

SCOTT A. CIVJAN, P.E., Associate Professor

University of Massachusetts at Amherst

College of Engineering

Department of Civil and Environmental Engineering

232 Marston Hall, 130 Natural Resources Road, Amherst, MA 01003-5205

Phone: (413) 545-2521 (office)

(413) 586-7841 (home)

e-mail: civjan@ecs.umass.edu

EDUCATION

Ph.D. in Engineering (Structural), The University of Texas at Austin, August 1998

M.S.C.E (Structural), The University of Texas at Austin, May 1995

B.S.C.E, Washington University, St. Louis, May 1989

PROFESSIONAL REGISTRATION

P.E. Registration Massachusetts (#42419) and Texas (#81440)

OSHA 10 Hour Certification

PROFESSIONAL EXPERIENCE

The University of Massachusetts, Amherst

Associate Professor, CEE 2004-Present

Assistant Professor, CEE 1998- 2004

Adjunct Professor, Architecture and Design 2004-2008

Structural Engineering/Mechanics Group Coordinator 2005-2011

CEE Chief Undergraduate Advisor 2007- 2009

CEE Personnel Committee 2005-2008

Chair 2006-2007

CEE Curriculum Committee – Chair 2007-2009

Environmental Performance Advisory Committee 2007-2012

(EPAC Chancellor Appointment)

ASCE Student Chapter co-advisor 2006-2008

Advisor of Steel Bridge Team (ASCE student chapter) Yearly

Advisor of EERI Student Seismic Design Team 2015

The University of Texas at Austin

Graduate Research Assistant 1993-1998

Black and Veatch Architects and Engineers, Overland Park, KS

Civil Engineer 03 1989-1993

Work included the structural analysis, design, detailing, checking, and construction contact for power plant facilities. Work included the design and detailing of deep pit concrete and pump structures, computer finite element analysis of structural mats for power plant buildings, and initial design of steel superstructures for boiler buildings. Culverts, retaining walls, site layouts and pipe routing were also performed. Coordinated

with field engineers, consortium partners, contractors, and equipment manufacturers. Supervised drafters and entry-level engineers.

RESEARCH INTERESTS:

Structural Engineering with an emphasis on experimental research. Specific areas of interests include seismic design of structures, composite steel/concrete structures, steel design and structural monitoring. Interactions between disciplines (such as architectural/structural components and soil-structure interaction) are of special interest.

COURSES TAUGHT AT UMASS

CEE434 Structural Steel Design
 CEE542 Advanced Topics in Steel Design
 CEE646 Seismic Concepts and Design of Structures
 CEE433 Design of Reinforced Concrete Structures
 ENGIN111 Introduction to Civil and Environmental Engineering
 CEE365 Laboratory Experience for Students in Civil/Environmental Engineering
 CEE241A Strength of Materials Laboratory
 ARCH DES 690T – Tectonics III (Architecture)

Critiques of Architecture Studio Projects

PROFESSIONAL ACTIVITIES

EERI Regional New England Chapter President, 2013-2015
 EERI Regional New England Chapter Past-President , 2015-2016
 Associate Editor: ASCE Journal of Structural Engineering, 2004-2007

Memberships/Committees

American Concrete Institute
 Associate Member, Paper Awards Committee, 2001-2004
 Chair – Subcommittee SC-1 (Construction) Committee, 2003-2004
 Associate Member, ACI335, “Composite and Hybrid Structures” 1999-2005
 American Institute of Steel Construction
 Partners in Education Committee, 2004- Present
 American Society of Civil Engineers
 BSCE Structural group Committee, Member, 2002- 2007
 Lecture Series Committee Member, 2002 – 2007
 Earthquake Engineering Research Institute
 National Steel Bridge Alliance
 Structural Engineering Institute
 Building Seismic Safety Commission Technical Subcommittee TS11 – Composite Structures. Corresponding Member, 2006 - 2009

Reviewer for the following:

Proposals: NSF Proposals (Sensing and Systems, NEESR Small Group Buildings , NEESR Individual Investigator – Concrete, Natural and Man-Made Hazards Mitigation, Large Structural and Building Systems), **Cooperative Grants Program of the U.S. Civilian Research and Development Foundation, NEES site review team (2007)**

Journals: *ASCE Journal of Structural Engineering* , *ASCE Journal of Bridge Engineering*, *ACI Structural Engineering Journal*, *ACI Concrete International*, *ACI Special Publication on Composite Steel-Reinforced Concrete Structures*, *AISC Engineering Journal*, *Elsevier Engineering Structures* , *Techno Press Structural Engineering and Mechanics*

