

**ASCE, PHILA. SECTION  
MEETING SCHEDULE 2008-09**

The ASCE, Philadelphia Section Meeting program for the 2008-09 season is just being formulated, and the TENTATIVE dates have been provided below for your planning purposes. We would suggest that you use this to mark your calendar at this time and hold the dates.

We are diligently working to schedule topics and speakers that will offer interesting and insightful events. In coming issues of *THE NEWS*, we will provide updates as information becomes available. We also suggest you visit the Section website for the latest changes in our meeting program.

All dinner meetings feature a cocktail hour starting at 5:30PM, dinner at 6:30PM, and the meeting presentation following at approximately 7:30PM, unless otherwise noted. We also intend to follow our second-Thursday pattern except where Joint Meetings will preclude this. As always, you are welcome to attend the meeting presentation without dinner at no cost if you prefer to do so.

The dates as of this printing are:

**Wednesday, January 21, 2009;** Joint meeting with American Society of Highway Engineers, Delaware Valley Section; Radisson Hotel, Valley Forge; cocktails 6:00PM; dinner 7:00PM; presentation 8:00PM

**Thursday, February 12, 2009;** Joint meeting with South Jersey Branch, New Jersey Section, ASCE

**Thursday, March 12, 2009**

**Thursday, April 9, 2009**

As noted, this is subject to change. Updates will be provided in each edition of *THE NEWS*.

**COMING NEXT ISSUE...**

Information on the November and December meetings, opening of ASCE, Phila. Section Award nominations, Engineers Week 2009 schedule.

Look for this in the December/January edition of *THE NEWS*, coming in mid-December.

**NOVEMBER DINNER MEETING**

American Society of Civil Engineers, Philadelphia Section

**TUESDAY, NOVEMBER 18, 2008**

*(NOTE THE CHANGE IN DATE)*

**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 Presentation Follows

**SUBJECT: Great Gorge Dam Rehabilitation**

**SPEAKER: Moustafa A. Gouda, P.E., CMX**

RESERVATIONS MUST BE SUBMITTED BY **WEDNESDAY, NOVEMBER 12, 2008**. 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, PO Box 58186, Philadelphia, PA 19102-8186. Reservations can also be made on the Electronic Message Center, **(800) 461-4190**, or via e-mail at [info@asce-philly.org](mailto: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.**

**SPECIAL FEATURE: Widener University Night.** The ASCE Student Chapter, Faculty and Alumni of the Department of Civil Engineering of Widener University will be honored at this meeting. All Faculty, Alumni and Students are cordially invited to attend and participate.

There are over 82,000 dams in the United States. When we think of dams, colossal structures such as Hoover Dam come to mind, but most dams are small and tend to be constructed of compacted soil. Dams provide a variety of functions including benefits for recreational users, navigation, flood control, water storage, irrigation, and electric generation.

Since they are structures, dams need to be maintained and inspected. There are over 3200 dams in Pennsylvania and over 1600 in New Jersey. Of these, about 800 in Pennsylvania and 200 in New Jersey are classified as high hazards, and their failures can result in catastrophes. The state agencies that

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**DECEMBER JOINT DINNER MEETING**

Society of American Military Engineers, Philadelphia Post

American Society of Civil Engineers, Philadelphia Section

Construction Management Association of America, Mid-Atlantic Chapter  
Engineers' Club of Philadelphia

Project Management Institute, Delaware Valley Chapter

Pennsylvania Society of Professional Engineers, Philadelphia Chapter

Association for the Advancement of Cost Engineering, Delaware Valley Chapter

**WEDNESDAY, DECEMBER 10, 2008**

**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: Philadelphia International Airport (PHL) Expansion Plans**

**SPEAKER: Charles Isdell**, Director of Aviation, City of Philadelphia Department of Commerce

RESERVATIONS MUST BE SUBMITTED BY **FRIDAY, DECEMBER 5, 2008**. ALL RESERVATIONS SHOULD BE MADE THROUGH THE SAME PHILADELPHIA POST WEBSITE, [www.samephiladelphiapost.org](http://www.samephiladelphiapost.org). No reservations will be accepted through the ASCE,

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## PRESIDENT'S MESSAGE

An interest of the ASCE, Phila. Section Board of Directors has been to try different venues for the dinner meetings. For the October meeting at the Loews Hotel, we were blessed with a clear night and a breathtaking view of the City in all directions. Thank you to the **Younger Member Forum (YMF)** for arranging our program. Our speakers provided an excellent presentation on local case studies for LEED projects.

At the October meeting, we recognized our Board members for their efforts. **James Markham**, our first Past President, could not attend. Jim has still been working hard for the Phila. Section in his retirement, answering my many, many questions. Jim recently chaired a meeting organized by the **Engineers' Club**, with the goal to help the many technical societies in our region work more efficiently. Specific topics included minimizing event conflicts, partnering for meetings, providing a clearinghouse for scholarship information, and sharing information for legislative issues.

