

SHRP2 R04: Innovative Bridge Designs for Rapid Renewal

Description

Meta Fields

Project Completion Year : 2013

Project Starting Year : 2016

Primary Sponsor Contact Info : Strategic Highway Research Program (SHRP 2) Washington, DC USA

Budget : 0.00

Key Words :

Bridge construction; Bridge design; Design methods; Highway bridges; Pilot studies; Standardization

Abstract :

TRB's second Strategic Highway Research Program (SHRP 2) SHRP 2 Report S2-R04-RR-2: Innovative Bridge Designs for Rapid Renewal: ABC Toolkit describes standardized approaches to designing and constructing complete bridge systems for rapid renewals.

The report includes design standards and design examples for complete prefabricated bridge systems, and proposes specification language for accelerated bridge construction systems, which adheres to the American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD) Bridge Design and Construction Specifications.

ABC Standard Concepts: The Lateral Slide, produced as an addendum to the Innovative Bridge Designs for Rapid Renewal: ABC Toolkit, provides additional detail on the lateral slide construction technique.

An e-book version of this report is available for purchase at Amazon, Google, and iTunes.

The R04 MathCAD files for the SHRP 2 Report S2-R04-RR-2 are available to help illustrate the sample accelerated bridge construction (ABC) design calculations. The sample design calculations serve as training tools for engineers to increase familiarity with ABC design issues and criteria.

A demonstration project on US 6 over the Keg Creek near Council Bluffs, Iowa used the accelerated bridge construction standards developed as part of Renewal Project R04.

Subject : Short to Medium Spans

Group : Standards

Category : Completed Projects