



PROJECT UPDATE

CLARK COUNTY HIGHWAY G
BRIDGE *over the* BLACK RIVER

Historic Resources and Bridge
Alternatives

May 1, 2023

WisDOT Project ID 7840-03-03

AECOM

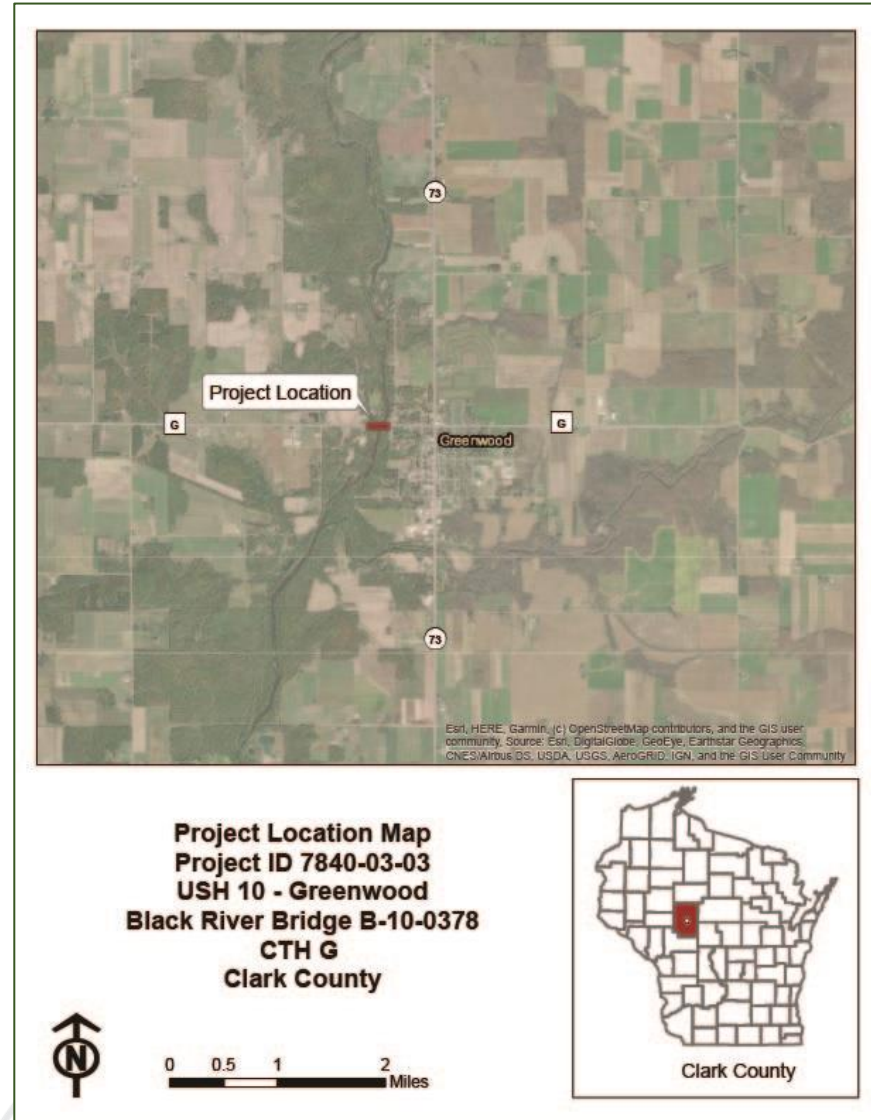


PROJECT OVERVIEW



Project Development Process

- Alternatives Development & Evaluation
- Public Involvement
- Environmental Document
- Select Preferred Alternative
- Final Design
- Construction



BRIDGE FACTS



- The County G bridge over the Black River was built in 1938. On an average day, about 1,400 vehicles cross the bridge, and nearly 100 of those vehicles are trucks.
- A 2020 bridge inspection revealed advanced concrete and steel deterioration.
- The bridge's vertical clearance is limited to 13 ½ feet. Some trucks and farm equipment are too tall for the bridge, and it has been struck repeatedly over the years.
- The bridge has two travel lanes, one in each direction, with no shoulder or space for bicycles, pedestrians or snowmobiles.



