

the news



FIRST CLASS MAIL

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

PHILADELPHIA SECTION
AMERICAN SOCIETY OF CIVIL ENGINEERS
P. O. Box 58186, Philadelphia, PA 19102-8186

Vol. 65-4

Our 79th Year

January, 1993

JANUARY JOINT DINNER MEETING

Philadelphia Section and Reading Branch, American Society of Civil Engineers
Delaware Valley Section, American Society of Highway Engineers (ASHE)

WEDNESDAY, JANUARY 20, 1993

HOLIDAY INN • Goddard Boulevard, King of Prussia, PA
Cocktails – 5:30 p.m. Dinner – 6:30 p.m. Meeting – 7:30 p.m.

SUBJECT: BOSTON'S CENTRAL ARTERY/TUNNEL PROJECT

SPEAKER: ROBERT ALBEE, Deputy Project Director, Central Artery/Tunnel Project, Massachusetts Dept. of Public Works

The Central Artery/Tunnel Project in Boston is one of the largest Public Works projects in America. Within an approximate construction value of \$5 billion, the Central Artery/Tunnel is breaking new ground in highway public works mega-projects. Our speaker, Mr. Robert Albee, is the Deputy Director for the Central Artery/Tunnel project. As a Deputy Director for CA/t, Mr. Albee was responsible for the highway project's overall design management, and therefore directs the entire engineering effort for both the new central artery and the third harbor tunnel. He also directs all right-of-way and utility relocation activities.

The more recently begun \$5 billion artery mega-project (officially titled the Central Artery/Third Harbor Tunnel Project), is linked with, but far overshadows in scope and cost Boston's Central Artery North Area (CANA) Project to the north. CANA, at \$245 million and now in advanced construction stage, is an ambitious highway and interchange job in its own right. It will replace elevated expressways in Charlestown's City Square with two cut-and-cover tunnels connecting Interstate 93 with U.S. Route 1. The tunnels and reconfiguring local roads add five acres of open space and reunite Charlestown with its historic waterfront.

The \$5 billion Central Artery/Third Harbor Tunnel has two main objectives: replacing the 1.7 mile six-lane elevated Central Artery with an eight-lane tunnel; and constructing a third tunnel under Boston harbor to link Logan International Airport with South Boston and the Massachusetts Turnpike. The project is funded 90% from the Federal Highway Trust Fund and 10% from State gasoline taxes.

For the first three years of the project, Mr. Albee held a position of Central Artery/Tunnel Project Manager, responsible for all right-of-way and utility relocation. In this capacity, he managed all land acquisition and business relocation including some 5,000 utility structures within the project corridor. Mr. Albee worked as Civil Engineer for the City's Public Works Department for 23 years where he was responsible for all highway and bridge design as well as planning and programming of all contracts. In 1986, he left as Chief Engineer of the City of Boston and joined Massachusetts Department of Public Works Central Artery Tunnel

team. Mr. Albee is a graduate of Lowell Technological Institute, he is a member of the Board of Directors and Vice President of New England Chapter of the American Public Works Association. His discussion on the Central/Artery Project is sure to be quite informative to us all.

RESERVATIONS ARE REQUIRED. Please send your check for the number of plates required (@ \$19 or \$10 Student each) payable to: Philadelphia Section, ASCE • P.O. Box 58186 • Phila., PA 19102-8186. The deadline for reservations is **January 15, 1993.**

TECHNICAL GROUP ACTIVITIES

Geotechnical and Environmental/Water Resources Group

(Combined program for 1992-1993)
January Meeting

Date: **Tuesday, January 21, 1993, 7:00 p.m.**

Location: Hill Seminar Room, LeBow Engineering Center, Market & 31st Streets, Drexel University, Philadelphia, PA

SPEAKER: Gary R. Brown, P.E., President, RT Environmental Services, Inc.

SUBJECT: Case Study: Groundwater Recovery and Treatment at Superfund Site

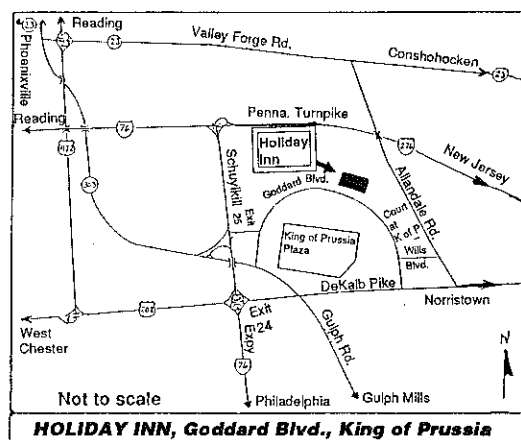
Many environmental cleanup projects, including Superfund (CERCLA) cases, are moving from the investigative stage into remediation implementation. The ASCE is pleased to present such an update report on a project that was presented as an investigation plan several years ago, for a groundwater contamination problem at a site in Montgomery County, PA. The work included hydrogeological investigation of a semi-karst limestone aquifer, and design and construction of a 150 gpm groundwater recovery and treatment plant. Compounds treated include benzene, toluene, xylene, ethylbenzene, dichlorophane, and other industrial solvents. In addition to the technical aspects, the presentation will address the project management and cost analysis.

