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PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS

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Vol. 73-5

Our 87th Year

February 2001

PLEASE NOTE NEW ELECTRONIC MESSAGE HOTLINE ABOVE

FEBRUARY JOINT DINNER MEETING

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

THURSDAY, FEBRUARY 15, 2001

Harbor League Club • Hudson Square, Camden, NJ • (See Location Map Below)
Cocktails - 6:00 p.m. • Dinner - 7:00 p.m. • Meeting - 8:00 p.m.

SUBJECT: The Delaware River Waterfront Development

SPEAKER: Robert A. Box, P.E., Director of Engineering and Chief Engineer, Delaware River Port Authority

SPECIAL FEATURE: TEMPLE UNIVERSITY NIGHT

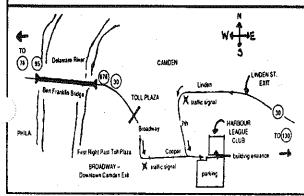
The ASCE Student Chapter, Alumni and Faculty of the Civil Engineering Department of Temple University will be honored at this meeting. All Students, Faculty, and Alumni are cordially invited.

RESERVATIONS MUST BE SUBMITTED BY FRIDAY, FEBRUARY 9, 2001. Please send your check for the number of attendees @ \$30 per member or guest, \$10 ASCE Student members, payable to: Phila. Section, ASCE, P.O. Box 58186, Phila. PA 19102-8186 or call the Electronic Message Center; 1-800-461-4190 (24 hours a day).

In recent years, the nature of the Delaware River waterfront has dramatically changed. Once known primarily for shipping, the waterfront is increasingly becoming an attraction for a variety of other uses. Technology shifts have resulted in a decrease in the amount of freight handled by the Ports of Philadelphia and Camden, as containerization, roll-on/roll-off cargo, "FastShip", and other modern methods are becoming more prevalent. These methods have made more land available for other purposes, among them residential and recreational, and this trend appears to be a continuing one.

Other, non-directly port-related activities, such as the privatization of the Philadelphia Naval Shipyard, the sale of Conrail, the anticipated commercial development of Penns Landing, and consideration of transit facilities on both the Pennsylvania and New Jersey sides of the river, have also helped to set the stage for the future transformation of the waterfront. The presentation will cover all recent developments along the Delaware River on both the Camden and the Philadelphia sides. These include the New Jersey State Aquarium, the minor league baseball stadium in Camden, and the River Tram.

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Directions to Harbor League Club

From Center City Philadelphia:

After crossing the Ben Franklin Bridge, go through the toll booth at the extreme right. The second street after the toll booth is Broadway. Turn right onto Broadway. Proceed to the first traffic light and turn left onto Cooper Street. Continue on Cooper Street in the right lane straight into the Harbour League parking lot. Look for the highrise building with the water tower.

TECHNICAL GROUP ACTIVITIESEngineering Management Group

March Luncheon Meeting

DATE: Thursday, March 8, 2001, 12 Noon LOCATION: Municipal Service Building, 16th Floor, Conference Room C, 15th & JFK Blvd., Philadelphia, PA

SUBJECT: "The Alameda Corridor Project" SPEAKER: James K. Kessler, P.E., Project Manager, HNTB/Thomas K. Dyer, Inc.

COST: \$10.00. Students \$5.00

Mr. Kessler will discuss the Alameda Corridor Project, a \$2.4 billion project that will provide improved rail access along the 20-mile long corridor that connects the Ports of Los Angeles and Long Beach to the rail yards east of downtown Los Angeles. The Ports combined move about 25% of the waterborne cargo in the United States and the quantity is growing significantly each year.

Mr. Kessler will present the scope, schedules, construction methods and sequences, and coordination aspects with railroads, public agencies, utilities and municipalities. He will also outline the design-build process using examples of issues the parties have resolved in this manner.

For reservations, contact Dennis MacBride, P.E. at (215) 925-0296 by Thursday, March 1, 2001.

