

ANNUAL REPORTS

REPORT OF THE BOARD OF GOVERNMENT FOR THE YEAR 1970 – 1971

To the Boston Society of Civil Engineers:

Pursuant to the requirements of the By-Laws, the Board of Government presents its report for the year ending March 24, 1971.

The following is a statement of the status of membership in the Society:

Honorary	12
Members	1088
Associates	3
Juniors	51
Students	1
 Total	 1155

Applications pending on	
March 24, 1971	12
Student Chapters	2

Summary of Additions

New Members	41
New Juniors	6

Reinstatements

Members	6
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Summary of Loss of Members

Deaths	22
Resignations	16
Dropped for non-payment of dues	37
Dropped for failure to transfer	1

Life Memberships

Life Members	121
Members becoming eligible today for Life Membership	8

Honorary Membership is as follows:

John B. Babcock, 3rd, elected January 2, 1969
 Charles O. Baird, Jr., elected January 2, 1969
 Harry P. Burden, elected February 1, 1965
 Thomas R. Camp, elected February 3, 1964
 Arthur Casagrande, elected February 1, 1965
 Frank M. Gunby, elected February 15, 1950
 Ralph W. Horne, elected February 1, 1965
 Karl R. Kennison, elected February 7, 1951
 Frank A. Marston, elected February 15, 1960
 Howard M. Turner, elected February 18, 1952

John A. Volpe, elected January 20, 1968
 Frederic N. Weaver, elected February 1, 1965

The following members have been lost through death:

William J. Balough, Sept. 1969
 Homer Briggs, March 18, 1970
 Charles S. Bryer, 1970
 Edward D. Chase, Jan. 9, 1970
 Kenneth T. Corey, Jan. 2, 1971
 Edwin A. Dow, Feb. 16, 1971
 Henry W. Durham, 1970
 Thomas G. Giblin, Dec. 7, 1970
 Walter J. Grady, 1971
 Joseph D. Guertin, Apr. 19, 1970
 Arthur R. Hahn, Nov. 16, 1970
 Horace P. Hamlin, Feb. 23, 1970
 James E. Hanlon, June 30, 1970
 George W. Lewis, Dec, 1970
 Richard Malkasian, Sept. 24, 1969
 Howard A. Mayo, Apr. 4, 1970
 Edwin J. O'Connor, 1970
 Dana N. Peaslee, July 11, 1970
 Edward G. Powers, Aug. 1970
 Reginald L. Reed, Sept. 20, 1970
 Samuel I. Widershein, May 27, 1970
 Edward F. Wilcox, Jan. 17, 1970

MEETINGS OF THE SOCIETY

- March 25, 1970 Address of Retiring President, Robert H. Culver, "The Time for Re-evaluation".
- April 29, 1970 Joint Meeting with BSCE Construction Section. Richard Q. Praeger of Praeger, Kavanaugh & Waterbury, Eng. Architects, New York, "Modern Stadium Design and Construction with Emphasis on the William Shea Stadium".
- June 3, 1970 Joint Outing with BSCE Sanitary Section. Treatment Facilities for City of Brockton. Mr. Joseph Heney, Camp, Dresser & McKee, "Nature of the Water Supply Treatment Facilities and Distribution of System". George M. Reece, Fay, Spofford & Thorndike, Inc., "Nature of Waste Disposal Problem and Nature of Materials to be Processed".
- July 13, 1970 Joint Meeting with BSCE Transportation Section and Mass. Section ASCE with National Meeting of the ASCE. William J. Ronan, Chairman, Metropolitan Transportation Authority, New York, New York, "Mass Transportation in the Seventies".
- September 16, 1970 Joint Meeting with BSCE Geotechnical Section and BSCE Structural Section. Rev. Daniel Linehan, Director, Weston Observatory, "Nature and Sources of Earthquakes". Russell J. Holt, President of Weston Geophysical Research, "Nature of Earthquakes". Robert V. Whitman,

- October 14, 1970 Prof. of Civil Engineering, M.I.T., "Relationship between Earthquakes and Structures Involved in the Earthquake".
Joint Meeting (Student Night) with BSCE Computer Section and Mass. Section of ASCE. Dr. Alan Altshuler, Prof. of Political Science at M.I.T., and Chairman of the Governor's Task Force on Transportation, "A Balanced Transportation for Metropolitan Boston".
- December 16, 1970 Joint Meeting with American Society of Military Engrs., and Mass. Section of ASCE. Edward J. King, Executive Director, Mass. Port Authority, "Growth and Development of the Mass. Port Authority".
- February 17, 1971 Joint Meeting with BSCE Hydraulics Section (John R. Freeman Memorial Lecture). Dr. Arthur T. Ippen, Ford Professor of Engineering and Director of the Hydrodynamics Laboratory at M.I.T. "A New Look at Sedimentation in Turbulent Streams".

ATTENDANCE AT MEETINGS

<i>Date</i>	<i>Place</i>	<i>Meeting</i>	<i>Dinner</i>
March 25, 1970	Science Museum Science Park Boston, Mass.	162	162
April 29, 1970	Red Coach Grill Boston, Mass.	65	62
June 3, 1970	Treatment Facilities City of Brockton	30	30
July 13, 1970	Statler Hilton Hotel Boston, Mass.	210	210
September 16, 1970	Townhouse Beacon St. Boston, Mass.	107	80
October 14, 1970	University of Massachusetts Amherst, Mass.	107	103
November 16, 1970	Red Coach Grill Boston, Mass.	190	170
December 16, 1970	Navy Building Summer Street Boston, Mass.	90	90
February 17, 1971	New England Life Bldg. Clarendon Street Boston, Mass.	45	45

The meetings of the Sections, offering opportunity for more detailed discussions, continue to demonstrate their value to the Section members and to the Society. A wide variety of subjects were presented. The annual reports of the various Sections will be presented at the annual meeting of the Society and will be published in the Journal.

*FUNDS OF THE SOCIETY**

Permanent Fund. The Permanent Fund of the Society has a Book Value of \$79,210.91. The Board of Government authorized the use of as much as necessary of the Current Income of this fund in payment of current expenses. By vote of the Society (as prescribed by the By-Laws) at the December 18, 1970 and February 17, 1971 meetings, the Board of Government was authorized to transfer an amount not to exceed \$5,000 from the Principal of the Permanent Fund for current expenditures. The amount necessary to transfer from the Principal of the Permanent Fund for current expenditures was none.

John R. Freeman Fund. In 1925 the late John R. Freeman, a Past President and Honorary Member of the Society, made a gift to the Society of securities which was established as the 'John R. Freeman Fund'. The income from this fund is to be particularly devoted to the encouragement of young engineers. Mr. Freeman suggested several uses, such as, the payment of expenses for experiments and compilations to be reported before the Society; for underwriting meritorious books or publications pertaining to the hydraulic science or art; or a portion to be devoted to a yearly prize for the most useful paper relating to hydraulics contributed to the Society; or establishing a traveling scholarship every third year open to members of the Society for visiting engineering works, a report of which would be presented to the Society. This year a John R. Freeman Memorial Lecture was given by Dr. Arthur T. Ippen. The expenditures from this Fund during the year were \$499.58 for the Freeman Lecture and \$7,000 which the Committee transferred to the Current Fund for publication of "Boring Data of Greater Boston".

Edmund K. Turner Fund. In 1916 the Society received a bequest of \$1,000 from Edmund K. Turner, a former member of the Society. The income of which is to be used for Library purposes. The Board voted that no expenditures be made this year from this Fund.

Alexis H. French Fund. The Alexis H. French Fund, a bequest of \$1,000 was received in 1931 from the late Alexis H. French, a Past President of the Society. The income of this fund is 'to be devoted to the Library of the Society'. The Board voted that no expenditures be made this year from this Fund.

Tinkham Memorial Fund. The Samuel E. Tinkham Fund, established in 1921 at Massachusetts Institute of Technology by the Society, "to assist some worthy student of high standing to continue his studies in Civil Engineering", had a value of \$3,507.24 on June 30, 1970. Jay Pollock a student in Civil Engineering class of 1972 was awarded this Scholarship of \$250 for the year 1970-1971.

Clemens Herschel Fund. This Fund was established in 1931 by a bequest of \$1,000 from the late Clemens Herschel, a Past President and Honorary Member of the Society. The income from this fund is "to be used for presentation of prizes for papers which have been particularly useful and commendable and worthy of grateful acknowledgement". The expenditures from this fund during the year was \$33.80.

Desmond FitzGerald Fund. The Desmond FitzGerald Fund established in 1910 by a bequest of \$2,000 from the late Desmond FitzGerald, a Past President and Honorary Member of the Society, provided that the income from this fund shall "be used for charitable and educational purposes". The Board voted on April 13, 1964 to use the income of this Fund to establish a Boston Society of Civil Engineer's Scholarship in Memory of

*Details regarding the value and income of these funds are given in the Treasurer's Report.