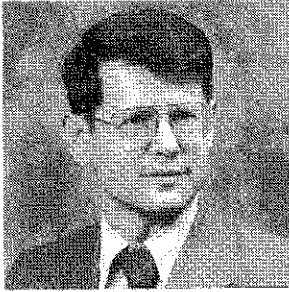
Upcoming Presentations:

February 16, 1993: ZIMPRO, Inc., "Biological powdered activated carbon technology applied to groundwater and industrial waste treatment."

March 16, 1993: Mr. Amin Ayubcha, Ecology & Environment, Inc., "Contaminated bedrock aquifer characterization."

For further information, please contact: **Dr. J.P. Martin**, Dept. of Civil & Arch. Engrg., Drexel University, Philadelphia, PA 19104, (215) 895-2363; or **Mr. Raymond A. Lees**, Groundwater Technology, Inc., 223 Wilmington-West Chester Pike, Chadds Ford, PA 19317, (215) 558-1730.





THE PRESIDENT'S MESSAGE

The arrival of the New Year makes us reflect on the year past and look forward with new enthusiasm and vigor to the new year just ushered in.

The past year at the Philadelphia Section has witnessed old traditions reintroduced and new ideas pursued. I consider the Section meetings to have been interesting, diverse in topic and current in subject. I am grateful for the response by the membership to my call to get involved as reflected in the ideas and participation by the membership in the Section meeting programs.

Looking forward to 1993 a full schedule of meetings is in place. I am, however, still looking for ideas on locations and activities for a family summer picnic with possibly the New Jersey branch. In addition, committee members are needed to put this event together.

The generous offer by our member **Bob Koerner** to conduct a seminar this spring and the enthusiastic chairing of that event by **Jonathan Cheng** is greatly appreciated.

I anticipate an active, interesting and exciting new year for the Philadelphia Section.

Wishing each and every member a Happy, Healthy, Prosperous and INVOLVED 1993.

Sincerely, Klaus Fuelleborn
President, Phila. Section, ASCE

MEMBERSHIP SURVEY

On behalf of the Board of Directors, I would like to thank all of the members who responded to our recent survey. Your Board is presently analyzing the findings and we plan to make these available to you in forthcoming Philadelphia Section issues of THE NEWS. Again, thank you for your support.

Sincerely,
George J. Stanley, P.E.
Membership Secretary

suggestions are welcome to help us improve all of our activities, programs and social events. Let's "get on the phone"... we're waiting to hear from you! **NOTE THE NUMBER: (215) 687-7741.**

ELECTRONIC MESSAGE SERVICE AND BULLETIN BOARD ON LINE

As announced, the Electronic Message Center and Bulletin Board for the Philadelphia Section, ASCE, is now in operation for the convenience of its members. This service was initially established to provide meeting and scheduling information to our members on a continuous basis, by calling **(215) 687-7741** any hour of any day.

An additional feature of this service is the capability for the caller to leave a recorded message. To date, the Message Center has been used relatively infrequently, with messages usually involving upcoming programs. It is hoped that members will use the service liberally, to ask questions or provide commentary on any subject concerning the Section or ASCE nationally. Your opinions and

AWARDS PROGRAM

Delaware Valley Chapter American Concrete Institute

The Delaware Valley Chapter of the American Concrete Institute (ACI) is pleased to announce its 2nd Annual Awards Competition. The purpose of the Competition is to recognize outstanding concrete projects. The previous Competition was a great success, honoring four Grand Prize winners and nine finalists. It is hoped that the Competition will continue to promote an appreciation of excellence in concrete design and construction among the industry and general public.

All submittals must be projects completed between January 1, 1988, and December 31, 1992. Projects located in the Chapter Counties of Philadelphia, Montgomery, Bucks, Delaware, Chester, Berks, Lehigh, Lancaster, Lebanon, Dauphin and Northampton in the Commonwealth of Pennsylvania or in the State of Delaware are eligible for the Competition. You are invited to submit nominations in the following categories:

1) Precast concrete systems buildings; 2) Cast-in-place frame construction; 3) Concrete bridges;

4) Architectural concrete/precast claddings; 5. Special Award: concrete structures 25 years or older

The jury will consist of professionals in the fields of architecture, construction and education. Awards will be judged for outstanding conception, originality, and applicability in design and construction.

Winners will be honored at an ACI banquet in late April 1993. The time and location of the banquet and a copy of the evening program will be forwarded to you at a later date.

To enter, please provide the information requested on the Awards Competition Prequalification form which may be obtained by contacting **David A. VanOcker, P.E.**, Chairman of the Awards Committee, c/o Christakis & Kachele, Inc., 6910 Ludlow St., Upper Darby, PA 19082; (215) 352-7676. You will be notified if your project prequalifies and sent a brochure detailing submission requirements.

We sincerely appreciate your interest in the program and look forward to your entry.

**PLACE YOUR
BUSINESS CARD AD
IN THE NEWS.
FOR INFO,
CONTACT
PRESIDENT FUELLEBORN
OR SECRETARY MIHOCKO.**

PHILA. SECTION, ASCE OFFICERS 1992-1993

PRESIDENT

Klaus K. Fuelleborn
PRESIDENT-ELECT

Robert M. Wright
VICE PRESIDENT

William T. Thomsen
SECRETARY

Drew S. Mihocko
ASSISTANT SECRETARY

Michael J. Carragher

TREASURER

Darin L. Gatti

MEMBERSHIP SECRETARY

George J. Stanley

DIRECTORS

Stephen G. Jochum David A. VanOcker

Joseph P. Martin Susan K. Lior

William G. Richards Richard P. Markwith, Jr.

