

Council Chamber, Ann Arbor, Mich.,  
January 6, 1913. Regular Session.  
Meeting called to order by the  
President.

Present: Ald. Schmid, Ramsay,  
Murray, Prochnow, Pipp, Sherk,  
Lutz, Pres. Mills, 8.

Absent: Ald. Hochrein, Koernke,  
Flynn, Manwaring, Lindenschmitt,  
Schultz, Rash, 7.

Minutes of previous meeting ap-  
proved.

(Enter Ald. Schultz and Rash.)

### Communications.

From the Mayor—

To the Honorable Common Council: Gentlemen—I desire to call your attention to some objections to the resolution passed at your last regular meeting ordering a special election for April 7th for the purpose of enabling the people to vote on the question of raising \$2000.00 by special tax for an automobile for the police department. The state law says that a city cannot order more than two special elections in one year and as this council has already ordered two such elections there may be some question as to the legality of your action. Besides, it may not be the wisest policy to use a special election for such a small matter, especially, when the coming year will bring up important matters for solution that may require the action of special elections. I would therefore suggest that the resolution be reconsidered, and be referred back to the Committee. I do not make this suggestion because I am in favor of the object of this special tax but because if the people are to vote this extra tax it should be done with a full understanding of its possible effects, and in a way that no technicalities can be raised against it.

I have been asked why I am opposed to the council appropriating this money for a police automobile, and will state that I am opposed to this action for a number of reasons but if the people wish to vote the extra tax I have no objections to their doing so. But I believe such additional money could be used to better advantage than to buy a police automobile. I will admit that an automobile would be a nice thing for the police department if we had the funds but I do not believe that it is a necessity. It is said that with an automobile the police could answer calls on the outskirts of the city. The police department is now equipped with a motor cycle which could be used for hurry-up calls. The first

cost of an automobile would be just the beginning of more expense and very soon the council would have to allow additional men in order to operate the auto. In fact some of the members now think that the force should be increased four or five men. I believe that the department is in good shape now and that all it needs at present is another man so that some one can be in the office at all times of the day and night so as to answer calls, and I would be glad to put on an additional man just as soon as the council provides funds to do so. In fact there is a vacancy on the police force now but which I never felt justified in filling because by doing so it would overdraw the police fund. Our total tax rate is now over two per-cent and while it is true that the greater portion of this is State, County and School, I believe we should do our part in keeping the rate down to two per-cent and below if possible, consistent with necessary improvements.

WILLIAM L. WALZ, Mayor.

Moved by Ald. Lutz, that action relative to election for auto-patrol, taken December 16th, 1912, ordering a special election, be reconsidered.

Adopted as follows: Yeas, Ald. Schmid, Ramsay, Schultz, Murray, Prochnow, Pipp, Sherk, Rash, Lutz, Pres. Mills, 10. Nays, none.

Moved by Ald. Lutz, that communication from Mayor be received and that part relative to Auto-Patrol be adopted and the resolution referred back to the Police committee.

Adopted as follows: Yeas, Ald. Schmid, Ramsay, Schultz, Murray, Prochnow, Pipp, Sherk, Rash, Lutz, Pres. Mills, 10. Nays, none.

Deed from Mr. and Mrs. L. D. Carr to the City, conveying right to construct a sanitary sewer through a certain piece of land in Ferdon's addition, received and referred to the city attorney.

Report of the Ann Arbor Water company of the City of Ann Arbor, Michigan, to the Michigan State Board of Health and also the City Clerk of the City of Ann Arbor, in accordance with Act No. 28 for the year 1912.

During the year 1912 this company has installed six fire hydrants and laid the following mains with necessary valves and fittings:

S. Univ. Ave. from Forest to Wash-  
tenaw, 500 Ft. 6 inch Pipe.

Cambridge Road between Wash-  
tenaw and Hill, 500 Ft. 6 inch Pipe.

Martin St., South of Cambridge

Road, 650 Ft. 6 inch Pipe.  
 Baldwin Ave., North of Wells, 650 Ft. 6 inch Pipe.  
 Hill St., from No. 1500 to Oswego St., 1610 Ft. 12 inch Pipe.  
 Oswego from Hill to Medallion, 330 Ft. 12 inch Pipe.  
 Medallion from Oswego to Tank, 365 Ft. 14 inch Pipe.  
 Broadway to City Limits, 700 Ft. 6 inch Pipe.  
 S. Ashley from Liberty to Williams, 600 Ft. 6 inch Pipe.  
 Mosley east of 3rd St., 600 Ft. 6 inch Pipe.  
 3rd St., South of Madison, 385 Ft. 4 inch Pipe.  
 Brookwood Place West of Packard, 212 Ft. 4 inch Pipe.  
 Hill St. to make circuit with 12 inch pipe to Tank, 96 Ft. 6 inch Pipe.  
 Cherry St., 65 Ft. 1 1/4 inch Pipe.  
 So. Ashley St., 53 Ft. 2 inch Pipe.  
 Camden Road, 152 Ft. 2 inch Pipe.  
 N. Ingalls St., 275 Ft. 2 inch Pipe.  
 Total 7,743 Ft.

