

the news



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AMERICAN SOCIETY OF CIVIL ENGINEERS
1317 Spruce Street, Philadelphia, PA 19107

VOL. 58 - 5

OUR 73rd YEAR

February, 1986

FEBRUARY DINNER MEETING

Philadelphia Section, American Society of Civil Engineers

TUESDAY, FEBRUARY 11, 1986

Engineer's Club, 1317 Spruce Street, Philadelphia

Cocktails — 5:30 P.M. Dinner — 6:30 P.M. Meeting — 7:30 P.M.

Joint Meeting with Philadelphia Chapter, American Institute of Architects

SUBJECT:

DESIGN PROFESSIONALS' SALARIES AND FEES — ARE WE OUR OWN WORST ENEMIES?

SPEAKERS:

CHARLES HOUGH, AIA, Hayes & Hough, Architects; **IRWIN CANTOR, P.E.**, Office of Irwin Cantor, New York, Structural Engineer; **RUSS KEELER, P.E.**, Keeler Associates, Philadelphia, PA, Mechanical and Electrical Engineers; and **AL McCLYMONT, P.E.**, McClymont Engineers, Geotechnical Engineers.

(Continued on page 2)

MARCH DINNER MEETING

Philadelphia Section, American Society of Civil Engineers

TUESDAY, MARCH 11, 1986

Engineers' Club, 1317 Spruce Street, Philadelphia

Cocktails — 5:30 P.M. Dinner — 6:30 P.M. Meeting — 7:30 P.M.

Joint Meeting with the **ASCE Women's Auxiliary**

SUBJECT:

THE REBIRTH OF COMMERCIALIZED CITY CENTERS — THE ROUSE COMPANY'S FESTIVAL MALLS.

SPEAKER:

ROBERT M. CAMERON, Senior Vice President and Group Development Director, The Rouse Company, Columbia, MD

Mr. Cameron is no stranger to Philadelphia, having headed the Rouse team that successfully planned, designed and built the Gallery at Market Street East. However, Rouse's highly successful Gallery shopping center would not qualify as a festival mall, as do qualify their centers at Baltimore's Harbor Place and New York City's Fulton Fish Market, to mention just two of several phenomenally successful festival malls.

In a very entertaining, graphic manner, Mr. Cameron will discuss this highly successful concept and its engineering aspects.

SPECIAL FEATURE:

WIDENER UNIVERSITY AND SPRING GARDEN COLLEGE NIGHT

Please call Mr. deKovacs at the Engineers' Club immediately (215 735-5234), for reservations. Dinner Meal Charge.

ASCE Member—\$10.00 Non-Member—\$11.00 Students—\$4.00

STUDENTS — Note that your Dinner Charge is LESS than one-half price. Plan to attend for Dinner or Meeting after Dinner.

TECHNICAL GROUP ACTIVITIES

Geotechnical Group

February Meeting

Date: **WEDNESDAY, February 19, 1986**

(Note Change in Date From Previously Announced)

Engineers Club, Philadelphia
Meeting at 7:00 p.m.

Subject: *"Flexible Membrane Liners in Waste Management Practice"*

Speaker: **Robert M. Koerner, Ph.D., P.E.**, Professor of Civil Engineering, Drexel University

Program Host: **Moustafa A. Gouda, P.E.**, Chairman, Geotechnical Group
(609) 461-1239

Since the original legislation in 1982, which was further augmented in 1985, flexible membrane liners (FMLs) have experienced outstanding growth. The legislation, aimed at hazardous waste containment, has had a direct impact on all other types of industrial and municipal waste disposal as well.

Of prime concern for selection of the FML is its chemical compatibility which is usually assessed via EPA test method 9090. Beyond this, the design of such facilities becomes heavily geotechnically oriented. Cross sections, leachate collection, leak detection, side slopes, cover soils, runoff lengths and anchor trenches are all capable of being designed using modified geotechnical principles. Together with an overview of these concepts, details of installations will be presented. This includes seams, seam inspection, connections and appurtenances.

For more information and reservations, please contact: **Moustafa A. Gouda**, Chairman, Geotechnical Group, Lippincott Engineering Associates, Inc., 501 Burlington Ave., Delanco, NJ 08075. Phone: (609) 461-1239.