Dennis Kohl (Reading Branch)

PAST PRESIDENTS

J. Richard Weggel

Francis J. Depman

Moustafa A. Gouda

Sandra May - President, Reading Branch

President - Klaus K. Fuelleborn

Pennoni Associates, Inc.

P.O. Box 2079

Doylestown, PA 18901

(215) 345-4591 or (215) 561-0460

Secretary - Drew S. Mihocko

Phila. Water Department

ARA Tower, 11th & Market Sts.

Philadelphia, PA 19107

(215) 592-6203

PUBLICATIONS COMMITTEE

Chairman and Editor of THE NEWS

Sidney Robin

Associate Editor - Joseph R. Syrnick

Staff Writers

Frank Russo Bill Richards Bob Wright

Publications Coordinator

Albert M. Tantala

SEND COPY TO:

Sidney Robin

64 Nancy Drive

Richboro, PA 18954

(215) 322-7464

**COPY DEADLINE FOR
FEBRUARY 1993 ISSUE
JANUARY 20, 1993**

NOVEMBER DINNER MEETING

November 18, 1992

Williamson's, City Line Ave.

The Reorganized Pennsylvania DER

By Bill Richards and Frank Russo, Staff Writers

A gratifying turnout of Philadelphia Section, ASCE members, guests, and Student Chapter, ASCE and faculty representatives of Villanova and Drexel Universities heard a talk and discussion at the November Dinner Meeting, on the timely subject: "The New Reorganized PA Department of Environmental Resources." The Principal Speaker of the evening was James W. Rue, Southeast Regional Director of the DER.

Villanova and Drexel Night

The meeting honored the ASCE Student Chapters, Alumni, and Faculties of the Civil Engineering Department of Villanova University; and the Civil and Architectural Engineering Department of Drexel University.

Drexel's Student Chapter Program Described

Philadelphia Section President Klaus K. Fuelleborn – who presided at the meeting – first introduced Dr. Claire Welty, Assistant Professor of Civil Engineering at Drexel, and who substituted for Student Chapter Faculty Advisor Dr. Joseph P. Martin. Dr. Welty described the Chapter's very active program, which included participation by both undergraduate and graduate Civil Engineering students. She introduced the Drexel ASCE Student Chapter officers: President, Maria Della Polla; Vice President, Michael Carnivale; Treasurer, Priyanti Fernando; Social Chairman, Thomas Brady; Membership Secretary, Dennis Zeveney; Recording Secretary, Christopher Crockett.

President Della Polla thanked the Phila. Section for its courtesies, and described the Chapter's ambitious and socially conscious program. In addition to the traditional competition in the annual concrete canoe race, Drexel is designing a handicapped access ramp for their Neumann Center, participating in "lend-a-hand" helping victims of Hurricane Andrew, promoting a blood drive on campus, raising funds by selling EIT study guides, and touring a hazardous waste treatment plant at DuPont. Marie's was an excellent example of a Civil Engineering student excited by her chosen profession.

Villanova's Student Chapter Activities

Dr. Lewis J. Mathers, Chairman of the Villanova Civil Engineering Department – and former ASCE Student Chapter Faculty Advisor for many years – expressed, on his own behalf and for Faculty Advisor, Mr. Falcone – who was unable to attend the meeting – his appreciation for the Section's invitation and courtesies in honoring the Student Chapter and C.E. Department. Dr. Mathers introduced the Villanova ASCE Student Chapter officers: President, Colleen McNerney; Vice President, Mike Flaherty; Treasurer, Lisa Garzoni; Secretary, Dan Daley; and Faculty member, Dr. Lee Christianson.

The Student Chapter's 1992-93 Agenda was reviewed by Treasurer Lisa Garzoni. The Student Chapter has 80 members and has initiated a monthly speakers program, with former graduates

describing their experiences since leaving Villanova. In return, the Chapter has been conducting an outreach program to neighboring middle schools, explaining what Civil Engineers do and study. They also helped the victims of Hurricane Andrew, and sent 15 students to Panama to work on Civil Engineering projects in that country. The Villanova and Drexel programs are excellent examples of how ASCE Student Chapters can help to further the goals of civil engineering.

The Fortright Mr. Rue Speaks

The Philadelphia Section, ASCE, was greeted quite unexpectedly when Mr. James W. Rue, the Southeast Regional Director of the Pennsylvania Department of Environmental Resources ascended to the podium and stated abruptly: "Hi, I'm from DER and I'm here to help you." This no doubt came as a surprise to many in the room who have numerous war stories about the permitting process in the Delaware Valley. Mr. Rue was Principal Speaker at the November Dinner Meeting, concerning the newly reorganized Pennsylvania Department of Environmental resources, and he had much valuable information to present to the audience. And he conveyed his message with disarming wit and charm.

The Department is undergoing a reorganization in response to the criticism that it is slow, unresponsive, inconsistent, and anti-development. Mr. Rue acknowledged that many of those criticisms are valid and were the genesis of the reorganization process. The reorganization process will be addressing three separate areas: Organizational Structure; Employee Relations; and Client Service.

