Preview of PCI

50th Anniversary

Annual Convention / Exhibition
and
The PCI National Bridge Conference

October 17-20, 2004

Atlanta, Georgia

Today's Solutions — Tomorrow's Possibilities
Historic Atlanta, Georgia, with its old southern charm and recent explosive urban growth, will provide the welcoming backdrop to PCI’s 50th Anniversary Annual Convention/Exhibition and PCI National Bridge Conference, October 17 to 20, 2004. The convention will be headquartered at the luxurious Hyatt Regency Atlanta.

The primary highlight of the convention will be the celebration of PCI’s 50th Anniversary. Among the celebrations will be the recognition of the “Titans of Our Industry,” the presentation of a specially commissioned piece of art depicting the “Wonders of the Precast World” and a 50th Anniversary Commemorative Publication titled “Visions Taking Shape: 50 Years of the Precast/Prestressed Concrete Industry.”

Despite the celebratory aspect of the convention, there is no intent to let the industry rest on its laurels. A comprehensive business, technical and marketing program has been organized to look at the future which is reflected in the theme “Today’s Solutions — Tomorrow’s Possibilities.” The Federal Highway Administration is again playing a major role in the PCI Convention by co-sponsoring PCI’s National Bridge Conference. Some 65 technical papers will be presented at this event covering the state-of-the-art for bridges, techniques and solutions for today and the future, and a series of seminars and programs titled “Bridges for Life.”

Another major highlight of the convention is the Workshop on Total Precast Concrete Structures, which is being organized by the Georgia/Carolinas PCI. In addition to these attractions, PCI will conduct its core sessions on Architectural Precast Concrete, Computer Software Possibilities, Industry Handbook (Sixth Edition), Innovative Precast/Prestressed Concrete Structures, Research and Development, Plant Safety/Environmental, Erectors/Certification, Seismic Design and Research Issues, and Productivity and Technical Update. As has become a regular feature, a Student Education Program will also be held.

Two keynote speakers have been invited. At the Monday Business Meeting Breakfast, Daniel Burrus will give his forecast for the business climate. On Tuesday morning, Professor Michael Buckley will present “Seven Transition Waves Impacting the Real Estate Industry.”

The Exhibition Hall will open Sunday noon and will feature the products, services and materials from 87 industry exhibitors. A listing of the exhibitors is provided on pp. 49-54.

Tuesday evening, PCI’s 50th Anniversary Celebration Banquet will be a true gala extravaganza. In addition to an evening of dining and dancing, the event will culminate in a salute to the “Titans of Our Industry.”

Differing from the past, the Wednesday Luncheon will feature the winners of the 2004 PCI Design Awards Program.

The PCI Spouses Program Advisory Committee has put together an activity-packed Spouses/Guests Program. A number of tours will explore Atlanta. “The City of Trees” boasts the Martin Luther King, Jr. Center, the Carter Center, the Herndon Home, the World of Coca-Cola, Underground Atlanta, the Hammonds House Galleries, Sci-Trek, the Atlanta University Center and much more. See p. 48 for details on the spouse/guest program.

Make sure you register early for PCI’s once in a lifetime 50th Anniversary Annual Convention and Exhibition. See y’all in Atlanta!
Important Information

**Room Reservations**
For hotel reservations, please contact: Reservation Manager, Hyatt Regency Atlanta, Phone (404) 577-1234, Fax (404) 460-6499, Toll-free (800) 233-1234.

**Travel Arrangements**
**Official Airline — American Airlines**
You may call American Airlines at (800) 433-1790. Be sure to mention the meeting plus AI4H4AF to take advantage of the Special Meeting Saver Fare.

**Climate & Clothing**
The weather should be pleasant during the time of the convention/conference. The average daytime temperature in Atlanta during October is 79°F/26°C, with nighttime lows around 52°F/11°C. Formal dress will not be required for any of the social functions, but is encouraged for the PCI 50th Anniversary Celebration Banquet. Business dress will be appropriate for meetings.

**Exhibition**
All major precast concrete industry suppliers will be present to display their products, materials, and services. Here you will be able to see the latest developments and talk with industry experts concerning a wide range of products, services, applications, and techniques.

**Social Program**
The third annual PCI Education Foundation Golf Tournament is scheduled for Friday, October 15, 2004. Tuesday evening will be one of fine dining, dancing, live entertainment, and recognition of winning producer members in our annual national Design Awards Program. Spouses and guests will enjoy an exciting array of special historical and cultural activities.

**Proceedings**
All conference registrants will receive a copy of the National Bridge Conference Proceedings.

**Language**
The official symposium language is English. There will be no simultaneous translation into other languages.

---

**Full Convention/Conference Registration Includes**
- Attendance to all Sessions and Meetings
- Bridge Design Manual Seminar
- Exhibition Grand Opening Reception
- Opening Session and Breakfast
- Three Luncheons
- Architectural Get-Together Reception
- PCI 50th Anniversary Celebration Banquet
- Exhibitors' Open House
- Refreshment Service
- Valuable Door Prize Drawings

**Full Spouse/Guest Program Registration Includes**
- Exhibition Grand Opening Reception
- Opening Session & Breakfast
- Architectural Get-Together Reception
- PCI 50th Anniversary Celebration Banquet
- Exhibitors' Open House
- Three Luncheons
- Refreshment Service
- American Continental Breakfasts
- Valuable Door Prize Drawing
- Option to Purchase Tour Tickets

**Refunds**
Written notice is required for all cancellations. Cancellations received or postmarked on or before September 27, 2004 will be issued a full refund. After September 27, 2004 there will be a $50 service charge. There will be no refunds issued for cancellations received after October 13, 2004. Participant substitutions may be made at any time at no additional charge.

**Retain For Your Records (U.S. Participants)**
Although business meeting expenses continue to be fully deductible, cost of meals and entertainment held in conjunction with meetings may be only partially deductible. The cost of meals and entertainment included in the 2004 Convention registration fee is $410.

**Register Early**
Please register early. It will save you money and assist PCI.
MEETING AT A GLANCE

FRIDAY OCTOBER 15
Industry Committee Meetings
PCI Education Foundation Golf Outing
GFRC Seminar

SATURDAY OCTOBER 16
Industry Committee Meetings
Professional Member Get-Together Reception

SUNDAY OCTOBER 17
Industry Committee Meetings
Exhibition Grand Opening

MONDAY OCTOBER 18
PCI Business Meeting Breakfast
Exhibition Open House

TUESDAY OCTOBER 19
MORNING SESSION TOPICS
Marketing
Financial Performance/Contracts
Erectors/Certification
Seismic Research & Design
Total Precast Structures Workshop
Student Education Program
Exhibition Open House
50th Anniversary Celebration Banquet

WEDNESDAY OCTOBER 20
MORNING SESSION TOPICS
Productivity
Technical Update

AFTERNOON SESSION TOPICS
Precast/Prestressed Concrete Computer Software Possibilities
2004 PCI Design Awards Luncheon and Installation of Officers
MEETING AT A GLANCE

SUNDAY OCTOBER 17
PCI Committee on Bridges Meeting
Exhibition Grand Opening

MONDAY OCTOBER 18
PCI Business Meeting Breakfast
MORNING SESSION TOPICS
Bridge Awards
Exhibition Open House
AFTERNOON SESSION TOPICS
The Conference Spotlight State – Georgia, Its Bridges and Research
The Precast Piles Seminar – Design, Production, Driving, Testing

TUESDAY OCTOBER 19
MORNING SESSION TOPICS
Rapid Construction by Prefabrication – Research and Reality
Many Solutions, One Focus – Aesthetics
Exhibition Open House
Special Bridge Committee/AASHTO T-10 Meeting
PCI 50th Anniversary Celebration Banquet

WEDNESDAY OCTOBER 20
MORNING SESSION TOPICS
The World of Precast Bridges – The Solutions
State-of-the-Art – Back Then and Now
Bridge Design Manual Seminar, Part One
2004 PCI Design Awards Luncheon and Installation of Officers
AFTERNOON SESSION TOPICS
Spliced Girders – Size Matters
High Performance and Ultra-High Performance – Research and Applications
Bridge Design Manual Seminar, Part Two

"Bridge conference registrants may attend any of the PCI Convention events of their choice."

A Conference Proceedings CD-ROM containing papers and abstracts available at press time will be provided to all Bridge Conference registrants.

Attendance qualifies for Professional Development Hours.

2004 National Bridge Conference Steering Committee

M. Myint Lwin
Director, Office of Bridge Technology
Federal Highway Administration
Washington, D.C.

Ian M. Friedland
Bridge Technology Engineer
Federal Highway Administration
Washington, D.C.

Claude S. Napier, Jr.
Bridge Engineer
Federal Highway Administration
Virginia Division, Richmond, Virginia

Lou Trianadifilou
High Performance Structural Materials Specialist
Federal Highway Administration
Eastern Resource Center
Baltimore, Maryland

Jerry Potter
Structural Engineer
Federal Highway Administration
Washington, D.C.

James G. Toscas
President
Precast/Prestressed Concrete Institute
Chicago, Illinois

John S. Dick
Structures Director, PCI
Precast/Prestressed Concrete Institute
Chicago, Illinois

Gary H. Munstermann
Administration and Finance Director
Precast/Prestressed Concrete Institute
Chicago, Illinois

Paul V. Liles, Jr.
State Bridge Engineer
Georgia Department of Transportation
Atlanta, Georgia

Peter Finsen
Executive Director
Georgia/Carolinas PCI
Atlanta, Georgia

REGISTER ONLINE
www.pci.org
PROGRAM DETAILS

FRIDAY
OCTOBER 15

11:00am
PCI Education Foundation
3rd Annual Golf Tournament

Make arrangements now to participate. For further information, please contact: Jim Voss at JVI, Inc., (847) 675-1560 or Peter Finsen at Georgia-Carolinas PCI & Tournament Coordinator, (678) 638-6220.

8:00am - 5:00pm
CPCI Committee Meetings

8:30am - 12:30pm
GFRC Seminar

9:00am - 3:00pm
Industry Committee Meetings

5:30pm - 7:00pm
PCI Education Foundation
3rd Annual Golf Reception

SATURDAY
OCTOBER 16

8:00am – 5:00pm
Industry Committee Meetings

5:00pm – 6:30pm
Professional Member Get-Together Reception

All Professional Members and their guests are invited.