**GEOTECHNICAL GROUP
Program — 1985-1986**

(Continued on page 2)

IMPORTANT!! 1985 - 1986 MEETING NOTICES

THE NEWS is now being mailed at Non-Profit Organization Bulk Rate. While this promises postage savings to the Section, *it also runs the risk of much longer delivery time from your local post office to your mail box.* Therefore, *please refer to your 1985-1986 Section Meeting Program Schedule* and mark your calendar for all meetings and social functions. Listed below is a summary of remaining meeting dates.

All Dinner Meetings —

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

Tuesday, April 8, 1986 —

Joint Dinner Meeting with Philadelphia Post,
Society of Military Engineers

Officers Club, U.S. Naval Base Philadelphia

Topic: *Meeting the Engineering Challenges of a Modern Navy*

Speaker: *Commodore Richard F. Butts, USN, Commander U.S. Naval Base Philadelphia*

Saturday Evening, May 3, 1986

Annual Spring Social

The Bourse Building, 5th and Market Sts., Phila., PA 19106

(Continued from page 1)

FEBRUARY MEETING

This program will focus on a nagging problem that affects all design professionals; namely, their salaries and design fees. While we all believe that we are worth more, too many of our colleagues have a tendency to underprice both themselves and their work.

On the other hand, several Governmental agencies have become increasingly price conscious. Indeed, several of them are requiring design professionals, in effect, to bid against one another for professional commissions. Design fees, therefore, have been subject to price competition.

Can a price be placed on creativity; can a price be placed on safety? Should the design professional consider himself or herself much like a doctor or lawyer, who almost never finds himself in price competition with his colleagues?

What are the consequences of continuing along in this way? Is there anything we can do about it? Are we our worst enemies?

These and other issues will be dealt with at this important meeting. All design professionals who ever considered themselves underpaid should certainly attend this vital meeting.

SPECIAL FEATURE:

TEMPLE UNIVERSITY AND UNIVERSITY OF PENNSYLVANIA NIGHT

The ASCE Student Chapters, Faculty and Alumni of the Civil Engineering Departments of Temple University and the University of Pennsylvania will be honored at this meeting. All students, faculty and alumni are cordially invited to attend.

GEOTECHNICAL GROUP Program — 1985-1986

(Continued from page 1)

For our 1985-1986 program, we have selected the topic of *"Geotechnical Consideration In Construction Over Lands Occupied By Sanitary Landfills"* as the subject of our lecture series.

Several sanitary landfills exist on valuable real estate property. In recent years, some developers have proposed to develop industrial and commercial buildings over properties occupied by sanitary landfills. Several problems associated with such development is geotechnical in nature and can be mitigated using special geotechnical techniques. Our lecture series will deal with the problems and how they can be solved. We trust that you will find this subject quite interesting and that you will attend all our monthly meetings.

Tentatively, we propose the following remaining programs:

March 18, 1986

"Methane Gas Protection Systems" — Richard E. Mabry, P.E., Consulting Engineer.

April 15, 1986

"Consolidation Settlement of Sanitary Landfills".

May 20, 1986

"Stabilization of Fill & Soil Masses Using Lime and Flyash".

As in the past, lectures will be held at the Engineers' Club in Philadelphia. (See THE NEWS future issues for more details of meetings.)

6:30-7:00 p.m. Cheese and Wine will be served (except January)

7:00-8:30 p.m. Lecture

We look forward to seeing you. Please feel free to pass this memo to others who may be interested.

For more information, please contact:
Mustafa A. Gouda, Chairman,
Geotechnical Group

IMPORTANT PARKING PRIVILEGE NOTICE

Philadelphia Section, ASCE members are entitled to special parking rates after 5:00 P.M. for meetings at the Engineers' Club, through an arrangement between the Club and the East side of Broad Street, North of Pine Street. Have your parking ticket validated at the front desk of the Engineers' Club and your parking fee will be the special reduced price of \$2.50.

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FEBRUARY 10, 1986**

TECHNICAL GROUP ACTIVITIES

ENGINEERING MANAGEMENT

For our Spring 1986 program, we have selected the topic of **Computers in Engineering and Management** as the subject of our program. In addition to providing timely speakers on issues in computers, it is also our objective to organize one or more computer users groups which will allow our members to interface with one another on hardware, software, and topics of interest.

Computer Users Group

The Engineering Management Committee has been asked on many occasions what we can provide of interest on computers and their applications. Several areas of interest we have identified are:

- Engineering Software (what is available and how others are using it)
- Selecting hardware and peripherals
- Getting everything to "work"
- Communications/Electronic data transfer
- Swapping of software developed by engineers for their own use
- Computer resources in the Delaware Valley

We decided that one of the best ways to provide this kind of information and service was to organize and foster an Engineering Computer Users Group.