Step 1: Organizational Structure

The DER will actively be consolidating many departments as a function of the actions that they perform. Since its formation in 1972 as a spin-off from the Department of Health and Human Services (DHHS) and other organizations, the DER has been a disjointed organization. The new bureau will have six major sub-groups consisting of Air Quality, Water Quality, Environmental Clean-Up, Solid Waste, Radiation Protection and Water Supply-Community Health. These groups will be decentralized from Harrisburg into the regions with the overall goal that service and action will be more timely and consistent.

Step 2: Employee Relations

Employee relations and performance are a major cause for concern among the directors of DER. The Conshohocken office has been experiencing a 30% vacancy rate due to absence, retirement, the high number of trainees processed through the office, and the fact that many employees use the office as a launching pad for careers in consulting. The office is actively recruiting new members but is still having a major problem filling the above mentioned voids. As a way to remedy these problems, the DER has enacted a variety of "cures."

- Employees are now presented with dual career paths. Instead of being forced into management after a finite time in the engineering or science disciplines, the DER is allowing employees to pursue their technical interests as upper-level technical personnel with salary and benefits consistent with those in managerial roles.

- Flex-time is also coming to DER. In order to accommodate the vastly different needs of its' employees, DER has instituted flexible start and end-of-day hours to provide a more comfortable schedule for the employees.

(Continued on page 4)

DECEMBER FIELD TRIP A Resounding Success

The fortunate sixty members and guests – the capacity limit – of the Philadelphia Section, ASCE, who participated in the December 9, 1992 Field Trip, observed at first hand active construction of one of Philadelphia's most advanced public facilities in many decades. It was a tour of the Pennsylvania Convention Center construction, the four-square block center-city Colossus now rising adjoining the historic Reading Terminal Building and Market, and well on schedule for completion in mid-1993.

Under the capable direction of Ted Garrison, Director of Construction for the Pennsylvania Convention Center Authority, the group was shown all major segments of the giant complex. Mr. Garrison explained the statistical characteristics, structural design and functions of the several meeting areas, the utility and mechanical apparatus, traffic flow and control, the central computer station, food distribution; and connections to and historical ramifications and constrictions of the massive rehabilitation program for the Reading Terminal Shed and Market.

Mr. Garrison is an affiliate of the firm of Morse Diesel/Temple Consulting/Construction Joint Venture. Exceptionally well-informed and articulate, he answered a myriad of questions about the Convention Center Complex and the Authority. The Pennsylvania Convention Center Authority is an independent agency, subject to Commonwealth regulations and must conform to all City of Philadelphia Zoning and Building Code laws and requirements.

The weather was ideal, and following the tour, the gathering enjoyed a delicious lunch at the Imperial Inn, near 10th and Race Streets, a few blocks from the construction site.

Those Philadelphia Section members and associates who missed the December 9th field trip to the Convention Center building site will have an opportunity to hear all about it at the Section's April 14, 1993 Joint Meeting with the Philadelphia Post, Society of American Military Engineers (SAME) at the Officers Club, Philadelphia Naval Base. The meeting will feature a Convention Center Update. So, whether or not you took part in the December tour, make sure to mark your calendar for the Joint Meeting with SAME, Wednesday, April 14, 1993 at the Officers Club. THE NEWS will publish full details of the meeting in the April, 1993 issue.

YOUNGER MEMBER FORUM NEWS

The Phila. Section's Younger Member Forum met on December 11, 1992 to establish bylaws for the Forum's operation. Establishing bylaws is the first step toward formal recognition by the Section and will allow the Younger Member Forum to elect its own representative to the Section's Board of Directors. It will also be an important accomplishment for the rejuvenation of the Younger Member Forum.

Other plans discussed at the meeting included starting a Speaker Series and High School Outreach program as well as some social events. Keep an eye on THE NEWS for future announcements or contact **Rich Markwith**, President of the Younger Member Forum at (215) 735-0832 for additional information.

November Dinner Meeting

(Continued from Page 3)

Step 3: Client Service

The final step in the process may have been the one that everyone was waiting for: recognition that something had to be done to make the permitting process smoother.

Mr. Rue acknowledged that the permitting process was a rocky road in many cases with the seemingly never ending list of questions from DER, variable requirements, lack of clear response, etc., and stated that one of his main goals was to give the client a clear understanding as to the basis for the answer to the permit request. DER should clearly define the issues early in the permit process so as to alleviate any questionable decisions along the way. Another goal of DER is to treat the client with respect and try to avoid the adversarial but sometimes inevitable screaming match. Finally, the DER wants to work with the community on issues of mutual concern. Mr. Rue rightfully believes that people really care about environmental issues and should be listened to with sincerity, compassion, and empathy.

These reorganizational steps are lofty indeed and will require a great deal of effort from all parties involved: the DER, clients and community organizations. Obviously, implementation of these changes will go a long way to improving client-server relationships in the Delaware Valley and the Commonwealth in general.

Questions and Answers Discussion

In an extensive question and answer period, Mr. Rue addressed the many inquiries and comments from members of the audience with candor and directness. He is to be congratulated for his forthrightness, knowledge and dedication to his very difficult job.

President Fuelleborn expressed the Section's appreciation to our distinguished speaker for his outstanding presentation.

