

## PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS

215 S. 16th Street, Suite 16, Philadelphia, PA 19102
Telephone/Reservations: (215) 985-5701
Web site: http://www.asce-philly.org

National ASCE Central Number 1-800-548-ASCE • Toll Free

The Sidney Robin Memorial Newsletter of the Philadelphia Section ASCE

Our 97th Year

March, 2010

#### ASCE, PHILA. SECTION MEETING SCHEDULE 2009–10 SPRING SOCIAL

Vol. 82-7

We're just about "there" for the season — hard to believe. After April, the one remaining Section event is the Spring Social.

We've teased you quite a bit on this but the proverbial cat's out of the bag, so we can report that the Social will be held at Citizens Bank Park on Friday, May 14 in the Hall of Fame Club. (No, this will NOT include a baseball game, as the Phils will be on the road.)

We hope you can join us for our end-of-season festivities, fun and an interesting venue (and maybe a chance to see your name on the Jumbotron?). More information on the Social will be included in the April edition of *THE NEWS*.

# DIGITAL DELIVERY WORKING LIKE A CHARM

We at *THE NEWS* are not superstitious — we prefer to think of ourselves as "cautious." So, at the risk of jinxing this, we'd like to report that, after two editions of the new delivery system, all systems are "go." Both the electronic and "snail mail" options seem to be working smoothly. (And we're knocking on wood — well, a wood laminate desktop at least — as we write this.) We hope you enjoyed the virtual version as much as you liked the hard copy.

As promised, if you decide that reading the computer screen is less enjoyable than the comfort of the hard copy, we're pleased to send you the paper version via the Postal Service as long as you let us know you want this and where you'd like it sent. Yes, we are still printing this and will be happy to send it to you. There is no deadline for asking for this — it's more of a "rolling" system that you can enroll (or unenroll) in at any time. Please notify us at info@asce-philly.org or via mail to our address at the Engineers' Club so we can note your preference and add you to the correct list.

Happy reading!

### MARCH DINNER MEETING

American Society of Civil Engineers, Philadelphia Section

#### THURSDAY, MARCH 11, 2010

Down Town Club, Public Ledger Building

6th and Chestnut Streets, Center City Philadelphia (enter from 6th Street) Cocktails 5:30 pm • Dinner 6:30 pm • Meeting 7:30 pm

SUBJECT: Green and Sustainable Stormwater Management in the Philadelphia Region SPEAKER: Dominic Rocco, P.E., Pennsylvania Department of Environmental Protection;

Christopher Crockett, Ph.D., P.E., Philadelphia Water Department;

Robert Traver, Ph.D., D. WRE, Villanova University

RESERVATIONS MUST BE SUBMITTED BY FRIDAY, MARCH 5. Please send your check for the number of attendees at \$40 per member or guest, \$20 per ASCE Student Member. Checks should be made payable to "Philadelphia Section ASCE" and sent to ASCE, Engineers' Club of Philadelphia, 215 S. 16th Street, Suite 16, Philadelphia, PA 19102. Reservations can also be made on the Engineers' Club message center, 215-985-5701, or via e-mail at info@asce-philly.org. Walk-ins will be subject to acceptance on a space-available basis. THERE IS NO GUARANTEE THAT SPACE WILL BE AVAILABLE IF YOU DO NOT RESERVE A SPACE.

**A NEW WAY TO PAY** — Starting with this meeting, you will be able to pay for your reservation through our website via PayPal. (Please see the article on this elsewhere in this edition.)

The presentation will provide a panel discussion with each speaker covering a specific topic prior to the discussion, as follows: Mr. Rocco will report on "DEP — Future Initiatives for Green and Sustainable Stormwater Management." For the last ten years, he has been the Chief of the Stormwater Section at the Southeast Regional Office of the Pennsylvania Department of Environmental Protection. He has been involved with various Storm Water Management (SWM) initiatives including the Comprehensive SWM Policy, the PA SWM BMP Manual, the Erosion and Sediment Pollution Control Manual update, and the PA Stormwater Technical Workgroup. In addition, he is currently an Adjunct Professor/Instructor at Temple University and the Montgomery County Community College for SWM-related coursework.

**Dr. Crockett** will cover "Separate Stormwater Billing Program for Non-Residential Properties – Based on Quantity of Impervious Surface." He is the Director of Planning & Research at the Philadelphia Water Department, where he oversees infrastructure planning, asset management, water and wastewater applied treatment research, stormwater management plan reviews, water

Continued on Page 3

## **APRIL DINNER MEETING**

American Society of Civil Engineers, Philadelphia Section

THURSDAY, APRIL 8, 2010

**The Mansion at Villanova Conference Center** • 601 County Line Road, Radnor, PA Cocktails 5:30 PM • Dinner 6:30 PM • Meeting 7:30 PM

This meeting will feature something a little different with a dinner followed by four different breakout sessions on topics covering Geotechnical Engineering, Structural Engineering, Environmental/Water Resources, and Construction/Transportation. More information will be provided in the April edition of *THE NEWS*.

The Villanova Conference Center is NOT on the University's campus. For directions, please visit <a href="http://www.acc-villanovaconferencecenter.com/directions.cfm">http://www.acc-villanovaconferencecenter.com/directions.cfm</a>.



