

| | | | |
|-------------|---------|-----------|--------------|
| FISCAL YEAR | Job No. | SHEET NO. | TOTAL SHEETS |
| 1930 | 7141 | 1 | 17 |

STATE OF ARKANSAS
STATE HIGHWAY COMMISSION

INDEX OF SHEETS

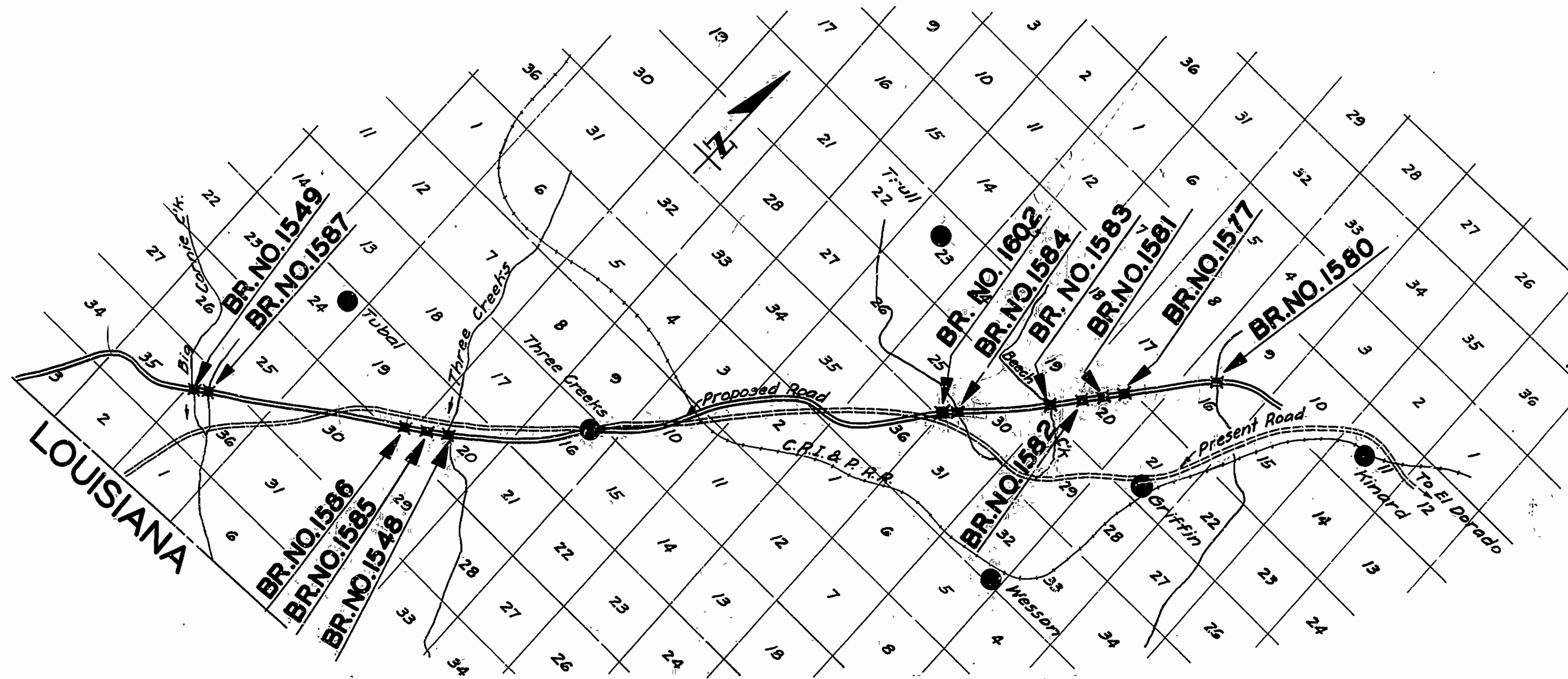
| Sheet No. | Dwg. No. | Title |
|-----------|----------|-------------------------------------------|
| 1 | 2781 | Title Sheet |
| 2 | 2782 | Layout of Br. No. 1580 |
| 3 | 2081 | Standard 19' Timber Trestle - 24'-0" Rdy. |
| 4 | 2783 | Layout of Br. No. 1577 |
| 5 | 2146 | Std 38' I-Beam Span - 20'-0" Rdy. |
| 6 | 2784 | Layout of Br. *1581 & *1582 |
| 7 | 2785 | Layout of Br. No. 1583 |
| 8 | 2786 | Layout of Br. No. 1584 |
| 9 | 2787 | Layout of Br. No. 1548 |
| 10 | 91 | Std 60' Steel Highway Span - 20' Rdy. |
| 11 | 2788 | Details of Piers - Br. No. 1548 |
| 12 | 2789 | Layout of Br. Nos. 1585 & 1586 |
| 13 | 2790 | Layout of Br. No. 1587 |
| 14 | 2791 | Layout of Br. No. 1549 |
| 15 | 1093 | Std. 80' Low Truss Span - 20' Rdy. |
| 16 | 2792 | Details of Piers - Br. No. 1549 |
| 17 | 2071 | Std 19' Timber Trestle - 20' Rdy. |

QUANTITIES

| Item No. | Description | Quantity |
|-----------|----------------------------|-----------------|
| S.P. # 12 | Earth Excavation | 2505 Cu. Yds. |
| 13 | Dry Excavation | 117 " |
| S.P. # 52 | Untreated Timber | 226 M. Ft. B.M. |
| S.P. # 52 | Treated Timber | 275,414 " |
| S.P. # 52 | Treated Timber Piling | 13,396 Lin. Ft. |
| S.P. # 52 | Treated Timber Pile Cutoff | 894 " |
| 54 | Class 3" Concrete | 971.67 Cu. Yds |
| 55 | Reinforcing Steel | 191,832 Lbs. |
| 56 | Structural Steel (Beams) | 17,725 " |
| 56 | Structural Steel (Trusses) | 11,833 " |

PLAN OF PROPOSED BRIDGES
ON
EL DORADO-THREE CREEKS ROAD
UNION COUNTY

ROUTE 15 SEC. 1
JOB NO 7141



The Specifications adopted by the State Highway Commission, May 30th, 1925 apply with subsequent revisions and Special Provisions noted apply to this Project.

| Pamphlet | Revised | Date |
|----------|---------|-----------------|
| A | Revised | Sept. 1st, 1928 |
| B | | |
| C | | |
| D | Revised | July 1st, 1928 |
| E | | |
| F | | |
| G | | |
| H | Revised | Oct. 1st, 1928 |
| I | | |
| J | Revised | Jan. 1st, 1929 |
| K | | |
| L | Revised | Jan. 1st, 1929 |

SPECIAL PROVISIONS

| Item | No. of Sheets |
|-------------------|---------------|
| Earth Excavation | 3 |
| Timber Structures | 12 |

LAYOUT

Scale: 1"=1 Mi.

LENGTH OF PROJECT = 2347'-6 1/2" = .444 Mi.
LENGTH OF BRIDGES = 2242'-1" = .424 Mi.
LENGTH OF EMBANKMENT = 105'-5 1/2" = .02 Mi.

Revised 8-11-30
Bridge No. 1602 Added

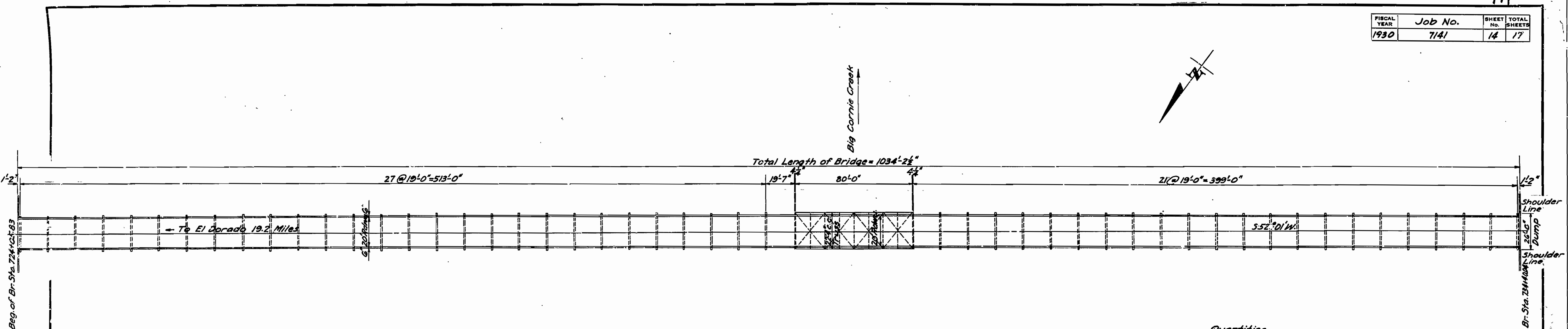
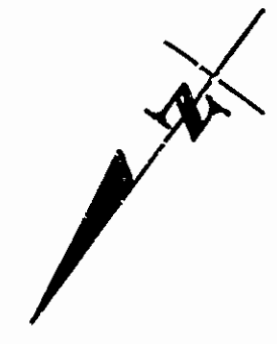
APPROVED
CHAIRMAN, STATE HIGHWAY COMMISSION