7:00pm - 9:00pm
CPCI Reception

SUNDAY
OCTOBER 17

8:00am – 5:00pm
Industry Committee Meetings

1:30pm – 6:30pm
Exhibition Grand Opening

On the first day of the exhibition, meet with colleagues and see the latest products, services and materials furnished to our industry.
### 2004 Convention Committee MEETING SCHEDULE

#### THURSDAY
**OCTOBER 14**
- **8:00 am - 4:00 pm**: Field Certification Fast Team

#### FRIDAY
**OCTOBER 15**
- **8:00 am - 4:00 pm**: Field Certification
- **1:00 pm - 3:00 pm**: CPCI Education
- **2:00 pm - 5:00 pm**: GFRC
- **2:00 pm - 6:00 pm**: Industry Handbook
- **3:00 pm - 5:30 pm**: CPCI Executive

#### SATURDAY
**OCTOBER 16**
- **8:00 am - 10:00 am**: Bridge Deck Panels
- **8:00 am - 12:00 noon**: Research & Development
- **8:00 am - 4:00 pm**: Quality Control Ad Hoc
- **8:00 am - 5:00 pm**: Erectors
- **8:00 am - 5:00 pm**: Market Plans/Promotion Teams
- **8:00 am - 5:00 pm**: Productivity
- **8:00 am - 5:00 pm**: Plant Certification
- **8:30 am - 11:30 am**: CPCI Marketing
- **9:00 am - 12:00 noon**: Precast Sandwich Wall Panels
- **9:00 am - 4:30 pm**: Plant Safety
- **9:00 am - 5:00 pm**: Connection Details
- **10:15 am - 5:00 pm**: Bridge Producers
- **1:00 pm - 4:00 pm**: Soundwall
- **1:00 pm - 5:00 pm**: Student Education
- **1:00 pm - 5:00 pm**: Financial Performance/Contracts
- **1:00 pm - 5:00 pm**: Seismic
- **1:00 pm - 5:00 pm**: JOURNAL Advisory
- **1:00 pm - 5:00 pm**: Hollow-Core Slab Producers
- **1:00 pm - 5:00 pm**: CPCI Directors & Annual Meeting
- **1:00 pm - 5:00 pm**: Prestressing Steel
- **6:00 pm - 9:00 pm**: Bridge Design Manual

#### SUNDAY
**OCTOBER 17**
- **8:00 am - 12:00 noon**: Bridges (breakout)
- **8:00 am - 5:00 pm**: Industry Handbook
- **8:00 am - 5:00 pm**: PCI Board of Directors
- **8:00 am - 5:00 pm**: Architectural Precast Concrete
- **8:00 am - 5:00 pm**: Bridges
- **9:00 am - 12:00 noon**: FRP Composites
- **9:00 am - 12:00 noon**: Parking Structures
- **9:00 am - 12:00 noon**: Fire Code Fast Team
- **9:00 am - 12:00 noon**: Personnel Training & Certification
- **10:00 am - 12:00 noon**: Housing Team
- **1:00 pm - 5:00 pm**: Building Code
- **1:00 pm - 5:00 pm**: Concrete Materials Technology
- **1:30 pm - 5:00 pm**: Prestressed Concrete Piling
- **1:30 pm - 5:00 pm**: Prestressed Concrete Poles

#### MONDAY
**OCTOBER 18**
- **10:30 am - 1:15 pm**: Regional Marketing Directors
- **6:00 pm - 9:00 pm**: AASHTO T-10 (Closed)

#### TUESDAY
**OCTOBER 19**
- **7:00 am - 8:30 am**: 2004 PCI Board of Directors
- **7:30 am - 10:30 am**: Professional Members
- **8:45 am - 9:30 am**: Associate Members
- **10:00 am - 11:30 am**: Public Affairs
- **1:00 pm - 5:30 pm**: FHWA-HPC Technology (Closed)
- **1:30 pm - 5:30 pm**: AASHTO T-10 PCI Bridges
- **2:00 pm - 5:30 pm**: Technical Activities
- **2:00 pm - 5:30 pm**: 50th Anniversary

---

**PCI's 5th Annual Professional Members Reception**

**SATURDAY**
**OCTOBER 16**
5:30 pm - 7:00 pm

At the reception in Atlanta, we will be welcoming our new members, recognizing our long-time members who have received awards, and enjoying social time with our friends.

We invite any company to participate as a sponsor for this year's event. If you are interested, please contact Gary Munstermann at PCI headquarters, (312) 786-3210.

We look forward to seeing you in Atlanta!
MONDAY
OCTOBER 18

CONVENTION/EXHIBITION

7:30am – 10:30am
Business Meeting Breakfast

After formal opening ceremonies and breakfast, PCI Chairman of the Board Fred Heldenfels IV will officially call the convention/conference to order. There will be special recognitions, including induction of new Fellows of the Institute, and recognitions of the retiring and incoming Board of Directors. Brief reports will be made by the officers of the Institute. Special 50th Anniversary presentations will look to the future. The meeting will also kick off our lapel pin prize program. Hundreds of prizes will be given away. Last year’s top prize was a cruise. You don’t want to miss this one.

Keynote Address: Daniel Burrus, one of the nation’s leading business forecasters. The New York Times has referred to Burrus as one of America’s top three business gurus.

10:30am
Exhibition Opens

12:00noon – 1:15pm
Exhibitor’s “Welcome to Atlanta” Reception and Luncheon

1:30pm – 5:00pm
Industry Handbook, Sixth Edition

Moderator: Kim Seeber

1:30 p.m. - 1:40 p.m.
"Welcome & Description of 6th Edition Committee Process,”
Kim Seeber, Cantonment, Florida

1:40 p.m. – 2:00 p.m.
"Review of Significant Code Changes Incorporated into 6th Edition,”
Les Martin, Consulting Engineers Group, Bella Vista, Arizona

2:00 p.m. – 2:45 p.m.
"New Seismic Analysis and Design Procedures (Chapter 3),”
Ned Cleland, Blue Ridge Design, Inc., Winchester, Virginia

2:45 p.m. – 3:15 p.m.
"Overview of Chapter 4 – Design of Precast and Prestressed Concrete Components,” Les Martin, Consulting Engineers Group, Bella Vista, Arizona

3:15 p.m. – 3:45 p.m.
"Overview of Chapter 6 – Design of Connections,” Jason Lien, StructureWorks, LLC, Denver, Colorado

3:45 p.m. – 4:30 p.m.
"Changes to Headed Stud Analysis and Design Procedures,”

4:30 p.m. – 4:45 p.m.
"Highlights of Chapter 9 – Thermal, Acoustical, Fire and Other Considerations,” Courtney Phillips, TPAC, Phoenix, Arizona
7:30am – 10:30am
PCI Business Meeting Breakfast

Join the entire Convention & Conference at breakfast for introductions, awards, special speakers and celebration of PCI’s 50th Anniversary.

10:30am
Exhibition Opens

10:45am – 12:00noon
Bridge Awards Session

The presentation of the 2004 PCI Bridge Design Awards, recognition of the Spotlight State and special awards to the key planners and authors of the PCI Bridge Design Manual.

12:00noon – 1:15pm
Exhibitor’s “Welcome to Atlanta” Reception and Luncheon

Network and relax in the spacious exhibit hall and enjoy a delicious buffet luncheon.

2:00pm – 5:00pm
The Conference Spotlight State – Georgia, Its Bridges and Research

History of Prestressed Concrete Bridges in Georgia (G1)
Paul V. Liles, Jr., State Bridge Engineer, Georgia Department of Transportation, Atlanta, Georgia

Hartsfield Runway Project over I-285 (G2)
John Heath, Heath and Lineback Consultants, Inc., Atlanta, Georgia

The fifth runway project for Hartsfield Airport, Atlanta, passes over I-285 as well as future service roads requiring the design of a multispan bridge for a 1.2 million pound load. The bridge will cross up to 18 lanes of traffic and will be 1500 ft wide.

Transfer and Development Length of Pretensioned Girders Constructed with Slate High Strength Lightweight Concrete (64)
Kari F. Meyer, U.S. Military Academy, West Point, New York and Lawrence F. Kahn, Georgia Institute of Technology, Atlanta, Georgia

This paper describes the results of transfer and development length testing at Georgia Tech on six pretensioned AASHTO Type II girders constructed using 8000 psi and 10,000 psi slate high strength lightweight concrete.

Deck Contraction Induced Deflection in a High Performance Concrete Bridge (8)
Marvin L. Griffin, U.S. Military Academy, West Point, New York and Lawrence F. Kahn, and Mauricio Lopez, Georgia Institute of Technology, Atlanta, Georgia
4:45 p.m. – 5:00 p.m.
"Improvements to Chapter 11 – General Design Information,"
Mike Malson, Consulting Engineers Group, Mt. Prospect, Illinois

1:30pm – 5:30pm
Research and Development – Developing Solutions for Future Industry Growth

Chairman: Thomas J. D’Arcy, The Consulting Engineers Group, Inc., San Antonio, Texas

This session features presentations on several PCI research fellowships and research projects. Topics include design criteria for headed studs, shear design of prestressed concrete, self-consolidating concrete, flange reinforcement in double tees, prediction of movements and forces in precast concrete structures due to volume change, precast concrete diaphragms, and various other research projects currently underway or recently completed at different universities and research institutions.

1:30 p.m. - 1:50 p.m.
"Simplified Shear Design of Prestressed Concrete Members,"
Robert J. Frosch, Purdue University, West Lafayette, Indiana

1:50 p.m. – 2:10 p.m.
"Structural Performance and Design of Precast/Prestressed Girder Bridges Using Self-Compacting Concrete," Rigoberto Burgueño, Michigan State University, East Lansing, Michigan

2:10 p.m. – 2:30 p.m.
"Simplified Design Procedures for Precast Hybrid Frames,"
Rami Hawileh, Adeeb Rehman and Habib Tabatabai, University of Wisconsin, Milwaukee, Wisconsin

2:30 p.m. – 2:50 p.m.
"Point Load Tests and Flange Reinforcement in Double Tees,"
Alex Aswad, Penn State at Harrisburg, Middletown, Pennsylvania

2:50 p.m. – 3:10 p.m.
"Development of Fatigue Limit Formula for Deformed Welded Wire Reinforcement," Maher K. Tadros, University of Nebraska, Omaha, Nebraska

3:10 p.m. – 3:40 p.m.
"Research Update on Design Criteria for Headed Studs,"

3:40 p.m. – 4:10 p.m.
"Influence of Torsion on Lateral Stability of Spandrel Beams," Arturo E. Schultz, University of Minnesota, Minneapolis, Minnesota, and Rafael A. Magana, President, Precast Engineering Systems, Inc., Tampa, Florida

4:10 p.m. – 4:40 p.m.

4:40 p.m. – 5:10 p.m.
"Development of Design Methodology for Precast Concrete,"
The purpose of this study was to investigate the deflections of a high performance concrete highway bridge due to shrinkage and temperature changes in the deck and to compare those deflections to analytical predictions.

Additional papers are being planned for this session as well.

2:00pm – 5:00pm
The Precast Piles Seminar – Design, Production, Driving, Testing

*Introducing Chapter 20, Piles*
Christopher White, HNTB, Houston, Texas

The primary author of this new chapter in the PCI Bridge Design Manual describes its contents and features. Copies of the chapter will be distributed at the session.

*Structural Design of Prestressed Concrete Piles (14)*
Saad Moustafa, Gig Harbor, Washington

This paper will discuss the history as well as the development of state-of-the-art structural design of prestressed concrete piles. Development of the design methodology as well as design examples will be presented.