#### PRESIDENT'S MESSAGE

Throughout the year, my President's messages have focused on the ASCE, Phila. Section Board's goals for the year and actions we have taken to reach those goals. However, I have avoided one topic that is of critical importance to all of us in the Civil Engineering/Design/Construction fields these days — the impact of the economy on our jobs and businesses. Surely we all know of someone who has been laid off or have heard quiet rumors about struggling

firms and office closures. Individuals may be worrying about job security, while companies are fighting to stay profitable. So what can the Philadelphia Section do to help its members?

I see three areas in which the Section is helping members succeed in this tight economy: 1) providing low-cost technical programs to improve members' technical competitiveness, 2) providing networking opportunities that may result in business development opportunities or job referrals, and 3) maintaining a "Career Search" section on our website with links to our sponsors' job opportunities. Do you take advantage of any of these resources?

Our technical programs are often offered at lunchtime so as to reduce time away from work and are inexpensively priced. We have also begun offering some technical programs in the evening and in the suburbs to accommodate members in different geographic areas. We are also looking into growing our existing technical groups and adding new ones.

Networking opportunities abound in the Younger Member Forum (YMF) with frequent happy hours and outreach/volunteer activities. For our more "mature" members, increased responsibilities at work and home may make it difficult to attend evening or weekend activities. But perhaps you have one hour free every month? If so, keep in mind that you are most welcome to attend only the social/cocktail hour of our monthly dinner meetings (usually 5:30 pm to 6:30 pm). We also welcome you to stay for the featured speaker and skip the dinner; this is a way to participate without the expense or the calories! These are both great netwoking opportunites.

What about the "Career Search" section of our website? Don't forget to look there if you are in the market for a new job.

Do you see other opportunities for the Section to serve you in these difficult times? What would you like to see more of — technical offerings? networking opportunities? lunch meetings? evening events? happy hours? suburban-based meeting locations? We are open to suggestions for new events or new ways of doing things that will help us all prosper in these tough times.

Kristen Bowman Kavanagh, P.E. President, ASCE, Philadelphia Section

## Resolve to attend ALL Section Meetings This Year!

#### HAPPY ST. PATRICK'S DAY TO ALL

We know how everyone is Irish on St. Pat's Day, and several folks challenged your Editor to come up with something for the big day as he did for your holiday wishes. Apparently these folks are either brave or dumb for issuing this challenge — we'll let you decide. (If you need help with this decision, please consult the January *NEWS* and re-read the holiday wishes!) Some of them suggested a limerick, in keeping with the Irish theme, so your Editor has obliged (and resisted the prodding and temptation to include any references to an island in Massachusetts or a water transport container, since we do not have a parental rating — at least not yet!).

For your reading enjoyment, here's to your March 17, and possibly another reason to have a drink or four on the big day (after all, if you want to be Irish, you have to drink like an Irishman?):

The big-wigs of Philly ASCE Through your Editor, a part Irish laddie Want this piece in *THE NEWS* As their wishes to youse To have a great St Pat's Day, tra-lee

#### CALLING ALL READING BRANCH MEMBERS! WE'D LIKE TO HEAR FROM YOU

For those of you who may not know, our Section has a Branch that encompasses the greater Reading area and represents nearly 200 members. Unfortunately, lately, the Reading Branch has been generally inactive in program offerings and meetings. We would like your help as our Section and Reading Branch members are currently working together to revitalize the Branch.

To do this effectively, we need your help. Members in the Reading Branch service area will be receiving an e-mail from **announcement** @asce-philly.org with a link to a survey. We would encourage your response to this survey, so please set up your spam blockers to be able to receive this e-mail. We would like to get your input as we look to make decisions that may affect the future of the Branch.

When you get the e-mail, please take a few minutes right then and there to respond to the survey. If you have any questions about the survey or would like to help in our efforts or to join the Reading Branch, please contact Dan Klein at (610) 374-5285 or daniel.klein@ TheARROGroup.com. Your assistance in this regard is greatly appreciated.

#### ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION — 2009-10 SEASON

#### **PRESIDENT**

Kristen Bowman Kavanagh, Flow Science, Inc.

#### PRESIDENT ELECT

Thomas W. Brady, Louis Berger Group

#### VICE PRESIDENT

Ann M. Tomalavage, Malarkey Consulting, Inc.

#### **SECRETARY**

AnnMarie L. Vigilante, Langan Engineering & Environmental Services

#### TREASURER

Joseph Platt, Traffic Planning and Design, Inc.

#### ASSISTANT SECRETARY

Guy DiMartino, Traffic Planning & Design, Inc.

#### ASSISTANT TREASURER

Peter Sitkowski, Citizens Bank

#### MEMBERSHIP SECRETARY

Christopher W. Wright, AECOM

#### **DIRECTORS**

Vicki L. Brown, Widener University ('09-'11) Jeremy Colello, Pennoni Associates, Inc. ('08-'10) Soheila Rahbari, Schoor DePalma ('09-'11) Jennifer K. Walsh, McMahon Associates Inc. ('08-'10) Keith Yamatani, Kleinfelder ('09-'11) John Zarsky, Pennoni Associates, Inc. ('08-'10)

#### PAST PRESIDENTS

Mark J. Tiger, Michael Baker, Jr., Inc. James P. Markham, Pennoni Associates, Inc. Carol C. Martsolf, Urban Engineers, Inc.

#### PRESIDENT, READING BRANCH

Gerald Donnelly, STV, Inc.

#### President — Kristen Bowman Kavanagh, P.E.

Vice President

Flow Science Inc.