Awards

Student nominated COE *Commencement Speaker*, May 2006

ASCE Student Chapter *Teacher of the Year*, 2006

ASCE Student Chapter *Teacher of the Year*, 2013

James L. Tighe Distinguished Teaching Award, 2015

FUNDED RESEARCH:

Northeast States Emergency Consortium (PI) “Structural Engineering Review and Collaborative Opportunity: Hazard Risk of Unreinforced Masonry Structures in the Northeast US.” (\$16,506) **2015**

New England Transportation Consortium (PI) co-PI Betsy Dumont “NETC14-2 Investigation of Northern Long-Eared Bat Roosting Sites on Bridges” (\$204,546) **2015-2017**

Massachusetts Department of Transportation (PI) “12-7 Performance of Adhesive and Cementitious Anchorage Systems” (\$229,791) **2014-2016**

Massachusetts Department of Transportation (PI) “Better Bridge Joint Technology Synthesis Project” (\$50,578) **2015**

New England Transportation Consortium (co-PI) PI: Sergio Breña “NETC 13-1: Development of High Early Strength Concrete for Accelerated Bridge Construction” (\$174,927) **2014-2015**

Hycrete, Inc. (Sub-award from Army Corp of Engineers) (PI) “Analysis and Interpretation of Hydrophobic Admixture Concrete Chloride Data and Recommended Parameters for LIFE-365” (\$20,062) **2013**

Vermont Agency of Transportation (PI) “Continued Monitoring of Vermont Bridges by UMass Amherst” (\$6,411) **2014-2015**

Vermont Agency of Transportation (PI) co-PI: Sergio Breña “Supplemental Funding/Storm Damage: Performance Monitoring of Jointless Bridges – Phase III” (\$88,080) **2013-2014**

MassDOT Accelerated Bridge Program (PI) co-PI: Sergio Breña “Field Instrumentation and Monitoring of NEXT Beam Bridge” MOU – MassDOT to provide approximately \$75,000 of equipment plus all incidental construction costs. **2010-2013**

MassDOT Accelerated Bridge Program (PI) co-PI: Sergio Breña “Field Instrumentation and Monitoring of Folded Plate Bridge” MOU – MassDOT to provide approximately \$65,000 of equipment plus all incidental construction costs. **2010-2013**

MassDOT Accelerated Bridge Program (PI) co-PI: Sergio Breña “Field Instrumentation and Monitoring of ‘Bridge in a Backpack’ Bridge” MOU – MassDOT to

- provide approximately \$80,000 of equipment plus all incidental construction costs. **2010-2013**
- Army Corp of Engineers/Subcontracted through Mandaree Enterprises (PI)
“Development of Parameters for Hydrophobic Concrete Admixture Life and Return on Investment Predictions” (\$22,002) **2010-2011**
- All States Materials (PI): “Testing of Anti-Icing Materials for Roadway Applications” (\$15,144) **2010**
- All States Materials (PI): “Undergraduate Research - Testing of Anti-Icing Materials for Roadway Applications” (\$3,500) **2009-2010**
- Vermont Agency of Transportation (PI) co-PI: Sergio Breña “Supplemental Funding/Change in Scope: Performance Monitoring of Jointless Bridges – Phase III” (\$182,357) **2010-2014**
- Vermont Agency of Transportation (PI) co-PI: Sergio Breña “Performance Monitoring of Jointless Bridges – Phase III Supplemental Equipment Funding” (\$80,000) **2008-2014**
- Vermont Agency of Transportation (PI). co-PI Sergio Brena. “Performance Monitoring of Jointless Bridges – Phase III” (\$295,984) **2007-2014**
- NETC (PI), Co PI’s Sergio Brena and Michael Knodler “Enhancing the Reflectivity of Concrete Barriers Phase I”. (\$48,000) **2009-2010 Project still not implemented due to NETC administration put on hold/reorganization from 2009-present**
- MegaMold (co-PI) Sergio Brena (PI): “Testing of MegaMold Products for Structural Formwork Applications” \$8,090 **2008-2009**
- American Institute of Steel Construction (PI) “Development of Core Teaching Aids for Structural Steel Design Courses” (\$20,000) **2007-2009**
- NETC (co-PI), Sergio Brena (PI) “Advanced Composite Materials in New England’s Transportation Infrastructure: Phase I Implementation Selection of Prototype” (\$25,909) **2007-2009**
- FHWA (Research Team Personnel) PIs: John R. Mullin and Jack Ahern “Feasibility Study for a Recreational and Wildlife Passage across Route 2 in Concord, Massachusetts” (\$172,500) **2006-2008**
- Massachusetts Executive Office of Transportation Proposal (PI) Co-PI Ray Mann “Terrazzo Cracking” (\$59,594) **2006-2008**
- Vermont Agency of Transportation (co-PI) PI: Sergio Breña “Evaluation of Bridge Performance and Rating Through Non-destructive Load Testing.” (Supplemental Contract) (\$3,125) **2005-2007**
- Vermont Agency of Transportation (co-P.I.), P.I. Sergio F. Breña; “Evaluation of Bridge Performance and Rating Through Non-destructive Load Testing” (\$166,320) **2005-2007**
- NETC (PI) “Field Studies of concrete Containing Salts of an Alkenyl-substituted Succinic Acid” (\$140,000) **2004-2007**
- NETC (co-PI), PI: Sergio Brena “Advanced Composite Materials for New England’s Transportation Infrastructure: A Study for Implementation and Synthesis of Technology and Practice” (\$53,339). **2003-2006.**
- MassHighway (PI), co-PI Segio Brena, Jason DeJong. “Behavior of Integral Abutment Bridges: Field Data and Computer Modeling”.(\$126,521) **2002-2005**