*Driving and Dynamic Testing Methods of Prestressed Concrete Piles (15)*
Mohamad Hussein and Brian Mondello, GRL Engineers, Inc., Orlando, Florida

Discussed in this presentation are the characteristics of the various hammers and equipment used in installing prestressed concrete piles, and dynamic pile testing and analysis methods background, application, and limitations, with illustrative case histories.

*Geotechnical Design Considerations for Prestressed Concrete Pile Foundations (36)*
Frank Townsend, University of Florida, Gainesville, Florida

The author discusses the geotechnical design of pile foundations, which must consider combinations of axial and lateral loadings, and group effects. The pertinent features, availability and costs of a myriad of computer software are summarized. In-place testing to develop soil engineering properties is also discussed.

*The Production and Transporting of Prestressed Concrete Piles*
Don Theobald, Gulf Coast Pre-Stress Company, Pass Christian, Mississippi

5:10 p.m. – 5:30 p.m.
“Concept, Design and Application of a Newly Developed Post-Tensioned Precast Frame System,” Claudio Pagani and Sergio Zambelli, B. S. Italia, Sty-Comp Group, Bergamo, Italy and Stefano Pampanin, University of Canterbury, Christchurch, New Zealand

2:00pm — 5:00pm
Plant Safety/Environmental

PLANT SAFETY SESSION
Chairman: Joseph T. Dugan, Spancrete Industries, Inc., Waukesha, Wisconsin

“Video On Stressing Safety (2004) — Initial Preview,” The safety committee invites your input and suggestions for this very important subject.


“Mock Trial — Accident Investigation And Its’ Importance,” One trial with missing information and facts: One trial with good information, witness statements, and pictures.

2:00pm — 5:00pm
Architectural Precast Concrete

Chairman: Marvin Hartsfield, Concrete Technology Inc., Springboro, Ohio


“Architectural Precast Concrete as a Form Generator,” Marvin Hartsfield, Concrete Technology Inc., Springboro, Ohio


“The Historical Significance of the Schokbeton System on Modernism Design”
Jack Pyburn, Office of Jack Pyburn, Architect, Inc., Atlanta, Georgia

5:30pm – 7:00pm
Architectural Get-Together Reception

Join us for an opportunity to meet and socialize with other architectural precasters.
8:30am – 11:50am
Rapid Construction by Prefabrication – Research and Reality

State-of-the-Practice for Accelerating Bridge Construction (57)
Jerry Potter, Federal Highway Administration, Washington, D.C.

Information is presented relative to concepts and processes successfully used to accelerate bridge construction. A summary is provided of the accomplishments that have been achieved in project benefits. It is anticipated that the paper will provide an exchange of information and expand support and advancement of accelerated bridge construction.

Report from the International Scan Team on Prefabricated Bridge Systems (41)
Benjamin Tang, Federal Highway Administration, Washington, D.C.

In April, a U.S. panel participated in the 2004 FHWA/AASHTO International Scan on Prefabricated Bridge Elements and Systems, with a focus on details related to the majority bridge population. The presentation will reveal preliminary findings from the trip.

Results of Research on Span Capabilities for Deck Bulb-Tee Girders (47)
Kevin G. Bailey, David T. Young and Reid W. Castrodele, Ralph Whitehead Associates, Inc., Charlotte, North Carolina

This paper reports the results of research in which the span ranges of deck bulb-tee bridges based on standard AASHTO girder shapes are compared to conventional construction. Constructability issues are identified and splicing of deck bulb-tee girders is also considered.

Effect of Connections between Adjacent Units on Deck Girder Bridges (12)
Sanjay Chaudhury and Zhongguo (John) Ma, University of Alaska Fairbanks, Fairbanks, Alaska

This paper will summarize research results on the impact of varying the number of shear connectors and intermediate steel diaphragms.

Moose Creek Bridge, the First Field Application of Prefabricated Bridges in Ontario (20)
Ben Huh, McCormick Rankin Corporation and John Low, Stantec Consulting Ltd., Mississauga, Ontario, Canada

This is a single-span structure and will feature prefabricated abutment units as part of the integral abutment system and prefabricated prestressed tee-girders.

Instant Bridges in the Pacific Northwest (49)
Chuck Prussack, Central Pre-Mix Prestress Co., Spokane, Washington

The use of simple precast substructures and prestressed superstructures simplifies and expedites the time needed to build bridges. The philosophy requiring this solution and a typical project will be described.
8:00am – 11:30am
Marketing Session – Seven Transition Waves Impacting the Real Estate Industry

Professor Michael Buckley, Head of the Columbia Center for High Density Development

This visually compelling, future-oriented presentation will present an overview of major forces which will impact the development industry over the decades ahead. Topics include transportation of capital markets, changing demographics, population growth, mergers, and key technology trends. An interactive panel discussion will follow the presentation.

8:30am – 11:30am
Financial Performance/Contracts

Chairman: Jamie Schultz, Concrete Technology, Inc., Springboro, Ohio

"Best Practices in Contract Negotiations – Panel Discussion"
Fred W. Heldenfels IV, Heldenfels Enterprises, Inc., San Marcos, Texas, Hagen Lambert and Travis Fox, Gate Precast Company, Jacksonville, Florida, Jamie Schultz. Concrete Technology, Inc., Springboro, Ohio, Peter Needham, Atlanta Structural Concrete Co., Buchanan, Georgia, and Brad C. Parrott, Shapiro Fussell Wedge Smotherman Martin Price, LLP, Atlanta, Georgia

8:30am – 11:30am
Erectors/Certification

ERECTORS SESSION – 8:30 a.m. – 10:00 a.m.

“Available Fall Protection Tools,” Gregory B. Gibbons, Gibbons Erectors, Inc., Parker, Colorado


“OSHA’s Enhanced Enforcement Program/Alliances,” Kenneth D. Kleinman, Stevens & Lee, PC, King of Prussia, Pennsylvania

CERTIFICATION SESSION – 10:00 a.m. – 11:30 a.m.
Chairman: Dave Buesing, Wells Concrete Products Co., Wells, Minnesota

PCI Certification is a nationally and internationally recognized standard for quality fabrication and erection of Precast/Prestressed Concrete. This session will focus on recent changes to our programs for Field Certification, Plant Certification and Certified Personnel Training.
Rapid Bridge Replacement Project of Tanglewood Bridge (53)
David Hohmann, Michael Hyzak, Clark Slacum, Lloyd Wolf, Texas DOT
Bridge Division, Austin, Texas

An example of TxDOT’s initiative for rapid bridge construction is the Tanglewood Bridge. The bridge will be totally prefabricated with complete replacement in four days or less. It is a single 60 ft prestressed concrete box beam span with integral railing, supported by precast concrete abutments and piling.

Utilization of Full-Depth, Precast Concrete Deck Panels, Past and Future (13)
Sameh Badie and Parul Patel, George Washington University, Washington, D.C. and Maher K. Tadros, University of Nebraska, Omaha, Nebraska

This paper presents results collected from the literature review and survey conducted for the ongoing NCHRP 12-65 project, “Full-Depth, Precast Concrete Bridge Deck Panel Systems.”

Innovative Use of Prefabricated Bridge Systems for Accelerated Bridge Construction (39)
Mohsen Shahawy, SDR Engineering Consultants, Inc., Tallahassee, Florida

This paper presents the current state-of-the-art on the use of innovative prefabricated systems and elements to limit traffic disruption during construction or rehabilitation of bridges. Newly developed systems resulting from recent research are discussed.

Rapid Bridge Construction in New Hampshire (17)
Peter E. Stamnas and Mark D. Whittemore, New Hampshire DOT, Concord, New Hampshire

This paper presents a rapid bridge replacement project being constructed by the Department in Epping, New Hampshire. It will focus on substructure details and how project schedule, design, specifications and contractual arrangements for a conventional bridge replacement project are impacted by specifying rapid bridge construction.

8:30am – 11:50am
Many Solutions, One Focus – Aesthetics

Achieving Unique and Aesthetically Pleasing Concrete Shapes for Bridges (25)
Amy Kohls, Figg Bridge Engineers, Dallas, Texas

By using concrete in different forms, textures and colors, unique appearances can be achieved. This presentation will demonstrate through case studies how concrete can be used to create sculpted works of bridge art.

The Lane Avenue Bridge – Precast Lessons from a Cast-In-Place Bridge (11)
James Pajk, Franklin County Engineer’s Office, Columbus, Ohio and David W. Jones, Jones-Stuckey, Ltd., Inc., Columbus, Ohio

The presentation will discuss Franklin County’s recent successes in the construction of unique precast bridges and how it led the agency in developing tight specifications for the Lane Avenue Bridge to ensure aesthetic goals and quality control.
8:30am – 11:45am
Seismic Design & Research Issues –
Developing Innovative Solutions for Design and Construction of Precast/Prestressed
Concrete Construction Systems

Chairman: Mario J. Bertolini, Blakeslee Prestress Inc.,
Branford, Connecticut

The session covers innovative design and construction solutions for precast frame and wall systems developed through the ATLSS (Advanced Technology for Large Structural Systems) and PRESSS (Precast Seismic Structural Systems) research programs. The program includes a description of the acceptance criteria for special precast structural walls based on validation testing, and development of proper design methodology for precast concrete diaphragms.

8:30 a.m – 9:00 a.m.
“Behavior of the Jointed Wall System in the PRESSS Building Test,”
Ataur Rahman, Derek Thomas and Sri Sritharan, Iowa State University,
Ames, Iowa

9:00 a.m. – 9:30 a.m.
“Lateral Load Tests of Unbonded Post-Tensioned Precast
Concrete Walls,” Richard Sause and Stephen Pessiki, Lehigh University,
Bethlehem, Pennsylvania

9:30 a.m. – 10:00 a.m.
“Coupled Precast Concrete Structural Walls,” Yahya (Gino) Kurama
and Brad Weldon, University of Notre Dame, Notre Dame, Indiana

10:00 – 10:30 a.m.
“Integrated Analytical and Experimental Approach to Precast Concrete
Diaphragm Research Program,” Jose I. Restrepo and Andre Filiatrault,
University of California at San Diego, La Jolla, California, Richard Sause
and Clay Naito, Lehigh University, Bethlehem, Pennsylvania, and
Robert B. Fleischman, University of Arizona, Tucson, Arizona

10:30 a.m. – 11:00 a.m.
“Seismic Response of Low-rise Buildings with Flexible Diaphragms,”
Ho Jung Lee and Dan Kuchma, University of Illinois at Urbana-Champaign,
Urbana, Illinois, and Mark Ascheim, Santa Clara University, Santa Clara,
California

11:00 a.m. – 11:45 a.m.
“Acceptance Criteria for Special Precast Structural Walls Based
on Validation Testing,” Neil M. Hawkins, Professor Emeritus of Civil
Engineering, University of Illinois at Urbana-Champaign, Urbana, Illinois,
Charles W. Dolian, University of Wyoming, Laramie, Wyoming

8:30am – 12:00noon
Total Precast Concrete Structures Workshop

Co-sponsors: PCI and Georgia/Carolinans PCI

8:30 a.m.
Continental Breakfast
Consensus Building and the Conceptual Design Process for the Replacement of the Fulton Road Bridge (23)
John C. Dietrick, Michael Baker Jr., Inc. and Brendan G. Finn, Cuyahoga County, Cleveland, Ohio

Constructed in 1932, the Fulton Road Bridge consists of six concrete open-spandrel deck arches, which are to be replaced. This paper focuses on the conceptual design process followed to determine an appropriate replacement for this important structure.