Desmond FitzGerald and that it be given to a student in Civil Engineering at Northeastern University. It was voted on February 24, 1971 to accept the recommendation of the Committee at Northeastern University, namely, that the Scholarship of \$150 be given to Joseph Schindler, presentation to be made at the Annual Meeting of the Society on March 24, 1971.

Edward W. Howe Fund. This Fund, a bequest of \$1,000, was received in 1933 from the late Edward W. Howe, a Past President of the Society. No restrictions were placed on the use of this bequest, but the recommendation of the Board of Government was "that the Fund be kept intact, and that the income be used for the benefit of the Society or its members".

William P. Morse Fund. This Fund, a bequest of \$2,000, was received in 1959 from the late William P. Morse, a former member of the Society. No restrictions were placed on the use of this bequest, but the recommendation of the Board of Government was "that the Fund be kept intact and that the income be used for the benefit of the Society of its members". Upon recommendation of the Committee appointed by the President, the Board voted on April 5, 1953, to appropriate from the income of this Fund a Scholarship to be known as "the Boston Society of Civil Engineer's Scholarship in Memory of William P. Morse", and that it be given to a Civil Engineering student at Tufts University. It was voted on January 27, 1971 to adopt the recommendation of the Committee at Tufts University, namely, that the \$150 Scholarship be given to Michael D. Giggey, presentation to be made at the Annual Meeting of the Society on March 24, 1971.

Frank B. Walker Fund. This Fund, a bequest of \$1,000, was received in 1961 from Mary H. Walker, wife of Frank B. Walker, a Past President of the Society. No restrictions were placed on the use of this bequest, but the recommendation of the Board of Government was "that this Fund be kept intact and that the income be used for the benefit of the Society or its members". The expenditure from this fund during the past year was \$1,000 towards the publishing of Boring Data in the Journal.

Ralph W. Horn Fund. This Fund, a bequest of \$3,000, was received June 29, 1964, from the Directors of Fay, Spofford & Thorndike, Inc., the income from which shall be devoted to a prize or certificate to be awarded annually to a member designated by the Board of Government as having been outstanding in unpaid public service in municipal, state or federal elective or appointive posts; or in philanthropic activity in the public interest. Members of B.S.C.E. only are eligible for the Award. No award was made this year.

Thomas R. Camp Fund. This Fund, a bequest of \$10,000, was received January 15, 1971, from the Directors of Camp, Dresser & McKee, Inc., to establish the 'Thomas R. Camp Fund', the income to be used to support an annual Thomas R. Camp lecture or lectures on outstanding recent developments or proposed or completed research in the sanitary engineering field. The income from the fund, over and above that needed to support the annual lecture should be added to the fund, but could be used otherwise at the discretion of the Board of Government of the Boston Society of Civil Engineers.

PRIZES

<i>Award</i>	<i>Recipient</i>	<i>Paper</i>
Clemens Herschel Award	Harl P. Aldrich, Jr.	"Back Bay Boston, Part I

<i>Award</i>	<i>Recipient</i>	<i>Paper</i>
Clemens Herschel Award	Klas Cederwall	"Dispersion Phenomena in Coastal Environments"
Desmond FitzGerald Scholarship	Joseph Schindler	Northeastern University
William P. Morse Scholarship	Michael D. Giggey	Tufts University

LIBRARY

The Report of the Library Committee contains a complete account of the Library Committee's activities during the past year.

COMMITTEES

The usual special committees dealing with the activities and conduct of the Society were appointed. The membership of these committees is published in the Journal and the reports of the committees will be presented at the Annual Meeting March 24, 1971.

Your Board in conclusion wishes to express its appreciation of the excellent work done by the officers of the Sections and by the committees of the Society.

Ernest L. Spencer
President

REPORT OF THE SECRETARY**Boston, Mass., March 24, 1971***To the Boston Society of Civil Engineers:*

The following is a statement of cash received by the Secretary and of the expenditures approved by the President in accordance with the budget adopted by the Board of Government.

FOR THE YEAR ENDING FEBRUARY 28, 1971

	<i>Expenditures</i>	<i>Receipts</i>
OFFICE		
Secretary's Salary & Expense	\$ 1,400.00	\$
Treasurer's Honorarium	900.00	
Stationary, Printing & Postage	1,612.87	
Incidentals & Petty Cash	123.39	
Insurance & Treasurer's Bond	423.00	
Quarters, Rent, Telephone & Light	6,611.76	
Office Secretary	7,025.00	
Soil Mechanics	6.97	780.75
Social Security	498.69	
MEETINGS		
Rent of Halls	25.00	
Hospital Committee	4,381.79	4,339.00
Annual Meeting - March 1970	1,231.78	1,067.00
SECTIONS		
Sanitary Section	43.00	
Structural Section	106.60	
Transportation Section	47.03	
Hydraulics Section	17.45	
Construction Section	36.25	
Geotechnical Section	125.34	
Computer Section	45.53	
Contingency Fund	9.55	
JOURNAL		
Editor's Salary & Expense	900.00	
Printing & Postage	11,434.89	
Advertisements	—	2,581.30
Sale of Journals	—	2,389.20
Reprints	652.84	570.00
Copyright	18.00	
Newsletter	544.36	
LIBRARY		
Periodicals	113.00	
Binding	29.69	

<i>MISCELLANEOUS</i>	<i>Expenditures</i>	<i>Receipts</i>
Binding Journals for Members	10.00	10.00
Badges	—	5.15
Bank Charges	14.26	
Miscellaneous	466.66	251.11
Engineering Societies Dues	1,165.00	
Public Relations Committee	90.00	
Sales Tax	.90	.90
Dues from B.S.C.E. Members		19,311.00
Trans. Income Perm. Fund		2,468.10
Trans. John R. Freeman Fund		7,000.00
Trans. Lecture Fund		<u>4,000.00</u>
	<u>\$40,110.60</u>	<u>\$44,773.51</u>
Increase in Balance of Current Fund	1,662.91	
Payable estimated bill Oct. '70 Journal	<u>3,000.00</u>	
	<u>\$44,773.51</u>	<u>\$44,773.51</u>

Entrance Fees to Permanent Fund \$450.00

41 New Members; 6 New Junior Members, 6 Reinstatements

The above receipts have been paid to the Treasurer whose receipt the Secretary holds. The Secretary holds cash amounting to \$30 to be used as a fixed fund for cash on hand. \$46.75 withholding tax is payable to the State of Massachusetts in April 1971.

Respectfully submitted,

Paul A. Dunkerley
Secretary

REPORT OF THE TREASURER

MARCH 24, 1971

for

Fiscal Year March 1, 1970 through February 28, 1971

FINANCIAL STANDING

The financial standing of the Society is summarized in the following four tables which accompany this report. The tables represent conditions as they existed at the close of business on February 28, 1971.

TABLE I

Condensed Statement of Condition —
Assets and Liabilities

TABLE II

Condensed Statement of Income and
Expenditures—Distribution of Funds

TABLE III

Portfolio of Investments

TABLE IV

Income and Yield from Investments

SOCIETY INVESTMENTS

The Boston Safe Deposit and Trust Company continues to provide us with investment management and custodian services for the portfolio of securities owned by the Society. The Custodian Bank has furnished us a certified audit of the Income and Principal Accounts relating to our investments.

Twice this year the Investments Division of the Boston Safe Deposit and Trust Company has reviewed our portfolio of securities and in both instances stated that our present holdings would do well under anticipated future economic conditions and therefore recommended no changes. The Bank also recommended certain additional investments at the time of the receipt of \$10,000 for the establishment of the Thomas R. Camp Fund. The Investment Committee of the Society considered and approved all of these recommendations and so informed the Board of Government. In each case the Board voted to approve the recommendations of the Bank and where required, voted to authorize the recommended changes and directed the Custodian Bank to proceed with the transactions.

The general policy which dictates the handling of the portfolio continues to be the maintenance of reasonable income consistent with a reasonable growth rate as a hedge against inflation.

The following changes, part of which were recommended in the previous fiscal year, were made in the portfolio during this fiscal year.

Sold	
177 Shs. So. Cal. Edison	\$ 5,382.96
200 Rights Std. Oil, N.J.	35.50
250 Rights Amer. Tel. & Tel.	96.45
	<u>\$ 5,514.91</u>
Bought	
170 Shs. Boise Cascade	\$ 9,829.69
2 Shs. I.B.M.	573.50
100 Shs. McGraw Edison	3,790.19
50 Shs. N.E. Elec System	1,288.95
	<u>\$15,482.33</u>

Received as Stock Dividend

1 Sh. Boise Cascade + \$19.30 in lieu of stock dividend

The percentage of common stocks in the portfolio based on current market value is now 77% compared to 77.4% a year ago. The yield from all securities in the portfolio based on current market value is approximately 4.3%. The market value of the portfolio as listed a year ago has increased by approximately \$22,000 which is 11%.

