Keynote Session
Presented Monday, June 13, 2005
Chaired by: Enrico T. Bruschi, PE, DMJM Harris, Pittsburgh, PA
Not Published in these Proceedings
John Kulicki, Ph.D., P.E., Modjeski and Masters, Inc., Harrisburg, PA
J. Richard Capka, Deputy Administrator for the Federal Highway Administration, Washington, DC
David A. Cole, Commissioner, Maine Department of Transportation, Augusta, ME

Featured State Session
Presented Monday, June 13, 2005
Chaired by: James E. Tukey, PE, Maine Department of Transportation, Augusta, ME

Maine and its Bridge Community
James E. Tukey, PE, Maine DOT, Augusta, ME
IBC-05-01

Unique Bridges, Challenges, and Solutions
Eric C. Shepherd, PE, Maine DOT, Augusta, ME
IBC-05-02

Development of Next-Generation Hybrid Composites
Habib Dagher, PhD, University of Maine, Orono, ME
IBC-05-03

Lightweight Structures for Bridge Applications
IBC-05-04

Cutting-Edge Technology: A Contractor's Perspective
Peter G. Vigue, Cianbro Corporation, Pittsfield, ME
IBC-05-05

From Disaster to Opportunity: Story of a Bridge Project in Maine
Bruce VanNote, Maine DOT; Kaven Philbrook, Cianbro/Reed & Reed LLC; Jay Rohleder, PE, Figg Engineering Group, Tallahassee, FL and Dyab Khazem, PE, Parons Engineering
IBC-05-06
Proprietary Session
Presented Monday, June 13, 2005
Chaired by: Eric S. Kline, KTA-Tator, Inc., Pittsburgh, PA

Bridge Deck Condition Assessment using Ground Penetrating Radar
Robert Parrillo and Roger Roberts, PhD, Geophysical Survey Systems, Inc., North Salem, NH; and Allan Haggan, Maine Dept. of Transportation
IBC-05-08

An Innovative Rehabilitation of the 78-years Old Benjamin Franklin Bridge Approach Structures Without Disrupting Traffic
Alex Y. Rong, Delaware River Port Authority, Camden, NJ, Miki Funahashi, PE, Corrpro Companies, Inc., West Chester, PA; and Daniel G. Faust, PE, Delaware River Port Authority, Camden, NJ
IBC-05-09

Increased Use of MSE Structures for Support of Bridges
IBC-05-10

Debris Control Structures: Before and After Bridgeshark Systems Installations
F. Michael Collier, Debris Free Inc., Ojai, CA
IBC-05-11

Applying Precast Solutions To “Get in, Get Out, Stay Out”
Jason V. Philbin, PE, CON/SPAN Bridge Systems, Charlotte, NC, and Jeffrey J. Von Handorf, PE, CON/SPAN Bridge Systems, Dayton, OH
IBC-05-12
Stainless Steel For Bridge Construction - Materials for the Towers of The Stonecutters Bridge, Hong Kong
Graham Gedge, Arup Materials Consulting, Blythe Valley Park, Solihull, UK
IBC-05-13

Earthquake Performance of Long-Span Truss Bridges in New York State
Arthur L. Wolek, PE, Lichtenstein Consulting Engineers, New York, NY and Bala Sivakumar, PE, Lichtenstein Consulting Engineers, PC, Paramus, NJ
IBC-05-14

Innovative Design for the First Double-deck with Twin PC Girder Cable-Stayed Bridge
Xu Gongyi, Mei Xinyong and Zhuang Yong, Major Bridge Reconnaissance & Design Institute Co., Ltd, Wuhan, P.R.China and Zhang Min, Central South University, Changsha, China
IBC-05-15

Ironton Russell Single Tower Cable-Stayed Bridge Configuration – Optimization for Client Engineering Constraints
Terrence J. Tiberio and Joseph E. Salvadori, Michael Baker Jr. Inc., Moon Township, PA and Armin Schemmann, Buckland & Taylor Ltd, North Vancouver, BC, Canada
IBC-05-16
Replacement of Cranston Viaducts Using Spliced Bulb-Tee Girder Technology
Firooz Panah, PE, DMJM+HARRIS, Boston, MA and H. Raymond Palmer DMJM+HARRIS, Providence, RI
IBC-05-17