Some of you may have joined other users groups, or heard about the benefits provided or the interest sparked by these groups. It's about time that we organized one dedicated to the needs of civil engineers.

All you need to join this group is an interest in computer technology. Come to the organizational meeting in February and we'll take it from there. Attendees of this meeting will be surveyed on their computer uses, needs, and interest. See you there.

The following speakers and programs have been scheduled:

Tuesday, February 18 Meeting

"Project Management and the Personal Computer — Solving Project Problems"

Speaker: James P. Lewis, Lewis Information Systems

Mr. Lewis has had extensive experience in providing training for the technical manager and has worked with clients in the selection of both computer hardware and software. Mr. Lewis has demonstrated that a "PC" loaded with the right software packages can calculate and display answers to involved project problems which previously required hours of work by hand. This meeting will provide the opportunity to gain an understanding of how planning, scheduling, and control problems can be solved with project management competence and computer know-how.

Computer Users Group Organizational Meeting will follow speaker.

March Meeting (Date to be Announced)

"Decisions To Be Made In Hardware Selection — What to look for in making your selection"

April Meeting (Date to be Announced)

"Public Domain Software — Getting your hands on low or no cost software"

Our programs will be held at the Engineers Club, Philadelphia. The Schedule is:

- 5:00-6:00 PM Wine and Cheese
- 6:00-7:00 PM Program
- 7:00- Remaining Wine and Cheese

For more information, please contact:
Madeline Salomon, Committee Secretary
 Peer Systems, Inc.
 1218 Chestnut Street
 Suite 1004
 Philadelphia, PA 19107
 (215) 925-3196

READING BRANCH PROGRAM SCHEDULE

February 19, 1986 —
Topic: PA Dept. of Environmental Resources

Speaker: N.J. DeBenedictus
Place: Green Valley Country Club

March 20, 1986 —

Topic: Hydro Barge
Speaker: K. Broome
Place: Sheraton Inn, Reading

April 17, 1986 —
Topic: PennDOT Bridges and Transportation

Speaker: Dr. David VanHorn
Place: Pottstown Area

May 15, 1986 —

Topic: Global Satellite Survey
Speaker: G. Cuppels
Place: To be announced

All Philadelphia Section members are cordially invited to attend Reading Branch meetings. For full information and reservations, kindly contact Reading Branch President **Dan Biss**, c/o Gilbert/Commonwealth, Inc., P.O. Box 1498, Reading, PA 19603, (215) 775-2600, Ext. 2416; or Reading Branch newsletter Editor **Walt Sawruck**, c/o Reading Branch, ASCE, P.O. Box 102, Shillington, PA 19607, (215) 775-2600, ext. 3474.

ITEMS OF INTEREST

Peer Systems, Inc. Announces the move to its new offices at Suite 1004, 1218 Chestnut Street, Philadelphia, PA 19107 — Phone: 215-925-3196. PSI specializes in Engineering Analysis and Information Management Systems.

INVITE YOUR ASSOCIATES TO ALL ASCE MEETINGS!

DON'T MISS THIS EVENT!

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ENGINEERING COMPUTER USERS GROUP TO FORM

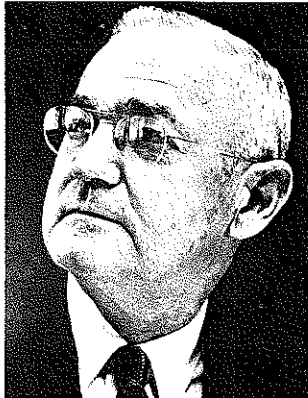
Needed: Persons interested in organizing or participating in a computer users group. First organizational meeting to follow Engineering Management Committee Program on **February 18, 1986**. Approximately 7 PM.

For more information contact:
Madeline Salomon
 Peer Systems, Inc.
 1218 Chestnut Street, Suite 1004, Philadelphia, PA 19107 - (215) 925-3196

LEROY A. BROTHERS

THE NEWS sadly reports the death, suddenly on November 20, 1985, of **Dr. Leroy A. Brothers**, Professor Emeritus of Civil Engineering and retired Dean of the College of Engineering, Drexel University. He was 81. Prior to living at the retirement community of Carol Woods, Chapel Hill, NC since 1980, Professor Brothers alternated residency between Philadelphia and Florida, always maintaining close contact with the Philadelphia Section, ASCE, where he had been an Active Member for many decades.

