

# the news



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**PHILADELPHIA SECTION  
AMERICAN SOCIETY OF CIVIL ENGINEERS**

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Electronic Message Hotline: 1-800-461-4190 (24 hours a day),

Web site: <http://www.asce-philly.org>

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

Vol. 74-5

## Our 88th Year

February 2002

### FEBRUARY JOINT DINNER MEETING

Philadelphia Section, American Society of Civil Engineers  
South Jersey Branch, New Jersey Section, American Society of Civil Engineers

### THURSDAY, FEBRUARY 21, 2002

THE PUB • Airport Circle • Pennsauken, NJ • See Location Map Below  
Cocktails – 6:00 p.m. • Dinner – 7:00 p.m. • Meeting – 8:00 p.m.

**SUBJECT:** New Jersey Transit's Southern New Jersey Light Rail Transit Project

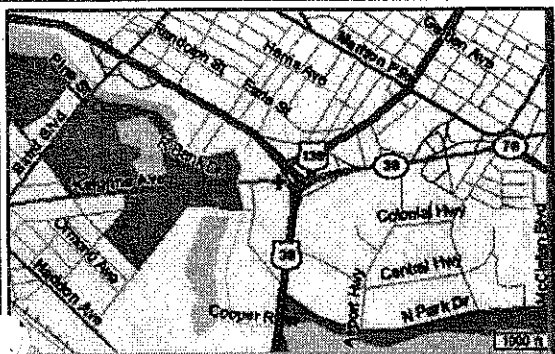
**SPEAKER:** Charles (Ty) Dickerson, P.E., Director of Engineering and Construction, New Jersey Transit

**SPECIAL FEATURE:** TEMPLE UNIVERSITY NIGHT. The ASCE Student Chapter, Alumni and Faculty of the Civil Engineering Department of Temple University will be honored at this meeting. All Students, Faculty and Alumni are cordially invited.

**RESERVATIONS MUST BE SUBMITTED BY FRIDAY, FEBRUARY 15, 2002.** Please send your check for the number of attendees @ \$30.00 per member or guest, \$10.00 per ASCE Student Members, payable to the Phila. Section, ASCE, P.O. Box 58186, Phila., PA 19102-8186; or call the Electronic Message Center: 1-800-461-4190 (Open 24 hours/day) or e-mail the Section at [info@asce-philly.org](mailto:info@asce-philly.org).

New Jersey Transit is moving forward with the Southern New Jersey Light Rail Transit System (SNJLRTS) to improve mobility and transportation access for communities in Southern New Jersey. The system's Initial Operating Corridor (IOC) extends 34 miles along the Delaware River between Trenton and Camden. The corridor will include 20 station stops along the route with park and ride facilities planned for some stops. This project is a Design, Build, Operate, and Maintain (DBOM) project. The light rail cars will be environmentally friendly, climate controlled, and equipped for those traveling with luggage and carriages. It is the first use of diesel light rail vehicles in North America and only the second DBOM transit project in the continental United States. The entire system will also be compliant with the Americans with Disabilities Act. Service on the IOC will begin as early as 2003.

(Continued on Page 2)



#### Location Map for THE PUB

7600 Kaighn Avenue Airport Circle  
Pennsauken, NJ • (856) 665-6440

We are located on Route 130 South at Airport Circle and Kaighn Avenue. Routes 70 West, 38 West, and 130 South all meet at the Circle.

**From Tacony-Palmayra Bridge:** Route 73 to Route 130 South, follow Route 130 to South to Airport Circle. The Pub is on the right after the traffic lights.

**From Betsy Ross Bridge:** Follow Route 130 South as above.

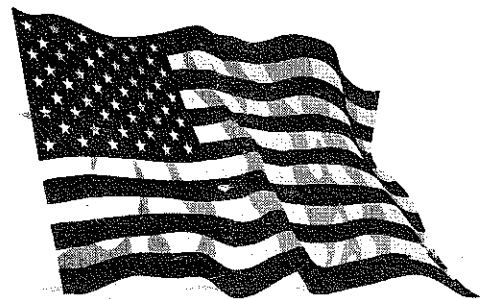
**From Ben Franklin Bridge:** Follow Route 130 East off the bridge, Pub is 2 1/2 miles on the right.

**From NJ Turnpike:** Exit 4, Follow 295 to Exit 34 B, follow Route 70 West to Route 130 South and Airport Circle. Pub is on the right after the traffic lights.

**From Walt Whitman Bridge:** Follow Route 130 North to second circle (pass park and shopping plaza).

Turn left at the light to get on Route 130 South. Pub is on the right after the traffic lights.

7600 Kaighn Avenue • Airport Circle • Pennsauken, NJ 08109 • Phone 856-665-6440



## God Bless America!

### TECHNICAL GROUP ACTIVITIES

#### Structures Group

##### March Dinner Meeting

**DATE:** Tuesday, March 26, 2002

**TIME:** 6:00 – 8:00 PM

**COST:** Free of Cost — Complimentary light dinner (sandwiches and soft drinks) will be provided

**LOCATION:** Drexel University, Lebow Engineering Center, Hill Seminar Room, 31st & Market Streets, Philadelphia, PA 19103

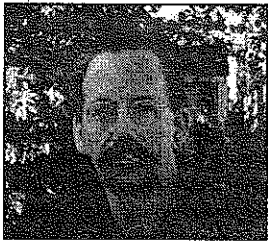
**SUBJECT:** I-95/Airport Interchange – Bridge Design and Construction

**SPEAKERS:** Joseph Capella & George Dunheimer, PennDOT-District 6-0, and Bijan Pashanamaei, DMJM+HARRIS

This photo presentation will show the construction of six bridges in PennDOT's I-95/Philadelphia International Airport Interchange Reconstruction Project. Bridge construction was largely completed in December 2001. The presentation will cover pile foundations, girder erection over I-95 mainline, shoring towers in wetlands, pot bearings 6 ft diameter, fracture critical steel box cross girder, 10 ft deep horizontally curved steel plate girders with 300 ft radius.