Deeply Haunched Spliced Precast Girders meet Architectural Demands of City Historic District
John C. Shanks, Jr., PE, Burgess & Niple, Inc., Columbus, OH
IBC-05-18

Context Sensitive Design for the Fulton Road Bridge Replacement
John C. Dietrick, PE, SE and Jeff W. Broadwater, PE, Michael Baker Jr. Inc., Cleveland, OH
IBC-05-19

Innovation - Thy Name is Victory Bridge!
Harry A. Capers, Jr., PE, NJDOT, Trenton, NJ and Garrett G. Hoffman, PE and Claudia P. Pulido, Ph.D, P.E., Figg, Tallahassee, FL
IBC-05-20
Ironton Russell Bridge – Wind Considerations and Remedial Issues for a Narrow Long Span Single Tower Cable-Stayed Bridge
Scott Gamble, Motioneering Inc./Rowan Williams Davies & Irwin Inc. Group, Guelph, Ontario, Canada, Terrence J. Tiberio and Robert W. Bondi, Michael Baker Jr., Inc., Moon Township, PA
IBC-05-21

Development and Verification of a NDE Method for Detection of Flaws in PE Sheathing of Stay Cables
Christopher A. Ligozio, SE, Construction Technology Laboratories Group, Skokie, IL and Armin B. Mehrabi, PhD, PE, Bridge Engineering Solutions, Lewiston, NY
IBC-05-22

Effective Flange Width Provisions for Composite Steel Bridges
Stuart S. Chen, PhD, PE, Amjad J. Aref, PhD, Il-Sang Ahn, and Methee Chiewanichakorn, University of Buffalo, Buffalo, NY
IBC-05-23

Fatigue Evaluation and Instrumentation of a Major Truss Bridge
Thomas Bolte, PE, Burgess & Niple, Inc., Columbus, OH and Kirk Grimmelsman, Drexel Intelligent Infrastructure Institute, Philadelphia, PA
IBC-05-24

Effects of Unbraced Length on Vertical and Lateral Bending Stress Distribution in a Horizontally Curved, Steel, I-Girder Bridge
Daniel G. Linzell and Joe M. Fleishman, The Pennsylvania State University, University Park, PA
IBC-05-25

An Analytical Investigation of the After-Fracture Redundancy of the Lehigh River Bridge (SR-33)
Justin R. McCarthy, Lehigh University - ATLSS, Bethlehem, PA
IBC-05-26

A Comparison of Load Ratings for Existing Bridges
Brian Ranck, PE, Pennsylvania Turnpike Commission, Harrisburg, PA, and Y. Frank Chen, PhD, PE, Penn State Harrisburg, Middletown, PA
IBC-05-27
Lessons Learned / Construction Session
Presented Tuesday, June 14, 2005
Chaired by: Gary Runco, PE, Paul C. Rizzo Associates, Monroeville, PA

Demonstration of Rapid Bridge Construction in Erie County, NY
Maria Lehman, PE, F.ASCE, URS Corporation, Buffalo, NY, Carl P. Dimmig, Erie County Dept of Public Works, Buffalo, NY, Jonathan DePlanche, TVGA Consultants, Elma, NY, Neill Wagner, Wagners Composite Fibre Technologies, Toowoomba, Queensland, Australia, and Jerome S. O'Connor, Bridge Composites, LLC, Hornell, NY

Lessons from the I-40 Bridge Collision
George F. Assis, Ph.D., P.E. and Malcolm G. McLaren, PE, McLaren Engineering Group, West Nyack, NY

Lessons Learned from the Construction of a Sharply Skewed, Two-span, Steel Multi-girder Bridge
Ahmad K. Ahmadi, PhD, PE and Raymond Henney, PE, SAI Consulting Engineers, Inc., Pittsburgh, PA, and Doug Thompson, PE, PennDOT, District 11-0, Bridgeville, PA

The Long Term Performance of Three Ontario Bridges Constructed With Galvanized Reinforcement
Frank Pianca and Hannah Schell Ontario Ministry of Transportation (MTO), Toronto, Ontario, Canada

Fatigue Cracking and Inspection of High-mast Lighting Towers
Robert J. Connor, Ian C. Hodgson, PE, SE, and Margaret K. Warpinski, Lehigh University - ATLSS, Bethlehem, PA, Justin Ocel, University of Minnesota, Minneapolis, MN, and Bruce L. Brakke, Iowa Dept. of Transportation, Ames, IA

