

Council Chamber, Ann Arbor, Mich.,  
Jan. 18, 1915. Regular session.

Meeting called to order by the president. Present: Ald. Fiegel, Heusel, A. Lutz, Hanselmann, Koernke, Prochnow Flynn, Markey, Hubbard, Sherk, Groves, McGregor, Sink, G. Lutz, Pres. Schmid, 15. Absent, none.

Minutes of previous meeting approved.

#### Communications.

From the Mayor—

To the Honorable, the Common Council of the City of Ann Arbor: Gentlemen—I hereby notify you that I have this day revoked the license heretofore granted to Leo Peters to conduct a billiard and pool room at 122 E. Huron street. My reason for revoking the license is that gambling has been permitted in the place. Small boys have been allowed to bring intoxicants into the place and become intoxicated, and he has generally catered to the trade of minor boys. On last Saturday night a fight occurred in the place and a young man was severely injured. The officers have been called to the place on several occasions.

I feel certain that you will agree with me that Ann Arbor is not in need of a place so conducted.

Very truly yours, R. G. MacKenzie,  
Mayor.

Dated January 18th, 1915.

Ordered on file.

From Board of Public Works—

The Engineer asked for more pay.

Moved by Mr. Reule, that the board recommend to the council that the salary of engineer be \$150.00 per month, commencing with month of February, 1915. Adopted by board.

(Council action.)

Moved by Ald. G. Lutz, that the recommendation of the board of public works be concurred in. Adopted by unanimous vote of those present, 15.

(From Board of Public Works.)

Moved by Mr. Rehberg, that Alfred J. Paul be employed as Street Commissioner for the city, to commence February 1st, 1915. Adopted by board. Moved by Mr. Rehberg, that the salary of Street Commissioner be placed at \$125.00 per month. Adopted by board.

(Council action.)

Moved by Ald. Fiegel, that action of the board of public works be concurred in. Adopted by unanimous vote of council, 15.

(From Water Works Department.)

Ann Arbor, Mich., Dec. 22, 1914.

To the Honorable Common Council of the City of Ann Arbor, Mich.: Gentlemen—The following resolution was offered by Mr. Lindenschmitt, and supported by Mr. Cornwell, that commencing Jan. 1st, 1915, the salaries of the following persons shall be as follows:

Geo. S. Vandawarker, Mngr. . . . .	\$2,200.00 per year
R. Spokes, Supt. . . . .	2,000.00 per year
C. Shetterly, Cashier . . . . .	1,000.00 per year
A. E. Hawkes, Inspector . . . . .	950.00 per year
Louise Malloy, Asst. Cashier . . . . .	60.00 per mo.

Ayes—Mann, Lindenschmitt and Cornwell.

Water Works Department of the City of Ann Arbor. By Geo. S. Vandawarker, Manager.

Moved by Ald. Prochnow, be concurred in. Adopted by unanimous vote of council, 15.

(From Health Officer.)

Ann Arbor, Mich., Jan. 12th, 1915.

To the Honorable Common Council: Gentlemen—In 1907 the salary of the Health Officer of the City of Ann Arbor was raised by your honorable body to \$600.00 per annum. Since that time the work has quadrupled so that at the present time I am obliged to make from four to six calls per day to investigate matters that the health officer must see, if the work is properly done. To meet this I have put in extra equipment, in the way of conveyance, so that I can travel faster and with greater certainty. Even with all this I am obliged to sacrifice some of my private practice. I do not feel that I should work longer for the city at a loss to myself. I therefore ask your honorable body to raise the salary of your health officer to \$1,200.00 per annum. Sincerely yours, John A. Wessinger,

M. D., Health Officer.

Moved by Ald. Markey, that the communication from Health Officer be referred to the special charter committee. Adopted.

Ann Arbor, Mich., Jan. 14, 1915.

To the Common Council of the City of Ann Arbor: In accordance with your request, I submit for your consideration the following proposition:

I am serving for the third year as bacteriologist and chemist to the Board of Health. You will note that the duties have been steadily increasing, to the extent that the work of the past year increased 100 per cent. over that of the preceding year.

For the year 1914 the compensa-

tion for the above services amounted to \$773.00, or about \$65.00 per mo. These charges were based on the regularly accepted standard prices charged for bacteriological work of the above nature.

Now instead of the generally unsatisfactory piece work method I am asked to offer my services at a straight salary. Owing to the better equipped laboratory the Board of Health has recently been provided with, and the other advantages derived from the later methods, I will agree to do the work under the direction of the City Health Officer, which service includes all bacteriological examinations and chemical analyses which the Health Officer sees fit to work out. This service I will give to the expiration of his term of office for \$50.00 per mo.

Very truly yours, U. G. Rickert,  
Chemist.

Moved by Ald. Groves, that communication be referred to the finance committee. Adopted.

Communications and petitions from Zion Lutheran Congregation, First Presbyterian Church, Baptist Church Young People's Guild, The Federation of Ministers, The First Baptist Church, The Woman's Christian Temperance Union, The Wesleyan Guild, representing the Young People of the Methodist Episcopal Church, Mothers, Sisters and Wives (43); H. F. Smith, et al. (54); George W. Sample, et al. (34); L. D. Wines, et al. (37), requesting the members of the common council to pass the ordinance prohibiting the opening of the theaters on Sunday, received and ordered on file.

**Petitions.**

Of Albert Benz, et al., asking that Sprinkling District No. 11 be discontinued, received.

Moved by Ald. Groves, that it be referred to street committee. Adopted by unanimous vote of council.

**Committee Reports.**  
**FINANCIAL REPORT**

**Fire Fund.**

Chas. J. Andrews, salary .....	\$ 50.00
Eugene Williams, salary .....	38.50
George Hoelzle, salary .....	38.50
Ralph Edwards, salary .....	38.50
Henry McLaren, salary .....	36.50
Jacob Gwinner, salary .....	36.50
Arthur Clark, salary .....	35.00
Harley Wise, salary .....	35.00
Martin Noll, salary .....	35.00
George Isbel, salary .....	35.00
Mat Heininger, salary .....	35.00
Frank Markey, salary .....	35.00
Thomas Shamp, salary .....	35.00
Clyde Carpenter, salary .....	35.00

Harold Darling, salary .....	30.00
Herman Krause, salary .....	30.00
Ed. Kleinschmidt, salary .....	30.00
Fred Horton, salary .....	30.00
Chas. Carroll, salary .....	23.00
Frank Kapp, salary .....	23.00

Total salaries for 1-2 month of  
Jan. .... \$684.50

**Police Fund.**

John T. Kenny, salary .....	\$ 41.66
Thos. O'Brien, salary .....	40.00
Wm. J. Aprill, salary .....	35.00
Gustave Meyer, salary .....	35.00
Rex Burnett, salary .....	35.00
Ruben Armbruster, salary .....	35.00
Edward Kuhn, salary .....	35.00
Wm. Blackburn, salary .....	35.00
Edward Blumhardt, salary .....	35.00
Frank J. Keihl, salary .....	32.50

Total salaries for 1-2 month of  
Jan. .... \$359.16

**Contingent Fund.**

M. C. Ryan, salary 1-2 month....	\$ 30.00
Washtenaw Gas Co., city hall and garage .....	21.45
Mich. State Telephone Co., rentals and tolls .....	40.78
The Boyer-Campbell Co., supplies..	3.19
The Brown Drug Store, supplies..	7.50
Cousins & Hall, supplies .....	2.25
Eberbach & Son Co., supplies .....	7.09
The Mayer-Schairer Co., supplies..	2.35
Geo. W. Weeks, wood, election ...	3.75
W. C. Russell, labor .....	17.00
F. E. Williams, labor .....	18.45
Davis & Ohlinger, printing .....	17.50
Washtenaw Post, printing .....	3.64
The Times News Co., printing ...	201.60

Total supplies, etc. ....\$346.55  
Contingent fund total, including salary .....

**Police Fund**

Harvey Stofflet, subscriptions .....	\$ 8.50
City Garage, labor and supplies..	3.25

Total supplies, etc. ....\$ 11.75  
Police fund total, including salaries .....

**Dog License Fund**

Cromwell Bros., burials .....	\$ 3.00
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**Water Works Fund**

W. H. Willsher, services .....	\$ 37.50
Joel West, services .....	37.50
Leslie Bush, services .....	37.50
Albert Kellogg, services .....	30.00
H. C. Willsher, services .....	30.00
Norris Budd, services .....	20.00
Flo'd Seabold, services .....	10.00
J. Schwikart, services .....	32.50
Henry Linde, services .....	30.00
John Wood, services .....	30.00
A. E. Hawkes, services .....	39.60
Cliff Shetterly, services .....	41.50
Louise Malloy, services .....	30.00

Services for 1-2 month of Jan...\$406.25  
The Standard Water Meter Co., supplies .....

phones .....	34.50
Jno. Fischer Co., supplies .....	2.77
Staebler & Co., supplies .....	2.53
Mich. Central R. R. Co., freight..	159.28
Ann Arbor Garage, supplies .....	2.20
Jno. J. Sauer, supplies .....	35.82
Crane Co., supplies .....	51.15
George Wahr, supplies .....	8.10
Ohio & Mich. Coal Co., supplies...	163.51
J. T. Wing & Co., supplies.....	19.45

Total supplies, etc. ....	\$542.35
F. Rhodenbecker, labor .....	\$ 8.90
L. Hazelschwerdt, labor .....	5.00

Total labor .....\$ 13.90

Water Works fund total .....\$962.50

**Street Fund**

John Dalglish, labor .....	\$ .75
G. J. Mack, labor .....	12.85
James Mason, labor .....	9.00
Ernest Rapp labor .....	2.88
W. H. Romig labor .....	.75
Geo. Schaulder labor .....	.50
E. Schlanderer labor .....	2.75
Fred Ulrich, labor .....	21.34
Joe Youngbauer, labor .....	1.00

Street fund total .....\$51.85

**Recapitulation**

Contingent fund .....	\$ 376.55
Fire .....	684.50
Police .....	370.00
Dog License .....	3.00
Water Works .....	962.50
Street .....	51.85

Total .....\$2,449.31

Ann Arbor, Mich., Jan. 18, 1915.

To the Finance Committee of the Common Council: Gentlemen—I have examined the foregoing accounts against the city of Ann Arbor, and I hereby certify that they are correct to the best of my knowledge.

ROSS GRANGER, City Clerk.

To the Honorable, the Common Council: Gentlemen—Your Finance committee has reviewed the foregoing report. Warrants for salaries were drawn Jan. 16, 1915. We recommend that same be approved and that warrants be ordered drawn for the foregoing accounts.

GEO. LUTZ, E. W. GROVES, ALBERT FIEGEL, Finance Committee.

Ald. G. Lutz moved the adoption of the report, which was adopted by unanimous vote of the council, 15.

Ald. G. Lutz presented the following bill:

The City of Ann Arbor to Robert Martin, Dr., To damage done to seed corn and other farm products by squirrels, \$10.00.

The undersigned submits the foregoing for allowance by the Common Council.

Robert Martin.

Dated January 4th, 1915.

Ald. G. Lutz moved that bill be not allowed, which was adopted by unanimous vote of council, 15.

**Ordinance Committee.**

Ald. Sink presented the following ordinance which was given its third reading:

**AN ORDINANCE TO PROHIBIT AND PUNISH THE OPERATING OF THEATERS AND SHOWS, FOR WHICH AN ADMISSION FEE IS CHARGED, IN VIOLATION OF THE SABBATH, WITHIN THE LIMITS OF THE CITY OF ANN ARBOR, MICHIGAN.**

The Common Council of the City of Ann Arbor ordain:

Section 1. No owner, proprietor or lessee of any theater, or opera house, located within the limits of the City of Ann Arbor, Michigan, shall put on or conduct any performance, motion picture show or other theatrical exhibition or amusement for which an admission fee shall be charged, upon the first day of the week commonly called Sunday.

Section 2. Any person violating any of the provisions of this ordinance shall upon conviction thereof be punished by a fine not to exceed one hundred dollars for the first offense, and in imposing such fine the Court may make a further sentence that in default of the payment of such fine the offender may be confined in the county jail of Washtenaw County until the payment thereof, for any period not exceeding thirty days, and upon a second conviction for a violation of the provisions of this ordinance a like fine may be imposed, and in addition thereto the person so convicted shall forfeit his license to conduct a theater within the City of Ann Arbor.

