



Submittal #006:

FIBER REINFORCED POLYMER TECHNOLOGY, NCDOT HISTORY AND VISION

Abstract:

Resiliency of bridges, especially those in coastal areas or that are subject to corrosion from de-icing salts is a major concern for both owning Agencies and Taxpayers. This presentation will educate the audience about the use of Fiber Reinforced Polymers in Concrete to construct coastal bridges with a design service life of one hundred years. It will include a summary of projects that illustrate the acceptance process and project design progression for the use of a new material by a State Department of Transportation. It will feature the design, testing, and construction of the Harkers Island Bridge Project consisting of a 3000 foot long bridge utilizing FRP reinforced concrete with NO structural steel reinforcement in the structure.

Speaker:

W. Cabell Garbee, II, PE
Manufactured Products Engineer
NCDOT Materials and Tests Unit
cgarbee@ncdot.gov
M: 919-906-6294

Bio:

Cabell Garbee is the North Carolina Department of Transportation's Manufactured Products Engineer. He manages the Department's acceptance programs for metals, concrete, timber, plastics, and composite products used by the Department to include facility audits and approvals, product evaluations, inspections, and approvals. He is responsible for materials product tracking by use of RFID/barcode identification and participates in the Department's specification development. He is the Vice-Chair of the AASHTO NTPEP Composite Concrete Reinforcement Committee, Chairman of the FRP Institute for Civil Infrastructure DOT Advisory Board, and a Professional Engineer licensed in North Carolina and Virginia. A native of Lynchburg, Virginia, he has a BSCE from NC State University and is a resident of Raleigh, North Carolina.