

# 2010 OHIO BRIDGE CONFERENCE PROGRAM

Crowne Plaza North Hotel  
6500 Doubletree Avenue, Columbus, OH

All sessions below have been approved for Continuing Professional Development (CPD) credit eligibility for P.E.'s and P.S.'s by the CEAO CPD Committee with the exception of the Welcome & Kick-Off and the Statewide Historic Bridge Preservation Awards. Attendants signed in at ea. session and attending ea. session in its entirety will receive a CEAO CPD certificate by mail after conference.

## Wednesday, August 11 – Ballroom I, II, III

11:00-12:20 p.m. **Registration – Sign-up for the Tour**  
Lunch on your own

11:00 – 6:00 p.m. **Trade Show / Refreshments**

12:20 – 12:25 p.m. **Welcome & Kick-Off:**

### **Conference Committee:**

*Much thanks to this committee for their orchestration in providing the following presentations contained in this program.*

12:25 - 1:15 p.m. (50 MIN) **Advance Technologies in Corrosion Protection of Steel Bridges**

*The U.S. Federal Highway Administration has rated 200,000 bridges or one in every three bridges structurally deficient or functionally obsolete. Corrosion cost the U.S.A. \$276 billion a year, and highway and bridges over 8.3 billion, yet very little is being done to utilize advances in coating technology that reduce cost of labor and surface preparation.*

*Most would agree that blasting to near white SSPC-SP-10 or white metal SSPC-SP-5 can cost well over \$2.50 a square foot while pressure washing might only cost \$0.45 square foot. The FHWA has addressed life-cycle cost in detail and two common findings are:*

- 1. Relative cost of painting or coating material is almost always insignificant when compared to overall cost of bridge maintenance.*
- 2. The advantages of more durable coatings systems often far outweigh any nominal increase in the cost of the materials.*

*Learn more about:*

- Co-Polymerized Calcium Sulfonate (Termarust)*
- Flexible Acrylic Coating Systems (3M Poly-Nox, Noxyde)*
- 100% Solid Epoxy Coating Systems (Cupon 152LV and others)*
- Mastic Epoxy Coating Systems*
- Amorphous a-polar viscous elastic solid polyolefin's*

*This could help you meet your shrinking budget numbers for bridge maintenance, while helping you to fight the cost of corrosion and lower your bridge life-cycle cost.*

Doug Klingensmith

NACE Coating Inspector Level I—Certified, Cert. No. 27309  
Technical Sales Manager & CEO  
Unconventional Solutions Inc.

1:15 - 1:25 p.m. **Break – Trade Show**

1:25 - 2:15 p.m. (50 MIN) **Ohio's Historic Bridge Legacy –**

### **A Selection of Remarkable Bridges from the ODOT Historic Bridge Inventory**

*A selection of Ohio's remarkable and highly significant historic bridges will be presented with a description of what makes them preservation worthy. The information presented will be a compilation from ODOT's recently completed project to update and digitize its historic bridge inventory. As part of that update, the level of significance for all historic bridges was assessed as a tool for informing management decisions. The presentation will emphasize historic bridge types common to county roads and how to make the best use of the historical data in the ODOT inventory.*

Patrick Harshbarger

Principal Historian

Hunter Research, Inc.

2:15 - 2:30 p.m.

### **Statewide Historic Bridge Preservation Awards**

*Annual event to present awards to several County Engineers for their efforts in historical bridge preservation.*

Paul Graham, Assistant Environmental Administrator, Ohio Department of Transportation

Susan Gasbarro, Office of Environmental Services., Ohio Department of Transportation

Thomas Barrett, Office of Environmental Services, Ohio Department of Transportation

Mark Epstein, Department Head Resource Protection and Review, Ohio Historic Preservation Office

Nancy Campbell, History/Architecture Trans. Reviews Mgr., Ohio Historic Preservation Office

2:30 – 2:40 p.m. Break – Trade Show

**2:40 - 3:30 p.m.** (50 MIN) **CEAO / ODOT / FHWA Agreement Update  
“Where We Were - Where We Are - Where We’re Going”**

Tim Keller, P.E.  
Administrator  
Office of Structural Engineering, Ohio Department of Transportation

Amjad Waheed, P.E.  
Assistant Administrator  
Office of Structural Engineering, Ohio Department of Transportation

**Corrugated Metal Pipe - new tools for load rating**

*Cindy will demonstrate the latest spreadsheets developed by ODOT, Office of Structural Engineering to load rate corrugated metal pipes and structural plate box culverts.*

Cindy Wang  
Office of Structural Engineering, Ohio Department of Transportation

**3:30 – 4:00 p.m.** (30 MIN) **CEAO QA/QC Coordinator Update – (Inventory Issues)**

Mark Stockman, P.E., P.S.  
CEAO Bridge QA/QC Engineer

CONTINUATION OF  
PREVIOUS SESSION

4:00 – 4:10 p.m. Break – Trade Show

**4:10 – 5:00 p.m.** (50 min) **Bridge Deck Concrete Wearing Course Replacement using Hydrodemolition Surface Preparation and Modified Concrete Overlays**