Coloring Concrete Bridges (6)
Cathy Higgins, Dynamic Color Solutions, Inc., Milwaukee, Wisconsin

This paper will be an introduction to using pigments to integrally color concrete bridges. It will start with a description of the classes of products used, particularly iron oxide pigments and how they are used in concrete. It concludes with a presentation of specific issues related to bridge construction including what works well and what does not.

Segmentally Precast, Post-Tensioned Concrete Deck for the I-235 Basket-Handle Arch Pedestrian Bridges (54)
David Rogowski and Amy Sramek, HNTB Corporation, Kansas City, Missouri, and Ahmad Abu-Hawash, Iowa Department of Transportation, Ames, Iowa

Three signature arch pedestrian bridges were designed to span the six-lane I-235 corridor in Des Moines with little disruption to capacity during construction. This paper will discuss how the segmentally precast deck saved valuable construction time and minimized traffic disruptions.

Innovative Bridge Delivered Through Unique Owner-Facilitated Design Build Process (30)
Jay Rohieder, Jr., Figg Bridge Engineers, Exton, Pennsylvania

Penobscot River Crossing on US 1 is being designed and constructed in a unique owner-facilitated design/build process to deliver the bridge on an extremely compressed schedule. The resulting durable, aesthetically-pleasing structure will provide a transportation solution, along with economic and historically appropriate solutions.

Reconstruction of Historic Animal Bridge (27)
Dipal P. Vimawala, Steve Leimer, CTE Engineers, Inc. and William Grosche, Johnson & Lasky Architects, Chicago, Illinois

The historic Animal Bridge was relocated and reconstructed over a channel leading to Lake Michigan in Chicago, Ill. Work also included cofferdams, seawalls, pile supported foundations, tall abutments, precast and cast-in-place and stone arches.

Case Studies of the Innovative Use of Partial Prestressing in Swiss Bridges and its Effect on Aesthetics (22)
Gregory T. Hasbrouck and David P. Billington, Princeton University, Princeton, New Jersey

The paper provides case studies of two of Christian Menn’s bridges in Switzerland exploring the innovative use of partial prestressing and the aesthetics that are achieved as a result.
9:00 a.m. – 12:00 Noon
Workshop: Total Precast Concrete Structures plus lunch in Exhibit Hall and afternoon pass to PCI Exhibition.

This workshop will explore total precast structures in which architectural and structural precast components create a building’s frame and panelized façade. Economical framing systems and precast architectural finishes for different building markets will be analyzed. The workshop will explore the benefits of economy, design flexibility, durability, and sustainability for integrated solutions of architectural and structural precast concrete.

This workshop is registered with AIA/CES for 3 HSW Learning Units. It will be presented by professional architects and engineers with years of experience in the design of precast structures and is intended as continuing education for the professional design community.

10:30am
Exhibition Opens
Hundreds of Anniversary Celebration prizes to win.

11:00am – 5:00pm
Student Education Program

11:00 a.m. – 12:00 Noon
Student Education Session

Introduction – PCI Chairman Fred Heldenfels IV, and the Student Education Committee Chair Pat Hynes will welcome the students and make short presentations on PCI’s Student Education Programs and the importance of student education in the future growth of the industry. Jason Lein of the StructureWorks located in Denver, Colorado, and Bill Richardson, Richardson Consulting Services, Colorado Springs, Colorado will discuss their experiences and the exciting career opportunities in the precast, prestressed concrete industry.

12:00 Noon – 1:00 p.m. Lunch

1:00 p.m. – 5:00 p.m. Exhibit Viewing and other Activities

An excellent opportunity for students to browse through the Exhibit Hall, enjoy food and refreshments sponsored by the convention exhibitors, and attend other activities as they please.

12:00 noon – 1:00pm
Lunch

6:30pm – 11:00pm
PCI 50th ANNIVERSARY CELEBRATION BANQUET

Join in PCI’s 50th ANNIVERSARY gala — a delightful evening of dining, dancing, peer recognition and an outstanding grand prize. This festive occasion features a salute to the Titans of our industry, a gourmet dinner and dancing to the music of a big band. For this celebration, black tie is encouraged.
The Use of Masonry Stains on the Las Vegas Monorail Project (56)
Clint Whitsett and Shawn M. Carney, United Coatings, Spokane Valley, Washington

The Las Vegas Monorail project required integration of precast elements for a multi-phase construction project. In some cases components were coated as much as a year apart and from several casting yards but came together with uniform color.

12:00noon – 5:00pm
Luncheon and Exhibit Open House

Unwind in the Exhibit Hall where a delicious buffet luncheon will be served.

1:30pm – 5:00pm
Exhibit Open House and Special Bridge Committee Meeting

Explore the many exciting exhibits and talk to the industry’s best and busiest equipment, materials and tools suppliers and expert consultants.

Or, join with state agency engineers, consultants, academics and precast producers for a joint meeting of the PCI Committee on Bridges and the AASHTO Technical Committee on Concrete Design (Committee T-10). Topics of mutual concern and issues involving the LRFD Design Specifications will be on the agenda.

6:30pm – 11:00pm
PCI 50th ANNIVERSARY CELEBRATION BANQUET

Join in PCI’S 50th ANNIVERSARY gala — a delightful evening of dining, dancing, peer recognition and an outstanding grand prize. This festive occasion features a salute to the Titans of our industry, a gourmet dinner and dancing to the music of a big band. For this celebration, black tie is encouraged.
8:30am – 11:30am
Productivity

Chairman: Charles Lowe, Meridian Precast & Granite, Inc., Waco, Texas

What’s Lean Manufacturing?
Ayaz Ahmed, Productivity Enhancements, LLC, McDonough, Georgia

“Applying Lean Manufacturing to Construction Projects”
Paul Reiser, The Boldt Company, Appleton, Wisconsin

“Lean Manufacturing – Panel Discussion”
Todd Brink, Spancrete Industries, Inc., Waukesha, Wisconsin,
Kevin Hanlon, IPC, Inc., Des Moines, Iowa, Chris Nichols,
High Concrete Structures, Inc., Denver, Pennsylvania

8:30am – 11:45am
Technical Updates – Issues Facing
The Precast Concrete Industry – PCI Technical Activities Committee’s
Involvement and Plans

Moderator: Michael LaNier

A. General Overview of Current Issues
   and Committee Days Blast Workshop
B. Strand Bond in SCC
C. PCI Fire Manual
D. SCC Full Scale Beam Test
E. Strand Bond Characteristics
F. Parking Garage Maintenance Manual
G. Mold Issues in Precast Concrete
H. Curing Temperature Issues

12:00noon – 1:30pm
2004 PCI Design Awards Luncheon
and Installation of Officers

Join us in recognizing the best of the best as we celebrate
this year’s award-winning precast structures.
9:00am – 11:40am
The World of Precast Bridges – The Solutions

*The Use of Precast Prestressed Box Beams for Temporary Bridge Construction (35)*

The paper will explore the issue of use and reuse of precast, prestressed concrete adjacent box beams for temporary bridge applications including information on using square beams for skewed temporary bridge applications. External transverse post-tensioning issues on skewed bridges will be discussed.

*Portable “Super Girder” Casting Bed (50)*
Chuck Prussack, Central Pre-Mix Prestress Co., Spokane, Washington

This presentation describes an above ground “portable” casting bed used for casting 100 ton “Super Girders” near a project site to avoid expensive heavy hauling. The process of building the bed, casting the girders, and obtaining PCI Certification is reviewed.

*Waterproofing the Precast Concrete Structures through the Secaucus Meadowlands (42)*
Frank Constantino, Stirling Lloyd Products, Inc., Newington, Texas

The study describes how a properly designed and installed waterproofing system was able to perform in conjunction with the design elements and surface characteristics of the precast, prestressed concrete deck panels and precast ballast retention wall in an environmentally sensitive area.

*Brissack Bridge Widening External Post-Tensioning to Increase Existing Girder Capacity (4)*
David McMullen, KPFF Consulting Engineers, Seattle, Washington

The Brissack Bridge was widened by externally post-tensioning the existing precast girders, saving considerable rehabilitation or replacement costs. The bridge was the only access for a small community north of the bridge and the solution considerably reduced the construction time.
1:30pm – 5:00pm
Precast/Prestressed Concrete Computer
Software Possibilities

Moderator: Ned Cleland

A. Leap Software, Inc. – Presto, Axsys, PC-Help, Conspan
B. Structure Works, LLC – Structure Works Precast
C. Losch Engineering Corporation – Lecwall, Lecpres
D. Eriksson Technologies – PSBeam 2.2
E. Salmons PC
F. Tekla, Inc. – Tekla Structures
G. Elematic Inc. – ELIPLAN

PCI PROGRAM COMPLETED

PCI All-Precast Design Award Winner
Aurora Municipal Center
Rocky Mountain Prestress
Photo: © Michael Peck Studio
U-Beams for MATA Medical Center Trolley Extension over Danny Thomas Boulevard (51)
Andrew Maybee, CPI Concrete Products, Inc., Memphis, Tennessee

The presenter describes the challenging aspects of design and fabrication of these twin, four-span trolley bridges. The versatility of prestressed concrete will be highlighted and detail all aspects of fabrication, delivery, and erection of this successful project.

MARTA Lindbergh Station Concourses and Roadway Expansion (55)
J. Michael Garver and Ulrich Lemcke, Regional Transit Partners, Atlanta, Georgia, and Jayant J. Patel, Metropolitan Atlanta Rapid Transit Authority, Atlanta, Georgia

Precast concrete box girders were chosen for this project that included modifications and expansion of the station to accommodate a commercial development over and around an active rail line. They offered the advantage of immediate protection of the rails and platforms from the construction above.

9:00am – 11:40am
State-of-the-Art – Back Then and Now

Performance of an Historic Prestressed Concrete Block Bridge (5)
Paul Zia, Gavin Wight, Mervyn J. Kowalsky, Hazim Dwairi and Mary Pope Furr, North Carolina State University, Raleigh, North Carolina

This paper describes the construction details of an historic prestressed concrete block bridge in Wilson County, North Carolina. It presents results of performance tests including the properties of the materials used in the beams, the effective prestress, the load-deflection characteristics, and the ultimate strength.