**Reservations are required and seating is limited to 30.** Please contact Ali Khan, Chairman, Structures Group, at (609) 530-9618; or call the Electronic Message Center: 1-800-461-4190 (open 24 hours/day).

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## THE PRESIDENT'S MESSAGE

Welcome to the Section's February issue of THE NEWS. And, Happy New Year. Since my last Message we sped by the Christmas Holiday and into the New Year. Yes, those Holidays are just a fond memory and we are zooming through 2002. I do indeed hope that you are still on track with all your New Year's resolutions. Those of you who resolved to attend one or more of the Section's activities can indeed stay on track with attending our next Dinner Meeting, which is set for February 21st. With the recent closing of the Harbor League Club the South Jersey

Branch of the New Jersey Section of ASCE will be hosting us at The Pub in Pennsauken so do take note of this new Joint Meeting location.

Our January Dinner Meeting was another well-attended function. Richard West gave the audience a very good overview of the planning, design and construction of the new Eagles Football Stadium. What an interesting and challenging project! Special thanks goes to Brian Stover for arranging such a wonderful meeting and to the Delaware Valley Section of the American Society of Highway Engineers for being such gracious hosts. There is a lot more to come. Our February Dinner Meeting should prove to be just as good. As previously mentioned, we join forces with our fellow professionals from the South Jersey Branch of the New Jersey Section of ASCE. This Joint Meeting will give us all an opportunity to hear first hand about New Jersey Transit's new light rail system being constructed between Camden and Trenton. I look forward to seeing many of you there, and hopefully some new faces.

February is also an exciting month for all engineers, as during this month a week is set aside to celebrate Engineers Week. Founded in 1951 by the National Society of Professional Engineers, National Engineers Week is celebrated annually by thousands of engineers, engineering students, teachers and leaders in government and business. In 1990, the National Engineers Week consortium expanded its scope and now includes more than 100 engineering, scientific and education societies and major corporations dedicated to increasing public awareness and appreciation of technology and the engineering profession. Engineers Week in the Delaware Valley runs from February 15th to the 23rd. Yes, an eight-day week! Local students, teachers and engineers will be honored at a number of local events taking place during that week. Among those being honored locally will be our own Edward M. D'Alba, P. E. as the 2002 Delaware Valley Engineer of the Year and also our own Carol Martself as one of two recipients of the 2002 Delaware Valley Young Engineer of the Year. Do plan on attending some of the Engineers Week's events as detailed elsewhere in this edition.

In closing, we are always looking for more of our members to become more involved in the Section – YOUR Section. The extent of that additional involvement is determined by you. "Be involved! Participate! Champion a Cause!" You'll be amazed how wonderful the feeling of involvement can be. If anyone is interested in helping out and/or becoming a Section Board Member please let me or any of the present Board members know. You do have a great Section.

Until next time – be safe, healthy and prosperous. Remember too... "Without challenges, there is no achievement." And don't forget your Sweetheart on Valentine's Day.

GOD BLESS AMERICA!

Sincerely yours,  
Chris L. Rood, P.E.  
President, Philadelphia Section, ASCE

## February Joint Dinner Meeting

(Continued from Page 1)



Charles (Ty) Dickerson

Charles (Ty) Dickerson is Director of Engineering and Construction for New Jersey Transit. Mr. Dickerson is a graduate of the U. S. Coast Guard Academy and has a Masters Degree from the University of Illinois.

While in the Coast Guard he worked in a variety of jobs including a ship-board duty as well as overseas and stateside civil engineering assignments. After leaving the Coast Guard he has been involved in many aspects of civil engineering from residential development to large mass transit projects. After joining New Jersey Transit (NJT) in 1993 he has been involved in both bus and rail projects. His current responsibilities at NJT involve oversight of the day-to-day

execution of the technical aspects of the SNJLRTS as well as interactions with local governing bodies, State and Federal agencies. He has been with the project since its inception and is now looking forward to actually building the SNJLRTS.

Mr. Dickerson is a licensed Professional Engineer in New Jersey and New York, a member of ASCE and a recipient of Central Jersey Branch's Government Engineer of the Year. Mr. Dickerson will discuss the project, the status to date and the next step.

Reservations must be submitted by Friday, February 15, 2002. Please send your check for the number of attendees @\$30.00 per Member or Guest or \$10.00 per ASCE Student Member, payable to the Philadelphia Section, ASCE, P.O. Box 58186, Philadelphia, PA 19102-8186. Or call the Section's Electronic Message Center at 1-800-461-4190 (open 24 hours/day) or e-mail the Section at [info@asce-philly.org](mailto:info@asce-philly.org).

## SECTION WEB SITE!

Our Section's web site has taken on a new look! Make sure you bookmark this site to check on our latest meetings and events, links and more! Comments and/or suggestions? Please contact us either via our Electronic Message Hotline at 1-800-461-4190 (24 hours a day) or e-mail at [info@asce-philly.org](mailto:info@asce-philly.org).

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**COPY DEADLINE FOR  
MARCH 2002 ISSUE  
FEBRUARY 11, 2001**

## TECHNICAL GROUP ACTIVITIES Construction & Transportation Group

### Joint Luncheon Meeting

**DATE:** Tuesday, February 26, 2002

**TIME:** 12 Noon

**COST:** \$10; Students: \$5.00

**LOCATION:** Conference Room Z on the 16th Floor of the Municipal Service Building, 15th & JFK Blvd, Philadelphia

**SUBJECT:** Route 202/I-76 Interchange Reconstruction Project

PADOT's Route 202/I-76 Interchange Reconstruction Project is presently underway in the King of Prussia, PA area. This project, SR 202 Section 400, enters the fourth year of a multi-year, \$250 million project to widen and improve five miles of US 202 between Gulph Road in Upper Merion Township (Montgomery County) and Tredyffrin Township (Chester County). This project will not only improve the interchange between Route 202 and I-76 (Schuylkill Expressway) but also that of Route 422/Route 202/I-76, and widen Route 202 from two lanes in each direction to three lanes in each direction from King of Prussia to the Chesterbrook Blvd. Exit.

