



RUSTIC ROADS ADVISORY COMMITTEE

September 15, 2017

Barry Fuss, Chief, Bridge Design
MCDOT, Transportation Engineering Division
100 Edison Park Drive, 4th Floor
Gaithersburg, MD 20878

RE: Zion Road, rustic road
Hawlings River bridge replacement proposal

Dear Mr. Fuss:

Thank you for contacting our committee regarding the need for a replacement bridge on Zion Road. Our members recently made two visits to the bridge, and we provide the following comments:

Based on the information and photos you provided, and what our members observed during our site visits, we agree with your recommendation that the existing bridge should be replaced. We recommend that you and your team design the replacement bridge to be narrow and context sensitive, reflecting several of our most important and long-standing County policies and programs, including:

- The County Council's designation of Zion Road as a **Rustic Road** in recognition of its historic value. The purpose of the Rustic Roads Program, as stated in County Code, is "to preserve as rustic roads those historic and scenic roadways that reflect the agricultural character and rural origins of the County." Zion Road was identified for preservation in 1990, and the Rustic Roads Program law came into effect in 1993. We especially recommend that the ca. 1920s concrete arch design and the narrow width between the parapets be carried to the new design.
- The site of the bridge, spanning a tributary of the Hawlings River, a critical part of the **Patuxent River Primary Management Area**, and an important element of both State and County efforts to protect our drinking water reservoirs on the Patuxent River, as well as aiding in protection of the Chesapeake Bay. Minimizing impervious levels is key to maintaining high water quality. The County's Functional Master Plan for the Patuxent River Watershed has been in effect since 1993.
- The setting of the bridge in **Rachel Carson Conservation Park**, a 650-acre park that is one of the County's premier conservation areas. The Montgomery County Parks Department began acquiring this land for conservation in 1964.
- The larger setting of Zion Road and this bridge in the 93,000-acre **Montgomery County Agricultural Reserve**, which was created in 1980 and is recognized as one of the best examples of land conservations in the country.

The Hawlings River corridor and this area has also been identified by the State of Maryland as a **Targeted Ecological Area**. Identified TEAs are large contiguous block of significant forests and wetlands

and their connecting corridors, and are preferred locations for funding through Stateside Program Open Space.

The current bridge was constructed in the 1920s, when Zion Road, previously Hobb Road, was a state highway. It is a distinctive concrete arch bridge, about 11.7 feet wide and 22 feet long. One of the parapets appears to be original. The bridge is located within a wide, wooded floodplain within Rachel Carson Conservation Park. Zion Road winds through this section, requiring slow speeds and single lane operations on the bridge. The Hawlings River appears to be developing an oxbow on the upstream side of the bridge. During one visit, we noted mud and debris along the road, indicated that the water had overflowed the road in two locations just north of the bridge. One of our members who lives in the area reports that the road floods and closes when we experience unusually heavy rains. The bridge is higher than the road, directing the overflow away from the bridge. It appears that the short length of the bridge exacerbates the condition.

This bridge is an important connection for our area farmers who are currently using circuitous detours because of the new weight limits on this bridge. Farmers who regularly use the bridge for agricultural purposes move large farm equipment and trucks on this section of road, some weighing 80,000 pounds. These farmers concur that the bridge is wide enough but must be reconstructed to accommodate heavy loads. A wider bridge would increase traffic speeds and the likelihood of conflicts between farm equipment and commuters on the road. Given the location of the bridge in the Agricultural Reserve where agriculture is the preferred land use, we do not consider that to be acceptable.

Much of the road flooding is located at a stream culvert approximately 100 feet east of the bridge, which was itself a bridge 30-40 years ago. We would like to discuss the process for a concurrent repair of this structure so as to minimize the need for additional road closures in this area.

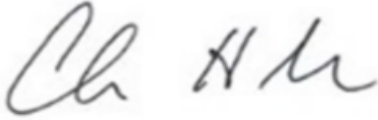
We request an opportunity to consult with you on the design of this important and sensitive project well before the 30 percent design stage, so that we have an opportunity to address issues of context and compatibility before any design decisions are finalized. As noted above, we recommend that the concrete arch design and the narrow width of the bridge be maintained. We would like to hear your thoughts on whether lengthening the bridge might reduce the times the river overflows the road. Tinting the concrete to reduce the visual impact of the new material, and using timber guardrails are preferred. Within the Rachel Carson Conservation Park or within the project limits (whichever is greater), the timber guardrails should be continued where guardrails are needed on this road.

More broadly, one of the designated Significant Features of this road is the “forest canopy over northeastern section of road,” (Rustic Roads Runctional Master Plan, p. 188). By County Code, Significant Features must be retained. As this section of road falls within parkland, we would like to work with you and staff from the Parks Department to assure that the forest canopy remains intact.

We support prompt funding of this project. As noted above, this bridge is vital to our area farmers who use Zion Road extensively, especially during harvest. If the Brookeville Bypass project is started before the completion of this project, it will be extremely difficult for the farming community to operate, so we ask that the two project schedules be coordinated, with this project being completed before the Brookeville Bypass road closures occur.

We will give you a call in the next week to see if you have any questions, discuss times for a design review, and discuss how we can assist in moving this project forward. In the meantime, if you have any questions about these recommendations please contact our staff coordinator, Michael Knapp, at 240-777-6335 or Michael.Knapp@montgomerycountymd.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Ch H Marston', is positioned above the typed name.

Christopher H. Marston, Chair
Rustic Roads Advisory Committee

Committee Members: Todd Greenstone, Thomas Hartsock, Sarah Navid, Jane Thompson, Robert Tworkowski, Laura Van Etten

Cc: Andy Frank, Chief, Park Development Division, Montgomery Parks
Mike Riley, Director, Montgomery Parks
Randy Paugh, Chief, Pavement Management Section, MCDOT
Bruce Johnston, Chief, Transportation Engineering, MCDOT
Al Roshdeih, Director, MCDOT
Roger Berliner, Council President, and Councilmembers Elrich, Floreen, Hucker, Katz, Leventhal, Navarro, Rice and Riemer