Delaware Valley Geo-Institute (DVGI) February Meeting

DATE: Tuesday, February 20, 2001

Cocktails 5:30 PM • Dinner 6:30 PM • Presentation 7:15 PM

LOCATION: Holiday Inn, King of Prussia, PA SUBJECT: "Stability Assessment of Large Landfill Failures"

SPEAKER: Robert M. Koerner, Ph.D., H.L. Bowman Professor of Civil Engineering, Drexel University

COST: \$27.00. Students \$14.00

Content information received too late for publication. For full details and reservations, contact Lee Stanish, Schnabel Foundation Co., Tel: (610) 277-2950; Fax: (610) 277-7932



THE PRESIDENT'S MESSAGE

Welcome to our February edition. This is always an exciting month for engineers in the Delaware Valley because we celebrate Engineers' Week. The events this year start with the Proclamation Luncheon on Friday, February 16th and end with the Engineers' Week Banquet on Saturday, February 24th. Students, teachers and engineers will be honored at a variety of events, which celebrate and promote engineering. This year we proudly welcome Pasquale ("Pat") A. Dougherty, P.E., P.L.S., a Philadelphia Section member, as the 2001 Engineer of the Year.

ASCE continues to play a strong role in the Engineers' Week activities. One activity that I have enjoyed participating in over the past few years is the Future Cities Competition. This is a competition among Middle School students from regional schools and was held last month at Drexel University. The students were required to design a city using the SimCity computer program, build a model, write an essay and make an oral presentation. It is exciting to see the enthusiasm and to hear the innovative ideas of our future engineers. If you've haven't participated in this in the past, I highly recommend it.

Enhance your experience in engineering by planning to attend some of the Engineers' Week events outlined in the brochure and by attending all or some of our remaining Section and Technical Group meetings.

Sincerely, Thomas J. Branigan, P.E. President, Phila. Section, ASCE

Technical Group Activities

(Continued from Page 1)

Structures Group Short Course

The Phila. Section, ASCE Structures Group is offering a short course on Design Codes and software applications using LRFD method. The course will be offered by experienced Structural Engineers, currently engaged in structural design in PA, NJ and DE and in the teaching of LRFD techniques. At the end of the second day, engineers will be able to design by computer buildings and bridges using LRFD.

DATES: Thursdays, March 15 & March 22, 2001; TIME: 1:00 PM to 6:30 PM, with 30 minutes coffee break

SUBJECT: Steel Building Design as per AISC and Steel and Prestressed Bridges Design as per AASHTO, PennDOT and NJDOT Codes. Use of standard PennDOT software will be demonstrated.

COURSE INSTRUCTORS: M. Ali Khan, Ph.D., P.E., Manager Bridge Design, STV, Inc. Trenton & Adjunct Professor, Drexel University, Philadelphia and M. ElGaaly, D.Sc., P.E., Professor, Civil Engineering Department, Drexel University, Philadelphia

LOCATION: Drexel University, Dept. of Civil and Architectural Engineering, Room 4-275, (2nd Floor Conference Room), Main Building 32nd & Chestnut Sts., Phila., PA

COST including handouts, lecture notes, snacks and refreshments will be \$275 per person, \$250 for ASCE members.

CONTACT Ali Khan, Chairman Structures Group, (609) 530-9618, for details and reservations.

THINK SPRING!

Mark your calendar and reserve your sweetie for the Section's Annual Social Dinner Dance at Sugarloaf Conference Center — Friday, May 4, 2001. Details in a later issue of THE NEWS.

February Joint Dinner Meeting

(Continued from Page 1)

Robert Box is Director of Engineering and Chief Engineer with the Delaware River Port Authority, the agency that owns and operates the Walt Whitman, Benjamin Franklin, Betsy Ross and Commodore Barry Bridges, and the PATCO High Speed Line. The Delaware River Port Authority is also involved with economic development and port related projects in the southeastern Pennsylvania and southern New Jersey.

Mr. Box has held the position of Director of Engineering and Chief Engineer since 1991 and has been with the Port Authority since 1985. He is a Registered Professional Engineer in both Pennsylvania and New Jersey. He graduated from Drexel University with a B.S. Degree in Civil Engineering and has a Masters Degree in Civil Engineering from Villanova. He has studied at Harvard University's John F. Kennedy School of Government and has participated in the Certified Public Manager Program that is administered by the State of New Jersey. He oversees a staff of approximately 25 professional and support personnel and is responsible for developing and implementing the Capital and Major Maintenance Programs for the Authority's facilities. The Authority's Capital Program for 2000 is in excess of \$200 Million.

