



# Red Wing Bridge Project

## Frequently Asked Questions

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### PROJECT OVERVIEW

#### What is the Eisenhower Bridge?

The Eisenhower Bridge is a steel truss through-deck bridge. The bridge is 1,631 feet long, 35 feet wide, and stands 65 feet above the Mississippi River.

The Eisenhower Bridge, named after former President Dwight D. Eisenhower, opened to traffic in November 1960. The bridge's original name was the Hiawatha Bridge (also called the Interstate Bridge).

The Eisenhower Bridge provides the only regional Mississippi River crossing for approximately 30 miles upstream and downstream for communities on either side of the river.

#### Why does the Eisenhower Bridge need to be replaced?

The Eisenhower Bridge is "fracture critical", meaning that if one fracture critical bridge component were to fail, the entire bridge could collapse. Following the I-35W Bridge collapse, the Minnesota Legislature established funding for rehabilitation or replacement of certain types of bridges around the state, including the Eisenhower Bridge.

#### Is the Eisenhower Bridge safe to cross until the new bridge is built?

The Eisenhower Bridge will continue to provide a safe river crossing for the Red Wing community, the region, and visitors during construction of the new bridge. MnDOT will continue its annual inspections of the Eisenhower Bridge until the new bridge opens to traffic. MnDOT's bridge inspectors evaluate nearly 1,000 bridges in the southeast Minnesota region for the state, cities, and counties.

#### What is the current condition of the Eisenhower Bridge?

The 2017 annual bridge inspection produced an overall "adequate" rating. MnDOT also evaluates individual bridge components during these inspections:

- The bridge deck is in fair condition.
- The superstructure (truss and beams) is in satisfactory condition. No section losses or defects were found in critical structural components. The truss and beams were last painted in 2002.
- The substructure (abutments and piers) are in fair condition.



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## **Will the Eisenhower Bridge close during construction for necessary repairs?**

The Eisenhower Bridge is inspected each year. The risk of a bridge closure for structural repairs before the new bridge opens to traffic in 2019 is extremely low. There could be more deck repairs, but all such work should be able to be accomplished while keeping the bridge open to traffic.

## **How many people use this bridge?**

On average, 13,300 vehicles per day cross the existing two-lane bridge (2012 count). The new bridge also will provide a safe crossing for pedestrians and bicyclists to enjoy the surrounding views.

## **What will this project cost?**

The construction cost of the project is \$63.4 million.

## **Who are the project partners?**

This project is a partnership between MnDOT, WisDOT, the City of Red Wing and the Federal Highway Administration.

## **RED WING BRIDGE HISTORY**

### **What was the first river crossing at Red Wing?**

The first river crossing at Red Wing was a ferry boat that began service in 1863. The boat was a flat-bottom paddle boat that was driven by horses on a walking belt. The horse-powered boat was replaced in 1865 by a new boat that operated along a cable stretched across the river.

### **When was the first Red Wing bridge built?**

The United States Congress approved the first bridge in Red Wing in 1872. However, there was no funding included in its approval. Red Wing citizens took up this task and approved funding for the bridge through bonds in 1893. The new Red Wing High Bridge opened two years later and collected tolls to repay the bond debt.

### **What came after the High Bridge?**

The High Bridge was in need of replacement after half a century of service. The new bridge was originally called the Interstate Bridge, but it was renamed the Hiawatha Bridge before its completion. President Dwight D. Eisenhower gave the dedication speech for the new bridge in October of 1960. Red Wing's citizens later renamed the bridge in Eisenhower's honor. The Eisenhower Bridge opened to traffic in November 1960.

## **THE NEW MISSISSIPPI RIVER CROSSING**

### **What is the name of the new bridge?**

The new bridge will keep the name "Eisenhower Memorial Bridge," according to [Minnesota statute 161.14, Subdivision 16](#). Only the Minnesota Legislature can name a bridge or change the designation. If communities wish to add plaques or signs honoring the bridge, they must first be approved by the Commissioner of the Minnesota Department of Transportation.

### **What will the new bridge look like?**

The new bridge will feature two travel lanes, one in each direction, with wider shoulders and a 12-foot wide shared-use path for pedestrians and bicyclists on the upstream side of the bridge.