1500 Kennedy Blvd., 2 Penn Center, Suite 200 Philadelphia, PA 19102

(215) 854-6445

kbkavanagh@flowscience.com

#### Secretary — AnnMarie L. Vigilante, P.E.

Project Manager

Langan Engineering & Environmental Services P.O. Box 1569

Doylestown, PA 18901-0219

(215) 491-6500

avigilante@langan.com

#### **PUBLICATIONS COMMITTEE**

Editor of THE NEWS Robert Wright

#### Staff Writers

James Markham Joe Syrnick

#### **SEND COPY TO:**

ASCE, c/o Engineers' Club of Philadelphia 215 S. 16th Street, Suite 16 Philadelphia, PA 19102

> COPY DEADLINE FOR APRIL '10 ISSUE MARCH 19, 2010

#### **TECHNICAL GROUPS/CHAIRS**

Information on the ASCE, Philadelphia Section's Technical Groups is given below. Director **Keith Yamatani** will be coordinating activities of the Groups. If you have any topics that you think would be of interest to the Groups, please feel free to pass this information along to the appropriate Group Chair.

#### CONSTRUCTION

Dennis MacBride SEPTA 1234 Market Street, 12th Floor Philadelphia, PA 19107-3780 215-580-3404 dmacbride@septa.org

#### **DELAWARE VALLEY GEOINSTITUTE**

Ara G. Mouradian Gannett Fleming, Inc. 1010 Adams Avenue Audubon, PA 19403 610-650-8101 amouradian@gfnet.com

#### **ENGINEERING MANAGEMENT**

William J. Mulloy US Army Corps of Engineers Wanamaker Building, 7th Floor 100 Penn Square East Philadelphia, PA 19107-3390 215-656-6583 William.J.Mulloy@usace.army.mil

## ENVIRONMENTAL and WATER RESOURCES

Eve D'Onofrio E S Design LLC 128 Regency Dr Norristown, PA 19403-1755 610-630-1660 edonofrio@esdesignllc.com

#### **STRUCTURAL**

Dr. Mohiuddin Ali Khan JMT Inc. 1300 Rt. 73 South, Suite 313 Mt. Laurel, NJ 08054 856-778-5517 mohidin@temple.edu

## TRANSPORTATION and URBAN DEVELOPMENT

William T. Thomsen Urban Engineers, Inc. 530 Walnut Street, 14th Floor Philadelphia, PA 19106 215-922-8080 wtthomsen@urbanengineers.com

# APRIL MEETING SPECIAL FEATURES

**Life Member Night** — newly-inducted Life Members will be invited to receive their certificates

**Past Presidents Night** — all Past Presidents of the Section are invited to attend as guests of the Section

#### **MARCH DINNER MEETING**

Continued from Page 1

quality studies and regulatory compliance support. He led the development and implementation of new stormwater management requirements for site development and the new program addressing impervious cover based stormwater billing for non-residential customers. He received his Ph.D. from Drexel University in 2004 and was an Adjunct Professor at Drexel University from 2004–2009. He is a Professional Civil Engineer in PA. He has led PWD teams on numerous national groundbreaking and award winning efforts. He is the creator of the Delaware Valley Early Warning System and Philly Rivercast. He serves as a board member of the Water Resources Association of the Delaware River Basin Commission and chairs the Toxics Advisory Committee for the Delaware River Basin Commission.

Dr. Traver will address "VUSP Green Infrastructure Research." He is a Professor in the Civil and Environmental Engineering Department at Villanova University and Director of the Villanova Urban Stormwater Partnership (VUSP). He has conducted research on topics that include modeling of stream hydraulics, urban hydrology, water quality, and measures to mitigate adverse stormwater effects. He initiated the Stormwater Best Management Practice Demonstration and Research Park on the Villanova Campus, and founded the Villanova Urban Stormwater Partnership. He served on ASCE's External Review Panel (ERP) of the Corps investigation of Hurricane Katrina, and most recently was a member of the National Academies Committee entitled Reducing Stormwater Discharge Contributions to Water Pollution.

#### YOUNGER MEMBER FORUM NEWS

Lindsey Glavin, Forum Editor Cathy G. Farrell, Forum President 2009-10 Michael Baker Jr., Inc. 201 Gibraltar Road, Suite 120 Horsham, PA 19044 215-442-5316 cfarrell@mbakercorp.com

#### **ERYMC Conference**

Five members of the YMF board attended the ERYMC conference February 12 & 13. This conference gathers YMF and student chapters of ASCE from the entire east coast. It was a great opportunity to learn from other group's experiences.

#### **Upcoming Events**

To keep up-to-date on all our upcoming events, sign up for our mailing list by emailing secretary@ymfphilly.org to receive regular updates or visit our events page at http://www.ymfphilly.org/events.htm.

#### **ASCE YMF CAN Make a Difference**

The YMF is creating a can structure to raise awareness of global hunger. The event, called **Canstruction**, will be held at **Liberty Place** 

#### ASCE PRESSES FOR LONG-TERM INFRASTRUCTURE SOLUTIONS

In response to President Obama's comments on infrastructure in his State of the Union address, ASCE has issued this statement by 2010 President Blaine D. Leonard, P.E., D.GE, F.ASCE:

We appreciate that the President mentioned in his address that railroads and the Interstate Highway System are critical investments in American infrastructure. He also spoke about how investments in infrastructure are investments in nation building. But the fact is, in recent decades we've stopped investing in our future. We are still driving on Eisenhower's roads and sending our kids to Roosevelt's schools.

