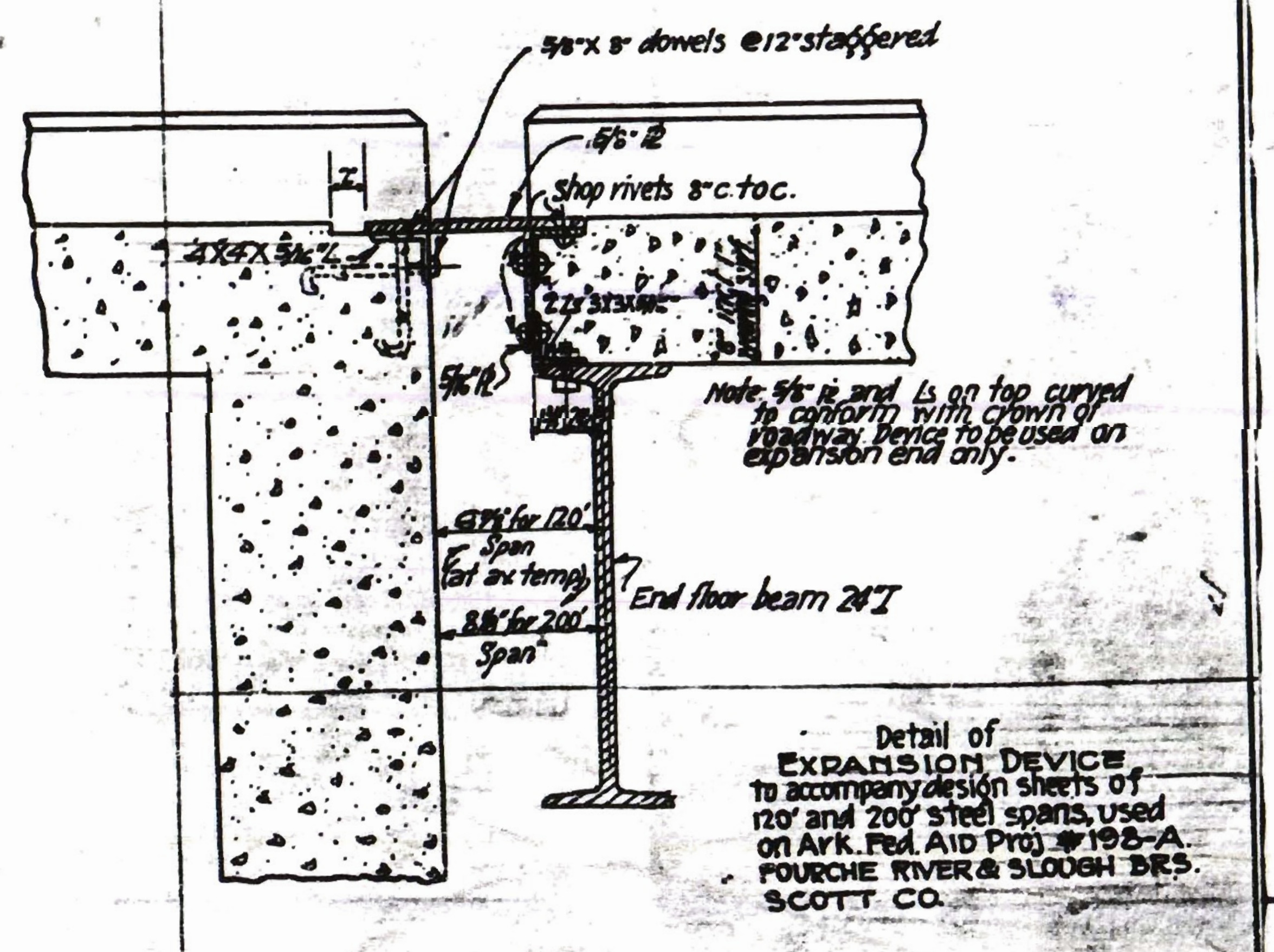
QUANTITIES

EARTH (ROADWAY EXC. 543 CU.YDS)	7796	CU. YDS
WORK (BORROW 7253 CU.YDS)		
LOOSE ROCK EXCAV.	543	" "
CONCRETE HANDRAIL	248	LIN. FT.
CONCRETE " 1:2:3 MIX	271.36	CU. YDS.
" " 1:2:4 "	34725	" "
REINFORCING STEEL	59079	LBS.
STRUCTURAL "	369250	" "
RIPRAP 1 FT. THICK	285	SQ. YDS.
STRUCTURAL EXCAV ROCK	68	CU. YDS.
" " DRY EARTH	235	" "
" " WET "	356	" "