Section 3. All ordinances or parts of ordinances inconsistent herewith are hereby repealed.

Section 4. This ordinance shall take effect and be in force from and after ten days from legal publication.

The Chair put the question, "Shall this ordinance pass?"

Passed by following vote: Yeas, Ald. Fiegel, Heusel, Sherk, Groves, McGregor, Sink, G. Lutz, Pres. Schmid, 8. Nays, Ald. A. Lutz, Hanselmann, Koernke, Prochnow, Flynn, Markey, Hubbard, 7.

**Water Committee.**

To the Council: Gentlemen—Your water committee, to whom the proposal of Mr. Fred Weinberg to furnish water for fountain and maintain same at South Fifth ave. for \$20.00 per year, was referred, recommend that offer be accepted.

Thos. Hanselmann, Wm. P. Flynn,

**Water Committee.**

Ald. Hanselmann moved the adoption of the report.

Adopted as follows: Yeas Ald. Fiegel, Heusel, A. Lutz, Hanselmann, Koernke, Prochnow, Flynn, Markey, Hubbard, Groves, McGregor, Sink, Pres. Schmid, 13. Nays, Ald. Sherk, G. Lutz, 2.

**Bond Committee.**

The official city bond of Alfred J. Paul, as street commissioner, with Frank I. Cornwell and William L. Dawson as sureties, was presented, and Ald. Sink moved that it be accepted. Adopted by unanimous vote, 15.

**Special Charter Committee.**

To the Honorable, the Common Council: Gentlemen—We, the undersigned members of your committee, to whom was referred the matter of the adoption of a commission form of government for our City, would respectfully report:

That, upon making inquiries, we find that both the commission and managerial forms of government are varied, the systems are still so new and in many instances have not had a thorough trial, and our present form of government having given on the whole the best of satisfaction that for the present at least we would not recommend any change in the city's form of government.

Your committee would, however, recommend that the Council meet as a committee of the whole to consider the advisability of making certain minor changes in our present charter. Geo. Lutz, I. L. Sherk, Albert Fiegel, Theo. Prochnow, Special Charter Committee.

Ald. G. Lutz moved that report be accepted and adopted. Adopted by unanimous vote of council, 15.

To the Honorable, the Common Council: Gentlemen—We, the undersigned members of the committee to whom was referred the advisability of presenting to the voters the proposition of electing by popular vote the members of the Water Works Commission, beg leave to report:

That we believe the members of the Commission, and the mode by which they were elected, have given the very best of satisfaction to a very large majority of our citizens. We also believe that it is the only sane and safe way to keep these positions free from politics and that the people as a whole do not demand a change in the way by which the Commissioners are elected, and for these reasons we do

not recommend any change for the present.

Geo. Lutz, I. L. Sherk, Theo. Prochnow, Special Charter Committee.

Ald. G. Lutz moved that report be accepted and adopted. Adopted by unanimous vote of council, 15.

**Officers' Reports.**

**CITY FUNDS—Treasurer's Report for Month Ending Dec., 1914:**

Money Received—	
Contingent Fund—	
Transient traders' tax .....	\$ 2.23
Milk license .....	2.00
Scale money .....	8.50
Rent, 2nd Ward bldg. ....	5.00
Skating rink license .....	24.50
Peddler's license .....	2.50
Telephone tolls, Civic Asso. ....	9.50
Sale of paper .....	1.50
Dray license .....	1.50
Int. on bank balance .....	214.96
Fees on Taxes Col. ....	728.21

Total ..... \$1,000.40

Police Fund—	
City fees (Chief) .....	\$ 19.85
City fines (Doty) .....	114.00

Total ..... \$133.85

Sprinkling Districts—	
Sprinkling District No. 11 .....	\$ 92.75
Sprinkling District No. 12 .....	68.02
Sprinkling District No. 13 .....	59.27
Sprinkling District No. 14 .....	38.24
Sprinkling District No. 15 .....	25.74

City Tax Fund—	
Taxes collected .....	\$17,801.97

State Tax Fund—	
Taxes collected .....	29,189.56

County Tax Fund—	
Taxes collected .....	14,530.33

School Tax Fund—	
Taxes collected .....	75,990.57

Morrison Judg Fund—	
Taxes collected .....	1,245.63

Water Works Fund—	
Received from Mgr. Vandawalker	3,710.68

Dog License Fund—	
Dog licenses sold .....	.75

Cemetery Fund—	
Burial permits .....	6.00

Poor Fund—	
Coal sold .....	6.20

Street Fund—	
Repairing pavement, alley .....	3.81

Sale of pavement blocks .....	6.83
Driveways paid, pav. No. 30.....	37.68

Received fr. Titus Hutzel alley pavement .....	82.77
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Total .....	\$131.09
Total .....	\$144,031.05

On hand Dec. 1, 1914 .....	3,888.95
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Total .....	\$147,920.00
Warrants paid .....	25,887.40

On hand Jan. 1st, 1915 .....	\$122,032.60
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Condition of the City Funds on the first day of Jan, 1915:

Warrants Paid—	
Water works fund .....	\$3,365.88
State street repaving fund .....	5.00

Steere farm fund .....	104.51
Contingent fund .....	5,017.85
City cemetery fund .....	53.75
Dog license fund .....	4.00
Fire department fund .....	1,759.48
Poor fund .....	80.28
Police fund .....	865.52
Street fund .....	1,142.10
Park fund .....	133.70
Street light fund .....	1,355.33
School tax fund .....	12,000.00

Tax Acc. Sewer Dist. No. 53.....	9.22
Tax Acc. Sewer Dist. No. 56.....	37.88
Tax Acc. Sewer Dist. No. 60.....	118.03
Tax Acc. Sewer Dist. No. 63.....	231.29

Total .....\$25,887.40

On Hand—

Water works fund .....	\$7,438.55
Steere farm fund .....	601.59
Detention hospital fund .....	60.80
Contingent fund .....	254.77
City cemetery fund .....	450.84
license fund .....	700.31
State dog tax fund .....	100.00
Fire department fund .....	4,311.80
Poor fund .....	1,817.66
Police fund .....	4,711.16
Water fund .....	4,521.43
Park fund .....	714.10
Street light fund .....	5,453.25
Sidewalk fund .....	5.71
Bridge culvert and crosswalk fund .....	274.83
State tax fund .....	29,189.56
County tax fund .....	14,530.33
School tax fund .....	63,990.57
Rejected tax fund .....	171.76

Total .....	\$ 733.90
Warrants paid .....	1,241.49
Overdraft .....	507.59
Overdrawn Dec. 1st, 1914 .....	4,972.18
Overdrawn Jan. 1st, 1915 .....	5,479.77

Condition of Sewer Funds on the First  
Day of Jan., 1915:

Warrants Paid—

Labor Acc. Lateral Sewer No. 54..	\$ 53.44
Labor Acc. Lateral Sewer No. 58..	8.34
Labor Acc. Lateral Sewer No. 59..	36.94
Labor Acc. Lateral Sewer No. 65..	225.71
Labor Acc. Lateral Sewer No. 66..	362.98
Labor Acc. Lateral Sewer No. 67..	554.08

Total .....\$1,241.49

On Hand—

Total .....\$139,298.99

Overdrawn ..... 17,266.39

On hand Jan. 1st, 1915 .....\$122,032.60

Overdrawn—

State street repaving fund .....	\$ 15.20
Margaret Morrison J. fund.....	454.37
Street fund .....	\$ 5,546.36
Sidewalk building fund .....	372.55
Uncollected city tax fund .....	6,202.81
Delinquent tax fund .....	4,148.32
Sprinkling District No. 11 .....	217.81
Sprinkling District No. 12 .....	134.27
Sprinkling District No. 13 .....	99.09
Sprinkling District No. 14 .....	74.81
Sprinkling District No. 15 .....	79

Tax Acc. Lateral Sewer No. 27....	\$ 13.06
Tax Acc. Lateral Sewer No. 35....	276.47
Tax Acc. Lateral Sewer No. 41....	34.92
Tax Acc. Lateral Sewer No. 42....	2
Tax Acc. Lateral Sewer No. 43....	39.33
Tax Acc. Lateral Sewer No. 44....	188.64
Tax Acc. Lateral Sewer No. 45....	237.68
Tax Acc. Lateral Sewer No. 46....	414.05
Tax Acc. Lateral Sewer No. 47....	414.55
Tax Acc. Lateral Sewer No. 48....	165.73
Tax Acc. Lateral Sewer No. 49....	12.81
Tax Acc. Lateral Sewer No. 51....	68.78
Tax Acc. Lateral Sewer No. 52....	41.14
Tax Acc. Lateral Sewer No. 58....	60.25
Tax Acc. Lateral Sewer No. 60....	102.50
Tax Acc. Lateral Sewer No. 61....	92.90
Tax Acc. Lateral Sewer No. 62....	3.80
Tax Acc. Lateral Sewer No. 63....	765.66
Labor Acc. Lateral Sewer No. 49..	43.18
Labor Acc. Lateral Sewer No. 51..	351.29
Labor Acc. Lateral Sewer No. 52..	55.28
Labor Acc. Lateral Sewer No. 53..	889.15
Labor Acc. Lateral Sewer No. 56..	449.24
Labor Acc. Lateral Sewer No. 60..	60.27
Labor Acc. Lateral Sewer No. 63..	781.13

Total .....\$5,791.59

Overdrawn ..... 11,271.36

Overdrawn Jan. 1st, 1915 .....\$5,479.77

Overdrawn—

Total .....\$17,266.39

Warrants Outstanding—

Water works fund .....	\$ 167.31
Contingent fund .....	\$58.48
Fire department fund .....	30.00
Street fund .....	6.94
Park fund .....	.60

SEWER FUNDS—Treasurer's Report for  
Month Ending Dec., 1914:

Money Received—

Tax of Sewer Districts—

Taxes Collected—

Tax Acc. Sewer Dist. No. 32.....	\$ 20.79
Tax Acc. Sewer Dist. No. 34.....	122.97
Tax Acc. Sewer Dist. No. 36.....	16.24
Tax Acc. Sewer Dist. No. 38.....	12.96
Tax Acc. Sewer Dist. No. 39.....	14.49
Tax Acc. Sewer Dist. No. 40.....	6.24
Tax Acc. Sewer Dist. No. 43.....	4.92
Tax Acc. Sewer Dist. No. 46.....	23.10
Tax Acc. Sewer Dist. No. 49.....	20.04
Tax Acc. Sewer Dist. No. 50.....	82.69
Tax Acc. Sewer Dist. No. 51.....	6.62
Tax Acc. Sewer Dist. No. 52.....	6.44

Tax Acc. Lateral Sewer No. 32....	\$1,016.17
Tax Acc. Lateral Sewer No. 33....	58.68
Tax Acc. Lateral Sewer No. 34....	1,463.02
Tax Acc. Lateral Sewer No. 36....	264.75
Tax Acc. Lateral Sewer No. 37....	176.55
Tax Acc. Lateral Sewer No. 38....	163.40
Tax Acc. Lateral Sewer No. 39....	494.99
Tax Acc. Lateral Sewer No. 40....	524.04
Tax Acc. Lateral Sewer No. 50....	21.60
Tax Acc. Lateral Sewer No. 53....	409.70
Tax Acc. Lateral Sewer No. 54....	158.61
Tax Acc. Lateral Sewer No. 55....	536.42
Tax Acc. Lateral Sewer No. 56....	124.02
Tax Acc. Lateral Sewer No. 57....	32.31
Tax Acc. Lateral Sewer No. 59....	135.90
Labor Acc. Lateral Sewer No. 42..	170.00
Labor Acc. Lateral Sewer No. 43..	161.62
Labor Acc. Lateral Sewer No. 44..	204.26
Labor Acc. Lateral Sewer No. 45..	247.32
Labor Acc. Lateral Sewer No. 46..	538.53
Labor Acc. Lateral Sewer No. 47..	532.71
Labor Acc. Lateral Sewer No. 48..	199.27
Labor Acc. Lateral Sewer No. 50..	98.35
Labor Acc. Lateral Sewer No. 54..	270.88