Analysis of the National Bridge Inventory: History, Population, and Performance Curves (26)
G. Scott Wilson, Palmer Engineering and Marcus L. Knight, Vanderbilt University, Nashville, Tennessee

This study investigates the statistical presence of precast concrete bridge structures throughout the nation's bridge inventory, their spatial and age distributions, and the development of performance curves for the different types of precast structures utilized. Performance curves for steel structures are developed for comparison with similar type precast structures.

Effect of Strand Debonding on Prestressed Concrete Girder: Performance (38)
Mohsen Shahawy, SDR Engineering Inc. and Tarek Hassan, North Carolina State University, Raleigh, North Carolina

The effect of excessive debonding of prestressed strands can present a marked impact on the performance of prestressed concrete girders. This paper presents experimental and field results demonstrating the effect of strand debonding on shear behavior.

Strand Development Length In Prestressed, Self-Consolidating Concrete Beams (33)
Rigoberto Burgueno and Mahmoodul Haq, Michigan State University, East Lansing, Michigan
The paper will present the latest results from an experimental investigation on the transfer and development length of ½-in. diameter prestressing strands in girders made with SCC. The study considers three SCC mix designs, which bound the design approaches for SCC, and a normally consolidated concrete mix.

Influences of Design Methods and Assumptions on Continuity Moments in Multi-Girder Bridges (18)
Charles Newhouse, Carin L. Roberts-Wollmann and Thomas E. Cousins, Virginia Tech, Blacksburg, Virginia

This paper presents results of an analytic study performed to determine how significant the differences are between methods to determine continuity moments in multi-girder bridges and how much effect thermal gradients may have on the predicted moments.

Lifetime Concrete Waterproofing and Protection (46)
Richard Taylor, Smartech Structure Protection, LLC, Dallas, Texas and Nelson Tonet, Express Polymers, Inc., Morgan, Pennsylvania

This new product is a biochemically-modified solution spray applied to cured concrete, bridging and sealing existing cracks (and future cracks as they occur). It is a waterproofing matrix against ingress of water and contaminants for the life of the structure.

Construction and Testing of Type II AASHTO Girders Using Self-Consolidating Concrete (63)

FDOT initiated a study in which six full-scale, precast and pretensioned AASHTO Type II girders were constructed with conventional and self-consolidating concrete (SCC) and tested to destruction. The results from trial mix designs and testing of the SCC girders will be presented and compared to the results from the conventional concrete girders.

Damage Assessment and Strengthening of Prestressed Concrete Bridge Elements (37)
Mohsen Shahawy, SDR Engineering Consultants, Inc., Tallahassee, Florida

The application of fiber reinforced polymers (FRP) for the repair and strengthening of damaged prestressed concrete elements is relatively recent. This paper presents analyses methods developed for damage assessment and repair and rehabilitation of prestressed concrete bridge elements.

9:00am - 11:40am
PCI Bridge Design Manual Seminar, Part One

The Bridge Design Manual is the most complete and comprehensive tool available for understanding and applying precast concrete as it is best used for highway and railroad bridges. The seminar begins with a practical tour of the many valuable design aids contained in the Manual. Then, it shifts to the presentation of a complete design example solved according to the provisions of the AASHTO LRFD Bridge Design Specifications.
12:00noon – 1:30pm
2004 PCI Design Awards Luncheon and Installation of Officers

Join us in recognizing the best of the best as we celebrate this year’s award-winning precast structures.

2:00pm – 5:00pm
Spliced Girders – Size Matters

*Design of Long-Span Spliced Concrete Girder Channel Span Unit at Fantasy Harbour (48)*

This paper will describe design and detailing issues for a post-tensioned, three-span bridge crossing the Intracoastal Waterway in Myrtle Beach, South Carolina, with a record-setting center span of 330 ft. Precast, pretensioned concrete girders are 6.5 ft deep and are haunched to 15 ft deep at interior supports.

*Long Span Bridges – Texas Style (52)*
Burson Patton, Texas Concrete Co., Victoria, Texas

Texas has used an approach to long spans by cantilevering the beams in the adjacent spans and using a drop-in beam. Spans up to 190 ft have been obtained using AASHTO Type VI beams. All beams are pretensioned only.

*A Design Study of Spliced Prestressed Concrete Bridges with I- and Box-Girders (31)*
Pimpida Surakomol and Rigoberto Burgueno, Michigan State University, East Lansing, Michigan

A comparative design study is presented of a single-span spliced girder bridge with standard I- and box-beams in accordance with the AASHTO-LRFD specifications. A comparison of the design outcomes such as cost, depth, beam spacing, prestressing and post-tensioning requirements, and splice location are provided.

*St. George Island Bridge (62)*
Don Theobald, Gulf Coast Pre-Stress, Inc., Pass Christian, Mississippi

A producer looks at the challenges and opportunities of this major design/build project near Tallahassee, Florida.

Increasing Use of Precast Concrete Bridge Members in Seismic Regions of Washington State (10)
Bijan Khaleghi, Washington State DOT, Lacey, Washington

This paper describes design methodology and practical details suitable for precast concrete bridge connections under seismic loading. Design examples are provided and the applicability of the AASHTO LRFD Specifications for the use of precast members in seismic areas is studied and recommendations are given.

*Platte River East Sets Precast Record in Nebraska (21)*
Shane Hennessy, Karer A. Bexten and Chuanbing Sun, Tadros Associates, LLC, Omaha, Nebraska, Fouad Jaber, Nebraska Department of Roads, Lincoln, Nebraska

Platte River East is a bridge project currently under design that uses a unique connection for creating superstructure continuity in concrete girders prior to deck placement. This allowed the longest precast concrete I-girder units ever built in the State of Nebraska.

*Aesthetic Solutions Using Spliced Girder Technology: Dayton Fifth Street over the Great Miami River (24)*
Travis Butz, Burgess & Niple, Inc., Columbus, Ohio

A combination of conventional prestressed concrete construction and spliced girder technology was used in the construction of the Fifth Street Bridge over the Great Miami River, Ohio.

*Influence of Construction Sequence on the Design of Spliced I-Girder Bridges (32)*
Rigoberto Burgueno and Pimpida Surakomol, Michigan State University, East Lansing, Michigan

The paper provides a quantitative assessment of the influence of single- and multi-stage construction sequences on the design of a continuous two-span spliced, precast and prestressed I-girder bridge with standard sections according to AASHTO LRFD specifications. The evaluation considers the resulting bridge cost, section depth, girder spacing, and prestressing and post-tensioning requirements.

*Deeply Haunched Spliced Precast Girders Meet Architectural Demands of City Historic District (28)*
John C. Shanks, Jr., Burgess & Niple, Inc., Columbus, Ohio

Where deep haunches or complex beam shapes are desired for architectural reasons, regular prestressed concrete construction is often impractical due to girder height and weight limitations. Spliced girder construction provides the designer with greater flexibility to customize the shape of the girders to meet the requirements of the project.

*Design of a Spliced Girder System with a 350 ft Channel Span; The LA-1 Project in Louisiana (66)*
Hugh D. Ronald, Wilbur Smith Associates, Orlando, Florida

The LA-1 project consists of 17 miles of elevated structure and includes a major navigation channel of three spans with a center span of 350 ft. The spliced girder system will be the longest of its type in the world. A number of design and construction problems have been investigated, including stability during erection and handling, and ductility of the girders at ultimate strength.
2:00pm – 5:00pm
High Performance and Ultra-High Performance – Research and Applications

Casting and Construction of an Optimized UHPC Bridge (16)
Benjamin Graybeal, PSI, Inc., McLean, Virginia

The Federal Highway Administration is investigating the optimal structural use of UHPC in bridge girders. Four unique girders have been constructed using a 28 ksi compressive-strength UHPC. Construction of these girders has identified potential obstacles to implementation to be addressed.

New England Precast Railing Research (40)
George Colgrove, Vermont Agency of Transportation, Montpelier, Vermont

This paper presents a current study resulting from growing public interest in bridge projects and aesthetic treatments. The solution presented in the paper addresses these concerns by expanding on the popular decorative rail treatment developed by the Texas Department of Transportation.

Development of New Iowa Bulb Tee Sections (58)
Norm McDonald and Dean Bierwagen, Iowa DOT, Ames, Iowa, Gary Novey, Ken Dunker, and Ahmad Abu-Hawash, Iowa State University, Ames, Iowa

To reduce bridge costs for rebuilding the I-235 freeway in Des Moines, Iowa, the Department partnered with the local precast industry to develop new bulb tee sections. Longer spans due to elimination of shoulder piers and shallow depths were required to meet existing street elevations.

VDOT Applications of HPC with Lightweight or SCC (45)
Celik Ozyildirim, Virginia Transportation Research Council, Charlottesville, Virginia

Lightweight HPC with minimum compressive strength of 8000 psi was evaluated for transfer and development length and load carrying capacity. Testing of beams and the behavior of beams in the field will be presented. Self-consolidating concrete with high flowability was used to make two specimen beams that will be tested at the FHWA research laboratory.

Shear Behavior of Pretensioned Girders Constructed with Slate High Strength Lightweight Concrete (65)
Karl F. Meyer, U.S. Military Academy, West Point, New York and Lawrence F. Kahn, Georgia Institute of Technology, Atlanta, Georgia

This paper describes the results of shear testing at Georgia Tech on six pretensioned AASHTO Type II girders constructed using 8000 psi and 10,000 psi slate high strength lightweight concrete.

Structural Reliability of UHPC Bridge Girders in Flexure (29)
Eric Steinberg and Eric Reeves, Ohio University, Athens, Ohio

If bridge designers are to use current standards to design UHPC bridges, the equations must be reviewed to determine their validity. This research begins to examine the reliability of the ultimate flexural strength of UHPC girders using current AASHTO LRFD procedures and investigates modifications to the resistance factor for this failure state.
Deck Protection Systems for Bridges Constructed with Precast Concrete Deck Slabs (61)
Michael Sprinkel, Virginia Transportation Research Council, Charlottesville, Virginia

Conventional protection systems for precast deck slabs include thin bonded concrete overlays and membranes overlaid with asphalt. The cost and risk of early failure are high and the construction time is long. Costing 55 to 66 percent less, integrally cast concrete and thin bonded epoxy overlays should be used.

Ultra High Performance Concrete Highway Bridge (59)
Dean Bierwagen, Iowa DOT, Ames, Iowa, Ken Dunker, and Ahmad Abu-Hawash, Iowa State University, Ames, Iowa

UHPC will be used in prestressed beams for a bridge replacement project in Wapello County, Iowa. The beams will be cast using 0.6-in. diameter strands and without mild reinforcing steel. This paper will discuss design efforts and the progress of this research project.

Reconstruction of North Avenue Bridge over Chicago River (9)
Murat Aydemir, Kenneth Price, Eddie He, Craig Hetue, and Gary Mraz, HNTB, Chicago, Illinois

The 420 ft long North Avenue Bridge utilizes an innovative cable stayed-suspension hybrid system. The HPC deck will provide greater durability and strength and lower permeability compared to normal concrete while reducing long-term maintenance costs.

