

PROCEEDINGS OF THE SOCIETY

Minutes of Meetings

BOSTON SOCIETY OF CIVIL ENGINEERS SECTION • ASCE

COMPUTER GROUP

October 22, 1974 — The regular Computer Group meeting was held at the Ralph M. Parsons Laboratory for Water Resources and Hydrodynamics, M.I.T. This session on Cost and Estimating included presentations by Mr. James Jackson of Francis & Jackson and Mr. Charles Keane and Mr. John McCormick both of Camp Dresser & McKee. Jim Jackson spoke of a proposal submitted to the Corps of Engineers for monitoring the construction bids and change orders for military camps in the European area where contracts are negotiated rather than submitted under sealed bid. Charles Keane spoke of the benefits of a systematic cost and estimating procedure. John McCormick spoke about the system's design and implementation on an IBM 1130 computer. There were approximately twenty-five members and guests in attendance.

Lewis H. Holzman
Clerk

CONSTRUCTION GROUP

October 30, 1974 — The October meeting of the Construction Group was held at the Red Coach Grill, 43 Stanhope Street, Boston. Luncheon was served at 12:30 P.M. At 1:00 P.M. the meeting was called to order. After brief announcements by Samuel E. Rice, III, Chairman, he introduced the main speaker, Mr. Philip Whitton of San-Vel Corporation. The talk was on "The Growing Use of Precast — Prestressed Concrete Building Units". A film of construction of the "57 Building" on Stuart Street, Boston was shown. Mr. Whitton explained the various aspects of this unique construction.

The meeting, attended by 18 persons was adjourned at 2:00 P.M.

Laimonis Rieksts
Vice-Chairman

GEOTECHNICAL GROUP

September 11, 1974 — The Geotechnical Group of the Boston Society of Civil Engineers Section met at Pierce Hall, Harvard University. Forty-two persons attended the dinner at Harkness Commons preceding the meeting.

The meeting was called to order at 7:30 p.m. by Mr. Vincent Murphy, Chairman of the Geotechnical Group. The meeting was designated as the monthly BSCES business meeting, but was dispensed with in the absence of any needed action.

Mr. Murphy introduced the Guest Speaker, Mr. Victor Milligan, Golder Associates, of Toronto, Canada. The subject of the presentation was "Instability of Slopes and Fills Upon Overconsolidated Clays" and dealt with a case study in which fills of considerable magnitude were placed over reportedly competent overconsolidated clays. During construction, excessive lateral movements in the fill and subsurface soils were noted, construction was halted and an extensive field and laboratory investigation ensued. The apparent cause of the lateral movements was reported to be a thin zone of plastic soil at the interface between two different soil types located within the competent soil mass. Remedial measures were made and the construction completed. Pertinent illustrative slides were shown during the presentation.

A question and answer session followed the presentation. The meeting was adjourned at about 9:30 P.M.

October 8, 1974 — The meeting was preceded by a social hour and dinner at the Harkness Commons of Harvard University. Eighty-six paid attendees at Pierce Hall heard three excellent presentations on the subject of the "Design, Installation and Performance of Tieback Systems." Mr. Ronald Chapman of Schnabel Foundation Company in Washington, D.C. discussed the installation and performance of driven, pressure grouted,

small diameter tiebacks and illustrated their application on a number of projects in the Washington area. The discussion of alternate pit underpinning and sloped sheeting was of particular interest. Mr. James Nelson of Spencer, White & Prentiss in New York City gave his presentation on the subject of the historical development of tieback systems with the emphasis on augered large diameter earth anchors. Very prevalent was Mr. Nelson's design philosophy which has evolved from his numerous years of experience in earth support systems. Mr. John Shuster, presently of Terrafreez but formerly of American Drilling Co., Inc. in Providence, R.I., discussed the multiple injection anchor with emphasis on its application at the Federal Reserve Bank project in Boston. Mr. Shuster also commented on specifications and contractual obligations as they relate to tiebacks. The presentations of approximately 20 minutes each were followed by a discussion period.

Robert E. McPhail

HYDRAULICS GROUP

October 23, 1974 — A meeting of the Hydraulic Group of the Boston Society of Civil Engineers was held on Wednesday, October 23, 1974 at the Ralph M. Parsons Water Resources Laboratory at the Massachusetts Institute of Technology in Cambridge. Attendance at the meeting was 44. A brief meeting of the Executive Committee of the Group was held prior to the scheduled presentation to review the program for the coming year.

The meeting was called to order at 7 p.m. by Group Chairman Saul Cooper. Due to the absence of President Liu, the monthly BSCES business meeting was dispensed with, however, Chairman Cooper did make a few brief announcements concerning Society business. Chairman Cooper introduced the guests speakers, Mr. David Campbell of the New England Power Company and Mr. Robert Kwiatkowski of Charles T. Main, Inc. The subject of the presentation was, "The Bear Swamp Pump Storage Project" located on the Deerfield River in the western part of Massachusetts. The illus-

trated talk dealt with the history, site selection, hydrology, hydraulic and power features of this project. Detailed descriptions of the two dams, the tunnel system and underground power house were presented. In conjunction with this talk, the Hydraulics Group is sponsoring a field to the Bear Swamp Project site on Saturday, October 26, 1974.

A question and answer session followed the presentation. The meeting adjourned at 8:30 p.m.

Oscar L. Donati
Clerk

STRUCTURAL GROUP

October 16, 1974 — The meeting of the Structural Section held in the Lecture Hall, Boston Public Library was opened by Chairman Dr. Kenneth Leet. Dr. Leet introduced the evening speaker, Dr. Joseph A. Yura, recipient of the 1974 T. R. Higgins Award given by The American Institute of Steel Construction.

Dr. Yura presented his paper which won him the Award. He presented a practical procedure for determining stability of steel structures using the effective column length alignment chart of the AISC commentary to the specifications.

He discussed assumptions used in developing the charts. He detailed with examples, methods that can be used to approximate solutions when the assumptions are not met. Dr. Yura passed out summaries of his discussion to the 110 members present. A question and answer period followed the presentation.

Lawrence H. Ogden
Clerk, Structural Group

TRANSPORTATION GROUP

October 2, 1974 — The meeting held at the 57 Restaurant was called to order at 5:30 p.m. The program subject was "The Railroad Resurgence in Boston and the Northeast Corridor". The guest speakers were Kenneth B. Ullman, Engineering Manager, Northeast Corridor Project Federal Highway Administration, U.S. Department of Transportation; and David L. Gunn, Director of Commuter Railroads, Massachusetts Bay Transportation Authority

Chairman Rodney P. Plourde introduced the speakers for the evening. Mr. Ullman began the evening's presentation by stating that the Northeast Corridor is America's largest megalopolis with 20% of the nation's population living on 2% of the land. Mr. Ullman discussed the options for transportation improvements. He outlined major considerations for rail expansion. The Northeast Corridor report was submitted for legislation in 1973 and was incorporated as part of the Regional Railway Reorganization Act in 1974. The Northeast Corridor Project Committee is now working towards the goal of developing an implementable package. The thought Mr. Ullman left us with is "Hope".

Mr. Gunn then took over the presentation. Contrary to Mr. Ullman's goal of long range planning, Mr. Gunn is concerned with daily operations as well as improvements. Existing commuter rail is in a stage of despair. Service is continually being curtailed. Present policy is repair first and build later. Plan to use established equipment rather than experimental. There is a potential conflict between high speed and commuter rail service.

The meeting was then opened to questions and answers.

Approximately 40 members attended.

Marvin W. Miller, P.E.
Clerk