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PHILADELPHIA SECTION

AMERICAN SOCIETY OF CIVIL ENGINEERS

1317 Spruce Street, Philadelphia, PA 19107

VOL. 59 - 4

OUR 74th YEAR

January, 1987

JANUARY DINNER MEETING

Philadelphia Section, American Society of Civil Engineers

TUESDAY, JANUARY 13, 1987

Engineers' Club, 1317 Spruce Street, Philadelphia

Cocktails - 5:30 P.M.

Dinner - 6:30 P.M.

Meeting - 7:30 P.M.

SUBJECT:

THE PHILADELPHIA CITY HALL RESTORATION

SPEAKER:

JOSEPH GRACI, P.E. Project Manager for City Hall Restoration Project, Department of Public Property, City of Philadelphia.



Mr. Graci will discuss the restoration now in progress. He will describe the state-of-the-art techniques in scaffolding, plating, stone repair and the numerous other engineering and structural facets of this major project. Several of the bronze statues are also scheduled for restoration. All work is required to be performed with a minumum of disruption to the public's use of City Hall and the Courtyard.

(Continued on page 2)

FEBRUARY DINNER MEETING

Philadelphia Section, American Society of Civil Engineers

TUESDAY, FEBRUARY 10, 1987

Cocktails - 5:30 P.M.

Dinner 6:30 P.M.

Meeting 7:30 P.M.

SUBJECT:

ENVIRONMENTAL AND ENGINEERING CONCERNS OF ASBESTOS REMOVAL

SPEAKER:

DR. EDWARD DOHENY, Associate Professor of Civil Engineering, Drexel University; and

DR. LESTER LEVIN, Professor of Industrial Hygiene, Drexel University.

Professors Doheny and Levin will describe the physical characteristics of asbestos and asbestos fibers, and their environmental health hazards. They will review the E.P.A.-regulated courses designated at Drexel University on asbestos removal techniques for health and safety.

SPECIAL FEATURE:

UNIVERSITY OF PENNSYLVANIA AND WIDENER UNIVERSITY NIGHT

Please call Mr. deKovacs at the Engineer's Club immediately (215 735-5234), for reservation. Dinner Meal Charge:

ASCE Member-\$12.00 Non-Member-\$13.00 Students-\$5.00 STUDENTS-Note that your Dinner Charge is LESS than one-half price. Plan to attend for Dinner or Meeting after Dinner.

TECHNICAL GROUP ACTIVITIES

Construction Group January Meeting

Date: Thursday, January 22, 1987

Engineers' Club Meeting at 7:00 P.M.

Subject: Rehabilitation of the George C. Platt Memorial Bridge

Speaker: James L. Au, P.E., Project Manager for IA - DePaul Joint Venture.

Program Host: Fredric L. Plotnick, Esq., P.E., Chairman, Construction Group

Mr. Au is a Registered Professional Engineer in Maryland, Delaware and Pennsylvania. He is currently working on another high visibility project: Section 813 of the Pennsylvania Turnpike Widening Project (Bucks County).

GEOTECHNICAL GROUP

January Meeting

Date: Tuesday, January 20, 1987

Engineers' Club

6:30-7:00 P.M. Cheese and Wine

7:00 Meeting

SUBJECT AND SPEAKER TO BE ANNOUNCED For full information and reservations, contact:

Moustafa A. Gouda, Chairman, Geotechnical Group, Lippincott Engineering Associates, Inc.,

501 Burlington Ave., Delanco, NJ 08075. Phone: (609) 461-1239

STRUCTURAL GROUP

January Meeting

Date: Thursday, January 22, 1987

Place: CENTRE SQUARE BUILDING

15th and Market Sts., Philadelphia, PA.

The Top of Centre Square Restaurant, First Pennsylvania Dining Room (room with a view of One Liberty Place)

Cocktails-5:30 P.M. Dinner-6:30 P.M. Meeting-7:15 P.M.

Subject: ONE LIBERTY PLACE - Structural System from Top to Bottom.

