The Historic MAPLE (Foster) ROAD BRIDGE

Rededication Ceremony
October 10, 2003
3:00 p.m.

The History of the Maple (Foster) Road Bridge...

on the Huron River at the Maple and Foster Road crossing, a quaint, one-lane wrought iron bridge has served Ann Arbor area residents for well over a century. The **Historic Maple (Foster) Road Bridge,** located one mile north of M-14 in Washtenaw County, is one of two metal truss bridges in Michigan dating from 1876, making it one of the two oldest in the state.

Although the exact erection date of the bridge is not known, historical records verify that this structure design dates back to the late 1800's, when it was manufactured by the Wrought Iron Bridge Company of Canton Ohio, considered to be one of the most prolific nineteenth century metal truss bridge manufacturers in the Midwest at that time. Bridge materials were shipped by rail in "kit form" and then assembled at the existing site. Local materials were used for the footings and decking, and it is presumed the one-lane bridge was erected shortly after the patent date of 1876.

Excerpt from Historic

~ Excerpt from Historic Highway Bridges of Michigan, Charles K. Hyde



Foster Station from Station 371 ~ Circa 1940



Hosted by the Washtenaw County Road Commission





The Maple (Foster) Road Bridge as it exists today.

Current Day Conditions and Needs...

or years, the sturdy 100-foot long "Foster Bridge," as it is referred to by locals, held its ground and provided limited passage for the community. However, time holds still for no one, and over the years, the bridge began to reflect its age. With its deck eroding, weight limitations and its paint peeled and weathered from years of exposure to the sun and elements, it was time for something to be done.

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vehicles. By late 1999, due to the structural deterioration of the bridge and concern for public safety, a reduced limit of 6 tons was imposed. The newly imposed weight restrictions quickly enlightened the community to the needs of the bridge, and made clear that something had to be done to prevent its permanent closure and preserve its future use and life-span.

It was at this time that the Road Commission began to

explore options to construct a new vehicular bridge, which could be accomplished by utilizing **Critical Bridge Funding (CBF)**, which is state and federal money that is allocated to local road agencies each year for the construction of new bridges. However, the receipt of this federal and state funding imposes certain restrictions – one being, that bridges must be built to meet current design standards. Therefore, to utilize CBF for the Foster Bridge project, the Road Commission was obligated to consider constructing a new two-lane bridge.

Thus, in early 2000, the Road Commission initiated an environmental assessment study of the bridge, which was conducted by an outside engineering consultant. Out of this study, four (4) options were proposed by the consultant and presented to the Ann Arbor Township officials in March of that year. A few months following, the proposed options were discussed with area residents at a public meeting held on June 13, 2000. The four options included the construction of a new twolane, concrete bridge, either upstream or downstream of the existing truss bridge, with cost estimates varying from \$1 million dollars to \$4 million dollars, of which 95% would be covered by Critical Bridge Funds. Since all of the proposed options involved the construction of a new two-lane bridge that would span the Huron River and encroach upon residential properties north of the river, the Road Commission suggested that the preferred option should be the one that would cause

the least impact on the residents and their adjacent properties. However, these initial designs for a new bridge caused a stir among the area residents and the consensus of the community was to reject the four proposed options. Instead, the citizens respectfully

requested the Road Commission to consider a fifth, alternative option – to rehabilitate the existing historic bridge. The Road Commission was willing to work with area residents and agreed to temporarily postpone their decision to replace the bridge.

Because local residents very much wanted the Foster Bridge to remain in its historic state, and the area to retain its rural setting as much as feasibly possible, they joined together to act quickly. Armed with the knowledge that they had the support of the Road Commission to seek alternatives to save the bridge, they formed the Citizens for Foster Bridge Conservancy (CFBC), a

non-profit grassroots organization that consisted of approximately 70 citizens from the City of Ann Arbor, Barton Hills Village and Ann Arbor and Scio Townships. It's list of officers included: **Frank Macher**, President; **Milt Chace**, Vice-President; **Dan Walters**, Treasurer; and **Sheila Conant**, Secretary.

The group's *Mission* was to address and support the bridge's refurbishment in the beginning stages of the project, in hopes to...

- Preserve the aesthetics of the historical onelane bridge;
- Protect the natural beauty of the Huron River corridor; and
- 3. **Promote** the safety of the community by upgrading the structural integrity of the Foster Bridge to support safe passage of school buses, passenger and emergency vehicles.

The CFBC's first official effort resulted in raising over \$40,000 from community residents to hire Lichtenstein Consulting Engineers, well-known specialists in the renovation of historic bridges, who performed an in-depth inspection, materials testing, and load rating and analysis, in an effort to identify rehabilitation alternatives. The first inspection took place on August 19, 2000, and in conjunction with Lichtenstein's study, the University of Michigan Civil Engineering staff and students were petitioned to perform load limit tests.