The broken water mains, gridlocked streets, crumbling dams and levees, and delayed flights that come from failing infrastructure have a negative impact on the checkbook and on the quality of life of each and every American. Investing in America's infrastructure will support and create jobs - an essential function for economic recovery — as well as bring tangible personal benefits to Americans, like safer communities, less money spent on gas and more time with our families due to shorter commutes. The President's leadership on infrastructure is essential for our future prosperity. We need a bipartisan commitment to create a long-term plan for our infrastructure; one that includes sufficient funding levels and dedicated revenue sources. Without that, anything we do now will be nothing more than a Band-Aid.

#### STRUCTURAL ENGINEERING INSTITUTE (SEI) LOCAL CHAPTER LOOKING FOR BOARD MEMBERS

SEI is a vibrant, 20,000 plus community of Structural Engineers within the American Society of Civil Engineers that was started in 1996 in order to serve the unique needs of the Structural Engineering community more effectively. The ASCE, Philadelphia Section's existing Structures Technical Group is currently in the process of transitioning into a local chapter of SEI and identifying members to serve on its founding Board. For more information about the group and available Board positions, please send an inquiry to info@asce-philly.org.

(Center City) on **April 23** with structures on display from April 24 through May 2. Locally, the event is sponsored by **Philabundance** and **AIA Philadelphia**. YMF will be collecting can and monetary donations from corporate sponsors for the thousands of cans needed for the structure.

After the event, all of the cans will be donated to Philabundance for distribution to those in need. For more information about the event or how you can help, please contact **Chris Gray** at (**cgray@timhaahs.com**).

#### **FEBRUARY DINNER MEETING**

February 17, 2010

Crowne Plaza Hotel, Cherry Hill, NJ

#### New Jersey Turnpike Exits 6-9 Widening Program

by Robert Wright, Editor

Having gone northwest in January, our meeting program turned to the opposite direction on the compass for our annual journey to the wilds of New Jersey, for what has become another traditional joint meeting. In February, the joint partner has been the South Jersey Branch of the New Jersey Section. We ventured into the western frontier of Cherry Hill, where about a dozen Philadelphia Section members bravely crossed the frigid Delaware and joined with over 40 of our New Jersey counterparts to find out about what's going on on the New Jersey Turnpike. The meeting was postponed for nearly a week because of the recent snowstorms, and mountains of snow greeted attendees in the parking lot of the Crowne Plaza Hotel to remind us all that the groundhog said more winter is coming.

South Jersey Branch President Marlene Dilworth welcomed attendees and opened the meeting, recognizing the meeting sponsor, Oldcastle Precast, as well as New Jersey Section President Upendra Karna. As dinner was wrapping up, Section President Kristen Bowman Kavanagh came to the podium to introduce the evening's presenter, John Keller, the Turnpike Authority's Program Engineer for the project.

Mr. Keller noted that he was a coach of his children's basketball team and was missing a game, so that would explain any cell phone calls to him during the presentation (there were none, so the team either did well without him or didn't do well and doesn't need him any more). He explained the project's scope, which will extend the 12-lane cross section which currently exists north of Exit 9 in New Brunswick southward to south of Exit 6 (the Pennsylvania Turnpike connector). He presented project facts and figures, which sum up to a \$2.7 billion effort which will take five years to complete.

In addition to construction of 25 miles of two 3-lane outer sections to either side of the existing 6-lane roadway from Exit 6 to Exit 8A, another 10 miles of 2-lane outer segments will be widened to the full 3-lane configuration (Exit 8A to Exit 9). The two-barrel directional roadway will enhance safety as trucks will be separated from automobile traffic for the most part. Mr. Keller explained that related interchange improvements will add 3 lanes at the toll plaza at the busy Exit 7A, and the Exit 8 roadway configuration will be completely revised to provide connections to and from nearby NJ 33 to remove a currently indirect movement. The program will add 170 lane-miles on the mainline and includes over 100 new structures, over 20 of which are local-road overpasses which cross the Turnpike. Funding is completely provided from

Speaking of tolls, Mr. Keller noted that one can drive the entire length of the Turnpike today and pay less in tolls than for one crossing of the George Washington Bridge.

The project started in 2005 with preliminary Engineering, and final design began in 2007. Mr. Keller outlined the aggressive approach that the Turnpike Authority is taking to implement the project. A total of eight design sections were identified, and all eight design consultants were selected using an accelerated process that resulted in \$160 million worth of contracts signed within a 14-month period (this would have taken 38 months following the usual steps). A program management consultant was additionally hired to manage and oversee the effort in conjunction with Turnpike staff. A constructability consultant is on board to monitor these issues as well as schedule, projected cash flow, innovative techniques, and construction industry availability/capacity to handle upcoming construction contracts.

There are 26 separate construction contracts planned. Two were let in 2009, worth \$200 million, and 19 will go to bids this year (total value \$1.5 billion). Two more are planned to be released next year, estimated at \$300 million. Mr. Keller outlined the critical steps needed to ensure that the contracts "mesh" to meet the ambitious project schedules. Maintenance of traffic is relatively easy as the outer lanes will be completed with little impact on the existing mainline. When the outer lanes are ready for traffic, it will be diverted to them and the current roadway will be closed for milling and resurfacing. This makes Sections 1 and 8, the "bookends," the critical path elements on the schedule.