A buffet lunch will be served started at Noon with the presentation beginning at 12:30 pm.

Reservations are required. Seating is limited to 50. Please contact Joanna Robinson at (215) 922-8080 or Joe Hellenbrand at (610) 688-8200, if you have any questions or for reservations.

## Engineering Management Group

### April Luncheon Meeting

**DATE:** Wednesday, April 3, 2002

**TIME:** 12 Noon

**COST:** \$10; Students: \$5.00

**LOCATION:** Municipal Services Building, 16th Floor, Conference Room T, 15th & JFK Blvd, Philadelphia, PA

**SUBJECT:** The National Constitution Center  
**SPEAKER:** Emily Bittenbender, Project Director, The National Constitution Center

Emily Bittenbender will discuss the National Constitution Center, an independent, non-profit organization whose mission is to build the first museum dedicated to honor our nation's constitution and educate the public to the significance of it in our daily lives. She will discuss how the Center plans to deliver a world class museum facility within budget.

For reservations, contact Dennis MacBride, P.E., Co-Chairman, Engineering Management Group, at (215) 568-6500 by Wednesday, March 27, 2002.

## PHILA. SECTION, ASCE SIXTH ANNUAL STUDENT ACTIVITY WORKSHOP

Co-sponsored by the Delaware Valley  
Engineers Week Council & Drexel University

The Cheltenham Mall

Cheltenham & Ogontz Avenues, Cheltenham, PA

FREE ADMISSION

For information, call Sandra May at (610) 941-1703 or Kathi Kennedy at (215) 895-6981.

## YOUNGER MEMBER FORUM NEWS

by Christopher Menna,  
Forum Editor and Past President

### Younger Member Forum

Christopher Wright, President

DMJM+HARRIS

The Atlantic Building

260 S. Broad St., Suite 1500

Philadelphia, PA 19102

(215) 735-0832, ext. 293

The Younger Member Forum (YMF) current membership includes college students, recent graduates, and young engineers including registered Professional Engineers who are 35 years of age and under. The objectives of the group are: 1) To provide networking opportunities, 2) To interact with schools and the general public to promote civil engineering, and 3) To enhance career development.

Young engineers or college students who would like to become part of the YMF please contact Mike McAtee, Urban Engineers, Inc. at mjmcatee@urban-hq.com or at (215) 922-8080.

### Past Accomplishments

The 2002 Northeast Regional Younger Member Council (NERYMC) held their annual conference from January 18-20, 2002 in Hartford, Connecticut. Each year the NERYMC conference provides Younger Members from every Section and Branch within Zone I with an opportunity to share ideas, meet ASCE National leaders, and attend leadership and professional development meetings. The Philadelphia Section YMF sent a group of eight energetic delegates to the Conference this year and brought back plenty of new ideas and an informed perspective about ASCE. In addition to the conference meetings, delegates spent their free time exploring Hartford and participated in a few friendly games of basketball at the hotel gymnasium. We would like to thank the Section for making our attendance at this conference possible.

On Wednesday, January 23, 2002 the YMF held a happy hour at The Adobe Café Southwest Bar and Grille in Roxborough. The event drew many YMF members, several Philadelphia Section members, and friends who enjoyed drink specials and free southwestern appetizers. The location provided a great opportunity for members from Center City and the suburbs to network together. We would like to thank Mike McAtee, Urban Engineers, for planning this successful event. We hope to see you at another one of our upcoming social events!

Several YMF members joined the South Jersey Younger Member Forum in attending a ski trip to Elk Mountain in Union Dale, PA on January 27, 2002. Members enjoyed a full day of skiing and snowboarding at one of the areas best locations. Special thanks go to Brian Lipko, Stone & Webster, President of the South Jersey Younger Member Forum for coordinating this event.

### Upcoming Events

Engineers Week 2002 will take place February 18-23, 2002 and the YMF will be participating in the Sixth Annual Critical Issues Seminar. This event is being jointly sponsored by the Philadelphia

Section, ASCE and the Engineers' Club of Philadelphia and provides an opportunity to participate in an open discussion with prominent member of the engineering community. The featured speaker and panelists are to be determined. Admission, food, and refreshments will be provided free. For more information, please contact Carol Martsof at martsof@pbworld.com or Christopher Wright.

Several YMF members are planning to visit local Colleges and Universities in March and April to hold open discussions with Civil Engineering students. The YMF will respond to questions and concerns from the students at this informal gathering. The students will be informed of what to expect from the engineering world after graduation. If you would like to volunteer as a speaker, please contact James Markham, Pennoni Associates at (215) 222-3000.

Also in March, the YMF is planning a Joint Meeting with the South Jersey Younger Member Forum and another exciting happy hour. Emails announcing the details of these events will be sent out soon. Hope to see you there!

### Member Spotlight

The purpose of the member spotlight is to introduce a fellow YMF member to the Delaware Valley Engineering Community.

Michael J. McGuire, P.E. is a Civil Engineer employed by McCormick Taylor and Associates, Inc. (MTA) in Center City, Philadelphia. At MTA, Mike is a Project Manager with the Highway Department. His current workload includes reconfiguration of the Broad Street and I-76 Interchange in South Philadelphia, the realignment of Camp Hill Road at Pennsylvania Avenue in Montgomery County, and roadway improvements at Penn State's Delaware County Campus. Mike also uses his water resources experience for the design of drainage and erosion control for Section 711 of the S.R. 6202 project.

Mike graduated in 1995 from Villanova University, where he earned a Bachelor of Civil Engineering degree. During college, Mike spent several summers working as an intern for the Naval Facilities Engineering Command in Lester, PA, performing Autocad work, structural design, field work, and cost estimates.