LAYOUT

GROSS LENGTH OF PROJECT .306 MILES
NET " " " .306 MILES



APPROVED: _____
COMMISSIONER, STATE LANDS, HIGHWAYS AND IMPROVEMENTS

APPROVED: _____
STATE HIGHWAY ENGINEER

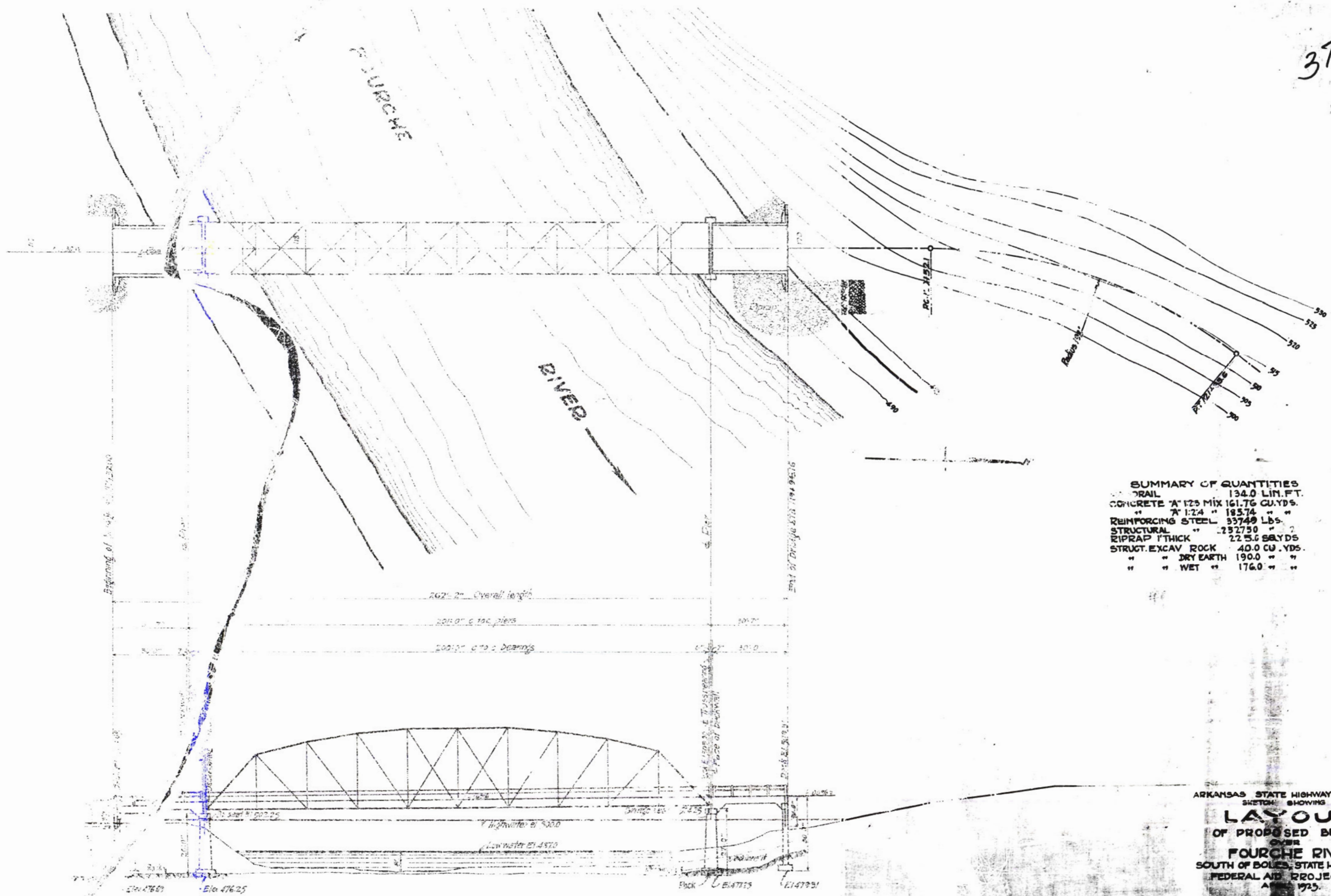
RECOMMENDED FOR APPROVAL: _____
DISTRICT ENGINEER, U.S. BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL: _____
CHIEF ENGINEER, U.S. BUREAU OF PUBLIC ROADS