In October, **Kristen Bowman Kavanagh** started the Phila. Section's program to generate more activities by the Technical Groups. The tech group chairs are meeting to brainstorm new ideas for topics, speakers, and events. The Phila. Section will tie the added events by the Tech Groups to our website improvements, providing more services for our members. Another possibility is linking the tech group events to the Continuing Education program that is also in development.

Our ASCE, Phila. Section committed to a joint sponsorship for the **Governor's Luncheon** at the upcoming **ASCE National Conference**. Our partners for the sponsorship are the three other PA ASCE sections. The conference is in **Pittsburgh on November 7th**. This sponsorship is a continuation of our efforts to spread the message of the PA Infrastructure Report Card. The last two years, we have taken our message to Harrisburg with our Legislative Day in May. ASCE National has prepared an Action Plan as a follow-up for the nationwide ASCE Report Card on infrastructure (see [www.asce.org](http://www.asce.org)).

And for my most important point, **Election Day** is fast approaching. This newsletter is our Section's last contact with our membership before **Tuesday, November 4th**. I will ask for two things (sorry, if you thought I would ask for one!). First, please be sure to vote. Second, please talk to others about voting, and the issues that impact our industry. As Engineers, we are the professionals on infrastructure preservation and investment. ASCE published a Policy Briefing in the October issue of *Civil Engineering* magazine. The article discusses both presidential candidates' positions related to infrastructure funding. We will post the article on the Phila. Section website. I think this election will be both historical and critical, and I ask our members to take the opportunity to participate.

I look forward to seeing everyone at our November meeting. We are working to gain PDH accreditation for this dinner. **Go Phillies!**

Mark J. Tiger, P.E.  
President, ASCE, Philadelphia Section

## RECRUITING FOR THE FUTURE

This article appeared in the October 2008 edition of the *APWA Reporter* (the magazine of the American Public Works Association) and is reprinted here with permission. Five participants gave their views on this issue at the recent APWA Congress. The participants were: **Rebecca Bilderback, P.E.**, Civil Engineer III, City of Olathe, Kansas; **Chas Jordan**, Management Analyst, City of Largo, Florida; **Aaron Keller, P.E.**, Engineer II, HNTB Corporation, Kansas City, Missouri; **Jay McArdle, P.E.**, Municipal Design Engineer, HNTB Corporation, Kansas City, Missouri; and **Jeffrey Roberts, P.E.**, Engineering Supervisor, Sarasota County Government, Florida.

While this was particularly geared toward public works, it applies to Engineering in general as well. If you have any comments, feedback, etc. you'd like to add, please send it to us and we'll forward it on to APWA.

Ever wonder what younger professionals are really looking for in a public works job? This year's "Recruiting for the Future" session at Congress provided a unique opportunity to allow recruiting managers to hear firsthand what workers are seeking in a job. Five employees with less than seven years of work experience sat down and provided a candid description of what

they look for in a job and why they are staying in their current positions.

From the "Recruiting for the Future" session, here are a few suggestions for recruiting and retaining young professionals:

### Tips for Recruiting New Talent

**Actively recruit for desired talent:** Attend career fairs, advertise in trade magazines, and join online job sites, such as Monster.com, to attract talent. Make sure you "show off" your workplace with high-gloss photos of construction sites, employees "engaged" in problem solving, and work life when displaying at fairs and in magazines.

**Don't just sell your organization; sell the location, community, and atmosphere:** Prospective employees aren't just coming to work at "the office," they are coming to live in your community. Inform them of the special things (attractions, schools, nightlife, family opportunities) offered throughout the community.

**Offer relocation assistance:** Relocating to a new job is a heavy expense, especially for new graduates. Offer assistance to help offset those costs.

**Offer leadership development and educational training opportunities:** Advertise what your organization can do to supplement day-to-day job

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**COPY DEADLINE FOR  
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NOVEMBER 21, 2008**

## TECHNICAL GROUPS/CHAIRS

Information on the ASCE, Philadelphia Section's Technical Groups is given below. Vice President **Tom Brady** will coordinate 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 Group Chair.

### CONSTRUCTION

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## ENGINEERS' CLUB OF PHILA. HOSTS SOCIETIES SUMMIT

The Engineers' Club of Philadelphia (ECP) launched its initiative to coordinate activities of all the technical societies of the Delaware Valley with an **Engineering Societies Leadership Summit** on September 16. Representatives of 18 societies, including ASCE, Phila. Section President **Mark Tiger**, and the Board of the Engineers' Club assembled to discuss ways the Engineering societies could increase the visibility and effectiveness of the region's Engineering societies by improving coordination and collaboration on a regional basis.

