

Monument Place Bridge

Informational Workshop Public Meeting

Welcome

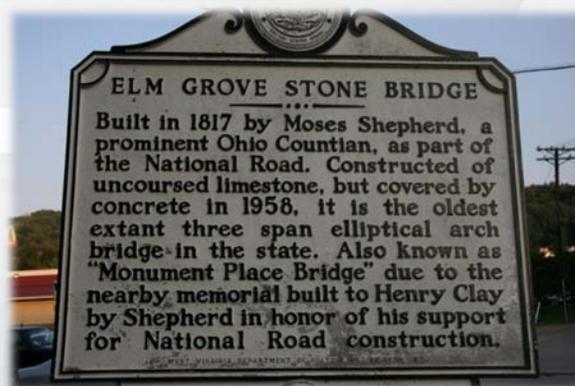
Thank you for participating in the informational workshop public meeting for the Monument Place Bridge in Wheeling, WV. This meeting is being presented by the West Virginia Division of Highways to inform the public of the project and to collect public opinion and comment.

This workshop is from 4:00 pm to 7:00 pm on Thursday, May 31st, 2012 in the cafeteria of the Bridge Street Middle School in Wheeling, WV. There will be no formal presentation. The workshop is intended to be informal to maximize the interaction between the citizens and project team. We invite you to browse the displays and encourage discussions with the project team. A comment sheet is included in this package and additional sheets are available at the information desk. Comments can also be submitted online at www.transportation.wv.gov.

Project Background and Description

Background

The Monument Place Bridge is located on US 40 and carries traffic over Little Wheeling Creek. It was part of the original US 40/National Road and is one of only two (along with the Wheeling Suspension Bridge) existing bridges in West Virginia from that historic facility. Constructed in 1817 by Moses Shepherd, this structure is the oldest bridge in West Virginia, and is among the oldest bridges in the country. Also known as the Shepherd Bridge and Elm Grove Stone Arch Bridge, it was inducted into the National Register of Historic Places in 1981. The bridge is a unique and rare example of a stone arch that features the elliptical style of arch geometry. The three span structure was updated in 1931 when the concrete sidewalks were added. In 1958, a concrete veneer was applied over the stone, giving it the appearance of a concrete arch bridge.



Project Purpose

Over time, a significant portion of the concrete veneer has become delaminated from the original stones, portions have become dislodged, and additional deterioration is evident. The original stone is visible in numerous places on the structure. The sidewalk and railing also show deterioration. The structure is currently posted for weight limit restrictions of 16 tons for single unit trucks and 32 tons for tractor trailers.

The purpose of this project is to evaluate the most economical and feasible rehabilitation or replacement options for the stone arch structure. Six (6) alternatives were developed and compared from a design and cost perspective. The existing historic bridge will remain regardless of the option selected.





The Alternatives

No-Build Alternative

The No-Build Alternative considers taking no rehabilitation or replacement action and continuing to maintain the structure as is. The WVDOH will continue to provide routine maintenance on the structure as currently is done today.

Alternatives 1A, 1B, 2 and 3

Alternatives 1A, 1B, 2 and 3 propose various forms of rehabilitating the existing structure. Alternative 1 has been developed as two options: 1A and 1B. Alternative 1A involves the rehabilitation of the existing bridge, which includes removal of all existing concrete, existing deck, sidewalks and the arch. Then, a significant number of stones will be removed and reset before rehabilitating existing piers and abutments. New sidewalks and asphalt roadway will also be constructed. Alternative 1B (less extensive) is similar to 1A without the need for removal and resetting (or replacement) of a significant number of stones. Instead of dismantling the stone masonry, the structure will be cleaned and repointed in place. Isolated damaged stones will be replaced where necessary and feasible.

Alternative 2 involves a hybrid rehabilitation of the existing bridge. It includes a significant portion of the work required for Alternative 1B plus the construction of a completely new load-carrying system that will prevent overloading of the original arch.

Alternative 3 is a rehabilitation option using one of a several modern, commercially available systems. Systems considered involve installing steel rods into the arch for support, drilling reinforcing bars into and along the arch or applying fiber reinforced wraps along the bridge to strengthen the arch. These options vary in difficulty to construct and some could be visually obtrusive.