2:00pm – 5:00pm
PCI Bridge Design Manual, Part Two

The seminar’s design example will include detailed “reference notes” to take home for use in learning to transition to the new LRFD Bridge Design Specifications.
**Friday, October 15**

**11:00am PCI Education Foundation 3rd Annual Golf Outing**

Make arrangements now to participate. For further information, please contact: Jim Voss (JVI, Inc., (847) 675-1560) or Peter Finsen (Georgia-Carolinas PCI & Tournament Coordinator, (678) 638-6220).

**Saturday, October 16**

*Convention Registration*

**Sunday, October 17**

**1:30pm Exhibit Grand Opening**

Join your spouse/guest in the Exhibit Hall for an extravagant 50th Anniversary Convention/Exhibition Grand Opening.

**2:00pm – 5:00pm Hospitality Room**

An ideal place to meet friends and relax. A docent will be on hand to provide assistance. The room will be open throughout the week.

**3:30pm Cocktail Party (in the Exhibit Hall)**

**Monday, October 18**

**7:30am PCI Business Meeting Breakfast**

(See page 28 for details. Tour participants are requested to leave the meeting at 9:45am.)

**10:00am – 3:30pm “Atlanta’s Famous First” (Registration Required)**

Georgia is a land of firsts. Countless people, places and things began a journey to stardom here. The list of the famous is endless, including everything from geological wonders to pioneers in medicine, politics and agriculture to educational accomplishments. Today, you will meet two of the brightest shining stars in the state: The world’s favorite soft drink and the first cable television network on earth, both of whom proudly call Atlanta home.

Over two decades ago, Ted Turner, a relative unknown, had a vision of a “Superstation” that would reach world-wide via an underground cable network. It would provide homes with the best in television programming (both new and vintage), movies, news, weather and sports.

As Turner’s Superstation has grown into a Supernetwork, one component of his empire continues to surface as the leader in the field. Introducing your first Famous First: Cable News Network. CNN and Headline News have their home in the heart of downtown Atlanta. Today, you will catch a glimpse of the fast-paced excitement of a 24-hour news broadcast in the making with a studio tour of Turner’s CNN Center. You’ll view the newsroom, the cameras and lights, and all the other behind-the-scenes places and things the viewing public never sees.

Coca-Cola has been on the Atlanta scene for a long time — over 100 years to be exact. It was here that the secret formula was first perfected, making it possible to bottle the refreshing cola around the globe. Under the direction of the International Headquarters located here in Atlanta, that is exactly what they are doing. You will meet this Famous First at the fabulous World of Coca-Cola Pavilion in Underground Atlanta. The excitement begins the moment you walk through the door. Pass under the landmark neon “spectacular” Coca-Cola sign and find yourself standing in a three-story atrium hung with flags representing nearly 200 nations & territories where Coca-Cola is available. From there, move at your own pace through the fascinating galleries showcasing the rich heritage and global reach of Coca-Cola.

With exhibits that appeal to both young and old, the attraction boasts approximately 1200 Coca-Cola artifacts, in addition to interactive exhibits and video presentations. You’ll be taken on a virtual journey from the invention of Coca-Cola by Dr. John Pemberton in 1886, to its present-day popularity throughout the world. *(Lunch Included)*

**5:30pm – 7:00pm Architectural Precasters Get-Together Reception**

**Tuesday, October 19**

**8:00am American Continental Breakfast**

**9:00am – 2:00pm A Taste of the Peach (Registration Required)**

Prepare yourself for an exciting taste of Atlanta. This city tour will introduce you to the sprawling metropolis that locals fondly call “The Big Peach.”

Relax as your experienced guide acquaints you with the city’s history — from its fiery past to its exciting future. You will learn how Atlanta grew from the destruction of the Civil War era to the dramatic destination chosen to host the 1996 Olympic Summer Games.

Drive through downtown to witness the blend of past and present that makes the city so strikingly handsome; the business district, an area of futuristic megastructures including Peachtree Center, INFORUM, CNN Center, Georgia’s gold-domed State Capitol, the Georgia World Congress Center, the Georgia Dome, Philips Arena and much more. You will drive through the Martin Luther King, Jr. Historic District on “Sweet Auburn Avenue” and pass by the MLK Center, Dr. King’s birth home and tomb. Then it’s off toward Midtown, home of the world headquarters of the Coca-Cola Company, the campus of Georgia Institute of Technology and the lofty IBM Tower. *(Lunch Included)*

**9:00am – 3:00pm Covington’s Mansions and Magnolias (Registration Required)**

As Turner’s CNN Center has grown into a Supernetwork, one component of his empire continues to surface as the leader in the field. Introducing your first Famous First: Cable News Network. CNN and Headline News have their home in the heart of downtown Atlanta. Today, you will catch a glimpse of the fast-paced excitement of a 24-hour news broadcast in the making with a studio tour of Turner’s CNN Center. You’ll view the newsroom, the cameras and lights, and all the other behind-the-scenes places and things the viewing public never sees.

Coca-Cola has been on the Atlanta scene for a long time — over 100 years to be exact. It was here that the secret formula was first perfected, making it possible to bottle the refreshing cola around the globe. Under the direction of the International Headquarters located here in Atlanta, that is exactly what they are doing. You will meet this Famous First at the fabulous World of Coca-Cola Pavilion in Underground Atlanta. The excitement begins the moment you walk through the door. Pass under the landmark neon “spectacular” Coca-Cola sign and find yourself standing in a three-story atrium hung with flags representing nearly 200 nations & territories where Coca-Cola is available. From there, move at your own pace through the fascinating galleries showcasing the rich heritage and global reach of Coca-Cola.

With exhibits that appeal to both young and old, the attraction boasts approximately 1200 Coca-Cola artifacts, in addition to interactive exhibits and video presentations. You’ll be taken on a virtual journey from the invention of Coca-Cola by Dr. John Pemberton in 1886, to its present-day popularity throughout the world. *(Lunch Included)*

**6:30pm PCI 50th Anniversary Celebration Banquet**

**Wednesday, October 20**

**8:00am American Continental Breakfast**

**12:00 Noon 2004 PCI Design Awards Luncheon and Installation of Officers**
EXHIBITORS

The exhibit hall offers an opportunity to examine recent product and service developments of interest to precast, prestressed concrete producers, and professionals who design with these materials.

PCI thanks those exhibiting firms who are also co-sponsoring some of the food and beverage functions.

THE EXHIBITION
officially opens
SUNDAY at 1:30 p.m.

THE EXHIBITION
GRAND OPENING
RECEPTION
follows at
3:30 p.m.

THE EXHIBITION HALL
conclues
TUESDAY at 4:00 p.m.

The following pages list the exhibitors (in alphabetical order), who were registered at the time the PCI JOURNAL went to press.

Advanced Concrete Technology, Inc.
139 Flight Line Road, #2
Portsmouth, NH 03801
Contact: E. Max Hoene
Phone: (603) 431-5661
Fax: (603) 431-5547
Booths: 232 and 230
Products: Materials handling equipment, and prestressed concrete equipment and accessories

Architectural Polymers Inc.
2040 West Penn Pike
New Ringgold, PA 17960
Contact: Marshall Walters
Phone: (570) 386-3111
Fax: (570) 386-3777
Booth: 225
Products: Form liners and architectural staining

AXIM Italcementi Group
8282 Middlebranch Road
Middlebranch, OH 44652
Contact: Jim Wamelink
Phone: (330) 966-0444
Fax: (330) 499-9275
Booth: 118
Products: Concrete chemicals and allied materials

Bonnybrook Custom Steel Forms
4227 Ogden Road, SE
Calgary, Alberta, Canada T2G 4R2
Contact: Krzysztof Palka
Phone: (800) 580-1092
Fax: (403) 266-0874
Booths: 303 and 305
Products: Forms, and forming machines

Brecon Vibration Technology, Inc.
2025 Countryway Lane
White Lake, MI 48383
Contact: James R. Vens
Phone: (248) 889-5959
Fax: (248) 889-5961
Booth: 301
Products: Vibrators

B.S. Italia
16, Via Stezzano
Zanica, BG 20450 Italy
Contact: Jack Lane
Phone: (404) 216-4539
Fax: (404) 924-3773
Booths: 400 and 402
Products: Building systems, materials handling equipment, post-tensioning systems, and patented systems for lifting, connecting, reinforcing, and safety

Carolina Stalite Company
205 Klumac Road
Salisbury, NC 28144
Contact: Kenneth S. Harmon
Phone: (704) 637-1515
Fax: (704) 642-1572
Booth: 408
Products: Lightweight aggregate

Composite Technologies Corporation
1000 Technology Drive
Boone, IA 50036
Contact: Tom Stecker
Phone: (515) 433-6075
Fax: (515) 433-6088
Booth: 323
Products: Building systems

CONAC – Concrete Accessories, Inc.
2725 Northwoods Parkway, Ste. A-2
Norcross, GA 30071
Contact: Mike Azarin
Phone: (770) 417-1110
Fax: (770) 417-1820
Booth: 249
Products: Concrete chemicals and allied materials, materials handling equipment, and prestressed concrete equipment and accessories

ConcreteCareers.com
P.O. Box 900
Bremen, GA 30110
Contact: Gene Vineyard
Phone: (770) 537-1488
Fax: (770) 537-1488
Booths: L1 and L2
Products: Personnel services

CTI, Inc. - Concrete Technology Integrators, Inc.
2231 Holmgren Way
Green Bay, WI 54304
Contact: Mark Schumacher
Phone: (920) 497-8725
Fax: (920) 497-8100
Booths: 122 and 124
Products: Hollow-core slab machines, and prestressed concrete equipment and accessories

Connecticut Steel Corporation
35 Toelles
Wallingford, CT 06492
Contact: Ken Williamson
Phone: (800) 221-0323
Fax: (203) 265-7676
Booth: L7
Products: Rebar and mesh
Connection Specialties
8914 ‘H’ Street
Omaha, NE 68127
Contact: Paul Hagen
Phone: (402) 597-2997
Fax: (402) 597-9789
Booth: 126
Products: Prestressed concrete equipment and accessories, and precast concrete anchors

Consolidated Systems, Inc.
4900 Hungerford Road
Memphis, TN 38118
Contact: Steve May
Phone: (901) 969-3055
Fax: (901) 375-9357
Booth: 410
Products: Forms

Cresset Chemical Company
1325 Main Street
P.O. Box 367
Weston, OH 43569
Contact: George Baty
Phone: (419) 669-2041
Fax: (419) 669-2200
Booth: 106
Products: Concrete chemicals and allied materials

Custom Rock Formliner
1156 Homer Street
St. Paul, MN 55116
Contact: Jim Bohrer
Phone: (651) 699-1345
Fax: (651) 699-1830
Booth: 517
Products: Form liners