Speaker: Charles H. Thornton, Ph.D., P.E., Lev Zetlin Associates, New York, NY

Program Host: Timothy H. Haahs, Chairman,

Structural Group

IMPORTANT!! 1986 - 1987 Meeting Notices

MARK YOUR CALENDAR for the dates of the remaining Philadelphia Section, ASCE monthly meetings and social functions, as follows:

All Dinner Meetings -

Cocktails: 5;30 p.m. - Dinner: 6:30 p.m. - Meeting: 7:30 p.m.

Tuesday, February 10, 1987 — Engineers' Club

Arranged by the Water and Environmental Engineering Group

Topic: Construction Management on PennDOT Projects

Speaker: Joseph P. McAtee, Project Manager, Joint Project / Gaudet, O'Brien & Urban Engineers.

Presentation of Life Membership Certificates

Temple University and Spring Garden College Night

WEDNESDAY, April 8, 1987 - Officer's Club, U.S. Naval Base, Philadelphia

Joint meeting with the Phila. Post, Society of American Military Engineers (S.A.M.E.)

Arranged by The Structural Group

Topic: National Building Safety Week

Speaker: Charles O. Everly, P.E., President, Building Officials Conference of America (BOCA)

Saturday Evening, May 2, 1987

Annual Spring Social

Location and details to be announced

JANUARY MEETING

(continued from page 1)

Joseph Graci holds a BSCE and MSCE from Villanova University. He is a Registered Professional Engineer in Pennsylvania, and he has been in the employ of the City for the past 16 years. Prior assignments have included work in the Water Department and Fairmount Park. Previous to the Restoration Project, Mr. Graci was Chief Design Engineer for the Department of Public Property.

SPECIAL FEATURE:

DREXEL UNIVERSITY NIGHT (Day and Evening Colleges)

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

TECHNICAL GROUP ACTIVITIES

(contd from page 1)

Structural Group (contd)

Dr. Thornton will highlight the following topics.

- 1. Cost Saving Foundation Systems
- 2. Wind Resistance System
- 3. Optimization Program

Price: \$16.00 per person (Members & Students)

PLEASE CALL FOR RESERVATIONS BY JANUARY 19th - Tim Haahs' Secretary: **Barbara Hatton**, (215) 751-9555

YOUNGER MEMBER FORUM

January Meeting

Date: Wednesday, January 21, 1987 Engineers' Club, 6:00-7:00 P.M.

Topic: ENGINEERING ETHICS AND PROFESSIONALISM

Guest Speakers:

Dr. Bernard McNamee, Professor of Civil Engineering, Drexel University

- BSCE, MBA Drexel University
- MSCE, University of Pennsylvania
- PhD., Lehigh University
- Civil Engineer, Department Head & Director of the Architectural Program at Drexel University
- Past President ASCE Phila. Section
- Registered Professional Engineer (Continued on page 4)

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 E-Z Parking Garage on 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 \$3.25.

PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS

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COPY DEADLINE FOR FEBRUARY 1987 ISSUE JANUARY 9, 1987

WOODRING ELECTED ENGINEER OF THE YEAR

Dr. Richard E. Woodring, Dean of the College of Engineering at Drexel University, has been elected as 1987 Delaware Valley Engineer of the Year by the Technical, Professional and Scientific Societies in the Delaware Valley.



His nomination was sponsored by the Philadelphia Section, ASCE. President Albert M. Tantala delivered a very effective nominating speech, and seconding speeches were made by Gerry Gordon (I.E.E.E.) and Dr. Joseph Mullin (ASCE South Jersey Branch).

A Registered Professional Engineer in Pennsylvania, Dr. Woodring holds a B.S. in civil engineering from Drexel University and an M.S. and a Ph.D. from the University of Illinois. He joined the Drexel faculty in 1956, and has conducted fundamental research and taught courses on the topics of behavior and design of reinforced concrete structures.

As Dean of Engineering since 1974, Dean Woodring has led Drexel's College of Engineering to unprecedented growth in size and quality. During his tenure, the enrollment has doubled and the volume of funded research has increased fivefold. In 1985 and 1986, the College graduated more engineers than any other private university in Pennsylvania. Furthermore, the College is recognized nationally and internationally for its research accomplishments in civil engineering composite materials, ultrasonic technology, and environmental studies.