And we quote...

"There is a destiny that makes us brothers. No one goes his way alone. What we send into the lives of others comes back into our own."

— Edwin Markham.

DREXEL ENVIRONMENTAL STUDIES SEMINARS

Drexel University, Department of Civil and Architectural Engineering, and The Environmental Studies Institute announce the Winter 1993 Seminar Series, as follows:

January 12, 1993: Mr. Michael J. Byle, Schnable Environmental Services, "Grouting and Ground Modification."

January 19, 1993: Dr. Sue Kilham, Department of Bioscience and Biotechnology, Drexel University, "Massive Extinctions Underway at Lake Victoria: A Limnological Puzzle."

January 26, 1993: Dr. Charles N. Haas, Betz Chair, Environmental Engineering, Drexel University, "The Risk of Illness from Drinking Water."

February 2, 1993: Dr. Mohammed Elgaaly, Department of Civil and Architectural Engineering, Drexel University, "Steel Plate Shear Walls for Earthquakes."

February 9, 1993: Dr. William L. Deutsch, Technical Director of Geotechnical Engineering, Roy F. Weston, "Deep Foundations: Piles and Caissons."

February 16, 1993: Dr. Chris Duffy, Dept. of Civil Engineering, Pennsylvania State University, "Non-linear Hydrologic Processes."

February 23, 1993: Dr. Le-Wu Lu, Dept. of Civil Engineering, Lehigh University, "Structural Design Lessons Learned from the Collapse of the Pino Suarez Towers in Mexico City."

March 2, 1993: Dr. Edward J. Bouwer, Professor of Environmental Engineering, Department of Geography and Environmental Engineering, Johns Hopkins University, "Bioremediation Capabilities and Limits."

March 9, 1993: Dr. Michael Gealt, Department of Bioscience and Biotechnology, Drexel University, "Gene Transfer in Wastewater."

March 16, 1993: Dr. J. Richard Weggel, Department of Civil and Architectural Engineering, Drexel University, "In-Plane Air Flow Through Nonwoven Geotextiles."

All sessions will be held on Tuesday's, 4:00 – 5:00 p.m., in Room 341 Curtis Hall (Building 3), 32nd and Chestnut Sts., Philadelphia, PA 19104.

For further information, please contact **Prof. Claire Welty**, at Drexel University, Department of Civil and Architectural Engineering, 32nd and Chestnut Sts., Philadelphia, PA 19104, phone (215) 895-2281; FAX (215) 895-2267; E-Mail: WELTYC@DUVM.OCS.DREXEL.EDU.



NATIONAL TIMBER PILING COUNCIL, INC.[®]
350 Theodore Fremd Avenue, Rye, New York 10580
(914) 925-2568
FAX (914) 925-2555

James S. Graham, P.E.
Staff Engineer



Cooperating with the American Wood Preservers Institute

KOERNER TO CONDUCT SEMINAR

Philadelphia Section, ASCE Past President (1975-1976) **Dr. Robert M. Koerner**, Professor of Civil Engineering, Drexel University, will conduct a Seminar/Workshop on: "Geosynthetic Aspects of Landfill Liners and Closures" on **Friday, March 12, 1993**, Drexel's Stein Auditorium, Nesbitt Building, N.E. Cor. 33rd and Market Streets, Philadelphia.

This one-day Seminar/Workshop on liners and covers for waste containment systems focuses on selection, design and testing of the various individual components used to make successful waste disposal containment facilities. The focus is one the various geosynthetic components such as: • geomembranes, geonets, geotextiles, geogrids, geopipe, and related materials like geosynthetic clay liners and geosynthetic erosion control systems. Natural soils will be described for comparison, such as compacted clay liners and gravel/sand leachate collection drains and filters, but the major emphasis of the program is clearly on geosynthetics.

The initial 45 min. is oriented so as to recognize that legislation plays a large role in the conceptual design of the facility and allows the designer to counterpoint geosynthetic used in liners and covers is then given along with selected durability issues, i.e., chemical resistance and lifetime prediction.

Salient features of the design and testing geosynthetics are then presented with illustrations for each type of geosynthetic. Included are geomembranes on side slopes and undergoing differential settlement, geonets as secondary leachate collection systems, geotextiles as filters and protection components, geogrids for veneer stability and landfill expansions, geopipe for leachate removal systems. The assemblage of these components into a complete system will then be described and will involve the use of geosynthetic clay liners and geosynthetic erosion control materials. The entire presentation is generic, i.e., trade name will not be mentioned and only discussed if questions are directed to a specific material.

Several case histories where problems have occurred will be offered so as to gain perspective with regard to the integration of design and construction practices. Construction related CQC and CQA issues and trends will be discussed.

Future projections for the waste containment industry will be offered and a summary of the current state-of-the-art will conclude the program.

Registration for the Seminar/Workshop will be at 8:00 a.m., Friday, March 12, 1993 – and the session will be from 8:30 a.m. to 4:30 p.m. A nominal charge for participants, which will include texts, materials and lunch, will be announced in the February, 1993 issue of THE NEWS. Parking arrangements are in process, and also will be announced in THE NEWS.

For further full information and advance registration for the Seminar/Workshop, please contact **Dr. Jonathan Cheng** at (215) 895-2996; or **Dr. J. Richard Weggel** at (215) 895-2355 – both of the Department of Civil and Architectural Engineering, Drexel University, 32nd and Chestnut Streets, Philadelphia, PA 19104.