APPROVED: _____
DIRECTOR, U.S. BUREAU OF PUBLIC ROADS

FED. ROAD DIST. No.	6	FED. AID PROJ. No.	198A	FISCAL YEAR	1934	SHEET NO.	5	TOTAL SHEETS	11
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376

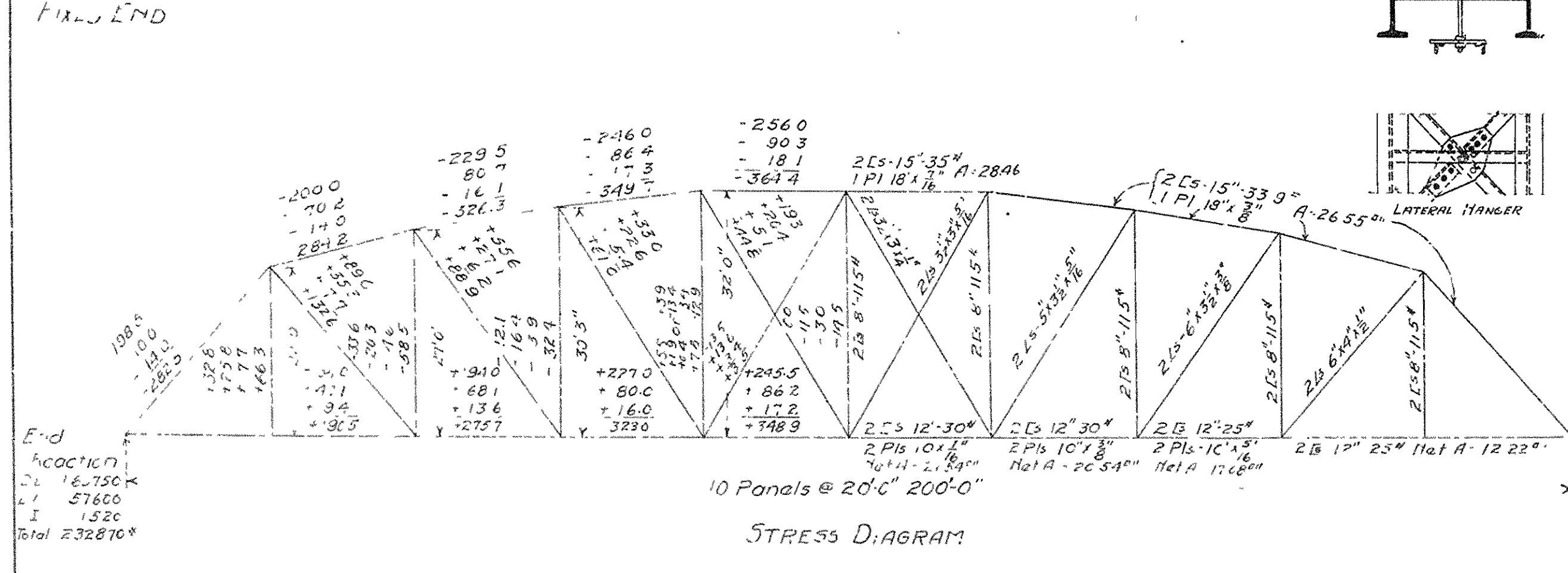