Mike currently resides in Havertown, PA and is an active outdoorsman and runner. He plays on MTA Philadelphia's softball team and enjoys backpacking. He also serves as Secretary of the Bryn Mawr Running Club and annually participates in both the Broad Street Run and the Philadelphia Distance Run.

In addition to being active in YMF, Mike is also an active member of the American Society of Highway Engineers (ASHE).

## READING PHILLIES OUTING

Mark your calendars now. Plans are being finalized for the 2nd Annual Philadelphia Section/Reading Branch Reading Phillies Outing. As of this printing two possible dates are being looked at - Sunday, May 19th at 1:05 pm or Sunday, June 2nd at 1:05 pm. Final details will be announced in a future issue of THE NEWS.

## JANUARY JOINT DINNER MEETING

January 9, 2002

Holiday Inn, King of Prussia, PA

### "The New Eagles Stadium"

By Bob Wright, Staff Writer and Sid Robin, Editor

The perennially popular Annual Joint Meeting of the Philadelphia Section, ASCE and the Delaware Valley Section, American Society of Highway Engineers (ASHE), celebrated a record overflow audience at the January 9, 2002 event. Certainly, the timely and popular subject of the meeting was a key factor in the magnificent attendance; nevertheless all Joint Meetings of these giant technical organizations attract large turnouts.

The subject of the January meeting was: "Construction of the Eagles' Football Stadium and Stadium Planning, Design and Construction." Principal speaker was **Richard C. West, P.E.**, Vice President, Project Director, Turner Keating McKissack. The meeting was excellently co-chaired by Philadelphia Section, ASCE President **Chris L. Rood, P.E.**, and Delaware Valley Section, ASHE President **Kevin Johnson, P.E.**, Presidents Rood and Johnson made announcements of interest to their respective organizations.

#### Drexel University Night

The meeting honored the ASCE Student Chapter, Alumni and Faculty of the Civil and Architectural Engineering Department of the College of Engineering of Drexel University. A large turnout affiliated with the school attended the meeting.

**Dr. Joseph P. Martin**, Head of the Drexel Civil and Architectural Engineering Department — a longtime dedicated active member of the Philadelphia Section, ASCE, thanked his hosts for their courtesies and recognition. He proudly boasted that two of the highest officials of the University are Civil Engineers: University President **Dr. Constantine Papadakis**, and College of Engineering Associate Dean **Dr. Rich Weggel**.

**Dr. Martin** introduced his Department's Faculty Members in the audience: **Dr. Jonathan Cheng**, Faculty Advisor of the ASCE Student Chapter, **Dr. Weggel** and several others. As usual, **Dr. Martin** illustrated his keen and astute sense of humor by proclaiming that the greatest achievement of the Student Chapter last year was the construction of a concrete canoe — for the Annual Race Competition — in which **Dr. Martin** (not a small-framed man by any measure) could sit full weight and not sink the craft!

**Dr. Martin** briefly reviewed the current and projected future programs in the curricula.

#### ASCE Student Chapter Representative Speaks

In the absence of Drexel's ASCE Student Chapter President **Travis Taylor**, who was unable to attend the meeting, Chapter member **Bill Snook** spoke about the activities and busy agenda of the Chapter. **Bill** also thanked his hosts for honoring his Group. He acknowledged the other officers in addition to **Travis Taylor**, and other Chapter members in attendance: Vice President, **Brenda Czumsky**; Treasurer, **Dan Kaldas**; Sec-

retary, **Veronica Ebersole**; other Student Chapter members, **Michelle Nenna**, **Brian MacAnallen**, **Karen Anne Reilly**, and **Mark Blackmore**. **Bill** spoke of the social and technical activities of the Chapter, which focus on speakers at their business meetings; outreach programs in which elementary schools are visited and students addressed; summer camp visits; Concrete Canoe Race and Model Steel Bridge Competitions.

Last year the Drexel Chapter finished in seventh place Nationally in the Concrete Canoe Race Competition. Currently the 2002 canoe is in construction. The Student Chapter strives for continued cooperation with the Philadelphia Section and National ASCE, and allied technical organizations.

#### Leonetti Introduces Speaker

ASHE Delaware Valley Section Past President **Leo Leonetti** introduced the evening's speaker, **Richard C. West, P.E.**, Vice President of Turner Keating McKissack (TKM), the Project Director for the Eagles Stadium. **West** qualified himself as "not an Eagles fan", since he hails from Atlanta, before going into the presentation.

#### Stadium Complexities

**Mr. West** stated that stadium projects were, in his opinion, the most challenging and complex of commercial projects due to the various requirements and constraints that must be satisfied and met. He showed a short video which contained an overview of the new stadium and the various amenities it will offer when the Eagles begin playing football there in the 2003 season.

#### Stadium Characteristics

**Mr. West** explained the characteristics of the stadium, which will be an open-air arena with a natural grass field. It will have a capacity of 66,000 seats. The playing field will be level with the grade outside the stadium, which avoids any major excavation and intrusion into the high groundwater table in the area. (By comparison, at Veterans Stadium and the proposed Phillies ballpark, both of which will have below-grade fields, water must constantly be pumped at considerable expense.) Consequently, however, the main concourse will have to be 25 feet above the outside grade. There will be three main structures — the west grandstand, the east/south grandstand, and the north headhouse, with the highest seating level a maximum of 150 feet (the equivalent of a 12-story building) above the field.

#### Seating Details and Stadium Area

Seating will consist of five levels — a lower bowl, mid-level and upper-level stands, with a ring of luxury suites inserted between each level. There will be 162 luxury suites. The entire site contains 43 acres, and 40 acres will be occupied by buildings.

#### Construction Schedule

**Mr. West** emphasized that the schedule is one

of the most critical elements of the project. The "T" Warehouse building, which occupied the site, was demolished by April 1, 2001, and pile driving began on May 1. Since targeted completion is August 1, 2003, the structure must be "topped out" one year in advance of that to allow other aspects to be completed on schedule. At present, the work is one month ahead of this schedule. The main concourse will be complete by February 1, 2002.

