



PUBLIC INVOLVEMENT MEETING

OCONTO COUNTY

SMYTH ROAD BRIDGE
over the OCONTO RIVER
NORTH BRANCH

NOVEMBER 4, 2025

WisDOT Project ID 9077-04-00



WELCOME

James Rhoad-Drogalis, P.E., AECOM Project Manager

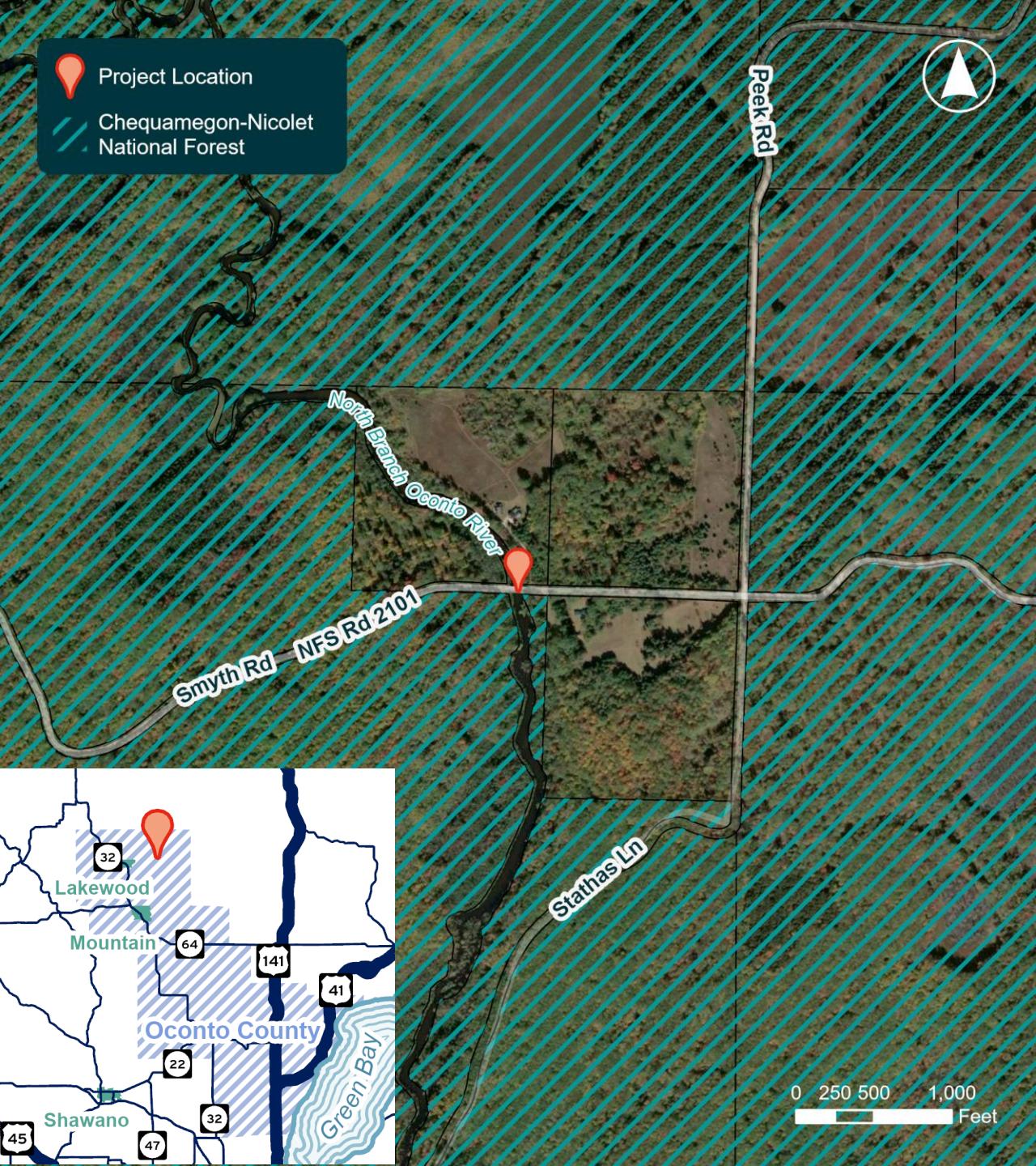
Nathan Guequierre, AECOM

Brandon Hytinen, Oconto County Highway Commissioner



Meeting Agenda

- Bridge Facts
- Project Purpose and Need
- Alternatives Development & Evaluation
- Preferred Alternative
- Historic Bridge
- Construction
- Budget