AIA, ASCE TO LAUNCH VIDEOTELECONFERENCE ON MARKETING ENVIRON- MENTAL SERVICES

One of the hottest marketing topics for civil engineering these days – expanding environmental expertise to clients on a local, national and global scale – will be the focus of three national videoteleconferences set for **January 14, March 4, and April 23, 1993**. Sponsored by the American Institute of Architects (AIA), the conferences feature full participation and co-sponsorship by the American Society of Civil Engineers (ASCE).

“**Building Connections: Linking Economy and Ecology for New Prosperity**,” the overall theme of the ambitious videoteleconference series, seeks to demonstrate that both the environment and the economy can prosper when architects, civil engineers, other design and construction professionals, and business leaders learn to use new design and construction practices that turn environmentally responsible architecture and engineering into fiscally sound business. The series will provide participants with a sound technical knowledge of environmentally conscious design and building, as well as a solid understanding of how to market such skills. The three four-hour video programs, “Energy/Resource Efficiencies,” “Healthy Buildings/Materials” and “Urban Ecology” are each scheduled to be simultaneously telecast to nearly 150 cities throughout the country.

“**Energy/Resource Efficiencies**,” set for **January 14, 1993**, will present examples of the 21st century, environmentally designed building. Proven concepts and technical skills for energy, water and materials efficiency will be spotlighted by designers and technical experts as well.

How a building, its occupants and its environmental interact will be the focus of “**Healthy Buildings/Materials**,” slated for **March 11, 1993**. The operative theme of this conference is “**Building Ecology**,” a comprehensive systems approach that takes into account everything from indoor air quality to the difference between salvaged, conventional, green and recycled materials.

“**Urban Ecology**,” scheduled for **April 22, 1993**, will provide civil engineers with new methods to integrate energy, waste treatment, land use, and infrastructure. Energy, materials, community needs and natural processes factors will undergo a thorough review.

To register for the “**Building Connections**” videoteleconferences, contact the ASCE Continuing Education Dept. at 1-800-548-ASCE (toll-free).

DID YOU KNOW THIS ABOUT ASCE?

- Has more than 110,000 members, including 10,000 international members. Membership is comprised of individual professional engineers rather than companies or organizations.
- Was founded in 1852 and is the oldest national engineering society in the U.S.

ASCE UNVEILS A NEW COLLECTION

U.S. bridge lovers take heart. American civil engineering’s finest hour – its legacy of bridge-building – has been captured in a beautiful, bold, new publication: *Landmark American Bridges*.

A labor of love undertaken by Historic American Engineering Record (HAER) Chief Eric DeLony and published by the American Society of Civil Engineers (ASCE), *Landmark American Bridges* is a pictorial collection of 87 engineering marvels spread out over 160 pages. On display are the technological workhorses of U.S. commerce and communities, spanning space in a physical sense and time in a historical sense.

DeLony, an industrial archaeologist by trade, believes that U.S. bridges were collaborations born from engineering, industry and entrepreneurialism. *Landmark American Bridges* offers testament to that theory. For engineers, architects, historians and bridge-lovers alike, this could well be the definitive pictorial treatise on U.S. bridge-building. Through words, drawings and photographs, DeLony shows us the underrated significance of American bridges. The beauty of *Landmark American Bridges* is its illustrative elements. Over two years DeLony assembled more than 100 historical photos (35 in color) and detailed isometric drawings from the HAER collection. These were complemented by a useful timeline of world influences on U.S. bridge-building. The result is a page-by-page chronicle of famous (the Brooklyn Bridge) and not-so-famous (Iowa’s Eureka Wrought-Iron Bridge) U.S. structures, the engineered unions of artistry and utility.

Landmark American Bridges provides stunning examples of engineering creativity and testaments to our technological prowess as a nation. With every chapter, every drawing and every photograph, readers will gain a new appreciation for U.S. bridges, what they made possible, and their unique contributions to the American experience.

Landmark American Bridges (ISBN #0-87262-857-4) can be purchased by contacting ASCE Publications at 1-800-548-ASCE. The member price is \$30; the non-member price is \$40.

- Is the world’s largest publisher of civil engineering information, publishing about 62,500 pages in 1991, including 20 technical journals, *Civil Engineering* magazine, and *ASCE News*.
- Has 25 technical divisions and councils to foster the development and advancement of the science and practice of engineering.
- Maintains the Civil Engineering Research Foundation to focus national attention and resources on the research needs of the civil engineering profession.
- Develops and produces industry design standards for adoption in building codes.
- Has four professional divisions concerned with internal and external professional matters that affect the practice of civil engineering.
- Sponsors a program of education conferences, forums and continuing education courses.

C.E.C.P.?

Educators, counselors, and students in grades one through Community College are very receptive to properly cast Civil Engineering Communication Programs which recognize and address specific needs. The Philadelphia Section of ASCE wants to respond to that need through the work of CECP, the Civil Engineering Class Projects committee, which aims to act as a catalyst in this area and as resource for prospective speakers.

In the context of “class-room visits,” can you isolate significant elements of Civil Engineering needs for a specific age group? In any one of these typical class rooms, Civil Engineering is neither a “primary topic” nor a “primary career goal” for the majority of the students in that room. So, why do we say that there is a receptive audience? We could point to our experience but there also are other answers.