- Anhydrides and Chemicals Affiliate Broadview Technologies (PI) “Long Term Performance of HyCrete DSS and other Corrosion Inhibiting Admixtures.” (\$2,400) **2003-2004**
- Weidlinger Associates, Inc. (PI). “Investigation of a Cambered “Tuned” Strut for Use in Large Excavations.” (\$10,000) **2003-2004**
- MassHighway Submittal (PI), co-PI Segio Brena. “Data Collection at the Orange-Wendell Bridge”. (\$24,495) **2002**
- MassHighway Submittal (PI), co-PI Segio Brena. “Data Collection at the Orange-Wendell Bridge”. (\$14,495) **2001-2002**
- NETC (PI) “Performance Evaluation and Economic Analysis of Combinations of Durability Enhancing Admixtures (Mineral and Chemical) in Structural Concrete for the Northeast U.S.A.” NETC 97-2. (\$127,000) **1998-2002**
- Faculty Research Grant (PI) “Capacity of Shear Studs in Composite Construction Subject to Cyclic Loads” (\$10,000) **1998-1999**
- NSF Major Research Instrumentation Jan. 1999. This was not chosen to go forward by the University, but **resulted in the allotment of \$50,000 from the Chancellor for Research** for equipment in addition to startup funding to be used towards the purchase of laboratory equipment.

PUBLICATIONS AND PRESENTATIONS**Journal Publications:**

Quinn, B. H. and **Civjan, S. A.** “An Assessment of Bridge Joint Performance in the Northeastern States”. *Transportation Research Record*. Accepted for Publication. 2016.

Danai, K., **Civjan, S. A.** and Styckiewicz, M. (2013) “Sensor Location Selection for Structures via Identifiability Analysis in the Time-Scale Domain” *Journal of Sound and Vibration*. Elsevier. V332, n24, Pp 6296-6311. DOI: 10.1016/j.jsv.2013.06.015

Civjan, S. A., Kalayci, E., Quinn, B. H., Breña, S. F. and Allen, C. A. (2013) “Observed integral abutment bridge substructure response” *Engineering Structures*. v56 n3. Pp. 1177-1191. DOI information: 10.1016/j.engstruct.2013.06.029

Breña, S. F., Jeffrey, A., and **Civjan, S. A.** (2013) “Evaluation of a Non-composite Steel Girder Bridge through Live-Load Field Testing”. *Journal of Bridge Engineering*. ASCE. v18 n7. Pp 690-699.

Kalayci, E., **Civjan, S.A.**, Breña, S.F. (2012) “Parametric study on the thermal response of curved integral abutment bridges” *Engineering Structures*, v 43, p 129-138.

Danai, K., **Civjan, S. A.** and Styckiewicz, M. M. (2012) “Direct method of damage localization for civil structures via shape comparison of dynamic response measurements” *Computers and Structures*, v 92-93, p 297-307.

Civjan, S. A., Mitchell, M. J., Mann R. K. (2011) “Terrazzo Design: Avoiding Stress Related Deterioration and Cracking” *Journal of Performance of Constructed Facilities*, ASCE. v 25, n 6, p 514-521. **Nominated for “Outstanding Paper Award 2011”**

Kalayci, E., **Civjan, S.A.**, Breña, S.F., and Allen, C.A. (2011) “Load testing and modeling of two integral abutment bridges in Vermont, USA”. *Structural Engineering International: Journal of the IABSE (SEI)*. Vol 21, No. 2. pg.181-188. **Invited Paper.**

Civjan, S. A., Mitchell, M., Fortin, D., Mann, R. K. (2011) “Deterioration of terrazzo” *Journal of Architectural Engineering*, v 17, n 2, p 51-58.