APPROVED
STATE HIGHWAY ENGINEER

N.B. Lane
BRIDGE ENGINEER

BRIDGES NO. 1548-1549-1577-1580
1581-1582-1583-1584
1585-1586-1587-1602. DRAWING NO. 2781

| | | | |
|-------------|---------|-----------|--------------|
| FISCAL YEAR | Job No. | SHEET No. | TOTAL SHEETS |
| 1930 | 7141 | 14 | 17 |

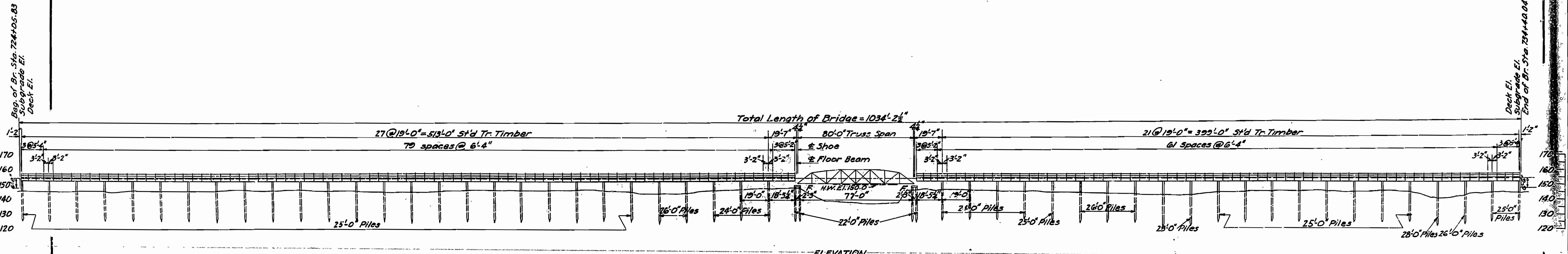


Notes
 Lengths of Piling shown cut-offs and are assumed for estimating quantities only. Actual lengths to be determined in the field.
 Bridge Contractor to complete embankment from Sta. 723+82 to Sta. 734+46
 For Details see Drawings No. 2071, 1093 & 2792

PLAN

Quantities

| | | |
|-----------------|-------------------------------|--------------------|
| S.P. & Item No. | 12 Earth Excavation | 380 Cu. Yds. |
| S.P. & " | 52 Untreated Timber | 0.026 M. F.F. B.M. |
| S.P. & " | 52 Treated " | 118.691 " " " |
| S.P. & " | 52 Treated Timber Piling | 5,208 Lin. Ft. |
| S.P. & " | 52 " " Cut-off | 136 " " |
| " " | 54 Glass 5" Concrete | 442.92 Cu. Yds. |
| " " | 55 Reinforcing Steel | 87,930 Lbs. |
| " " | 56 Structural Steel (Trusses) | 65,539 " " |



ELEVATION

B.M. El. 146.39
 Nail in 24" Gum, 4' Rt. of
 Sta. 729+00

LAYOUTS
BRIDGE OVER BIG CORNIE CREEK
EL DORADO-LA. STATE LINE ROAD
UNION COUNTY
 ROUTE 15 SEC. 1

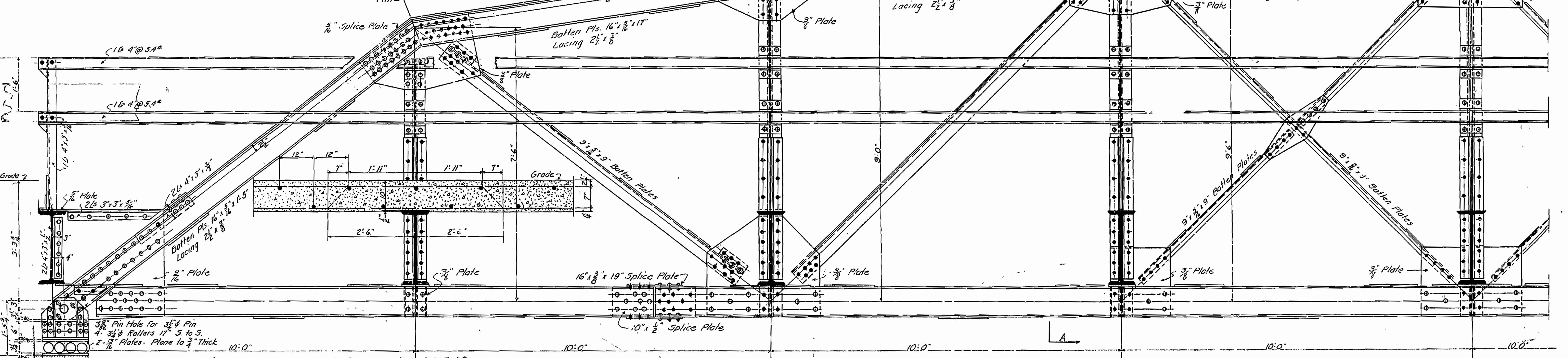
ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

Drawn By: *F.P.B.* Date: 7-10-30
 Traced By: *BA* Date: 7-12-30
 Checked By: _____ Date: _____
 Scale: 1 in. = 30 ft.
BRIDGE NO. 1549 **DRAWING NO. 2791**

