



Publication

Foundation innovations ensure successful bridge replacement

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Authors: -

Jean Louis Z. Locsin, Ph.D., P.E., Heather B. Scranton, P.E., Alec D. Smith, Ph.D., P.E., Haley & Aldrich; Mary Vittoria-Bertrand, P.E., RIDOT; and Mark S. Greenleaf, P.E., Commonwealth Engineers and Consultants

Synopsis:

Rhode Island's new \$163.7 million, 2,265 ft (690 m) long, four-lane Sakonnet River Bridge sits just south of the existing bridge in Portsmouth/Tiverton, RI. The bridge, a critical transportation system link between Massachusetts and Rhode Island, has a steel I-girder main span and concrete New England Bulb Tee approach spans. The foundation work was done between October 2009 and July 2010, and the bridge was completed in February 2014. Constructing a new bridge adjacent to an existing bridge, and generating high-capacity foundation elements in deep silty soils proved to be challenging. However, innovative design solutions were created through close collaboration of teaming partners, saving about \$9 million in costs, plus additional savings in time.

Photo credit Rhode Island Department of Transportation.