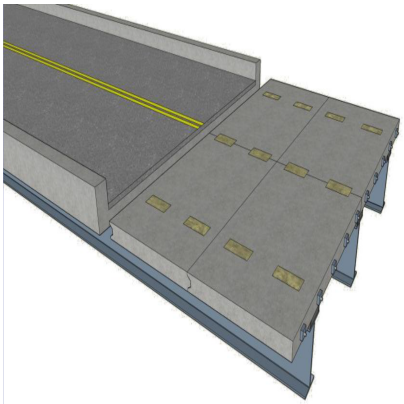

Transverse Joint Configuration Development and Testing for a Modular Bridge Deck Replacement

Description

Meta Fields
Project Completion Year : 2011
Project Starting Year : 2008
Other Documents 0 Other Documents File : 2340
Primary Sponsor Contact Info : New Hampshire Department of Transportation Bureau of Materials and Research Box 483 5 Hazen Drive Concord, NH 03302-0483 USA
Project Length : 36
Budget : 151000.00
Key Words :

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

Abstract :

According to the 2009 Report Card for Americaâ€™s Infrastructure, one in four of the nationâ€™s bridges are listed as structurally deficient of functionally obsolete, establishing a dire need for new and innovative repair and replacement techniques to improvethe efficiency and state of the nationâ€™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.

Subject : Deck Panels
Group : Decks
Category : Completed Projects

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