AUDIT

The Auditing Committee has reviewed the Treasurer's account book, the bills paid by the Treasurer, the receipts from the Secretary, the savings bank passbook, the checkbook, and the certified audit of the income and principal accounts of the Society investments. The information contained in this report has been verified.

INVESTMENT FUNDS – INCOME ACCOUNT
(Bos. Safe Dep. & Tr. Co. Custodian)

Balance March 1, 1970	1,162.52
Dividends Received	6,709.34

Interest Received	2,736.30	
Sub Total		10,608.16
Custodian Bank Charges	1,403.26	
Transfer to B.S.C.E. Savings Acct.	3,500.00	
Transfer to B.S.C.E. Checking Acct.	5,000.00	
Sub Total		9,903.26
Balance in account February 28, 1971		704.90

INVESTMENT FUNDS – PRINCIPAL ACCOUNT
(*Bos. Safe Dep. & Tr. Co. Custodian*)

Balance March 1, 1970	152.15	
Stock Sold	5,382.96	
Rights Sold	131.95	
Received in lieu of Stock Dividend	19.30	
Received for Thomas R. Camp Fund	10,000.00	
Sub Total		15,686.36
Stock Bought	15,482.33	
Sub Total		15,482.33
Balance in account February 28, 1971		204.03

SAVINGS ACCOUNT
(*First Fed. Sav. & Loan Assoc. of Boston*)

This savings account is used as a temporary investment for money available for investment, and for excess balance in the checkbook, thus providing additional income to the funds, until there is a need to transfer it to the checkbook to meet expenditures. It is a temporary investment for the major part of the cash balance.

Balance March 1, 1970	2,935.18	
Transfer from Income Account	3,500.00	
Transfer from Checking Account	9,000.00	
Interest Received	428.18	
Sub Total		15,863.36
Transfer to Checking Account	14,000.00	
Sub Total		14,000.00
Balance February 28, 1971		1,863.36

CURRENT FUND ACCOUNT

This fund is set up for payment of operating expenses of the Society and for receiving income for that purpose. To provide money for operation in March before regular income is received, the fund is provided with a balance sufficient for this purpose. The customary amount for this balance has been \$1,500. The Board of Government voted to increase this to \$3,000 next year.

Total Expenditures	40,110.60
Total Income and Receipts	31,305.41
Excess of Income over Expenditures	(8,805.19)

Balance in Fund March 1, 1970	1,337.09
Transfer from Permanent Fund Income	2,468.10
Transfer from Lecture Fund	4,000.00
Transfer from Freeman Fund	7,000.00
Subtotal Available to cover deficiencies	<u>14,805.19</u>
Balance in Fund March 1, 1971	3,000.00
Reserve in Fund for Bill Payable	3,000.00

By vote of the Board of Government \$2,468.10 was transferred from the Income of the Permanent Fund and \$4,000.00 was transferred from the Lectures Fund to the Current Fund.

By vote of the Freeman Fund Committee and by acceptance by the Board of Government, \$7,000.00 was transferred from the Freeman Fund to the Current Fund, to be used toward the expense of publishing Boring Data for the City of Boston. The journals for July and October 1969 and July 1970 published these data, the cost of which has been paid from the Current Fund. This \$7,000.00 will cover most of this expense.

It should be noted that in addition to the \$3,000 balance in the current fund, the transfers to this fund also include an additional \$3,000 to cover later payment of bill payable for the October 1970 Journal, which is rightfully payable out of 1970-71 funds.

The membership and other interested persons are referred to the report of the Secretary published elsewhere in the Journal for a detailed breakdown of the income and expenditures of the Current Fund.

PERMANENT FUND

The Permanent Fund receives income from its prorated portion of interest and dividends from investments and pays its portion of service charges of the Custodian Bank.

Receipts from entrance fees are credited to the principal of this fund. These amounted to \$450.00 this year.

Income from Interest and Dividends	4,721.00
Prorated portion of Custodian Services Charges	<u>671.42</u>
Net Income	4,049.58

As explained above \$2,468.10 of this net income was transferred from the Permanent Fund to the Current Fund. No transfer was made from the Permanent Fund principal this year.

JOHN R. FREEMAN FUND

Payments from this fund were made this year for expenses of the annual Freeman Lecture. The lecturer, Prof. Arthur T. Ippen, received an honorarium of \$300.00.

As stated above \$7,000.00 was transferred from this fund to the Current Fund to be used toward expense of publishing Boring Data.

Expenses of Freeman Lecture	199.58
Lecturer's Honorarium	300.00
Transfer to Current Fund	7,000.00
Prorated portion of Custodian Service Charge	<u>461.06</u>
Total Expenditures	7,960.64
Prorated portion of income from Investment	3,242.85
Excess of Income over Expenditures	(4,717.79)

LECTURES FUND

As stated above \$4,000.00 was transferred from this fund to the Current Fund to be used for operating expenses.

Transfer to Current Fund	4,000.00
Prorated portion of Custodian Service Charge	<u>60.68</u>
Total Expenditures	4,060.68
Prorated portion of income from Investment	<u>424.99</u>
Excess of Income over Expenditures	(3,635.69)

BORING DATA FUND

The Committee on Subsoils of Boston has been actively engaged in revising and adding to the Boring Data Book. Mr. Clarence Seagrave has continued his work of sorting and collating the information into a publishable form, and has been assisted by Mr. E. M. Battle and Mr. N. P. Kenis.

Solicitations for funds for this purpose were made this year resulting in donations amounting to \$2,525.00.

Balance in Fund March 1, 1970	721.63
Donations from Solicitations	2,525.00
Received from Sale of Books	<u>36.00</u>
Total Receipts	3,282.63
Paid for sorting and collating	1,868.90
Paid for prints	<u>77.62</u>
Total Expense	1,946.52
Balance in Fund February 28, 1971	1,336.11

THOMAS R. CAMP FUND

The Thomas R. Camp Fund was established in January 1971 as a result of a gift to the Society of \$10,000 from the firm of Camp Dresser & McKee, made for this purpose. The income from the fund is to be used to support an annual Thomas R. Camp lecture on outstanding recent developments, or proposed or completed research in the sanitary engineering field.

M.I.T. TINKHAM SCHOLARSHIP FUND

By letter of January 2, 1971 Mr. Jack H. Frailey, Director of Student Aid at Mass. Institute of Technology, reported the status of this fund as of June 30, 1970.

Balance in Principal Account June 30, 1970	3,507.24
Balance in Income Account June 30, 1970	283.48

The scholarship award for the year 1970-71 was made to Jay Pollack, Class of 1972 in the amount of \$250.

KARL R. KENNISON FUND

On March 3, 1971 Mr. Beaton of the Massachusetts Company reported to the Treasurer of the Society the status of the irrevocable trusts established on behalf of the Society by Mr. Karl R. Kennison. As of February 28, 1971 the two trusts involving shares in the Massachusetts Fund were as follows:

	<i>No. Shares</i>	<i>Market Value</i>
Trust #4315	356.650	4,005.18
Trust #4444	<u>473.942</u>	<u>5,322.37</u>
Total	830.592	9,327.55

A year ago there were 823.909 shares which had a market value of \$8,749.70.

OTHER FUNDS

The membership and other interested persons are referred to the Report of the Board of Government published elsewhere in this issue of the Journal for information concerning the remaining funds, the reason for existence, and the disbursements made from each.

ACKNOWLEDGEMENTS

I wish to thank Prof. Paul A. Dunkerley, Secretary of the Society, for his valued assistance and Mrs. Virginia Boudia, office secretary, for her time and effort in handling the voluminous routing of keeping the accounting records.