Ahern, Jack, Warren, Paige, Charney, Noah, Jackson, Scott, Mullin, John, Kotval, Zenia, Brena, Sergio, **Civjan, Scott**, Carr, Ethan. (2009) “Issues and Methods for Transdisciplinary Planning of Combined Wildlife and Pedestrian Highway Crossings”. *Transportation Research Record*. Vol 2123. pp. 129-136.

Civjan S.A., Bonczar C.H., Breña S.F., DeJong J.T., and Crovo D.S. (2007) “Integral Abutment Bridge Behavior: Parametric Analysis of a Massachusetts Bridge”, *Journal of Bridge Engineering*, ASCE, Vol 12, No 1. pp. 64-71.

Breña, S.F., Bonczar, C.H., **Civjan, S.A.**, DeJong, J.T., and Crovo, D.S. (2007) “Evaluation of Seasonal and Yearly Behavior of an Integral Abutment Bridge”, *Journal of Bridge Engineering*, ASCE, Vol 12, No 3. pp 296-305

Civjan, Scott A. and Crellin, Benjamin J. (2006) “A New Admixture to Mitigate Corrosion Problems”, *Concrete International*. Pp. 2-6.

Civjan, Scott A., LaFave, James M., Trybulski, Joanna E., Lovett, Daniel, Lima, Jose, and Pfeiffer, Donald. (2005) “Effectiveness of Corrosion Inhibiting Admixture Combinations in Structural Concrete” *Cement and Concrete Composites*, Vol. 27 Issue 6. Pp. 688-703.

Civjan, Scott A., Bonczar, Christine Crellin, Benjamin (2005) “A New Admixture to Minimize Corrosion: Overall Performance of DSS Concretes” – New Product Watch. *Structure Magazine*. Pp. 38-40.

Civjan, Scott A., Brena, Sergio F., Butler, David A., and Crovo, Daniel S. (2004) “Field Monitoring of an Integral Abutment Bridge in Massachusetts” *Design of Structures 2004. Transportation Research Record*, No. 1892. Pp. 160-169.

Clouston, Peggi, **Civjan, Scott A.** and Bathon, Leander. (2004) “Shear Behavior of a Continuous Metal Connector for a Wood-Concrete Composite System” *Forest Products Journal*. 54(6) Pp. 76-84.

Civjan, Scott A. and Singh, Prabhjeet (2003) “Behavior of Shear Studs Subjected to Reversed Cyclic Loading”, *ASCE Journal of Structural Engineering*. Pp. 1466-1474.

Jones, Sean C. and **Civjan, Scott A.** (2003) “Application of FRP Overlays to Extend Steel Fatigue Life”, *ASCE Journal of Composites for Construction*. Pp. 331-338.

LaFave, James M., Pfeifer, Donald W., Sund, Daniel J., Lovett, Daniel and **Civjan, Scott A.** (2002), “Using Mineral and Chemical Durability Enhancing Admixtures in Structural Concrete”, *Concrete International*. Pp. 71-78.

Civjan, Scott A., Engelhardt, Michael D., and Gross, John L. (2001) “Slab Effects in SMRF Retrofit Connection Tests”, *ASCE Journal of Structural Engineering*. Pp. 230-237.

Civjan, Scott A., Engelhardt, Michael D., and Gross, John L. (2000) “Retrofit of Pre-Northridge Moment Resisting Connections”. *ASCE Journal of Structural Engineering*. Pp. 445-452.

Civjan, Scott A., Jirsa, James O., Carrasquillo, Ramon L., and Fowler, David. W. (1998) “Instrument to Evaluate Remaining Prestress in Damaged Prestressed Bridge Girders”, *PCI Journal*. Pp. 62-71.

Web Material

Civjan, S. A. "Core Teaching Aids for Structural Steel Design Courses" *American Institute of Steel Construction*. Web Address: <https://aisc.org/content.aspx?id=24858>

Final Reports:

Civjan, S. A. and Quinn, B. H. "Better Bridge Joint Technology" Final Report to Massachusetts Department of Transportation. 110 pp. 2015.

Civjan, S. A. "State Building Codes and Structural Safety Provisions for Unreinforced Masonry (URM) Buildings in the Northeast States" Final Report to Northeast States Emergency Management Consortium (NESEC). 20 pp. 2015.