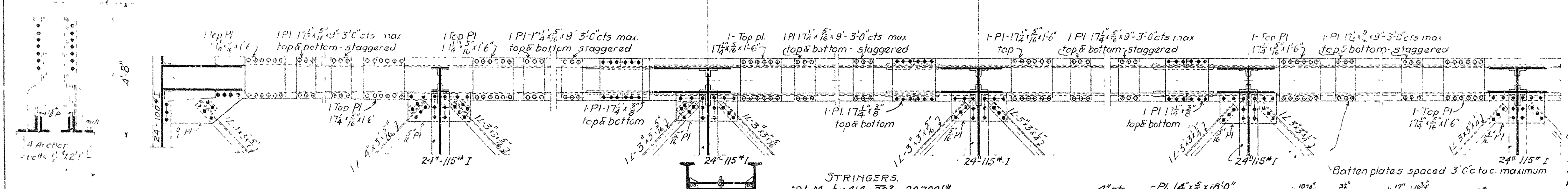
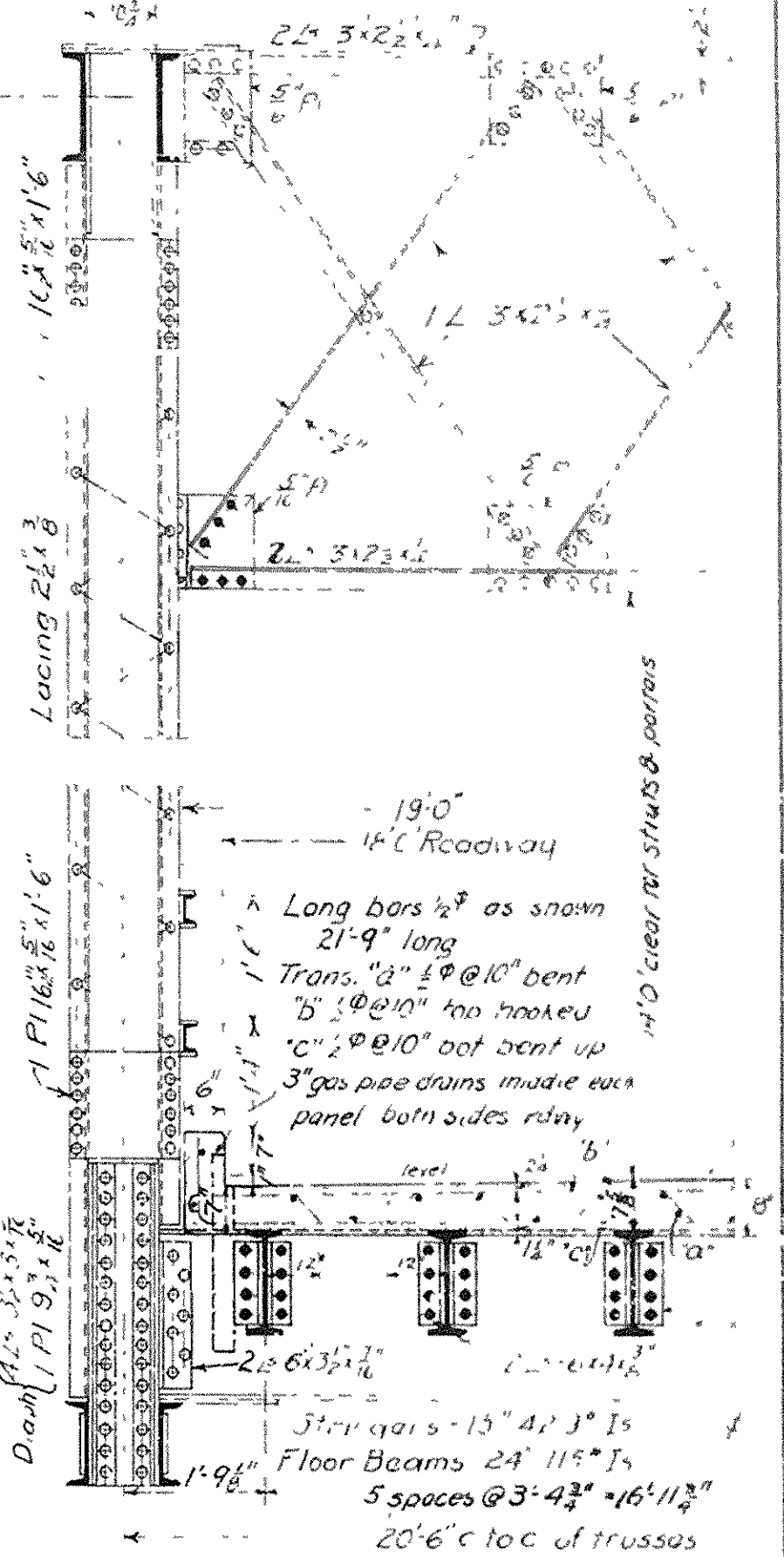
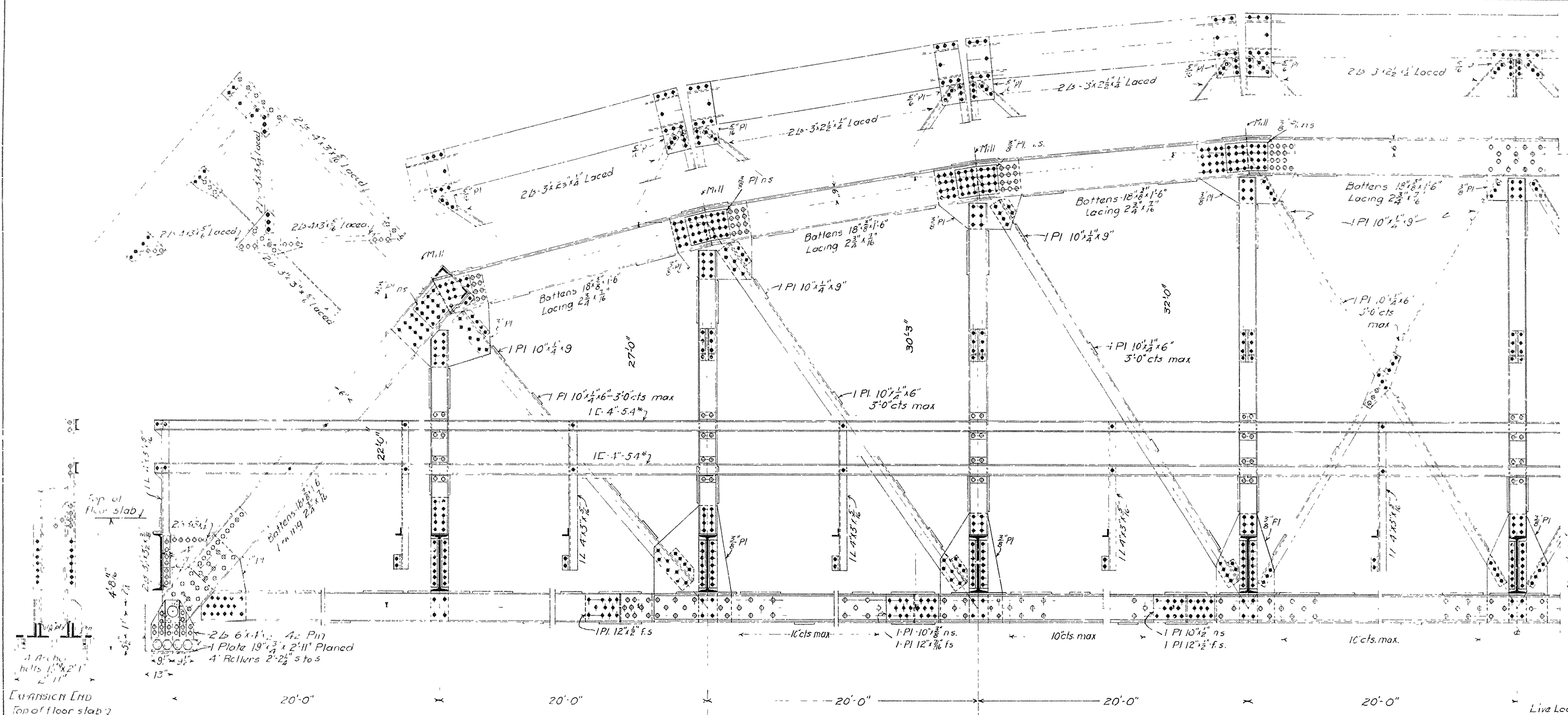