Demolition and Reconstruction of the Ohio Turnpike Bridges over the Cuyahoga River Valley
Ray Farcas, PE, Dick Corporation, Cleveland, OH and Rob Fleischman, PE, Ohio Turnpike Commission, Berea, OH

Fire Performance of Bridges
Alp Caner, PE, Middle East Technical University, Ankara, Turkey
Rehabilitation Session
Presented Wednesday, June 15, 2005
Chaired by: Lisle E. Williams, PE, PLS, DMJM + HARRIS, Pittsburgh, PA

Huey P. Long Bridge Widening – Final Design Challenges
Bruce E. Peterson, William B. Conway, and Gerard P. Doyle, Modjeski and Masters, Inc., New Orleans, LA
IBC-05-35

Field Testing and Fatigue and Fracture Evaluation of the I-79 Neville Island Bridge
Hussam Mahmoud, Ian Hodgson, and Carl Bowman, Lehigh University, Bethlehem, PA, Lou Ruzzi, PENNDOT, District 11-0, Pittsburgh, PA, and Scott Eshenaur, Modjeski and Masters, Harrisburg, PA
IBC-05-36

Structural Rehabilitation of a Vertical Lift Highway Bridge
David M. Marcic and Rolan Stamm, Hardesty & Hanover, LLP, New York, NY
IBC-05-37

Benedict Swing Bridge Rehabilitation - Design/Build
Paul J. Connolly, PE, Hardesty & Hanover, LLP, New York, NY and Douglas Neely, PE, Hardesty & Hanover, LLP, Annapolis, MD
IBC-05-38

Shear Enhancement of Deficient Reinforced Concrete Bridge Piers
Wael Zatar, West Virginia University Tech, Montgomery, WV
IBC-05-39

Program to Preserve, Rehabilitate, and Upgrade the Verrazano-Narrows Bridge
Julius Chang, PE, MTA Bridges and Tunnels, New York, NY
IBC-05-40

A Unique Bridge with a Unique Problem
Armin B. Mehrabi, Bridge Engineering Solutions, Inc., Lewiston, NY
IBC-05-41

Safe Load Carrying Capacity of a Suspension Bridge With Degraded Cables
Imam Hossain and Peter Sluszka, Ammann and Whitney, New York, NY
IBC-05-42

Construction Repairs to the Bascule Span of the Tacony-Palmyra Bridge
Matthew W. Colon and John Q. Wong, PE, DMJM+HARRIS, Iselin, NJ
IBC-05-43
Design, Part 2 Session
Presented Wednesday, June 15, 2005
Chaired by: M. Myint Lwin, Federal Highway Administration, Washington, DC

Design of Tied Arch Bridge Across Ohio River and Blennerhassett Island
Gregor Wollmann, PE, Michael Baker Jr., Inc., Charleston, WV, Ted Zoli, PE HNTB, New York, NY, and James Shook, PE, WVDOH, Charleston, WV
IBC-05-44

Network Arch Bridge Over The River Luznice
Ladislav Šašek, PhD, Mott MacDonald Group, Prague, Czech Republic
IBC-05-45

The Design, and Field Monitoring of a Horizontally Curved Steel Plate Girder Bridge
Daniel E. Domalik, PE, HDR Engineering, Inc., Pittsburgh, PA, Daniel G. Linzell, PhD, PE and Jason F. Shura, The Pennsylvania State University, University Park, PA, USA
IBC-05-46

Innovative Design for Millennium Park BP Pedestrian Bridge
Robert Sinn, Hal Iyenjer, Christopher Rockey, and John Zils, Skidmore, Owings & Merrill LLP, Chicago, IL
IBC-05-47

Conceptual Engineering of Light Rail Transit Bridges
Robert J. Shulock, PE, Hatch Mott MacDonald, Seattle, WA
IBC-05-48

New Croton Dam Spillway Bridge
William E. Nyman, PE, Hardesty & Hanover, LLP, New York, NY
IBC-05-49

The Main Street Replacement Bridge, Columbus, OH
David M. Rogowski, PE, Genesis Structures, Inc., Kansas City, MO, Greg DeMond, RA, HNTB Corp, Kansas City, MO, and Daniel K. O’Rorke, PE, DLZ Ohio, Inc., Columbus, OH
IBC-05-50