Civjan, S. A., Quinn, B. H. and Breña, S. F. "Bridge-in-a-Backpack: Fitchburg, MA" Final Report to Massachusetts Department of Transportation. 15 pp. 2014.

Civjan, S. A. and Moradi, M. "Analysis and Interpretation of Hydrophobic Concrete Chloride Data and Recommended Parameters for LIFE-365" Final report to Broadview Industries, Inc. as part of a subcontract to an Army Corp of Engineers contract. 16 pp. 2014.

Civjan, S. A., Breña, S. F., Quinn, B. H., Kalayci, E.
Performance Monitoring of Jointless Bridges – Phased III Final Report Part2
http://vtransengineering.vermont.gov/sites/aot_program_development/files/documents/materialsandresearch/completedprojects/2014%20-%2007%20Performance%20Monitoring%20of%20Jointless%20Bridges%20-%20Phase%20III.pdf (Pgs 199-349 of document)
VTrans Report 2014-07 May 2014 (141 pp.)

Civjan, S. A., Breña, S. F., Kalayci, E., Quinn, B. H.
Performance Monitoring of Jointless Bridges – Phased III Final Report Part1
http://vtransengineering.vermont.gov/sites/aot_program_development/files/documents/materialsandresearch/completedprojects/2014%20-%2007%20Performance%20Monitoring%20of%20Jointless%20Bridges%20-%20Phase%20III.pdf (Pgs 1-198 of document)
VTrans Report 2014-07 May 2014 (173 pp.)

Civjan, S. A. and Moradi, M. "Instruction for Using Hycrete in Life-365" White Paper to Broadview Industries, Inc. as part of a subcontract to an Army Corp of Engineers contract. 2014. 6 pp.

Civjan, S. A., Sit, M. H. and Breña, S. F. "Folded Plate Girder Bridge: Uxbridge, MA" Final Report to Massachusetts Department of Transportation. 2014. 23 pp.

Ericson, D., Breña, S. F., **Civjan, S. A.** and Singh, A. “Evaluation of Live-Load Distribution Factors for NEXT-F Beam Bridges” Submitted to the Precast/prestressed Concrete Institute. 2013. 63 pp.

Jeffrey, A. E., Breña S.F and **Civjan, S. A.** “Evaluation of Bridge Performance through Non-Destructive Load Testing” Vermont Agency of Transportation Final Report 2009-1. January 2009. 271 Pages.

Civjan, Scott A. and Crellin, Benjamin. “Field Studies of Concrete Containing Salts of an Alkenyl-Substituted Succinic Acid” NETC03-2. Final Report prepared for the New England Transportation Consortium (NETC). NETR73. December 2008. 135 Pages
http://www.netc.umassd.edu/reports_listing.html

Civjan, Scott A., Kinoshita-Mann, Ray, and Mitchell, Mike J. “Terrazzo Cracking” Cooperative Research Program Task Order #11 Final Report, Executive Office of Transportation, August 2007. 128 Pages.

Ahern, Jack, Warren, Paige, Charney, Noah, Jackson, Scott, Mullin, John, Kotval, Zenia, Brena, Sergio, **Civjan, Scott**, Carr, Ethan. “Walden Passage Feasibility Study” FHWA January 2007.

Breña S.F., **Civjan S.A.**, and Goodchild M., “Advanced Composite Materials for New England’s Transportation Infrastructure: A Study for Implementation and Synthesis of Technology and Practice”, *Final Project Report: NETC 01-1 (NETCR62)*, New England Transportation Consortium, May 2006. 77 Pages.
http://www.netc.umassd.edu/reports_listing.html

Bonczar, Christine H., **Civjan, Scott A.**, Brena, Sergio F., DeJong, Jason, “*Behavior of Integral Abutment Bridges: Field Data and Computer Modeling*”, Final Report prepared for the Massachusetts Highway Department. UMTC-05-04, June 2005. 201 Pages.

Civjan, S. A., LaFave, J. M, Lovett, D., Sund, D. J., Trybulski, J. “*Performance Evaluation and Economic Analysis of Combinations of Durability Enhancing Admixtures (Mineral and Chemical) in Structural Concrete for the Northeast U.S.A.*”, NETC 97-2 Final Report prepared for the New England Transportation Consortium. February, 2003. 165 Pages http://www.netc.umassd.edu/reports_listing.html

Civjan, Scott A., Engelhardt, Michael D. “Experimental Investigation of Methods to Retrofit Connections in Existing Seismic-Resistant Steel moment Frames”, Summary Final Report to the National Institute of Standards and Technology, The University of Texas at Austin, 1998.

