Welcome to Webinar on Accelerated Bridge Construction

Georgia’s Rapid Replacement Utilizing Full-Depth Precast Deck Panels with UHPC Closure Joints

Sponsored by

Accelerated Bridge Construction University Transportation Center (ABC-UTC) at
Florida International University

Website: abc-utc.fiu.edu
Email: abc@fiu.edu

March 16, 2017 – 1:00 p.m. to 2:00 p.m. Eastern
Today’s Webinar

ABC Announcements (10 minutes)
Featured Presentation (35 minutes)

Georgia’s Rapid Replacement Utilizing Full-Depth Precast Deck Panels with UHPC Closure Joints

Bill DuVall, P.E., State Bridge Engineer, Georgia Department of Transportation; and Dexter Whaley, P.E., Bridge Design Group Manager, GDOT

Question and Answer (15 minutes)

Please post your questions in the question box
Mark Your Calendar

2017 National Accelerated Bridge Construction Conference
December 7 and 8, 2017: Conference
December 6: Workshops
Miami, FL

Conference Planning Committee will complete development of conference program by Mid-April
This Conference is approved Continuing Educational Credit by Florida and New York Boards of Professional Engineers.
• You can now reserve your hotel room, at the special Conference rate, by visiting the website

• Opportunities are available for exhibiting at the Conference

• Travel scholarship fund will be available to assist bridge owners attend the Conference

Visit www.abc-utc.fiu.edu for more information
We hope to see many of you at the Conference

Please visit www.abc-utc.fiup.edu for more information
Upcoming Events

*Every Day Counts* Webinar Series:
Ultra-High Performance Concrete for Prefabricated Bridge Elements
Sponsored by Federal Highway Administration (FHWA)
https://www.fhwa.dot.gov/innovation/everydaycounts/

Webinar 2 of 6:
Why UHPC for Prefabricated Bridge Element Connections?
April 4, 2017 – 1:00-2:30 pm EST

To register, go to the following link:
Upcoming Events

Structures Congress 2017 – Denver, CO
April 6-8, 2017
Sponsored by Structural Engineering Institute of the American Society of Civil Engineers (ASCE/SEI)
http://www.structurescongress.org/

Thursday, April 6:
Session 70, Connection Challenges Including Seismic Loading in Accelerated Bridge Construction

Friday, April 7:
Session 122, Innovative Solutions using UHPC

Saturday, April 8:
Session 55, Reuse of Bridge Foundation: Technical Challenges and Developments

Advance registration deadline: March 16, 2017
Upcoming Events

2017 International Bridge Conference – National Harbor, MD
June 4-8, 2017
Sponsored by Engineers’ Society of Western PA (ESWP)
http://www.eswp.com/bridge/

ABC Sessions:
• Tuesday, June 6, 8:00 am – 12:00 pm: ABC, Part 1
• Tuesday, June 6, 2:00 – 5:00 pm: ABC, Part 2

ABC Workshops:
• Wednesday, June 7, 9:00 am – 12:00 pm: W-06, FRP Composites Impact to Sustainable Design of Concrete Bridges and ABC
• Thursday, June 8, 8:00 am – 12:00 pm: W-12, ABC Systems

Early bird registration deadline: May 5, 2017
Upcoming Events

2017 International Bridge Conference

June 5, 2017 – June 8, 2017

The 2017 IBC includes several ABC activities, as listed below:

ABC Sessions:
- Tuesday, June 6, 8:00 am – 12:00 pm: ABC, Part 1
- Tuesday, June 6, 2:00 – 5:00 pm: ABC, Part 2

ABC Workshops:
- Wednesday, June 7, 9:00 am – 12:00 pm: W-06, FRP Composites Impact to Sustainable Design of Concrete Bridges and ABC (see flyer)
- Thursday, June 8, 8:00 am – 12:00 pm: W-12, ABC Systems - Concrete Filled Steel Tubes for Bridge Applications- Seismic

UPCOMING EVENTS

March 16, 2017
Georgia’s Rapid Replacement Utilizing Full-Depth Precast Deck Panels with UHPC Closure Joints

March 22, 2017 – March 24, 2017
2017 NASCC: The Steel Conference - San Antonio, TX
Upcoming Events

2017 International Bridge Conference

Technical Workshop W-06:
FRP Composites Impact to Sustainable Design of Concrete Bridges and Accelerated Bridge Construction

FRP composites are a proven material used in over 500 North American bridges during the past two decades. Composites features such as its lightweight, corrosion resistance, and prefabrication have reduced assembly and installation time resulting in lower installation costs and delivery for new construction. In retrofit and rehabilitation situations, composites extend the service life of the bridge, are faster to install and require minimal disruption to the structure.