Respectfully submitted,

Robert T. Colburn
Treasurer

TABLE I
CONDENSED STATEMENT OF CONDITION
ASSETS AND LIABILITIES
February 28, 1971

ASSETS	BOOK VALUE		MARKET VALUE	
	2-28-71	2-28-70	2-28-71	2-28-70
First Nat. Bank Bos. (Check Acct.)	2,875.04	1,662.31	2,875	1,662
Boston Safe Dep. & Trust Co. (Custodian Acct.)				
Bonds	55,628.84	55,628.84	44,540	40,151
Common Stocks	112,608.60	99,210.51	184,471	157,222
Balance in Acct.	908.93	1,314.67	909	1,315
First Fed. Sav. & Loan Assn. (Savings)	1,863.36	2,935.18	1,863	2,935
Cash held by Secretary	30.00	30.00	30	30
TOTAL ASSETS	\$173,914.77	\$160,781.51	\$234,688	\$203,315
LIABILITIES AND FUNDS				
Permanent Fund	79,210.91	75,533.76	109,950	95,684
John R. Freeman Fund	48,437.74	52,023.92	67,345	65,933
Edmund K. Turner Fund	2,648.72	2,463.60	3,670	3,136
Desmond FitzGerald Fund	5,133.04	4,988.17	7,110	6,292
Alexis H. French Fund	2,622.83	2,439.68	3,630	3,096
Clemens Herschel Fund	1,788.46	1,681.16	2,480	2,111
Edward W. Howe Fund	2,950.59	2,743.41	4,090	3,498
William P. Morse Fund	4,931.27	4,729.89	6,840	5,990
Frank B. Walker Fund	1,332.28	1,239.07	1,850	1,568
Ralph W. Horne Fund	4,082.18	3,949.98	5,650	5,005
Lectures Fund	3,363.89	6,853.40	4,660	8,703
Thomas R. Camp Fund	10,000.00	—	10,000	—
Subtotal Investment Funds	\$166,501.91	\$158,646.04	\$227,275	\$201,016
Boring Data Fund	1,336.11	721.63	1,336	722
Current Fund	3,000.00	1,337.09	3,000	1,500
Secretary's Change Fund	30.00	30.00	30	30
*Taxes withheld	46.75	46.75	47	47
Reserve for Bill Payable	3,000.00	—	3,000	—
TOTAL LIABILITIES	\$173,914.77	\$160,781.51	\$234,688	\$203,315

*Withhold Massachusetts State Income Taxes due and payable in April 1971

TABLE II
 CONDENSED STATEMENT OF INCOME AND EXPENDITURES — DISTRIBUTION OF FUNDS
 Fiscal Year March 1, 1970 through February 28, 1971

FUND	Book Value 3-1-70	Income Interest and Dividends	Gain from sale of Securities	Receipts and Transfers to Funds	Expenditures and Transfers from Funds	Book Value 2-28-71
Permanent	\$ 75,533.76	\$4,721.00	\$1,645.67	\$ 450.00	\$ 671.42)	\$ 79,210.91
Transfer to Current	—	—	—	—	2,468.10)	—
John R. Freeman	52,023.92	3,242.85	1,131.61	—	960.64)	48,437.74
Transfer to Current	—	—	—	—	7,000.00)	—
Edmund K. Turner	2,463.60	153.45	53.48	—	21.81	2,648.72
Desmond FitzGerald	4,988.17	299.19	106.27	—	260.59	5,133.04
Alexis H. French	2,439.68	151.55	53.14	—	21.54	2,622.83
Clemens Herschel	1,681.16	104.19	36.91	—	33.80	1,788.46
Edward W. Howe	2,743.41	171.47	60.04	—	24.33	2,950.59
William P. Morse	4,729.89	288.54	103.50	—	190.66	4,931.27
Frank B. Walker	1,239.07	77.29	26.91	—	10.99	1,332.28
Ralph W. Horne	3,949.98	239.30	86.26	—	193.36	4,082.18
Lectures	6,853.40	424.99	146.18	—	60.68)	3,363.89
Transfer to Current	—	—	—	10,000.00	4,000.00)	10,000.00
Thomas R. Camp	—	—	—	—	—	—
SUB TOTAL Invest. Funds	\$158,646.04	\$9,873.82	\$3,449.97	\$10,450.00	\$15,917.92	\$166,501.91
Boring Data Fund	721.63	—	—	2,561.00	1,946.52	1,336.11
Current Fund	1,337.09	—	—	31,305.41)	40,110.60	3,000.00
Transfer from Permanent	—	—	—	2,468.10)	—	—
Transfer from Freeman	—	—	—	7,000.00)	—	—
Transfer from Lectures	—	—	—	4,000.00)	—	—
Reserve for Bill Payable	30.00	—	—	—	—	3,000.00
Secretaries Change Fund	46.75	—	—	—	—	30.00
Taxes Withheld	—	—	—	—	—	46.75
TOTALS	\$160,781.51	\$9,873.82	\$3,449.97	\$57,784.51	\$57,975.04	\$173,914.77

TABLE III
PORTFOLIO OF INVESTMENTS

	BOOK VALUE		MARKET VALUE	
	2-28-71	3-1-70	2-28-71	3-1-70
BONDS 20%				
6,000 Assoc. Invest. Co. 5-1/8-79, Deb.	\$ 6,000	\$ 6,000	\$ 4,800	\$ 4,320
10,000 Flintkote Co. 4-5/8-81, Deb.	10,450	10,450	7,875	7,300
1,000 Florida Po. Corp. 3-1/8-84, 1st Mtg.	1,018	1,018	664	604
5,000 Florida Po. Corp. 3-7/8-86, 1st Mtg.	5,038	5,038	3,525	3,219
5,000 Georgia Po. Co. 3-3/8-77, 1st Mtg.	5,162	5,162	4,144	3,669
5,000 Marine Mid. Corp. 4½-89 Deb.	5,000	5,000	3,450	3,275
10,000 Montreal Quebec Imp. 6%-87 Deb.	10,075	10,075	8,025	6,900
10,000 Orange & Rockland 6½-97 1st Mtg.	9,950	9,950	9,200	8,262
3,000 Ontario 3¼-72 Deb.	2,936	2,936	2,858	2,602
TOTAL BONDS	\$ 55,629	\$ 55,629	\$ 44,541	\$ 40,151
STOCKS 77%				
250 Amer. Tel. & Tel. Co.	\$ 4,410	\$ 4,506	\$ 12,250	\$ 12,812
400 Clark Equipment Co.	12,287	12,287	16,200	13,600
170 General Motors Corp.	9,131	9,131	13,621	11,794
214 Hartford Insurance Co.	—	1,534	—	10,700
171 Boise Cascade	9,810	—	7,353	—
250 Illinois Power Co.	11,591	11,591	9,781	8,500
37 Inter. Business Machines	6,974	6,400	12,450	11,909
214 Inter. Tel. & Tel. — Preferred	1,534	—	14,739	—
400 McGraw Edison Co.	14,211	10,421	14,550	8,813
200 Kraftco	1,155	1,155	8,225	7,800
358 New England Elec. System	7,505	6,216	8,503	6,699
500 Newmont Mining Corp.	12,548	12,548	14,062	16,000
177 So. Calif. Edison Co.	—	1,933	—	5,332
200 Std. Oil, N.J.	1,977	2,013	15,025	10,868
472 Texaco	1,516	1,516	16,992	13,157
200 Warner Lambert Pharm. Co.	9,937	9,937	14,800	14,400
4 W. R. Crace & Co.	156	156	134	93
260 Wilson & Co. Inc.	7,866	7,866	5,785	4,745
TOTAL COMMON STOCKS	\$112,609	\$ 99,210	\$184,470	\$157,222
SAVINGS BANK 1.5%				
First Federal Sav. & Loan Assn.	\$ 1,863	\$ 2,935	\$ 1,863	\$ 2,935
CASH ACCOUNTS 1.5%				
1st Nat. Bank Boston (Check Acct.)	2,875	1,662	2,875	1,662
Bos. Safe Dep. & Tr. Co (Custodian Acct.)	909	1,315	909	1,315
Secretary's Change Fund	30	30	30	30
TOTAL SAVINGS & CASH	\$ 5,677	\$ 5,942	\$ 5,677	\$ 5,942
GRAND TOTAL	\$173,915	\$160,781	\$234,688	\$203,315

TABLE IV
INCOME AND YIELD FROM INVESTMENTS
Fiscal Year March 1, 1970 to February 28, 1971

BONDS	<u>Income</u>	<u>Yield on Current Market Value</u>
6,000 Assoc. Invest. Co. 5-1/8-79, Deb.	\$ 307.50	6.4%
10,000 Flintkote Co. 4-5/8-81, Deb.	462.50	5.9
1,000 Florida Power Corp. 3-1/8-84, 1st Mtg.	31.25	4.7
5,000 Florida Power Corp. 3-3/8-77, 1st Mtg.	193.80	5.5
5,000 Georgia Power Corp. 3-3/8-77, 1st Mtg.	168.75	4.1
5,000 Marine Midland Corp. 4½-89, Deb.	225.00	6.5
10,000 Montreal Quebec Imp. 6%-87, Deb.	600.00	7.3
10,000 Orange & Rockland 6½%-97, 1st Mtg.	650.00	7.1
3,000 Ontario 3¼-72, Deb.	97.50	3.4
TOTAL BONDS	<u>\$2,736.30</u>	<u>6.1%</u>
COMMON STOCKS		
250 Amer. Tel. & Tel.	\$ 650.00	5.3%
400 Clark Equipment Co.	560.00	3.5
170 General Motors Corp.	578.00	4.2
214 Hartford Fire Ins. Co.	149.80	—
171 Boise Cascade	17.58	1.0
250 Illinois Power Co.	525.00	5.3
37 Inter. Business Mach. Corp.	170.40	1.2
214 Inter. Tel. & Tel. Corp. — Preferred	219.36	3.3
400 McGraw Edison Co.	420.00	3.9
200 Kraftco	340.00	4.9
358 New England Elec. Co.	462.00	5.9
500 Newmont Mining Corp.	520.00	3.7
200 Standard Oil, N.J.	750.00	5.0
472 Texaco	755.20	4.5
200 Warner Lambert Pharm. Co.	235.00	1.6
4 W. R. Grace & Co.	6.00	4.5
260 Wilson & Co. Inc.	351.00	6.0
TOTAL COMMON STOCKS	<u>\$6,709.34</u>	<u>3.7%</u>
SAVINGS ACCOUNT		
First Fed. Savings & Loan Assn.	<u>428.18</u>	<u>5.25%</u>
TOTAL INCOME FROM INVESTMENTS	<u>\$9,873.82</u>	<u>4.3%</u>