Dayton Superior
721 Richard Street
Miamisburg, OH 45342
Contact: Bob Roeller
Phone: (937) 866-0711
Fax: (937) 866-8027
Booths: 417, 419, and 421
Products: Building systems, concrete chemicals and allied materials, and forms

Degussa Admixtures, Inc.
23700 Chagrin Boulevard
Cleveland, OH 44122
Contact: Dave Martin
Phone: (216) 839-7803
Fax: (216) 839-8821
Booth: 148
Products: Supplying total precast solutions to the precast, prestressed concrete industry, including the most advanced admixtures for Rheodynamic self-consolidating concrete, integral color, exposed-aggregate retarders, architectural coatings, release agents, and precast accessories

Diamond Systems Inc.
39 Hale Road
Brampton, Ontario, Canada L6W 3J9
Contact: Ray Davis
Phone: (905) 796-0640
Fax: (905) 457-9330
Booth: 420
Products: Diamond blades

DIMAS/Div. of Electrolux
Construction Products North America
17400 West 19th Street
Olathe, KS 66061
Contact: Ron Rapper
Phone: (913) 928-1000
Fax: (913) 438-7946
Booth: 228
Products: Diamond and concrete blades and bits

The Dow Chemical Company
200 Larkin Center
1605 Joseph Drive
Midland, MI 48674
Contact: Federico Montaneer
Phone: (989) 638-6337
Fax: (989) 636-0351
Booth: 325
Products: Concrete systems with Styrofoam™ insulation

Dynamic Color Solutions
2024 South Lenox Street
Milwaukee, WI 53207
Contact: Cathy Higgins
Phone: (414) 769-2580
Fax: (414) 769-2585
Booth: 315
Products: Concrete chemicals and allied materials, pigments, and dispensing equipment
**EARL Composite Systems**  
199 South Hudson Avenue  
Pasadena, CA 91101  
**Contact:** Paul Clark  
**Phone:** (626) 796-6161  
**Fax:** (626) 796-6194  
**Booth:** 620  
**Products:** Building systems  

**Elematic Inc.**  
21795 Doral Road  
Waukesha, WI 53186  
**Contact:** J. Matt Cherba  
**Phone:** (262) 798-9777  
**Fax:** (262) 798-9776  
**Booth:** 143  
**Products:** Hollow-core slab machines, and prestressed concrete equipment and accessories  

**Elk River Machine Company**  
828 Fourth Street  
Elk River, MN 55330  
**Contact:** Larry Ebert  
**Phone:** (763) 241-5102  
**Fax:** (763) 441-1596  
**Booth:** 125  
**Products:** Forms, forming machines, hollow-core slab machines, materials handling equipment, and prestressed concrete equipment and accessories  

**ERICO Inc.**  
34600 Solon Road  
Solon, OH 44139  
**Contact:** Lou Colarusso  
**Phone:** (440) 248-0100  
**Fax:** (440) 248-0723  
**Booth:** 206  
**Products:** Building systems, mechanical rebar splices, anchors, and dowel bar substitutes  

**Eriksson Technologies, Inc.**  
P.O. Box 16396  
Tampa, FL 33687  
**Contact:** Jeff McClure  
**Phone:** (813) 989-3317  
**Fax:** (813) 989-0617  
**Booth:** 411  
**Products:** Bridge design software  

**ESCSI – Expanded Shale, Clay & Slate Institute**  
2225 E. Murray Holladay Road, Ste.102  
Salt Lake City, UT 84117  
**Contact:** Robyn Ryting  
**Phone:** (801) 272-7070  
**Fax:** (801) 272-3377  
**Booth:** 510  
**Products:** Lightweight aggregate  

**Federal Highway Administration**  
400 Seventh Street, S.W.  
Washington, DC 20590  
**Contact:** Gene Clark  
**Phone:** (202) 366-4597  
**Fax:** (202) 493-2070  
**Booth:** 116  
**Products:** The Federal Highway Administration, Office of Pavement Technology, partners with industry, academia and State Highway Agencies in promoting, developing and implementing new technology in high performance concrete  

**Fister Quarries Group**  
2777 Finley Road, #2  
Downers Grove, IL 60515  
**Contact:** Chris Fister, George Alewel  
**Phone:** (800) 542-7393  
**Fax:** (630) 424-6209  
**Booth:** 317 and 319  
**Products:** Concrete chemicals and allied materials, polishing equipment, prestressed concrete equipment and accessories, GFRC materials, and decorative architecture aggregates  

**Fitzgerald Formliners**  
1341 East Pomana Street  
Santa Ana, CA 92705  
**Contact:** Ed Fitzpatrick  
**Phone:** (714) 547-6710  
**Fax:** (714) 547-7938  
**Booth:** 501  
**Products:** Architectural form liners  

**Georgia/Carolinas PCI**  
One Glenlake Parkway, Ste. 700  
Atlanta, GA 30328  
**Contact:** Peter Finsen  
**Phone:** (678) 638-6220  
**Fax:** (678) 638-6221  
**Booth:** L6  
**Products:** PCI Regional Organization (AOM) “Regional Host”  

**Georgia Department of Transportation**  
#2 Capital Square, SW  
Atlanta, GA 30334-1002  
**Contact:** Paul V. Liles, Jr.  
**Phone:** (404) 656-5280  
**Booth:** L5  
**Products:** State Department of Transportation, National Bridge Conference, “Spotlight State”  

**Grace Construction Products/W.R. Grace**  
62 Whitemore Avenue  
Cambridge, MA 02140  
**Contact:** Michael Gee  
**Phone:** (617) 498-4349  
**Fax:** (617) 498-4314  
**Booth:** 224 and 226  
**Products:** Concrete chemicals and allied materials, and fibers  

**Hamilton Form Company**  
7009 Midway Road  
Fort Worth, TX 75118  
**Contact:** Ed Baer  
**Phone:** (817) 590-2111  
**Fax:** (817) 595-1110  
**Booth:** 117 and 119  
**Products:** Forms, prestressed concrete equipment and accessories, curing blankets, magnets, and tensioning jacks  

**Helser Industries**  
P.O. Box 1569  
Tualatin, OR 97062  
**Contact:** Karl Helser  
**Phone:** (503) 692-6909  
**Fax:** (503) 692-1666  
**Booth:** 328  
**Products:** Forms  

**High Concrete Accessories**  
125 Denver Road  
Denver, PA 17517  
**Contact:** Alicia Allamena  
**Phone:** (717) 508-2583  
**Fax:** (717) 336-9301  
**Booth:** 208  
**Products:** Prestressed concrete equipment and accessories  

**HunterLab**  
11491 Sunset Hills Road  
Reston, VA 20190  
**Contact:** Hal Good  
**Phone:** (703) 471-6870  
**Fax:** (703) 471-4237  
**Booth:** 519  
**Products:** Color measurement instruments
Hydronix Ltd.
610 West Sheridan Street, Ste.5
Petoskey, MI 49770
Contact: Timothy Statler
Phone: (231) 439-5000
Fax: (231) 439-5001
Booth: 518
Products: Microwave moisture equipment

Innovative Brick Systems, LLC
11625 Reed Court, Unit B
Broomfield, CO 80020
Contact: Mark Scott
Phone: (720) 890-6032
Fax: (720) 890-6038
Booth: 327 and 329
Products: Thin brick and form liners

Insteel Wire Products
1373 Boggs Drive
Mt. Airy, NC 27030
Contact: Dick Wells
Phone: (336) 719-9000
Fax: (336) 786-6682
Booth: 161
Products: Prestressing steels

Ivy Steel & Wire
400 N. Sam Houston Pkwy, E., Ste.1200
Houston, TX 77060
Contact: Robert E. May
Phone: (800) 254-0080
Fax: (281) 448-6304
Booth: 237A
Products: Welded wire reinforcement

JVI, Inc.
7131 North Ridgeway Avenue
Lincolnwood, IL 60712
Contact: James R. Voss
Phone: (847) 675-1560
Fax: (847) 675-0083
Booth: 159
Products: Bearing pads, slide bearings, plastic shims, slotted inserts, BSF, Vector connector, and flange connections

Kraft Energy Systems, Inc.
3330 West Seventh Street
Fort Worth, TX 76107
Contact: Mark Kraft, Michael Kraft
Phone: (817) 338-4997
Fax: (817) 338-0233
Booth: 216
Products: Curing equipment

LEAP Software, Inc.
P.O. Box 16827
Tampa, FL 33687
Contact: Lee Tanase
Phone: (813) 985-9170
Fax: (813) 980-3642
Booths: 311 and 313
Products: Building systems and precast/prestressed software

Lehigh Cement Company / White Cement Division
7660 Imperial Way
Allentown, PA 18195
Contact: Cathy Sauerwine
Phone: (610) 366-4777
Fax: (610) 366-4638
Booth: 412
Product: Manufacturer

Liebherr Concrete Technology Co.
4100 Chestnut Avenue
Newport News, VA 23607
Contact: Ron Dickerson
Phone: (757) 928-2488
Fax: (757) 928-2489
Booth: L3
Products: Prestressed concrete equipment and accessories

Lily Corporation
240 S. Broadway
Aurora, IL 60505
Contact: Robert E. Trout
Phone: (630) 892-0860
Fax: (630) 892-5623
Booth: 416
Products: Crack inspection equipment

Ludwig, Franz Company for Moisture Measurement and Control Engineering Ltd.
Budenheimer Str.1
Mainz 55124 Germany
Contact: Manfred Ludwig,
Wolfgang Ludwig
Phone: (49) 6131 910 46-0
Fax: (49) 6131 910 46-24
Booth: 615
Products: Moisture measurement

Marcantonini
Via Perugia 101
Passaggio 01, Bettona 06080 Italy
Contact: Lamberto Marcantonini
Phone: (39) 988551
Fax: (39) 9885533
Booth: 414
Products: Concrete batching plants

Master Builders, Inc.
Booth: 148
Please see DEGUSSA ADMIXTURES, INC.