The program was kicked off by ECP President **Eric Flicker**, who outlined the objectives of

## YOUNGER MEMBER FORUM NEWS

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On September 30, 2008, the YMF held our **Annual Bowling Event** at Strikes Bowling Lounge in University City. A great time was had by all 35 attendees, including 14 students. The event included a one hour social followed by two hours of open bowling. Appetizers were provided by YMF for all attendees.

From all reports, the pro bowling tour need not fear any serious competition from the YMF!

Thanks to **Guy DiMartino** for organizing this successful event.

On October 18, 2008, YMF participated in "**Philadelphia Cares**" Day, which involved cleaning, painting and refurbishing school facilities in Philadelphia. A week later, on October 25, YMF once again partnered with the **Friends of the Wissahickon** to help with restoration activities in the Wissahickon Valley in Fairmount Park. These activities involved trail maintenance, removal of invasive plant species and restoration of stormwater/park facilities and are a great way to enjoy and improve the outdoor resources available in our region. (This event, originally scheduled and advertised for October 18, was changed after the printing of the October edition of *THE NEWS*.)

### YMF WINTER SOCIAL!!!!!!! January 12, 2009

Mark your calendar for the most anticipated YMF event of each year. We'll release more details in the next edition of *THE NEWS*, so be sure you secure the date.

the meeting and the need to better coordinate and publicize the activities of the Engineering societies in the Delaware Valley. Eric and other ECP representatives discussed a variety of ideas. For example, an initiative for improving communication and coordination was ECP's offer to post all the societies' meetings on a common calendar on the ECP website ([www.engclub.org](http://www.engclub.org)). This joint calendar will help avoid scheduling meeting conflicts as well as promote each organization's event.

Another collaborative effort suggested was scholarships. ECP offered to develop and web-host a database of scholarships awarded by each society, thereby publicizing the availability of scholarships to a wider audience and assist students searching for Engineering scholarships. It would also allow Engineers to determine the cumulative scholarship funds awarded throughout the entire engineering profession — a total that is expected to be impressive.

Among a discussion of other related issues was a dialog on ways Engineers can gain a stronger voice in influencing state and local laws that impact the Engineering profession. A list of

## ANACE\*

### SUBWAY CARS USED BY FISH?

At first glance, it seems a little strange, but you may have heard that New York City has been disposing of its retired subway cars by dumping them in the ocean. These are used to create artificial reefs. In the past, old ships have generally provided this function, and military tanks have additionally been utilized for this purpose. The subway cars have been found to be ideal for "reefing", as it is called, since they are roomy enough to attract certain fish and are too heavy and bulky to shift in rough seas. Besides, the alternative would be to scrap them, so this presents an opportunity for their beneficial reuse.

Over 1200 cars have been "sunk" in this fashion since 2001. The majority of this "fleet" has been deposited about 16 miles off Indian River Inlet in Delaware, but others have gone to New Jersey, Virginia and South Carolina. The cars help promote the growth of sea grasses and become habitats for mussels and sponges, which in turn attracts flounder and bass. The location has become very popular with amateur fishers.

Another 600 to 1000 cars are expected to be "reefed" in the next five years as replacements arrive. At present, six states (Delaware, New Jersey, Virginia, North Carolina, South Carolina and Georgia) are vying for the cars. New York State would like some as well, and is now starting to insist that future cars be kept in state, as the value of the reefed cars becomes increasingly realized.

The cars are prepared for this "service" after they are retired from passenger-carrying duties at New York City Transit's shops in upper Manhattan. All materials are removed except for the basic steel car body, so anything potentially hazardous or harmful is not introduced into the ocean environment. Once this is completed, they are loaded on a barge for transport to the designated reef location. It is believed that the cars will last for decades in their new homes.

Ironically, the cars are so popular with fish that those who have observed conditions in the reefs noted that while they were once packed with commuters when they roamed the tracks of the subway lines in New York, they are now crowded with flounder and bass.

Something to think about on your next summer trip to the Shore...

\*ANACE – Absolutely Nothing About or Concerning Engineering

action items to continue with the initiative was also developed.

The consensus of the meeting attendees was an enthusiastic agreement that the ECP initiative was beneficial to the area's Engineering profession and to all the professional and technical societies. The representatives offered to inform their respective boards about the initiative and ECP's desire to serve as the regional coordinator of common interests of Engineers. Another Summit is being planned for the spring.

Thanks to **Thom May** for this summary.

## **FALL IS CAMPAIGN SEASON — ELECTION DAY IS ALMOST HERE!**

ASCE National wants to take this opportunity to make sure you are ready to exercise your constitutional rights in November.