Design Philosophy and Summary Report: The Palm Jumeirah Gateway Bridge, Dubai, UAE
Thomas Piotrowski, AIA., SARP and James Fox, R.A., H2L2 Architects/Planners, LLP, New York, NY
IBC-05-51

Bridge Aesthetics in Design/Build
Kenneth C. Saindon, PE and George Skillman, PE, DMJM+HARRIS, Denver, CO
IBC-05-52
Foundations Session
Presented Wednesday, June 15, 2005
Chaired by: Thomas G. Leech, PE, Gannett Fleming, Inc., Pittsburgh, PA

The Great Crossings Bridge – A Construction Driven Design
IBC-05-53

Foundations for the Replacement of the Bushkill Creek Bridge
Thomas P. Macioce, PE and Pennsylvania Department of Transportation, Harrisburg, PA, Kamlesh A. Ashar, PE, Pennsylvania Department of Transportation, Allentown, PA, and Jeffery Dipple, Patel Chen Associates, Grantville, PA,
IBC-05-54

AASHTO LRFD Specifications for Foundation Design
Scott D. Zang, PE, Michael Baker Jr. Inc., Beaver, PA and Jerry A. DiMaggio, PE, Federal Highway Administration, Washington, DC
IBC-05-55

Four Bears Bridge — Context Sensitive Design/Construction Challenges
Francis G. Ziegler, PE, North Dakota Department of Transportation, Bismarck, ND and Russell D. Call, PE, SE, Figg Bridge Engineers, Inc., Denver, CO
IBC-05-56

Rock Slope Dictates Expedited Foundation Redesign
John C. Schirmer, PE, Bergmann Associates, Rochester, NY and Louis Recchia, PE, NYSDOT, Albany, NY
IBC-05-57
Design/Build Session
Presented Wednesday, June 15, 2005
Chaired by: Victor E. Bertolina, PE, SAI Consulting Engineers., Pittsburgh, PA

The New Tacoma Narrows Suspension Bridge
Thomas Spoth, PE, Joseph Viola, PE, and Seth Condell, PE, Parsons, New York, NY
IBC-05-58

Cooper River Cable-Stayed Bridge - Optimizing Construction for Design-Build Process
Armin G. Schemmann, PEng., Peter R. Taylor, PE , and Nedim Alca, PEng., Buckland & Taylor Ltd.,
North Vancouver, BC, Canada
IBC-05-59

Innovations in Program Delivery and Design for Diverse Multi-Structural Projects
Jeff Stapleton, PE, Carter & Burgess, Denver, CO
IBC-05-60

Replacement of the Belt Parkway over Ocean Parkway
Charles Norrish, III, PE, Gannett Fleming Engineers and Architects, P.C., New York, NY, Chris
Sklavounakis, PE, New York City Department of Transportation, New York, NY, Paul Atkins, PE,
Granite Halmar Construction Co., Inc., Mount Vernon, NY and Jerome Liebowitz, PE, HAKS Engineers
and Land Surveyors, PC, New York, NY
IBC-05-61

Replacement of the Hog Back Through Truss Railroad Bridge
Thomas F. Potts, PE and Alfons E. Minko, PE, HNTB Corporation, Wayne, NJ, and Richard A. Olsen,
PE, New Jersey Transit Corporation, Newark, NJ, USA
IBC-05-62
Ahmadi, PhD, PE, Ahmad K., SAI Consulting Engineers, Inc., Pittsburgh, PA - Lessons Learned from the Construction of a Sharply Skewed, Two-span, Steel Multi-girder Bridge (IBC-05-29)

Anderson, PE, Peter L., The Reinforced Earth Company, North Reading, MA - Increased Use of MSE Structures for Support of Bridges (IBC-05-10)

Assis, PhD, PE, George F., McLaren Engineering Group, West Nyack, NY - Lessons from the I-40 Bridge Collision (IBC-05-28)

Bergquist, Warren, Washington University in St. Louis, St. Louis, MO - St. Croix River Bridge Project (IBC-05-U01)

Bolte, PE, Thomas, Burgess & Niple, Inc., Columbus, OH - Fatigue Evaluation and Instrumentation of a Major Truss Bridge (IBC-05-24)