Labor Acc. Lateral Sewer No. 55..	276.99
Labor Acc. Lateral Sewer No. 57..	220.19
Labor Acc. Lateral Sewer No. 58..	166.85
Labor Acc. Lateral Sewer No. 59..	164.92
Labor Acc. Lateral Sewer No. 61..	501.76
Labor Acc. Lateral Sewer No. 62..	143.07
Labor Acc. Lateral Sewer No. 64..	651.54
Labor Acc. Lateral Sewer No. 65..	225.71
Labor Acc. Lateral Sewer No. 66..	362.98
Labor Acc. Lateral Sewer No. 67..	554.00

Total .....\$11,271.36

PAVING FUNDS—Treasurer's Report for Month Ending Dec., 1914:

Money Received—  
Tax Acc. Paving Districts—  
Taxes Collected—

Tax Acc. Paving Dist. No. 10....\$	33.37
Tax Acc. Paving Dist. No. 12....	34.91
Tax Acc. Paving Dist. No. 13....	6.06
Tax Acc. Paving Dist. No. 14....	34.94
Tax Acc. Paving Dist. No. 15....	63.56
Tax Acc. Paving Dist. No. 16....	35.55
Tax Acc. Paving Dist. No. 17....	22.60
Tax Acc. Paving Dist. No. 18....	142.00
Tax Acc. Paving Dist. No. 19....	40.90
Tax Acc. Paving Dist. No. 20....	55.41
Tax Acc. Paving Dist. No. 21....	29.10
Tax Acc. Paving Dist. No. 22....	2.08
Tax Acc. Paving Dist. No. 23....	5.90
Tax Acc. Paving Dist. No. 24....	45.46
Tax Acc. Paving Dist. No. 25....	29.00
Tax Acc. Paving Dist. No. 26....	81.18
Tax Acc. Paving Dist. No. 27....	6.99
Tax Acc. Paving Dist. No. 28....	380.29
Tax Acc. Paving Dist. No. 29....	862.12

Total .....\$1,914.42

Warrants paid .....	22.61
Balance .....	\$1,891.81
On hand Dec. 1st, 1914 .....	\$15,290.07

On hand Jan. 1st, 1915 .....\$17,181.88

Condition of Paving Funds on the First Day of Jan., 1915:

Warrants Paid—  
Labor Acc. Pavement No. 30.....\$22.61

Total .....\$22.61

On Hand—

Labor Acc. Pavement No. 20....\$	254.34
Tax Acc. Pavement No. 5.....	1,079.01
Tax Acc. Pavement No. 6.....	76.20
Tax Acc. Pavement No. 7.....	.05
Tax Acc. Pavement No. 8.....	641.09
Tax Acc. Pavement No. 11.....	789.70
Tax Acc. Pavement No. 13.....	380.91

Tax Acc. Pavement No. 14.....	737.10
Tax Acc. Pavement No. 15.....	799.14
Tax Acc. Pavement No. 16.....	585.46
Tax Acc. Pavement No. 17.....	454.00
Tax Acc. Pavement No. 18.....	2,043.55
Tax Acc. Pavement No. 19.....	1,218.30
Tax Acc. Pavement No. 21.....	1,578.09
Tax Acc. Pavement No. 22.....	240.01
Tax Acc. Pavement No. 23.....	858.75
Tax Acc. Pavement No. 24.....	105.82
Tax Acc. Pavement No. 25.....	135.35
Tax Acc. Pavement No. 26.....	12.45
Tax Acc. Pavement No. 27.....	2,177.90
Tax Acc. Pavement No. 28.....	3,377.59
Tax Acc. Pavement No. 29.....	2,422.80
Tax Acc. Pavement No. 30.....	1,000.28

Total .....\$20,967.95

Overdrawn ..... 3,786.07

On hand Jan. 1st, 1915 .....\$17,181.88

Overdrawn—

Labor Acc. Pavement No. 30.....\$	202.41
Labor Acc. Pavement No. 31.....	126.15
Labor Acc. Pavement No. 32.....	235.28
Tax Acc. Pavement No. 9.....	1,370.12
Tax Acc. Pavement No. 10.....	1,447.97
Tax Acc. Pavement No. 12.....	165.51
Tax Acc. Pavement No. 20.....	238.63

Total .....\$3,786.07

Warrants Outstanding—  
Labor Acc. Pavement No. 30.....\$63.48  
To the Honorable Common Council, of the City of Ann Arbor;

This is to certify that there was on deposit in this bank to the credit of Chas. L. Miller, city treasurer, the sum of Ninety-Five Thousand Seven Hundred Seventy-Seven and 29-100 (\$95,777.29) Dollars at the close of business December 31st, 1914.

WILLIAM L. WALZ, Ass't. Cashier.  
January 11th, 1915.

Recapitulation

City funds on hand .....	\$122,032.60
Pavement funds on hand .....	17,181.88

Total .....\$139,214.48

Sewer funds overdrawn ..... 5,479.77

Balance .....\$133,734.71

Bank balance .....\$ 95,777.29

Cash on hand ..... 37,957.42

Total .....\$133,734.71

Respectfully submitted: CHAS. H. MILLER, City Treasurer.

Engineer's Department, Ann Arbor, Michigan, Jan. 2, 1915.

To the Board of Public Works, Ann Arbor, Michigan: Sirs—I present herewith the following report of expenditures for work done under my direction during the month of December, 1914:

Employee	Amount	Chargeable To	Amount
Engineering and Clerical—		General work of the department....	\$195.67
Wood .....	\$125.00	North Division st. storm sewer.....	1.62
A. L. Sloman .....	80.00	Madison, Jefferson, and Division st. storm sewer .....	33.50
F. E. Williams .....	41.40	First st. sanitary sewer .....	.21
W. C. Russell .....	53.80	Moore st. sanitary sewer .....	.32
		Seventh st. sanitary sewer, Miller to Huron st. ....	29.30
		Municipal lighting .....	2.17
		Steele farm, gauging wells .....	2.17
		Steele farm, shaft .....	35.17
Total .....	\$300.23	Total .....	\$300.23

Sewer and other work—

Julius Loehrke .....	\$ 80.00
St. Com. Roll 12-30 .....	19.30
St. Com. Roll 12-16 .....	31.17
<b>Total .....</b>	<b>\$130.47</b>

Total Expenditures .....\$430.70  
Respectfully submitted, MANLEY OSGOOD, City Engineer.

Sanitary Sewer maintenance .....	\$ 55.41
Tapping sanitary sewers .....	.39
North Division st. storm sewer.....	.50
Madison, Jefferson, and Division storm sewer .....	66.53
Vault equipment .....	7.64
<b>Total .....</b>	<b>\$130.47</b>

**STREET COMMISSIONER'S REPORT**

Office of Street Commissioner, Ann Arbor, Mich., Jan. 2, 1915.

Hon. Board of Public Works, Evart H. Scott, President: Gentlemen—The following is a report of work done by the Street Department during the month of December, 1914:

Dec. 3-16, 17-30; taking care of snow, labor  
Cleaning snow from crosswalks,  
gutters, etc. ....\$143.23  
Plowing snow from sidewalks..... 220.50  
Plowing snow from gutters ..... 1.50

**Total .....** **\$365.23**

Cleaning paved streets, labor,  
(Dec. 3-8) .....\$102.48

Miscellaneous work and repairs,  
labor ..... 43.44

(Making street sweeper brooms, \$36.59—  
cinders on sidewalk, Division, between  
Washington and Liberty, \$1.08—handling  
materials at city yard, \$2.63—handling coal  
for poor master, \$1.67—removing ashes  
basement city hall, \$1.47)

Repairs culverts, labor ..... 9.81  
(Railings culverts Fountain st. and on  
Miller ave.)

Grading, graveling and patching  
dirt streets, labor ..... 9.75

(Filling holes Geddes ave.; cinders alley  
south of Catherine between Main and 4th  
av.; cinders 14th and Volland)

City Engineer Dep't., acct., labor.. 50.51  
(Flushing sanitary sewers, work on storm  
sewers, etc.)

Cleaning crosswalks, labor ..... 1.94

Repairs and cleaning inlets, gutter  
boxes, etc., labor ..... 56

(Tile east side Glen ave. between Catherine  
and Fuller)

**Total .....** **\$583.72**

Respectfully submitted, J. WISNER,  
Street Commissioner.

Reports of treasurer, clerk, engineer and street commissioner for month of December, and the annual report of board of public works, received and ordered to take usual course and filed.

**ANNUAL REPORT OF BOARD OF PUBLIC WORKS 1914-15.**

To the Board of Public Works, Ann Arbor, Michigan:

Sirs—I submit the following report of work done, under your direction, in the Engineer's Department during the year ending Dec. 31st, 1914. It is, Very respectfully submitted, MANLEY OSGOOD, City Engineer.

**PAVING.**

**Cost of Materials.**

Cement cost \$1.14 per bbl. net f. o. b. cars in Ann Arbor; bank run gravel cost \$1.25 per load of about one and one-third cubic yards delivered on the street; water cost 25 cents per one hunder cubic feet of completed concrete; day labor was twenty-five cents per hour; teams cost 50c per hour; tar for surfacing cost five cents per gallon delivered into the city's storage tank or tank wagon at the Gas Company's plant; washed sand and torpedo gravel cost forty-five cents per ton, or about sixty-three cents per cu. yd. f. o. b. cars in Ann Arbor.

**Church St., District No. 30:** The only pavement completed this year was on Church st. from Washtenaw ave. to Prospect st. This was the Ann Arbor tarred Concrete type and seven inches thick. The bottom five inches were mixed eight parts of bank run gravel to one part of cement. The top two inches were mixed two parts of washed sand, or washed gravel screenings, to one part of cement. After spacing expansion joints fifty feet apart, in 1913, it was found advisable to space them closer together to decrease the number of intermediate cracks and on Church st. these joints were left one along each curb and transversely every thirty feet along the pavement.

The expansion joints along the curb are three-quarters of an inch in width and those transverse to the center line of the pavement are three-eighths of an inch wide. The specifications for this pavement required that the joints be filled with filler asphalt but this was changed, after construction commenced, by a resolution of the Common Council to require tar and sand for the filler. Tar bought from the local Gas Company was used both for filling joints and for surfacing but the surfacing was very poorly applied. The curbing in this district was built in 1913 and the grading and paving were commenced this season as soon as the weather would permit and completed in August.

This pavement is thirty feet wide between Washtenaw ave. and Hill st. and twenty-eight feet wide between Hill st. and Prospect st. there being 11,832.46 sq. yds. of pavement and 6,-

015.7 lin. ft. of curbing in this district. The total cost, as shown in my report to you dated Sept. 21, 1914, was \$14,802.93 and the unit costs were as follows:

Cost per sq. yd. complete.....	\$1.251
Cost per sq. yd. for grading and paving .....	1.127
Cost per sq. yd. for concrete pavement and wearing surface	0.984
Cost per sq. yd. for filling joints and wearing surface .....	0.061
Cost per sq. yd. for concrete pavement, only .....	0.923

The cost for engineering only in this district was \$255.72 or a unit cost of \$0.21 per sq. yd. This includes all preliminary surveys, plans, profiles, estimates, staking out, report and boundaries for assessment districts, and includes all portion of the time of men working on a monthly salary properly chargeable to this account.

The driveways in this district which were paved or curbed contains 420.66 sq. yds. of pavement and 630.6 lin. ft. of curbing in addition to the totals given above. For this curbing, grading and paving in drives the city will collect \$593.04.

In the construction of the curbing in this district 674.7 lin. ft. of curbing which conformed to the specifications for curbing and to line and grade of the pavement, and which had been built and paid for by the respective property owners several years previous to 1913, was not replaced. No allowance was made for this at the time of assessing the district, but afterwards a total of \$86.09 was refunded to these property owners.

**Hill St., Dist. 31, State St. to Washenaw Ave:** By the adoption of the Street Committee Report on June 15, 1914, the Common Council resolved that "no storm sewers or pavement be built on this street at present." This district therefore remains in the same conditions as a year ago, with the curbing built in that block between Church st. and Forest ave. The total costs to date in this district have been as follows:

Curbing .....	\$151.80
Engineering .....	55.64

Total .....