The loss is singularly sorrowful for your Editor, because of his close personal friendship with Dr. Brothers since college days, and through the years in correspondence since he left Philadelphia. In addition to studying structural theory and reinforced concrete design under Dr. Brothers' tutelage, the two frequently engaged — right in class — in spirited political dialogue, each expounding diametrically opposite doctrines and political philosophy. It was Dr. Brothers who recommended, in 1940, to the then Editor **Joseph A. Schulz**, that your present Editor be appointed to serve on the Section's newsletter, THE NEWS. He has been there ever since.



DR. LEROY A. BROTHERS

Born in Wilmington, NC, Dean Brothers was one of ten children whose mother died when he was 14 years of age. He learned at an early age to depend upon himself to get along. He worked at menial jobs to earn his way through North Carolina State University, and earned his B.S. in Civil Engineering in 1925. He graduated in the upper 10 percent of his class, and he was elected to Phi Kappa Phi. He was elected subsequently to three other honoraries: Tau Beta Pi, Chi Epsilon, Pi Tau Sigma, the service fraternity Alpha Phi Omega, and the social fraternity Theta Chi. He is listed in "Who's Who in Science" and in "American Men of Science." He held the grade of Fellow in ASCE and was a founding member of the Operations Research Society of America. In 1963, when your Editor was President of the Philadelphia Section, ASCE, he had the honor of presenting to Dr. Brothers the *Delaware Valley Engineer of the Year Award* at ceremonies at the Franklin Institute.

Dr. Brothers came to Drexel from North Carolina in 1927 as an Instructor in Civil Engineering. "... when I started my first lecture and the students looked blank," he recalled in later years, "I knew it was my heavy Southern accent. I had to learn to speak English!" During World War II, in 1942, he left Drexel to serve in the U.S. Air Force. He achieved distinction as an Operations Analyst and earned the Bronze Star with Oak Leaf Cluster for meritorious service to the Combat Air Forces. From 1946 to 1958 he was Deputy Chief of Staff, U.S. Air Force, and received the Decoration for Exceptional Civilian Service in 1958. In 1958 he was awarded an honorary degree of Doctor of Science by his alma mater, North Carolina State University.

In 1958 he returned to Drexel and was appointed Dean of the College of Engineering and Science. He served with distinction in this position through a critical period of transformation of the College, instituting strong components of research and full-time graduate education. He laid the foundation for Drexel's achieving University status by successfully building quality doctoral programs in Engineering and Science.

Although slender in build, Roy Brothers cast a broad shadow. The arena of his professional activities was the World. He willed his body to the University of North Carolina for medical research. He had asked that should there be remembrances in his behalf, that they be as contributions sent to the Anatomy Department Memorial Research Fund, for the purchase of scientific books and journals. These would be purchased in his name, and in his memory. Contributions should be addressed to the *University of North Carolina*, 102 Medical Research Building "D" 331H, Chapel Hill, NC 27514.

A special memorial service for Dr. Brothers was held at Carol Woods on December 13, 1985. He is survived by a daughter, Margaret Ann Raub, a son, Robert and a sister, Alma. His beloved wife of 46 years, Alice, died in 1978.

At a recent Faculty meeting at Drexel, a Memorial resolution was recorded in the minutes, expressing "...the deep sense of loss which it feels upon the death of Leroy A. Brothers, and that this expression, together with its sincerest sympathy, be extended to his family..." The Philadelphia Section, ASCE, joins in this respectful tribute to a consummate gentleman — and one of its most distinguished members.

ASCE DUES BILL AND TECHNICAL GROUP DETAILS

Section members will notice in the 1986 dues bill from National ASCE Headquarters, that the PHILADELPHIA (SECTION) DUES is itemized as \$12.00. This amount includes assessment for membership in one Phila. Section Technical Group of your choice. *If you choose to be a member of more than one Group, please add \$1.00 for each Group.*

Also, because National's bill did not list the Technical Groups to which your \$1.00 payments were to be applied, *you are requested to get in touch with the Chairmen of the Technical Groups of your preference*, so that their membership lists can be classified.

The appropriate individuals to contact are the following:

Liaison

Norman G. Weintraub
Phila. Water Dept.
29th & Cambria Streets
Philadelphia, PA 19121
(215) 686-1635 (215) 228-7078

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1141 Dyre Street
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