Here are four easy steps to get you started:

### **First, are you registered to vote?**

If you are not, you can visit ASCE's advocacy website [http://asce.capwiz.com/election/register\\_vote/](http://asce.capwiz.com/election/register_vote/) and get the information you need for your state.

### **Second, are you educated about the issues?**

ASCE's advocacy website provides you with detailed information about the candidates running in your district and any ballot initiatives you might encounter at the polls. For issue specific information, you can visit ASCE's Members Only page <http://www.asce.org/membersonly> to read the Key Vote Scorecard.

ASCE also participates in a number of coalitions that seek to educate voters including: Scientists and Engineers for America, <http://sefora.org/> and Engineering the Vote, <http://www.engineeringthevote.org>. Both of these organizations can help you arrive at an informed choice.

### **Third, have you reminded someone else to get registered or to vote on November 4?**

A personal recommendation is a powerful tool, all it takes is a casual conversation and you can bring someone else into the process. Challenge yourself this fall to encourage one friend who has never voted to do so this election.

### **Fourth, don't forget to vote on November 4th!**

Are there any elderly or homebound people in your neighborhood? Do a good deed this Election Day and give a ride to someone who might have trouble getting to the polls themselves.

## **THANKS TO OUR SPONSORS**

The ASCE, Phila. Section Sponsorship continues to be a success. Thus far we have 18 local firms committed — a little behind last year's pace, but there's still time to grab a good spot on the sponsors' page! As always, the Section extends its collective "thank you" to our sponsors for their commitment and continued support of the Section.

There are several benefits available to you as a Section Sponsor. For a low annual fee, you too can be a part of this program and have your business card appear in each edition of *THE NEWS*, among other perks. If your firm is not in this esteemed group, and you would like to become a sponsor, this is the time to consider it.

For information on the program, please contact our Editor, **Bob Wright** at (215) 922-8081, x1647 or [newseditor@asce-philly.org](mailto:newseditor@asce-philly.org).

## **SPONSOR PROFILE**

### **Urban Engineers — Formulating Excellence**

Urban Engineers is an ISO 9001:2000-registered, multidisciplinary planning, design, construction services, and environmental consulting firm. Founded in Philadelphia in 1960, Urban provides services for buildings, bridges, highways, railroads, ports, transit, and airports.

Urban attributes its reputation and excellence as a recognized leader in its field of professional practice to its ability to provide clients with the highest level of professional competence, diversity, and commitment. From its beginning with a 7-person staff, Urban has grown to over 475 people in regional offices in Philadelphia, Erie, Warrendale, and Mechanicsburg, Pennsylvania; Cherry Hill, New Jersey; New Castle, Delaware; Baltimore, Maryland; Hartford, Connecticut; and New York City and Buffalo, New York.

Urban provides a variety of services in the disciplines of aviation, bridge design/inspection, building systems design, civil/site design, claims litigation support, construction management/inspection, environmental, highway design, marine, material testing, planning, program management, railroads/rail transit, streetscape/municipal design, and traffic engineering/intelligent transportation systems.

Urban has won dozens of awards for outstanding achievement in the engineering profession. Among the organizations that have recently recognized Urban's performance are: The U.S. Department of Transportation, American Council of Engineering Companies,

Construction Management Association of America, Engineering Societies of the Delaware Valley, and the American Concrete Institute as well as ASCE.

In its 48 years of operation in Philadelphia, Urban has made an indelible impact on the infrastructure of the Delaware Valley. From participation in such key projects as the Center City Commuter Tunnel, Vine Street Expressway, Schuylkill Expressway, I-95, Pennsylvania Turnpike, Philadelphia Cruise Terminal, Aker Philadelphia Shipyard, Philadelphia International Airport, Independence Mall, Wachovia Center, Citizens Bank Ballpark, and Lincoln Financial Field, Urban's professionals have contributed to making Philadelphia a world class city.

Urban is a strong supporter of sustainable design and management efforts which contribute to the creation of a harmonious built environment through the reduction of the use of non-renewable resources and minimization of overall environmental impact. We employ many LEED-AP credentialed professionals, offer in-house LEED training, and encourage environmental consciousness through efforts such as paper recycling, car-share programs, and pre-tax deductions for transit fares.

Urban's mission and goal is that we will strive to be our first choice through planning, engineering and management excellence. We are a growing organization, committed to being the first choice of our clients.

Please visit our website at [www.urbanengineers.com](http://www.urbanengineers.com) for more about our firm.

## **A TRANSPORTATION SOLUTION — CONFUSE YOUR CUSTOMERS?**

The AARP Bulletin (September) reports that a retirement community in Germany has come up with a novel solution to a unique transportation problem.

The Benrath Senior Center in Dusseldorf has erected a bus stop sign in front of its facility. No buses stop there, but apparently patients do. The Center has had its share of residents, especially those with Alzheimer's, who either consciously or otherwise decide to "escape" to return to their homes and families (which are often nonexistent). They usually head for the nearest bus stop to catch a ride to wherever.