M.R. [Signature]
 BRIDGE ENGINEER

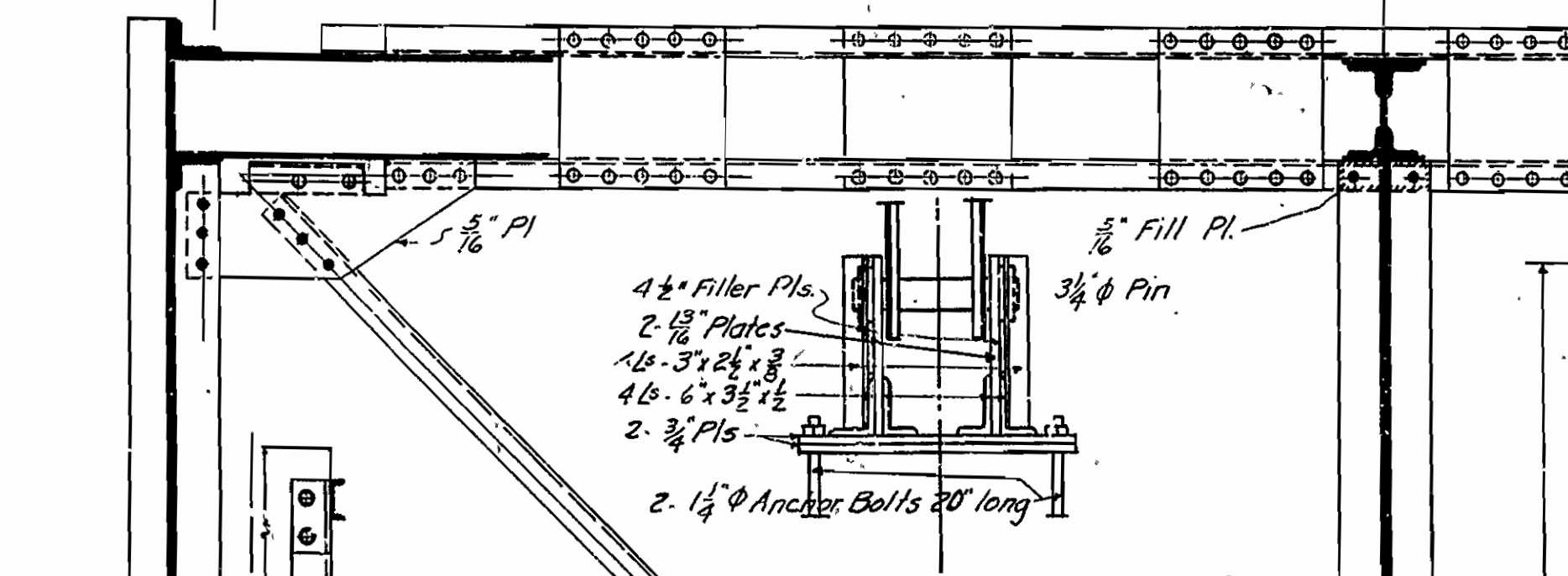
MAX. STRESSES & SELECTION OF MEMBERS

| | | | | | | |
|--------------------------------------------|--------------------------------------------|--------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| D-123.53 L-67.50 T-18.23 T-209.26 | D-122.24 L-66.80 T-18.04 T-207.08 | D-154.27 L-94.30 T-22.76 T-261.33 | 20.9' @ 20' E 16.7' @ COV. PL. | 20.9' @ 15' E 16.7' @ COV. PL. | 20.9' @ 15' E 16.7' @ COV. PL. | 20.9' @ 13' E 16.7' @ COV. PL. |
| D-85.46 L-46.70 T-12.61 T-144.71 | D-85.46 L-46.70 T-12.61 T-144.71 | D-144.39 L-78.90 T-21.30 T-244.59 | 20.10' @ 30' | 20.10' @ 20' | | |



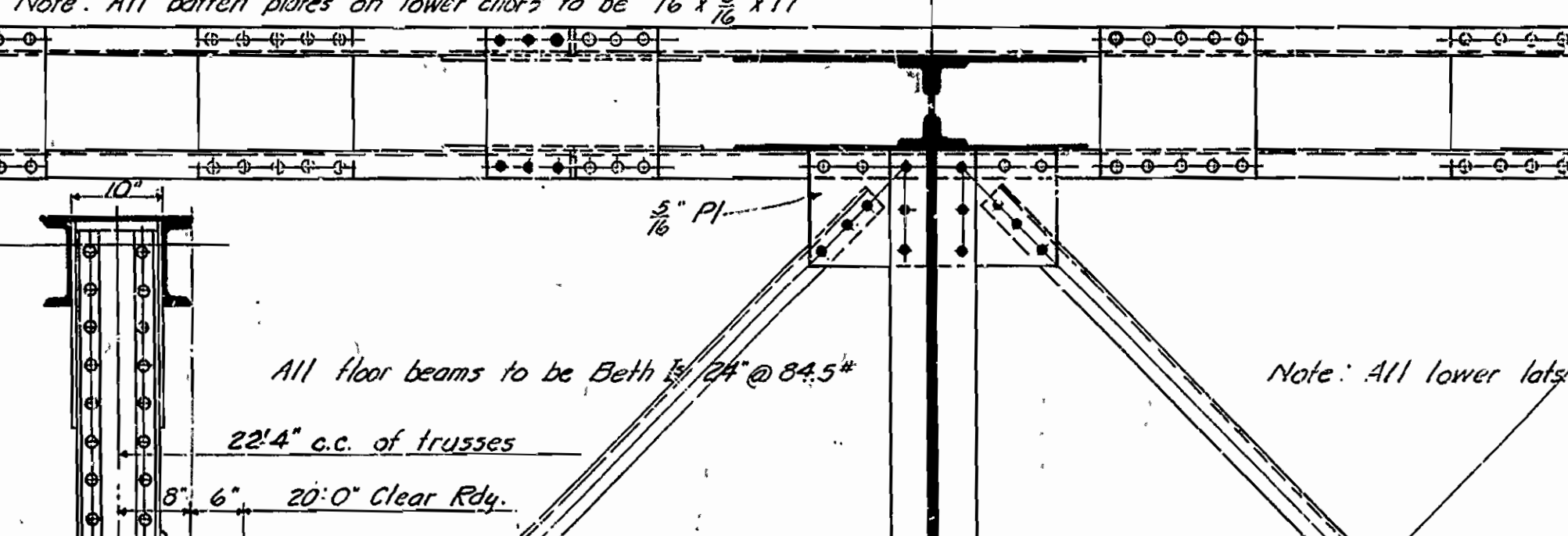
Use Fixed shoes Both Ends Bridge #1549

Note: All batten plates on lower chors to be 16' x 5/8" x 17"

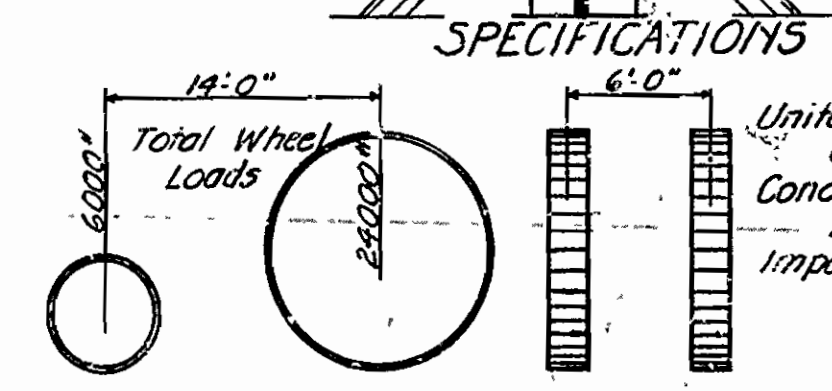


FLOOR BEAM DATA

| | | |
|-----------------------------|----------------------------|------------|
| D.L.M. | 31,512 x 22.33 x 1.5 | 1,055,000" |
| L.L.M. | | 1,934,592" |
| Imp. Mod. @ 30% | | 380,380" |
| Total Mod. | | 3,369,972" |
| Reqd. Sec. Mod. | 3,569,972 ÷ 18,000 = 198.4 | |
| Sec. Mod of 24" B.I @ 84.5" | | 200.5 |