BRIDGE FACTS

- The Smyth Road bridge over the North Branch of the Oconto River was built in 1928. It's 97 years old.
- On an average day, about 50 vehicles cross the bridge. Heavy trucks account for 20-25% of the traffic.
- 2024 bridge inspection revealed advanced concrete and steel deterioration, including a tipped east abutment creating pressure on the structure.
- The bridge's vertical clearance is limited to 12 feet. Standard minimum clearance is 14 feet.
- There is damage to the railing and vertical truss members from vehicle impacts.





PURPOSE & NEED

The **purpose** of the project is to provide a reliable, long-term crossing of the North Branch Oconto River for all users in the vicinity of this important route by addressing structural deficiencies to provide a safe and efficient transportation system.

The **need** for this project is due to structure deterioration, and functional deficiencies including low vertical clearance and limited roadway width on the bridge.



Transportation Needs

STRUCTURAL DEFICIENCIES:

NBI Condition Ratings

- The National Bridge Inventory (NBI) **condition rating** for the substructure, superstructure, and deck from 2024 was determined to be 3 (**serious**), 4 (**poor**), and 4 (**poor**) respectively, making the bridge structurally deficient.
- *NBI is a numerical rating that ranges from 0 to 9, where 9 represents a primary bridge component in excellent condition and 5 represents a minimum rating for a primary bridge component in fair condition. Ratings lower than 5 indicate components in deteriorated condition.*



East Abutment –
Vertical Crack.



East Abutment – Vertical
Crack.



East Expansion Bearings.



Typical Deck Cracking.