For Alternatives 1A, 1B, 2 and 3, a temporary detour using existing routes is proposed to maintain traffic while the existing structure is closed. Additional information on the proposed detour routes is found on the next page. The bridge will have three 12' lanes with 5' sidewalks on each side of the bridge.

Alternative 4

This alternative proposes the replacement of the bridge on a new alignment approximately 833 ft upstream of the existing structure between the dual structures carrying I-70 over US 40 and Little Wheeling Creek. This alternative also includes relocating US 40 along existing city streets, Lumber Avenue and Coal Avenue. This will require upgrading local streets to meet design criteria of an urban arterial facility.

The proposed structure will not have the same overall width of the existing Monument Place Bridge due to the constraints of the existing piers of I-70. The proposed structure will consist of two 12' lanes with 4' shoulders and no sidewalks.

Traffic will be maintained on the existing bridge while the new structure is being constructed.

Alternative 5

Alternative 5 provides for a new structure downstream of the existing structure. Based on the significant right-of-way, hydraulic, and traffic impacts created by this alternative, it has been determined that this option is not a viable solution and has been eliminated from further consideration.

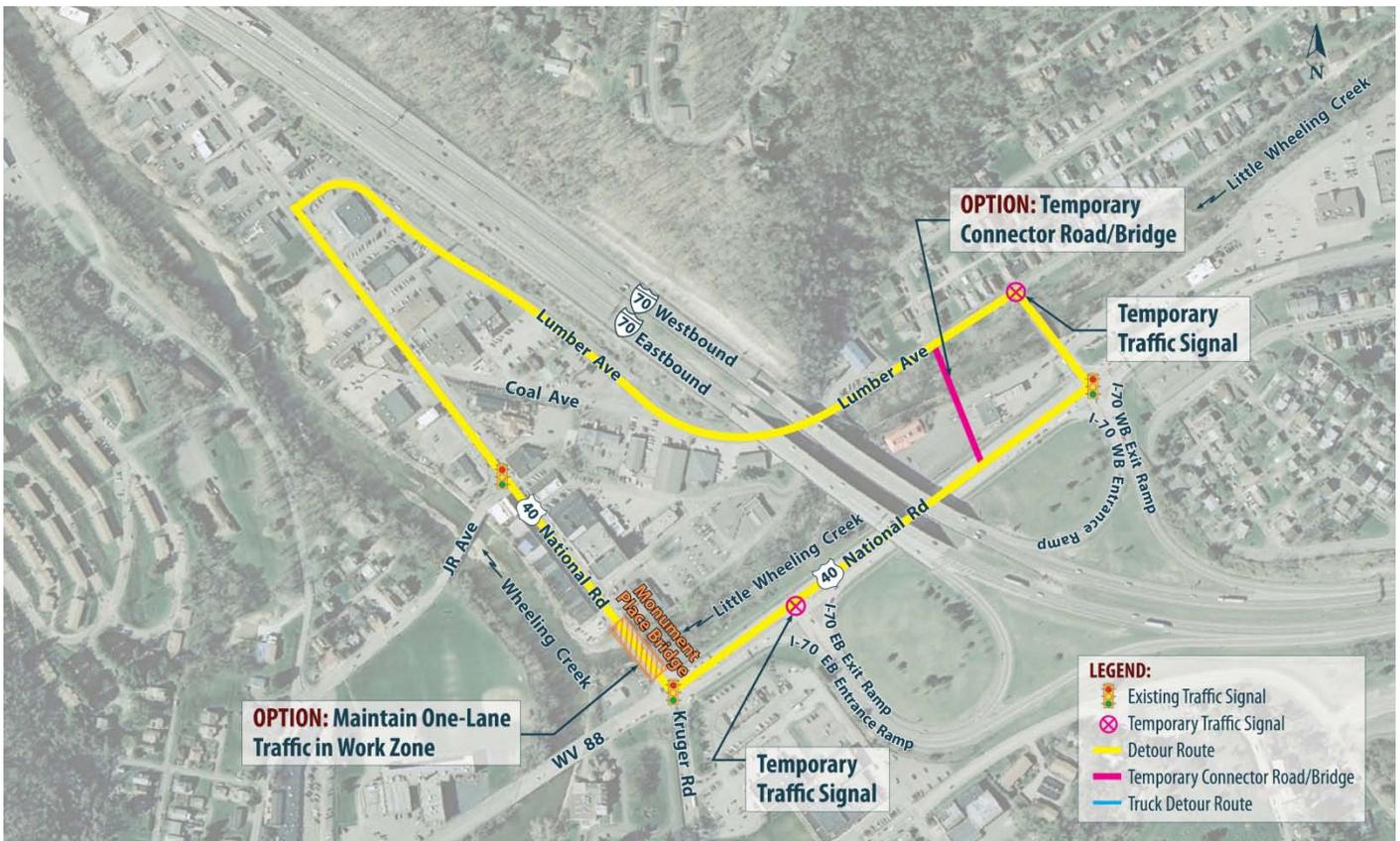


Construction Detour

Local Traffic

A detour, using the existing street system, is proposed to maintain traffic throughout the construction of Alternatives 1A, 1B, 2 or 3. The detour, as shown below, utilizes Lumber Avenue and the existing Unnamed Road to bypass Monument Place Bridge. There is an option to construct a temporary connector road/bridge to eliminate traffic on existing unnamed road, but this option increases the cost of construction significantly and provides minimal improvements to traffic conditions. There is also an option to maintain one lane of traffic on the existing Monument Place Bridge throughout construction, but this could increase the construction duration considerably.