PROJECT PURPOSE & NEED



Project Purpose

The **purpose** of the proposed project is to provide a reliable, long-term crossing of the Black River for all users (including snowmobiles) in the vicinity of this important route by addressing structural deficiencies to provide a safe and efficient transportation system.

Project Need

The **need** for the proposed project is due to structural deterioration, functional deficiencies, and route importance.



PROGRESS TO DATE



- Initial alternatives analysis completed
- Public Involvement Meeting in May 2021
- Selected an alternative that would construct a new bridge on the location of the existing structure, necessitating the demolition of the current bridge
- Submitted draft environmental evaluation documenting project impacts to the natural, social, economic environments



PROGRESS TO DATE



Bridge has been determined to be historically significant.

Requires another look at the alternatives analysis

- New alternatives were developed to avoid demolition of the bridge
- These alternatives were evaluated
- A consultation meeting was held in March 2023 with historical societies, adjacent property owners, the City of Greenwood and Clark County to discuss options for preserving the existing bridge or mitigating its loss if it can't be preserved



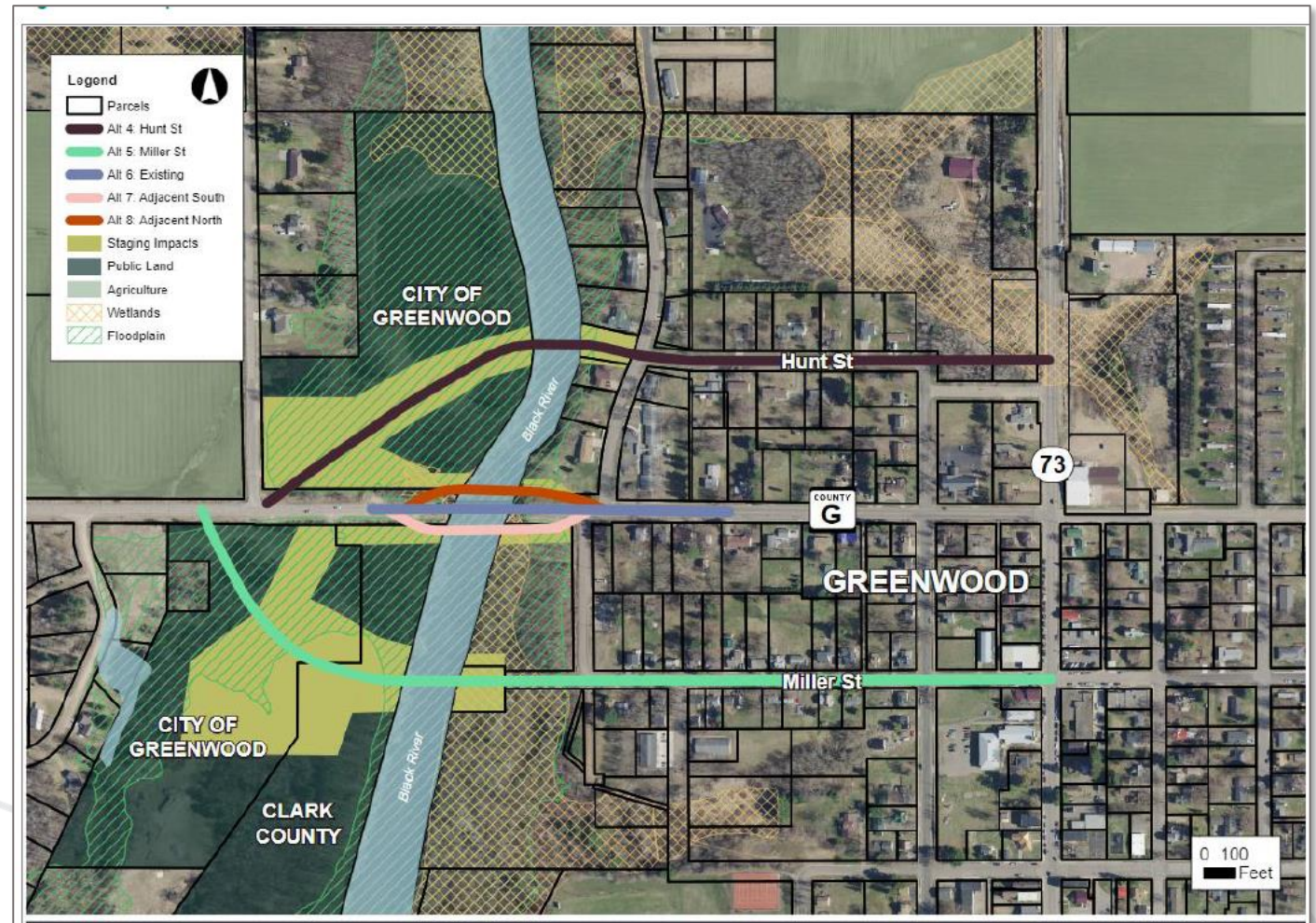
ALTERNATIVES *for the* BRIDGE'S FUTURE



Conceptual Alternatives

- Alternative to rehabilitate bridge
 - Would still be too narrow and with limited vertical clearance
- Alternatives to build a new bridge on a new alignment that wouldn't affect the existing bridge
 - Miller and Hunt Street alignments would create major disruptions to neighborhoods and require extensive property acquisition
 - A new bridge just south of the existing bridge would require extensive utility relocation

These alternatives were dismissed because they didn't meet the project purpose and need or because they generated excessive negative impacts to the environment