Note: All lower lats to be 3" x 2 1/2" x 1/2" angles



ESTIMATED QUANTITIES

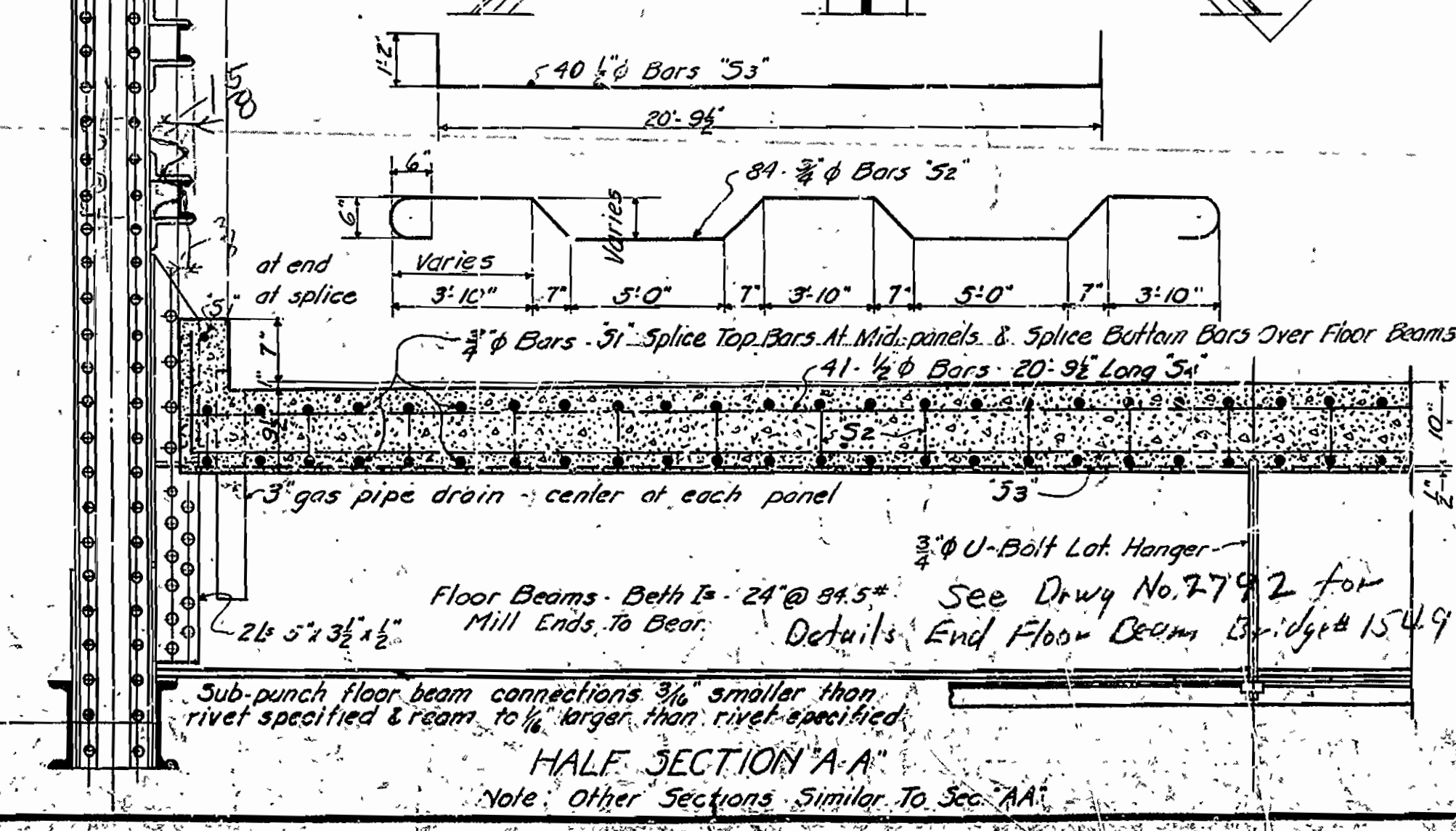
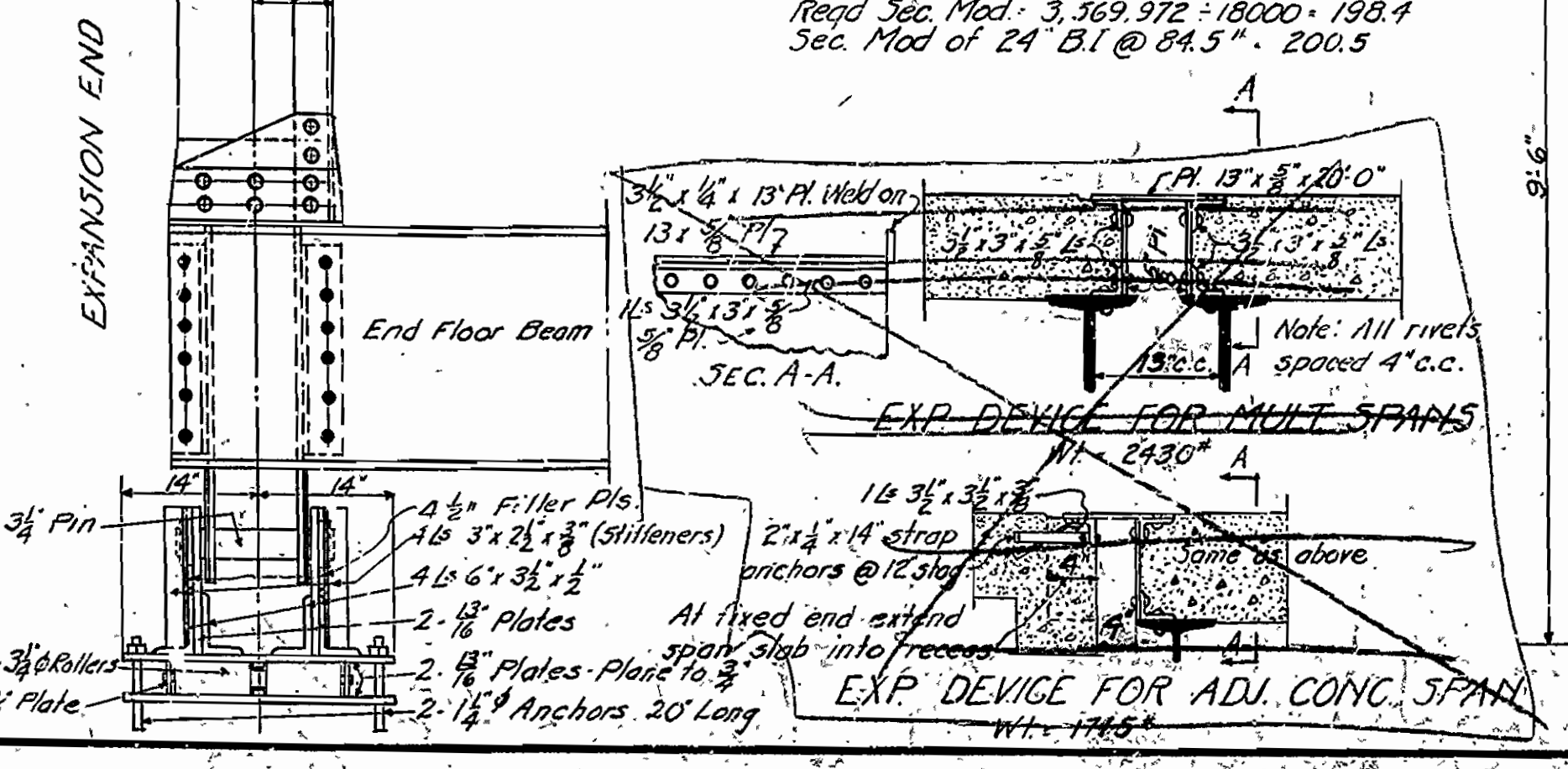
| | |
|-----------------------------------------------|-----------------------|
| Structural Steel Without Expansion Devices | 61,285 Lbs. (Se. Wt.) |
| Reinforcing Steel (0.10 0 of End Floor Beams) | 10,472 Lbs. |
| Class 5 Concrete (0.10 0 of End Floor Beams) | 54.9 Cu. Yds. |

Revised 5-2-29
 Splicing of 3" Bars in Floor Slab & Lateral Lag Angles by H.B.
 For General Reference by H.B.

This drawing included in Job 2447 for information only.