Local Traffic Detour Options

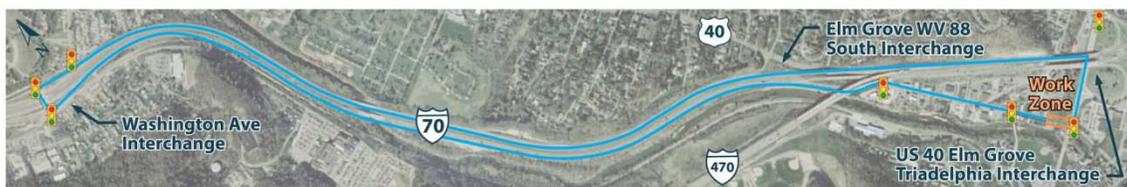


Truck Traffic

* For Alternatives 1A, 1B, 2 and 3

The proposed local traffic detour will not be able to accommodate large trucks. Therefore, truck traffic will be detoured to the Washington Avenue interchange, approximately 2 miles west of the project site and the WV 88 South/Elm Grove Interchange. This truck detour is depicted in the figure below.

Truck Detour





Alternatives Comparison

The proposed alternatives are summarized and compared in the table below.

	Sidewalks	Three 12' Lanes	Two 12' Lanes	Detour	Construction Cost Estimate
No Build (existing bridge)	YES	X	-	-	*
Alternative 1A	YES	X	-	YES	\$4,278,000
Alternative 1B	YES	X	-	YES	\$3,024,000
Alternative 2	YES	X	-	YES	\$3,762,000
Alternative 3	YES	X	-	YES	\$4,837,000
Alternative 4	NO	-	X	No	\$3,146,000
Alternative 5	Eliminated from further consideration				

*The maintenance costs over time will significantly increase as the structure continues to deteriorate.

Next Steps...

July 2, 2012

All public comments due to WVDOH

Summer 2012

Begin environmental studies

Fall 2012

Additional Public Meetings for Environmental Document

2013 and Beyond...

Final Design of Preferred Alternative and Construction

Why should you be involved in the project?

Comments on this project and its potential impacts are requested from the public to assist in the study and development of the recommendations. The comments and suggestions you provide are important so the agencies involved can hear the concerns of the people who live and work in the area. Your input will be used to guide the study team as the project moves forward.

Comments are due July 2, 2012
and should be sent to the following:

Mr. Gregory Bailey, P.E., Director
Engineering Division
West Virginia Division of Highways
State Capitol Complex, Building 5
1900 Kanawha Boulevard East
Charleston, West Virginia 25305-0430

Visit the WVDOH Website at www.transportation.wv.gov for project Information and the opportunity to comment electronically.

