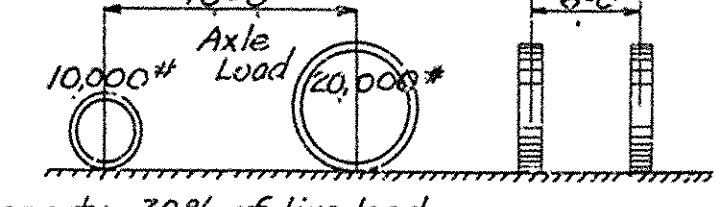


**SPECIFICATIONS**

Live Load - Uniform - 80 lbs. per square foot of roadway  
 Concentrated - Two 15-Ton Trucks as shown below.



Impact - 30% of live load.  
 Unit Stresses - See Arkansas Highway Department Specifications.  
 Rivets - 3/4" diam. except in flanges of channel.  
 Open Holes - 1/8" diam.

**STRINGERS**  
 D.L.M. =  $\frac{1}{8} \times 74 \times 16.67^2 = 2,565\#$   
 L.L.M. =  $\frac{1}{4} \times 56,000 \times 16.67 = 23,350$   
 Impact 30% = 7,005  
 Total = 32,920#  
 $\frac{32,920 \times 12}{16,000} = 24.6 = \text{Sec. Mod. Req'd.}$   
 Use 10" - 25.4# I-beam - Sec. Mod. = 24.4

**FLOOR BEAMS**  
 D.L.M. =  $\frac{1}{8} \times 635 \times 20^2 = 31,750\#$   
 L.L.M. =  $3 \times 24,000 - 6 \times 12,000 = 132,000$   
 Impact 30% = 39,600  
 Total = 205,350#  
 $\frac{205,350 \times 12}{16,000} = 152.7 = \text{Sec. Mod. Req'd.}$   
 Use 24" - 79.9# I-beam - Sec. Mod. = 173.9

**STANDARD PLAN**

100-FT. STEEL HIGHWAY BRIDGE  
 18' ROADWAY

ARKANSAS HIGHWAY DEPARTMENT  
 LITTLE ROCK, ARK.  
 Aug. 1922

Approved: Commissioner State Lands, Highways & Improvements

By: State Highway Engineer

STATE STANDARD No. F-410A

DETAIL OF SUPPORT FOR LATERALS  
 U-Bolt  
 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 boiled linseed oil.  
 Field Paint - Two coats of different colors as approved by the engineer.  
 Batten plates spaced not more than 3'-0" c. to c.  
 Estimated weight of steel = 74,400#  
 Lumber = 10,070 Ft. B.M.

DESIGNED	N. B. G.
TRACED	E. H. F.
CHECKED	
REVISIONS	

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