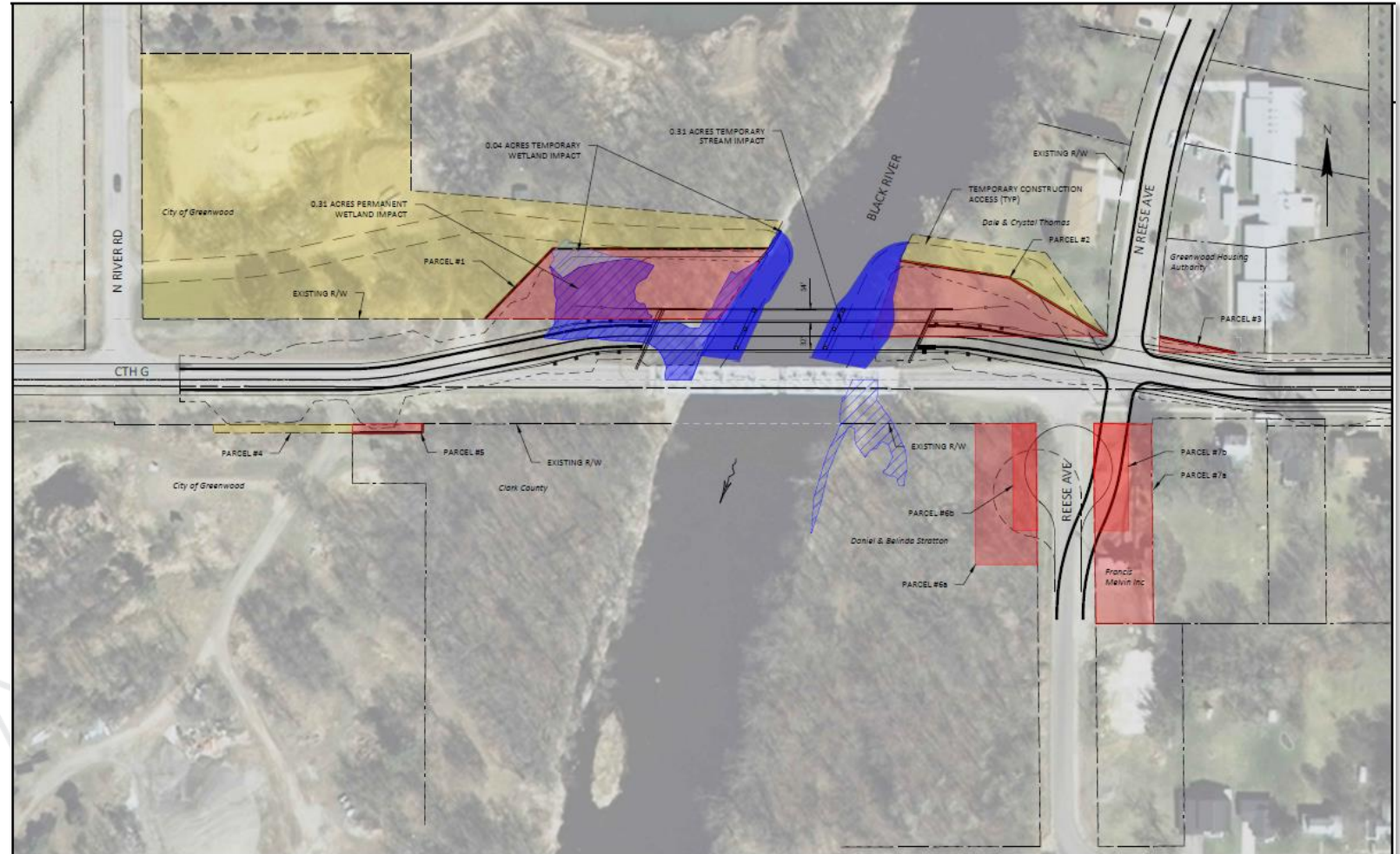


ALTERNATIVES *for the* BRIDGE'S FUTURE



Detailed Alternatives

- Alternative to rehabilitate the bridge for non-motorized travel
 - Would still require a new bridge to carry cars
 - May not maintain historic integrity
- Alternatives to build a new bridge on a new alignment that wouldn't affect the existing bridge
 - A new bridge just north of the existing bridge would require acquisition of private property
 - Historic bridge would continue to deteriorate
- Build a new bridge on the alignment of the existing bridge



ALTERNATIVES *for the* BRIDGE'S FUTURE



Selected Alternative

Alternative 6: New Bridge on Existing Alignment

- Requires less fill in wetlands than other alternatives
- Requires less property from private residences
- Lower costs
- Will meet project purpose and need prudently and effectively

Evaluation Factor	Alt 6: Existing Alignment	Alt 8: Adjacent North
Permanent Wetland Fill	0.20 ac	0.31 ac
Temporary Wetland Fill	0.07 ac	0.04 ac
Temporary In Stream Fill	0.38 ac	0.41 ac
Permanent Property Acquisition	0.46 ac	1.64 ac
Property Cost	\$1.9 K	\$15.3 K
Temporary Property Use	2.75 ac	3.04 ac
Construction Cost	\$4.1 M	\$4.7 M

SELECTED ALTERNATIVE



Replacement with a New Bridge

- 3-span bridge, 316 feet long
- Two 12-foot travel lanes with 4-foot shoulders; 12-foot recreational trail
- Roadway will be raised about 1-foot & new beam guard will be installed
- Environmental impacts to be avoided and minimized through design: area of piers in river, permanent and temporary property acquisition, stormwater runoff into river, bird nesting areas, disruptions during construction