2001 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 11, 2001 at the Fort Washington Expo Center. 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 Phila. Section President-Elect, Chris L. Rood, P.E., at (856) 461-9565, ext. 102 or via email at roode@dmjm.com.

Humphrey Scholarships

(Continued from Page 5)

Spring Social Dinner Dance on May 4, 2001 to receive their awards and will be asked to participate in future ASCE educational outreach activities. Submission Deadline:

Submissions must be made to the ASCE Student Chapter Faculty Advisor by Wednesday, March 21, 2001. Faculty Advisors must submit their nominations to Chris L. Rood, P.E., President-Elect of the Phila. Section at DMJM+HARRIS, Zurbrugg Hospital, 1 Hospital Plaza, Riverside, NJ 08075 by Friday, March 30, 2001. The President-Elect will forward all submissions to the Section's Scholarship Committee.

PHILA. SECTION, ASCE OFFICERS 2000-2001

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> COPY DEADLINE FOR MARCH 2001 ISSUE FEBRUARY 10, 2001

YOUNGER MEMBER FORUM NEWS

by Christopher Menna, Past President & Forum Editor

Younger Member Forum

Carol Martsolf, President

Parsons Brinckerhoff; 1528 Walnut Street, Suite 400, Philadelphia, PA 19102; (215) 790-2319

The Younger Member Forum (YMF) current membership includes college students, recent graduates, and young Registered Professional Engineers who are 35 years of age and under. The objectives of this 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 Kristen Bowman, Flow Science, Inc. at kbowman@flowscience.com or at (215) 361-6065.

Past Accomplishments

Thank you to everyone who attended the Fifth Annual YMF Winter Social December 5, 2000. The event was a huge success, with over sixty people attending including students from Temple, Drexel, and Rowan Universities, and professionals from most local engineering companies. Guests enjoyed socializing and a delicious buffet of pizzas, lasagna, and appetizers. There were many new faces at this event whom we hope to see again soon.

The YMF would like to give special thanks to our Winter Social raffle sponsors: Parsons Brinckerhoff, Inc., with two \$25.00 gift certificates to Barnes and Noble; Urban Engineers, Inc. with a \$75.00 gift certificate to Plough & and the Stars; and URS Corp., with a \$50.00 gift certificate to the King of Prussia Mall. Thanks to their generous donations, we were able to raise approximately \$180.00 for the 50/50 raffle! Gift certificates were won by Abhay Thorat and Tammy Wisco of Parsons Brinckerhoff, and by Jeannette Quirus of McCormick Taylor Associates. The big winner of the 50/50 raffle was Joyce Paulukonis of URS Corp. The proceeds from the 50/50 raffle (\$90.00) were donated to the Fund for the Waterworks to aid in restoration of the historic Fairmount Water Works. The Philadelphia YMF is proud to support their efforts and we look forward to visiting when the restoration is complete. Last, but not least, thank you to the Winter Social committee who did an awesome job planning this fun event: Kristen Bowman, Jennifer Diec, Parsons Brinckerhoff; Michael McAtee, Urban Engineers; and John Quirus, Parsons Brinckerhoff. See you there next year!

The 2001 Northeast Regional Younger Member Council (NERYMC) took place on January 19-21, 2001 in Portland, Maine. The NERYMC Conference provides Younger Members from each Zone I Section and Branch the opportunity to meet and exchange ideas as well as discuss issues that are close to the hearts of young engineers and ASCE as a whole. Scheduling NERYMC in conjunction with the Zone I Management and Leadership Conference (ZMLC) enables younger mem-

JANUARY JOINT DINNER MEETING

January 10, 2001

Holiday Inn, King of Prussia, PA

"The Greater Cairo Metro System - Line 2"

By Bob Wright, Staff Writer

As usual, the Annual Joint Dinner Meeting of the Philadelphia Section, ASCE, and the Delaware Valley Section, American Society of Highway Engineers (ASHE), attracted a large turnout of members and guests of the participating Societies, students and alumni and faculty of the featured University. As usual, too, there was an excellent presentation of a major and important engineering project, of particular interest to Civil Engineers. The subject was "The Greater Cairo"

bers to have a direct voice to the ASCE National leaders and interact with those who are making the decisions about ASCE's future. In addition, NERYMC seeks to provide YMF leadership training to those in attendance. Our YMF sent a record of eight members this year. We sincerely thank the Section for making our travels possible. Rest assured, our voices were heard!