The "phantom" bus stop sign usually attracts them. While they wait for the bus that will never come, they often forget that they wanted to leave. That's where the Center's staff tends to find and "corral" them before they are able to wander further away.

Other similar facilities in Germany are preparing to do the same.

Of course, those of us who ride SEPTA often find ourselves at a stop where it seems that the bus is taking an eternity to arrive...

## **WIDENER UNIVERSITY — FALL 2008 SEMINAR SERIES**

In an effort to track current trends in the construction industry, the Widener University School of Engineering graduate program is hosting a Seminar Series in Fall 2008 on **Building Materials and Construction Methods**.

On **Wednesday, November 12, 2008**, we will discuss set-in-place precast concrete walls. The primary application for precast walls is for building foundations. Building designers need to understand their design requirements, sequencing, and required site preparation in order to achieve project continuity.

You are invited to join us for lunch from 12:00–1:00 p.m. Please RSVP by October 31.

Register by e-mailing your intent to attend to [tferguson@mail.widener.edu](mailto:tferguson@mail.widener.edu) or contact **Roger J. Marino, P.E.**, Director of Graduate and Special Programs at (610) 499-1294 or [rjmarino@widener.edu](mailto:rjmarino@widener.edu)

Reservations are required and space is limited, so register now!

This event is sponsored by **Superior Walls, New Jersey**.

## OUR NEW ADDRESS IS COMING!

As reported last month, the ASCE, Phila. Section is in the process of changing the way we accept dinner reservations and mail, with the intent and goal that our methods of communication become more streamlined, efficient and easier to use.

We continue to have a relationship with the **Engineers' Club** and have decided to use its administrative functions for things such as mail, meeting reservations and similar activities. At the start of the new year, we will formally begin to use the Club's mailing address for our mail. We will also be closing the Hotline service and using the Club's telephone numbers for our contacts. These changes will be reflected in the December/January edition of *THE NEWS*.

Longer-range plans include online meeting reservation and payments, which, for the first time, will allow you to use a credit card and PayPal for this purpose.

We hope these changes make things easier for our members, and we welcome your comments, observations, input, etc.

## DECEMBER DINNER MEETING

*Continued from Page 1*

Phila. Section's Hotline, Website or Post Office Box. The cost of the meeting and dinner is \$40 per person in advance. 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.** Please note that there are **seven societies co-sponsoring this meeting**, so a crowd is expected.

**SPECIAL FEATURE: Drexel University Night.** The ASCE Student Chapter, Faculty and Alumni of the Department of Civil and Architectural Engineering of Drexel University will be honored at this meeting. All Faculty, Alumni and Students are cordially invited to attend and participate.

**Philadelphia International Airport (PHL)** is among the busiest airports in the United States and its traffic continues to grow despite economic conditions that have resulted in cutbacks at other facilities around the nation. PHL has the smallest acreage of the country's thirty busiest airports and cannot readily expand to meet projected future needs. Recent changes to accommodate increased traffic within its confines include the expansion of Runway 17-35 at the north end of the Airport and renovations and expansion of current terminals. Other suggested options include changes in approach and departure airspace, which have caused controversy throughout the region.

**Charles Isdell** was appointed as the Director of Aviation in 2000. He holds Bachelor's and Master's degrees from Temple University and has done post-graduate work at several institutions. In 2003, he was named Airport Director of the Year by "*Airport Revenue News*" magazine. During his tenure as Director, the Airport has greatly

## OCTOBER MEETING REPORT

Thursday, October 9, 2008

Loews Hotel, Center City Philadelphia

### *Sustainable Design*

*by Bob Wright*

The 2008-09 season started off with an assembly of over 70 attendees who were looking forward to an interesting presentation on **Sustainable Design**. They were also hopeful that the meeting would finish in time for them to catch the start of Game 1 of the Phillies' League Championship Series, which itself would get underway about an hour later. As things turned out, they would not be disappointed by either the presentation or the Phillies.

It was difficult to go to this meeting on a warm, nice early fall evening, compounded by the previously-mentioned baseball game, but the view from the 33rd floor of the Loews Hotel made up for it. **President Mark Tiger** opened the meeting with a few announcements and business items. **Younger Member Forum President Don Gusic** covered a few upcoming YMF events and then brought **YMF Technical Group Co-Chair Katie Berrillo** to the podium to introduce the speakers — **David Schoenhard**, Vice President, Wulff Associates, and **Robert Newton**, Senior Project Manager, Urwiler and Walter Inc.