\$207.44

**W. Ann St., Dist. 32, from Main St. to First St.:** On Sept. 7, 1914, the Common Council ordered the paving of this district according to plans and specifications as recommended by you. These specifications call for a two-course concrete pavement with mesh

reinforcing placed between the two courses and steel plates for protecting the edges at expansion joints. No surfacing will be put over the concrete. The curbing was built in this district at once upon your order to proceed with the construction but when same was completed it was your decision that the weather had become too uncertain to proceed with the grading and concrete construction this year. The total cost to date for work in this district has been as follows:

Curbing .....	\$229.57
Engineering .....	33.29

Total .....

\$262.86

**State St., Repaving from William St. to Liberty St.:** On July 20, 1914, the Common Council instructed the board to proceed with the repaving of the above described portion of State st. On August 17th, the Council, on your recommendation changed the specifications so that a cement grout filler was used in place of pitch. The pavement was accordingly constructed between the existing curb lines with a six inch concrete base mixed eight parts of bank run gravel to one part of cement. On top of this was placed a sand cushion compacted to one and one-half inches thick by rolling. The brick were wire cut lug blocks. A cement grouting mixed one-half sand and one-half cement was thoroughly flushed into the spaces between the brick and much care was taken to leave same in all cases flush with the brick surface. A one inch expansion joint was left along each curb and filled with paving pitch. The sand used for the sand cushion was salvaged by screening the gravel on which the old asphalt blocks were laid and which was removed in excavating for the concrete foundation of the new pavement.

There were 2,351.62 sq. yds. of pavement constructed in this block. The total cost was \$4,572.98 and the unit costs were as follows:

Cost per sq. yd. complete.....	\$1.945
Cost per sq. yd. exclusive of grading and curbing .....	1.75
Cost per sq. yd. for concrete foundation .....	0.48
Cost per sq. yd. for sand cushion and brick in place.....	1.14
Cost per sq. yd. for grouting...	0.09
Cost per sq. yd. for filling joints along curb .....	0.04

The cost for engineering only in this district was \$94.32, or a unit cost of \$0.04 per square yard. This in-



cludes all items, as for Church st. above, together with a considerable amount of personal supervision during the progress of the work. Some items of tools have been charged directly to this work are still on hand for future use.

The lowest contractor's bid received for the pavement was \$2.11 per sq. yd. exclusive of curbing and grading.

**Division St. and Jefferson St.:** On June 15th, 1914, the Common Council requested plans and specifications for the paving of East Jefferson st. from Fifth ave. to State st. and for the paving of Division st. from Detroit st. to Packard st. Such plans and specifications were prepared, the specifications, at your request, being drawn for the four following kinds of pavement: Ann Arbor Tarred Concrete, as laid in the past; Reinforced Concrete, as specified for Ann st.; Asphaltic Concrete, similar to William st. and Vitrified Brick, as that constructed on State st. and above reported upon. The selection of the type of pavement to be used on these two streets you still have under advisement.

The costs for engineering on these two pavements to date have been as follows:

Division st. ....	\$100.73
E. Jefferson st. ....	49.67

Total .....	\$150.40
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**Repairing, resurfacing, and all maintenance** of pavements has been taken care of by the Street Department during the past year.

**General:** For changes and completion of the plans for office record, \$12.15 was spent on W. Liberty st. pavement, District 28, and \$21.41 on W. Huron st. pavement, District 29, during the past year.

On West Huron st., the Detroit, Jackson & Chicago Railway extended the paving between and eighteen inches outside of their rails from Seventh st., where they left off in 1913, to the west end of the pavement on W. Huron st., at the junction of Huron st. with Dexter ave. and Jackson ave. Care of City monuments in connection with the work cost \$7.72.

#### Statement of Kinds of Pavement in Ann Arbor:

Brick on Concrete .....	25,617 sq. yds.
Brick on Sand .....	1,589 sq. yds.
Asphalt Block on Sand .....	32,494 sq. yds.
Bituminous .....	7,519 sq. yds.
Ann Arbor Tarred Concrete—	
Laid in 1909 .....	1,883 sq. yds.
Laid in 1910 .....	16,557 sq. yds.

Laid in 1911 .....	64,089 sq. yds.
Laid in 1912 .....	11,537 sq. yds.
Laid in 1913 .....	33,463 sq. yds.
Laid in 1914 .....	11,832 sq. yds.

	139,361 sq. yds.
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Total .....	206,580 sq. yds.
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#### Original Cost and Reconstruction:

The total original cost of paving done in Ann Arbor to date, exclusive, as above, of macadamizing Detroit st. and S. University ave., has been \$326,822.36. This year, for the first time, it became necessary to remove some of this pavement and replace it as was done on State st. between Liberty st. and William st. The cost of this work, as reported above was \$4,572.98, all of which was paid by the City at large. Pavements, like everything else, will wear out in time and the expense of maintenance and reconstruction will increase in the future until the annual cost for same becomes quite large. The maintenance of our pavements is a matter for careful consideration and scientific study.

#### SANITARY SEWERS.

Five new sanitary sewer districts were established this year, the plans, profiles and estimates prepared and the work let to contract. All of the districts which were uncompleted at the time of my report a year ago have been completed and have the new districts established. The policy of the City to furnish the men who lay and cement the tile as well as the necessary inspection has been followed throughout.

**District No. 51:** Summit st from Main st. to Spring st. was commenced in 1913 (see report for 1913) and completed this year. The cost has been distributed as follows:

Contract cost .....	\$1,061 80
Laying tile and inspecting ..	58.10
Engineering .....	38.67

Total .....	\$1,158.57
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Of the above contract cost, five per cent has been retained until a year after acceptance. This five per cent amounts to \$53.09 and is payable Feb. 16th, 1915. The cost for engineering, laying tile and inspecting is 9.1 per cent of the contract cost.

**District No. 53:** West Washington st. west of Ninth st. and Crest ave. was commenced in 1913 and completed in an acceptable condition, this year. The cost has been distributed as follows:

Contract cost .....	\$2,298 85
Laying tile and inspecting ..	96.40

Engineering .....	37.56
Total .....	<u>\$2,432.81</u>

No percentage of the contract cost was retained on this district, the contractor having been paid the full amount of same. The cost for engineering, laying tile and inspecting is 5.8 per cent of the contract cost.

**District No. 55:** From Granger ave. and Ferdon rd. across private property to Austin ave., thence to Wash-tenaw ave. and in each direction on Washtenaw from Austin. This sewer was commenced in 1913 and completed in acceptable condition this year. The cost has been distributed as follows:

Contract cost .....	\$3,607.98
Laying tile and inspecting..	121.98
Engineering .....	132.33

Total .....

Of the above contract cost, \$93.48 was for extra work and five per cent of the remaining \$3,514.50 has been retained until a year after acceptance. This five percent amount, to \$175.73 and is payable Feb. 16, 1915. The cost for engineering, laying tile and inspecting is 8.3 percent and for engineering alone is only 4.3 percent of the contract cost although a preliminary survey of considerable extent was necessary in order to determine the most feasible route from Austin ave. to Granger ave.

**District No. 56:** Includes the following streets in the Third Ward: Brook st. from Miller ave. to Pearl st., Gott st. and Miner st. from Felch st. to Pearl st., Felch st. from Fountain st. to Gott st., Hiscock st. from Miner st. to Brook st., and Summit st. from Spring st. to Brook st. This sewer was commenced in 1913 and completed this year. The costs have been as follows:

Contract cost .....	\$7,159.59
Laying tile and inspecting...	267.15
Engineering .....	229.04

Total .....

Of the above contract cost, five per cent has been retained until a year after acceptance. This five percent retained amounts to \$357.98 and is due July 6, 1915. The cost for engineering, laying tile and inspecting is 6.9 percent of the contract cost.

**District No. 57:** Geddes ave. from Oswego st. east as far as possible, was commenced in 1913 and completed in acceptable condition this year. The cost has been distributed as follows:

Contract cost .....	\$543.61
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Laying tile and inspecting....	16.48
Engineering .....	14.20

Total .....

Of the above contract cost, five per cent or \$27.18 has been retained until one year after acceptance. This is due on Feb. 16th, 1915. The cost for engineering, laying tile and inspecting is 5.8 percent of the contract cost.

**District No. 60:** Furnishes sewerage for Brown st. from Hill st. to Philip st., Fourth ave. from Hill st. to the south end, and Philip st. from Fourth ave. to Main st. The plans and specifications for this district were prepared and the contract let to Mr. E. L. Schneider in 1913 but the work of construction was all done this year. After the work contracted for by the City was commenced and well under way, Mr. G. F. Allmendinger arranged privately with Mr. Schneider care for storm water on Jefferson st. between Division st. and State st. to extend the Fourth ave. sewer through his property under the direction of this department. All the sewers in this district are eight inch vitrified tile sewers with eight by four inch sanitary tees placed in the line of the sewer to receive the connection from each building site. All of the sewage from this district is emptied into the eight inch sanitary sewer on Hill st. Mr. Schneider was allowed a final estimate on this district on July 6th, 1914. The cost has been distributed as follows:

Contract price .....	\$2,682.34
Laying tile and inspecting..	157.39
Engineering .....	62.97

Total .....

Of the above contract cost, five percent or \$134.12 has been retained until July 6th, 1915, one year after acceptance. The cost for engineering, laying tile and inspecting is 8 percent of the contract cost. The laying of tile was delayed by quicksand and water encountered.

**District 61:** Furnishes sewerage for Detroit st. from Division st. to Catherine st., Catherine st. from the Main sewer to Detroit st., and Fourth ave. from Catherine st. to Ann st. The Detroit st. part of this district was completed in 1913 and the remainder this year. General information relative to the district was given in my report last year. The distribution of cost has been as follows:

Contract cost .....	\$4,641.18
Laying tile and inspecting..	127.02

Engineering ..... 94.99

Total ..... \$4,863.19

Of the above contract cost, five per cent was retained until one year after acceptance. This five percent amounts to \$232.06 and becomes due July 6, 1915. The cost of engineering, laying tile and inspecting is 4.8 percent of the contract cost.

As shown in my report to you dated June 17, 1914, during the construction of the sewer in this district the old Beal sewer which carried sewage from the Times News and Old Post Office buildings was broken and stopped. In connecting this sewer to the new sewer constructed in this district, the city furnished labor to the amount of \$95.75 and in keeping water from the basement of the Times News building prior to such connection \$8.40. Bills have been rendered for these amounts.

**District 62:** East Catherine st. from Clark st. 100 feet east, was practically completed in 1913 but the final estimate was not allowed until Feb. 2, 1914. General information relative to this district was given in my report for 1913. The distribution of costs has been as follows:

Contract cost ..... \$150.60  
Engineering ..... 4.54

Total ..... \$155.14

Of the above contract cost, five percent or \$7.53 has been retained until Feb. 2, 1915. The cost for engineering is 3 percent of the contract cost.

**District 63:** Furnishes sewerage for that portion of Sixth st., Seventh st. and Eighth st. lying between Liberty st. and Washington st. It was necessary to run a sewer from Murray ave. to Eighth st. through the valley which lies between Liberty st. and Washington st. A right of way for this sewer from Murray ave. to the Water Works property now belonging to the city of Ann Arbor, was given by Mr. Wm. H. Murray. From Sixth st. to Eighth st., through the Water Works property, this is an eight inch, class "B" cast iron water pipe sewer. The rest of the sewer in this district is of eight inch vitrified tile. A four inch connection for each building site was extended to the curb line on the respective streets. This sewer empties into the eight inch sanitary sewer on Murray ave., District No. 48. The work in this district was let to Messrs. Dederich and Eddy of Saginaw, Michigan, who have completed the same and were allowed a final

estimate on August 17th, 1914. The cost was distributed as follows:

Contract cost ..... \$4,358.81  
Laying tile and inspecting... 145.61  
Engineering ..... 161.36

Total ..... \$4,665.78

Of the above contract cost, \$217.94, of five percent, has been retained one year after acceptance and is due August 17, 1915. The cost for engineering, laying tile and inspecting is 7 percent of the contract cost and the cost for engineering alone is only 3.7 percent, although a preliminary survey of considerable extent was necessary to determine the proper route through the valley from Murray ave. to Eighth st.