The Turnpike needs to take over 350 parcels of right-of-way for the widening. Mr. Keller advised that roughly 200 of these are in hand and the remainder are in process. To meet the ambitious schedule, the Turnpike could not wait until all right-of-way was clear, thus this was phased in conjunction with construction sections to allow work to start as early as possible in the schedule. Existing major pipelines and PSE&G power transmission lines along the east side of the roadway will need to be relocated, at a total cost of \$200 million. Another \$10 million will fund the relocation of a fiber optic line installed by the Turnpike about 10 years ago.

Mr. Keller reviewed numerous progressive techniques used by the Authority to advance the project on a fast track. Items such as procurement, contracts and small business enterprise (SBE) approval were streamlined. New design manuals, CAD standards, bridge design standards, and similar items were provided so all designers were working on the same page. These replaced outdated and often conflicting manuals and standards. A project website was developed for use both by those looking for information as well as hosting project documents on a password-protected segment for those involved with the effort.

A project of this size is sure to face many challenges, and Mr. Keller outlined several of them. The schedule is perhaps the most critical one, with work planned to be completed in 2014. Three construction management contracts are in place, with the largest covering the mainline work and two smaller ones handling the Exit 7A and Exit 8 elements. Environmental issues had to be addressed differently given the numerous reviews and permits required. An approach was taken to minimize environmental impact and the construction footprint through the use of retaining walls and minimal structures.

Several insightful questions were posed by the audience and addressed by Mr. Keller.

Presidents Dilworth and Bowman Kavanagh presented tokens of each Section's appreciation to Mr. Keller for his informative session. President Bowman Kavanagh also awarded those lucky few who held the right meeting announcement sheets their coveted prize (a package of Pop Rocks) with the admonition of not consuming them while drinking Coke.

#### ENGINEERS WEEK 2010 SUCCESSFULLY COMPLETED

We hope you celebrated Engineers Week appropriately (we needed any reason to take our minds off snow!). You may recall that it occurred from Friday, February 12 through Saturday, February 20. The revamped events were popular and successful. The Proclamation and Awards Luncheon, conducted at the Loews Hotel on February 12, drew over 200 attendees. The Young Engineers Social, previously a formal dinner citing the Delaware Valley Young Engineer of the Year, brought out over 120 adventurous souls to the Yards Brewery on the lightly snowing evening of February 15. The Gala on February 20 at the Chemical Heritage Society attracted nearly 80. The 2010 Delaware Valley Engineer of the Year, Dr. Selcuk Güceri, the Dean of Engineering at Drexel University, and the 2010 Delaware Valley Young Engineer of the Year, Michael Witkowski, an Associate at McHugh Engineering Associates in Fort Washington, were introduced and cited at these events.

As we know, the completion of this year's events only kicks off the planning for next year's. The Delaware Valley Engineers Week Committee (DVEW) of the Engineers' Club of Philadelphia is always in need of volunteers to assist in many of the activities surrounding Engineers Week. DVEW has a need for your talents and skills in the following areas: newsletter, website coordination, Hall of Fame, Proclamation Luncheon, Annual Banquet, PR, fund development, or general assistance as needed

If you are interested in volunteering or have any questions on the volunteer opportunities, please contact Mike McAtee, Committee Vice Chair, mjmcatee@urbanengineers.com or (215) 922-8081, x2622.

# REMINDER — LONG OVERDUE UPDATES TO SECTION CONSTITUTION AND BYLAWS!

As we reported last month, the Constitution and Bylaws of the Philadelphia Section of ASCE were last updated in 1992. In an effort to update the structure and terminology of these documents per current Society recommendations, an ad hoc committee was formed last spring to recommend revisions. The committee includes Director Keith Yamatani, Newsletter Editor and Past President Robert Wright, and President Kristen Bowman Kavanagh.

The committee has met several times and presented their draft revisions to the Section Board of Directors for preliminary discussions. Additional discussion was conducted at our February Board meeting. A vote on the proposed amendments is scheduled for our March 11 Board meeting. After the Section Board approves the proposals, the proposed amendments to the Constitution will be presented to the general membership at our April 8 Section meeting. We must also send the proposals to the Society's Committee on Geographic Units for their review and approval. After we receive the Society's approval, the membership will make a final vote on the amended Constitution at our May 14 Spring Social.

Although the draft documents are still undergoing revision, we invite all Section members to review the current documents on our home page at www.asce-philly.org. In the interest of streamlining the process and out of respect for those investing much time and effort on this process, it is important that you raise any questions and concerns now and do not wait until the final vote. Despite substantial changes to the format and terminology of the documents, there are very few substantive changes proposed.

## Proposed Changes to Section Constitution

- Numerous changes in format, organization, and terminology have been made for consistency with the Society's current terminology and sample constitution.
- Revised Section objectives to make them more concise and consistent with the Society's recommendations.
- Added a clause to terminate Section membership for non-payment of dues.
- Moved several procedural clauses from the Constitution to the Bylaws per Society's guidelines.
- Simplified the Amendment procedures per Society's recommendations; deleted the requirement that members vote on amendments within 90 days of the Board vote on the amendment. No changes are proposed to the existing requirements for a) 30 days advance notice of vote and b) an affirmative vote by a 2/3 majority of the Section membership present at the voting meeting.

The proposed amendments to the Bylaws do not require approval by the general membership,

but we also invite you to comment on those proposed changes.