#### Planning Integration

Planning is another essential element. The overall plan must be integrated with the construction schedule for the project to be implemented effectively, according to **Mr. West**. For example, poured in-place concrete was recommended for the main concourse construction mainly for speed and ease of construction. This also allowed easy access to the service level below the concourse. The superstructure (above the concourse) is structural steel, which is different from other new stadiums. The lower seating bowl cannot be built until the stadium is topped out, as the area is used for crane travel and access and material lifts. This dictates that field-level work cannot occur until after topping out.

#### The "Pyramid" Approach and Subgrade Details

The stadium is actually multiple subprojects within a project, and directional flow of work becomes critical to the operation. The structure is treated as a pyramid, with adjacent levels completed simultaneously. Logic would dictate that levels be completed one at a time, but the pyramid approach allows completion of interior high-finish levels, such as suites, restaurants, lounges, etc. as they are enclosed and separated from the elements. **Mr. West** noted that the playing field must be excavated to a depth of 7 feet for installation of subgrade, heating grids, drainage pipes, and planting mix. This cannot occur until after topping out.

#### Ancillary Components Detailed

**Mr. West** addressed certain key areas. Seating is installed at a rate of 8,000 seats per month. Due to the custom colors of the seats and the placement of Eagles insignia on the hardware, a 2-year lead time is required for ordering. There are 10 miles of railings in the arena and there is no one uniform type. Sliding windows for suites are another long lead-time specialty item. There are 80 concessions in the building, with 2 main kitchens in the service level. Scoreboards are off-the-shelf items but they must be in place before the lower seating bowl is built, at which time cranes can no longer be used on the playing field.

**Mr. West** is proud of the field, which is highly specialized. The sod is being grown at a New Jersey sod farm and will be grown for 2 years before it is harvested. The planting mix is a complex design of materials that will ensure drainage through the field, although the field itself has a 1-for-crown. The rootzone mix is 90% sand, at a 1-inch depth, and the sod is bluegrass. A heating system within the planting mix will not be used for ice melting, rather it will heat the mix to en-

(Continued on Page 6)

## PHILADELPHIA SECTION, ASCE HUMPHREY FUND SCHOLARSHIPS

The Philadelphia Section, ASCE, is pleased to announce the availability of the following types of undergraduate scholarships for 2002. Scholarships will be awarded at our Annual Spring Social Dinner-Dance, on **Friday, May 3, 2002**, at the Radisson Hotel Philadelphia Northeast, Trevose, PA.

### Type of Award:

We recognize that the different colleges have differences in the regulations as to scholarships, stipends and awards. It is the Philadelphia Section's intent to provide these awards to give the maximum financial support to the individual engineering student within his/her college's rules. Therefore, the form of award will be that most beneficial to the student consistent with his/her college regulations. Unless indicated otherwise by the student, a check in the name of the award recipient will be presented. No two (2) scholarships will be awarded to the same student.

### Scholarship Type 1

It is anticipated that up to three (3) scholarships, each worth up to **\$2,000**, will be awarded. The number and amount of the actual awards remains at the discretion of both the Section's Scholarship Committee and the Section's Board of Directors.

### Eligibility Requirements:

1. The student must be matriculating in a full-time Civil Engineering or Architectural Engineering program in one of the six (6) colleges in the Philadelphia Section region (Drexel University, University of Pennsylvania, Swarthmore College, Temple University, Villanova University or Widener University).
2. The student must be an active participant in the ASCE Student Chapter.
3. Students in their sophomore and junior year (and Pre-Juniors at Drexel) are eligible to submit.

### Submission:

The candidate must submit the following to his/her Faculty Advisor:

- An essay, limited to 1,000 words, on "How could civil engineers assist in the security of the nation's infrastructures in the wake of recent terrorist attacks? What is the role of civil engineering profession in public safety in reaction to these events?" is required.
- The candidate's name, GPA and/or class rank and an address/telephone number where they can be reached must be included. Additional information for consideration (such as need) is allowed. A letter and/or resume is an acceptable means to provide this information.

### Faculty Advisor Evaluation:

Each Chapter's Advisor will evaluate all their candidates and select two (2) for submission to the Philadelphia Section's Scholarship Committee (address under "Deadline" below). The GPA and/or class rank should be verified as they may be used by the Scholarship Committee in their evaluation. If the university does not release class rank, the Advisor should provide some indication as to

the candidate's standing. The advisor will formally nominate these candidates by including a letter of endorsement from a member of the faculty along with the submission.

### Section Evaluation:

The Section Scholarship Committee will evaluate all nominations and select award recipients for scholarships or other form of stipend.

Awardees will be invited guests at our Annual Spring Social Dinner-Dance on **May 3, 2002** to receive their awards and will be asked to participate in future ASCE educational outreach activities.

### Submission Deadline:

Submissions must be made to the Faculty Advisor by **Wednesday, March 13, 2002**. Faculty Advisors must submit their nominations to **Mr. Ruben D. David, P.E.**, President-Elect of the Philadelphia Section, ASCE at Philadelphia Section - ASCE, P.O. Box 58186, Philadelphia, PA 19102-8186 by **Friday, March 22, 2002**. The President-Elect will forward all submissions to the Section's Scholarship Committee.

### Scholarship Type 2

One (1) scholarship worth up to \$1500, will be awarded.

### Eligibility Requirements:

1. The student must be the child of an active Philadelphia Section member.
2. The student must be matriculating in a full-time Civil Engineering or Architectural Engineering program
3. The student must be an active participant in the ASCE Student Chapter.
4. Students in their sophomore and junior year are eligible to submit.