### **Will the new bridge have more travel lanes than the existing bridge?**

No. The new Mississippi River crossing will still be single-lane in each direction.

### **How tall is the new bridge?**

The new bridge will stand more than 70 feet above the Mississippi River.



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## **Will there be lighting on the new bridge?**

The aesthetic lighting will balance the needs of the river valley with those of the community and modern design. Light pollution will be intentionally reduced to be minimally disruptive to the environment. The lighting will tie into the ornamental railings, and there will be lights on the pillars and “wash lighting,” which will outline the bridge shape on the upstream side and be visible from Levee Park, the river, and the Wisconsin shoreline.

## **Will MnDOT turn off the lights during the mayfly hatching period?**

MnDOT or the City of Red Wing will be able to turn off the bridge lighting when the mayflies are hatching to keep them from congregating on the bridge and causing traffic issues – the pavement can become slick from the sheer volume of bugs!

## **Will there be a de-icing system on the new bridge?**

No, the new bridge will not have a de-icing system. MnDOT’s maintenance crew will keep the bridge deck clear during the winter. Snow will be stored on land.

## **CONSTRUCTION SCHEDULE**

### **What is the project schedule?**

2017 work includes:

- Constructing the new river bridge piers
- Treating the poor soil conditions on the Wisconsin side river embankment to provide stable ground for construction of the new bridge
- Constructing the temporary Highway 63 bridge over Highway 61
- Constructing the button-hook and cul-de-sac on E. 3rd St.
- Reconstructing Highway 61 south of the temporary bridge, including adding a traffic signal

2018 work includes:

- Continued construction of the new river bridge
- Constructing the new Highway 63 bridge over Highway 61
- Constructing the slip ramp and bridge at Bluff St.

2019 work includes:

- Continued construction of the new river bridge
- Constructing Highway 63 in Wisconsin
- Constructing the west side of 825th St. in Wisconsin

2020 work includes:

- Removing the existing river crossing
- Constructing Highway 61 under and north of the new Highway 63 overpass
- Constructing the Highway 61 median
- Removing the temporary Highway 63 bridge over Highway 61
- Constructing the 825th St. jug-handle and the east side of 825th St. in Wisconsin

## **Will the bridge be closed during construction?**

**No. Highway 63 and the Eisenhower Bridge will be open during construction.** The project team anticipates minimal traffic disruptions during this project (see Traffic/Noise impacts).



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## **When will construction begin on the Wisconsin side?**

Construction began on the Wisconsin side in mid-May 2017. The 825th St. detour is in effect through 2019.

## **When will construction begin on the Minnesota side?**

Construction began on the Minnesota side in mid-July 2017.

## **When will pile driving begin?**

Pile driving for the north abutment in Wisconsin began the second week of July 2017.

## **When will the new bridge open to traffic?**

The new bridge is anticipated to open to traffic by fall 2019.

## **When will the project be completed?**

The overall project is anticipated to be complete by late summer 2020.

## **BRIDGE BASICS**

### **What is a causeway?**

A causeway is a temporary road that will allow the contractor to access the river to build the new bridge. Zenith Tech began building a causeway from the Wisconsin shoreline near Island Campground in June 2017. The causeway will be removed once construction is complete.

### **How many piers are in the water?**

There will be 2 piers in the river—one in the water and one on the shoreline in Minnesota—and 4 piers in the backwaters in Wisconsin.

### **How will you construct the pier foundations?**

First, construction crews will drive steel piling into the bedrock to anchor the foundation. They will use a temporary metal box-like structure called a cofferdam to construct each pier foundation located in the river or backwaters. Once the cofferdam is assembled and positioned on the river bottom, crews pour the concrete seal then pump out the water to create a dry work space. A concrete footing is constructed on top of the seal. The footing is made up of reinforcement bar, or rebar, and concrete and provides additional strength and stability for the pier foundation. Once the concrete has cured, crews remove the cofferdam and let the water surround the new pier foundation. Only the top of the footing will be above the water line.

The construction process is similar for the piers located on land. However, a cofferdam is not required to complete this work.

### **How far down is bedrock?**

At Pier 2 in the middle of the Mississippi River, bedrock is 80 feet below the water surface.

