Laboratory and Field Testing and Evaluation of Precast Bridge Elements

Description

Meta Fields
Project Completion Year : 2009
Project Starting Year : 2006
Other Documents 0 Other Documents File : 2447
Primary Sponsor Contact Info : Iowa Department of Transportation 800 Lincoln Way Ames, IA 50010 USA
Budget : 0.00
Key Words :

Bridge design; Bridge engineering; Construction; Cost effectiveness; Design standards; Durability; Field tests; Laboratory tests; Precast concrete; Research projects; Structural tests

Abstract :

The objective of this research project are to: 1. Assist the Iowa DOT and Iowa county engineers in fully leveraging the FHWA Innovative Bridge Research Construction Program funding. Demonstrating the benefits of precast, post-tensioned bridge components through this project may provide an opportunity for the Iowa DOT and Iowa county engineers to design and construct more cost effective and durable bridges. The benefits derived from developing accelerated construction concepts may also be significant. 2. Perform testing (lab and field) and evaluation of precast components for three separate bridge projects to assess overall design, construction, and bridge structural performance. The research team will design and install monitoring systems and perform laboratory structural tests on bridge specimens that represent structural details for use on three field demonstration projects in Black Hawk County, Boone County, and Madison County. Further, the research team will design and install monitoring systems on the three demonstration field bridges to collect overall bridge construction and in-service bridge performance over an extended period of more than two years. Evaluation of performance will be formulated through comparisons with design assumptions, recognized codes, and standards including the AASHTO specifications.

Subject : In-service Testing Pile Pockets, Deck Panels,
Group : Standards
Category : Completed Projects

Contact Us | Phone: (305) 348-0110 | Email: abc@fiu.edu | 10555 W. Flagler Street, EC 3680 Miami, FL 33174