*This technical session would first include a history on the Ohio Bridge Deck Overlay Program. A technical information session on Hydrodemolition and its use in today’s construction industry as a tool for bridge deck surface preparation and structural removals would be presented as well. I would also discuss bridge deck wearing course replacement using structural concrete overlays, accelerated bridge overlay construction techniques using Micro Silica Concrete and Rapid Set Latex Modified Concrete, new products and also new construction techniques. A discussion on the new Ohio 848 Specifications would also be included.*

Edward M. Liberati, P.E.  
Specialty Group Engineer  
Hydro-Technologies, Inc., Modified Concrete Suppliers, LLC

5:00 – 6:00 p.m. **Trade Show and “Ice Breaker” Reception**

**Thursday, August 12 - Ballroom I, II, III**

7:30 – 8:20 a.m. Continental Breakfast - Foyer

**8:20 - 8:50 a.m.** (30 MIN) **ODOT Bridge Inspection Manual Update**  
*Fifteen representatives from CEAO, FHWA, Municipalities, Consultants and ODOT have completed the DRAFT 2010 Manual of Bridge Inspection. The presentation will provide a brief summary of the reasoning behind the revision and major changes to the document including but not limited to the following:*

1. *A 1 page detailed description for each item*
2. *Each 1-4 item has 9 rows (9-0 spread) for each item on the BR-86*
3. *1-4 Individual items will be rated on the “Worst Span” and the 9-0 Summary items will be rated on the “Total Bridge”*
4. *Addition of Item 20. “Gusset Plates”*
5. *Item 69. Boxes 5-8 definitions will change*
6. *Additional structure types have been added (for example MSE Walls, SIP Deck with only asphalt and Highly Skewed)*

Mike Brokaw, P.E.  
Bridge Inspection Engineer  
ODOT, Office of Structural Engineering

8:50 – 9:00 a.m. Break

**9:00 – 9:50 a.m.** (50 MIN) **Steel Sheet Piles for Bridge Abutments and Retaining Walls**  
Application and Practicality –

Dean Abbondanza  
Business Development Manager  
Skyline Steel

**9:50 -10:20 a.m.** (30 MIN) **Open Ended Large Diameter Pipe Piles**

*Jawdat will discuss the design side*  
Jawdat Siddiqi, P. E., Assistant Administrator  
Office of Engineering, Ohio Department of Transportation

*Todd will discuss the construction side*  
Todd Moore, P.E., Construction Area Engineer  
District 11, Ohio Department of Transportation

10:20 – 10:30 a.m. Break

**10:30 -11:00 a.m.** (30 MIN) **Precast/Prestressed Concrete Bridge Design Keys**

*This presentation will cover some common issues designers encounter when designing prestressed concrete bridges from a fabricator's perspective. Ohio Prestressers Association works closely with ODOT and local governments to continually improve the quality of the product and we will share some recent specification changes. We will also answer "why" to some of the seemingly trivial details that need to be considered when designing prestressed concrete box beams.*

Mary Ellen Kimberlin, P.E., P.S.  
Executive Director  
Ohio Prestressers Association

**11:00 - 11:50 a.m.** (50 MIN) **Benefits of Prefabricated Bridge Systems for New Construction and Replacement Projects**

*The benefits of prefabricated bridge systems for new construction and replacement projects highlighting structural plate, precast concrete and pre-fabricated steel truss bridges. Update of the industry standards and new products along with current specifications with the Ohio Department of Transportation and AASHTO. Describe the manufacturing and installation process and highlight local applications. Demonstrate the potential for cost savings on engineering and construction compared to conventional bridge structures, especially on future maintenance costs. Review of the technical resources and engineering tools available when planning and designing prefabricated bridge systems.*

Patrick Herl  
Project Consultant  
Contech Construction Products, Inc.

**11:50 – 1:00 p.m.** (25 MIN) **Luncheon Key Note (Ballroom IV):**

Introduction: Randy Partika P.E.  
Mahoning County Bridge Engineer

Presentation: **Spring Commons Bridge Rehabilitation Project**  
*The Spring Commons Bridge Rehabilitation Project preserved a local landmark in the Downtown Youngstown area as well as extended the lifespan of one of the main commuter routes to and from the city. As the project progressed, the construction team overcame several challenges to keep the project on schedule without compromising the quality of the rehabilitation.*

Jeremy Levenson, P.E., Project Manager  
Great Lakes Construction, Inc.

**1:00 p.m.**

**Main Street Bridge Tour –**

"Sign-up at conference registration desk when registering for conference  
Meet at back entrance of hotel after lunch

*Bring hardhat and safety vests" (Parking on your own)*

**Organized by:** Thomas Bolte, P.E.,  
Bridge Group Director  
Burgess & Niple, Inc.

**Begins at 1:45pm on-site**

**Conducted by:** Tom Graf, Area Manager  
**Kokosing Construction Company, Inc.**