**Station No. 1.**

For river connection through Barton Dam 204 feet of 16 inch pipe and 288 feet of 20 inch pipe.

This Company has made 144 service or house connections.

For the purpose of equalizing the pressure during the time of excessive consumption the Company has erected in the Eastern part of the City, between Medallion and Geddes Avenue, a steel tank, on pillars, 30 feet in diameter and the top of the tank is 60 feet from the surface of the ground with a capacity of 250,000 gallons.

State of Michigan, County of Washtenaw, ss. I, A. K. Hale, Secretary and Treasurer of the Ann Arbor Water Company, hereby certify, that the foregoing report is correct according to the best of my knowledge and belief.

THE ANN ARBOR WATER CO.  
 By A. K. HALE, L. S.  
 Secretary and Treasurer.

Dated December 27th, 1912.  
 Received and ordered on file.

**Committee Reports.**

**FINANCE REPORT.**

Ann Arbor, Mich., Jan. 2nd, 1913.

To the Finance committee of the Common Council: Gentlemen—I have examined the following 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.

**Contingent Fund.**

Ross Granger, salary and clerk hire \$166.66  
 Eugene G. Mann, salary and clerk hire ..... 108.33

S. W. Beakes, salary ..... 125.00  
 John W. Dwyer, salary ..... 83.33  
 Jas. F. Breakey, salary ..... 50.00  
 M. E. Easterly, salary ..... 50.00  
 Napoleon Brough, salary ..... 50.00  
 R. G. MacKenzie, salary ..... 25.00  
 Michael Ryan, salary ..... 30.00  
 Edward Besch, collecting garbage 300.00

Total salaries and services .....\$988.32

**Fire Fund.**

Chas. J. Andrews, salary .....\$ 41.66  
 Eugene Williams, salary ..... 38.50  
 Geo. Hoelzle, salary ..... 38.50  
 Ralph Edwards, salary ..... 38.50  
 Henry McLaren, salary ..... 36.50  
 Fred Jolly, salary ..... 36.50  
 Jacob Gwinner, salary ..... 35.00  
 Arthur Clark, salary ..... 35.00  
 Max Wittlinger, salary ..... 35.00  
 Harley Wise, salary ..... 35.00  
 Martin Noll, salary ..... 35.00  
 Geo. Isbel, salary ..... 35.00  
 Mat. Heininger, salary ..... 35.00  
 John Behr, salary ..... 35.00  
 James Smith, salary ..... 35.00  
 Frank Markey, salary ..... 35.00  
 Thomas Sharp, salary ..... 30.00  
 Clyde Carpenter, salary ..... 30.00  
 Chas. Carroll, salary ..... 23.00  
 Frank Kapp, salary ..... 23.00

Total salaries for 1-2 month of December .....\$686.16

**Police Fund.**

Theo. C. Apfel, salary .....\$ 41.66  
 Thos. O'Brien, salary ..... 40.00  
 Wm. J. Aprill, salary ..... 35.00  
 Gustave Meyer, salary ..... 35.00  
 Wm. Blackburn, salary ..... 35.00  
 Rex Burnett, salary ..... 35.00  
 Edw. Kuhn, salary ..... 35.00  
 Reuben Armbruster, salary ..... 35.00

Total salaries for 1-2 month of December .....\$291.66

**Poor Fund.**

J. H. Shadford, salary .....\$25.00

**Cemetery Fund.**

Matthias Luippold, salary .....\$40.00

**Bridge, Culvert and Crosswalk Fund.**

John Wisner, salary .....\$125.00  
 Manley Osgood, salary ..... 100.00  
 R. M. Caughey, salary ..... 60.00

Total .....\$285.00

**Recapitulation of Salaries.**

Contingent fund .....\$988.32  
 Fire ..... 686.16  
 Police ..... 291.66  
 Poor ..... 25.00  
 Cemetery ..... 40.00  
 Bridge, culvert and crosswalk... 285.00

Total salaries .....\$2,316.14

**Contingent Fund.**

Ann Arbor Gas Co., city hall, etc ...\$1.65  
 Eastern Michigan Edison Co., city hall, clock, etc..... 51.45  
 Michigan State Telephone Co., tolls ..... 1.25  
 Washtenaw Home Telephone Co., rentals 1 month ..... 12.75