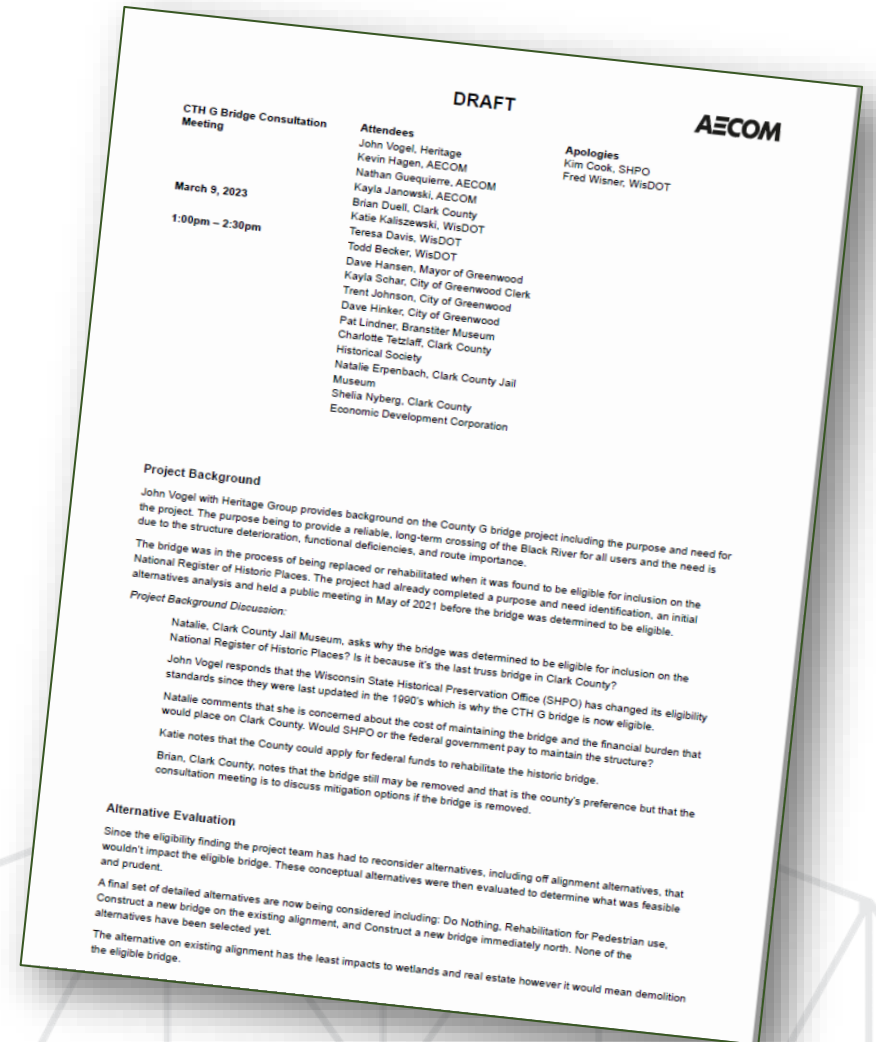


MITIGATING LOSS OF HISTORIC BRIDGE



Consultation Meeting – March 2023

- Neighbors, historical societies, museums, and municipalities were invited to discuss the historic structure
- It was agreed that the only feasible and prudent alternative is to move forward with the selected alternative: a new bridge on the location of the existing bridge.
- Numerous ideas were discussed as participants identified appropriate activities to mitigate the demolition of the historic bridge.



MITIGATING LOSS OF HISTORIC BRIDGE



Consultation participants agreed on the following activities to mitigate the demolition of the historic bridge:

- The bridge will be documented with high quality photographs which will be offered to area museums
- The bridge will be offered for relocation by any responsible party
- Structural elements of the bridge will be salvaged and displayed at the City of Greenwood's Branstiter Museum
- Website content documenting and interpreting the bridge's significance will be developed for Clark County Historical and City of Greenwood.
- A panel display will be developed documenting the historic bridges in Clark County crossing the Black River. The displays will be given to the Clark County Jail Museum and the Branstiter Museum. See the example to the right.

The Prairie du Sac Hydroelectric Plant

Electricity, although on a small scale, was first generated by waterpower in the United States in 1881. That event happened on the Fox River in Appleton, Wisconsin. The first large-scale production of electricity in the country occurred in 1896, when a power plant was constructed at Niagara Falls. The Wisconsin Legislature subsequently helped in 1905 to promote hydroelectric power by commissioning a study of potential waterpower sites around the state. One location thus identified was on the Wisconsin River, adjacent to Prairie du Sac (Illustration A). The site provided good water flow, as well as the ability to impound a large head of water—both factors when considering where to build a hydroelectric facility. Planning for the plant started in 1907. Construction followed in 1911.



