

Proposals, Specifications and Plans,

Submitted by

Wrought Iron Bridge Co.,

Canton, Ohio.

L. W. Finley, Agent, Castle Fin, York Co., Pa.

Wrought Iron Bridge Co.

Proposal.

To the Honorable

Joint Board of Com^{ee}s Cumberland & York Cos.
County, State of Pa

of

Sirs:---The Wrought Iron Bridge Co., of Canton, Ohio, propose to do all the work, and furnish all the material of every description, requisite and necessary to complete in a workmanlike manner, and ready for travel, the superstructure for a Wrought Iron
Bridge over Yellow Branches
in said County and State; at the prices specified below.

Said Bridge to be built in accordance with annexed specifications and drawings.

160 x 18 Span \$34⁴⁵ per linear foot.

133 x 16 " 27¹⁰ " " "

Should either the above proposals be accepted, we hereby agree to enter into contract with your honorable Body for the
building of said Bridge, with full plans and specifications of such Bridge as your Honors may adopt, to be annexed to, and form part
of said contract.

Very respectfully,

WROUGHT IRON BRIDGE CO.

By Foley & Archie Agent.

York Pa
Sept 12, 1889

Wrought Iron Bridge Co.

Specification for Iron Truss Bridge.

over Yellow Branches Creek at on Turnpike
~~between Cumberland & York~~ County Pa

The form and numbers of chords and diagonals may be varied from sizes specified without reducing total panel section, and the form of compression members may also be varied without reducing total value of cross section, as determined by formulas specified.

For Upper Chord and end Post, sizes of rivets used to be as follows; in channels under 7 in., 1-2 in.; 7 to 12 in., 5-8 in.; 12 in., 3-4 in., spaced apart 3 in. for a distance from each panel point equal to width of plate, 6 in. for remaining distance, and lower flanges to be united by 4 inch 1/4 bars with two rivets at each end.

Tension Members when without adjustment, to be eyebars having die-forged or turned eyeheads; when with adjustment to have turned eyes and sleeve nuts, or screw ends with nuts, or both. Section at root of thread equal to body of bar. Section across eyes 1 1-3 to 1 3-4 times section of bar.

Rivets to be proportioned for a maximum bending strain on extreme fiber of 20000 lbs. per inch.

Rivets and Rivets proportioned for a maximum shear of 750 lbs. per inch and bearing of 1500 lbs. per inch, the diameter being one dimension.

Rollers under ends of trusses proportioned for maximum pressure in pounds per lineal inch of roller = $100 d^{1/3}$ where d = diameter of roller in inches, 8 = compression unit strain in tons.

Fences. Bridge to have — fences. Top rail to be — feet, lower rail 6 inches above footwalk floor. Top rail to be —. Lower rail to be —. Lattice bars —.

Painting. All inner surfaces of iron work to have one coat of Iron Clad Paint, mixed with pure boiled linseed oil, before riveting parts together, all exposed surfaces of iron work to have one coat of said paint at shop, a second coat of same after erection of bridge. In case weather will not permit painting bridge said last coat at time of completion, it is not to prevent acceptance of the work, but a sufficient amount of contract price may be retained to guarantee said painting as soon as weather will permit.

Roadway Joists to be 3 x 12, oak lumber, 16 lines in each roadway.

Roadway Floor to be 2 1/2 inch oak plank, 6 to 12 inches wide, well spoked to joists.

Guard Rail to be 4 by 6

Hub Plank to be 2 lines 2 by 6 Dressed Pine, on each truss.

Footway Joists to be —, — lumber, — lines in each footway.

Footway Floor to be — inch — plank, 6 to 12 inches wide, well spoked to joists.

2 - 10" - $10\frac{1}{2}^{\prime \prime}$ L
1 - 16 $\frac{1}{2}^{\prime \prime}$ PL.