REPORT OF THE AUDITING COMMITTEE

Boston, Mass., March 24, 1971

To the Boston Society of Civil Engineers

We have reviewed the records and accounts of the Secretary and Treasurer of the Boston Society of Civil Engineers, and we have compared the bank statement of securities held by the Boston Safe Deposit and Trust Company with the enumeration submitted by the Treasurer.

We have found them to be in order and to account accurately for the Society's Funds.

Respectfully submitted,

Max D. Sorota
Peter S. Eagleson

REPORT OF THE JOURNAL EDITOR

Boston, Mass., March 24, 1971

To the Boston Society of Civil Engineers:

During the last fiscal year, Volume 57 was published, consisting of issues for January, April, July and October 1970. It contained five technical papers and the Boring Data for the Roxbury area of Boston, plus Society reports, in 340 pages of text.

As mentioned in last year's report, the publication of the boring data increases the Journal expense since it involves extra composition costs. The Society should benefit, however, when the boring data are eventually published in a single hard-cover volume, since the composed copy is being retained for future use.

The continuing purpose of the Journal is to provide the Society members and our subscribers with a publication of high standards as a medium for top quality technical papers, high grade professional advertising, and Society reports. With increased and still rising publication costs, a determined effort is being made to reduce the cost of the Journal to the Society, and still maintain our standard of service to the Society membership and the engineering profession.

Respectfully submitted,

H. H. Holly, Editor

REPORT OF PUBLICATION COMMITTEE

Boston, Mass., March 24, 1971

To the Boston Society of Civil Engineers:

During the period March 1970 and February 1971 the Publication Committee reviewed nine papers.

Of these nine, one was rejected, two were published, two have been accepted for publication, and four were conditionally accepted and returned to the authors for modification.

Respectfully submitted,

James P. Archibald, Chairman
Publication Committee

REPORT OF THE ADVERTISING COMMITTEE

Boston, Mass., March 24, 1971

To the Boston Society of Civil Engineers:

The Advertising Committee met three times during the year and worked continuously in an attempt to bolster advertising revenue from the Journal. In spite of the general economic decline prevalent in the nation, advertising in the Journal has been maintained at a fairly constant level during the year.

In order to substantially increase advertising revenue, the Committee suggests that serious consideration be given to:

1. Engaging a professional advertising agency to mount a vigorous soliciting campaign.
2. Revision of advertising rates.

Respectfully submitted,

Frank W. Stockwell

Robert J. Van Epps

John S. Cusack

Joseph W. Lavin

H. Hobart Holly

Walter M. Newman, Chairman

REPORT OF THE LIBRARY COMMITTEE

Boston, Mass., March 24, 1971

To the Boston Society of Civil Engineers:

The activity and the use of the Library for the current year, has not increased over the previous year. Most of the activity is associated with literature in the historical section of the library. A few students have made use of the library throughout the year in search for material to aid them in their theses.

During the year, approximately 30 books and proceedings were loaned out to individuals. These were individuals associated with engineering firms in the greater Boston area.

The Library Committee recommends no expenditures for new books.

No books have been donated to the library during this current year.

The Committee at its meeting on February 12, 1971 did not recommend any new action to be presented in its report to the Society. It did feel strongly that the recommendations in the March 25, 1970 report of the Library Committee be carried out. The Committee would strongly suggest the recommendations which involves culling out material no longer of sufficient value to the membership both in the main library room and in the storage room; also, the recommendation dealing with part-time employment. It is particularly important that the books on the library shelves be arranged in an orderly fashion. Material which is kept in the storage room should be re-arranged, and the material which is not to be retained should be discarded. This could be handled by part-time help under the supervision of Mrs. Boudia.

The Committee felt that with the present lease expiring at the end of 1972, and with the possibility of seeking new quarters, the Society should begin to dispose of material of questionable value to the membership.

Respectfully submitted,

George W. Hankinson

For the Library Committee.

REPORT OF HOSPITALITY COMMITTEE

Boston, Mass., March 3, 1971

To the Boston Society of Civil Engineers:

The Hospitality Committee submits the following report for the year 1970-1971:

A total of nine meetings of the Society were held during the past year. This was three meetings less than the previous year.

Included in this total were the 122nd Annual Meeting, eight joint meetings with the American Society of Civil Engineers, one of which was a Student's Night Meeting, another meeting was held at the ASCE National Convention, and seven regular meetings of the Society.

Catered dinners were served prior to all meetings.

The average attendance of members and guests for all nine meetings, using the larger attendance figure, was 112 as compared to last year's average of 84.

ATTENDANCE AT MEETINGS

<i>Date</i>	<i>Place</i>	<i>Meeting</i>	<i>Dinner</i>
March 25, 1970	Science Museum Science Park Boston, Mass.	162	162
April 29, 1970	Red Coach Grill Boston, Mass.	65	62
June 3, 1970	Treatment Facilities City of Brockton	30	30
July 13, 1970	Statler Hilton Hotel Boston, Mass.	210	210
September 16, 1970	Townhouse Beacon Street Boston, Mass.	107	80
October 14, 1970	University of Mass. Amherst, Mass.	107	103
November 16, 1970	Red Coach Grill Boston, Mass.	190	170
December 16, 1970	Navy Building 495 Summer St. Boston, Mass.	90	90
February 17, 1971	New England Life Bldg. 225 Clarendon St. Boston, Mass.	45	45

Respectfully submitted,

Philip A. Bianchi
Chairman

REPORT OF MEMBERSHIP COMMITTEE**March 24, 1971***To the Boston Society of Civil Engineers:*

During the past year, the members of the Committee canvassed several of the larger engineering firms and governmental agencies for new members. Although the effect of intensive membership recruiting drives in recent years was evident, many new possible candidates were contacted. We suggest that the Society continue to place a strong emphasis on new member recruiting.

The increase in membership during the current year is as follows:

New Members	41
Membership Applications Pending	12
New Juniors	6
Reinstated	6

Total Membership as of March 1, 1971 - 1,115

Respectfully submitted,

Warren H. Ringer
Chairman

REPORT OF THE PUBLIC RELATIONS COMMITTEE**March 24, 1971***To the Boston Society of Civil Engineers:*

The members of this Committee were in contact during the past year by phone, correspondence and personal contact. In reporting to the Society on its activities, we emphasize three main public relation projects that were considered.

1. A new brochure, updating one that we understand was developed about 20 years ago, is not deemed worthwhile. The added interest in BSCE activities and membership may better be encouraged in other ways.
2. Three standard forms were developed for use by Section Chairmen to better publicize meetings. The forms consist of:
 - a. An abstract of the paper to be delivered. This information can be used to better inform BSCE members of the contents of the paper to be delivered.
 - b. An information for news release form which can be used for insertion in local newspapers.
 - c. A speaker information form which can be used for introductions and for later filing with the abstract to form a permanent, more detailed record of Section speakers and papers.
3. The Committee suggests to the Board of Government that a "Speaker Bureau" consisting of a volunteer from each Section be set up. The Bureau would supply to college and university classes, ready access to speakers on engineering specialties, the advantages of engineering societies and BSCE in particular, and would serve as a means to communicate with and assist engineering students in choosing their career specialty.

Respectfully submitted,

Charles A. Parthum
Chairman

REPORT OF COMMITTEE ON SUBSOILS OF BOSTON**March 24, 1971***To the Boston Society of Civil Engineers:*

The Committee on Subsoils of Boston met on April 8, September 16, 1970 and January 28, 1971.

During the past year boring data for the sub-area Roxbury was published in the July 1970 issue of the Journal of the Boston Society of Civil Engineers. Boring information on South Boston was turned over to the Publication Committee last October and it shall be published in the near future. Collection and compilation of boring data for Cambridge was begun last November but the work was interrupted due to insufficient funds.

