

A photograph of a concrete bridge spanning a river. The bridge has a single central pier. The surrounding landscape is filled with trees in various stages of autumn, with some showing bright yellow and orange foliage. The water in the river is dark and reflects the sky. The sky is a clear, pale blue.

County Road 510 Bridge Over the Dead River

Original Bridge History

- Pennsylvania Truss Bridge which once crossed the Allegheny River.
- Purchased by the state in 1919 for what was going to be state route M-35.
- 1939-State Highway Department cancelled route due to complications with crossing the Huron Mountains. The bridge and road were then turned over to the MCRC.

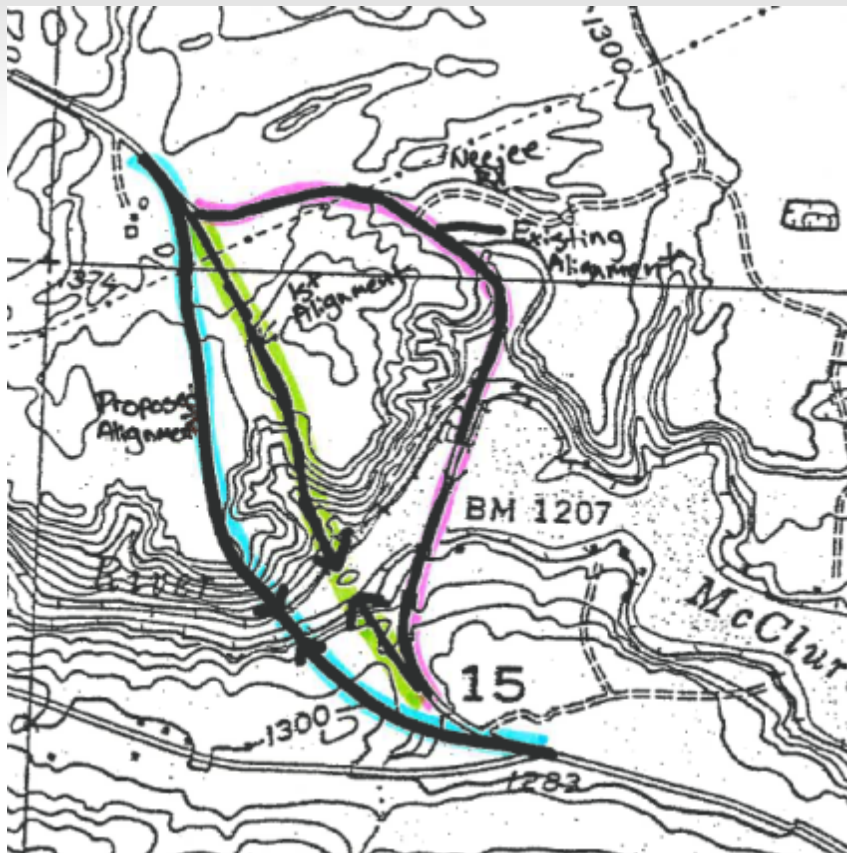


Need For a New Bridge



- Mid-1990's weight limit of bridge at 51 tons
- 2003-weight limit lowered to 40 tons
- 2009-weight limit lowered again. Bridge had to be plowed with a pickup truck.
- 40 Mile Detour

Planning and Design



- March of 1999 Received Critical Bridge Funding
- RFPs were sent out and Wilcox Associates, Inc. was awarded contract
- 4 Alternatives for bridge replacement
 - 1. Replace existing bridge at current location
 - 2. Side by Side Bridges
 - 3. New Crossing
 - 4. No Action

Delays

- Took approx. 1 year to get approval from MDOT for horizontal alignment.
- First proposed alignment had to be moved because of wetland impacts , the close proximity to a small “trout” stream with a waterfall and on the south side and the MDNR Public Access Site.
- More survey information was required.