Caner, PE, Alp, Middle East Technical University, Ankara, Turkey, Tivoli, NY - Fire Performance of Bridges (IBC-05-33)

Capers, Jr., PE, Harry A., New Jersey Department of Transportation, Trenton, NJ - Innovation - Thy Name is Victory Bridge! (IBC-05-20)

Chang, PE, Julius, MTA Bridges and Tunnels, New York, NY - Program to Preserve, Rehabilitate, and Upgrade the Verrazano-Narrows Bridge (IBC-05-40)

Chen, PhD, PE, Stuart S., University of Buffalo, State University of New York, Buffalo, NY - Effective Flange Width Provisions for Composite Steel Bridges (IBC-05-23)

Colon, Matthew W., DMJM HARRIS, Inc., Iselin, NJ - Construction Repairs to the Bascule Span of the Tacony-Palmyra Bridge (IBC-05-43)

Connolly, PE, Paul J., Hardesty & Hanover, LLP, New York, NY - Benedict Swing Bridge Rehabilitation - Design/Build (IBC-05-38)

Connor, Robert, Lehigh University - ATLSS, Bethlehem, PA - Fatigue Cracking and Inspection of High-mast Lighting Towers (IBC-05-31)

Dagher, PhD, Habib, University of Maine, Orono, ME - Development of Next-Generation Hybrid Composites (IBC-05-03)

Dietrick, PE, SE, John C., Michael Baker Jr., Inc., Cleveland, OH - Context Sensitive Design for the Fulton Road Bridge Replacement (IBC-05-19)


Farcas, PE, Ray, Dick Corporation, Cleveland, OH - Demolition and Reconstruction of the Ohio Turnpike Bridges over the Cuyahoga River Valley (IBC-05-32)

Gamble, Scott, *Motioneering Inc./RWDI Group, Guelph, Ontario, Canada* - Ironton Russell Bridge – Wind Consideration and Remedial Issues for a Narrow Long Span Single Tower Cable-Stay Bridge (IBC-05-21)


Lehman, PE, F.ASCE, Maria, *URS Corporation, Buffalo, NY* - Demonstration of Rapid Bridge Construction in Erie County, NY (IBC-05-34)


Macioce, PE, Thomas P., *Pennsylvania Department of Transportation, Harrisburg, PA* - Foundations for the Replacement of the Bushkill Creek Bridge (IBC-05-54)

Mahmoud, Hussam, *Lehigh University, Bethlehem, PA* - Field Testing and Fatigue and Fracture Evaluation of the I-79 Neville Island Bridge (IBC-05-36)

Marcic, David M., *Hardesty & Hanover, Annapolis, MD* - Structural Rehabilitation of a Vertical Lift Highway Bridge (IBC-05-37)


Mehrabi, PhD, PE, Armin B., *Bridge Engineering Solutions, Inc., Lewiston, NY* - A Unique Bridge with a Unique Problem (IBC-05-41)


Nyman, PE, William E., *Hardesty & Hanover, LLP, New York, NY* - New Croton Dam Spillway Bridge (IBC-05-49)


Panah, Firooz, *DMJM HARRIS, Boston, MA* - Replacement of Cranston Viaducts Using Spliced Bulb-Tee Girder Technology (IBC-05-17)


Philbin, PE, Jason V., CON/SPAN Bridge Systems, Dayton, OH - Get In, Get Out, Stay Out (IBC-05-12)

Pianca, Frank, Ministry of Transportation of Ontario (MTO), Toronto, Ontario, Canada - The Long Term Performance of Three Ontario Bridges Constructed With Galvanized Reinforcement (IBC-05-30)

Ranck, PE, Brian, Pennsylvania Turnpike Commission, Harrisburg, PA - A Comparison of Load Ratings for Existing Bridges (IBC-05-27)

Rogowski, PE, David M., Genesis Structures, Inc., Kansas City, MO - The Main Street Replacement Bridge (IBC-05-50)

Rong, Alex Y., Delaware River Port Authority, Camden, NJ - An Innovative Rehabilitation of the 78-years Old Benjamin Franklin Bridge Approach Structures Without Disrupting Traffic (IBC-05-09)