### LEED?

Mr. Schoenhard began the presentation with an overview of LEED (Leadership in Energy and Environmental Design) and what it is all about. Projects can get LEED certification if they meet certain standards and guidelines. There are four levels of LEED certification — certified, silver, gold and platinum — and these are calculated based on a point system that evaluates six areas of concern. These areas include sustainable site characteristics, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation and design process.

LEED principles encourage efficient design and conservation/preservation efforts in projects. Mr. Schoenhard gave some examples, facts and figures on the building industry. These included that buildings consume over 70% of the energy used and 12% of the potable water in the United States. Energy efficiency, conservation, recycling, and stormwater retention/brown water reuse are only a few of the ideas that are taken into consideration in the current trends toward "green" (environmentally-friendly) buildings. Other relatively simple measures, such as turning lights to shine downward and thereby reduce light pollution in the sky, are incorporated into this thought process.

Mr. Schoenhard indicated that LEED certification is available to professionals who desire to specialize in this area. This relatively-new specialty area requires careful design and coordination, especially as local regulations and

increased passenger and flight numbers each year and has lured low-fare domestic carriers to the area, increasing competition and resulting in lower fares on all carriers.

codes continue to change.

### Applying LEED Methodology — Colorcom

After some background on LEED principles, Mr. Schoenhard gave a short history of the Colorcom site in Harleysville, Montgomery County. The company, which manufactures prescription drug capsules and colorings, engaged the Wulff firm for architecture, with Urwiler and Walter as the subconsultant for site engineering, to design a new building for its operations.

Mr. Newton described the site characteristics of the complex. It was a 26-acre parcel formerly occupied by farmland. The building, a two-story structure which, because of the proposed fill on the site would look like a single story, uses 5.5 acres of a 26-acre parcel for building. The remainder of the site would be utilized for environmental and mitigation purposes. A large portion of this area was reforested.

As mentioned, the complex was constructed on approximately 16 feet of fill to create slopes and grades for natural water flow where desired. Mr. Newton noted that the design team was able to obtain a zoning variance from the township to construct a reduced number of parking spaces, thereby reducing the amount of impervious parking lot paving, and provide space in reserve for the difference (48 cars).

Stormwater runoff from the site would be used to replenish the green roof. Mr. Newton explained that a small portion of the roof (only 2100 sf) was desired to be green, with the remainder designed with peaks to be available for solar panels at some future date. The green roof was of the intensive variety with soil depths up to 18 inches. While this made the green roof a relatively heavy structure, it could accommodate substantial plant materials. Tanks were installed to provide a 23,500-gallon capacity of retention. Site constraints meant that all runoff from the site could not be retained, and in some areas, particularly near the complex's data center in one corner of the building and near adjacent residential development, there was an intent to have water flow away to prevent flooding.

Several good questions were posed by the audience and the presenters ably responded.

President Tiger presented the ASCE, Phila. Section's speaker gift to each presenter in appreciation of their effort.

**In any moment of decision  
the best thing you can do is the  
right thing, the next best thing  
is the wrong thing, and the  
worst thing you can do  
is nothing.**

— *Theodore Roosevelt*

## RECRUITING

*Continued from Page 2*

activities. The more opportunities available the more likely you will land a new recruit.

**Provide an Ambassador Program:** Develop an Ambassador Program to engage the new hires with employees of similar age and get acquainted with the work environment. A non-supervisory ambassador should be able to answer all of the little questions like "How do I brew a new pot of coffee?" or "Do we get Flag Day off?"

**Offer staggered or flexible work schedules:** Some are early risers and some have kids to usher off to school. Allow your employees the flexibility to work 7am-4pm or 9am-6pm depending on their personal preferences.

**Offer internships during college:** Summer internships are attractive to college students looking to get an early start on career experience. They are also a great way to for new talent excited about the work and interested in coming back after graduation.

**Support Professional Development:** Younger employees are looking for an employer that is committed to supporting their development as a professional. Be sure to support involvement in professional organizations such as APWA [and ASCE - Ed.]

**Provide continuing educational reimbursement for qualified expenses:** Help pay for those master's degrees! Providing tuition reimbursement will attract younger workers and keep those high-level employees longer.

**Work with the local schools to train future employees:** The Public Works Department of Pinellas County and the APWA West Coast Branch has worked with the Pinellas County Schools to develop the Public Works Academy. The Academy provides training in front-line public works fields such as tradeworkers, inspectors and foremen. Through the program, students can earn a technical training completion certificate and become a vital part of the public works field.

### Tips for Keeping Good Talent

**Give them responsibility as soon as they start:** Individuals seeking a new job, whether right after college or changing jobs, are always eager to contribute in a meaningful way from the first minute on the job. Having a specific duty available which will offer personal responsibility will show a new recruit that they are needed in order for your organization to be successful.