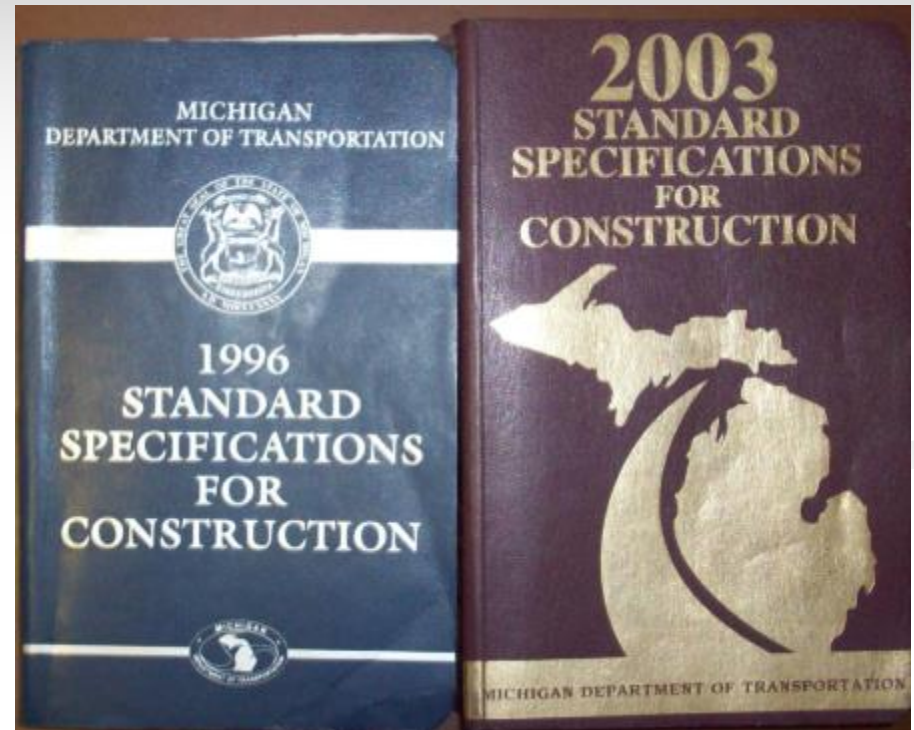
Delays



- MCRC/Wilcox had to persuade MDOT to get critical bridge funding to cover entire approaches.
- MDOT wanted it based on replacing bridge at existing location.
- Found more cost effective to relocate, therefore whole project covered by CBF.

Delays

- Design started using 1996 Spec Book (Metric Units) and had to be changed to 2003 Spec Book (English Units)



Delays



- Wilcox pulled away from project to design Co. Rd. AAO Bridge over the Dead River which was destroyed by the Silver Lake Flood in May of 2003.

Delays

- **Right-of-Way Acquisition**
 - Struggled obtaining a one-acre parcel necessary for construction—property had to go to condemnation



Wetland Mitigation



- **Work Completed by MCRC Crews**
- **7.71 Acre Site**
 - **Credited 1.56 for 510 Bridge Project for Emergent Wetlands**
 - **Credited 3.72 Acres for 550 Eagle's Nest Project for Forested Wetlands**
 - **2.43 Acres Remain in Our Bank**
- **Worked closely with MDEQ to ensure proper completion**

PHASE I

LETTING DATE: 9-7-07

COMPLETION DATE: 11-14-08

CONTRACTORS: OBERSTAR, INC., ZENITH TECH

ENGINEER'S ESTIMATE: \$2,089,250.75

BID AMOUNT: \$1,623,161.29

ACTUAL COST: \$1,738,276.78



















































ROAD
CLOSED

Phase II

LETTING DATE: 8-6-09

COMPLETION DATE: 10-15-10

CONTRACTORS: *LUNDA CONSTRUCTION CO.*

ENGINEER'S ESTIMATE: \$5,409,218.65

BID AMOUNT: \$4,484,024.83

ACTUAL COST: \$4,930,320.57







09/18/2009















































































11/04/2009



































03/03/2010







03/05/2010







03/08/2010























05/03/2010



05/04/2010



05/06/2010











































05/27/2010



















































































10/15/2010















1921 BRIDGE FACTS

271 FEET LONG

20.01 FEET WIDE

10 FEET ABOVE THE WATER

1 SPAN

TOTAL COST: \$80,710

OPEN TO TRAFFIC: 1921

CLOSED TO TRAFFIC: 2010



2010 BRIDGE FACTS

532 FEET LONG

36.52 FEET WIDE

100 FEET ABOVE THE WATER

3 SPANS

TOTAL COST: \$6,668,597.35

OPEN TO TRAFFIC: 9-17-2010