## **CONSTRUCTION ACTIVITIES**

### **What does this project include?**

Construction includes building a new river crossing connecting Minnesota and Wisconsin, replacing the historic Highway 63 Bridge over Highway 61, and reconstructing the Minnesota and Wisconsin bridge approaches, or where the highway transitions onto the bridge deck.



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## **When did construction begin?**

Construction began in mid-May 2017. The overall project is anticipated to be complete by late summer 2020.

## **Who is the primary contractor?**

Zenith Tech, a union contractor, is the primary contractor on the project.

## **Why will the work on the Wisconsin side take longer to complete?**

The contractor needs to treat the soil on the Wisconsin side to stabilize it before any construction can begin. It will take a full year for the new fill to settle, which is why this process, called surcharging, is one of the first activities to ramp up on the project.

## **Where is the construction limits on the Wisconsin side?**

Construction ends past the box culvert by Mud Lake in Wisconsin.

## **How will the project team build the new bridge?**

The new bridge will be constructed next to the existing bridge. Once traffic has been moved to the new bridge, the contractor will remove the Eisenhower Bridge.

## **How will the project team remove the existing bridge?**

The Eisenhower Bridge will be disassembled piece by piece.

## **Can I boat on the river near the project?**

Yes. Few barges are needed for this project so the project team does not anticipate establishing a "No Wake Zone" during construction. Still, please remember to be safe and attentive in all construction zones, whether on land or on the water.

## **What will the project team do with the riprap near Levee Park?**

The existing riprap, or rock used to prevent shoreline erosion, will be removed during construction. Materials will be recycled or go to the local landfill/quarries and new riprap will be installed.

## **Will trees be removed for this project?**

Yes, the project team will do some grubbing on the Minnesota side and remove trees near Island Campground on the Wisconsin side. The project team has received permits for these activities, which consider protected species and their habitats.

## **Will any buildings in downtown Red Wing be demolished for this project?**

Demolition of four buildings obtained to make room for the project will begin the second week of July 2017. Keep your distance from these buildings, which are private property and may be unstable during demolition.

## **PROJECT IMPACTS**

### **Will crews be working at night or on the weekends?**

At this time, there is no planned nighttime work and minimal weekend work.

### **Will there be any traffic restrictions on the bridge during construction?**

Lane restrictions on the bridge will occur during non-peak hours. Flaggers will be onsite to direct traffic. There will be no lane closures on the bridge on weekdays between 6-8:30 a.m. and 3-6 p.m. There are no planned state highway detours on this project.



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## **Will the bridge close at any time during construction?**

Highway 63 and the Eisenhower Bridge will be open during construction. Lane restrictions on the bridge will occur during non-peak hours to minimize delays.

## **Are there any planned construction detours?**

A detour will be in place for 825th St. in Wisconsin from mid-May 2017 through 2019. The detour route is the 825th St. access from Highway 63 just north of The Woodshed.

There are no planned state highway detours on this project. However, there is a pre-approved emergency detour for Highway 61 for the demolition of the Highway 63 bridge over Highway 61. The emergency detour is Highway 61 to Flower Valley Road/County Road 21 to Highway 58.

## **When will drivers first experience a major permanent traffic change on this project?**

The project team anticipates rerouting traffic to the new button-hook ramp via a temporary bridge over Highway 61 in April 2018. This new, permanent traffic movement includes meeting a new traffic signal at the bottom of the button-hook ramp at Highway 61. The new button-hook ramp will support traffic coming from both directions. Drivers coming from Wisconsin will access Highway 61 via the new button-hook ramp, while drivers on Highway 61 wanting to cross the river also will take the new button-hook ramp located on the north side of downtown Red Wing.

## **How is the project accommodating shift changes for area manufacturing?**

The project team will work with area manufacturing should any shift changes during lane restrictions on the bridge contribute to continuous traffic delays in excess of what is anticipated during this project.

## **Will farmers be able to move equipment across the bridge during construction?**

The travel lanes on the bridge will be no wider than 12 feet during construction. Anyone who needs to move oversized equipment across the bridge should first contact the project team.

## **What is the speed limit on the bridge during construction?**

The speed limit across the Eisenhower Bridge and through the work zone is 30 mph to keep the community and construction crews safe during this project.

## **Is there pile driving on this project?**

Yes, though the contractor is not allowed to start this activity or operate noisy construction equipment before 7 a.m.