Dr. Woodring was a founding member of the Philadelphia Regional Introduction for Minorities to Engineering (PRIME), a consortium dedicated to encouraging black and Hispanic youth to pursue studies and careers in engineering. As a result he was awarded the regional Jones Award of the National Action Council for Minorities in Engineering.

Dr. Woodring is an active member of the Philadelphia Section ASCE and has served on the Board of Directors. In addition to ASCE, Dr. Woodring is a member of the American Society for Engineering Education, American Concrete Institute, National Society of Professional Engineers, and the Engineers Club of Philadelphia, from which he received the George Washington Medal. He has been a recipient of the Ford Foundation Faculty Development Fellowship (1960) and the Ford Foundation Residency in Engineering Practice (1968). Dean Woodring is also active in his community serving as president of the Flourtown-Erdenheim Little League, Scout Master of Troop 173 of the Valley Forge Council and President of the Springfield Parent-Teacher Association.

DECEMBER MEETING

December 9, 1986

Engineers' Club

The Lits Building Restoration

A good turnout of Philadelphia Section members and guests enjoyed a stimulating presentation on the subject: "The Restoration and Renovations of the Historical Lit Brothers Building Complex, Philadelphia," at the Section's regular monthly December Dinner Meeting. William F. O'Donnell, P.E., Partner, O'Donnell and Naccarato, Inc., Consulting Engineers, Philadelphia, PA., discussed the preservation of this remarkable structure, located at 7th and Market Streets a historically certified building.

Swarthmore Night

In keeping with the Section's continuing policy of focusing on the Civil Engineering Schools of Philadelphia Metropolitan area, the meeting honored the ASCE Student Chapter and Civil Engineering Department of Swarthmore College. Student Chapter Faculty Advisor, Dr. Faruq M.A. Siddiqui, thanked the Section for its courtesies and the opportunity for the students to mingle with their senior peers. Dr. Siddiqui introduced the Civil Engineering students in attendance. Although the Civil Engineering Department at Swarthmore is small and focuses principally on Soil Mechanics, he said, it has contributed measurably to the overall Engineering Department at the College.

ASCE Student Chapter President Ian Samways introduced his fellow officers: Vice President Thomas Newman, and Secretary-Treasurer Richard Torkornoo. Ian explained the College's programs of inter-connection and flexibility of the Civil Engineering and other engineering specialties with Liberal Arts and Humanities curricula - a policy which has been an effective and significant hallmark at Swarthmore for several years. President Samways also outlined the ASCE Student Chapter's plans and objectives for the year.

Mr. O'Donnell and the Lits

Section Assistant Treasurer **Tom Branigan** introduced the featured speaker of the evening, **William F. O'Donnell.**

Mr. O'Donnell stated that since 1978, when the building was placed on sale, several developers have presented proposals for re-use of the complex. None of the schemes proved feasible until a conglomerate from California decided to salvage the interior floor space. The nearly 1 million square feet of shell space preserved could then be rented and customized by various tenants.

The restoration effort was a formidable task since the structure is actually a complex of several buildings. Mr. O'Donnell explained that as Lits thrived in the early 1900's, adjacent buildings along Market Street were annexed to the original building. Consequently, many different types of construction techniques are incorporated within the complex. The predominant construction method is post and beam timber construction, although reinforced concrete framing appears in some additions to the original structure. In the interim period from when the complex was placed on sale until the rehabilitation began, the building suffered severe deterioration due to neglect. A massive inspection and testing program then had to be undertaken to evaluate the structural soundness of the complex. The testing, which was assisted by Conwell Testing Laboratories, included selective sampling and laboratory testing of portions of the girder system to determine breaking strengths. From the results obtained, the firm was able to calculate load capacities. In-situ testing of a concrete floor section was accomplished by filling a pool of water on the floor and measuring the resulting deflection with electronic gauges.