### Submission:

To apply for this scholarship, the candidate must submit the following:

- An essay, limited to 1,000 words, on "How could civil engineers assist in the security of the nation's infrastructures in the wake of recent terrorist attacks? What is the role of civil engineering profession in public safety in reaction to these events?" is required.
- The candidate's name, GPA and/or class rank and an address/telephone number where they can be reached must be included. Additional information for consideration (such as need) is allowed. A letter and/or resume with an official transcript are an acceptable means to provide this information.
- Two letters of recommendation. One must be from one of the civil engineering program faculty members, and the other may be from another faculty member, present or past employer, or other responsible person. The recommenders should send their letter of recommendation directly to the Section's President-Elect at the address noted under "Submission Deadline", to arrive no later than the deadline date.

## 2002 DELAWARE VALLEY ENGINEERS WEEK

Engineers Week: February 15th - 23rd  
Celebrating 200 Years of  
American Engineering Excellence

### What is Engineers Week?

Engineers Week is held in February each year to recognize engineering accomplishments throughout the nation. In the Greater Philadelphia Region, Engineers Week programs have been held since 1953. The programs are sponsored by a coalition of engineering societies, government agencies, universities, and major corporations representing thousands of engineers.

### The Goals of Engineers Week Include:

- To inform the community on the contributions engineers and technology make to the quality of life and the environment.
- To acquaint young people and guidance counselors with the opportunities and rewards of a career in engineering or science.
- To recognize exceptional engineering achievements, outstanding teachers and students, and a Young Engineer and Engineer of the Year.

### The Importance of Engineers Week

Engineers have helped build our nation since its founding. In fact our first President, George Washington, conducted engineering activities as a soldier and as a young man surveying and mapping wilderness territories. Today, engineers are essential for building and maintaining the systems that protect our health and safety, restore and protect our environment, make our factories run, and contribute to our economic future.

### Schedule of Events:

**Future City Competition**  
A challenge for middle school students to design the city of the future.  
Widener University  
**Saturday, January 26th, 9 a.m. to 5 p.m.**

### Proclamation Luncheon

Union League, 140 South Broad Street  
**Friday, February 15th**

Reception: 11:30 a.m.; Lunch: 12 noon

- Engineers Week Proclamations
- Engineering Achievement Awards
- Engineer of the Year Address

### Young Engineer of the Year Dinner

Williamson's Restaurant,  
Belmont and City Line Avenues

**Wednesday, February 20th**

Reception: 5:30 p.m.; 6:15 p.m.

Presented by the Engineers Club of Philadelphia

### Science and Math Teachers Workshop

Villanova University, Connelly Center

**Thursday, February 21st**

Workshop: 3:30 p.m.; Dinner: 6:30 p.m.

Theme: "Hands-On Teaching Techniques for the Emerging Generation"

### Engineers Week Banquet

Villanova University, Conference Center  
**Saturday, February 23rd**

(Continued on Page 6)

(Continued on Page 6)



## SECTION DIRECTOR MARTSOLF CITED AS DELAWARE VALLEY YOUNG ENGINEER OF THE YEAR

Carol Martsolf, Current Director of the Philadelphia Section, ASCE, has been named as one of two recipients of the 2002 Delaware Valley Young Engineer of the Year honors. This honor is sponsored by the Engineers Club of Philadelphia, in conjunction with the Delaware Valley Engineers Week Council, and recognizes the special and notable contributions of a young engineer (age 35 and under) to the engineering profession and community in the Philadelphia area.

Carol is a Project Engineer with Parsons Brinckerhoff in Center City and she has held this position for the past nine years. In addition to her service as Section Director, she is involved in many Section Committees and activities and was President of the Section's Younger Member Forum last year. The Phila. Section recognized her as its Young Civil Engineer of the Year in 1999. She additionally authored a paper on engineering ethics which received both ASCE Zone I and National top prizes as part of the Daniel W. Mead Prize for Younger Members competition in 1999. She is also active in the Women's Transportation Seminar and the Delaware Valley Engineers Week Council.

In addition to her service to the engineering profession, Carol devotes much of her time to various community groups and causes and is a tireless supporter of several homeless outreach programs and organizations. She has been certified as a volunteer hospice caregiver as part of the Delaware County Memorial Hospital Hospice Program.

The Philadelphia Section salutes Carol Martsolf on her achievement as the 2002 Delaware Valley Young Engineer of the Year.

## MEMBERS IN THE NEWS

### Tantala Relected President of Registration Board

Phila. Section, ASCE, Past President (1986-1987) **Albert M. Tantala, P.E., F. ASCE**, President of Tantala Associates Consulting Engineers was recently reelected President of the Pennsylvania State Registration Board for Professional Engineers, Land Surveyors and Geologists. The Section extends its hearty congratulations to Al on his high achievement.

### Amy Naugle Attains P.E.

RGS Associates, Inc., land development consultants, is pleased to announce that **Amy Kanarr Naugle**, Project Engineer with the firm of RGS Associates, recently received her Professional Engineer registration. Formerly with Rummel, Klepper & Kahl, LLP Consulting Engineers, Naugle received her Bachelor of Civil Engineering from Bucknell University and is currently working towards her MBA at Penn State. She resides in Mohnton, outside of Reading. The Phila. Section extends its warm congratulations to Amy on her high achievement.

## LIFE MEMBERS TO BE HONORED AT MARCH DINNER MEETING

By Allan F. Moore, Jr., Vice President

This year, sixteen Philadelphia Section, ASCE Members will become Life Members of ASCE. These members will be honored at our March 21, 2002 Dinner Meeting, when we will present their Life Member Certificates to them.

Achieving Life Membership in ASCE requires a career of service to ASCE and the Civil Engineering Profession. To qualify for Life Membership, a member must:

- Have reached the age of 65
- Have paid dues for a minimum of 20 years
- Have paid dues in any membership grade

for a number of years that when added to their age equals or exceeds 95

Life Members are exempt from dues and need only pay a small service fee to receive *ASCE News* and *Civil Engineering* magazine.