To improve the sagging finances of the Committee, a second fund raising campaign was started last July. The President of the Boston Society of Civil Engineers sent a letter to all former contributors, also to additional addresses requesting new donations. The letter was followed up by personal contacts by the members of the Committee. All these efforts produced meager results, the total cash on hand as of January 28, 1971 was \$1,236.11. It is estimated that about an additional sum of \$2,500.00 is required to bring the Cambridge sub-area to completion. This sum does not include the cost of publication which will be, hopefully, underwritten by the Boston Society of Civil Engineers.

The Committee is presently considering different avenues which would make it possible to finish the Cambridge area. It is however questionable that the contemplated additional areas will ever be published in light of the lack of interest and financial support by the engineering profession.

Respectfully submitted,

Horst Borberek, Chairman
Subsoils of Boston Committee

REPORT OF COMMITTEE ON PROFESSIONAL CONDUCT**March 16, 1971***To the Boston Society of Civil Engineers:*

During the past year the Society has received no complaints of ethical practice violations on the part of any of the members. The Committee has held one meeting.

William L. Hyland, Chairman
George G. Bogren
Francis S. Harvey
George M. Reece

REPORT OF THE JOINT LEGISLATIVE COMMITTEE**Boston, Mass., March 25, 1970***To the Boston Society of Civil Engineers:*

The Committee has looked at legislation submitted to the General Court for the present session. Of the many proposed pieces of legislation that relate to the interests of the

Society, the Committee feels that the following should be of general interest to the members.

Senate Bills

- 1072 – Legislation to provide a limitation of three years for the bringing of actions of contract or tort for malpractice, error or mistake against architects, professional engineers and land surveyors.
- 1074 – Legislation to provide for the definition of the terms “responsible charge” and “supervision of construction”.
- 1075 – Legislation to provide for stamping of certain engineering plans.

House Bills

- 474 – That the membership of certain boards and commissions shall consist of at least two non-professionals or lay persons.

There are presently eight bills which would allow citizens to bring legal actions to enforce statutes and regulations protecting the environment. These bills are presently in committee and a compromise bill is anticipated. Where the compromise bill is reported it will probably be by the Committee on Natural Resources. One of the provisions would allow that any ten citizens of the Commonwealth may bring a suit in equity against any person, violating environmental protection laws or regulations.

This Committee feels that the impact of this legislation may be such that members of the Society should be aware of the proposed legislation and should make their views known to the Committee on Natural Resources.

During the 1970 legislative session the most significant legislation to our Society was the enactment of Chapter 707 of the General Laws. This law requires that to become a registered professional engineer or land surveyor a written examination is mandatory. Candidates will have to take an eight-hour examination in the basic sciences and an eight-hour examination in engineering principles and practices. These examinations will be offered twice each year.

Respectfully submitted,

Cornelius J. O’Leary, Chairman
 Ralph Soule
 Joseph Knox
 James Dallas
 Charles Parthum

REPORT OF BSCE-ASCE RELATIONSHIP COMMITTEE

March 24, 1971

To the Boston Society of Civil Engineers:

Acting jointly with a like committee of the Massachusetts Section of the American Society of Civil Engineers, the work of this Committee culminated with the preparation of a proposal for a final resolution of BSCE-ASCE Relationship.

This proposal was requested by the Board of Government of the BSCE and has been submitted to the governing bodies of both organizations for study and action.

The proposal presents a plan for consolidating the Massachusetts Section of the ASCE and the BSCE into one civil Engineering organization to be named the Boston Society Section of ASCE. The proposal presents details for consolidation, discusses the impact of

consolidation on members in the two societies and gives recommendations for implementation if warranted.

Respectfully submitted,

James P. Archibald, Chairman
BSCE-ASCE Relationship Committee

REPORT OF THE JOHN R. FREEMAN FUND COMMITTEE

March 24, 1971

To the Boston Society of Civil Engineers:

Professor Arthur T. Ippen, Institute Professor of the Ralph M. Parsons Laboratory for Water Resources and Hydrodynamics presented the sixth John R. Freeman Memorial Lecture. His topic was "Another Look at Sediment Transport in Turbulent Streams".

As a worthy project for the year the Freeman Fund Committee agreed unanimously to provide \$7,000.00 toward the expense of publishing the Boring Data of Greater Boston.

Leslie J. Hooper
Chairman

REPORT OF THE RALPH W. HORNE FUND COMMITTEE

Boston, Mass., February 17, 1971

To the Boston Society of Civil Engineers:

This is the Fifth Annual Report of the Ralph W. Horne Fund Committee.

At the 1970 Annual Meeting, the Society, acting upon the recommendation of the Committee, named Wilfred McGregor Hall as the recipient of the Ralph W. Horne Award and presented him a scroll in recognition of the unpaid public service which he has rendered throughout his professional career.

Prior recipients of the award were Edward Wright in 1969, Dr. Carl Stephen Ell in 1968, Llewellyn T. Schofield in 1967, Miles N. Clair in 1966 and Charles O. Baird, Jr. in 1965.

William L. Hyland, Chairman
George G. Bogren
Miles N. Clair

ANNUAL REPORT OF THE EXECUTIVE COMMITTEE SANITARY SECTION

March 16, 1971

The Sanitary Section met four times during the preceding year. A brief account of each meeting follows:

- 1- *March 4, 1970 - Annual Meeting*
(Meeting held at Society Rooms)

The following officers and members of the Executive Committee were elected:

Leland F. Carter	Chairman
Cornelius O'Leary	Vice-Chairman
Prof. Jack Cochrane	Clerk
Paul Guertin	
William Parker	
George K. Tozer	

After election of officers, there was a panel session on the subject of "Air Pollution Control Implementation Plans and Their Economic Impact". Panelists introduced by Chairman David Duncan were:

Mr. David Standley
Executive Director
City of Boston
Air Pollution Control Commission

Mr. John W. Lebourveau
Environmental Engineer
New England Electric System

Mr. James L. Dallas
Director, Bureau of Air Use Management
Massachusetts Department of Public Health

- 2- *June 3, 1970 - Annual Outing and Joint Meeting with Parent Society*
(Meeting held at Brockton, Massachusetts)

Members and guests attended the dinner meeting at the Congress Inn in early evening.

The meeting was opened by Secretary Paul A. Dunkerley of the Boston Society of Civil Engineers and parent society business was conducted.

The meeting was turned over to the Sanitary Section Chairman, Leland F. Carter.

Between 2:00 p.m. and 5:00 p.m., previous to the dinner meeting, the members and guests visited the Brockton Water Filtration Plant at Silver Lake and the Brockton Sewage Treatment Plant, off Meadow Lane.

After dinner, Mr. Joseph Heney of Camp, Dresser & McKee spoke briefly on the Water Filtration Plant and Mr. George Reece of Fay, Spofford & Thorndike, Inc., spoke briefly on the Sewage Treatment Plant.

- 3- *October 7, 1970*
(Meeting held at Society Rooms)

At this meeting an interesting lecture on "New England Offshore Currents and Potential Pollution Problems" was presented by Dr. Robert Batchelder, Professor of Geography, Boston University.

- 4- *December 2, 1970*
(Meeting held at Society Rooms)

At this meeting Mr. Arthur A. Baker, Instructor/Coordinator for the New England Wastewater Institute, described in detail the function and operation of the school for training sewage treatment plant operators.

The Executive Committee met prior to the March 4, October 7 and December 2 meetings. Programs for the year were planned and plans for future meetings were discussed.

Action on more suitable quarters and remedial action on the present quarters was discussed, and the results of these discussions were transmitted to the parent organization.

Better attendance at meetings was also discussed, but no definite course of action was decided upon in this area.

Respectfully submitted,

Jack Cochrane
Clerk

**REPORT OF THE EXECUTIVE COMMITTEE OF
THE STRUCTURAL SECTION**

Boston, Mass., March 11, 1971

The Structural Section held five meetings during the past year, as follows:

April 8, 1970

Mr. Richard P. Thuma, Building Commissioner of the City of Boston, spoke on "Impact of the New Boston Building Code on Structural Engineers". Attendance was 38. This dinner meeting was held in the Harvard Room of Purcell's Restaurant.

October 14, 1970

This was a joint meeting of the Structural and the Geotechnical Sections. Mr. Mark Fintel, Director of Engineering, Design and Standards, Portland Cement Association, spoke on "Earthquake Codes and Design Implications". Attendance was 83. This and the following dinner meeting was held in the Engineers Club at the Prudential Building.

December 9, 1970

Mr. Sepp Firnkas, Consulting Engineer in Boston, spoke of "Headaches with Prestressed Precast Concrete". Attendance was 56.