**District 64:** Third st. and Fourth st. from Liberty st. to William st. and Fifth st. from Liberty st. to the north line of the Michigan Union Brewing company's property are all eight inch vitrified tile sewers emptying into sewers of the same size and material. Eight inch by four inch sanitary tees were placed in the line of each sewer to receive the connection from each building site. This district was established and plans and specifications all prepared this year. The work in this district was let to Mr. E. L. Schneider who has completed the same and was allowed a final estimate on Oct. 5th, 1914. The cost has been distributed as follows:

Contract cost ..... \$685.83  
Laying tile and inspecting... 24.12  
Engineering ..... 41.03

Total ..... \$750.98

Of the above contract cost, \$34.29 or five percent has been retained until Oct. 5, 1915, which is one year after acceptance. The cost for engineering, laying tile and inspecting is 9.5 percent of the contract cost.

**District 65:** Packard st. from Granger ave. to Brooklyn ave., is an eight inch vitrified tile sewer with eight by four inch sanitary tees placed in the line of the sewer to receive the connection from each building site. It empties into the sewer of the same size and material running northwesterly along Packard st. from Granger ave. The outlet of the sewer built in this district is only four feet deep and at Brooklyn ave. the sewer is only three feet deep to the flow line or bottom of the invert. This district was established and the plans, and specifications all prepared this year. The work was let to Messrs. Dederich & Eddy who have completed

the same and were allowed a final estimate on Dec. 7, 1914. The cost has been distributed as follows:

Contract cost .....	\$237.59
Laying tile and inspecting....	12.63
Engineering .....	\$20.93

Total .....\$271.15

Of the above contract cost five percent has been retained for one year after acceptance. This five percent amounts to \$11.88 and is due on Dec. 7, 1914. The cost for engineering, laying tile, and inspecting is 14.1 percent of the contract cost.

**District 66:** First st. from Ann st. to Catherine st. was established this year and all plans, specifications, etc., were prepared. The contract was let to Messrs. Dederich & Eddy of Saginaw who have completed the work and were allowed a final estimate on Dec. 7, 1914. This is an eight inch vitrified tile sewer with eight inch by four inch sanitary tees placed in the line of the sewer to receive the connection from each building site. It empties into the eight inch vitrified tile sewer on Catherine st., Dist. 61. The distribution of cost has been as follows:

Contract cost .....	\$382.08
Laying tile and inspecting....	30.13
Engineering .....	11.59

Total .....\$423.80

Five percent of the above contract cost, \$19.10, has been retained until one year after acceptance and becomes due on Dec. 7, 1915. The cost for engineering, laying tile, and inspecting is 10.9 percent of the contract cost, the cost of laying tile and inspecting comprising 7.9 percent of it. This high cost for laying tile and inspecting is due to large stones and water encountered which delayed the tile laying.

**District No. 67:** Moore st. from Broadway to Pontiac st., was established this year and all plans, specifications, etc., were prepared. It is an eight inch vitrified tile sewer with eight by four inch sanitary tees placed in the line of the sewer to receive the connection from each building site. It empties into the ten inch vitrified tile sewer on Broadway at the foot of Moore st. The contract was let to Messrs. Dederich & Eddy of Saginaw who have completed the work and were allowed a final estimate on Dec. 7, 1914. The cost has been distributed as follows:

Contract cost .....	\$583.24
Laying tile and inspecting....	21.73

Engineering ..... 29.25

Total .....\$634.22

Five percent of the above contract cost, or \$29.16, has been retained until one year after acceptance, becoming due on Dec. 7, 1915. The cost for engineering, laying tile, and inspecting is 8.7 percent of the contract cost.

**Fair Oaks Parkway and Norway Road:** Eight inch sanitary sewers were built on the above streets this year in what is now "Scottwood addition to the city of Ann Arbor," each emptying into the eight inch sanitary sewer on Austin ave. built in District No. 55. These sewers were constructed by Messrs. Schumacher and Backhaus of this city working on a cost plus percentage basis for the property owners. The city furnished part of the engineering labor and the labor for laying and cementing the tile which together amounted to \$43.54. The city will be reimbursed the full amount of this cost by Mr. C. W. Spooner. Four inch connection was run to the curb line for each building site in this district.

**Brookwood Place Sanitary Sewer:** The sanitary sewer on Brookwood Place was extended by private parties and in order to insure that the same be properly laid the city paid \$5.12 for engineering labor and labor for laying tile and inspecting. This short extension was made by Messrs. Raab and Robbins of this city. Eight by four inch branches were left to receive the connection from each building site.

**Future Construction:** Acting under the direction of the Sewer Committee of the Common Council I have prepared plans for a sanitary sewer on Jones and Mill streets to empty into the Broadway sewer. The cost to date for engineering on this sewer has been \$13.80. Similarly I am now preparing plans for a sanitary sewer to run from Chapin st. to Seventh st. through the valley lying between Miller ave. and Huron st. and to furnish the sewerage for Seventh st. between Miller ave. and Huron st. and for Bath st., Mineral st., and other streets lying west of Seventh st. This sewer will empty into the sewer on Chapin st. The cost to date for engineering has been \$125.42. These sewers are to be ordered by the Council and built at some future date.

**Sewer Connections:** The records in my office show a connection from the W. Liberty st. sanitary sewer to the

curb line for the house at the north-west corner of Liberty st. and Ashley st., but when excavation was made at the point of recorded location same could not be found. Acting under your direction, I had a connection built to replace the one which could not be located at a cost of \$41.32.

Before paving Church st., it was determined that there was no sanitary sewer connection available for the property of the Seventh Day Adventist Church, which is located on Church st. near Prospect st. Acting under the direction of the Common Council, a four inch connection was extended from the Prospect st. sanitary sewer to the east curb line on Church st. in front of this property. The total cost of same was \$37.24.

**Repairing Sewer and Pavement at Washtenaw Ave. and North University Ave.:** After the construction of the heating tunnel from the new University power house to the Campus, arrangements were made whereby the city was to repair the sanitary sewer and pavement at the above intersection and be reimbursed for the cost of same. The repairs to the sanitary sewer were made under my direction at a cost of \$90.84 which was refunded to the city by the Jas. Stewart & Co. together with the cost of repairing the pavement.

**Raising Manhole at Wall Street Bridge:** During the high water in the Huron river last spring, the water flowed over the top of and into the manhole on the east bank of the Huron river just south of the Wall St. Bridge, raising the elevation of the water in the Wall st. sewer to that in the Huron river. In order to prevent a recurrence of this, and acting under the direction of the Council, this manhole was raised to put the top on the same elevation as that of the manhole on Wall st. west of the bridge and thoroughly waterproofed. A lamphole on the west bank of the river at this point was also made water tight. The total cost of this work was \$12.86.

**Tapping Sanitary Sewers:** Since your action in July ordering that all sanitary sewer tapping, or making connection at places other than where a regular opening is provided for such connection, be done by a man in the employ of this department, the total cost of making such connections has been \$12.41.

**Maintenance:** Maintenance of existing sanitary sewers during the past

year has cost \$768.32, including all labor, material, and tools, and the amount paid to the Ann Arbor Water department for water for flushing. The trunk sewer from Edwin and State along State, Packard, E. University, Prospect, across private ground, Forest ave., Oakland, Church, and Willard in the order named to E. University again was cleaned throughout its length. In addition it was necessary to clean sewers in forty-eight separate places scattered in all parts of the city. This is more than double the number of such cleanings in 1913. In five places it was impossible to clean the sewer between existing manholes and it was necessary to dig down to and break open the sewer. In all these places a manhole was built because the roots which were cut off will undoubtedly grow again and it will be necessary to clean again from the same place. This cost has been distributed as follows:

Cleaning .....	\$364.82
Five new manholes.....	197.74
Flushing .....	173.88
Repairing .....	18.82
Inspecting .....	13.06
<b>Total .....</b>	<b>\$768.32</b>

The greatest cause for cleaning has been the entrance of roots through joints.

**Payments of Five Percent Retained:** On sewers completed in 1913 and reported in my report for last year, the following amounts, being the five percent which was retained for one year, have been expended:

Dist. 52, Hiscock st.....	\$ 14.44
Dist. 54, W. Liberty st.....	53.44
Dist. 58, W. Huron st.....	8.34
Dist. 59, East Ann st.....	36.94
<b>Total .....</b>	<b>\$113.16</b>

**Sanitary Tees:** All of the eight by four inch branches placed in the line of sanitary sewers built by the city this year to receive the four inch house connections have been "sanitary tees." These combine the advantages of the ordinary tee, in that rods in cleaning may be pushed clear through the house branch and into the main sewer and of the Y and curve, in that the sewage from the house branch has a velocity in the direction of flow in the main at the time of entering the main.

**Summary:** A summary of the sanitary sewers completed this year is shown on the table on the following page:

SUMMARY OF SANITARY SEWERS BUILT DURING 1914

Streets and Limits	District	No. House Connections	Total Length House Connections	Length of Main	Manholes	Flush Tanks	Light Holes	Total Cost	City to Pay	Property to Pay	Amount of Contract	5 Per Cent Retained on Contract	When Due	Contractors
Summit St., Main to Spring	51*41		1295	5	1	1	1	1158.57	134.16	1024.41	1061.80	53.09	Feb. 16, 1915	E. L. Schneider
Crest Ave. and W. Washington	53*66	1006	1774	4	3	3	3	2432.81	178.40	2254.41	2298.85	not retained		E. L. Schneider
Austin Ave. and Washtenaw	55*78		2486	9	2	2	2	3862.29	571.58	3290.71	3607.98	175.73	Feb. 16, 1915	E. L. Schneider
Third Ward	56*244		7186	22	8	8	8	7655.78	716.18	6939.60	7159.59	357.98	July 6, 1915	E. L. Schneider
Geddes Ave., Oswego to 210 ft. E.	57*6		276	1	1	1	1	574.29	62.38	511.91	543.61	27.18	Feb. 16, 1915	E. L. Schneider
Brown St., 4th Ave., Philip St.	60*93		2551	7	3	3	3	2902.70	261.55	2641.15	2682.34	134.12	July 6, 1915	E. L. Schneider
E. Catherine, Detroit and Fourth	61*73	1326	2322	9	4	4	4	4863.19	830.73	4032.46	4641.18	232.06	July 6, 1915	E. L. Schneider
E. Catherine, Clark to 100 ft. E.	62*5		101	1	1	1	1	155.14	15.21	139.93	150.60	7.53	Feb. 2, 1915	Hochrein & Co.
Sixth, Seventh and Eighth	63*88	1330	3146	12	5	5	5	4665.78	1293.17	3365.11	4358.81	217.94	Aug. 17, 1915	Dederick & Eddy
Third, Fourth and Fifth Sts.	64*31		647	1	3	3	3	750.98	116.43	634.55	685.83	34.29	Oct. 5, 1915	E. L. Schneider
Packard St.	65*11		428	1	1	1	1	271.15	42.55	228.60	237.15	11.88	Dec. 7, 1915	Dederick & Eddy
First St., Catherine to Ann St.	66*10		225	1	1	1	1	423.80	54.71	369.09	382.08	19.10	Dec. 7, 1915	Dederick & Eddy
Moore St., Broadway to Pontiac St.	67*16		545	2	1	1	1	634.22	134.70	499.52	583.24	29.16	Dec. 7, 1915	Dederick & Eddy
Totals	762	3742	23282	72	33	33	33	30350.70	4411.75	25931.85	28393.06	1300.06		

\*Branches only.

## STORM SEWERS AND CARE OF STORM WATER.

The only radical change in storm sewer construction this year has been the letting of all such work to contract while in 1913 all storm sewers were built by city labor. This is due to the fact that this year sewers have been ordered and built on streets to be paved in the future while last year the sewers were ordered in connection with the pavements and built the same year as the pavements.

**Cambridge Road:** The Council, on August 17th, 1914, ordered that a twenty-four inch storm sewer be built on Cambridge road from Forest ave. to Lincoln ave. Plans, specifications and estimates were prepared and the contract was awarded to Mr. E. L. Schneider who has completed the work and was allowed a final estimate on Nov. 18th, 1914. This is a twenty-four inch vitrified tile sewer emptying into the sewer of the same size and material on Forest ave. at the corner of Cambridge road. In all except three places where the inlet was very close to the main sewer pipe, twelve inch vitrified tile extensions have been made to the inlets from manholes so that they may be easily cleaned. In these three places, where close to the main sewer pipe the inlet was connected directly into the sewer pipe. The costs of this work have been distributed as follows:

Contract cost .....	\$2,265 26
Laying tile and inspecting...	42.87
Engineering .....	89.09

Total .....

