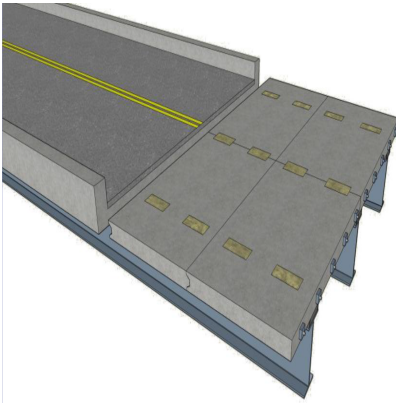




Transverse Joint Configuration Development and Testing for a Modular Bridge Deck Replacement

Description

Meta Fields

Category : Completed Projects

Group : Decks

Subject : Deck Panels

Abstract :

According to the 2009 Report Card for America's Infrastructure, one in four of the nation's bridges are listed as structurally deficient or functionally obsolete, establishing a dire need for new and innovative repair and replacement techniques to improve the efficiency and state of the nation's bridges. Full-depth pre-cast bridge deck panels have proven to be a rapid, efficient and cost effective solution to cast-in-place bridge deck replacement techniques. However, the panel-to-panel connection for these segmental deck replacement systems requires further development and testing to improve their structural redundancy, and to streamline their installation procedure. Multiple transverse joint configurations have been developed, fabricated, and tested in order to evaluate their shear transfer capabilities and ease of use. It was determined that a round corrugated transverse joint configuration provided the greatest shear transfer capacity and an efficient installation procedure.

Key Words :

Modular structures, Bridge decks, Bridge construction, Transverse joints, Structural health monitoring, Shear strength,

Budget : 151000.00

Project Length : 36

Primary Sponsor Contact Info : New Hampshire Department of Transportation Bureau of Materials and Research Box 483 5 Hazen Drive Concord, NH 03302-0483 USA

Other Documents 0 Other Documents File : 2340

Project Starting Year : 2008

Project Completion Year : 2011