SUMMARY OF QUANTITIES

TRAIL	134.0 LIN. FT.
CONCRETE "A" 1:2:4 MIX	161.76 CU. YDS.
" " " " 1:2:4	183.74 " "
REINFORCING STEEL	33749 Lbs.
STRUCTURAL	22750 " "
RIPRAP 1" THICK	225.6 SBLYDS
STRUCT. EXCAV. ROCK	40.0 CU. YDS.
" " DRY EARTH	190.0 " "
" " WET	176.0 " "

ARKANSAS STATE HIGHWAY DEPARTMENT
 SKETCH SHOWING
LAYOUT
 OF PROPOSED BRIDGE
 OVER
FOURCHE RIVER
 SOUTH OF BOLES, STATE HIGHWAY A-4
 FEDERAL AID PROJECT NO.
 APRIL 1935

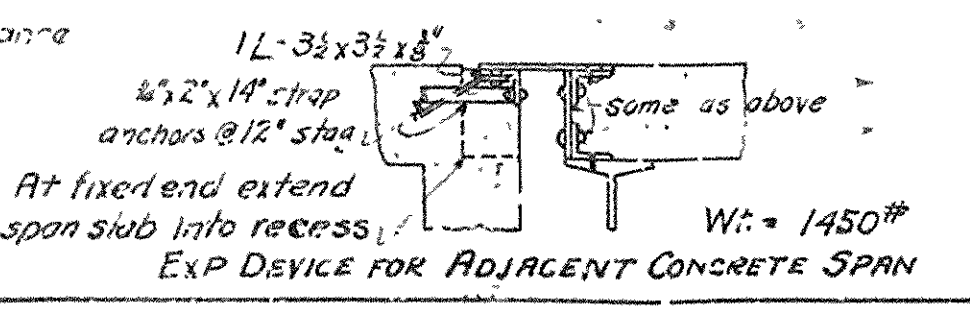
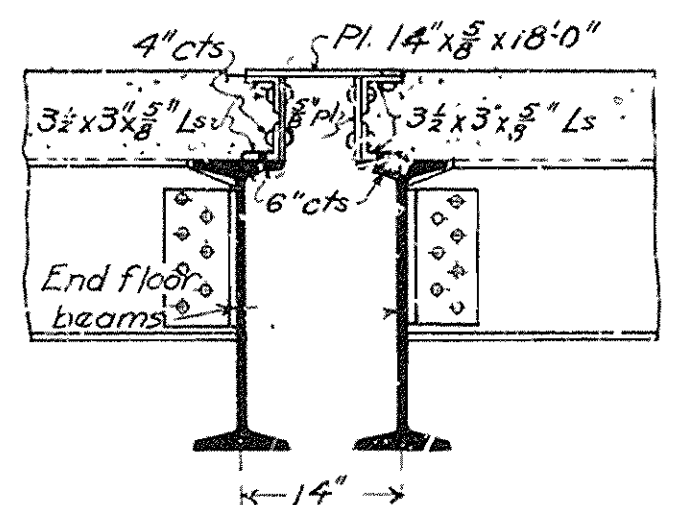
FED AID STATE DIST NO. 6 ARK
FED AID PROJ NO. 1744
SHEET NO. 17
NO. SHEETS 18



STRINGERS
DLM 1/2 x 41/4 x 20 = 20,700#
LLM 1/2 x 9050 x 20 = 45,200#
Impact 30% = 13,600#
Total = 79,500#
79,500 x 12 / 16000 = 596 Sec. Mod. Req'd.
Use 15" 42.9# I's Sec Mod = 589

INT. FLOOR BEAMS
DLM 1/2 x 2521 x 20 5/8 = 133,000
LLM 1/2 x 25800 x 6 = 128,000
Impact 30% = 44,580
Total = 326,180
326,180 x 12 / 16000 = 2450 Sec Mod Req'd.
Use 24" 115# I's Sec Mod = 2450

Note: This drawing is general only. Shop drawings must be made in compliance with the specifications and must be submitted and approved before fabrication is begun.



ESTIMATED QUANTITIES
Structural Steel-Lbs 243,300#
Reinforcing Steel-Lbs 12,770#
Class 5 Concrete C. Yds 93.9
Expansion Plate (see sketches)

DESIGNED J.R.L.
DRAWN S.C.E.
CHECKED
REVISIONS 2/21/27 R.U.

SPECIFICATIONS
Live Load: Uniform-24 lbs. per square foot of roadway
Concentrated 2 15 Ton trucks as shown below.
6000' Axle Loads 24000'
Impact = 1005 / L + 300

Unit stresses - See Arkansas State Highway Department Specifications
Rivets 5/8 diam & open holes 1 1/2" in flanges of B's & 2 1/2" legs of L's All field sections riveted. Rivet holes in tension members made up of angles 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 of red lead and raw linseed oil. Field paint - Two coats of different colors as approved by the engineer.
Floor slab to be Class 5 concrete. 1" extra thickness has been added for wear.

STANDARD PLAN
200 FT. STEEL HIGHWAY BRIDGE
18 FT. ROADWAY - CONCRETE FLOOR
ARKANSAS HIGHWAY DEPARTMENT
LITTLE ROCK, ARK.

APPROVED
CHAIRMAN, ARKANSAS STATE HIGHWAY COMMISSION
BY
STATE HIGHWAY ENGINEER
MAY 1924 STATE STANDARD NO. F-720-A