Of the above contract cost, five percent or \$113.26 has been retained until one year after acceptance and becomes due Nov. 18th, 1915. The cost for engineering and laying tile and inspecting is 5.8 percent of the contract cost.

**West Jefferson St.:** The Council, on August 17th, 1914, also ordered that a twenty-four inch storm sewer be built on W. Jefferson st. from Second st. to Third st. Plans, specifications and estimates were prepared for a twenty-four inch vitrified tile sewer emptying into the twenty inch sewer running east from Second st. on Jefferson st. The inlets all discharge into manholes through twelve inch vitrified tile extensions, except in the case of one inlet which sets very close to and discharges directly into the main sewer pipe, making the whole construction accessible for cleaning. The contract for this sewer

was let to Mr. E. L. Schneider who has completed the contract and was allowed a final estimate on Nov. 18th, 1914. The distribution of costs has been as follows:

Contract cost .....	\$1,021.47
Laying tile and inspecting..	17.76
Engineering .....	56.39

Total .....

Five percent of the above contract cost of \$51.07 was retained until Nov. 18, 1915, which is one year after acceptance. The cost of engineering and laying tile and inspecting is 7.2 percent of the contract cost. The cost for engineering alone, which is 5.5 percent of the contract cost, includes a preliminary survey of and computation of sizes for the whole district lying west of Secon st. and south of the divide between William and Jefferson st.

**North Division St.:** Storm sewer from Detroit st. to Ann st. was ordered by the Council on Sept. 21, 1914, to care for the storm water on the north end of Division st. Plans, specifications, etc., had been prepared prior to that date and the contract was awarded to Messrs. Dederich & Eddy of Saginaw, who have completed the work and were allowed a final estimator on Dec. 9, 1914. This is a fifteen inch vitrified tile sewer from Detroit st. to Catherine st., and a twelve inch vitrified tile sewer from Catherine st. to Ann st. It empties into the eighteen inch tile drain on Detroit st. All inlets discharge into manholes through twelve inch tile extensions, making the whole easily accessible for cleaning. The costs for this sewer have been distributed as follows:

Contract cost .....	\$2,217.76
Laying tile and inspecting..	42.72
Engineering .....	49.33

Total .....

The customary five percent of the contract cost, being \$110.89, was retained until one year after acceptance. The cost for engineering, laying tile and inspecting is 4.2 percent of the contract cost.

**Madison St., Division St. and Jefferson St.:** Storm sewer running from Allen's creek at Madison st. and Fourth ave. to Jefferson st. and State st. and Fourth ave. to Jefferson st. and State st. in the above streets in the order named was ordered by the Common Council on Sept. 21, 1914, to and on Division st. between Jefferson st. and Packard st. The letting of the contract for this work was delayed

by the Council until Nov. 2d, 1914, when same was let to Messrs. Dederich & Eddy. The work is not yet completed but has progressed on Madison st. and on Division st. nearly to Jefferson st. The cost to date has been distributed as follows:

Paid to contractors.....	\$1,683.37
Laying tile and inspecting...	75.86
Engineering .....	66.24

Total .....\$1,825.47

**E. Jefferson St.:** Storm sewer from Fifth ave. to Hamilton Place, to care for the storm water on Jefferson west of Division st. was ordered on Sept. 21, 1914, and the contract awarded to Dederich & Eddy on Nov. 2d, 1914. No work by the contractors has been commenced on this sewer as yet, but the engineering cost to date has been \$5.46.

**Hill St. at Church st.:** Before paving at the intersection of Hill st. and Church st., extensions were run from the storm sewer on Church st. in each direction on Hill st. to the end of the paving returns. From the manhole on the south side of the car tracks the extension is of eighteen inch tile running east. From the manhole on the north side of the car track the extension is of twelve inch tile running west. These are for the care of storm water on Hill st. at some future time before the paving of this street. The total cost for these extensions was \$52.71.

**Care of Storm Water in Connection with Pavements:** In connection with the pavement on Church st., a manhole was built in the storm sewer at the corner of Church st. and S. University ave. at a cost of \$21.89 and an inlet was lowered at the corner of Willard and Church st. at a cost of \$3.10. These items, in addition to \$49.93 spent in 1913 for resetting inlets makes a total cost of \$74.92 for care of storm water in connection with the improvement. The storm sewer on this street had been built in 1911 and 1912.

On west Ann st. between Main st. and First st. it was necessary to reset the two inlets at the corner of First st. to the new curb line and grade and to replace one of them. This was done at a cost of \$15.65. It was also necessary to run an extension from the main storm sewer in W. Ann st., which was built in 1902, and place an inlet just south of Ann st. in the alley running north and south between Main st. and Ashley st. This extension and inlet was completed at a cost of \$59.64.

**General Care of Storm Water:** Due to the building of the new University Power House on property onto which storm water had formerly been discharged, it was necessary to make arrangements for the care of such water at the low point in W. Huron st. between Glen ave. and Fourteenth st. This was done by building a large catch basin which receives the discharge from two inlets and overflows into the sanitary sewer at that point. It is intended only as a temporary relief until such time as a storm sewer may be built to relieve the situation. Authority for this construction was given by the Common Council on Feb. 3, 1913. The cost was \$152.21.

On Arch st. at the corner of Packard st., a large catch basin was built, one new inlet extension constructed therefrom and two new inlets placed to care for the water which came down Arch st. and ran west on Packard st. covering the pavement with sand and silt. At the corner of State and Arbor a new inlet was placed and on Packard st. between State and Arch st. two new inlets, one of them requiring an extension of about thirty feet of twelve inch tile were constructed. This work all had for its object the care of water which formerly came to the low point in Packard st. between State and Arch st. in such volume that it flowed over the curbing and into cellars in this locality. The total cost was \$168.40.

Storm water from the alley running north and south from Liberty to Washington and between Ashley and First flowed over the inlet placed there to receive it and carried mud and silt onto the walk on Liberty st., freezing in cold weather and making this steep walk dangerous. It was taken care of by extending the inlet run north in the alley about sixty feet to receive the roof water from Hertler's building which caused the major part of the trouble. The total cost was \$33.84.

On First st. just north of Washington st. it was necessary to repair and put a cover on the old storm water cistern at a cost of \$7.83. At Liberty st. and Third st. a low point was formed in the pavement at the time of building and a small inlet was placed to care for the water which stood there, after every rain, at a cost of about \$7.00. Tile was furnished two property owners on Cambridge Rd. for the construction of driveways across the open storm water ditch existing there at a total cost of \$5.33. The engineering cost of investigating



storm water conditions not relieved was \$5.03.

**Storm Sewer Maintenance:** The largest single item of storm sewer maintenance was necessary repairs to the W. Ann St. Storm Sewer. This sewer empties into Allen's Creek from private property. This private property had been filled and the filling rolled down over the end of the sewer until same was entirely covered up. The end was uncovered and extended north to the line of the nearby culvert under the Ann Arbor Railroad where a small wall of stones from the dump was laid up to prevent the recovering of the sewer end. A manhole at the bend of this same sewer west of First st., which had also been covered in filling, was uncovered and built up above the level of the surrounding ground. The cost of this

work with the other items of storm sewer maintenance are as follows:

Repairs W. Ann st. (including manhole) .....	\$101.71
Other repairs .....	31.69
Adjusting inlets to curbing (not including Church st. or Ann st. as given above) .....	11.91
Replacing broken inlets .....	2.96
Cleaning .....	.83
<b>Total .....</b>	<b>\$149.10</b>

**Need for Storm Sewers:** Still continues in many parts of our city and should be given consideration. The extension of the storm sewer system has not kept pace with other public improvements.

**Summary:** A summary of storm sewers built this year is given on the following page:

SUMMARY OF STORM SEWERS BUILT DURING 1914

Street and Limits	Length of Main	Length of Inlet Connection	Inlets Regular	Inlets Alley	Inlets Special	Manholes	Total Cost	Amount of Contract..	5 Per Cent Retained on Contract	When Due	Contractors
Cambridge Road, Forest Ave. to Lincoln	987	741	14	4	2	6	\$2397.22	\$2265.26	\$113.26	Nov. 18, 1915	E. L. Schneider
W. Jefferson St., Second to Third Sts....	339	446	6	4	1	1	1095.62	1021.47	51.07	Nov. 18, 1915	E. L. Schneider
N. Division St., Detroit to Ann Sts.....	1480	780	20			7	2309.81	2217.76	110.89	Dec. 9, 1915	Dederick and Eddy
Madison, Division and Jefferson Sts.....							1825.47	(Cost to Date)			Dederick and Eddy
East Jefferson, Fifth							5.46	(Cost to Date)			Dederick and Eddy
Alley, North of Liberty St.		58		1			33.84				City Force Account
Alley, South of Ann St.		43		1			59.64				City Force Account
Totals	2806	2067	40	6	14	14	\$7727.06	\$5504.49	\$275.22		

SUMMARY OF SEWERS AND PAVEMENTS.

The total cost of sewers and pavements completed in Ann Arbor to date is divided among such improvements as follows:

Pavements	\$326,362.19
Sanitary sewers	212,851.54
Storm sewers	66,470.91
<b>Total</b>	<b>\$605,684.64</b>

The total cost of pavements and sewers completed in Ann Arbor to date is divided according to the year of completion as follows:

Prior to 1900	\$176,616.21
1900	28,372.81
1901	3,704.93
1902	36,850.85
1903	34,229.33
1904	5,024.40
<b>Total</b>	<b>18,744.79</b>

1906	12,986.96
1907	34,931.94
1908	10,489.40
1909	11,867.30
1910	24,166.12
1911	82,089.30
1912	20,022.31
1913	54,369.77
1914	51,218.16
<b>Total</b>	<b>\$605,684.64</b>

**PUBLIC IMPROVEMENTS OTHER THAN PAVEMENTS AND SEWERS.**

**Additional Rooms in the City Hall:** In order to make room on the first floor of the City Hall for the new Water Works Department, the south end of the second floor, which had not heretofore been finished, was plastered and finished for the Board of Public Works and the City Engineer. The arrangement is the same as the former offices on the first floor. These former Board of Works and City Engineer's offices were rearranged and refinished for the Water Works Department. Plans and specifications for the work were prepared by this Department and the contract for same was let to Mr. John Koch who has completed the work and been paid in full. The costs of this work, exclusive of amounts paid by the Water Works Department in moving and fitting up their new offices, have been as follows:

Contract cost .....	\$1,763.26
Plans, specifications and supervision .....	48.01
Extras or unforeseen work..	81.89
Moving Engineer's Dep't...	39.20
Vault doors .....	149.05
Fixtures and lights .....	52.26
<b>Total .....</b>	<b>\$2,133.67</b>

**Seventh Ward Public Hall:** At the Seventh Ward Public Building or Voicing Place, a toilet and washstand was installed and a small room built for same. Plans and specifications were prepared by this Department last year but the contract was not let nor the work done until this year. Hockrein & Co. were the contractors and have completed the work. The cost this year was as follows:

Contract cost .....	\$141.30
Water tap .....	10.00
<b>Total .....</b>	<b>\$151.30</b>

**Broadway Viaduct:** On Broadway, between the bridge over the Michigan Central Railroad tracks and the bridge over the Huron River, a concrete sidewalk was constructed along the east side of the roadway. Due to the topography of the ground, 360 feet of this walk is reinforced concrete construction with one edge resting on the ground and the other edge supported on posts spaced twelve feet apart. A two-inch iron pipe railing was constructed along each side of this walk and on the west side of the roadway the old wooden fence was replaced with the railing that was formerly along the

west side of the sidewalk. The plans and specifications for this walk were prepared by this Department. The contract for the walk with the railing along the east edge of same was let to E. R. Schaffer. The contract for the railing along the west edge of the walk was let to Hutzel & Co. and the moving of the old railing to the west side of the roadway was done by this Department. All of the work is completed and the costs have been as follows:

Contract cost of walk and east railing .....	\$1,406.44
Contract cost of west railing along walk .....	246.56
Cost of moving old railing to W. side of roadway .....	37.00
Whitewashing east face of walk: (city force acc't)...	7.83
Engineering and inspecting .....	59.41
<b>Total .....</b>	<b>\$1,757.24</b>

**Maintenance:** At Broadway Bridge, it was necessary to tighten two eye bars with wedges to strengthen and prevent rattling. Also to refasten the post of the hand rail at the southwest corner of the bridge, same having rusted out and left that side of the bridge dangerously unprotected. This work was done at a total cost of \$9.19.