In 2002, the following members of the Philadelphia Section will achieve the status of Life Member:

Myron Bernhang  
Vincent Calvarese  
Louis Cheifetz  
John Coscia  
Murray Cowan  
Harry Harris  
Harvey Kagan  
Peter Krasas  
Robert McAuliffe  
Gary Munkelt  
Carl Nieberle  
Celestino 'Chuck' Pennoni  
Frederick Williams  
Paul Woodruff  
Ramesh Chokshi  
Gerald Fornwald

ASCE appreciates the lifelong support of these members. We thank them for their contributions and years of dedication to our profession. We hope you will join us on March 21st to congratulate our new Life Members.

## JANUARY DINNER MEETING

(Continued from Page 4)

sure grass growth without any dormant periods. The grass must be planted by April 1, 2003 to allow for proper establishment, and it cannot be planted at any other time. It will receive the same level of care as a professional golf course.

### Questions and Answer Period

As expected, a lively question and answer period followed our distinguished speaker's address in which members of the audience asked for detailed clarification of the infinite complexities of this major structure. Mr. West responded with the expertise for which he is universally recognized.

Presidents Rood and Johnson presented Gifts of Appreciation to Mr. West, on behalf of ASCE and ASHE, respectively, for his outstanding talk.

## 2002 DELAWARE VALLEY SCIENCE FAIRS

The Philadelphia Section, ASCE, will again be participating in the **Annual Delaware Valley Science Fairs**. This year's Fairs' judging day will be **Wednesday, April 10, 2002** at the Fort Washington Expo Center, Fort Washington, PA. As in the past, the Section will be judging, and subsequently presenting Special Awards. Our Section is looking for 6 to 8 judges to participate in our judging, with the Science Fairs needing approximately 500 judges.

For further information and/or to volunteer as a judge, please contact Philadelphia Section President **Chris L. Rood, P.E.** at (856) 461-9565, ext 102 or via e-mail at C-T-Rood@msn.com.

## DEEP FOUNDATIONS COURSE OFFERED

Foundations Courses, Inc. presents "Geotechnical and Structural Design and Construction Monitoring of Deep Foundation" **May 2-4, 2002** in Washington, DC. This course is intended for Geotechnical Specialists, Structural Designers, Engineering Geologists, and DeepFoundation Contractors and Materials Suppliers involved in the design and construction monitoring of driven piles, drilled shafts, auger cast and micro piles. Early registration ends April 10th. For more information or a brochure please contact **Jae Law** at Foundation Courses, Inc. at (303) 494-0702.

## HUMPHREY FUND

(Continued from Page 5)

### Section Evaluation:

The Section's Scholarship Committee will evaluate all submissions and select the award recipients.

Awardees will be invited guests at our Annual Spring Social Dinner-Dance on **May 3, 2002** to receive their awards and will be asked to participate in future ASCE educational outreach activities.

### Submission Deadline:

Submissions must be made by **Friday, March 22, 2002** to Mr. **Ruben D. David, PE**, President-Elect of the Philadelphia Section at Philadelphia Section - ASCE, P.O. Box 58186, Philadelphia, PA 19102-8186.

## ENGINEERS WEEK

(Continued from Page 5)

Reception: 6:00 p.m.; Dinner: 7:00 p.m.

Recognition of 2002:

- Engineer of the Year
- Outstanding Engineering Achievements
- Young Engineer of the Year
- Outstanding Math and Science Teachers
- Undergraduate Student Papers
- Outstanding High School Student
- Future City Competition Winners

For more information visit the Engineers Week website at [www.engclub.org](http://www.engclub.org)

## WEBSITE SPONSORSHIP PROGRAM

By Directors Carol Martsof and Walter DeLury

The Officers and Directors of the ASCE Philadelphia Section are pleased to advise you of the "Sponsors" section of our recently upgraded web page [www.asce-philly.org](http://www.asce-philly.org).

The Sponsorship Directory will provide three categories of "Sponsors" for the following annual fees:

Golden Gate Bridge Club	\$700.00
Silver City Bridge Club	\$500.00
Bronze Cast Bridge Club:	\$300.00

\*E-mail and web page site address cannot be linked to the [www.asce-philly.org](http://www.asce-philly.org) site due to ASCE 501(c)(3) tax status.

The Sponsors section will also have the following General Provisions associated with it:

- Sponsor information on the ASCE web page is for a one-year period from October 1 to September 30 with web page updates occurring in October, November, January, February, March, April and August.

- The ASCE web page will run Sponsorship member employment opportunity ads on the ASCE web page as follows:

**Golden Gate Bridge Club:** one employment ad three times during the year

**Silver City Bridge Club:** one employment ad two times during the year

**Bronze Cast Bridge Club:** one employment ad one time during the year

The employment opportunity ads, once placed, will run until the next web page update.

Sponsorship will be for a one-year period as previously stated. There will be no refunds of Sponsorship payments and the names of Sponsorship members will be implemented within a month of receipt by ASCE. No company logos will be allowed. All electronic format information for Sponsorship ads must be received by ASCE prior to the 15th day of the month for the next update period.

- The ASCE will provide the following electronic format for the ad and it will be up to the sponsor to provide the ASCE with electronic information:

- Provide Company Name and one line biography (20 words or less)
- Job Position and Location
- Requirements of position (30 words or less)
- How to respond to job listing offer\*

\*E-mail and web site addresses cannot be linked to [www.asce-philly.org](http://www.asce-philly.org) site due to ASCE 501(c)(3) tax status.

**RESOLVE TO ATTEND  
AT LEAST ONE  
SECTION MEETING  
OR FUNCTION  
THIS YEAR  
AND INVITE YOUR  
ASSOCIATES!!**

## ENGINEERS AND PBS TELEVISION SERIES — ZOOM — COMBINE FORCES TO TEACH ENGINEERING CONCEPTS TO DELAWARE VALLEY CHILDREN

Tell a six-year-old that elasticity relies on a key principle of engineering and expect eyes to glaze over. Let that child make a mini-bungee jump by putting an egg in the toe of a nylon stocking to test how far it can drop before it splatters, however, and consider it a lesson in engineering learned.

