

THE 100 YEAR BRIDGE

Owner: MDOT SHA | **Engineer:** WSP | **General Contractor:** Martins Construction Corp
Concrete Contractor: SAP Contracting | **Manufacturer:** MST Rebar Inc | **Distributor:** Ernest Maier, Inc



Total Budget **\$6.8 Million**

Bridge Deck	60' Long x 44' Wide
Fiberglass Rebar	4 tons of #4, #5, #6 (straight and bent). Equal to 10+ tons of steel. Mat is @ 8" OC with traffic, @ 5.5" OC normal to traffic.
Construction	September 2024 - September 2025 (12 months)

Project Overview

The MD-5 (Point Lookout Road) bridge over Hilton Run in St. Mary's County, Maryland, originally constructed in 1936, has long served as a vital link for local and regional traffic. After nearly 90 years of service, the bridge was in poor shape and needed to be replaced. In September 2024, the Maryland Department of Transportation State Highway Administration (MDOT SHA) began a \$6.8 million bridge replacement project.



Innovation: Fiberglass Rebar Integration

The most groundbreaking aspect of the MD-5 Bridge Replacement Project is its use of **glass fiber reinforced polymer (GFRP)**—commonly known as **fiberglass rebar**—in the bridge deck. This is the first time MDOT SHA has implemented fiberglass rebar in a bridge structure.

Why Fiberglass Rebar?

MDOT SHA did not undertake this project lightly. It builds upon a dozen other state DOTs' and AASHTO's experiences with GFRP, and over 30 years of field experience in the U.S.

- **Corrosion-Free:** Unlike traditional steel rebar, fiberglass rebar does not rust, making it ideal for environments exposed to moisture and deicing salts.
- **Lightweight:** GFRP is significantly lighter than steel, reducing transportation and handling costs.
- **Material Performance:** Offers superior tensile strength while being easier to work with on-site.
- **Sustainability:** Its long lifespan, resistance to environmental degradation, and smaller carbon footprint make it the most sustainable choice.
- **Cost-Competitive:** Material and labor savings have made this the most affordable option from Day 1.



Contractor Experience

Beyond Positive. Just like steel, but fiberglass was easier to place, cut, and handle. They were also excited that it didn't get hot during the summer months. They are ready to use on more of their projects.



Ready to build a bridge that lasts 100 years, without the maintenance headaches of lane closures for repair?

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