To obtain the required fire rating, drywall and elaborate sprinkler and exit systems are being installed. The historically certified facade, which is predominantly concrete, is being repointed and repainted. As reported by Mr. O'Donnell, the scheduled re-opening date is April 1987 with Mellon Bank expected to be the prime tenant.

Questions and Answers Discussion

An interesting and enlightening and protracted question and answer period was terminated only because of the constraints of time. Mr. O'Donnell proved himself extremely well-informed in all aspects of this gargantuan job facing the developers, architects, engineers and contractors. Their efforts have been rewarded with the preservation to the public of one of the most picturesque and legendary structures in the Metropolitan area; one which was saved from the oblivion via the wrecking ball only by the persistent, unflinching efforts by City officials, innumerable private organizations and civic-minded citizens of Philadelphia and its environs.

President Albert M. Tantala extended to our distinguished speaker the congratulations and appreciation of the Philadelphia Section for his outstanding presentation.

by **Sid Robin**, Editor and **Dave Perri**, Staff Writer

PHILADELPHIA BRIDGE SECTION HONORED

The Bridge Section of the Philadelphia Streets Department has received two awards for Bridge Design Engineering Excellence from the American Institute of Steel Construction (AISC) in its nationwide 1986 Prize Bridge Competition.

The Prize Bridge Competition is held biennially in even-numbered years. It serves to acknowledge the most outstanding bridge designs utilizing fabricated structural steel aesthetically, imaginatively, and efficiently. The bridges so honored must have been opened to traffic within the two previous calendar years.

The bridges receiving the awards are the McCallum St. Bridge over Cresheim Creek as The Prize Bridge in the medium span - high clearance category and the "B" and Somerset Street Bridge over CONRAIL which received the Award of Merit in the short span category.

It is an outstanding honor to be the recipient of one bridge award but to receive two awards, especially for a municipal agency, is unprecedented.

Accepting the awards for the Bridge Section were **James D. Leasure**, Chief Bridge Engineer, **John F. Lutz**, Engineer of Design and Project Engineer for both bridges and **Kevin M. Koch** as Design Engineer for both bridges.

The Philadelphia Section congratulates the Bridge Division of the Department of Streets for this outstanding achievement.

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 \$13.00. 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 Chairman of the Technical Groups of your preference, so that their membership lists can be classified.

The appropriate individuals to contact are the following:

Liaison

Susan Lior
Peer Systems, Inc.
1218 Chestnut St.
Philadelphia, PA 19107
(215) 925-3196

Younger Member Forum

Anthony M. Micciolo, Chairman Phila. Water Department Design Branch One Reading Center, 2nd Floor Philadelphia, PA 19107 (215) 592-6088

Construction

Fredric L. Plotnick, Chairman 806 Hillton Lane Elkins Park, PA 19117 (215) 487-1443

Engineering Management

Madeline Salomon, Chairman Peer Systems, Inc. 1218 Chestnut St. Philadelphia, PA 19107 (215) 925-3196

Geotechnical

Moustafa A. Gouda, Chairman Lippincott Engineering Associates 501 Burlington Avenue Delanco, New Jersey 08075 (609) 461-1239

Structural

Timothy H. Haahs, Chairman Walker Parker Consultants 2 Penn Center Plaza Philadelphia, PA 19102 (215) 751-9555

Transportation and Urban Development

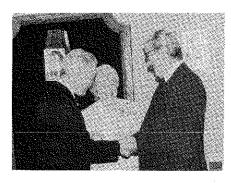
William T. Thomsen, Chairman Urban Engineers 300 N. 3rd Street Philadelphia, PA 19106-1193 (215) 922-8080

Water and Environmental Engineering

John E. Tunnell, Chairman
U.S. Army Corps of Engineers,
Phila. District
U.S. Custom House
2nd and Chestnut Streets
Philadelphia, PA 19106
(215) 597-4714

McPHILLIPS FETED

Over 300 colleagues, co-workers and friends attended a testimonial dinner for **James W. McPhillips** on Friday, November 14 at the Cannstatter's German Club in Northeast Philadelphia. As reported in last month's THE NEWS, McPhillips recently retired from government service after almost 29 years with the Philadelphia Department of Streets, 24 as Chief Engineer and Surveyor.