2-10" 22 1/2"
1-16 x 1/4 "

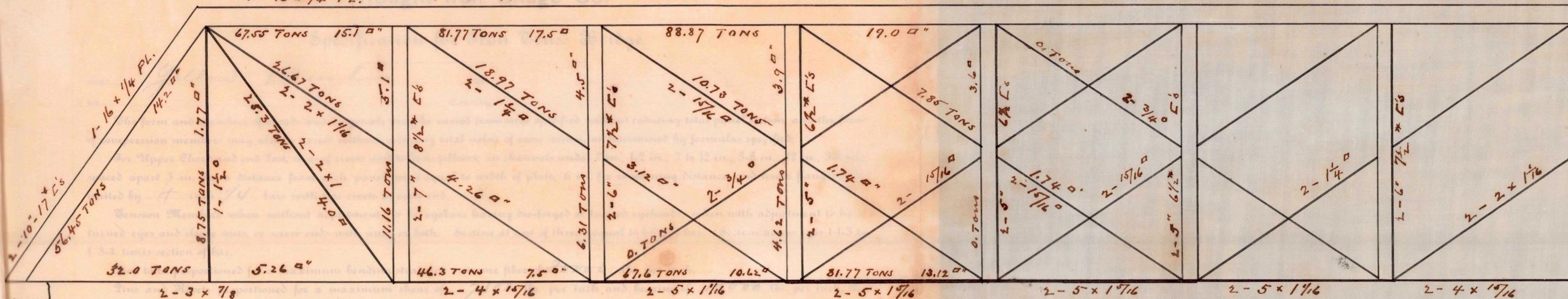
2-10" - 25^{*}
1-16 x 74

2-10" 25"
1-16 1/4 PL

2-10" 25" L.
1-16 x 1/4 PL.

2-10" 25⁴ CS
1-16 x 1/4 PL.

2-10 " 22 1/2" L
1-16 x 74 PL.



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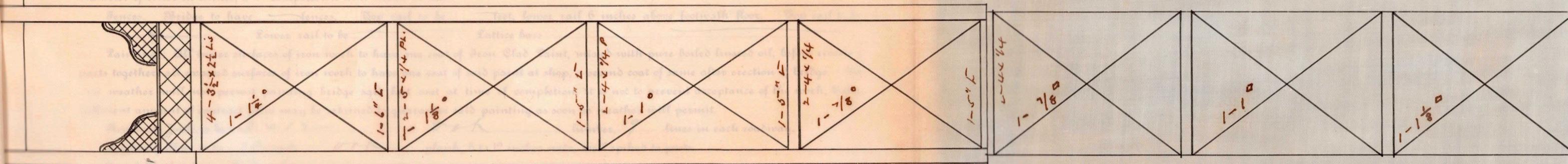
This is a $2 - 3 \times \frac{7}{8}$ positioned for a man
diameter being one dimension.

~~2 - 4 x 1⁵/16~~ ~~2 - 5 x 1¹/16~~

$$2 = 25 \times 15\%$$

2-5 x 1%6

2-4 x 15716



Bram

Iron Bridge

2-10" 22½" L's
1-16 x ¼ PL.

2-10" 25" L's
1-16 x ¼ PL.

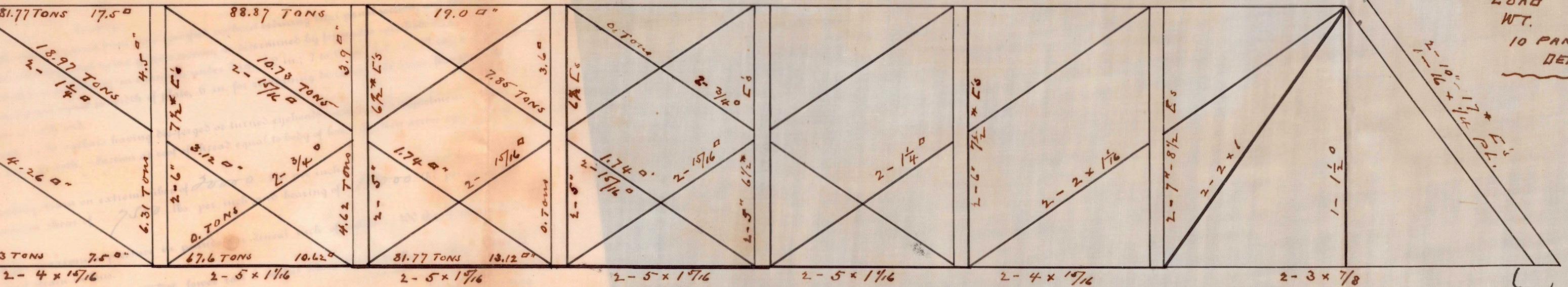
2-10" 25" L
1-16 x ¼ PL.