#### **Proposed Changes to Section Bylaws**

- Numerous changes in format, organization, and terminology have been made for consistency with the Society's current terminology and sample bylaws.
- Added several procedural clauses from the Constitution to the Bylaws per Society's guidelines.
- Redefined the committee organizational structure by redefining officer duties such that each officer is responsible for one or more committees instead of the President-Elect being responsible for all committees.
- Revised references to "publications" and "in writing" to allow for notifications and documentation specifically via electronic means or other regular communications methods.
- Added definition of quorum for Section meetings to be the majority of members in attendance.
- Added requirement that Branch formation requires at least 30 potential members.
- Updated requirements to form and operate an Institute or Technical Group per Society's recommendations.
- Added descriptions of all standing committees.
- Moved procedures for amending the Bylaws from the Constitution to the Bylaws, and added procedures for members to propose amendments.

Questions or comments can be directed to any of the committee members (see page 2 for contact information). You are also invited to attend our March Board meeting (starting at 4:30 pm before the regular Section meeting) to participate in the Board's discussions. We welcome your input and encourage you to attend our May 14 Spring Social to have fun and vote on the Constitution.

## **Civilevity**

by Alma Radocaj



With continuing professional development becoming a requirement for licensure, it's Back-to-School for Engineers!

#### **TECHNICAL GROUP ACTIVITIES**

#### Structures Group March Luncheon Meeting

Thursday, March 25, 2010

SUBJECT: Mobile Creches for Large Construction Sites in India

SPEAKERS: Scott Gerald Shall R.A., Professor of Architecture, and M. Ali Khan, P.E., Adjunct Professor, Temple University.

TIME: 12:00 Noon to 1:30 PM

LOCATION: Conference Room Y on the 16th Floor of the Municipal Services Building, 15th Street and Kennedy Blvd., Philadelphia.

*COST*: \$10 for lunch - sandwiches and soft drinks will be provided. Students pay \$5.

Large construction sites in India have hundreds of labor living in camps with their school-age children. To facilitate low cost school construction, a team of art, architecture, and structural design students from seven universities and six disciplines traveled to India in the summer of 2008. They redesigned school and health centers for children living on construction sites of Mumbai.

Working side-by-side with people who speak a different language, have different customs, and carry different values, our students used their creative talents to uncover new techniques of design and construction based upon undervalued materials and indigenous methods of working. In the process, a new service-learning methodology began, one that could potentially help students and educators to articulate a much more sensitive, humane, and sustainable response to the world around us.

The Contractor was able to proceed with temporary school construction before the start of projects. It will enable the children to study while both their parents work simultaneously.

Reservations are required and seating is limited to 30. Please reserve through the ASCE, Phila. Section website.

For more information, contact **Dr. Khan**, Chairman, Structures Group, at (609) 332 1136.

# A NEW WAY TO PAY FOR SECTION MEETINGS

As noted in the meeting announcement on page 1, we are introducing an easier and faster way to pay for ASCE, Phila. Section events. We are able to accept electronic payments through **PayPal** for meetings and other events. Please visit our website (www.asce-philly.org) for details on how to RSVP and make electronic payments.

Please note that this will ONLY be in effect for meetings and events for which the Section is accepting reservations. At certain joint meetings, other societies or groups may be handling reservations, thus our system will NOT be available for use. The meeting announcement will note whether our system can be used for RSVP's.

We are hopeful this comes in handy for your purposes and helps you avoid the lines for payment in the future.

#### ANOTHER REASON TO CONTACT YOUR ELECTED OFFICIALS...

One of the big issues under consideration in Pennsylvania is the institution of tolls on Interstate 80. This would result in a revenue stream that would help fund other desperatelyneeded transportation infrastructure projects and, by consequence, help many civil engineers.

If Pennsylvania succeeds in adding tolls to I-80, it would close a favorite escape route from the Pennsylvania Turnpike. No longer would motorists or truckers be able to cross the state without paying a toll. State officials, who would receive the money, argue that I-80 tolls are crucial to pay for highway, bridge, and transit projects. They see a free I-80 as a drain on the treasury.

Since 2007, though, the state has sought federal permission to add tolls to I-80. Its applications were rejected in 2007 and 2008, and the state returned to the Federal Highway Administration recently with a renewed request, for which a decision is anticipated shortly.

Because I-80 was built largely with federal money, the state needs federal permission before it can add tolls. Revenue from I-80 tolls was crucial to Act 44, the transportation-funding measure the legislature passed in 2007. Lawmakers assumed that higher tolls on the turnpike and new tolls on I-80 would provide \$900 million in annual payments from the Turnpike Commission to PennDOT for desperately-needed highway and bridge improvement projects. Without tolls on I-80, transportation funding from the Turnpike Commission would be cut in half, to \$450 million a year, beginning in July. Among the biggest losers would be SEPTA, which would need to delay or defer several of its own large capital projects. With both highways and transit being affected, mobility is at stake.