Saindon, PE, Kenneth C., DMJM HARRIS, Denver, CO - Bridge Aesthetics in Design/Build (IBC-05-52)

Šašek, PhD, Ladislav, Mott MacDonald Group, Prague, Czech Republic - Network Arch Bridge Over The River Luznice (IBC-05-45)


Schirmer, John C., Bergmann Associates, Rochester, NY - Rock Slope Dictates Expedited Foundation Redesign (IBC-05-57)

Shanks, Jr., PE, John C., Burgess & Niple, Inc., Columbus, OH - Deeply Haunched Spliced Precast Girders meet Architectural Demands of City Historic District (IBC-05-18)

Shepherd, PE, Eric C., Maine DOT, Augusta, ME - Unique Bridges, Challenges, and Solutions (IBC-05-02)

Shulock, PE, Robert J., Hatch Mott MacDonald, Bainbridge, WA - Conceptual Engineering of Light Rail Transit Bridges (IBC-05-48)

Sinn, Robert, Skidmore, Owings & Merrill LLP, Chicago, IL - Innovative Design for Millennium Park BP Pedestrian Bridge (IBC-05-47)

Spoth, PE, Thomas, Parsons, New York, NY - The New Tacoma Narrows Suspension Bridge Design/Build (IBC-05-58)

Stapleton, PE, Jeff, Carter & Burgess, Inc., Centennial, CO - Innovations in Program Delivery and Design for Diverse Multi-Structural Projects (IBC-05-60)


Tukey, PE, James E., Maine Department of Transportation, Augusta, ME - Maine and its Bridge Community (IBC-05-01)

VanNote, Bruce, Maine Department of Transportation, Augusta, ME - From Disaster to Opportunity: Story of a Bridge Project in Maine (IBC-05-06)
Vigue, Peter G., Cianbro Corporation, Pittsfield, ME - Cutting-Edge Technology: A Contractor's Perspective (IBC-05-05)


Wollmann, PE, Gregor, Michael Baker Jr., Inc., Charleston, VA - Design of Tied Arch Bridge Across Ohio River and Blennerhassett Island (IBC-05-44)

Xu, Gongyi, Major Bridge Reconnaissance & Design Institute Co., Ltd, Wuhan, China - Innovative Design for the First Double-deck with Twin PC Girder Cable-Stayed Bridge (IBC-05-15)

Zang, PE, Scott D., Michael Baker Jr. Inc., Beaver, PA - LRFD AASHTO Specifications for Foundation Design (IBC-05-55)

Zatar, Wael, West Virginia University Tech, Montgomery, WV - Shear Enhancement of Deficient Reinforced Concrete Bridge Piers (IBC-05-39)

Rockey, Christopher, Skidmore, Owings & Merrill LLP, Chicago, IL - Innovative Design for Millennium Park BP Pedestrian Bridge (IBC-05-47)

Zils, John, Skidmore, Owings & Merrill LLP, Chicago, IL - Innovative Design for Millennium Park BP Pedestrian Bridge (IBC-05-47)

Iyengar, Hal, Skidmore, Owings & Merrill LLP, Chicago, IL - Innovative Design for Millennium Park BP Pedestrian Bridge (IBC-05-47)


Zhang, Min, Central South University, Changsha, China - Innovative Design for the First Double-deck with Twin PC Girder Cable-Stayed Bridge (IBC-05-15)

Mei, Xinyong, Major Bridge Reconnaissance & Design Institute Co., Ltd., Wuhan, China - Innovative Design for the First Double-deck with Twin PC Girder Cable-Stayed Bridge (IBC-05-15)

Zhuang, Yong, Major Bridge Reconnaissance & Design Institute Co., Ltd., Wuhan, China - Innovative Design for the First Double-deck with Twin PC Girder Cable-Stayed Bridge (IBC-05-15)

Chen, PhD, PE, Y. Frank, Penn State Harrisburg, Middletown, PA - A Comparison of Load Ratings for Existing Bridges (IBC-05-27)

Sklavounakis, PE, Chris, New York City Department of Transportation, New York, NY - Replacement of the Belt Parkway over Ocean Parkway (IBC-05-61)

Liebowitz, PE, Jerome, HAKS Engineers and Land Surveyors, PC, New York, NY - Replacement of the Belt Parkway over Ocean Parkway (IBC-05-61)