January 13, 1971

This was the "Young Engineers" evening initiated by Mr. Abraham Woolf, Member of the Executive Committee. The first speaker, Mr. Alvin R. Griffith, Structural Engineer, Charles T. Main, Inc., spoke on "A.D. Edmoston Pumping Plant Discharge Line Manifolds - Structural Design Studies". The second speaker was Mr. Jack I. Mann, Principal Engineer, Jackson and Moreland, who spoke on "Structural Design of 38 Story Steel Framed Building with Emphasis on Computer Application on Analysis and Design". The third speaker, Mr. Peter K. Taylor, Soils Engineer, Stone and Webster Engineering Corp., spoke on "Problems in Constructing a Pile Foundation". Attendance was 37. This and the following meeting was held in the Town House Restaurant on Beacon Street.

March 10, 1971

Mr. T. W. Spilman, Manager of Engineering Fabricated Steel Construction Division, Bethlehem Steel Corp., spoke on "Problems in Bolted Connections in Structural Steel". This was the annual meeting of the Structural Section. Attendance was 58. The following were nominated and elected to the Executive Committee of the Structural Section for the year 1971-1972:

Sepp Firnkas, Chairman
Jurgis Gimbutas, Vice-Chairman
Rubin Zallen, Clerk
Harold McKittrick
Othar Zaldastani
William Hagen

The total attendance at the five meetings was 272, averaging 54 per meeting. The last three meetings, starting in December, were joint meetings with the Structural Section of the American Society of Civil Engineers, Massachusetts Section.

Respectfully submitted,

Jurgis Gimbutas
Clerk

**REPORT OF THE EXECUTIVE COMMITTEE OF
THE TRANSPORTATION SECTION – YEAR 1970-1971**

March 22, 1971

The Executive Committee for the year 1970-1971 consisted of the following:

A. Paul LaRosa	Chairman
A. Russell Barnes	Vice-Chairman
Robert T. Tierney	Clerk
Charles D. Shaker	
Maurice Freedman	
Richard K. Guzowski	

The Transportation Section held four meetings during the past year, as follows:

May 20, 1970

Joint Meeting with Institute of Traffic Engineers

A panel of speakers, consisting of Daniel S. Horgan, Chief Engineer, Massachusetts Department of Public Works; Sumner Hoffman, Engineer, Massachusetts Department of Public Works; and Philip Robinson of the Bureau of Public Roads, Department of Transportation, discussed "Traffic Operations Program for the Improvement of Capacity and Safety".

Attendance – approximately 66

This meeting was held at Purcell's Restaurant, School Street, Boston.

July 13, 1970

Joint-Sponsored Dinner with A.S.C.E.

This meeting took place during the 1970 A.S.C.E. National Transportation Engineers' Convention. Mr. William J. Ronan, Chairman of the Metropolitan Transit Authority of New York, presented an interesting talk on "Mass Transit in the Seventies".

Attendance – over 350 engineers and wives

The meeting was held at the Statler-Hilton Hotel, Boston.

In November of 1970, a new program of joint meetings of the B.S.C.E. and A.S.C.E. Transportation Sections was initiated and appears to be stimulating increased attendance and interest at the meetings.

November 18, 1970

Joint Meeting B.S.C.E. and A.S.C.E. Transportation Sections

Dr. Alan A. Altshuler, Director of the Governor's Boston Transportation Planning Review, presented his talk entitled, "Balanced Transportation for Metropolitan Boston".

Attendance – capacity audience of 140 engineers

This meeting was held at the Red Coach Grill, Stanhope Street, Boston.

February 24, 1971

Annual Meeting

Mr. Robert T. Kenney, Director of the Boston Redevelopment Authority, addressed the group on "The New Boston".

The following were nominated and elected to the Executive Committee of the Transportation Section for the year 1971-1972:

A. Russell Barnes	Chairman
Robert T. Tierney	Vice-Chairman
Richard K. Guzowski	Clerk
A. Paul LaRosa	
R. Lawrence Whipple	

Attendance – 65

This meeting was held at the Red Coach Grill, Stanhope Street, Boston.

I wish to thank the members of the Executive Committee who contributed so much of their time and energies in providing assistance in the activities of the Transportation Section and making the 1970-1971 year an active and successful season.

Respectfully submitted,

A. Paul LaRosa
Chairman

EXECUTIVE COMMITTEE REPORT OF THE HYDRAULICS SECTION

March 8, 1971

The following meetings were held during the past year:

May 6, 1970

Mr. Saul Cooper, Chief Reservoir Control Center, New England Division, Corps of Engineers, spoke at a joint meeting of the Hydraulics and Computer sections. The subject of the presentation, held at the Corps' offices, was the Automated Hydrologic Reporting Network recently placed in operation by the Corps. A demonstration of the interrogating and reporting procedure was given together with the plotting of the data received.

Attendance: 50

November 17, 1970

Mr. Richard Estes of Camp, Dresser & McKee spoke on the construction, operation and function of the Commonwealth of Massachusetts Fish Hatchery installed just downstream of Quabbin Reservoir.

Attendance: 16

February 17, 1971

The Annual Meeting was held jointly with the Main Society of the Boston Society of Civil Engineers at the Charter Room of the New England Life Building, 225 Clarendon Street, Boston, Massachusetts. Dr. Arthur Ippen, Ford Professor of Engineering and Director of the Hydrodynamics Laboratory at M.I.T. gave the sixth John R. Freeman Memorial Lecture. He presented a review of achievements in theoretical and experimental research on the transport of sediments in turbulent flow, with emphasis on applications to engineering practice.

The following slate of officers of the Hydraulics Section for the year 1971-1972 was elected unanimously by voice vote:

Chairman	Albert G. Ferron
Vice-Chairman	Jerome Degen
Clerk	Frank E. Perkins
Executive Committee	Robert E. Restall
	Saul Cooper
	Stephen E. Dore, Jr.
	(Past Chairman)

Attendance: 45

The cooperative effort between the Hydraulics Sections of the Boston Society of Civil Engineers and American Society of Civil Engineers has been initiated. To afford a high degree of coordination with a view toward increasing interest and attendance at meetings, Jerome Degen of the Boston Society was appointed Chairman of the American Society, Hydraulics Section. One executive committee was held on November 17, 1970, with mutually satisfactory results.

Respectfully submitted,

Jerome Degen
Clerk

ANNUAL REPORT (1970-71) OF THE EXECUTIVE COMMITTEE OF THE GEOTECHNICAL SECTION

The officers and members of the Executive Committee who have served during the past year are as follows:

Charles C. Ladd	Chairman
Philip A. Wild	Vice-Chairman
Edmund G. Johnson	Clerk
Vincent J. Murphy	Member
Steve J. Poulos	Member
Stiles F. Stevens	Member
Ronald E. Bucknam	Chairman, Continuing Education Committee

During the past year, four highly successful regular Section meetings were scheduled, and in addition, two well-attended, informal Geotechnical Section Forum meetings were sponsored, as follows:

GEOTECHNICAL SECTION MEETINGS

Date: *May 13, 1970 3:30 to 9:30 P.M.*
 Place: Harkness Commons, Harvard University
 Attendance: 130 ± Afternoon and evening sessions, buffet dinner
 Subject: Panel Discussion on Vertical Sand Drains
 Moderator: Dr. Harl P. Aldrich, Jr.
 Haley & Aldrich, Inc.

Panel Members:

Dr. Leo Casagrande
 Div. of Engineering & Applied Physics
 Harvard University, Cambridge, Mass.
 Mr. Stanley Johnson
 Waterways Experiment Station
 Vicksburg, Mississippi
 Mr. Martin S. Kapp
 The Port of New York Authority
 New York, New York
 Dr. Charles C. Ladd
 Prof. of Civil Engineering
 M.I.T., Cambridge, Massachusetts

The primary purpose of the panel discussion was to present and review recent developments and experiences among the panel members on the subject of stabilization by means of vertical sand drains. Each of the members has had considerable experience in this field and brought to the group a most distinguished presentation. After formal presentations by each panelist there was group discussion among the panel, followed by general discussion from the floor.

Note: The following Section members served as Reporters: J. Rixner, P. Taylor and D. Riordan. They have prepared notes summarizing the major points of discussion in these sessions, which have been forwarded to the Society for publication in the BSCE Journal.

Joint Dinner Meeting with: BSCE & Structural Section, BSCE

Date: *September 16, 1970*
 Place: The Townhouse, Boston
 Attendance: 81
 Subject: "Implications of Revised Earthquake Zone Classification for Boston"

Speakers:

Rev. D. Linehan (S.J.)
 Director, Weston Observatory
 "Earthquake History of Boston"
 Mr. R. J. Holt
 President, Weston Geophysical Research, Inc.
 "Comparative Seisicity"
 Dr. R. V. Whitman
 Prof. of Civil Engineering, M.I.T.
 "Ground Motions and Amplification"

The meeting was opened by Prof. Spencer, President of the Society, for a brief business meeting. Prof. Ladd, Section Chairman, then introduced the guest speakers.

