Replacement of Bridge 3-164
on Cedar Beach Road over Cedar Creek

RENDERING OF THE PROPOSED BRIDGE

Project data:

12 MONTHS
Estimated roadway closure duration

$32 MILLION
Estimated project cost

Why is the bridge being replaced?

EXISTING BRIDGE

Bridge 3-164 is owned and maintained by DelDOT. The existing structure consists of a 60 ft movable swing span with a 14 ft fixed approach span on the east side of the movable span. The creek serves as a key link for boats accessing the Delaware Bay which makes this structure DelDOT's most frequently operated movable bridge. The increasing frequency of high water events at the bridge has led to deterioration and ongoing maintenance for the bridge operating equipment. Additionally, the corrosive marine environment has led to significant corrosion of the structure. Although the bridge is still safe for traffic, the deterioration has led to continuous maintenance issues and the structure has surpassed its useful service life. The proposed project will replace the existing bridge and control house in their entirety.

Delaware Department of Transportation

AECOM

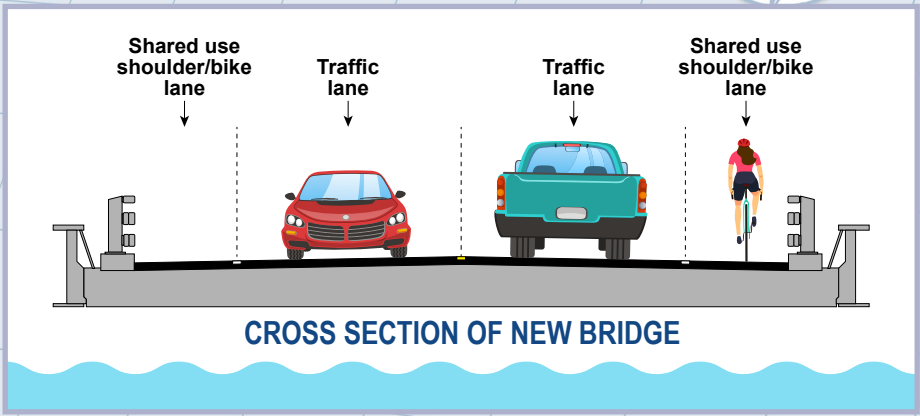
https://de.gov/slaughterbeachbridge

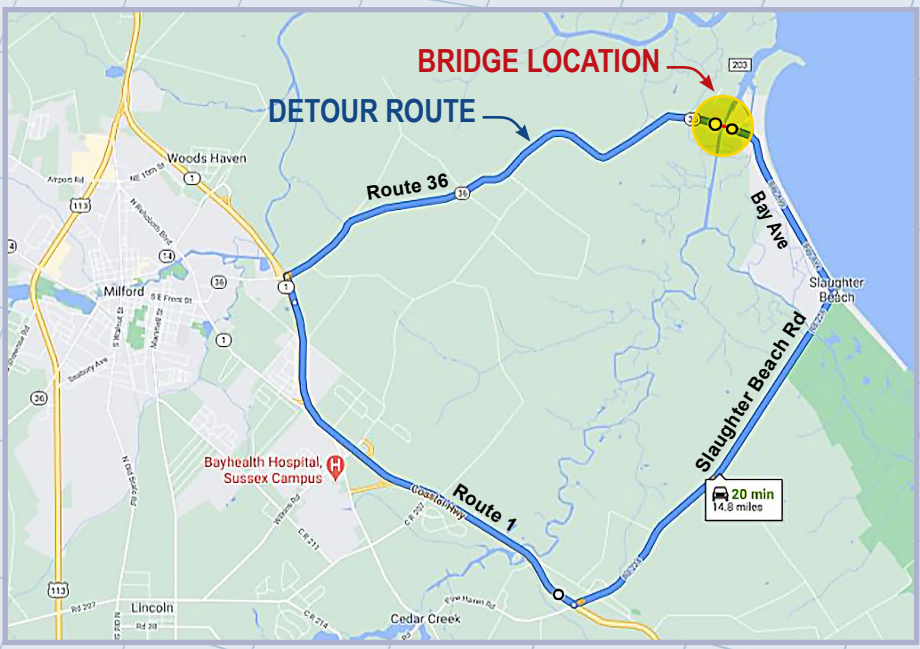
Hardesty & Hanover

DelDOT Bridge Section

Project description

Several alternatives were considered for replacement of the existing structure focusing on two primary project objectives: 1) providing the operating components for the movable span above the flood elevation to avoid ongoing maintenance after high water events and 2) providing an aesthetically appealing structure. The selected alternative is a Dutch-style bascule bridge which allows the operating machinery to be located above the roadway level and out of the floodplain. This type of structure is commonly used in Europe for pedestrian and bicycle traffic but lends itself well to the needs of this project.





The proposed bridge is composed of a 41 ft bascule span with fixed approach spans on either side. The width of the navigation channel for the proposed structure is 27 ft, increased from the existing width of 22 ft. The approach spans consist of precast concrete slabs for ease of construction and cost effectiveness. The width of the proposed structure will be increased to allow for 11 ft lanes and a 5 ft shared use shoulder/bike lane in each direction.

The design of the operator's house incorporates sustainable design elements to provide a structure that will be durable and energy efficient. The structure was developed to resemble a lighthouse in a horizontal form extending toward the waterway and will act as a beacon for both roadway and marine traffic.

Construction is anticipated to begin in the Spring of 2024 and last for approximately 16 months during which a 12 month detour of the roadway will be necessary. Periodic closure of the navigation channel will also be required for demolition and construction. A map of the bridge location and vehicular detour route is provided for reference.

Public feedback

The design team is requesting project feedback from residents, commuters, and other interested parties. All interested parties are encouraged to fill out the comment form located on the project website.

For more information visit our project website.
Direct questions, comments, or concerns to:
DelDOT Community Relations
302-760-2080
dotpublic@delaware.gov
Please include the project name when contacting us to expedite our response to you.

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