**STANDARD PLAN
 80'0" LOW TRUSS SPAN
 20'0" CLEAR ROADWAY
 ARKANSAS STATE HIGHWAY DEPARTMENT
 LITTLE ROCK, ARK.**

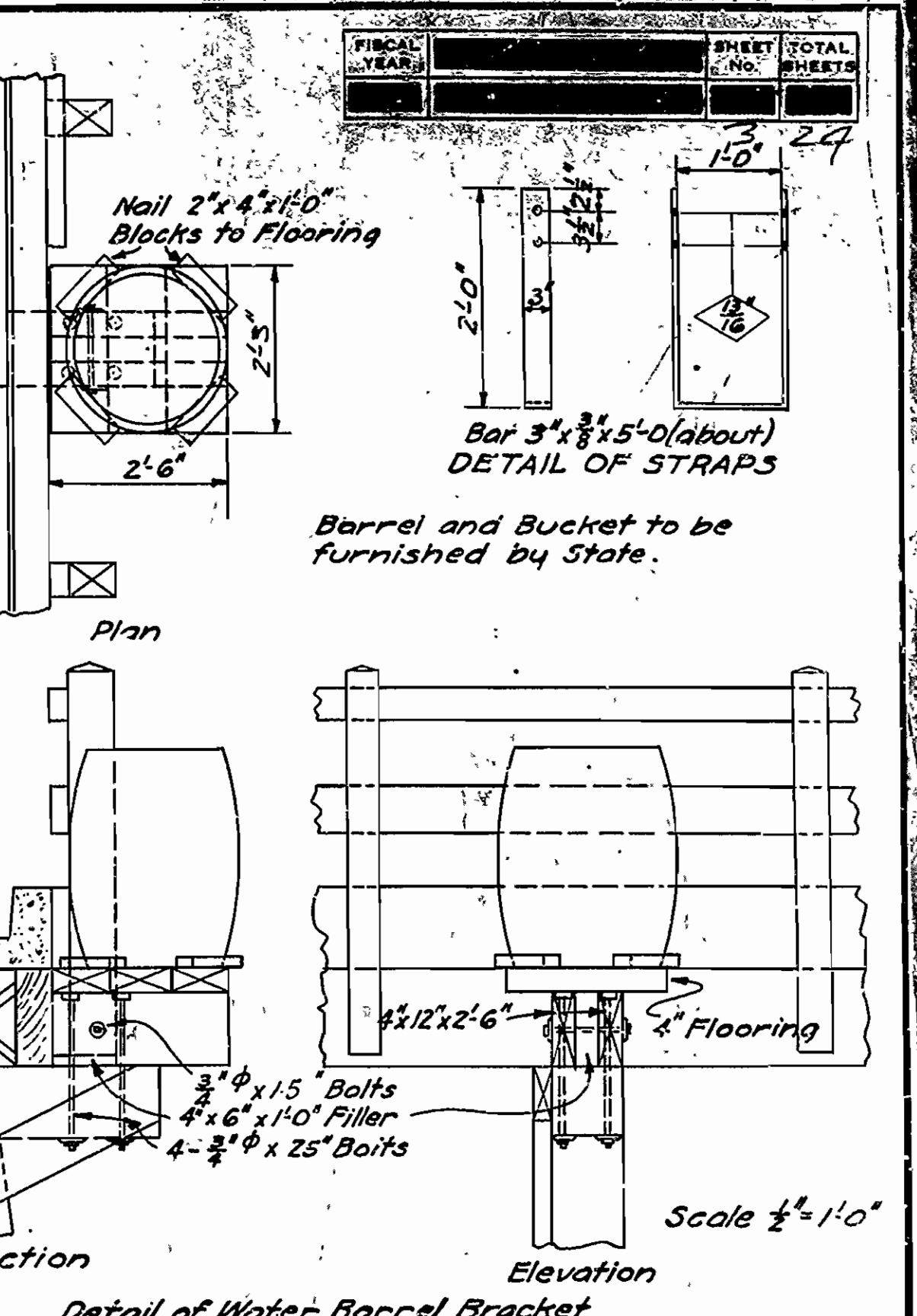
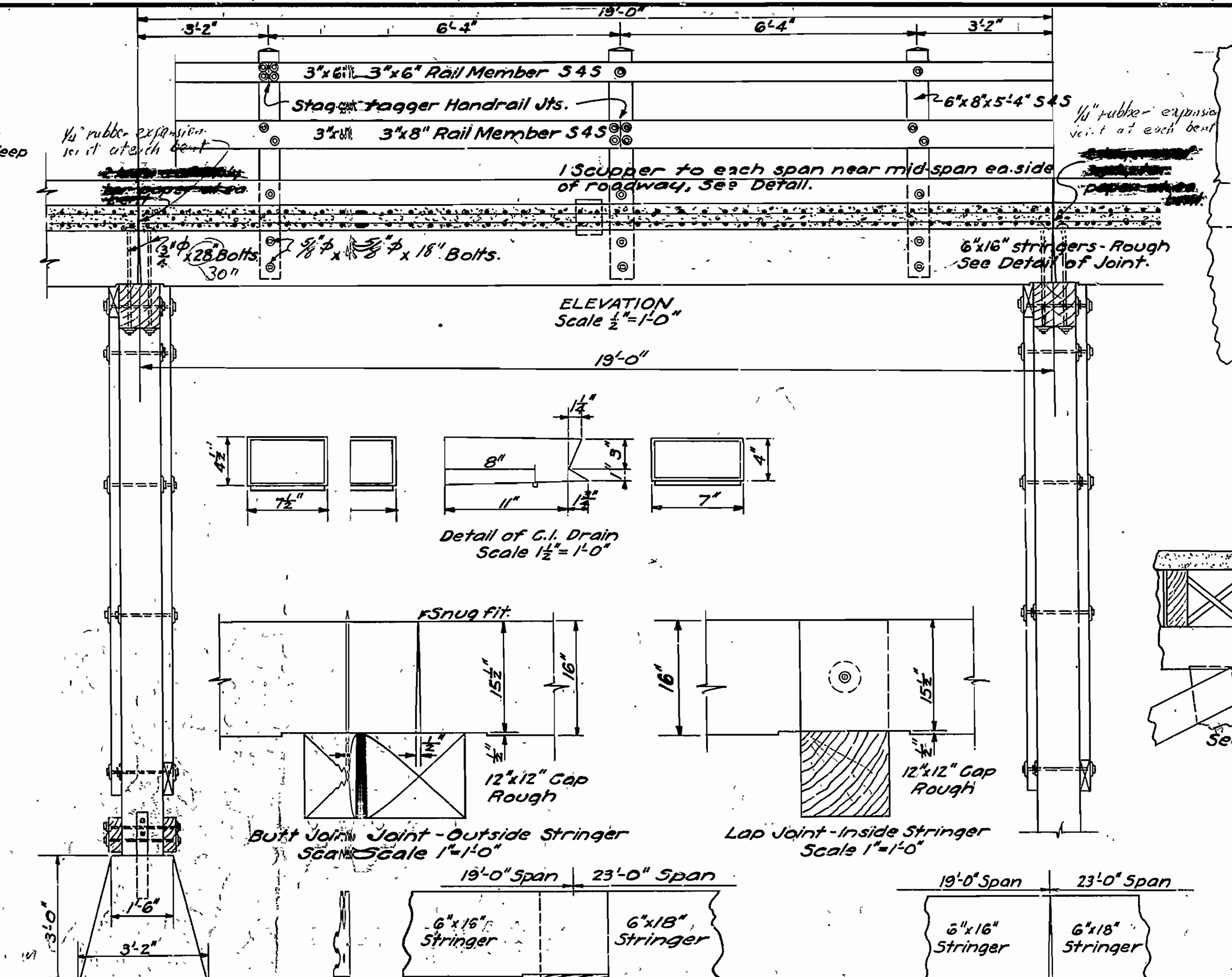
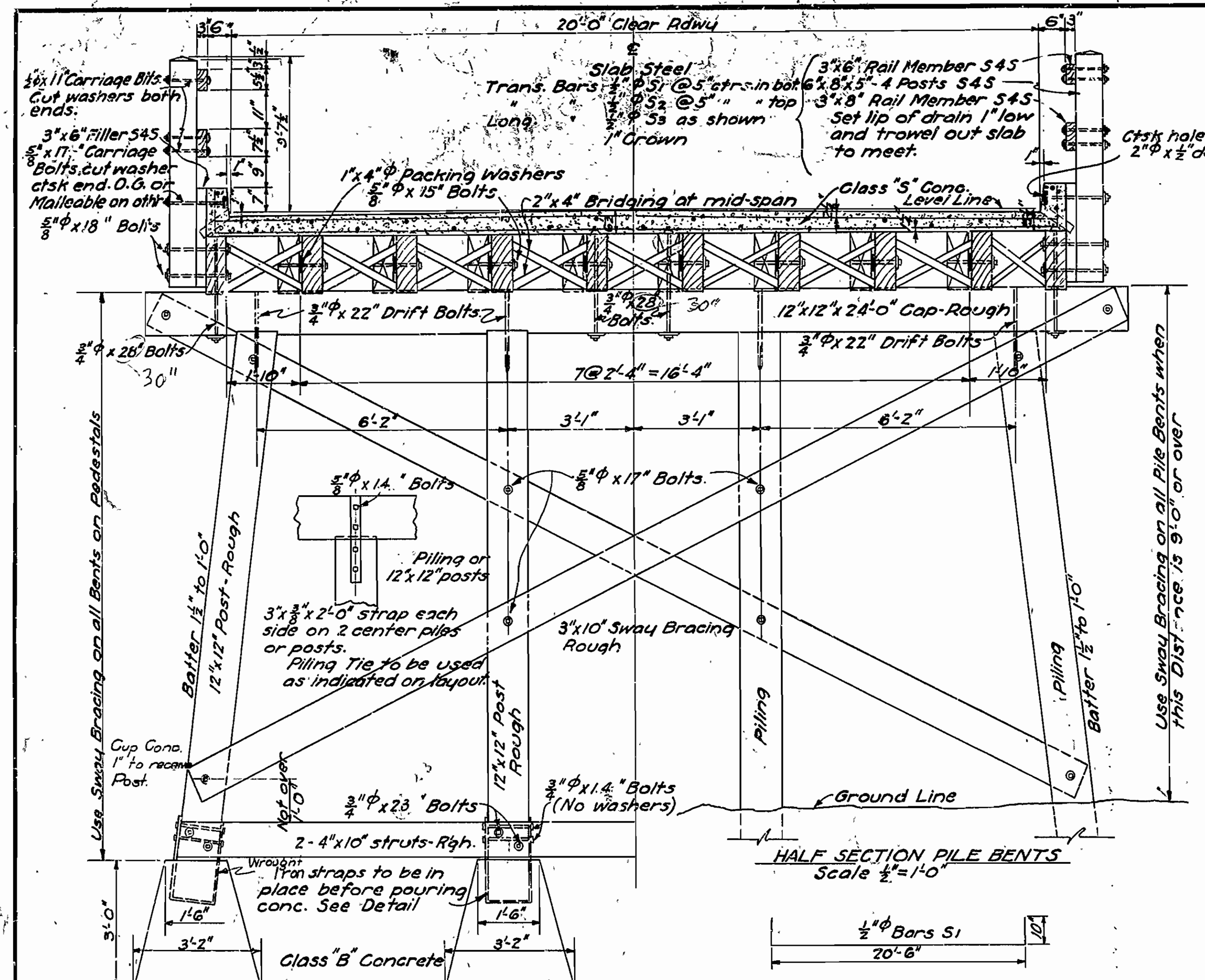
Drawn By: NOE Date: _____
 Traced By: NOE Date: _____
 Checked By: Beck Date: 1-11-29
 BRIDGE NO. _____ DRAWING NO. 1093