Then, on September 18, 2000, the CFBC began their fund-raising efforts within the community to provide for anticipated refurbishing costs, holding a public meeting at the Scio Township Hall. Over 200 people attended the meeting and the response from the local residents in support of the rehabilitation project was overwhelmingly positive, particularly from the Barton Village Trustees, who generously pledged to contribute \$225,000 from their own escrowed Michigan Transportation Funds, which were monies that could not be spent on private roads within the Village. The remaining funds needed were subsidized by the Washtenaw County Road Commission from its general fund – and thus, the project was set into motion. The total construction costs for the rehabilitation of Foster Bridge - \$525,000.

The Rehabilitation...

eginning the week of April 21, 2003, the Foster Bridge began to receive its much-needed rehabilitation under the direction of the Road Commission and their consultants, with the approval by Washtenaw County Board of Road Commissioners Norman Kennedy, Pamela Byrnes and Fred Veigel. This approved rehabilitation was intended to not only preserve the aesthetic historic value of the bridge, but also ensure its longevity and safety for modern day use.



Over the next five and a half months, the extensive bridge rehabilitation process involved replacement of various structural components and posttensioning of the trusses, replacement of the timber deck with a new laminated wooden deck, guardrail improvements, and repainting the bridge green; (the color that records indicate it was

painted sometime in the 1940's). The completed

improvements have increased the load carrying capacity to

safely accommodate most forms of traffic, including passenger, emergency vehicles and school buses.







"A special acknowledgment must be given to Aaron Berkholz, Project Manager, and the rest of our staff who diligently worked to ensure the successful completion of this unique, historic project," states Steven Puuri, Managing Director of the Washtenaw County Road Commission.

"But our sincere expression of thanks and appreciation must definitely go out to the area residents and Barton Hills Village officials, who were instrumental in the positive and cooperative outcome of this rehabilitation



project," continues Puuri. "Were it not for their financial support and commitment, the Road Commission would not have been able to restore the bridge in a way that

could ensure its historic preservation, while also maintaining our required safety standards."







The Rededication...

n October 10, 2003, the Washtenaw County Board of Road Commissioners hosted an official "Rededication Ceremony" where members of the Citizens for Foster Bridge Conservancy, local dignitaries, the Road Commission staff, media representatives, friends, neighbors and families joined together once more to officially rededicate and reopen this distinctive, long-serving bridge back into service for the Washtenaw County community.

With its newly completed rehabilitation, the Historic Maple (Foster) Road Bridge could quite possibly be around for another 100-plus years, thanks to the tireless and cooperative efforts of area citizens, local officials and the staff of the Washtenaw County Road Commission. These individuals are now a part of this bridge's history, as they leave this gift, this legacy to the next generation who will travel across and admire the unique Foster Bridge for many years to come. It is a gift that will forever "bridge the past with the future."

Special Acknowledgments...

special *thank you* goes out to these and the many other individuals who contributed their invaluable time, commitment and support to this project:

Citizens for Foster Bridge Conservancy

Frank Macher, President Milt Chace, Vice-President Dan Walters, Treasurer Sheila Conant, Secretary Nancy Davis, Director Sandy Fortier, Director Kathy Macher, Director Sue Walters, Director

Barton Hills Village

James Wilkes, President
Riad Al-Awar, President Pro-tem
Doris Foss, Clerk
Jan Esch, Assistant Clerk
William Boddie, Treasurer
Adele Laporte, Trustee
William Davis, Trustee
Susan Butterwick, Trustee
Cheryl MacKrell, Trustee
Barbara Hensinger, Trustee
Joseph Pickl. Trustee

University of Michigan College of Engineering Professor Andy Nowak

Professor Andy Nowak
Dept. of Civil & Env. Engr.

VJM Metal Craftsman, LLC Vernon J. Mesler

Ann Arbor Charter Twp.

Michael Moran, Supervisor Catherine Braun, Clerk Virginia A. Forshee, Treasurer John Allison, Trustee Richard Dieterle, Trustee Della DiPietro, Trustee Gene Ragland, Trustee

Lichtenstein Consulting Engineers. Inc.

William Clark, P.E., Project Engr. David M. Moskowitz, P.E. Hamid V. Homaee, P.E. Bala Sivakumar, P.E.

Dixon Engineering, Inc.

Anlaan Corporation

Washtenaw County Road Commissioners & Staff

Norman E. Kennedy, Chair Pamela G. Byrnes, Vice-Chair Fred J. Veigel, Member Roy D. Townsend, P.E. County Highway Engineer Aaron L. Berkholz, P.E. Civil Engineer, Project Manager Chet Brzys, Inspector Emmanuel Edwin, Inspector