Please consider helping your profession and the traveling public and let your elected representatives know how important this is, especially with the poor grades our infrastructure has received recently. As a painful reminder (and as we heard at the November Section meeting). these grades are generally not improving:

	2001	2005	2009
Aviation	D	D+	D
Bridges	C	C	C
Dams	D	D	D
Drinking Water	D	D-	D-
Energy (National			
power grid)	D+	D	D+
Hazardous Waste	NR	NR	D
Inland/Navigable			
Waterways	D+	D	D-
Levees	NR	NR	D-
Public Parks and			
Recreation	NR	C-	C-
Rail	NR	C-	C-
Roads	D+	D	D-
Schools	D-	D	D
Security	NR	I	NR
Solid Waste	C+	C+	C+
Transit	C-	D+	D
Wastewater	D	D-	D-

 $NR = no \ grade \ recorded; \ I = incomplete$ 

Our "permanent record" is looking pretty spotty here!

# ANACE\*

#### As you have seen, the Section Sponsorship Program is once again popular and 22 firms have elected to participate in it. We extend our special

and collective THANKS to each sponsor for their financial commitment and support.

...AND THANKS TO OUR

**SPONSORS!** 

And we threw in an added and unadvertised benefit this year. In November, we began showing a continuously-running powerpoint which contains our sponsors' logos during the cocktail hour and dinner portion of Section meetings. This will further demonstrate their support of the Section and our gratitude for this. The logos are included in a special Sponsors section of our website.

Also, we no longer post employment ads on our website, but we provide direct links to sponsors' sites so prospective employees can review all available and up-to-date positions.

If you have an interest in joining our sponsorship program, please contact Bob Wright at newseditor@asce-philly.org for more details.

#### When is a clothespin a screw?

This sounds like the start of a risqué joke. Should we have put a parental warning on the cover of this edition?

Why are we asking this unusual question? Well, at the ASCE, Phila. Section November meeting, you may recall we played a game of Quizzo during dinner. One question on the quiz asked what the famous Clothespin at Centre Square was originally supposed to be (or why we got a Clothespin instead of something else). The answer was a giant screw. Your Editor, who has been in Philadelphia his entire life, had never heard this before, and he usually remembers things like this. Admittedly, the Centre Square project was underway when your Editor was in high school and busy with other things so it could have slipped by him. Anyway, his curiosity was piqued, and he did some digging.

Laura Griffith, the Assistant Executive Director of the Fairmount Park Art Association, was the first source consulted. While the Clothespin is not in the Park, the Editor has had dealings with Ms. Griffith in the past and thought she would know given her vast knowledge of public art throughout the city and region. She responded, "Concerning your inquiry on Claes Oldenburg's Clothespin, we do not have any information in our Inventory files that indicates that the Clothespin was a last minute replacement for another sculpture. The only reference I could find regarding a gigantic screw proposal was in an article by Patricia Stewart in the January/February 1977 Philadelphia Arts Exchange (Stewart was a graduate student at the University of Pennsylvania at the time), that stated, 'At one point, Oldenburg proposed a screw for the project.'

"However, as previously stated, we have nothing in our files to substantiate this. In Germano Celant's 1999 'Claes Oldenburg/ Coosje Van Bruggen,' he quotes Oldenburg as coming up with the Clothespin idea in 1967 as a potential monument for Chicago. In 1972 the Clothespin became associated with Philadelphia through its use on a poster for the exhibition 'Object into Monument' at the Philadelphia Museum of Art. Its joined parts, bound by two springs, recalled the embracing couple in Brancusi's sculpture, 'The Kiss,' in the Museum's collection.

"In 1974 Jack Wolgin, the developer of the Centre Square complex, invited Oldenburg to create a sculpture for his project as part of the City's Percent-for-Art requirement, and the Clothespin was installed there in 1976."

One item about this that your Editor has heard frequently is that the Clothespin reflects Philadelphia's significant attachment to backyard clotheslines (now known as solar dryers). So maybe the sculpture needs to be supplemented by a clothesline pole — if you weren't around when our President was named Kennedy you probably don't remember these poles, which were used to prop droopy clotheslines that sagged from the weight of the wet items. The poles lifted the lines and kept larger items like bed sheets from hitting the ground.

It appears the only big screw here is an urban legend, as it seems, and it appears the Clothespin was conveniently available and put to use without much forethought or planning. Imagine the puns that would come from this if it was a big screw instead of a big clothespin directly across the street from City Hall.

Thanks to Laura Griffith as well as Julia Guerrero of the Philadelphia Redevelopment Authority's Percent for Fine Arts Program for their help on this. If anyone recalls anything different, please feel free to pass it along.

#### Disrespect transportation at your own risk?

A report from Berlin in October noted that a German man mooning railway staff in a departing train got his trousers caught in a carriage door and ended up being dragged half naked along the platform, out of the station and onto the tracks.

The 22-year-old journalism student shoved his backside against the window of a low-slung

Continued on Page 7

#### ANACE\*

Continued from page 6

double-decker train when staff forced him off in Lauenbrueck for traveling without a ticket, a spokesman for police in the city of Bremen said. "It's a miracle he wasn't badly hurt," the spokesman said on Monday. "This sort of thing can end up killing you."

Instead, dangling by his trousers, the man got pulled along for about 200 meters, all the while managing to keep his legs away from the wheels of the train. The ordeal ended when a passenger saw what was happening and pulled the emergency brake. Rescue services were called in, causing rail service between Bremen and Hamburg to be suspended for over an hour, delaying 23 trains.

The man — unharmed except for cuts and bruises — was charged with dangerous interference in rail transport and insulting the train staff and faces a sizeable compensation claim for the delays he caused, police said.

"He was full of remorse when I talked to him," the spokesman said. "And he advised others not to try the same thing."

