

May 31st, 2017

RE: 41'-4" Rail Car Bridge Evaluation

Dear _____,

At your request, _____ performed a loading evaluation of the two rail cars, removed from your _____ for vehicle bridge use. The rail cars had been used as bridges at the _____ property _____ for a number of years. It is our understanding that this load evaluation will be used to aid in the sale of the two rail cars.

_____ visited the _____ on April 26th to measure the rail car member sizes for our evaluation model. During our visit, we performed a brief visual review of the rail car condition and observed that the structure of the cars are generally in good condition with some cosmetic wear to non-structural elements.

The results of our evaluation indicate the bridge is capable of supporting the following loading conditions:

- 2 axle delivery truck, maximum axle load is 32,000 pounds. May have tandem rear axles with a total combined load of 32,000 pounds. AASHTO equivalent loading designation H20-44
- 2 axle truck with trailer, maximum axle load is 24,000 pounds. Rear axle of truck and trailer axle may be tandem axles with a combined load of 24,000 pounds at each set of axles. AASHTO equivalent loading designation HS15-44

These loading conditions are for ordinary operational use of the bridge. Though the rail cars are capable of supporting the above listed vehicle loads, the calculated live load deflection of 1.55 inches exceed the allowable deflection limit of 1.00 inches, for road and highway bridges. Depending on the anticipated traffic over these rail cars, the deflection may not be an issue.

Feel free to contact our office if you have any questions regarding this bridge evaluation.

Sincerely,