Upcoming Events

The YMF is continuing to announce the arrival of our first-ever ASCE YMF T-shirt featuring the winning logo designed by **Tom Brady** of URS. They can be purchased at all YMF events for only \$10.00 or contact **Jennifer Diec** at (215) 790-2312 or through email at diec@pbworld.com

During 2001 Engineers' Week, the YMF will participate in the Fifth Annual Critical Issues Facing Young Engineers Seminar. This meeting is tentatively scheduled for Tuesday, February 20th, 2001 and will be held in the basement of Peco Energy's Building. This well attended activity is jointly sponsored by the Philadelphia Section and by the Engineers' Club of Philadelphia. The featured speaker and/or panel are to be determined. Admission, food, and refreshments will be free. For more information, please contact Carol Martsolf at martsolf@pbworld.com.

Member Spotlight

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

Pablo Mancheno, E.I.T. is a Structural Engineer employed by Jacobs Engineering Group located in Conshohocken, PA. In this position, he is responsible for structural and civil engineering services. Currently, Pablo is involved in the engineering design of a new office-lab building for a major pharmaceutical company in Eastern Pennsylvania. At the same time, he is also involved in the design and retrofit of existing structures in industrial plants for clients in the chemical, petrochemical, and pharmaceutical industries along the East Coast. In addition, Pablo has just been appointed team leader for the retrofit of a chemical plant in Pennsylvania. He is a part-time student and is three-quarters completed for his MBA degree at Drexel University. Pablo is very active in the South Jersey YMF, serving as Vice-President and as one of the contacts for that group.

Metro System – Line 2." Principal speaker was David Campo, P.E., Chief Geotechnical Engineer, Greater Cairo Wastewater Project, Parsons Brinckerhoff, Inc., Consulting Engineers.

The meeting was capably co-chaired by **Brian Stover**, **P.E.**, President of the Delaware Valley Section, ASHE: and **Thomas J. Branigan**, **P.E.**, President of the Philadelphia Section, ASCE. (Mr. Stover, an active Philadelphia Section, ASCE member and past Director, is currently Chairman of the Section's Construction Technical Group.)

Drexel University Night - Dr. Martin Reviews C.E. Agenda

The meeting honored the ASCE Student Chapter, Alumni and Faculty of the Civil and Architectural Department of Drexel University. Dr. Joseph P. Martin, Head of the Department of Civil and Architectural Engineering, and Faculty Advisor (with Faculty Professor Dr. Jonathan Cheng) of Drexel's ASCE Student Chapter, thanked his hosts for their courtesies. He paid tribute to the Adjunct Professors, Teaching Assistants, and the Board of Trustees for their active roles in cementing close ties between Drexel and the Civil Engineering community as a whole. He proudly proclaims that both the President of the University, Dr. Constantine Papadakis, and the Chairman of the Board of Trustees, "Chuck" Pennoni, P.E., are Civil Engineers. (Chuck is a Past President of the Phila. Section, ASCE, and the National Society, ASCE.) A sizable contingent of Drexel ASCE Student Chapter members, Civil Engineering alumni, and faculty in the audience were acknowledged by Dr. Martin. He also especially praised the Civil Engineering Class of 1988 for their Drexel involvement and accomplishments. He described the construction of new and expansion projects in the Department, particularly in laboratory facilities; and reviewed the ambitious current curricula and those in planning stages for the future.

Student Chapter President Speaks

Drexel ASCE Student Chapter President, Laura McLaughlin also thanked her hosts for their recognition and tributes. She introduced her fellow officers: Vice President, Hugh Quigley; Recording Secretary, Oscar Merida; Membership Secretary, Heather Eland; Treasurer, Matt Van Rensler. Faculty members, Dr. Robert Koerner, Dr. Joseph Whartman and Dr. Dean Kaiser were also introduced.

