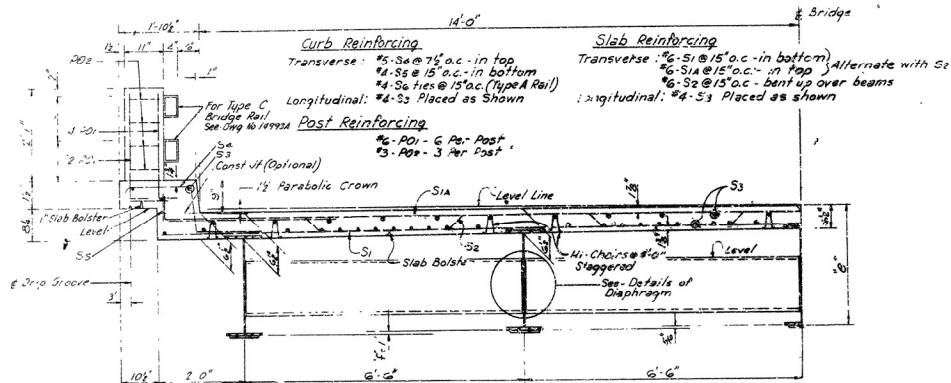
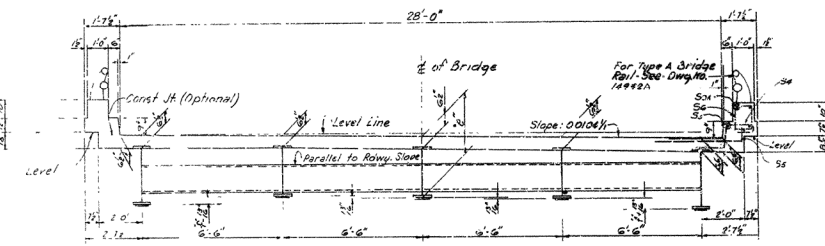


| PER. ROAD | STATE | PER. A.D. | F. ROAD | ENGR. | TOTAL |
|-----------|-------|-----------|---------|-------|-------|
| 6 | ARK | 11700 | 16 | 51 | |
| JOB NO. | 11700 | | | | |
| SHEET NO. | 16 | | | | |



HALF SECTION A-A OF REGULAR SPAN-PARABOLIC CROWN
Regular spans have all beams of equal depth.
3/8" = 1'-0"



SECTION A-A OF MODIFIED SPAN-SLOPED ROWY

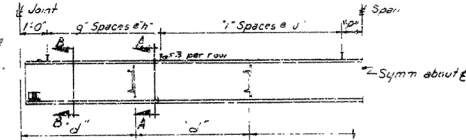
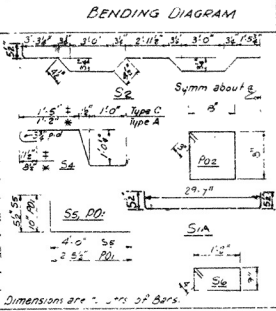
Interior beams are same as in regular spans. Exterior beams are the lightest section of the same nominal depth as beams for longest span shown on Bridge Layout.
3/8" = 1'-0"

Note: 1" = difference in depth between Interior and Exterior Beams

| | | Interior Beam | | | | Exterior Beam | | | | Diaphragm | | Post | | Variables of Shear Connector Spacing | | | |
|-----|--------|---------------|-----------|---------|----|---------------|---------|----|-----------|-------------------|--------------|---------|----|--------------------------------------|---|----|----|
| No. | Length | Type | Beam Size | Cover R | p | Beam Size | Cover R | p | Beam Size | Diaphragm Spacing | Post Spacing | a | b | c | d | e | f |
| 1 | 20'-0" | Reg. | 24" x 48" | 7-5/8" | 23 | 24" x 48" | 7-5/8" | 23 | 24" x 48" | 7-5/8" | 23 | 7-5/8" | 23 | 3 | 0 | 15 | 14 |
| 2 | 30'-0" | Reg. | 36" x 60" | 10-1/8" | 31 | 36" x 60" | 10-1/8" | 31 | 36" x 60" | 10-1/8" | 31 | 10-1/8" | 31 | 3 | 0 | 22 | 21 |