Thanks to Roads and Bridges magazine for

\*ANACE — Absolutely Nothing About or Concerning Engineering

#### **SCIENCE FAIRS COMING UP —** SECOND CALL FOR JUDGES

The Delaware Valley Science Fairs will be conducted on Wednesday, April 7. The location remains the same as last year, the Greater Philadelphia Expo Center in Oaks. The ASCE, Phila. Section will once again participate in the Fairs and offer four Special Awards for projects that have a Civil Engineering theme, with two awards for Grades 6 through 8 and two for Grades 9 through 12.

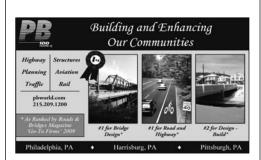
As usual, judges are needed for this effort. The judging will require you to spend most, if not all, of your day (approximately 8 AM to 3 PM) at the Fairs, examining and short listing possible projects in the morning and then interviewing the students who assembled them and finalizing the selections in the afternoon.

If you are interested in being a Special Awards judge for the Section please contact Chris Rood at chris.rood@aecom.com. We hope you can join us for a rewarding and interesting day.





260 South Broad Street, Suite 1500 Philadelphia, PA 19102 T 215.735.0832 F 215.735.0883





Courses-Only Master Degree Online Graduate Courses

Environmental Engineering Hydraulic Engineering Smart Infrastructures

Michel C. Boufadel, PhD, PE Department Chair

ceed@temple.edu

Geotechnical Engineering Construction Management Stormwater Management

Robert J. Ryan, PhD, PE Graduate Coordinator gradceed@temple.edu (215) 204-3054



610-696-7864 FAX 610-761-1303 EMAIL bmil@softdig.com 610-738-8762 800-545-1531

#### UNDERGROUND SERVICES, INC.



Subsurface Utility Engineers

Robert L. Miliken President

24 Hagerty Blvd., Unit 11 West Chester, PA 19382





Phone: 610 265 1818 Fax: 610 265 1833 www.geostructures.net

#### GEOTECHNICAL ENGINEERING CONSULTANTS Foundation Evaluations/Design

- · Subsurface Investigations
- Slope & Retaining Wall Design
- · Geosynthetics Design
- Phase 1 & 2 Site Assessments
- Construction Monitoring
- Soil Stabilization
- · Geologic Exploration/Mapping
- Sinkhole Assessment/Remedy
- · Geotechnical Lab Testing

1000 West 9th Avenue, King of Prussia, PA 19406



#### DREXEL UNIVERSITY

Civil, Architectural & Environmental Engineering

Part-Time and Full-Time Graduate Study (funding available for full-time study)

Structural Engineering Geotechnical Engineering Architectural Engineering Environmental Engineering

Dr. Charles Haas Head, Civil, Architectural & Environmental Engineering haascn@drexel.edu

Geosynthetics Infrastructure Systems Hydraulics, Hydrology & Water Resources

Dr. Grace Hsuan Graduate Advisor (215) 895-2785 ghsuan@coe.drexel.edu



#### Francisco Ortiz-Landazabal, P.E.

Tel: 267 884 6849, 215 794 5512 E-mail: GCS.fol@comcast.net

3825 Green Ridge Road Furlong, PA 18925-2107



DESIGN AND INSPECTION IGHWAYS AND BRIDGES DOUGLASSVILLE (610)385-8323

PHII ADEI PHIA (215) 832-3530 PITTSBURGH (412) 392-3500

HARRISBURG (717) 545-2103

WWW.STVINC.COM an employee owned firm providing quality service since 1912



#### **Edwards & Company**

**Building Envelope Consultants** 

1022 Keystone Dr. Sellersville, PA 18960 edcobec@aol.com ww.edwardsbec.com Glass & Glazing Exterior Walls Masonry Roofing





PHILADELPHIA, PA | TRENTON, NJ | NEWARK, DE WWW.JMT.COM | CAREERS@JMT.COM





350 Eagleview Blvd., Suite 250 Exton, PA 19341-1178 Tel 610 280 4018 Fax 610 363 5390

2300 Chestnut Street Phila., PA 19103-4331 Tel 215 814 0414 Fax 215 972 8005 610 505 6948

Email tbrady@louisberger.com www.louisberger.com

THOMAS W. BRADY, P.E. Manager, Transportation Engineering

#### Over 50 years of Graduate Engineering Education



Evening Civil Engineering Graduate Programs

- Environmental\* & Water Resources\*
- Geotechnical & Structures\*
- Transportation
- Multidisciplinary

Department of Civil & Environmental Engineering (610) 519-4960 Fax (610) 519-6754

www.engineering.villanova.edu/academics/ce/

\*Programs are available through Real Time - Distance Education!







Roger J. Marino, Ph.D., P.E.

Director, Graduate & Special Programs Senior Lecturer, School of Engineering

One University Place, Chester, PA 19013-5792

t: 610-499-1294 f: 610-499-4059

e: rjmarino@mail.widener.edu





YOUR CARD COULD BE HERE! **Become a Section Sponsor. Contact us at** newseditor@asce-philly.org for more information.



#### PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS

215 S. 16th Street, Suite 16, Philadelphia, PA 19102

Telephone/Reservations: (215) 985-5701 Web site: http://www.asce-philly.org

National ASCE Central Number Toll Free 1-800-548-ASCE

Address Service Requested FIRST CLASS MAIL

Presorted 1st Class Mail U.S. Postage Paid Philadelphia, PA Permit No. 1845