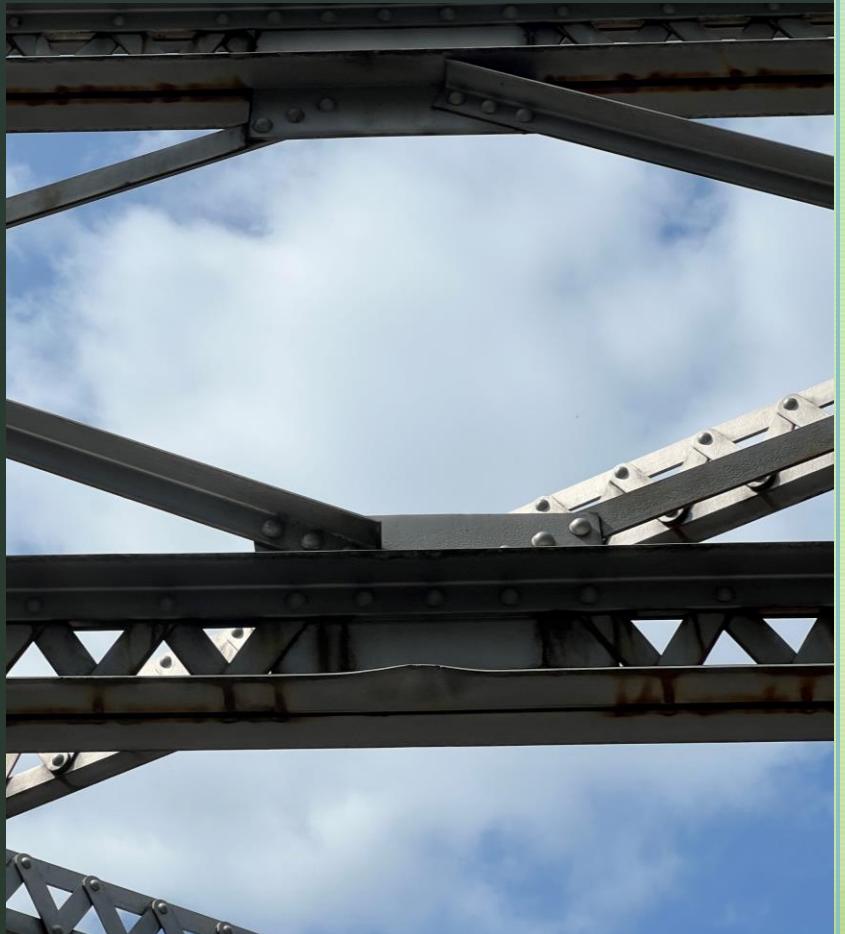
Transportation Needs

STRUCTURAL DEFICIENCIES:

Sufficiency Rating

The bridge's sufficiency rating is 31.9 of 100, indicating that the structure's degradation and lack of functionality are advanced enough to qualify it for Federal replacement funding.

Federal Highway Administration has an established sufficiency rating formula to provide a method of evaluating highway bridge data by calculating four separate factors to obtain a numeric value which is indicative of a bridge sufficiency to remain in service. The result of this method is a percentage in which 100 percent would represent an entirely sufficient bridge and zero percent would represent an entirely insufficient or deficient bridge. The sufficiency rating is also used as a benchmark for determining funding eligibility in accordance with the Wisconsin Administrative Code Chapter Trans 213. A bridge that has a sufficiency rating of 80 or less is eligible for rehabilitation funding. Furthermore, if the sufficiency rating falls below 50, the bridge may be eligible for replacement funding.



Transportation Needs

STRUCTURAL DEFICIENCIES: Load Posting

The bridge has a **10 Ton Load Posting**.

Bridge load posting means restricting vehicle weight when engineering analysis of a bridge, known as a load rating, indicates that it cannot carry standard, legal loads.





SPECIAL CONSIDERATIONS

- Local Commuting
- Trucking
- ATV/UTV Route
- River Recreation
 - Paddling
 - Fishing



CONCEPTUAL ALTERNATIVES

Four conceptual alternatives were developed: No Build, Rehabilitation, New Bridges at a Variety of Locations.

Option B for one alternative was dismissed:

- New Bridge Adjacent South – potential for public lands impacts

Three alternatives were recommended to advance to Detailed Study: Rehabilitation, New Bridge Adjacent North, New Bridge at the Current Location.



DETAILED ALTERNATIVES EVALUATION

These alternatives were developed to a point that their measurable impacts could be compared.

The factors considered for analysis include impacts to wetlands, floodplain, waterways, and right-of-way, in addition to construction costs.

Evaluation Factor	Alt 1: No Build	Alt 2: Rehabilitate for Vehicular Use	Alt 3: New Bridge on Existing Alignment	Alt 4A: New Bridge Adjacent North
Permanent Wetland Fill (including in-stream)	0	0	0.011 ac	0.204 ac
Temporary Wetland Fill (including in-stream)	0	0	0.003 ac	0.003 ac
Permanent Property Acquisition	0	0	0	0.833 ac
Property Cost (Permanent)	0	0	0	\$2,400
Temporary Property Use	0	0	0	0
Relocations	0	0	0	0
Construction Cost	Maintenance costs only	\$2.45M	\$1.05M	\$3.5M
Impacts to Historic Resources	Eventual Loss of Integrity	No impact	Adverse impact	No impact
Expected Lifespan	-	35 years	75 years	75 years
Conclusion	Not preferred	Not preferred	Preferred Alternative	Not preferred