The Wall st. bridge was pointed up and whitewashed at a cost of \$13.60.

The roof of the small garage at the rear of the City Hall was repaired with a higher flashing along the building abutting on the west. The cost was \$8.70.

**Sidewalk and Curbing Grades:** Sidewalks and curbing except in paving district, are built by the property owners by private contract, the City only furnishing the line and grade for same. The cost for Engineering in furnishing these lines and grades this year has been \$564.04, which is an increase of \$117.44 over the cost for the same work a year ago. The work has been scattered in all parts of the City.

**SUMMARY OF YEARLY COST OF ALL PUBLIC IMPROVEMENTS.**

The cost to the City of all new and reconstructed improvements completed this year has been as follows. Pavements and sewers as

per previous summary...	\$51,218.16
Repaving State street ....	4,572.98
Broadway Viaduct .....	1,757.24
Rearranging City Hall ....	2,133.67
Seventh Ward Public Hall.	151.30

<b>Total .....</b>	<b>\$59,833.35</b>
Of the above amount.	\$13,987.15

was spent in 1913 on work not completed until 1914. In 1914 there has been expended \$2,238.73 on work which is not yet completed. This leaves the net amount paid in 1914 for public improvements \$48,084.93. This work has all been designed, laid out, superintended, etc., by this Department. In addition plans specifications and estimates have been prepared for work which is estimated to cost \$33,140.00.

**GENERAL.**

**Street and City Property Surveys:** Surveys have been made in several parts of the City and grades determined for streets together with the estimated cost, in some cases, of grading accordingly. This work has cost \$61.16. New Signs were placed at all street intersections during the past year in connection with which a list of signs needed was prepared by this Department at a cost of \$26.27. To insure no encroachment of a recently constructed building on the City Yards, the east line of same was determined and marked at a cost of \$6.88. For the purpose of subdividing an unused portion of Fairview Cemetery into additional lots, a survey was made at a cost of \$3.48 and when the frost goes out of the ground these lots will be laid off on the ground.

**Sprinkling Streets:** Mr. John Gutekunst was awarded all contracts for sprinkling streets again this year, the contract costs being as follows:

District No. 11 .....	\$1,796.00
District No. 12 .....	920.00
District No. 13 .....	950.00
District No. 14 .....	696.00
District No. 15 .....	450.00

Total .....

In addition to the above, \$48.22 was expended to move the stand pipe from the corner of Hill and East University to Oakland ave. and Tappan sts. and \$13.45 to change the gate valves on all stand pipes to disk globe valves, in order to stop leakage and dripping.

For sprinkling of streets just before sweeping, a new stand pipe was erected at the corner of Liberty st. and Third st. to serve the west side pavements. The cost was \$57.92. The cost of water for sprinkling pavements prior to sweeping was \$191.58.

In this connection I would suggest that the oiling of some of our gravelled roads would be a very great and more lasting benefit than sprinkling with water.

**Steere Farm:** Further work at the Steere Farm during 1914, done under

the direct orders of the Common Council has necessitated expenditures as follows:

Map and description for purchase .....	\$ 13.42
Gauging wells .....	71.75
Cleaning ditches .....	14.81
Information for survey .....	5.49
Estimates and specifications	
16-foot well .....	76.92

Total .....

**Municipal Lighting:** At the direction of the Common Council I am preparing an estimate of the cost for which the City of Ann Arbor could generate electricity and do the street lighting now contracted for. The cost to date of this work has been \$4.75.

**Work for Other Boards:** For the Park Board and the Board of Water Commissioners, during the past year, we have set stakes measured coal piles, furnished records, etc., at a cost as follows:

Park Board .....	\$ 2.14
Water Board .....	60.98

Total .....

**Accidents:** During this year only one accident occurred to labor working under this Department. In this case a heavy pump dropped on Mr. Loehrke's toe, breaking it. Mr. Loehrke lost no time and his doctor bill was paid by the Insurance Company.

**Engineer's Office:** The amount chargeable directly to your Engineer's office this year, including all equipment and supplies purchased and all that part of my own time and the time of my assistants spent in attending to correspondence and routine office work, office accounting, keeping office maps up to date, compiling records of all work done, indexing and filing records, numbering houses, repairing and adjusting instruments, inspecting plumbing, attending Board or Council meetings, etc., etc., has been distributed as follows:

Office equipment (new and repairs) .....	\$ 109.37
Office supplies .....	110.58
Surveying equipment, (new and repairs) .....	47.92
Surveying supplies .....	49.98
Other tools and supplies ...	21.36
Express, carfare, livery, tolls	4.90
City Engineer's time .....	1,001.70
Time of assistants .....	642.54

Total .....

The total cost of all engineering labor employed during this year, in-

cluding your Engineer's salary, as shown by the sum of my twelve monthly reports, was \$3,860.67.

**Needs of Department:** If your Engineer's Department could be supplied with a light motor conveyance suitable for carrying four or five men with instruments, much time would be saved. Such a conveyance would save its cost in one season's work and would greatly increase the efficiency of the department as well.

I would again suggest that all gas and water mains be laid out accurately with a transit and an accurate record of their location kept and furnished to this office. Much annoyance and expense would be saved by such a plan.

Office of Street Commissioner, Ann Arbor, Mich., Jan. 6, 1915.

Hon. Board of Public Works, Ewart H. Scott, President: Gentlemen:— I herewith submit the annual report of the Street Department for the year ending with December, 1914, including care of streets, and sidewalks, building and repairs sidewalk extensions, crosswalks, culverts, inlets, etc., paving work, and the amount of cement, gravel and other materials used.

#### STREET WORK—

Cleaning paved streets, labor .....	\$ 5,318.98
(Of above, 503.61 was used for general spring cleaning of paved streets.)	
Cleaning alleys, labor .....	31.80
Sprinkling paved streets, labor .....	5.00
Cleaning leaves from paved streets, labor .....	205.04
Taking care of snow, labor—	
Cleaning snow from crosswalks, gutters and inlets.\$	658.54
Plowing snow from sidewalks .....	903.42
Plowing snow from gutters .....	37.27
Cleaning snow from park walks .....	8.81
Salt for extensions, inlets, etc. ....	5.65
<b>Total .....</b>	<b>\$ 1,613.69</b>

Repairs concrete and block pavements and laying brick at intersections to match with new paving work, labor .....	\$ 640.16
1088 paving blocks at \$19.00 per M. ....	20.68
123 sacks cement, 30.75 bbl. at \$1.14 .....	35.06
4 loads sand at \$0.25 .....	1.00

19 loads gravel at \$0.25....	4.75
3 loads gravel (delivered) at \$1.25 .....	3.75
11 loads gravel (washed) at \$1.13 .....	12.43

<b>Total .....</b>	<b>\$ 717.83</b>
Repairs pavement intersection east and North University avenues, labor and materials (paid by the University) .....	\$ 317.27
Grading dirt streets with scraper, labor .....	129.12
Grading dirt streets with street drag, labor .....	109.50
Tarring concrete and block pavements, labor .....	\$ 920.91
12200 gals. tar at \$0.05....	610.00
12 3-4 cars washed gravel (318 loads) .....	159.38
3 loads washed gravel (local) at \$0.25 .....	0.75
2 loads washed gravel (delivered) at \$1.25 .....	2.50
Wood .....	12.85

<b>Total .....</b>	<b>\$ 1,706.39</b>
Grading, graveling and patching dirt streets in the several wards, labor.\$	4,481.43
<b>Total .....</b>	<b>\$ 4,481.43</b>

<b>Gravel—</b>	
2617 loads at \$0.25 .....	\$ 654.25
442 loads at \$0.10 .....	44.10
34 loads at \$0.20 .....	3.40
349 loads at \$0.15 .....	52.35
87 loads at \$0.50 (delivered) .....	43.50

<b>3529 loads .....</b>	<b>\$ 797.60</b>
<b>Total .....</b>	<b>\$ 5,279.03</b>

Cleaning gutters on dirt streets, labor .....	\$ 2,383.52
Cleaning leaves from gutters on dirt streets, labor .....	290.58
Cutting leaves from streets and lawn extensions in the several wards, labor.	338.79

Setting street signs, labor..	\$ 146.53
Use of auto. 5 weeks.....	10.50
Paint, etc. ....	4.00
Lumber .....	40.84

<b>Total .....</b>	<b>\$ 201.87</b>
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<b>Total, Street Work .....</b>	<b>\$18,887.03</b>
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#### CULVERTS—

Cleaning culverts, labor—	
Allen's creek, State and Arch and open ditch Edwin and Division .....	\$ 119.35
Division and Hill .....	3.06

Madison and 4th avenue...	7.11
5th street and William....	6.44
<b>Total .....</b>	<b>\$ 135.96</b>
Repairs culverts, labor—	
2d bet. Liberty and William \$	11.37
Spring north of Miller ave. and Chapin .....	9.07
Spring, bet. Hiscock and and Summit .....	17.12
Railing Jefferson and A. A. R. R. ....	2.34
Railings Fountain and Miller ave. ....	9.81
<b>Total .....</b>	<b>\$ 49.71</b>
5 pc 24" tile (Spring st.)..\$	10.50
Lumber for railings .....	2.33
16 sacks cement, 4 bbl. at \$1.14 .....	4.56
2 loads gravel at \$0.25....	0.50
<b>Total .....</b>	<b>\$ 67.60</b>
<b>Total, Culvert Work ....</b>	<b>\$ 203.56</b>

**SIDEWALKS—**

Grading for sidewalks in the several wards, labor ....\$	481.35
Sidewalks built by city under contract—	
For property owners:	
Thos. Hession, contractor, 4 pieces, 2 East Huron, 2 South Fifth ave., 248.166 lin. ft., 1315.08 square ft. at \$0.10....\$	131.51
Thompson & Son, contractors, 6 pieces, one East Minerva, Olivia, William, 3 East Ann, 287 lin. ft., 1435.5 sq. ft. at \$0.10 .....	143.56
Thos. Hession, contractor, 2 pieces driveway and curb South Fifth ave. (ordered by Council)..	23.90
Sidewalks for city account:	
Thompson & Son, contractors, on east side First, north of Liberty, 118.416 lin. ft., 592.08 square ft. at \$0.10 ....	59.21
<b>Total .....</b>	<b>\$ 358.18</b>
<b>Total, Sidewalk Work ...</b>	<b>\$ 839.53</b>

**CROSSWALKS, SIDEWALK EXTENSIONS, STORM WATER GUTTERS, ETC.—**

Building crosswalks, sidewalk extensions, storm water gutters, etc., in the several wards; 11 new crosswalks, 54 extensions, 17 crosswalks relaid or repaired, 10 extensions	
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repaired, 7 storm water gutters in street intersections, 3 brick and cement platforms for sprinkling standpipes, labor .....	\$ 767.80
56 loads gravel at \$0.25...	14.00
5 loads gravel (delivered) at \$1.00 .....	5.00
12 loads gravel (delivered) at \$1.25 .....	15.00
1 load sand .....	0.25
3 loads filling at \$0.25....	0.75
Lumber .....	38.25
406 sacks cement, 101.5 bbl. at \$1.14 .....	115.71
Crossing irons for culverts	14.54
<b>Total .....</b>	<b>\$ 991.64</b>
Sidewalk extensions laid by contract:	
7 pieces Thompson & Son..\$	38.85
1 piece curb set, Richmond	3.00
1 piece curb set, Thompson & Son .....	9.96
<b>Total .....</b>	<b>\$ 51.81</b>

