




PAT McCRORY
Governor

NICHOLAS J. TENNYSON
Secretary

November 21, 2016

TO: Joint Legislative Transportation Oversight Committee

FROM: Rodger Rochelle, PE 
Director, Technical Services, Division of Highways

SUBJECT: Herbert C. Bonner Bridge Replacement Project

This report is submitted pursuant to GS 136-89.183B and provides the status of the Department's efforts to replace the Herbert C. Bonner Bridge on NC 12 in Dare County.

In April 2015, the Department of Transportation, the Federal Highways Administration, and the Division of Coastal Management reached a settlement agreement with the Southern Environmental Law Center and the plaintiffs, Defenders of Wildlife and the National Wildlife Refuge Association, which resolved the plaintiffs' opposition to the project.

Immediately following this settlement agreement, the Department worked quickly to complete all conditions precedent under the settlement agreement so that the lawsuits at both the federal and state levels could be dismissed. Subsequently, all construction permits were obtained, including recorded highway easement deeds from the Pea Island National Wildlife Refuge and the Cape Hatteras National Seashore.

Design of the replacement bridge is complete and an official groundbreaking was held on March 8th of this year. The 2.8-mile bridge, as well as the roadway improvements, are scheduled to open to traffic in November 2018. The overall project, including the demolition of the existing bridge, is scheduled to be complete in September 2019. To date, the construction of the bridge is approximately 15% complete.

The new bridge is designed to have a 100-year life span, built using stainless reinforcing steel and high-durability concrete. The high rise will be 3,500 feet long and have seven navigational spans, each averaging about 300 feet in length, which will provide more options for navigation under the bridge. Comparatively, the arched high rise of the existing bridge provides for only one navigational span with an opening of 130 feet.

Nearly 700 bridge piles, averaging about 120 feet in length, will be installed. The first pile was driven on March 10th of this year. To date, approximately 110 of these piles have been installed.

Nothing ComparesSM

The bridge will be composed of 82 spans of varying length from 155' to 350' including the seven navigational channel spans. A few pier caps have been placed atop the piles to allow for girder placement to form these spans. More than 300 girders, most of which will be 8 foot tall prestressed concrete, will be used in the construction, as well as 264 prestressed, post-tensioned concrete box segments ranging in height from 8 feet to 21 feet.

Upcoming milestones on the project include (1) the pouring of the first massive low water footing to support the navigational channel spans in the next few weeks; (2) installation of the first precast post-tensioned concrete column segments for the navigational spans in December; and (3) pouring of the first span's bridge deck riding surface concrete in early 2017.

Thank you and please feel free to contact me at (919) 426-3075 with any questions or concerns.

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