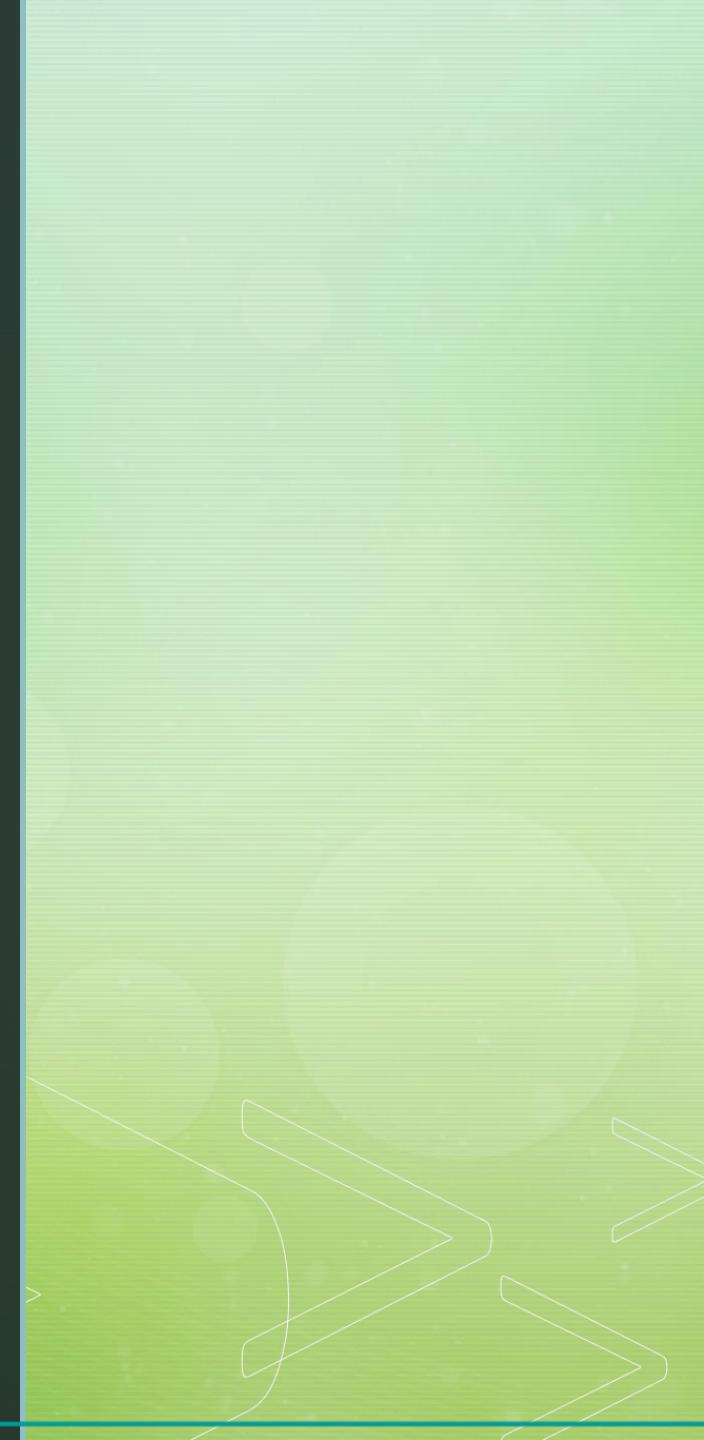
Property cost estimate is based on 2024 assessed value of property as listed on the Oconto County land information website and is used only to compare the alternatives. The value for Adjacent Alt includes full acquisition of one parcel (including improvements) and two partial acquisitions. Value for On Alignment Alt includes two partial acquisitions. Actual acquisition cost may differ.



PREFERRED ALTERNATIVE

Construct a New Bridge on the Existing Alignment

- Meets the project's purpose and need with the least environmental impacts (with the exception of requiring the demolition of an historic resource), making it both feasible and prudent.
- Lower capital cost compared to other alternatives.
- Alternatives that avoid adverse effects to the existing historic structure are either unable to adequately meet project purpose and need or generate significantly greater impacts to private property.



PREFERRED ALTERNATIVE

- Two-span reinforced concrete haunched slab bridge.
- Two 10-foot travel lanes with two-foot shoulders adjacent to a 42-inch concrete barrier
- Every effort will be made to avoid or minimize environmental impacts: area of bridge piers in the river, permanent and temporary property acquisition, stormwater runoff into river, bird nesting areas, disruptions during construction, recreation constraints.