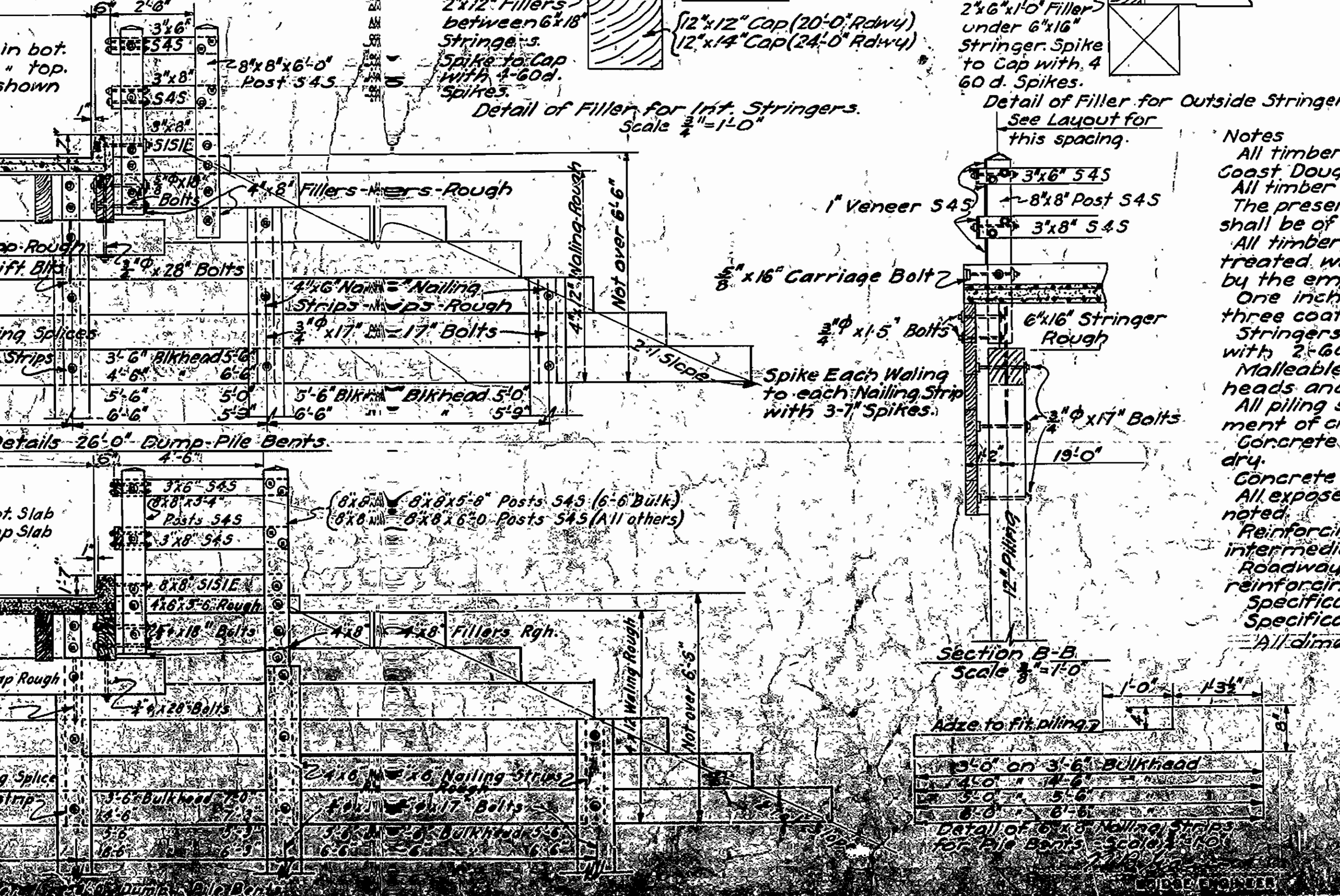
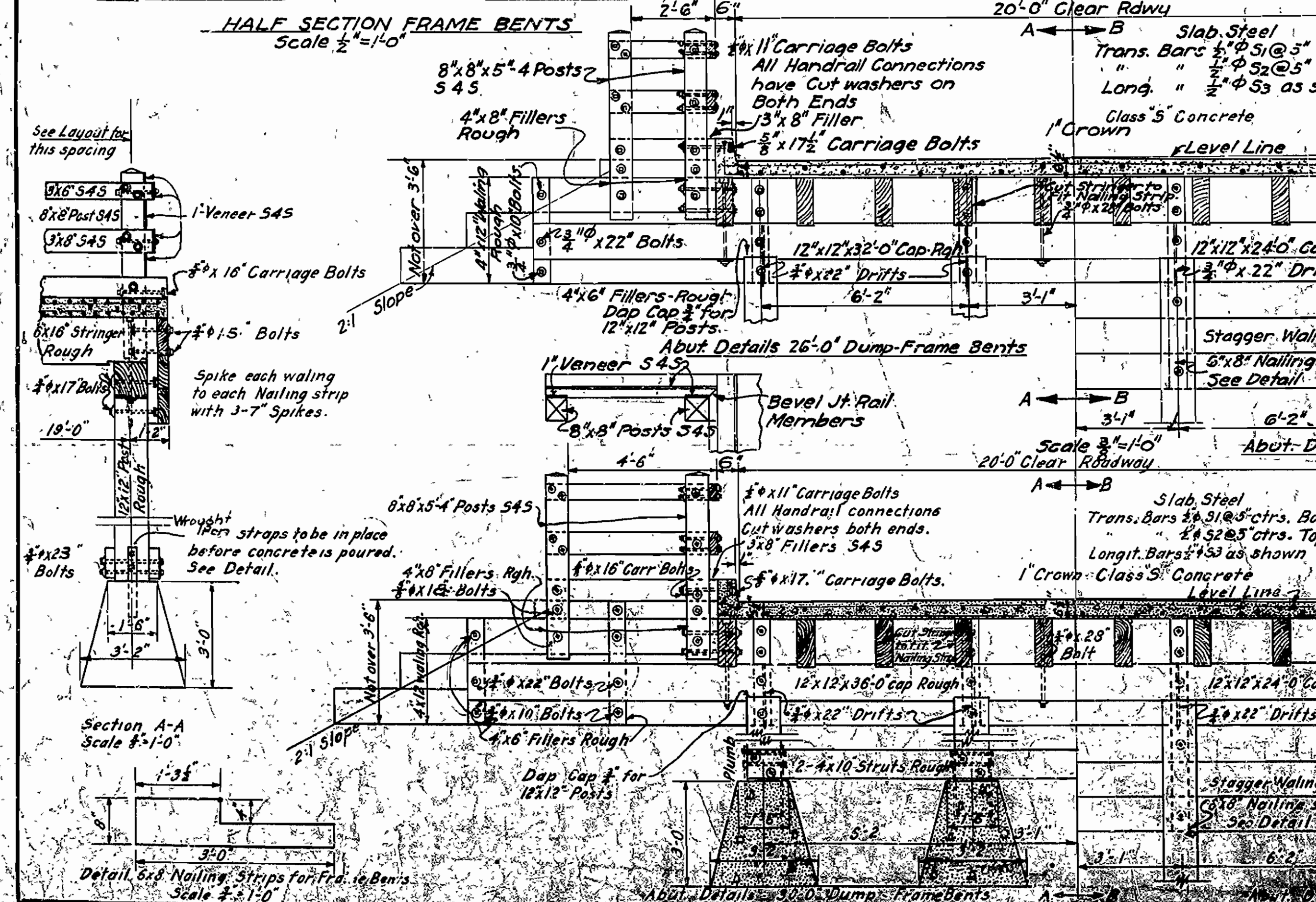
Rivets to be 3/8" in diam.
 Open holes: Sub-punch rivet holes in main members (both shop & field holes) 1/16" smaller than rivet specified and ream to 1/16" larger than rivet specified after assembly in shop, and mark marked.
 All field connections riveted. Rivet holes in tension members so spaced that only one hole is deducted from each angle at the point of maximum stress. Deduct two web holes and one flange hole from each channel 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 engr.
 Batten pls. to be spaced not over 3'0" c/c's on tension members.
 Concrete floor slab - Class 5 - Extra 1" added for wear.
 Stringers & floor beams to be milled to exact length.
 Members of equal or greater strength may be used in place of members shown here, but payment will be made in accordance with sizes shown on this plan.
 This drawing is general only. Shop drawings must be made in compliance with specifications, must be submitted & approved before fabrication begins.
 Specifications: Ark. State Highway Dept. 1-13-29
 Specifications adopted 3-30-23
 and revised