2-10" 25" L's
1-16 x ¼ PL.

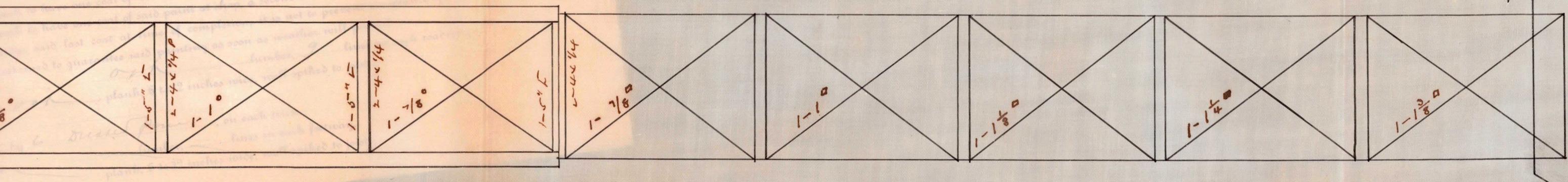
2-10" 25" L's
1-16 x ¼ PL.

2-10" 22½" L's
1-16 x ¼ PL.

2-10" 18½" L's
1-16 x ¼ PL.



160 SPAN x 18
LOAD 1800*
WT. 820*
10 PANELS
DEPTH 2.3'



Braam 26 x 1/4 PL
4- 3 1/2 x 2 1/2 L's 6 1/2"

Wrought Iron Bridge Co.

Specification for Iron Truss Bridge.

over Yellow Breeches at
in. County,

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Tension Members when without adjustment, to be eyebars having die-forged or turned eyeheads; when with adjustment to have turned eyes and sleeve nuts, or screw ends with nuts, or both. Section at root of thread equal to body of bar. Section across eyes 1 1-3 to 1 3-4 times section of bar.

Pins to be proportioned for a maximum bending strain on extreme fiber of 2000 lbs. per inch.

Pins and Rivets proportioned for a maximum shear of 750 lbs. per inch and bearing of 1500 lbs. per inch, the diameter being one dimension.

Rollers under ends of trusses proportioned for maximum pressure in pounds per lineal inch of roller = $100 d \sqrt{\frac{s}{3}}$ where d = diameter of roller in inches, s = compression unit strain in tons.

Fences. Bridge to have fences. Top rail to be feet, lower rail 6 inches above footwalk floor. Top rail to be Lattice bars.

Painting. All inner surfaces of iron work to have one coat of Iron Clad Paint, mixed with pure boiled linseed oil, before riveting parts together, all exposed surfaces of iron work to have one coat of said paint at shop, a second coat of same after erection of bridge. In case weather will not permit painting bridge said last coat at time of completion, it is not to prevent acceptance of the work, but a sufficient amount of contract price may be retained to guarantee said painting as soon as weather will permit.

Roadway Joists to be 3 x 12, oak lumber, 9 lines in each roadway.