Messy? Maybe, but it suits the aims of the organizers of National Engineers Week 2002 just fine. In an effort to reach an ever younger audience, namely six- to 12-year-olds, the National Engineers Week committee, a consortium of more than 100 engineering societies and corporations, is launching a new educational program, **ZOOM™ into Engineering**. Based on ZOOM, the daily PBS television series and Web site produced by WGBH Boston, the program will teach children the essence of engineering through hands-on experiments, such as the bungee egg and other fun activities. To kick off the program, National Engineers Week 2002 co-chairs the American Society of Civil Engineers and DuPont hosted a training seminar to hone the teaching skills of engineers last October at the National Building Museum in Washington, D.C.

Led by WGBH educational staff, the seminar brought together more than 80 volunteer engineers from 24 states, including **John Kampmeyer**, P.E. from Triad Fire Protection Engineering in Springfield, Pa., **Sandra May** from PECO Energy in Plymouth Meeting, **Pasquale Dougherty** from Urban Engineers, Inc. in Philadelphia, **Douglas Jones** from Verizon in Philadelphia, and Philadelphia engineer **Amy Rivera**. The meeting was the first step in creating ZOOM into Engineering workshops and events in the Delaware Valley, and nationwide to reach kids with the message of what engineers do every day — solve problems using science and technology. The "train-the-trainer" seminar participants will now fan out across the country, including the Philadelphia area, to train other engineers to teach the program.

It is widely recognized that the earlier children embrace science and math, the more likely they will maintain an interest leading to more rigorous studies in years to come, including engineering courses in college. Engineering corporations and societies say that could help address the critical need to substantially increase the number of engineers in America.

It's an enormous challenge. Engineers can readily share insights on their work with adults, for example, but dealing with youngsters presents several hurdles. At the summit, engineers were first asked to think like a six- to 12-year-old, and were led through an explanation of how kids think differently as they mature and gain experience. Five- to eight-year-olds, for instance, have diffi-

## The ASCE 2002 Member Drive is On!

ASCE MEMBER GET A MEMBER DRIVE



Earn Rewards...  
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Help Your  
Colleagues!

Refer your colleagues for ASCE membership during the 2002 member drive and you can earn terrific rewards and prizes. Visit our special web site for details on how to participate.

For more information visit  
[www.ASCEDrive.org](http://www.ASCEDrive.org)

culty working in groups and grasping abstract ideas. By the time they are 10, however, they can analyze data drawn from experiments, understand another person's perspective, work well in groups, and realize that there is often more than one "right" answer.

Of course, the cornerstone of an effective hands-on program is finding children to participate. Local boys and girls clubs, for example, provide an ideal audience. Other recommendations include setting up events at public venues such as malls, with activity stations, testing zones, video monitors, and engineer facilitators.

To assist engineers in the program, WGBH and National Engineers Week have produced 7,000 ZOOM into Engineering toolkits, each containing an Activity Guide, CD-ROM, video, and giveaways. The guide details eight hands-on activities for use at ZOOM into Engineering events which were presented at the seminar, and information on engineering websites and other National Engineers Week programs such as Introduce a Girl to Engineering Day. The CD-ROM contains additional resources, a training tutorial, and printable files of Activity Guide projects.

ZOOM into Engineering was inspired in part by the partnership established between the American Society of Civil Engineers and WGBH Boston to teach middle-school children basic civil engineering principles through hands-on activities and by exploring local civil engineering construction. The curriculum was developed by WGBH and based on the PBS-series, *Building Big™*, which aired in October 2000.

ZOOM, which began its fourth season in January 2002, will include science segments in all 20 new episodes. The segments revolve around three categories — kitchen chemistry, biomes, and things you build. Targeted to children ages six to 12, ZOOM features a diverse cast of seven kids who bring to life activities sent in by viewers across the country.

For more information on ZOOM into Engineering activities in your area, and for a copy of the Activity Guide and CD-ROM, contact **Donald Lehr** at (212) 967-8200 or [74731.217@compuserve.com](mailto:74731.217@compuserve.com).

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For full registration information contact: ASCE Continuing Education,  
P O Box 79536, Baltimore, MD 21279-0536; Phone 1-800-548-2723; fax (703) 295-6144

## IMPORTANT! 2001-2002 MEETING NOTICES

MARK YOUR CALENDAR NOW! The dates of the Philadelphia Section, ASCE monthly meetings and social functions, are as follows: (Check each upcoming edition of THE NEWS for additional details, possible date and topic changes.) THIS IS A TENTATIVE LIST.

ALL DINNER MEETINGS (except as noted):

Cocktails – 5:30 pm; Dinner – 6:30 pm; Meeting – 7:30 pm

Students: All dinner and/or luncheon are at discounted price. If you prefer, you are welcome to attend all meetings after dinner or luncheon, at no charge.

Thursday, March 21, 2002

Joint Dinner Meeting with Delaware Valley Chapter, American Concrete Institute (ACI) and the Delaware Valley GeoInstitute (DVGI) • Williamson's in the GSB Building on City Line Avenue • "Doubling the Parking Capacity at Phila. International Airport" • Speaker Nick Cinalli • Swarthmore University Night • Life Members Night

Thursday, April 18, 2002

Joint Dinner Meeting with Phila. Chapter, Penna. Society of Professional Engineers (PSPE) • Williamson's City Line, Philadelphia, PA • "CHOP Expansion" • Speaker: Anthony Kelly • Widener University Night • Past Presidents Night

Friday, May 3, 2002

Annual Spring Social Dinner Dance and Awards Presentations • Radisson Hotel, Philadelphia Northeast, Treves, PA • Details to be announced. **NOTE CHANGE IN LOCATION**

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