Repairs bridges, labor (sidewalk No. 1 bridge) .....	\$ 0.84
Cleaning crosswalks, labor.	90.30
Unloading cars cement, gravel, brick, etc., handling and shipping empty cement sacks, labor ....	282.65
Cleaning bridges, labor ....	15.17
Setting 3 drinking fountains, labor .....	\$ 35.36
2 loads gravel at \$0.25....	0.50
1 load gravel (delivered)..	1.25
21 1-2 sacks cement, 5.38 bbl. at \$1.14 .....	6.14
Hauling .....	9.69
<b>Total .....</b>	<b>\$ 52.94</b>
Piling block from State st. repaving at city yard, labor .....	\$ 83.16
Unloading pitch, \$7.56; unloading gravel, \$10.14; labor .....	17.70
<b>Total Crosswalks, etc....</b>	<b>\$ 1,586.21</b>

**INLETS, STORM WATER SEWERS, ETC.—**

Repairs and cleaning inlets, spills and gutter boxes, laying tile in gutters, etc., labor .....	\$ 331.59
Tile .....	40.10
2 loads gravel at \$0.25 ....	0.50
13 1-2 sacks cement, 3.38 bbl. at \$1.14 .....	3.86
<b>Total .....</b>	<b>\$ 376.05</b>
Cleaning catch basins and	

inlets, labor .....	132.67
City Engineer's department acct., labor .....	938.77

Total Inlets, etc. .... \$ 1,447.49

#### GENERAL WORK AND REPAIRS—

Miscellaneous work and repairs at  
dinerent points in the city, labor:

Various small jobs .....	\$ 17.35
Filling street sweeper brooms and repairs sweepers.....	88.20
Removing ashes from base- ment of city hall .....	10.56
Handling materials .....	27.56
Handling coal for poormaster. Filling around house N. E. cor. First and Liberty.....	5.36
Work on sprinkling tank ....	6.50
Various small repairs side- walks .....	11.16
Repairs cement mixers .....	11.25
Repairs snow plow and haul- ing, \$24.56; iron work on snow plows, \$10.95.....	44.53
Work on tops wells, Broad- way, \$9.32; new pumps, \$11.80 .....	35.51
City Engineer Dep't, acct: Posts, fence, etc., Broadway between briges .....	21.12
Steere farm .....	\$ 20.39
Other work .....	6.00
	1.26

Total .....

Repairs tools .....	\$ 1.67
Painting wagons .....	5.90
Repairs steam roller .....	10.06

Total .....

Total, General Work .....

#### PAVING—

Paving District No. 30, Church street .....	\$15,538.03
Repaving State street, Lib- erty to William st. ....	4,500.65
Paving Dist. No. 32, Ann, Main to First, curbing and grading .....	235.28

Total Paving .....

#### PAVING YARDAGE—

District No. 30.....	12253.12 sq. yds.
Repaving State ..	2351.62 sq. yds.

Total .....

#### SUPPLIES—

Supplies, repairs, etc., ex- cept as included in fore- going .....	\$1,397.38
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#### RECAPITULATION—

Street work .....	\$18,887.03
Culverts .....	203.56
Sidewalks .....	839.53
Crosswalks, extensions, etc.	1,586.21
Inlets, storm water sewers,	

etc. ....	1,447.49
General work .....	324.38
Paving .....	20,173.96
Supplies .....	1,397.38

Total .....

No. of culverts repaired .....	6
No. of crosswalks built .....	11
No. of sidewalk extensions built (by city) .....	54
No. of sidewalk extensions built (by contract) .....	7
No. of crosswalks repaired or re- laid .....	17
No. of extensions repaired .....	10
No. of platforms laid at standpipes for sprinkling .....	3
Pieces of curb repaired and set... No. of storm water cement gutters at intersections .....	2
(Abt. 238 lineal feet.)	7
No. of cement sidewalks built by city under contract for property.	10
No. of sidewalks city acct. (First street) .....	1
(653.582 lin. ft.; 3342.66 sq feet.)	
No. of sidewalks repaired at cul- verts, alleys, etc. ....	8
No. of square yards of pave- ment laid .....	14604.74
No. of notices served:	
To repair sidewalks .....	45
To remove obstructions in streets.	15
To fill holes in streets .....	7
To cut weeds .....	5
To clean snow .....	3

Total .....

#### GRAVEL ACCOUNT—

	Loads
Gravel and patching streets in the several wards .....	3529
Crosswalk and extension work..	91
Drinking fountains .....	3
Pavement repairs .....	33
Pavement repairs East and North University .....	35
Culverts .....	2
Repairs inlets, etc. ....	2
Tarring old pavements .....	323

Total .....

#### Paving work—

Dist. No. 30 Church bank .....	1265
Same, washed (27 cars) .....	675
Repaving State, bank .....	348
Same, washed .....	18
Tarring new pavements, washed (3 cars) .....	75

Total .....

Total loads .....

#### COST OF GRAVEL—

Cost of gravel (not including paving work) 3529 loads on streets .....	\$ 797.60
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489 loads extensions, cross-walks, paving repairs, tarring old pavements, etc... 284.66

Total ..... \$1,082.26

CEMENT ACCOUNT—

On hand January 1, 1914..... Bbls. 24.5  
 Bought:  
 Peerless Portland Cement Co..2240  
 Michigan Portland Cement Co.2281  
 Locally ..... 102.5

Total bought .....4623.5

Total ..... 4648

Deduct injured by water ..... 3

Balance ..... 4645

Used as follows:

Bbls.  
 Paving Church St. No. 30....4021.75  
 Repaving State street ..... 394.25  
 Curbing Ann St. No. 32 ..... 32.5  
 Repairs pavement East and North University ..... 24.25

Sacks.  
 Extension and crosswalk work..406

Paving repairs .....123

Culvert repairs ..... 16

Inlets, etc., repairs ..... 13.5

Storm sewers, etc., City Engineer department ..... 52

Setting drinking fountains..... 21.5

Total .....632

Bbls.  
 632 sacks equals ..... 158

Total barrels used .....4630.75

On hand January 1, 1915 ..... 14.25

Respectfully submitted, John Wisner,  
 Street Commissioner.

INVENTORY — STREET DEPARTMENT:

1 team horses .....\$ 150.00

Horse blankets ..... 4.00

2 street sweepers ..... 200.00

1 pair bobs ..... 20.00

1 hack ..... 5.00

19 wood snow plows ..... 95.00

1 steel snow plow ..... 10.00

1 60-gal. oil can ..... 4.00

4 1-gal. oil cans ..... 0.80

2 pails ..... 0.50

1 large tar tank on wheels. 45.00

1 small tar tank on wheels. 100.00

4 paving hammers ..... 2.00

1 street drag ..... 10.00

1 roter ..... 5.00

29 street brushes ..... 15.85

1 lot empty barrels ..... 10.00

6 street sweeper brooms ..... 60.00

3 canvass for covering cement ..... 11.25

Paint brushes and paint... 2.00

2 old plows ..... 2.00

1 cross cut saw and 1 one-man saw ..... 2.50

2 dump wagons..... 200.00

1 bolt cutter ..... 1.00

19 red lanterns ..... 11.40

17 steel wheelbarrows ..... 68.00

1 scythe and handle ..... 1.00

1 sidewalk roller ..... 5.00

1 set platform scales ..... 150.00

1 batch cement mixer ..... 25.00

3 mauls ..... 1.50

1 2-wheeled scraper ..... 25.00

1 mixing board ..... 3.00

3 tool boxes ..... 9.00

4 scoop shovels ..... 2.00

6 iron tampers ..... 3.00

1 double harness ..... 20.00

1 steam road roller..... 1,000.00

2 pumps ..... 10.00

Stencil and alphabet ..... 1.00

2 road scrapers ..... 100.00

2 Black snow plows..... 25.00

1 50-gal gasoline can..... 4.00

3 5-gal. oil cans ..... 0.75

Tools for filling brooms for sweepers ..... 9.00

1 sidewalk building outfit... 8.00

1 sand wagon ..... 25.00

1 tar tank and equipment, Broadway and River ..... 1,200.00

100 ft. hose ..... 8.00

1 lot sewer jacks ..... 5.00

4 bdl. bamboo splints ..... 9.00

1 stencil for marking cement and letters ..... 4.00

1 ladder ..... 1.00

3 spindles and worn brooms for sweeper ..... 6.00

20 lbs. bolts (est.) ..... 1.00

1 plow ..... 12.00

2 sand screens ..... 4.00

1 sprinkling wagon ..... 150.00

3 carts ..... 90.00

1 brace and bit ..... 1.50

1 iron, 3 wood, levels ..... 2.00

15 grub hoes ..... 7.50

1 handle for scythe ..... 0.25

1 iron vice and bench ..... 3.00

1 tool box on wheels ..... 20.00

2 slip scrapers ..... 10.00

3 old pails ..... 0.30

1 square wood tamper ..... 1.00

3 hand saws ..... 3.00

1 mortar box ..... 2.00

3 cement shovels ..... 2.25

2 wood pounders ..... 1.00

8 iron crow bars ..... 4.00

3 hatchets ..... 2.25

10 shovels ..... 5.00

2 Fcote continuous cement mixers ..... 800.00

2 closets ..... 8.00

1 lot rope ..... 2.00

2 Knowell's street scrapers.. 4.00

1 20th century grader ..... 100.00

2 large hose nozzles ..... 3.00



4 iron rods for red lights...	1.00	11 old crosswalk grates .....	22.00
1 pliers .....	0.75	1 lot old sewer pipe, 30", 20",	
2 post hole diggers .....	1.00	23", 18" and 15" (est.)....	50.00
1 lot castings for steam mix-		I lot new 12", 15" and 18"	
ers .....	5.00	tile (est.) .....	50.00
1 old tar kettle .....	2.00	300 wood paving blocks .....	5.00
1 lot old fire hose .....	5.00	500 ft. 12" plank and 6 pc.	
5 Berry street brushes .....	4.00	2"x4" .....	10.00
1 draw knife .....	0.40	1-2 ton old bridge iron, \$4.00;	
2 pipe spades .....	0.80	3 pc. 8" iron pipe, \$10.00..	14.00
3 creasers, 1 edger .....	2.40	1 lot old manhole and inlet	
2 century street scrapers...	10.00	frames (est.) .....	25.00
6 hammers .....	3.00	1 lot cobble and flag stone	
2 axes .....	1.00	(est.) .....	40.00
6 picks .....	3.00	3000 ft. oak plank .....	65.00
1 grindstone .....	2.00		
6 street shovels .....	2.40		
1 lot iron pipe and fittings..	50.00		
1 tar kettle .....	10.00		
2 pieces wire fence .....	1.00		
1 tar wagon distributor at-			
tachment .....	50.00		
3 rakes .....	1.00		
5 cold chisels .....	2.50		
1 long-handled shovel .....	0.60		
3 pitchforks .....	1.50		
2 brick tongs .....	2.50		
1 stone boat .....	1.00		
1 hoe .....	0.40		
1 stone hammer .....	0.35		
1 snow shovel .....	0.60		
2 wood trowels .....	0.65		
3 trowels (steel) .....	0.75		

Total ..... \$762.85

JOHN WISNER,  
Street Commissioner.

**Resolutions.**

By Ald G. Lutz: Resolved, that \$500.00 be and same is hereby transferred from the Dog License fund to the Contingent fund, and \$15.20 from the Dog License fund to the State Street re-paving fund. Adopted by unanimous vote of council, 15.

By Ald. G. Lutz: Resolved, that the city clerk be and is hereby authorized to draw warrants for water works coupons when due, February 1st, 1915. Adopted by unanimous vote of council, 15.

Moved by Ald Groves, that the council meet as committee of whole on Tuesday evening, January 26th, 1915, at 7:30 o'clock. Adopted.

**Miscellaneous Business.**

Communication from the Pomona Grange, protesting against the City allowing a large flow of water to run to waste in the county ditch at the Steere farm, as is supposed to be contemplated in the putting down of a large well or shaft, received and on motion of Ald. Groves ordered on file. The Council adjourned.

ROSS GRANGER, Clerk.

Total .....	\$5,101.20
Inventary Building Material—Street	
Department:	
1455 paving block (cull, State	
street paving) .....	\$ 14.55
4630 paving block .....	99.55
8000 old asphalt block (est.)..	40.00
3000 old paving brick (est.)..	30.00
59 bbls. pitch .....	219.00
14.25 bbl. cement .....	16.25
5000 old bridge timbers (est.)	40.00
5 turned posts, \$2.50; 1 keg	
nails and spikes, \$3.00...	5.50
1 lot 12-ft. wing bars for cul-	
verts .....	17.00