## **ENVIRONMENTAL/SAFETY PRACTICES**

### **How is the project team protecting and respecting the environment during construction?**

The project team is complying with the necessary requirements and has adopted several best practices to be a good environmental steward during bridge construction. Some examples are:

- The contractor is complying with all **in-river and land work permits**, including those required by Wisconsin, Minnesota, and multiple federal agencies.
- The project team has developed an **Environmental Management Plan** and **environmental training for all project workers**.
- The project has an **Environmental Compliance Manager** on the construction management team.



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## **How is the project team limiting the wetland's exposure to construction materials?**

The contractor uses protection mechanisms like a floating silt curtain and metal sheeting to limit the wetland's exposure to construction materials. For example, the contractor installed a floating silt curtain in the water both upstream and downstream from the temporary causeway before any sand touched the water.

## **How will the project team remove the temporary causeway without harming the surrounding wetland?**

Construction crews installed a geotextile fabric in the wetland to protect it when the causeway is removed after construction is completed.

## **Will the mussels in the river be impacted by this project?**

A mussel survey was conducted on both sides of the Mississippi River throughout the project area. No threatened mussel species were found on the Minnesota side. However, two Wartyback specimens were found on the Wisconsin side. The project team will minimize contact and disruptions to the river bottom as much as possible to mitigate any impacts to these mussels. A permit from the Wisconsin Department of Natural Resources has been obtained to authorize the project work based on these findings.

## **What will happen to any bald eagles nesting in the project area?**

An eagle nest was encountered in close proximity to the project area during preliminary construction work. Minnesota and Wisconsin Department of Natural Resources and U.S. Fish and Wildlife Service staff were contacted, a bald eagle permit was obtained, and specific tree clearing restrictions were imposed. In fact, the project team changed its entire approach to tree removals due to the eagles and to fully comply with the federally endangered Northern Long Eared Bat requirements.

## **What will happen to any historical artifacts that found in the river?**

If the project team identifies a historical artifact during construction, a historian will be called onsite to confirm it and take the necessary steps to preserve the artifact.

## **How will the project team protect historical properties during construction?**

The City of Red Wing includes 25 properties on the National Register of Historic Places. A Historical Properties Vibration Monitoring Plan, which includes pre-construction and post-construction condition surveys, will be used throughout the project to monitor and protect historic properties.

## **How will the project team protect Barn Bluff during construction?**

Many of Red Wing's historic properties will be monitored during construction, including Barn Bluff. The project team hired a vibration specialist from a geotechnical engineering firm to conduct a vibration sensitivity assessment of Barn Bluff. This assessment included a field condition survey and developing vibration limits for the area surrounding Barn Bluff. An initial pre-construction condition survey was completed in 2016, and a follow-up survey was done in March 2017. These surveys included photos, video, and non-invasive testing to capture data. In addition, a vibration monitoring team was formed to supervise the construction vibration plan and to monitor vibration-producing activities to prevent Barn Bluff from excessive vibration exposure throughout the project.

## **Are there safety standards for project workers?**

Yes, safety is definitely a priority at all times on this project. The project team has regular safety meetings and OSHA site visits. In addition, Zenith Tech has a full-time onsite safety manager.



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## **PUBLIC ENGAGEMENT**

### **What is the public involvement process on this project?**

The public has been involved in each step of this project over the past seven years of planning and design. Community engagement will continue during project construction and via a variety of formats to make following construction progress easy and convenient.

### **How can the public stay involved in the project?**

- Go to [mndot.gov/d6/projects/redwing-bridge](http://mndot.gov/d6/projects/redwing-bridge) and sign up to receive project email updates.
- Follow the project on social media:
  - [facebook.com/RedWingBridgeProject](https://facebook.com/RedWingBridgeProject)
  - [@mndotsoutheast](https://twitter.com/mndotsoutheast)
- Tune in to monthly Red Wing Bridge Updates with Jay & Terry on Channel 6.
- Read the Red Wing Bridge Project monthly column in the *Red Wing Republican Eagle*.

### **Where can the public safely view construction?**

The public can safely view construction from Barn Bluff or Levee Park. For those who want a closer look, the project team will regularly post construction pictures, video and other educational resources on the project website and social media.

### **Who should I contact with questions or guest speaking requests?**

Terry Ward, MnDOT Construction Manager  
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