Civjan, Scott A., Jirsa, James O., Carrasquillo, Ramon L., and Fowler, David. W. “Method to Evaluate Remaining Prestress in Damaged Prestressed Bridge Girders”, Research Report CTR 0-1370-2, Center for Transportation Research, October, 1995.

Invited Presentations:

Civjan, S. A. and Quinn, B. H. “An Assessment of Bridge Joint Performance in the Northeastern States”. *AASHTO Western Bridge Preservation Partnership Workshop*. Salt Lake City, UT. May 2016.

Civjan, S. A., Breña, S. F. “Bridge Instrumentation Programs and Maintenance Issues from UMass Experiences” KEYNOTE Lecture. First International Bridges Conference – Chile 2014, Future Challenges: Design, Construction and Maintenance. Santiago, Chile. September 24, 2014.

Civjan, S. A., Breña, S. F. “Integral Abutment Bridges Behavior and Design Observations from UMass Studies” Presentation at Universidad Católica de Valparaíso, Valparaíso, Chile. September 23, 2014.

Civjan, S. A. and Droesch, D. “Adhesive and Grouted Anchorage Systems: Researching the Behavior of Anchors” North Eastern States’ Materials Engineers Association Annual Meeting. Boston, MA. October 20-21, 2014

Breña S.F., **Civjan S.A.** and Singh A. “Field Monitoring of an Integral Abutment Prestressed Concrete NEXT Beam Bridge in Massachusetts” *PCI-Northeast Bridge Technical Committee Meeting*. Publick House, Sturbridge, MA. June 2012.

Civjan S.A. Allen, C. A., Kalayci, E., Breña S.F. “Performance Monitoring of Jointless Bridges”, *NESGE Annual Meeting*. Burlington, VT. October 2010.

Civjan, Scott A. “Core Teaching Aids for Courses in Structural Steel Design”, NASCC Educators Session, Phoenix, AZ, April 2009.

Civjan, Scott A., Larsen, Gershon and Hines, Eric M. “Historic Shear Connections: Rivet and Moment Capacity Data”, *Connections VI Sixth International Workshop on Connection in Steel Structures*, Chicago, June 2008.

Civjan, Scott A., Galloway, Judd, Kirmani, Minhaj, Aristorenas, George, “Experimental and Analytical Verification of the “Tuned Strut” Concept”, *ASCE Structures Congress*. St. Louis, MO May 2006.

Civjan, Scott A. and Rhodes, Philip S. “Hycrete: Innovative Admixture for Extending Structural Life of Concrete--Chemistry and Test Results” (P05-0030) *Transportation Research Board* Washington D.C. January 2005.

Civjan, Scott A., Bonczar, Christine H., Brena, Sergio F., DeJong, Jason, and Crovo, Daniel. “Integral Abutment Bridges: A Case Study and Parametric Analysis”, Louisiana Structures Congress, September 9, 2005 (CANCELLED)

Civjan, Scott A. and Crellin, Benjamin, “Hycrete – DSS An Innovative Admixture for Concrete: An Update on NETC 03-2” *16th Annual NE Materials and Research Meeting* Concord, NH June 7, 2005.

Civjan, Scott A. “Evaluation of DSS Corrosion Inhibitor”, *North Eastern States Materials Engineers’ Association 80th Annual Meeting*, Portsmouth, NH October 19, 2004.

Civjan, Scott A., and Engelhardt, Michael D. “Experimental Testing Utilizing E70T-4 Electrodes in Pre-Northridge SMRF Connections.” Invited Delegate/Presenter. *U.S./Japan Seminar on Advanced Stability and Seismicity Concepts for Performance-Based Design of Steel and Composite Structures*, Kyoto, Japan July 23-27, 2001.

Civjan, Scott A. and Engelhardt, Michael D. “Experimental Testing of Retrofit Steel Moment Connections”, *Connections in Steel Structures IV: Steel Connections in the New Millennium* international, Roanoke, Virginia, October 22-25, 2000.

Conference Presentations/Proceedings:

Civjan, S. A. and Quinn, B. H. “An Assessment of Bridge Joint Performance in the Northeastern States”. *Transportation Research Board Annual Meeting*. Washington D.C. 2016.

Civjan, S. A. Berthaume, A., Bennett, A. and Dumont, E. “Evaluation of Bats in Bridges throughout New England”. *Transportation Research Board Annual Meeting*. Washington D.C. 2016.

Civjan, S. A., Quinn, B. H., Breña, S. F., Allen, C. A. “Integral Abutment Data from Three Steel Girder Bridges”. *World Steel Bridge Symposium*. Toronto, ON. 2014.