Sivakumar, PE, Bala, Lichtenstein Consulting Engineers, PC, Paramus, NJ - Earthquake Performance of Long-Span Truss Bridges in New York State (IBC-05-14)


Neely, PE, Douglas, Hardesty & Hanover, LLP, New York, NY - Benedict Swing Bridge Rehabilitation - Design/Build (IBC-05-38)


Virding, PE, Tom, Parsons Transportation Group, Inc., Denver, CO - Innovations in Program Delivery and Design for Diverse Multi-Structural Projects (IBC-05-60)

Schell, Hannah, Ministry of Transportation of Ontario (MTO), Toronto, Ontario, Canada - The Long Term Performance of Three Ontario Bridges Constructed With Galvanized Reinforcement (IBC-05-30)

Broadwater, PE, Jeff W., Michael Baker Jr., Inc., Cleveland, OH - Context Sensitive Design for the Fulton Road Bridge Replacement (IBC-05-19)

Fleischman, PE, Rob, Ohio Turnpike Commission, Berea, OH - Demolition and Reconstruction of the Ohio Turnpike Bridges over the Cuyahoga River Valley (IBC-05-32)

Brabant, PE, Keith, The Reinforced Earth Company, Norcross, GA - Increased Use of MSE Structures for Support of Bridges (IBC-05-10)

Wong, PE, John Q., DMJM HARRIS, Iselin, NJ - Construction Repairs to the Bascule Span of the Tacony-Palmyra Bridge (IBC-05-43)

Mehrabi, PhD, PE, Armin B., Bridge Engineering Solutions, Lewiston, NY - Development and Verification of a NDE Method for Detection of Flaws in PE Sheathing of Stay Cables (IBC-05-22)

Palmer, H. Raymond, DMJM HARRIS, Boston, MA - Replacement of Cranston Viaducts Using Spliced Bulb-Tee Girder Technology (IBC-05-17)


O'Rorke, Daniel K., OLZ Ohio, Inc., Columbus, OH - The Main Street Replacement Bridge (IBC-05-50)

DeMond, R.A., Greg, HNTB Corp, Kansas City, MO - The Main Street Replacement Bridge (IBC-05-50)

Recchia, PE, Louis, New York Department of Transportation, Albany, NY - Rock Slope Dictates Expedited Foundation Redesign (IBC-05-57)

Pulido, PhD. PE, Claudio P., Figg, Tallahassee, FL - Innovation - Thy Name is Victory Bridge! (IBC-05-20)

Hoffman, PE, Garrett G., Figg Bridge Engineers, Inc., Tallahassee, FL - Innovation - Thy Name is Victory Bridge! (IBC-05-20)

Zoli, PE, Ted, HNTB, New York, NY - Design of Tied Arch Bridge Across Ohio River and Blennerhassett Island (IBC-05-44)
Shook, James, *West Virginia Department of Highways, Charleston, WV* - Design of Tied Arch Bridge Across Ohio River and Blennerhassett Island (IBC-05-44)


Ashar, PE, Kamlesh A., *Pennsylvania Department of Transportation, Allentown, PA* - Foundations for the Replacement of the Bushkill Creek Bridge (IBC-05-54)


Bowman, Carl, *Lehigh University, Bethlehem, PA* - Field Testing and Fatigue and Fracture Evaluation of the I-79 Neville Island Bridge (IBC-05-36)


Dimmig, Carl P., *Erie County Dept of Public Works, Buffalo, NY* - Demonstration of Rapid Bridge Construction in Erie County, NY (IBC-05-34)


Grimmelsman, Kirk, *Drexel Intelligent Infrastructure Institute, Philadelphia, PA* - Fatigue Evaluation and Instrumentation of a Major Truss Bridge (IBC-05-24)


Linzell, PhD, PE, Daniel G., *The Pennsylvania State University, University Park, PA* - The Analysis, Design, and Monitoring of a Horizontally Curved Steel Plate Girder Bridge (IBC-05-46)

Shura, Jason F., *The Pennsylvania State University, University Park, PA* - The Analysis, Design, and Monitoring of a Horizontally Curved Steel Plate Girder Bridge (IBC-05-46)

Skillman, PE, George, DMJM HARRIS, Denver, CO - Bridge Aesthetics in Design/Build (IBC-05-52)