Laura described the long-established Drexel Co-op program and how the ASCE Student Chapter strives to make all of its activities available to class-attending students as well as on-the-job Co-op students. The Chapter boasts more than fifty members. It holds regular meetings, invites well-known and respected authorities on subjects of interest to Civil Engineering students, to speak at the meetings. Pursuing a prime objective of bridg-

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January Joint Dinner Meeting

(Continued from Page 3)

ing the gap between scholastic, social and athletic accomplishments, the Chapter sponsors many functions involving community participation and scholastic endeavors. It takes part enthusiastically in the Annual Reinforced Concrete Canoe Race, and Model Steel Bridge Design and Construction Competitions. It is extremely proud of its high standing in the National Concrete Canoe Race Competition – 10th nationally. The Drexel ASCE Student Chapter is to be congratulated as it fulfills its busy and progressive agenda.

Allen Cadden Introduces Mr. Campo

After announcements by ASHE President Stover and ASCE President Branigan of events of interest to the respective Societies, Allen W. Cadden, P.E., Liaison of the Phila. Section's Delaware Valley Geo Institute (DVGI). who made the arrangements for this excellent meeting, presented the Principal Speaker, David Campo, P.E., Chief Geotechnical Engineer, Greater Cairo Wastewater Project, Parsons Brinckerhoff, Inc., Consulting Engineers, which is part of the Greater Cairo Metro Consultants Consortium which is directing this monumental design/build effort.

Overview and Cairo's Giant Effort

Mr. Campo presented a brief overview of the project. Cairo is home to over 15 million people and its population density is extremely high. This leads to some of the worst traffic congestion conditions in the world. To improve mobility around the city, the \$7 billion rail rapid transit system was proposed and undertaken. Work was begun in 1986 and the system, which consists of three lines, is expected to be fully operational by 2003. Its scale and magnitude have led to its being called the "fourth pyramid", and in terms of large public works efforts in the entire world, it is only surpassed by Boston's "Big Dig" (currently at the \$12 billion cost range).

Metro System Description

The Mètro system itself is primarily gradeseparated, with considerable underground portions. The three lines are designed to criss-cross the city and meet at the center of the urban area. Line 1, the initial undertaking, is 20 km in length, with much of its trackage at grade, except for the central city subway portions. Thus, it was the simplest to construct. Its construction started in 1986 and was completed in 1993.

Line 2, the focus of the presentation, taps the most densely populated areas of Cairo, and is mainly bored tunnel construction. It is 16 km in length. All sections of this line were started in 1993. Phase 1A was completed in 1996, Phase 1B in 1997, and Phase 2A this past August. Phase 2B, the most difficult to construct, is anticipated to be finished in 2002.

The third line, Line 3, is currently in the planning stages.

Line 2 Focus Described

Mr. Campo returned the focus to Line 2. Construction has been handled mainly by joint ventures of French contractors. Ground conditions for

STREETS DEPARTMENT HONORED

Congratulations to the Philadelphia Streets Department for recently receiving the ASCE/CYM (Committee on Younger Members) Employer Recognition Award. The Award is a plaque and will be formally presented at the Annual Spring Social Dinner Dance at Sugarloaf, May 4, 2001. The Streets Department is the third organization within our Section to receive this award. Previous award winners include Schnabel Engineers, Inc. of West Chester and Frederic R. Harris, Inc. of Philadelphia.

Younger Member enthusiasm, meaningful involvement and growth are the keys to ASCE's future. As a means of fostering individual Younger Member participation in Society activities, the ASCE Committee on Younger Members (CYM) has developed a program to help Sections and Branches recognize those employers who encourage their young engineers to get involved. Special recognition will go to those organizations that exhibit exemplary support evidenced by efforts such as: Providing a model for involvement

tunneling were less than ideal, with coarse to fine sand being encountered almost everywhere, as expected, and shallow groundwater found more than anticipated. Most stations, which consist of three levels below ground (the station itself, a mezzanine above it, and a mechanical room atop that), were primarily constructed using slurry walls. Campo highlighted the various problems encountered especially given the limited site access, side clearances, and maintenance of surface traffic requirements.

Computerized grouting systems were employed to control mixes, injection penetration, and other considerations. Jet grouting was also utilized, although care had to be exercised around existing underground utility lines. Additionally, some initial problems were caused by pressure imbalances. This was averted through pressure balances created by flooding station excavations during the grouting procedure.

