



SOLUTIONS FOR THE BUILT WORLD

Fall 2015 Iowa DOT Vibration Seminar
Non-Historic Structures

W. Robert Hannen
rhannen@wje.com

WJE | ENGINEERS
ARCHITECTS
MATERIALS SCIENTISTS

Wiss, Janney, Elstner Associates, Inc.

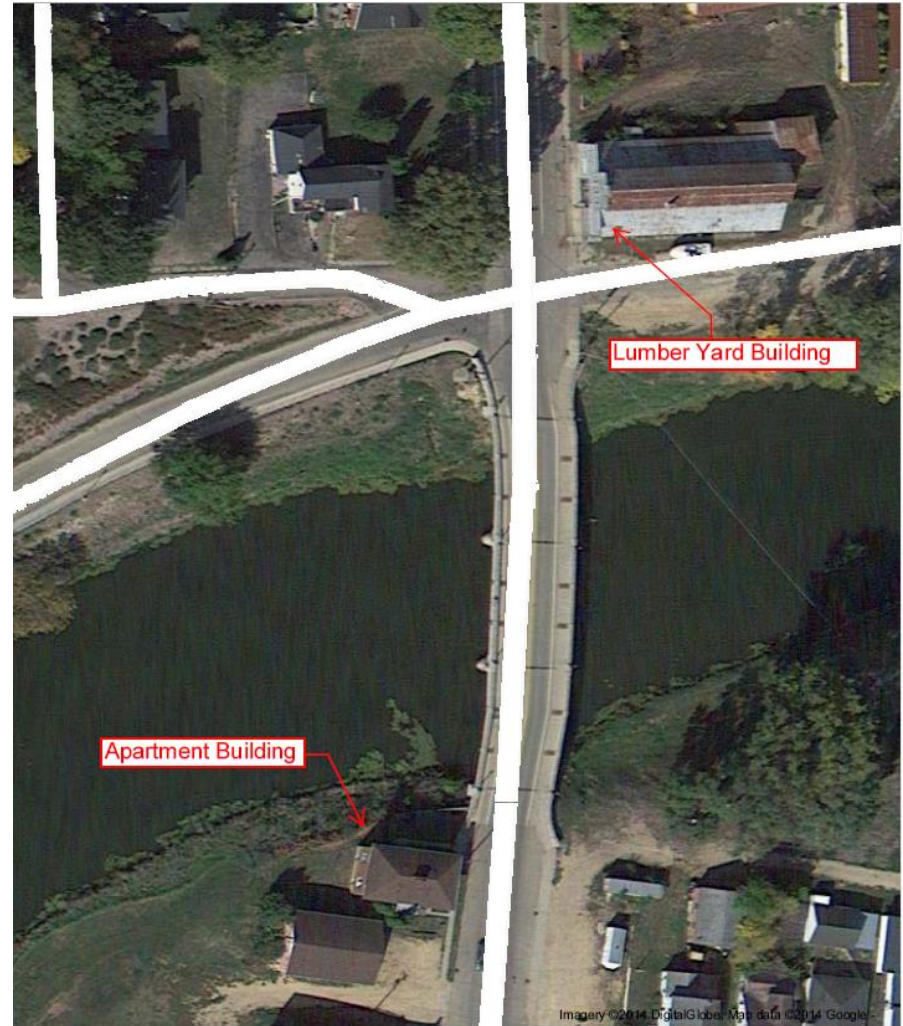


Protecting Non-Historic Structures

- What percentage of buildings near bridge/highway construction comprised historic structures?
 - Very small
 - Remainder of buildings are non-historic
 - They may be just as susceptible as historic structures
 - Possibly more susceptible

Protecting Non-Historic Structures

- Close, but not historic



Protecting Non-Historic Structures

- Close, but not considered significant



Protecting Non-Historic Structures

- Construction activity disturbs neighbors
 - Likelihood of generating complaints
 - 0.05 in/s complaint threshold
 - Perceptible vibrations lead to damage claims
 - Damage threshold is 10 times greater
- Any occupied building within 50 feet of construction work is likely to experience perceptible vibrations
- Evaluate likelihood that neighbors would complain
 - Find distress that was likely already present
 - Eventually they would claim damage

Protecting Non-Historic Structures

- Protected
- Not historic



Protecting Non-Historic Structures

- Thank You!
- Questions?