**Never let them get bored:** The younger workforce is looking for a fast-paced, multi-tasking job that allows them to work on large variety of tasks and projects. Provide continuous opportunities in their profession to grow intellectually, experientially and professionally to keep them engaged and interested in their jobs.

**Look to the future; get a succession plan in place:** Younger workers want interesting work today, but also want to know what opportunities are available tomorrow. Have a succession plan in place, including steps to grow today's new talent into tomorrow's leaders and managers.

**Allow older workers to mentor younger workers:** Allowing younger workers to learn from the depth of experience and knowledge of others in the office can really help them out and provides the perfect opportunity to transfer knowledge in your organization.

**Let them know they are appreciated:** Everyone wants to feel appreciated and to be thanked for job well done. Positive feedback is especially important for younger workers. Rule of thumb: Be sure to provide about twice as much positive feedback for younger workers than older workers.

**Offer healthy living incentives:** In exchange for documented healthy living activities, provide help with prescription expenses, doctor's co-pays, and day care expenses. Providing allowances for gym memberships is also a great way to help keep your folks, and keep them healthy.

**Provide performance incentives:** Whether you provide performance bonuses, a paid day off, or just a pat on the back with a certificate, having this policy can be one of the easiest ways to retain employees. Be creative and offer tickets to the theme parks, movies, or 18 holes of golf!

**Cultivate a team work environment:** A relaxed and family-oriented work atmosphere provides a setting to build personal relationships among coworkers. It is easy to replace the source of a pay-check but it is hard to replace the source of friendship.

**Plan extra-curricular activities:** Providing extra-curricular activities allows for the employees to build personal relationships outside of a work setting. Extra-curricular activities, including team sports such as softball, kickball, volleyball and basketball, or group activities such as being part of a book club, allow employees to get to know one another. Even the in-office activities, such as monthly luncheons where anyone can pitch in \$5-\$7 and have food catered in to the office, will work. These extra activities allow employees to build their teamwork and communication skills which come to fruition on the job.

**Encourage employee outings:** Provide random or yearly activities for employees and their families. One organization provides free admission to a major zoo for the whole family once a year. Other examples can include fun activities for the group or department during work hours called a "day away" for team building exercises. Make people feel as part of a family because they work for you!

**Allow flexible work hours from week to week:** A work-life balance is important and younger workers want the ability to sometimes work extra hours Monday through Thursday and leave early Friday, or to work extra on Tuesday to take off time for a Wednesday activity. Having the ability to make up hours for things such as dentist appointments, doctor visits or school programs (or a visit with the principal!) instead of using vacation time allows for true stress-relieving and relaxing vacations.

## Other things you need to know

**Flexible Time:** For recruiting and retention, flexible work time was on the top on everyone's wish list. While some prefer staggered schedules such as the ability to work 9 to 6 to accommodate school drop-offs, everyone wants the ability to take off two hours for a dentist appointment and make up the time later in the week. Flex time is seen as a tool to provide work-life balance and the consensus is that it would be hard to go to an organization that does not allow flex time.

**College Recruitment:** All of the panelists were recruited into their fields straight out of college. Some were even recruited while in college.

**Recruiting Non-Engineers:** Chas Jordan, the only non-engineer in the group, spoke about the role that non-engineering staff, such as budget analysts and public administrators, have in public works and the importance of recruiting them. "Public works is the cornerstone of local government, providing services directly to the citizenry. Now with the economy in a downturn and government accountability being the key term for our citizens, it is time for public works departments to locate and recruit professionals outside the Engineering field. While having skilled Engineers is the backbone of most public works departments, the need for skilled financial analysts, managers, and public administrators is larger than ever."

**General Advice:** Be patient with younger workers. Young professionals understand that our more experienced mentors and supervisors may not be as technologically astute as we are, but also remember that we are used to working in a multi-tasking environment, and in so doing, are not trying to disrespect you if we pull out the laptop or cell phone in a meeting.

**Retention:** Overall, young professionals are looking for opportunities to grow professionally and personally at work. Opportunities for professional development, membership in professional organizations, social networking, and extra-curricular activities will attract and keep them in your department.

## MEMBERS IN THE NEWS

Michael Tantala was a co-author of an article entitled "Earthquake loss estimation for the New York City Metropolitan Region," which appeared in the October/November edition of *Soil Dynamics and Earthquake Engineering* (available for viewing at [www.elsevier.com](http://www.elsevier.com)). Mike is a project manager at Tantala Associates. The other co-authors are Guy Nordenson of Princeton University and George Deodatis and Klaus Jacob, both of Columbia University.

John Nawn has recently taken a position with Patrick Engineering as its Pennsylvania Transportation Unit Group Leader at the firm's office in Wayne. John was previously at GAI Consultants.