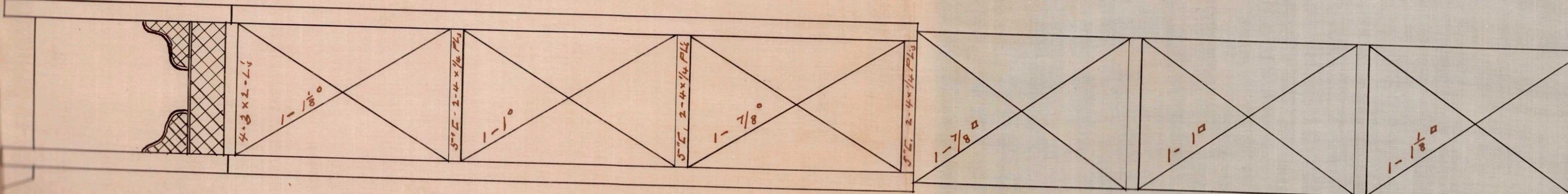
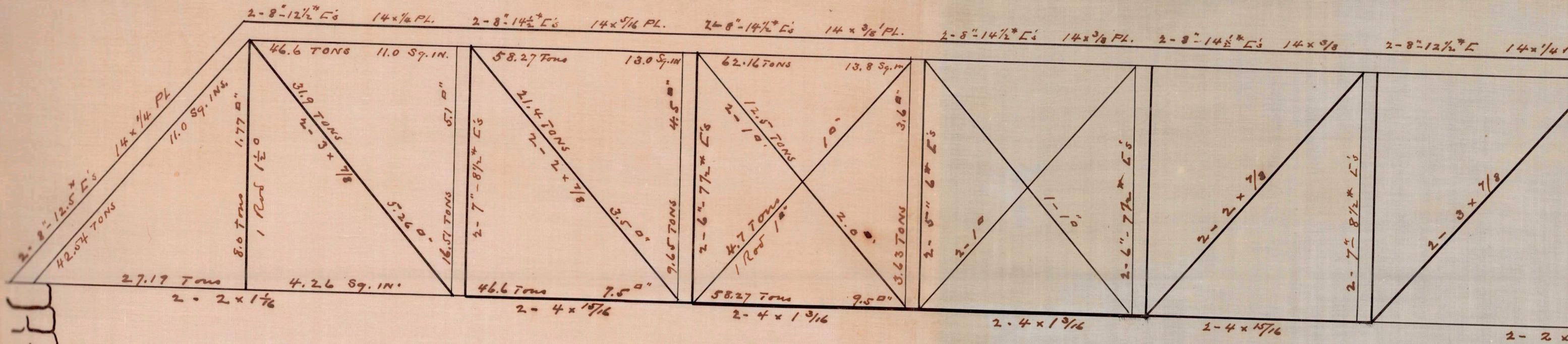
Roadway Floor to be 2 1/4 inch oak plank, 6 to 12 inches wide, well spiked to joists.

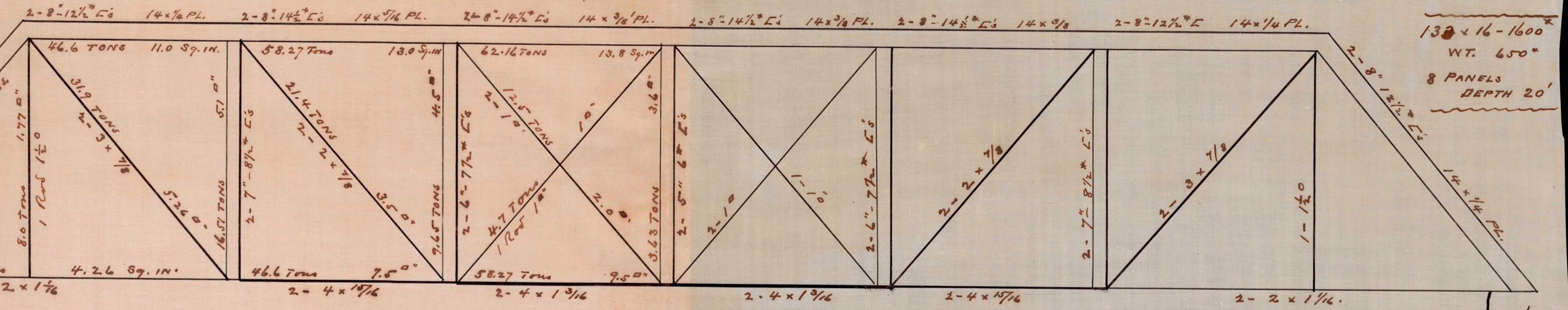
Guard Rail to be 4 by 6

Hub Plank to be 2 lines 2 by 6 Dressed pine, on each truss.

Footway Joists to be 1 lumber, 6 lines in each footway.

Footway Floor to be 1 inch plank, 6 to 12 inches wide, well spiked to joists.





132 x 16 - 1600

WT. 650*

8 PANELS DEPTH 20'