Sluszka, Peter, Ammann and Whitney, New York, NY - Safe Load Carrying Capacity of a Suspension Bridge With Degraded Cables (IBC-05-42)


Warpinski, Margaret K., Lehigh University, Bethlehem, PA - Fatigue Cracking and Inspection of High-mast Lighting Towers (IBC-05-31)

Brakke, Bruce, Iowa Dept. of Transportation, Ames, IA - Fatigue Cracking and Inspection of High-mast Lighting Towers (IBC-05-31)

Ocel, Justin, University of Minnesota, Minneapolis, MN - Fatigue Cracking and Inspection of High-mast Lighting Towers (IBC-05-31)

Hodgson, PE, SE, Ian C., Lehigh University, Bethlehem, PA - Fatigue Cracking and Inspection of High-mast Lighting Towers (IBC-05-31)


Salvadori, Joseph E., Michael Baker Jr., Inc., Moon Township, PA - Ironton Russell Single Tower Cable-Stayed Bridge Configuration – Optimization for Client Engineering Constraints (IBC-05-16)

Bondi, Robert W., Michael Baker, Jr., Inc., Moon Township, PA - Ironton Russell Bridge – Wind Consideration and Remedial Issues for a Narrow Long Span Single Tower Cable-Stay Bridge (IBC-05-21)

Tiberio, Terrence J., Michael Baker Jr., Inc., Moon Township, PA - Ironton Russell Bridge – Wind Consideration and Remedial Issues for a Narrow Long Span Single Tower Cable-Stay Bridge (IBC-05-21)

Thompson, PE, Doug, Pennsylvania Department of Transportation, Bridgeville, PA - Lessons Learned from the Construction of a Sharply Skewed, Two-span, Steel Multi-girder Bridge (IBC-05-29)


DiMaggio, PE, Jerry A., Federal Highway Administration, Washington, DC - LRFD AASHTO Specifications for Foundation Design (IBC-05-55)

Aref, PhD, Amjad J., University of Buffalo, State University of New York, Buffalo, NY - Effective Flange Width Provisions for Composite Steel Bridges (IBC-05-23)
Ahn, Il-Sang, *University of Buffalo, State University of New York, Buffalo, NY* - **Effective Flange Width Provisions for Composite Steel Bridges** (IBC-05-23)

Chiewanichakorn, Methee, *University of Buffalo, State University of New York, Buffalo, NY* - **Effective Flange Width Provisions for Composite Steel Bridges** (IBC-05-23)


Cochran, Shane, *Washington University in St. Louis, St. Louis, MO* - **St. Croix River Bridge Project** (IBC-05-U01)

Ford, Maren, *Washington University in St. Louis, St. Louis, MO* - **St. Croix River Bridge Project** (IBC-05-U01)

McClellan, Bill, *Washington University in St. Louis, St. Louis, MO* - **St. Croix River Bridge Project** (IBC-05-U01)


Philbrook, Kaven, *Cianbro/Reed&Reed, LLC, Bucksport, ME* - **From Disaster to Opportunity: Story of a Bridge Project in Maine** (IBC-05-06)

Khazem, PE, Dyab, *Parsons Engineering, Inc. - From Disaster to Opportunity: Story of a Bridge Project in Maine* (IBC-05-06)

Rohleder, PE, William Jay, *Figg Engineering Group, Tallahassee, FL* - **From Disaster to Opportunity: Story of a Bridge Project in Maine** (IBC-05-06)

Haggan, Allan, *Maine Department of Transportation, Augusta, ME* - **Bridge Deck Condition Assessment using Ground Penetrating Radar** (IBC-05-08)

Roberts, PhD, Roger, *Geophysical Survey Systems, Inc., North Salem, NH* - **Bridge Deck Condition Assessment using Ground Penetrating Radar** (IBC-05-08)

Faust, PE, Daniel G., *Delaware River Port Authority, Camden, NJ* - **An Innovative Rehabilitation of the 78-years Old Benjamin Franklin Bridge Approach Structures Without Disrupting Traffic** (IBC-05-09)

Funahashi, PE, Miki, *Corrpro Companies, Inc., West Chester, PA* - **An Innovative Rehabilitation of the 78-years Old Benjamin Franklin Bridge Approach Structures Without Disrupting Traffic** (IBC-05-09)