The Tunneling Operations

Mr. Campo outlined the tunneling construction. Two tunnel-boring machines (TBM's) were used, with slurry plants attached to place the mix as they traveled. End sections and shafts of the tunnels were located in outlying areas of the line where wider construction sites could be located. The tunnel beneath the Ismailia Canal waterway proved to be especially tricky, and placement of a cofferdam system was implemented to keep water out of the area of the excavation.

Cut and cover construction was used where possible. In several instances, the tunnel passed beneath multi-story residential buildings which had to be underpinned. Jet grouting was successfully utilized to provide the underpinning structure. Building settlement was kept within 5 mm at all locations.

At the conclusion of Mr. Campo's outstanding talk, Presidents Stover and Branigan presented him Gifts of Appreciation on behalf of their respective organizations.

through company-wide participation in Local, Regional and National ASCE activities; allowing young engineers time off to attend ASCE meetings and seminars; supporting and encouraging technical and professional growth; encouraging young engineers to prepare articles for publication in ASCE professional and technical journals; and assisting in the payment of Local and National dues.

Younger Members who want their organizations to be considered for recognition should fill out a questionnaire, which describes their organizations' level of compliance with these guidelines. Sections and Branches, with the help of local Younger Member Groups, should forward meritorious submittals to CYM. After its review, CYM will prepare a list of exemplary employers, by Section and Branch. This list will be submitted for publication in Civil Engineering magazine or ASCE News. The annual deadline is August 1st, 2001 for the following year. Interested YMF members who want to nominate their firms, please contact Carol Martsolf, Parsons Brinckerhoff at martsolf@pbworld.com.

PHILA. SECTION, ASCE HUMPHREY FUND SCHOLARSHIPS

The Phila. Section, ASCE, is pleased to announce the availability of its 2001 scholarships. It is anticipated that up to three scholarships, each worth up to \$5,000, will be awarded at our Annual Spring Social Dinner Dance, on Friday, May 4, 2001, at the Sugarloaf Conference Center, Chestnut Hill, PA. 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.

Type of Award:

We recognize that the various colleges have differences in the regulations as to scholarships, stipends and awards. It is the Phila. 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.

Eligibility Requirements:

- The student must be matriculating in a full-time Civil Engineering or Architectural Engineering program in one of the six colleges in the Phila. Section region (Drexel University, University of Pennsylvania, Swarthmore College, Temple University, Villanova University or Widener University).
- The student must be an active participant in the ASCE Student Chapter.
- 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: (Continued on Page 5)

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For more than 50 years, employee-owned PARSONS POWER GROUP has been building an enviable reputation through technical competence and a genuine concern for the needs of customers. Our business attitude, along with our enviable performance record, has rewarded us with dozens of significant new domestic and international challenges. We've secured a great future for ourselves, and we're actively seeking qualified engineers for our READING, PA, CHATTANOOGA, TN and HOUSTON, TX offices. Here's your chance to join a recognized global leader as:



Licensed Structural Engineer

Requires a BSCE, 10+ years of experience in industrial and/or power plant engineering; computer proficiency; familiarity with SBC, UBC, BOCA, AISC, and ACI codes/standards; and PE license (SE license in CA preferred). Must be willing to relocated to PA, and travel occasionally both domestically and internationally.

Civil Engineer

A BS in Civil Engineering; 1-3 years of experience in storm water management, development of erosion/sedimentation controls plans, land development and highway design; an EIT; and strong computer skills are necessary. Microstation and INROADS experience is a plus.



Civil/Geotechnical Engineer

A BSCE (MS preferred) with 3-5 years of experience in the preparation of geotechnical reports for site development, slope stability analyses, settlement analyses, deep foundations, and environmental projects; strong computer skills; and a PE or scheduled to take the PE exam in the near future are essential. Microstation and INROADS experience is a plus.

Civil Designer

Requires a thorough knowledge of Microstation/AutoCad14 and good math skills plus the ability to prepare 3-D topographic plans from survey data for use in preparing site grading and drainage plans. Experience with INROADS is desired.