See Drawg No. 2792 for Details End Floor Beams Bridge #1549

Note: Other Sections Similar To Sec. AA



| Material | Quantity | Notes |
|-------------------------|--------------|-------|
| Treated Timber | | |
| Rail Posts | 6x8, 8x8" | S45 |
| " Members | 3x6, 3x8" | S45 |
| " Post Fillers | 3x6, 3x8" | S45 |
| Felloe Guard | 8x8" | S151E |
| Stringers | 6x16" | Rough |
| Bridging | 2x4" | " |
| Caps | 12"x12" | " |
| Walling | 4x6, 4x12" | " |
| Fillers | 4x6, 4x8" | " |
| Nailing Strips | 4"x6", 6"x8" | " |
| Sway Bracing | 3"x10" | " |
| Posts (Frame Bent Only) | 12"x12" | " |
| Struts | 4"x10" | " |
| Supports (Water Abl.) | 4"x10" | " |
| Flooring | 2"x4" | " |
| Blocks | 2"x4" | " |
| Fillers | 4"x6" | " |
| Untreated Timber | | |
| Veneer | 1x6, 1x8" | S45 |



Notes
Veneer
All timber and piling to be Southern Yellow Pine or Pacific Coast Douglas Fir
All timber to be framed and bored before treatment.
The preservative used for the treatment of timber and piles shall be of Grade 1 of Creosote Oil for Structural Timber.
All timber, except 1" Veneer on Handrail Turnouts, shall be treated with a ten (10) pound treatment of creosote oil by the empty cell process.
One inch veneer boards on handrail turnouts to be given three coats of white lead paint.
Stringers to be dapped, at ends and to be spiked to cap with 2-60 d. nails in each end of stringer.
Malleable or cast iron washers to be used under all heads and nuts of machined bolts unless otherwise noted.
All piling shall be treated with twelve (12) pound treatment of creosote oil by the empty cell process.
Concrete pedestals to be Class "B" and to poured in the dry.
Concrete deck to be Class "S"
All exposed corners to have 3/4" chamfer unless otherwise noted.
Reinforcing steel to be deformed bars of structural or intermediate grade.
Roadway drains to be paid for at unit price bid for reinforcing steel.
Specifications: Ark. Standard Road & Bridge Specifications, adopted May 30, 1925 & Revised.
All dimensions shown are center to center of bars.

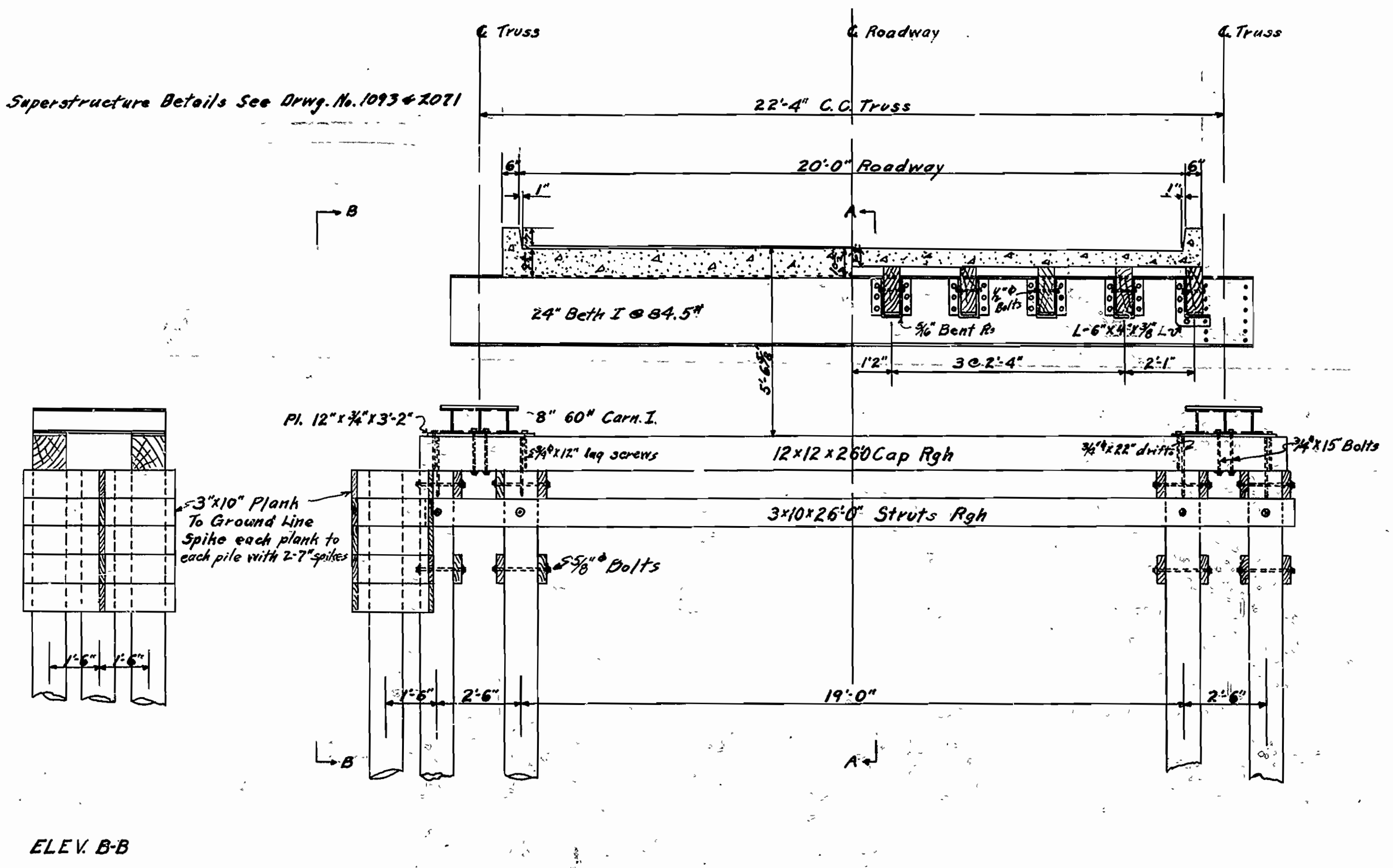
DETAILS
19'-0" STANDARD TIMBER TRESTLE
CONCRETE FLOOR 20'-0" CLEAR RDWY.

ARKANSAS STATE HIGHWAY DEPARTMENT
LITTLE ROCK, ARK.