About the Workshop
This workshop will showcase advancements in design and specification of FRP products to build steel free concrete structures and retrofit/rehabilitate aging bridges. Presentations include the first-ever use of FRP rebar in a cable-stayed bridge and new techniques for accelerated bridge construction and rapid composites deck replacement. A 20-year durability performance study will demonstrate sustainable construction techniques and the viability of bridge protection systems. Assistance on writing special provisions to utilize FRP using industry guidelines will conclude the workshop.

Halls River Bridge, Corrosion Free Design with FRP Composites
The Florida Department of Transportation (FDOT) has conducted numerous research projects to implement fiber-reinforced polymer (FRP) composites in highway structures.
ABC-UTC
Quarterly Research Seminar
Friday, April 28, 2017 – 1:00-2:00 pm Eastern

Development of Prefabricated Bridge Railings
ABC-UTC / Iowa State University

Researcher Team:
• Sri Sritharan, Ph.D., Professor, Department of Civil, Construction and Environmental Engineering, ISU
• Terry Wipf, Ph.D., Chair & Professor, Department of Civil, Construction, and Environmental Engineering, ISU
• Ashley Ecklund, M.S.E., 2016 Graduate, ISU

Mark your calendar!
In This Issue

The 2017 Infrastructure Report Card is Out!

3037 INFRASTRUCTURE REPORT CARD

MAKING THE GRADE  AMERICA'S GRADES  STATE BY STATE  SOLUTIONS  THE IMPACT  GET INVOLVED

Bridges
American Society of Civil Engineers' 2017 Infrastructure Report Card

The ASCE's 2017 Infrastructure Report Card continues to give bridges a grade of C+ ("mediocre, requires attention"). "The U.S. has 614,387 bridges, almost four in 10 of which are 50 years or older. 56,007 — 9.1% — of the nation's bridges were structurally deficient in 2016, and on average there were 188 million trips across a structurally deficient bridge each day. While the number of bridges that are in such poor condition as to be considered structurally deficient is decreasing, the average age of America's bridges keeps going up and many of the nation's bridges are approaching the end of their design life. The most recent estimate puts the nation's backlog of bridge rehabilitation needs at $123 billion."
ABC-UTC Website Home Page

(www.abc-utc.fiu.edu)
FHWA ABC Contact: Benjamin Beerman, benjamin.beerman@dot.gov

Links to FHWA ABC Publications:
- FHWA ABC Website
- Bond of Field-Cast Grouts to Precast Concrete Elements, 2017
- Dimensional Stability of Grout-Like Materials Used in Field-Cast Connections, 2016
- Material Characterization of Field-Cast Connection Grouts, 2013
- Engineering Design, Fabrication, and Erection of PBES, 2013
- Contracting and Construction of ABC Projects with PBES, 2013
- ABC Manual, 2011
- Connections Manual, 2009
- PBES Case Studies, 2006
- Decision-Making Framework, 2005
- Highways for LIFE Summary Reports

Links to FHWA Ultra-High Performance Concrete (UHPC) Publications:
(FHWA UHPC Contact: Benjamin Graybeal, Benjamin.Graybeal@dot.gov)
- FHWA UHPC Website
- UHPC Deployments Across US and Canada
- Design and Construction of Field-Cast UHPC Connections, 2014
Next Webinar

Thursday, April 20, 2017 (1:00 – 2:00 p.m. Eastern)

Featured Presentation

PennDOT’s Rapid Bridge Replacement Project Utilizing Folded Steel Plate Girder Bridge

by

Tom Macioce, P.E., Chief Bridge Engineer, Pennsylvania Department of Transportation; Ben Boisvert, P.E., Design Build Manager, Walsh/Granite JV; and Curt Beveridge, Project Manager, Walsh/Granite JV

To register, visit: www.abc-utc.fiu.edu
Today’s Webinar

ABC Announcements (10 minutes)
Featured Presentation (35 minutes)

Georgia’s Rapid Replacement Utilizing Full-Depth Precast Deck Panels with UHPC Closure Joints

Bill DuVall, P.E., State Bridge Engineer, Georgia Department of Transportation; and Dexter Whaley, P.E., Bridge Design Group Manager, GDOT

Question and Answer (15 minutes)

Please post your questions in the question box