Table Data 1-28-69 UAS

| | | LENGTH OF SPAN | | NUMBER REQUIRED EACH SPAN | |
|-----|------|----------------|----------|---------------------------|-----|
| NK | SIZE | LENGTH | PIN DIA. | SP | FS |
| S1 | 6 | 28'-0" | 5/8" | 32 | 64 |
| S1A | 6 | 36'-0" | 5/8" | 32 | 64 |
| S2 | 6 | 31'-2" | 5/8" | 31 | 63 |
| S3 | 4 | 5'-6" | 5/8" | 12 | - |
| S3A | 4 | 5'-7" | 5/8" | - | - |
| S3B | 4 | 5'-10" | 5/8" | - | 216 |
| S4 | 5 | 2'-5" | 1/2" | 12 | 256 |
| S5 | 4 | 4'-5" | 1/2" | 6 | 128 |
| S6 | 4 | 4'-5" | 1/2" | - | - |
| S6A | 4 | 3'-7" | 5/8" | - | - |
| PO1 | 6 | 3'-3" | 2 1/2" | 72 | 134 |
| PO2 | 3 | 3'-1" | 1 1/2" | 148 | 88 |



SPACING FOR 3/4 STUD SHEAR CONNECTORS & DIAPHRAGMS

OPTIONAL CHANNEL SHEAR CONNECTORS

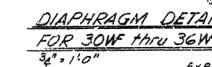
NOTE: 1/2" Stud 1/2" x 1/2" was used in place of the 3/4" Stud 1/2" x 1/2" at the ends of the bridge. The stud connectors shall be 1/2" long and may be attached to the slab flange or equal, and automatically be welded to the main reinforcement in accordance with recommendations of the manufacturer. Spacing shall be as shown in detail for measurement of structural steel in shear connector.

THIS DRAWING TO BE USED WITH DRAWING 149000.
LOADING: ~~AS SHOWN~~ 14320

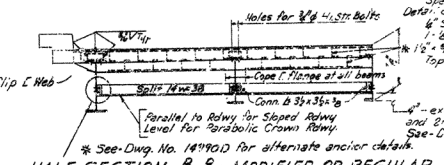
| | INTERIOR BEAM | EXTERIOR BEAM |
|---|----------------------------|----------------------------|
| 1. Over Load: (Type A Rail) | | |
| a. To W. Beam (Without Const. Jt.) | 528W" + 1.15W" (ft. of Wf) | 600W" + 1.15W" (ft. of Wf) |
| b. To Composite Beam (Without Const. Jt.) | 528W" + 1.15W" (ft. of Wf) | 454W" + 1.15W" (ft. of Wf) |
| 14. Dead Load: (Type C Rail) | | |
| a. To W. Beam (Without Const. Jt.) | 528W" + 1.15W" (ft. of Wf) | 700W" + 1.15W" (ft. of Wf) |
| b. To Composite Beam (Without Const. Jt.) | 528W" + 1.15W" (ft. of Wf) | 454W" + 1.15W" (ft. of Wf) |



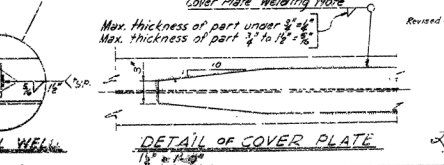
DIAPHRAGM DETAIL FOR 21W THRU 27W
3/8" = 1'-0"



DIAPHRAGM DETAIL FOR 30W THRU 36W
3/8" = 1'-0"



HALF SECTION B-B - MODIFIED OR REGULAR SPANS
3/8" = 1'-0"



DETAIL OF COVER PLATE
1 1/2" = 1'-0"

EXPANSION DEVICE
Roadway 15' x 33' 9" x 28'-0"
Conn. B 6" x 3/4" x 10'-0"
Performed, and Shrinker See Special Provisions
Detail device B high & provide 6" Shims using 2" x 6" x 6" B.
1/2" x 1/2" x 1'-0" Straps @ 15' c/c Top & Bottom
except when using 21W and 27W @ 2" @ 6" Beam See Dwg. No. 149900

UNIT STRESSES:
Class 5 Concrete (4-10) 1,200 psi
Structural Steel (A-36) 20,000 psi
Reinforcing Steel 20,000 psi

DETAILS OF STANDARD 35'-30' COMPOSITE I-BEAM SPANS
28'-0" CLEAR ROWY, 0'-6" CURBS
1 1/2" PARABOLIC CROWN
OR
0.0104 1/4 SLOPED ROWY.
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: J.S. DATE: 8-16-67
TRACED BY: DATE: 8-16-67
CHECKED BY: F.H.H. DATE: 8-16-67
BRIDGE NO. 5223 DRAWING NO. 15829

L.P. Carlson
PRINCIPAL ENGINEER