A



B



C

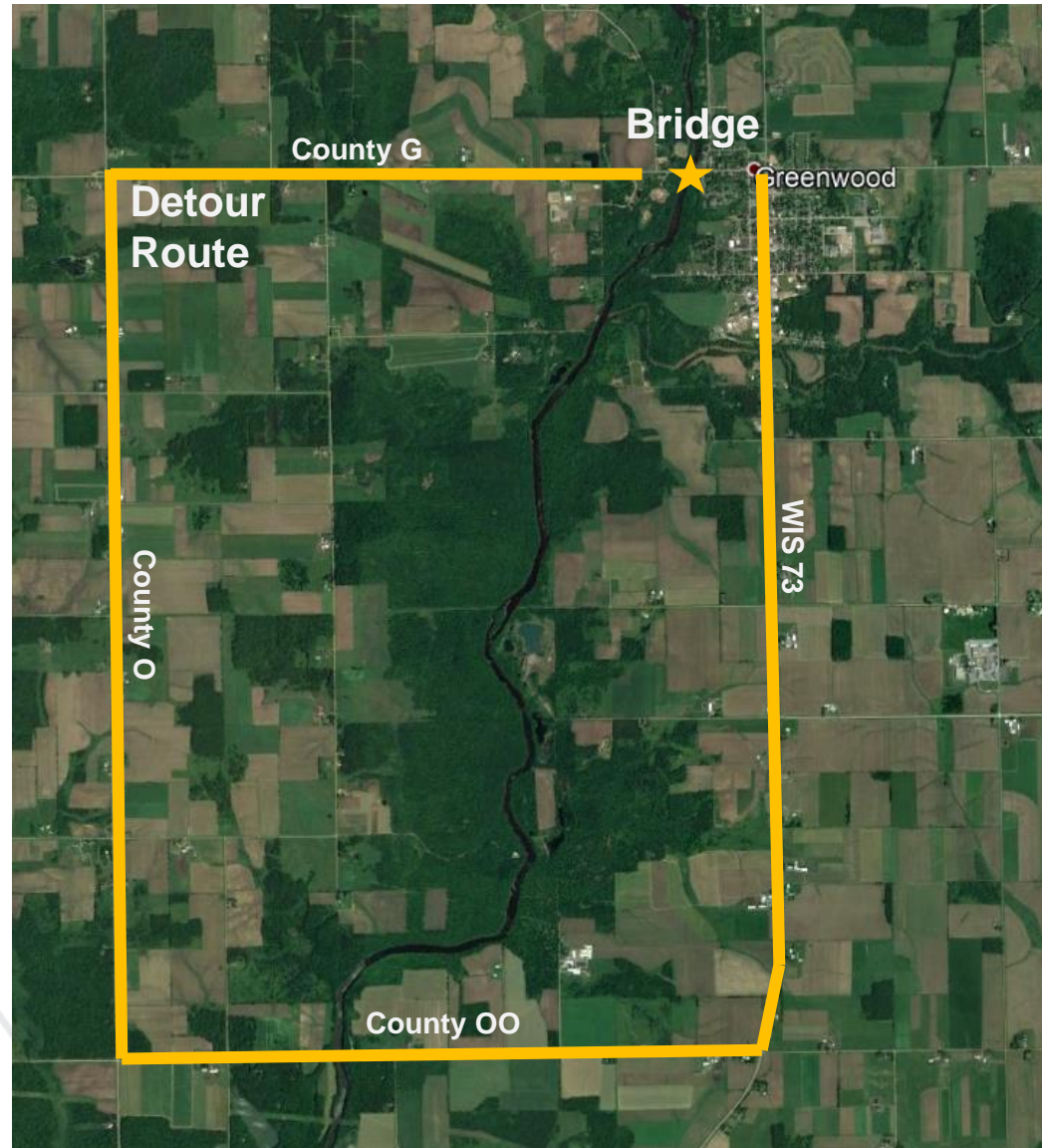
Prior to erecting the new plant, a coffer dam had to be built across the river in order to "dewater" the construction site (Illustration B shows the forming of the coffer dam). Thereafter, work began on the plant's dam (Illustration C) and powerhouse.

These mitigation activities are being reviewed by the State of Wisconsin Historic Preservation Officer

CONSTRUCTION INFORMATION



- Tree clearing and roadway preparation work could start as early as fall 2024. Bridge construction is scheduled to start in 2025 and will last one construction season
- The bridge will be closed to all traffic for 5 to 6 months.
- Detour route is 13.9 miles.



CONSTRUCTION INFORMATION



- Estimated Construction Cost: \$2.5M - \$3M
- Funding
 - 20% local (County)
 - 80% WisDOT (State and Federal)





Your feedback is key to a successful project.

Send an email with any thoughts or comments:

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