Competitive salaries and benefits are offered. Resumes may be submitted to: Parsons Power Group Inc., Attn: Human Resources/ASCE0201PH, 2675 Morgantown Rd., Reading, PA 19607. FAX: 610-855-2186. E-MAIL: karin.thielking@parsons.com Parsons is proud to be an equal opportunity employer m/f/d/v.

- An essay, limited to 1,000 words, on "How Can Civil Engineers Enhance Their Profession?" is required.
- The Candidate's name, GPA and/or class rank and an address/telephone number where he or she 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 ASCE Student Chapter's Faculty Advisor will evaluate all their candidates and select two for submission to the Phila. 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

(Continued on Page 2)

ACI SPRING 2001 CONVENTION & SEMINAR

The American Concrete Institute (ACI) announces its Spring 2001 Convention, to be held in Philadelphia, March 25-30, 2001 at the Marriot Hotel, including a one-day seminar on Controlled Low-Strength Materials (CLSM). The Convention theme is "Constructibility: From Concept to Completion."

CLSM Seminar

The Controlled Low-Strength Materials (CLSM) Seminar on March 30, 2001 as part of the ACI Convention, is designed for attendees to gain a better understanding of CLSM (also known as Flowable Fill); how and where they can be used; how they are tested, produced and can be specified. Through this Seminar, attendees will learn the properties of CLSM in plastic, in-service and hardened states; face construction issues including mixing, transporting and quality control.

Registration fee includes publications, continental breakfast, lunch and refreshment breaks. For full information and registration procedures for the Convention and CLSM Seminar, contact Monica Schultes, P.E., Executive Director, Mid-Atlantic Precast Association, P.O. Box 831, Hockessin, DE 19707; tel (800) 453-4447: fax (302) 235-1139.

WIDENER C.E. LAB NAMED IN MEMORY OF DEPT. CHAIRMAN

Widener University's new Civil Engineering laboratory building will bear the name of the former Chairman of the Civil Engineering Department. The **Dr. Charles L. Bartholomew Civil Engineering Lab** will house a concrete and structures testing lab, a soils mechanics lab and a classroom lecture area.

Bartholomew died in July 2000 while awaiting a heart transplant. A member of the Widener faculty since 1987, he served as Professor of Civil Engineering, Director of Research for the School of Engineering and Chairman of the Civil Engineering Department. Bartholomew also served as a consultant for Delaware County, Westinghouse Electric Corp. and the Army Corps of Engineers. In 1994, he was recognized as Engineer of the Year by the Pennsylvania Society of Professional Engineers.

Prior to joining Widener, Bartholomew taught engineering courses at the University of Colorado at Denver, Sangamon State University in Springfield, Ill., and Bradley University in Peoria, Ill. He also served as President and Chief Engineer of Charles Bartholomew Engineering, Inc., for 16 years. Bartholomew earned his bachelor's degree

(Continued on Page 6)

JOIN THE SECTION'S **TECHNICAL GROUPS**

Construction

Brian Stover, P.E., Chairman Urban Engineers, Inc. 530 Wainut St., 14th Floor Philadelphia, PA 19106 (215) 922-8080

Structural

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IMPORTANT! 2000-2001 MEETING NOTICES

MARK YOUR CALENDAR! for the dates of the Philadelphia Section, ASCE monthly meetings and social functions, 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 charges one-half price. If you prefer, you are welcome to attend all meetings after dinner or luncheon, at no charge.

Thursday, March 22, 2001

Joint Dinner Meeting with Delaware Valley Chapter, American Concrete Institute (ACI) • Williamson's City Line • "The Regional Performing Arts Center" . George Shaeffer, P.E., Perks-Reutter. • Swarthmore College Night • Life Members Night

Thursday, April 19, 2001 (Note change in date)

Joint Dinner Meeting with Phila. Chapter, Pennsylvania Society of Professional Engineers (PSPE) • Williamson's City Line, Philadelphia, PA • "Coastal Engineering Challenges" • Corps of Engineers, Media. • Widener University Night • Past Presidents Night

Friday, May 4, 2001

Annual Spring Social Dinner Dance and Awards Presentations • Sugarloaf Conference Center, Chestnut Hill, PA • Details to be announced.

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Widener Lab

(Continued from Page 5)

from the University of Kansas at Lawrence and his master's and doctorate from the University of Illinois at Urbana-Champaign.

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