As one of these students, teachers or counselors, how could you not recognize an added dimension of relevance of a “properly integrated presentation or project” on hazardous waste in a biology class or the connection between the Eiffel Tower and the Statue of Liberty in a history class or public projects and the decaying infra-structure in any number of other classes, not necessarily limited only to science and math?

The response to such Civil Engineering needs is limited only by the availability of effectively supported efforts of individuals deeply involved in Civil Engineering and very much committed to this work. On the last page of this issue (and future issues) of THE NEWS, there is an invitation for you to join CECP. The address and phone numbers may also be used to let us know of your needs or be listed as “a friend of the committee” which will place you on the committee’s mailing list for some special meetings. We’re hoping to hear from you!

Sincerely, **Stephen G. Jochum**, Chairman,
C.E.C.P. Committee, Philadelphia Section, ASCE.

FREDRIC L. PLOTNICK, ESQ., P.E.
CONSTRUCTION CONSULTANT
FOCUSING UPON LEGAL AND TECHNICAL ASPECTS
OF CONSTRUCTION MANAGEMENT

MEMBER OF THE BAR
REG. PROF. ENGINEER
PA, NJ, FL

BENSON MANOR • SUITE #117
JENKINTOWN, PA 19046-3501
215-885-3733 609-487-0093
TELEX 6502152819 MCI

CONSTRUCTION COST CONSULTANTS
HEAVY • INDUSTRIAL • INSTITUTIONAL

Construction Claim Resolutions

Estimating • Quantity Surveys • Reports
Conceptual Engineering • Claims Cost Verification
Schedules • Construction Managers

J. S. MULLER ENGINEERING

Registered Professional Engineers Since 1975
350 S. Main St. Suite 109 Doylestown, Pa. 18901 215-348-4428

**INVITE YOUR
ASSOCIATES TO
ALL ASCE MEETINGS
WITH YOU!**

**JOIN THE SECTION'S
TECHNICAL GROUPS**

Liaison

William Thomsen
Urban Engineers, Inc.
300 N. 3rd St.
Phila., PA 19106
(215) 922-8080

Younger Member Forum

Richard P. Markwith, President
Fredric R. Harris, Inc.
260 S. Broad St., Suite 720
Phila., PA 19102
(215) 735-0832

Construction

Fredric L. Plotnick, Chairman
Empromac
P.O. Box 11264
Elkins Park, PA 19117-0264
(215) 843-7313

Structural

Richard Roberts, Chairman
Pennoni Associates, Inc.
1600 Callowhill St.
Phila., PA 19130
(215) 561-0460

Transportation & Urban Development

Gregory Yates, Chairman
Urban Engineers, Inc.
330 N. Third St.
Philadelphia, PA 19106
(215) 922-8080

Engineering Management

Alvin Zion, Chairman
Hill International, Inc.
1 Levitt Parkway
Willingboro, NJ 08046
(215) 937-1930 or (215) 977-7750

Geotechnical

Dr. Joseph P. Martin, Chairman
Drexel University
Civil Engineering Dept.
32nd & Chestnut Sts.
Philadelphia, PA 19104
(215) 895-2363

Water Resources &

Environmental Engineering

Raymond A. Lees, Chairman
Groundwater Technology, Inc.
223 Wilmington-West Chester Pike
Chadds Ford, PA 19317
(215) 558-1730

*Join the Section's
CIVIL ENGINEERING CLASS
PROJECTS COMMITTEE
for Grades 1 thru 12 & Community Colleges*

Stephen G. Jochum, Chairman

Temple University
Department of Civil Engineering
12th and Norris Streets
Philadelphia, PA 19122
(215) 787-7802 or Section's Electronic
Message Service (215) 687-7741

IMPORTANT! 1992-1993 MEETING NOTICES

MARK YOUR CALENDAR for the dates of the remaining Philadelphia Section, ASCE monthly meetings and social functions, as follows: (Check each issue of coming editions of THE NEWS for details, possible date and topic changes.)

ALL DINNER MEETINGS

Cocktails – 5:30 p.m. Dinner – 6:30 p.m. Meeting – 7:30 p.m.

STUDENTS: All dinner and/or luncheon charges one-half price. If you prefer, you are welcome to attend all meetings after dinner or luncheon, at no charge.

Thursday, February 25, 1993 – Dinner Meeting – Harbor League Club, Camden
Joint Meeting with South Jersey Branch ASCE
Topic to be announced
Speaker: **Dr. Robert Koerner**, Honorary Member, ASCE
Temple University Night

Sunday, March 21, 1993 – Spouse and Family Event – Camden Aquarium Tour

Wednesday, April 14, 1993 – Dinner Meeting – Officers Club, Naval Base
Joint Meeting with SAME
Subject: Pennsylvania Convention Center Update
Speaker: **Harry Perks**
Widener University Night

Sunday Evening, May 16, 1993 – Annual Spring Dinner Dance

Spring/Summer Picnic – Phila./Reading Branch & South Jersey Sections Informal Family-Oriented Picnic