Jim and Helene McPhillips greet Bob Washburn of the City's Bridge Dept. at the Retirement Party.

Speakers at the dinner included F. Eugene Dixon, President of the Fairmount Park Commission who described McPhillips as a professional and a friend. Bob Rowland, District Engineer for Pennsylvania Department of Transportation brought greetings from Governor Thornburgh and Secretary of Transportation Larson. Rowland also presented McPhillips with a Pennsylvania vanity license plate with the message "THANKS". Phil Ouellet, District Engineer of the Federal Highway Administration conveyed appreciation from Elizabeth Hanford Dole, U.S. Secretary of Transportation.

Highlight of the evening were remarks by Jim's son Kevin, whose topic was "The Chief Engineer, Up Close and Personal". In all, 16 different people made presentations.

McPhillips, given an opportunity for rebuttal, spoke of his years in the department and the people who had influenced his life. Jim was accompanied by his wife, Helene, and children Jeanne, Noelle, Jay, Nancy, Helene and Kevin.

McPhillips has joined the firm of Urban Engineers as a Vice President and will work in the areas of marketing and special projects. The Philadelphia Section extends to Jim its best wishes for good luck in his new duties.

ATTENTION YOUNGER MEMBERS

Are you working hard to complete your 1987 Daniel W. Mead Contest paper? Remember, the deadline is February 1, 1987 for submission of seven copies of your paper to Section Secretary Edward J. Lutz (see address and phone on page 2), who will send them on to ASCE Headquarters in New York.

For full details about the Contest, please refer to the October, 1986 issue of THE NEWS.

YOUNGER MEMBER FORUM

(continued from page 2)

Kenneth Zitomer, Consulting Engineer, Philadelphia

- BSCE, University of Pennsylvania
- Past Water Department positions include Chief Engineer, Deputy Commissioner of Engineering and Acting Water Commissioner
- Past President ASCE Philadelphia Section, PSPE and APWA

Gunther Carrle, Esquire, Powell & Liddle Associates, Attorneys-at-Law, Bala Cynwyd, PA

- BSCE, MSCE Rensselaer PolyTech Institute
- JD, University of Pennsylvania
- Lawyer with Powell & Liddle Associates, focusing on the representation of engineers and architects

There will be no charge for the meeting or for the beer and pretzels which will be available. All members (not only Younger Member Forum affiliates) and guests are cordially invited to attend.

For more information, please contact **Tony Micciolo**, Chairman, Younger Member Forum, at (215) 592-6088.

ENGINEERING LIBRARY AVAILABLE

Robert E. McLaughlin, a retired Structural Consulting Engineer desires to sell his library of Structural Engineering books, some of which are listed below. The library consists of approximately 150 books plus journals of A.S.C.E. and A.C.I.

McLaughlin, now retired, consultant @ 1411 Walnut St. for 21 years was formerly consultant for A. & R. Engineering, 5 years, Philadelphia School Board, 15 years, and Chief Engineer, Matthew McCloskey and Co., 5 years. Formerly licensed in Pennsylvania, New Jersey, New York, and Delaware.

Books are quite new and most are in excellent condition.

Visit to the address below requires an appointment. Call between the hours of 11:00 a.m. and 3:30 p.m.

The following are titles and authors of some of the books that are available for inspection:

Design Data Book for Civil Engineers

by Elwyn E. Seelye Theory of Elastic Stability by Timoshenko

Theory of Plates and Shells

by Timoshenko

Buckling Strength of Metal Structures by Friedrich Bleich

Formulas for Stress and Strain by Raymond Roark

Differential and Integral Calculus

by Harold M. Bacon Elementary Differential Equations by Thornton C. Fry

Mathematical Methods in Engineering by Karman & Biot and many more.

Highest bid will be accepted and expected to take with him or her on all the selections. Cash or check accepted

For further discussion and inspection appointment please contact: Robert E. McLaughlin 3804 Henry Ave., Phila., PA 19129 - (215) 438-8447