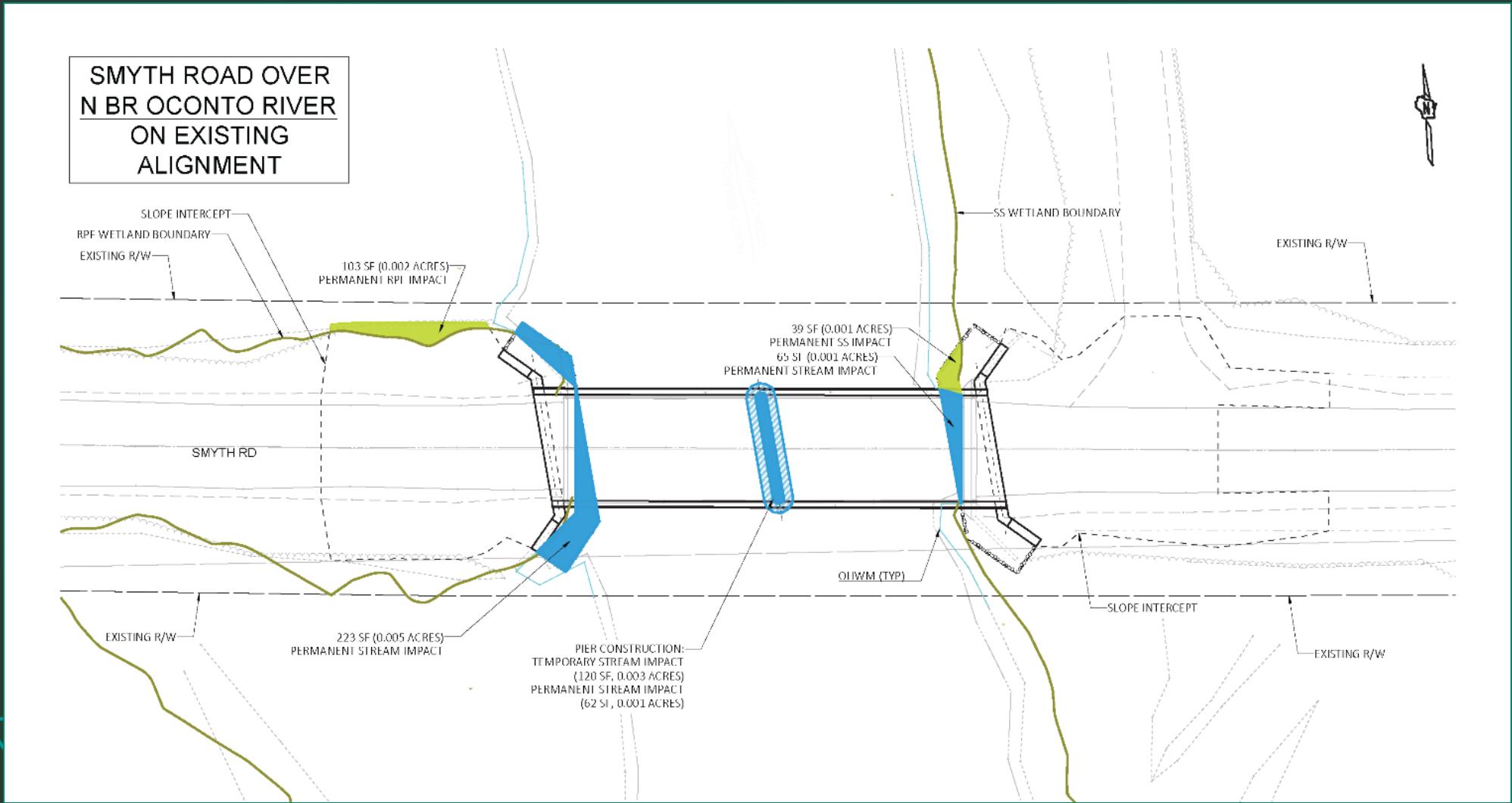


EXAMPLE: Bridge Replacement

Rangeline Road over Little Eau Pleine River, Marathon County



PREFERRED ALTERNATIVE IMPACTS



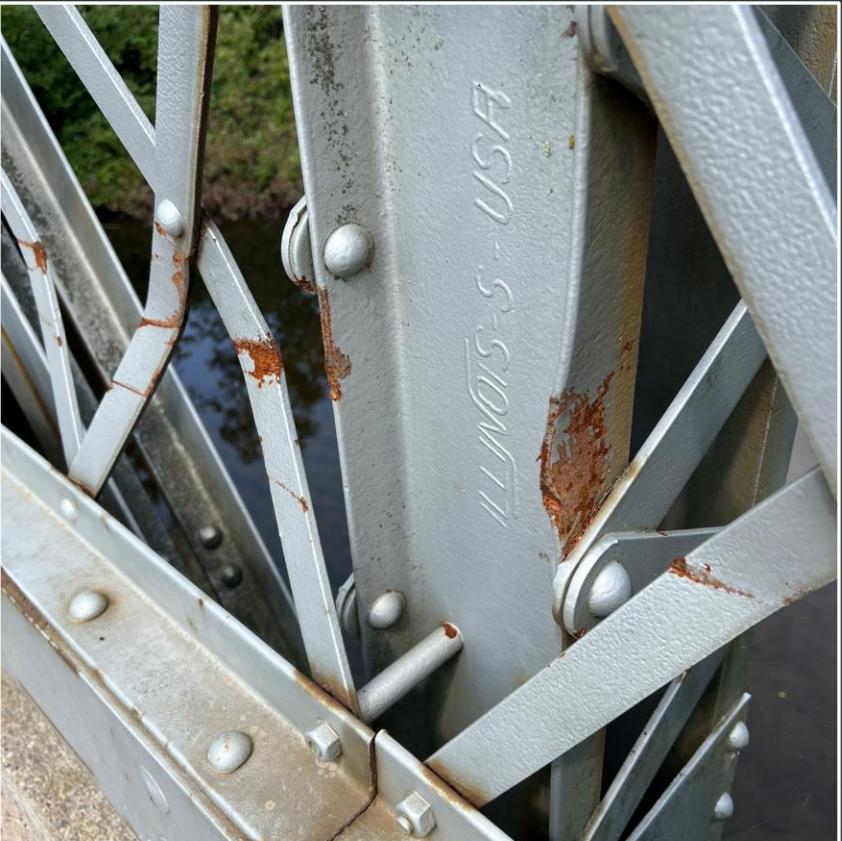
HISTORIC BRIDGE

The Smyth Road Bridge, constructed in 1928, is listed in the National Register of Historic Places due to its engineering significance. The preferred alternative would remove the historic bridge.

Ideas to mitigate the loss of the historic resource:

- Educational display or web content
- Move the bridge or salvage a piece for display
- Others?

Bridge member stamped with the Illinois Steel Company branding.



DURING CONSTRUCTION

- Construction is scheduled to start in 2027.
- The bridge will be closed to all traffic for up to 4 months.
- Detour route is about 12 miles.





BRIDGE CONSTRUCTION

- Estimated Construction Cost
 - \$1.05M
- Funding
 - 100% WisDOT (Federal)



STAYING INVOLVED

- Visit the Oconto County Highway Department website regularly for updates.
- Provide written comments using the comment forms.
- Have discussions with the staff here tonight.
- Tell us about the opportunities to improve transportation in Oconto County with this project.



THANK YOU!

- Brandon Hytinen, Oconto County Highway Commissioner
 - Brandon.Hytinen@OcontoCountyWI.gov
- James Rhoad-Drogalis, P.E., AECOM Project Manager
 - James.Drogalis@AECOM.com

OPEN DISCUSSION

*Your feedback is key to
a successful project!*