Each speaker presented a most interesting illustrated talk and was followed by a general discussion period.

Joint Dinner Meeting with Computer Section, BSCE

Date: *November 10, 1970*
 Place: Patten's Restaurant, Boston
 Attendance: 37
 Subject: "Computer Applications in Soil Mechanics"

Speakers:

Dr. C. C. Ladd
 Prof. of Civil Engineering, M.I.T.
 "Engineering Applications"
 Dr. J. T. Christian
 Assoc. Prof. of Civil Engineering, M.I.T.
 "Recent Advances"
 Mr. G. L. Woodland, Jr.
 Computer Section, Stone & Webster Corp., Boston
 "Computer Services"

This meeting was of interest to members of both Sections as it pointed out the common areas where both fields can serve each other.

Annual Meeting of the Geotechnical Section

Date: *February 10, 1971*
 Place: Dinner: Harkness Commons, Harvard University
 Meeting: Room 110, Pierce Hall, Harvard
 Attendance: 100 ±

Business Meeting:

Chairman Ladd called on Mr. Donald Goldberg to present the slate of candidates proposed by the Nominating Committee (Messrs. D. Goldberg, C. Ladd and H. P. Aldrich, Jr.) which were as follows:

Philip A. Wild	Chairman
Edmund G. Johnson	Vice-Chairman
Steve J. Poulos	Clerk
Vincent J. Murphy	Member
Stiles F. Stevens	Member
Anwar Wissa	Member

There being no further nominations from the floor, the members voted to elect the slate as read.

General Subjects of Program:

1. Inherent Pay Item Conflicts in Typical Pile Specifications
2. Applications of the Wave Equation
3. Interpretation of Pile Load Tests

Speakers:

Panel Moderator:	Ronald C. Hirschfeld
Panelists:	Charles L. Guild, Guild-Moulton Construction Corp. James F. Haley, Haley & Aldrich, Inc. Clifford Simmons, Raymond International Inc. William F. Swiger, Stone & Webster Engr.. Corp.

The format was quite informal, and was a continuation of the general subject of pile foundations. Each panelist made a brief presentation, followed by discussions among the panelists and questions from the floor.

Subsequently, several brief presentations on related subjects were given, some of which were illustrated and accompanied by handouts, including the following:

John Dunicliff	Method of surveying internal alignment of pipe piles
Tom Davisson	Discussion of stresses induced in steel piles during driving
Peter Taylor	Short-term load test experiences
Gabriel Fuentes	(Pile Contractor, Puerto Rico). Short movie on pile load test and installation procedures in Puerto Rico
Abraham Woolf	Reminiscences of experiences with pile tests on several types, 30 years ago
Gary Brierley	Recent load tests in which tell-tale measurements at pile tip important

There were, in addition, several worthwhile and pertinent comments from other members in the group. The meeting was adjourned at 9:30.

Geotechnical Section Forum Meetings

*Sponsored by Continuing Education Committee
Ronald E. Bucknam, Chairman*

First Meeting:

Date: *November 17, 1970*
 Place: Harkness Commons, Harvard University
 Panel Discussion, followed by buffet dinner
 Attendance: 144
 Subject: "Pile Load Tests and Use of Preaugering"
 Organizer: Steve J. Poulos
 Moderator: Eric P. A. O'Neil
 Panelists: W. P. Carter J. F. Haley
 C. L. Guild H. A. Mohr
 C. E. Simmons S. F. Stevens
 F. Maxwell D. D'Appolonia

Second Meeting:

Date: *January 19, 1971*
 Place: Harkness Commons, Buffet Dinner
 Room 110, Pierce Hall, Program
 Attendance: 80
 Subject: "Performance During Loading of Areas Underlain
 by Peat or Rubbish Fill"
 Organizer: William Zoino
 A. Allen Gass
 Speakers: Harl P. Aldrich, Jr. Carmine DeVito
 Birger Schmidt Edson F. White
 Donald Goldberg Norbert Schomaker
 William Zoino

Both of these meetings were well attended and received with much enthusiasm, indicating that these subjects and meeting format are well received by the membership.

Respectfully submitted,

Edmund G. Johnson
Clerk

ANNUAL REPORT OF THE EXECUTIVE COMMITTEE OF THE COMPUTER SECTION - 1970-71

During the second year of operation the computer section conducted or participated jointly with other sections in six meetings.

April 1, 1970

(Meeting at Pattens Restaurant, Attendance 76)

The Computer Section met to hear a panel discussion on "Computer Graphics in Civil Engineering". The first speaker, Mr. Paul DeNapoli, Chief Engineer, Hayden, Harding and Buchanan, Boston, described his experiences with the use of computers and computer graphics using time-sharing and remote terminal hardware. The second speaker, Mr. Joseph Fornataro, California Computer Products, Inc., reviewed the evolution of hardware and software aspects of automatic digital plotters.

May 6, 1970

(Meeting at Corps of Engineers Reservoir Control Center, Waltham, Mass., Attendance 50 approximately)

The Computer and Hydraulic Sections met jointly to hear Mr. Saul Cooper, Chief of the Reservoir Control Center describe and demonstrate, "A System for Automated Flood Control and Hurricane Protection". Mr. Cooper described the system which transmits hydrologic data to a central computer to direct the operation of 35 flood control dams in New England.

October 14, 1970

(Student Night - Meeting at University of Mass., Amherst, Attendance 150)

The Computer Section jointly sponsored student night with the Main Society and the Mass. Section of ASCE. The speaker was Mr. David Carsen of Omnidata, Inc., New York City. His talk was entitled: "Civil Engineering in the Seventies - The Effects of Mergers, Conglomerates, Unions and Computers". Mr. Carsen's presentation was followed by a lively discussion regarding the civil engineer's economic and professional status in society.

October 28, 1970

(Meeting at Playboy Club, Attendance 50)

The Computer Section met to hear Professor Joseph Sussman of M.I.T., who spoke on the subject, "Computerized Specification Editing", using illustrated examples from the "SPECS" Program. The discussion period indicated considerable potential use of the system.

November 10, 1970

(Meeting at Pattens Restaurant, Attendance 37)

The Computer and Geotechnical Sections met to hear a panel discussion concerning "Computer Applications in Soil Mechanics".

Dr. Charles C. Ladd, Professor of Civil Engineering, M.I.T., presented some engineering applications of computers.

Dr. John T. Christian, Associate Professor of Civil Engineering, M.I.T., discussed recent computer advances including graphical output.

Mr. Gerald L. Woodland, Jr., Assistant Manager, Systems Analysis and Programming Division, Stone & Webster Engineering Corporation, discussed "Computer Services and Engineering Objectives of Computer Usage".

January 20, 1971

(Annual Meeting at Playboy Club, Attendance 67)

During the business meeting the following persons were nominated to serve on the executive committee:

Chairman	- Alan Rimer
Vice-Chairman	- David Hellstrom
Clerk	- Robert Logcher
Member	- John Christian
Member	- Charles Shaker
Member	- Gerald Woodland

There were no other nominations, and it was voted that the clerk cast a single ballot for the slate.

Mr. Woodland then read the annual report of the section. Following this, there being no other business, Dr. G. Neil Harper, President of CLM Systems, Inc., was introduced as guest speaker. His subject was "Civil Systems Engineering in the 70's". He described several computer programs which his firm had developed and used, including those for vehicle licensing, airport noise studies, hydraulic systems, building size and shape optimization, elevator optimization, real estate analysis and risk analysis. A question period followed.

With this meeting the Computer Section completes its second year of service to the Society. Our section mailing list now identifies approximately 125 civil engineers in the Greater Boston area who are involved in computer applications. Computer Section meetings have indicated considerable interest in computer-related subjects and have generated considerable discussion.

Joint meetings with other technical sections have been attended principally by those engineers practicing in particular technical areas. I would encourage future meetings along both lines to satisfy both interests.

It is now accepted practice to use computers in engineering work by practically all engineering organizations. There is a definite need for a Computer Section in the Society and this has been demonstrated by increased attendance and participation in the affairs of the section. The future holds a challenge as computer-related techniques are refined and adopted. The Computer Section's role of service to the Society and to the profession will be to bring to the membership the knowledge and experience required for successful use of the computer by the Society's membership.

In conclusion I would like to express my personal appreciation to the Executive Committee for their cooperation and assistance during the past year and to the membership for your support. It has been a professionally rewarding experience.

Respectfully submitted,

Gerald L. Woodland, Jr.
Chairman 1970-71