Civjan, S. A., Sit, M. H. and Breña, S. F., “Field and Analytical Studies of the First Folded Plate Girder Bridge” *Transportation Research Board Annual Meeting*. Washington D.C. 2014.

Quinn, B. H., **Civjan, S. A.**, Breña, S. F., Allen, C. A. “Single Span Integral Abutment Bridge Response – Straight and Skew Alignments” *Transportation Research Board Annual Meeting*. Washington D.C. 2014. Poster Presentation.

Bahjat, R., Ericson, D., Breña, S. F., **Civjan, S. A.** “Evaluation of Moment Live-Load Distribution of a NEXT-F Beam Bridge Through Field Load Testing and FE Modeling” *PCI Annual Meeting and National Bridge Conference*. Washington D. C. 2014.

Civjan, S. A., Breña, S. F. “Integral Abutment Bridges Behavior and Design Observations from UMass Studies” *First International Bridges Conference – Chile 2014, Future Challenges: Design, Construction and Maintenance*. Santiago, Chile. September 24-26, 2014

Quinn, B., **Civjan, S. A.**, Lahovich, A. and Breña, S.F. “Data from the Fitchburg Bridge, an Innovative FRP Arch Structure”, *Transportation Research Board Annual Meeting*. Washington D.C. 2013

Civjan, S. A., Kalayci, E., Breña, S.F. and Allen, C. A. “Instrumentation and Long Term Monitoring of Three Integral Abutment Bridges in Vermont” *Transportation Research Board Annual Meeting*. Washington D.C. 2013.

Breña S.F., **Civjan S.A.** and Singh A. “Field Monitoring of an Integral Abutment Prestressed Concrete NEXT Beam Bridge in Massachusetts” Research and Development Session. *PCI Annual Convention*. Nashville, TN. September 30, 2012.

Civjan S.A., Kalayci, E., Breña S.F., Allen C. A. “Integral Abutment Bridge Monitoring Program in Vermont”, *Transportation Research Board Annual Meeting*. Washington D.C. January 2010.

Kalayci, Emre, Brena, Sergio F. and **Civjan, Scott A.** “Curved Integral Abutment Bridges – Thermal Response Predictions through Finite Element Analysis”, 2009 *ASCE Structures Congress*. Austin, TX. April 2009.

Ahern, Jack, Warren, Paige, Charney, Noah, Jackson, Scott, Mullin, John, Kotval, Zenia, Brena, Sergio, **Civjan, Scott**, Carr, Ethan. “Issues and Methods for Transdisciplinary Planning of Combined Wildlife and Pedestrian Highway Crossings”. *Transportation Research Board Annual Meeting*. Washington D.C. January 2009.

Civjan, Scott A. (2005) “A New Corrosion Inhibitor for Concrete Construction” *Construction Materials: Third International Conference on Construction Materials Performance, Innovations and Structural Implications. ConMat’05*. Vancouver, British Columbia, Canada. Full Paper available on Conference CD

Bonczar, Christine H., Brena, Sergio F., **Civjan, Scott A.**, DeJong, Jason, Crellin, Benjamin and Crovo, Daniel, “Field Data and FEM Modeling of the Orange-Wendell Bridge”. *FHWA Conference on Integral Abutment and Jointless Bridges*. Baltimore, MD, March 2005. Pp. 163-173.

Bonczar, Christine H., Brena, Sergio F., **Civjan, Scott A.**, DeJong, Jason, and Crovo, Daniel, “Pile Behavior and Design – Field Data and FEM Studies” . *FHWA Conference on Integral Abutment and Jointless Bridges*. Baltimore, MD, March 2005. Pp. 174-184.

DeJong, Jason T., Howey, Daniel T., **Civjan, Scott A.**, Brena, Sergio F., Butler, David S., Crovo, Daniel S., Hourani, Nabil and Connors, Peter "Influence of Daily and Annual Thermal Variations on Integral Abutment Bridge Performance", *American Society of Civil Engineers, Geo-Trans Conference*, Los Angeles, CA. 2004. Pp. 496-505.

Civjan, Scott A., Brena, Sergio F., Butler, David A., and Crovo, Daniel S. “Field Monitoring of an Integral Abutment Bridge in Massachusetts” *Transportation Research Board*, Washington D. C. January 2004.

Civjan, Scott A., LaFave, James M., Trybulski, Joanna E., Lovett, Daniel, Lima, Jose, and Pfeiffer, Donald. “Effectiveness of Corrosion Inhibiting Admixture Combinations” *ACI Fall Convention*, Boston, MA, October 2003.