## 90 MILES AWAY BUT A WORLD OF DIFFERENCE...

Two recent articles (one in the *New York Times*, September 23 edition, the other in the *Associated Press*, September 30) remind us how everything is relative. We have our big projects, which, in the Big Apple, are small by comparison. The articles show this discrepancy.

The *Times* article focused on the now-under-construction Second Avenue subway tunnel. Last Spring three of our Technical Groups co-sponsored a meeting on "mega-projects" underway in New York, and this was one of them. The article was probably a revelation to many non-engineers (and maybe even a surprise to some of us in the field who don't deal with underground construction). It questioned whether the subway line, first envisioned in 1929 and desperately needed to relieve overcrowding on a parallel route, still makes sense.

To quote from it:

"Right now, the Metropolitan Transportation Authority is digging a subway tunnel down a short piece of Second Avenue. The current estimate is that the construction will cost about \$3,000 every minute of every day next year. Then the real money begins.

"Which raises the question: Is it really such a great idea to be digging subway tunnels in Manhattan?"

"Once this was a simple question. A century ago, only dirt and rocks were under the sidewalks. The subways built between 1900 and 1940 made the modern city grow, a system of human irrigation for skyscrapers and apartment buildings. Today, though, the underground is practically as crowded as the streets above.

"Running beneath every street is an invisible, honeycombed world of cables and conduits, pipes and vaults.

"To thread new subway tunnels through this tangle requires both brilliant Engineering and construction, and spectacular amounts of money."

It looks to the options available on the surface, such as light rail and bus rapid transit, as possible alternatives to the expensive subway line (\$1 billion per mile). The current price for the entire Second Avenue subway may be more than \$16 billion when all is said and done sometime in the latter part of the next decade. As noted, it was planned in 1929 and at the time its cost was envisioned to be \$500 million. The Depression put an end to the idea until the late 1960's when it was revisited and three different segments moved to construction in the early 1970's. New York City's fiscal crisis in 1975-76 halted work soon after it began.

Several groups are convinced that New York cannot afford to not build the line, given its many benefits. It would generate construction jobs and help the city through an economic downturn. It would help to reduce congestion, not only along its corridor on the east side of Manhattan, but in the Bronx and Brooklyn as well with the lines that will be tied into it. Transit usage is at levels not seen since World War II and the need for the line is still there.

Meanwhile, on the other end of the island, the World Trade Center rail station, a planned architectural masterpiece with a glass dome, a retractable skylight and a vast, naturally lit concourse, is currently hundreds of millions of dollars over budget and five years behind schedule.

The rail terminal would replace a Port Authority Trans-Hudson (PATH) rail hub that was underneath the Trade Center's twin towers and a temporary station that opened in 2003. The PATH trains take commuters between New York and New Jersey.

The design by Spanish architect **Santiago Calatrava** has won praise. It would include high-end shops and underground concourses connecting passengers to more than a dozen subway lines. Business leaders have said the terminal would attract corporate tenants to the five planned skyscrapers and the financial district.

The lapse in schedule has been attributed to failure to make timely decisions, delays in procuring contractors, constant design changes and the extra cost of paying staff for a longer-than-expected job. A report from last fall said a "lack of timely, proactive decisions by senior management" could cause further delays.

## NOVEMBER DINNER MEETING

*Continued from Page 1*

oversee dams (in Pennsylvania, the Department of Environmental Resources, in New Jersey, the Department of Environmental Protection) continually monitor these situations and look to Engineers to develop solutions for rehabilitation and addressing of potentially unsafe situations.

This meeting will focus on **Great Gorge Dam** in Sussex County, New Jersey, an earthen dam classified as a high hazard structure since its spillway was not adequate for the handling of a 100-year storm. The presentation will outline the problems and deficiencies found and the ways these were addressed.

**Moustafa A. Gouda, P.E., F.ASCE**, is a Senior Vice President of CMX of Manalapan, New Jersey. He is a licensed Professional Engineer in twelve states. He has amassed more than 40 years of professional experience and is widely recognized for his outstanding contributions to the Civil Engineering profession in general, and in the field of Geotechnical and Geoenvironmental Engineering in particular. He is noted for pioneering Brownfields redevelopment and for promoting the beneficial use of existing landfills. In addition to his professional work, he has also served as an adjunct professor at the New Jersey Institute of Technology, Rowan University, and Associate Professor at Mercer County College.

For his service to Engineering, Mr. Gouda has received many awards, including the ASCE, Phila. Section's Philadelphia Civil Engineer of the Year award in 1987 and a lifetime achievement award from the Delaware Valley Engineers Week Council in 2006.

He has been strongly involved with ASCE over the past 30 years and has served as President of the Philadelphia (1991-92) and New Jersey Sections and the Central Jersey Branch as well as on numerous District Council and National Committees. He remains very active in the New Jersey Section.

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