O'DONNELL & NACCARATO

DONNA LUDDOVICO
MARKETING COORDINATOR

BOURSE BUILDING 10TH FLOOR
21 SOUTH 5TH STREET
PHILADELPHIA, PA 19106-2524
215-925-3788 / FAX 215-627-1051



Manufacturers
Representative
for Miraflores-Nicolson
-infiltrator

GEOTEXTILES & GEOTECHNICAL PRODUCTS:

- Soil Reinforcement • Drainage •
- Sedimentation Control • Erosion Control •
- Pond Lining & Underlining •
- Revetment Systems

Geo-solutions For Geo-problems

P.O. Box 3714 • Cherry Hill, NJ 08034 • (609) 785-4844

LIPPINCOTT

Moustafa A. Gouda, P.E.
Principal

**LIPPINCOTT ENGINEERING
ASSOCIATES, INC.**

The Watchcase Office Complex
One Pavilion Avenue
Riverside, NJ 08075
609-461-1100 800-421-0046
FAX 609-461-3166

Civil, Survey, Structural,
Environmental and Geotechnical
Engineering



TEMPLE UNIVERSITY
A Commonwealth University

College of Engineering, Computer
Sciences, & Architecture

Dr. Frederick C. Schmitt, P.E.
Chair, Civil Engineering Department

12th & Norris Sts.
Philadelphia, PA 19122 (215) 787-7831



WILLIAM R. SCHUTT
President

800-523-6692
215-348-2974
FAX: 215-348-2699

MATCOR, INC.
P.O. Box 687
Doylstown, PA 18901

Cathodic Protection Systems and Technical Services



Irving M. Fogel, P.E.

FOGEL & ASSOCIATES, INC.

15 E. 26th STREET, SUITE 1700, NEW YORK, NY 10010-1505
CONSULTING ENGINEERS • PROJECT MANAGERS
(212) 686-6500 FAX: (212) 684-1487

**Pennoni
Associates Inc.**
Consulting Engineers

1600 Callowhill St.
Philadelphia, PA
215-561-0460

M. Salah Abdelhamid, Ph.D., P.E.
Vice President - Manager
Design & Applied Technology Division



Roy F. Weston, Inc.
Weston Way
West Chester, Pennsylvania 19380
215-430-3074



Susan K. Lior, P.E.
President

Six Lantern Lane
Media, Pennsylvania 19063
215/891-9315
215/891-1949 (FAX)

**PE REVIEW
WORKSHOPS
FOR
CIVIL
ENGINEERING**

As preparation for taking the CIVIL-SANITARY-STRUCTURAL Professional Engineering (PE) Examination, the Civil Engineering Department at Temple University is offering Saturday workshops for PEE Examination Applicants. **The workshops are designed to supplement other preparation** which may include well-selected graduate or undergraduate courses, self study, and more extensive PE Review Courses. The workshops are considered appropriate as an early start and as a final effort.

Within each year, three different PE workshops are now scheduled 8:30am to 1:30pm for the last Saturday of **January, March, and September**. Depending on their specific needs, participants may enroll in one, two or all three workshops.

Each of the three workshops addresses a well selected third of the total subject area likely to appear in the CIVIL-SANITARY-STRUCTURAL Examination. Each workshop includes a testing exercise with criteria-specific feed back and direct access to at least three presenters with highly specialized qualifications in diverse areas of Civil Engineering.

Dr. Frederick Higgins, Dr. Frederick Schmitt, and Professor William Thomsen are the core faculty involved with these workshops, which are organized and coordinated by Professor Stephen G. Jochum.

Additional information may be obtained by contacting the Civil Engineering Department at (215) 787-7814 (FAX 787-6936) or by writing to

**Professor Stephen G. Jochum, P.E.
Department of Civil Engineering
Temple University (084-53)
Philadelphia PA 19122.**

For 1993, the fee is \$88 per workshop. Notes are included. Other references are recommended but optional.

1993 dates are 1/30, 3/27, and 9/25.

For each workshop, **registration should be finalized ten or more days in advance of the scheduled date of the workshop**. A full refund will be made if there is a need to withdraw - for any reason - ten or more days prior to the scheduled date of a workshop. Temple University also reserves the right to cancel a workshop and provide a full refund.

There is a conscious effort on our part to keep to a necessary minimum such costs (and corresponding added charges) as publicity and advertising. To disseminate the needed information, we consider it appropriate to rely on simple newsletter announcements, bulletin boards in your organization, and personal discussions between individuals who appreciate the value of engineering and registration.

We trust that **EMPLOYERS AND SUPERVISORS** can and will identify qualified individuals who merit their encouragement, support, and financial assistance. We also trust that **unregistered but QUALIFIED INDIVIDUALS** can and will keep each other informed on effective and efficient ways of preparing to **BECOME A REGISTERED AND LICENSED PROFESSIONAL ENGINEER**.

NOTE THE CHANGED LOCATION:
ENGINEERING BUILDING
12TH & NORRIS STREETS

----- cut and mail -----

REGISTRATION FORM for the Civil/Sanitary/Structural Engineering

PE WORKSHOP(S)

scheduled for the following date(s): _____

Name: _____

Bus. Tel. _____

Address: _____

Res. Tel. _____

Amount Enclosed: _____

Check Number: _____

Please make check payable to "Temple University" and mail this registration form and check to **Professor Stephen G. Jochum, P.E., Department of Civil Engineering, Temple University (084-53), Philadelphia PA 19122.**