Maxon Industries, Inc.
3204 West Mill Road
Milwaukee, WI 53209
Contact: Patrick J. Conerty
Phone: (414) 351-4000
Fax: (414) 351-9057
Booth: 616
Products: Materials handling equipment

Meadow Burke Products
715 South U.S. Highway 301
Tampa, FL 33619
Contact: David DeBorde
Phone: (813) 248-1944
Fax: (813) 248-5409
Booth: 237
Products: Precast erection hardware and engineered lifting systems, Rapid Lift, DeHa lifting systems, Rapid Lok, Hafen anchoring system, strand restraining devices, structural connections, bar supports, and shims

Mil-Jack Products
3111 West 167th Street
Hazel Crest, IL 60429
Contact: Michael Lanigan, Jr.
Phone: (708) 596-5200
Fax: (708) 225-2312
Booth: 217 and 219
Products: Materials handling equipment

Miller Fall Protection, Division of Bacou-Daloz
1345 15th Street
Franklin, PA 16323
Contact: Shelly Mihalic
Phone: (800) 873-5242
Fax: (800) 892-4078
Booth: 418
Products: Fall protection

Mixer Systems, Inc.
190 Simmons Avenue
P.O. Box 10
Pewaukee, WI 53072
Contact: David Boles
Phone: (262) 691-3100
Fax: (262) 691-3184
Booth: 243
Products: Hollow-core slab machines, prestressed concrete equipment and accessories

Multiform Systems, Ltd.
P.O. Box 128-129, Remuera
Auckland, New Zealand
Contact: Ron Dunlop
Phone: (649) 528-8852
Fax: same as phone
Booth: 617
Products: Forms
Nelson Manufacturing Company  
6448 U.S. Route 224  
Ottawa, OH 45875  
Contact: Tony Niese  
Phone: (419) 523-5321  
Fax: (419) 523-6247  
Booth: 120  
Products: Semi-trailers and steerable dollies

Oklahoma Steel and Wire Co., Inc.  
Highway 70 South  
P.O. Box 220  
Madill, OK 73446  
Contact: Lou Richards  
Phone: (580) 795-6003  
Fax: (580) 795-7422  
Booth: 316  
Products: Welded wire fabric

Owens Corning  
One Owens Corning Parkway  
Toledo, OH 43659  
Contact: Mike McLaughlin  
Phone: (419) 248-6863  
Fax: (419) 248-6862  
Booth: 104  
Products: Insulation

Prestress Supply, Inc.  
1804 West Lake Parker Drive  
Lakeland, FL 33805  
Contact: Bruce Hartup  
Phone: (863) 683-4492  
Fax: (863) 683-2886  
Booths: 131, 133, 127 and 129  
Products: Materials handling equipment, post-tensioning systems, prestressed concrete equipment and accessories, stressing equipment, T-630 Tuckerbilt, and prestress repair

RATEC LLC  
250 Julia Circle North  
St. Petersburg, FL 33706  
Contact: Mathias Reymann  
Phone: (813) 337-2832  
Fax: (727) 363-7463  
Booths: 227 and 229  
Products: Forms and design of plant automation

Scott System, Inc.  
10777 East 45th Avenue  
Denver, CO 80239  
Contact: Dana Scott  
Phone: (303) 373-2500  
Fax: (303) 373-2755  
Booth: 102  
Products: Building systems, form liners, and brick inlay systems

Scougall Rubber Corporation  
6239 Corson Avenue South  
P.O. Box 80226  
Seattle, WA 98108  
Contact: Rob Anderson  
Phone: (206) 763-2650  
Fax: (206) 764-4984  
Booth: L8  
Products: Elastomeric bearing pad manufacturer

Shuttlelift, Inc.  
49 East Yew Street  
Sturgeon Bay, WI 54235  
Contact: Dan Reinholdt  
Phone: (920) 746-4224  
Fax: (920) 743-1522  
Booth: 107  
Products: Materials handling equipment

Silca Corporation  
201 Politio Avenue  
Lyndhurst, NJ 07071  
Contact: Philippe Jost  
Phone: (201) 933-8800  
Fax: (201) 933-6225  
Booth: 149  
Products: Concrete chemicals and allied materials

Silica Fume Association  
c/o Elkem Materials, Inc.  
P.O. Box 266  
Pittsburgh, PA 15230  
Contact: Tony Kojundic  
Phone: (412) 299-7229  
Fax: (412) 299-7238  
Booth: 512  
Products: Concrete chemicals and allied materials

Simem America  
12508 Jones-Malletsberger Road, Suite 100  
San Antonio, TX 78258  
Contact: Robert Ober  
Phone: (800) 729-0906  
Fax: (210) 581-8601  
Booth: 259  
Products: Prestressed concrete equipment and accessories, mixers/batch plants, and control systems - Environmental process

SKAKO, Inc.  
7985 Dunbrook Road, Ste. F  
San Diego, CA 92126  
Contact: John Leszczynski  
Phone: (858) 271-7341  
Fax: (858) 271-0924  
Booths: 128 and 130  
Products: Materials handling equipment, and mixers and batch plants

Spicelie North America, Inc.  
4345 E. Lowell Street, Ste. A  
Ontario, CA 91761  
Contact: Stan Kunoki  
Phone: (909) 937-7161  
Fax: (909) 937-7181  
Booth: 210  
Products: Connections and rebar splices

Standley Batch Systems, Inc.  
P.O. Box 800  
Cape Girardeau, MO 63702-0800  
Contact: Gary Holtz  
Phone: (573) 334-2831  
Fax: (573) 334-3704  
Booths: 324 and 326  
Products: Materials handling equipment

Strand-Tech Martin, Inc.  
P.O. Box 2220  
Summerville, SC 29483  
Contact: Terry Johnson  
Phone: (904) 614-8679  
Fax: (904) 962-3340  
Booths: 401 and 500  
Products: Prestressing steels

Smartech LLC  
P.O. Box 25122  
Dallas, TX 75225-1122  
Contact: Richard Taylor  
Phone: (214) 769-1888  
Fax: (214) 363-8422  
Booth: 321  
Products: Concrete waterproofing and protection - "RADCON FORMULA #7"
StructureWorks LLC
5801 North Pecos Street
Denver, CO 80221
Contact: Jason Lien
Phone: (303) 278-4111
Fax: (303) 433-0010
Booth: 513
Products: Software

SWS Sales, LLC / SWPC
1810 S. El Camino Real, Ste. C and D
San Clemente, CA 92673
Contact: Jeff Feitler
Phone: (949) 366-9577
Fax: (949) 366-9579
Booth: 218
Products: Prestressing steels

Verti-Crete, LLC
P.O. Box 2347
Sandy, UT 84091
Contact: Brent Baker
Phone: (801) 571-2028
Fax: (801) 576-1595
Booth: 521
Products: Forms

Vollert GmbH & Co.
P.O. Box 1320
Weinsberg, Germany 74185
Contact: Hans-Jorg Vollert
Phone: (49-7134) 52229
Fax: (49-4134) 52203
Booth: 211
Products: Automated precast plants, cranes, curing systems, lifting systems and accessories, and machinery

Vivex Engineering, Inc.
400 CR 468
Leesburg, FL 34748
Contact: Don Galbreath
Phone: (352) 787-3157
Fax: (352) 365-1732
Booth: 255
Products: Forms, materials handling equipment, and prestressed concrete equipment and accessories

Wacker Concrete Solutions
N92 W 15000 Anthony Avenue
Menomonee Falls, WI 53052-9007
Contact: Bob Becher
Phone: (262) 250-3508
Fax: (262) 502-6263
Booth: 520
Products: Prestressed concrete equipment and accessories

Weckenmann Anlagentechnik
Birkenstrasse 1
Dormettingen, Germany 72358
Contact: Wolfgang Weckenmann
Phone: (49-7427) 94930
Fax: (49-7427) 949329
Booth: 211
Products: Plants and announced machinery for precast/prestressed concrete production, form cleaning machines for forms, and sand and water blasting equipment for architectural precast concrete
2004 PCI Convention/Exhibition
PCI National Bridge Conference
REGISTRATION FORM

October 17-20, Atlanta, GA

PLEASE PRINT CLEARLY

Name

Last
First

Calling Name

Spouse's Name

List only if registering

Firm

Address

City State Zip

Phone Fax

Email

CIRCLE APPROPRIATE FEE(S)

Registration Postmarked:

On or Before After

Sept. 24 Sept. 24

1. FULL REGISTRATION $695 $770

2. PCI PROFESSIONAL and AFFILIATE MEMBER REGISTRATION $640 $715

2a. PCI PROFESSIONAL MEMBER first time attendance code

3. ACADEMIC REGISTRATION $460 $535

Academic registrations are available to Professors who submit a letter from their college verifying full-time academic status. (Students please contact PCI)

4. ONE-DAY REGISTRATION* (Does not include Tuesday Dinner Party) $159 Single $550 One Bedroom Suite

*Indicate day attending: Sun. $95 Mon. $300 Tues. $300 Wed. $300 Add $35 to daily registration fee after September 24.

5. SPOUSES/GUEST PROGRAM REGISTRATION $360 $435

6. SPOUSES/GUEST ONE-DAY REGISTRATION* (Does not include Tuesday Dinner Party) $175 Double (Contact hotel for availability)

*Indicate day attending: Sun. $75 Mon. $75 Tues. $75 Wed. $75

7. SPECIAL EVENTS/TOURS

Spouses/Guests may not register for events/tours or attend social functions without registering for the Convention/Conference (Tours are subsidized). All tours are subject to minimum/maximum number of participants.

MONDAY

Atlanta's Famous Firsts $60 $80

TUESDAY

A Taste of the Peach $50 $70

Covington's Mansions and Magnolias $60 $80

Total Enclosed

Please check box if you have special needs. The PCI is in compliance with Americans with Disability Act. Describe disability/special needs, including dietary, on line below. Attach separate sheet if necessary

Payment must accompany registration without payment in full

Payable to PCI by 1) U.S. denominated Check Drawn on U.S. Bank, or 2) Wire Transfer in U.S. Funds to The Northern Trust Company, Chicago, IL, Our Account Number 940046, or 3) VISA/MasterCard (only) NO OTHER CREDIT CARDS ACCEPTED.

FAX TO: 312-786-0353
OR REGISTER ONLINE @ www.pci.org

Reservations received after Sept. 14. 2004 will be confirmed on a Space Available Basis.
Attn. Group Reservations
265 Peachtree Street NE
Atlanta, Georgia 30303
USA

PHONE
(800) 233-1234

IN GEORGIA
(404) 577-1234

FAX
(404) 460-6499
All through 2004 we'll be saluting our PCI golden anniversary with broad-based recognition and celebration programs. These are designed to remind everyone of our proud history and brilliant future.

Here's what to expect:

**Visions Taking Shape** — A hard bound, coffee-table sized book covering the extraordinary history and accomplishments of PCI, its members and the industry. The book also offers an extraordinary opportunity for members to participate through advertising and special advertorial programs.

**Titans of Precast** — A very special salute to and recognition of those who have changed and/or advanced our industry for the better.

**Top 50 Projects** — Continuous year-long recognition of the best 50 precast/prestressed projects from a base of 300+ projects submitted. A jury of peers worked very hard to make these difficult choices.

**Seven Wonders of Precast** — Industry-wide recognition of those seven monumental projects of such significance as to raise the profile of precast throughout the construction world.

**The 50th Lapel Pin Program** — Launched at the 49th Annual PCI Convention, this highly successful prize award program will continue throughout 2004 at PCI Committee Days, the annual PCI Zone meetings and, of course, the 2004 PCI Convention.

**Sharing the Success** — A unique pre-packaged promotion program celebrating 50 Days of Precast. This is designed to assist in the implementation and recognition of regional and local celebratory projects raising the profile of PCI members, their facilities, local projects and accomplishments.

To learn more and how PCI members can participate, contact: Marketing, PCI, 209 West Jackson Boulevard, Suite 500, Chicago, IL 60606, 312-786-0300, wwwpci.org.