DRAWING NO. 2071

| | | | |
|-------------|---------|-----------|--------------|
| FISCAL YEAR | Job No. | SHEET NO. | TOTAL SHEETS |
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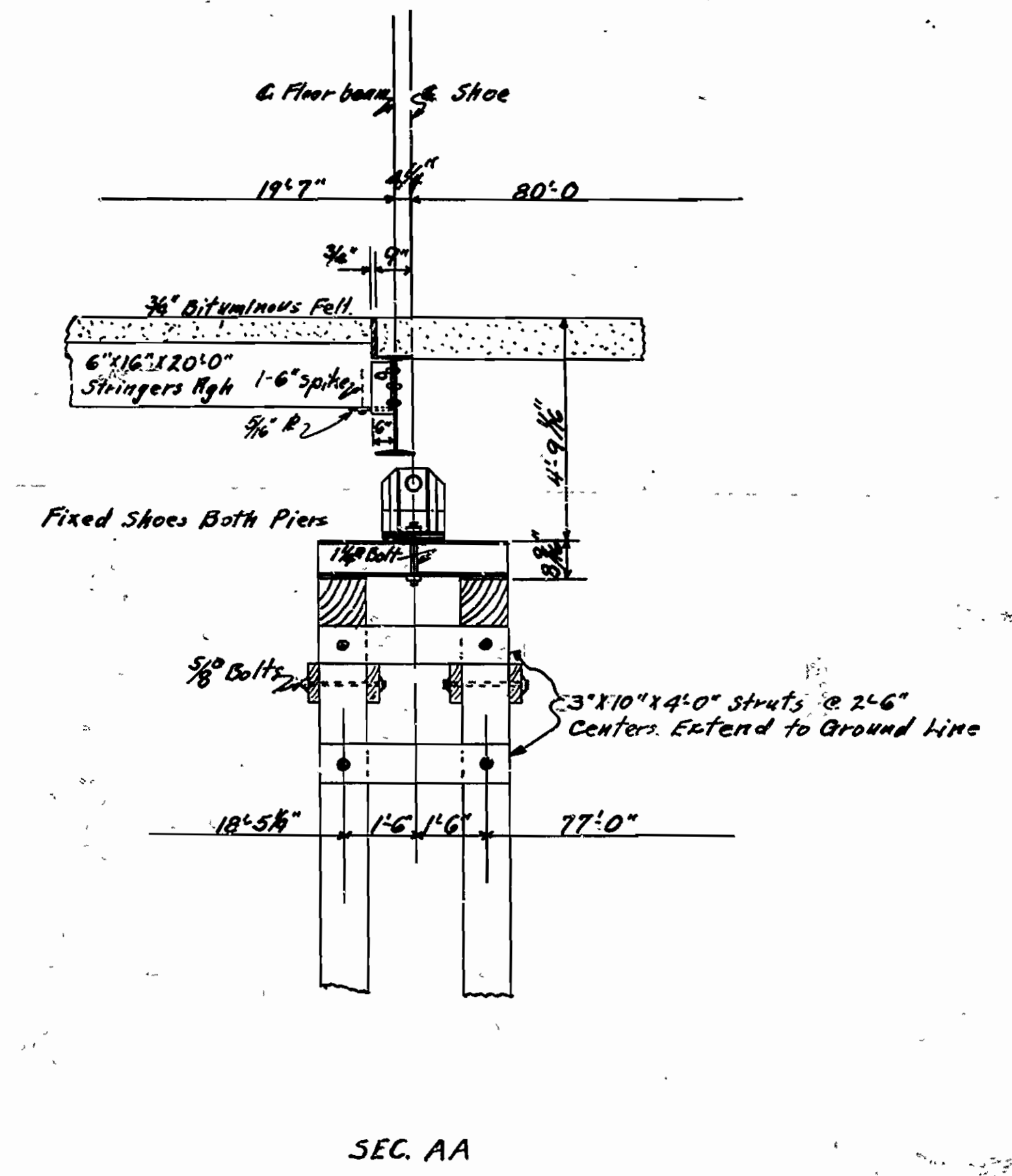
For Superstructure Details See Drwg. No. 1093 & 2071



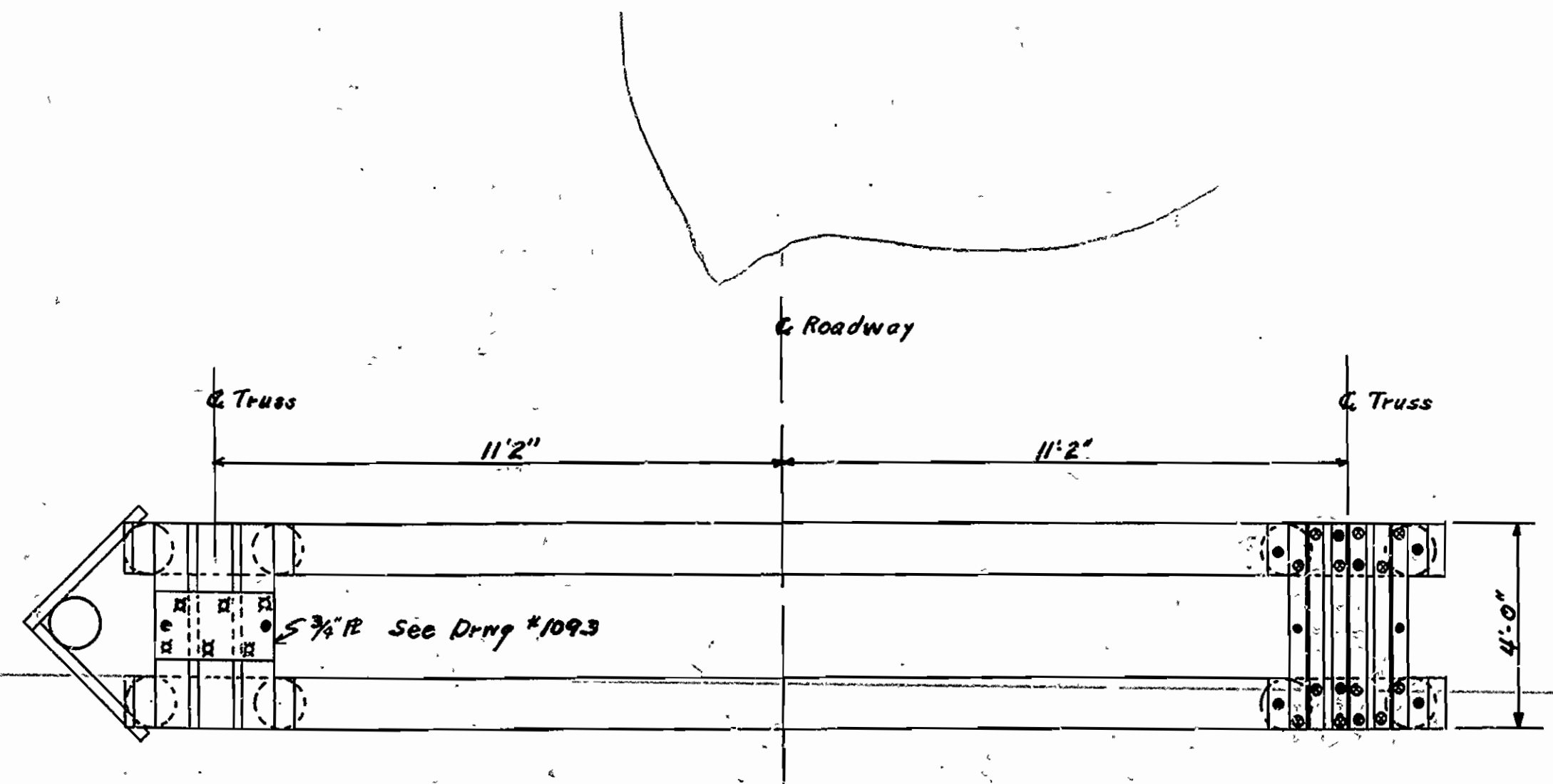
ELEV. B-B

HALF ELEV. OF PIER FROM STEEL SPAN SIDE
 Note: Nose is on Upstream End of Pier Only.

HALF ELEV. OF PIER FROM TREATED TIMBER SPAN SIDE



SEC. AA



PLAN

DETAILS OF
 PIERS
 FOR BRIDGE OVER BIG CORNIE CK.
 ELDORADO-LA. STATE LINE
 UNION CO.
 ROUTE 15 SEC. 1

ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

Drawn By: *FPB* Date: 7-1-30
 Traced By: *FPB* Date: 7-1-30
 Checked By: _____ Date: _____
 BRIDGE NO. 1549 DRAWING NO. 2792

M.P. Lewis
 BRIDGE ENGINEER

Scale: 3/8" = 1' ft.