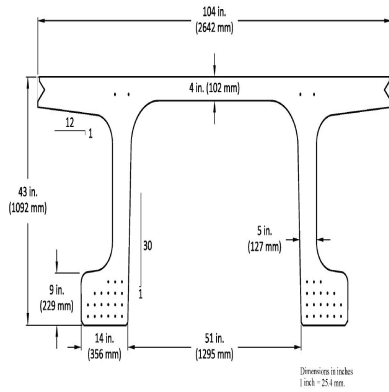




Development of a Family of Ultra-High Performance Concrete Pi-Girders

Description

Meta Fields

Category : Completed Projects

Group : Ultra-High Performance Concrete (UHPC)

Subject : PI girders

Abstract :

Ultra-high performance concrete (UHPC) is an advanced cementitious composite material, which tends to exhibit superior properties such as exceptional durability, increased strength, and long-term stability. (See references 1â??4.) The use of existing structural configurations for materials with advanced properties results in inefficient designs and less cost-effective solutions. Therefore, the purpose of this research is to develop a series of optimized sections of UHPC pi-girders to effectively utilize the superior mechanical properties of UHPC over longer span lengths through finite element analysis (FEA).

Key Words : Ultra-high performance concrete, UHPC, finite element analysis, pi-girder, structural optimization

Primary Sponsor Contact Info : Federal Highway Administration (FHWA) 1200 New Jersey Avenue, SE Washington, DC 20590 USA

Other Documents 0 Other Documents File : 4420

Project Starting Year : 2014

Project Completion Year : 2014