Civjan, S. A., and Singh, P. “Shear Stud Capacities Under Fully Reversed Cyclic Loading”, Paper #404. *Seventh U.S. National Conference on Earthquake Engineering*, Boston, MA, July 21-25, 2002.

LaFave, J. M., Lovett, D., and **Civjan, S. A.**, “On the Use of Combinations of Durability Enhancing Admixtures (Mineral and Chemical) in Structural Concrete,” *ACI Fall Convention*, Toronto, Ontario, Canada, October 15-21 2000.

Civjan, Scott A., Engelhardt, Michael D., and Gross, John L. “Slab Effects on Retrofit Steel Moment Connections”, *6th ASCCS International Conference on Steel-Composite Structures*, Los Angeles, CA, March 22-24, 2000.

Civjan, Scott A., Engelhardt, Michael D., and Gross, John L. “Experimental Program and Proposed Design Method for the Retrofit of Steel Moment Connections”, *12th World Conference on Earthquake Engineering*, Auckland, New Zealand, Jan. 30-Feb. 4, 2000.

Civjan, Scott A. “Instrument to Determine Prestress Remaining in a Damaged Bridge Girder”, Proceedings of the 1998 *Structural Materials Technology Non-Destructive Testing Conference*, March 1998.

Civjan, Scott A. “Steel Moment Frame Connection Retrofit Project- Research in Progress (Preliminary Results)”, Poster presentation at the *EERI Annual Meeting*, San Francisco, California, February, 1998.

Zobel, Robert S. and **Civjan, Scott A.** “Repair of Impact Damaged Prestressed Concrete Bridge Girders”, *SEAoT State Conference*, Austin, Texas, 1994.

Other Presentations:

Invited Presentation: Civjan, S.A., Breña, S.F., “Bridge Field Monitoring Projects at UMass Amherst” *FHWA Task Group on Seismic Connections Scan Tour Meeting*. Cambridge MA. March 2012.

Invited Presentation: Breña, S.F., Civjan, S.A. and Singh, A. “Field Monitoring of an Integral Abutment Prestressed Concrete NEXT Beam Bridge in Massachusetts.” *PCI-Northeast: Bridge Tech Committee Meeting*. Publick House, Sturbridge, MA. June 2012.

Breña, S.F., Civjan, S.A., Jeffrey, A. “Evaluation of Bridge Performance and Rating through Non-destructive Load Testing”, Vermont Agency of Transportation, Montpelier VT. November 2008.

Invited Presentation: Civjan, Scott, Brena, Sergio, and Bonczar, Christine “Integral Abutment Bridge Behavior Case Study and Parametric Analysis”
Department Seminar Presentation at Northeastern University, March 2007.

Civjan, Scott A. and Brena, Sergio B. “FRP Applications in the Northeastern States”, Annual AASHTO Structures Meeting, Presentation to TC-6., June 27, 2005.
Also Presented by Brena to MA (Jan 2005), NH (June 2005) and VT (Sept 2005)
Departments of Transportation

Invited Presentation: Breña, S.F., Civjan, S.A., and Bonczar, C.H., “Response of an Integral Abutment Bridge under Temperature Changes” (in Spanish), Universidad Iberoamericana, October 24, 2005, Mexico City, Mexico.

Invited Presentation: “Seismic Behavior of Steel Connections, Including Reduced Beam Section (RBS) Design”, Tufts University Civil Engineering Seminar, October, 2004.

Civjan, Scott A., LaFave, James M, , Trybulski, Joanna E., Lovett, Daniel, Lima, Jose, and Pfeiffer, Donald. “Corrosion Inhibiting Admixture Testing at UMass” *ACI Committee 222 Presentation*, Boston, MA, October 2003.

Invited Presentation: Reduced Beam Section (RBS) Research: Problems in the Northridge Earthquake to Steel Moment Resisting Frame Connections”, Northeastern University Civil Engineering Lecture Series, October, 2002.

“Incorporating Structural Engineering in K-12 Curriculum” Invited special lecture for Educ 791L – Engineering for the Classroom” to 14 Middle School Teachers.

“Building Big Teacher Training” Co-trained (with Prof. Hancock of CEE) approximately 25 K-12 teachers on ways to incorporate Engineering in the classroom activities.

Civjan, Scott A. “Moment Connection Retrofit Project-Research in Progress”, Poster presentation at the STEER Conference, The University of Texas at Austin, May, 1997.

Civjan, Scott A. “Moment Connection Retrofit Project-Research in Progress”, Poster presentation at the EERI Annual Meeting, Austin, Texas, February, 1997.