A. F. Martin, election meals .....	4.00	Wm. Temple, burial dog .....	.50
G. F. Willey, services .....	4.00	Total .....	\$53.70
R. W. Pryer, services .....	20.00	<b>Street Lighting Fund.</b>	
McOmber & Miner, insurance .....	2.00	Eastern Michigan Edison Co.,	
C. E. Godfrey, cartage .....	1.00	light .....	\$1,242.07
The Times News Co., printing .....	100.65	<b>Sidewalk Building Fund.</b>	
Sid. W. Millard, printing .....	20.25	E. G. Mann, Gerken tax refund .....	\$15.91
Clyde C. Kerr, printing .....	4.25	<b>Park Fund.</b>	
The Athens Press, printing .....	8.50	Jno. C. Fischer Co., supplies .....	\$ .65
R. L. Polk & Co., directories .....	45.00	Holmes' Livery, liveries .....	5.50
The Richmond & Backus Co., sup- plies .....	36.75	Total .....	\$6.15
J. I. Holcomb Mfg. Co., supplies .....	4.20	<b>Water Fund.</b>	
Jno. C. Fischer Co., supplies .....	7.20	Ann Arbor Water Co., hydrants, water, etc. ....	\$5,079.76
Wm. H. L. Rohde, supplies .....	2.50	<b>Bridge, Culvert and Crosswalk Fund.</b>	
The Brown Drug Store, supplies ..	3.20	Andrew Caughey, labor .....	\$1.78
Dawson Bros., supplies .....	6.50	Wm. Clark, labor .....	22.00
Mayer, Schoettle & Schairer Co., supplies .....	2.70	John Dalgliesh, labor .....	10.25
Christian Schlenker, repairs .....	8.45	Geo. Enkeman, labor .....	2.25
Henry G. Pipp, repairs .....	4.82	John Holka, labor .....	6.40
L. Walz, expenses paid .....	5.74	Sam. Kalubach, labor .....	9.55
Ross Granger, express paid .....	1.35	Wm. Kuehn, labor .....	22.37
Contingent fund total .....	\$360.16	Mat. Luippold, labor .....	4.25
<b>Fire Fund.</b>		J. G. Mack, labor .....	18.35
Jos. Seabolt, substitute .....	\$4.00	Geo. Miley, labor .....	9.15
the Swan Laundry Co., Ltd., laundry .....	7.05	W. J. Bandel, labor .....	2.25
Ann Arbor Gas Co., light, etc. ....	12.24	Geo. Roberts, labor .....	10.40
Eastern Michigan Edison Co., light, etc. ....	6.15	Adam Stoll, labor .....	18.00
American-LaFrance Fire Engine Co., repairs and express .....	3.83	Clenn Winans, labor .....	3.50
F. S. Gehringer, supplies .....	1.08	Geo. Wisner, labor .....	3.50
Dawson Bros., supplies .....	5.70	W. C. Bargdill, team .....	26.50
Hutzel & Co., supplies .....	.50	Dorfer E. Howard, team .....	4.00
R. E. Muehlig, supplies .....	26.32	Edwin Knapp, team .....	21.00
Schumacher Hardware Co., supplies	3.07	Herman Marquardt, team .....	22.00
Muehlig & Schmid, supplies .....	13.42	C. L. Mullison, team .....	8.25
S. C. Andres, supplies .....	.47	Geo. Schaeble, cart and man .....	18.00
Ed. Donovan, hay .....	21.84	Walter Schneider, team .....	5.00
Michigan Milling Co., bran .....	6.25	Wm. Seyfried, team .....	24.50
C. W. Cornell, horseshoeing .....	7.40	Jos. Wallacker, cart and man .....	19.67
H. A. Wisdom, repairs .....	.25	Koch Bros., plowing snow .....	5.00
Fire fund total .....	\$119.55	W. B. Schaffer, plowing snow .....	7.00
<b>Police Fund.</b>		G. W. Weeks, plowing snow .....	5.00
Michigan State Telephone Co., tolls..	\$3.40	V. M. Wheelock, plowing snow and team .....	15.00
Washtenaw Home Telephone Co., tolls .....	.20	Jos. Williams, plowing snow .....	2.50
Ann Arbor Garage, services .....	2.75	Total labor St. Comm'r dept. ....	\$327.54
Ann Arbor Taxicab Co., services .....	10.00	D. W. Bingham, labor .....	\$ 3.75
Washtenaw Garage, services .....	2.00	W. R. Drury, labor .....	33.60
Wm. L. Belser, services .....	2.00	W. A. Grove, labor .....	6.60
Folkemus Transfer Line, services ..	1.50	Total labor Eng. dept. ....	\$43.95
J. C. Miller, services .....	2.00	Total labor .....	\$371.49
W. A. Ehnis, supplies .....	5.75	Albert Weimer, drilling wells .....	\$256.10
DeFries' Art Store, supplies .....	1.50	Engineering & Contracting Pub. Co., advertising .....	3.60
Sid. W. Millard, printing .....	1.25	The American Contractor, advertising	2.40
Edward Kuhn, lost cap .....	1.50	Engineering Record, advertising ..	4.50
Theo. C. Apfel, supplies paid .....	1.50	W. B. & Esser Co., supplies .....	4.04
Police fund total .....	\$35.35	The W. L. McCullough Co., supplies and freight .....	4.15
<b>Poor Fund.</b>		Hutzel & Co., supplies .....	1.00
Helber Bros., supplies .....	\$3.50	Eyer & Whitker, supplies .....	1.25
Herrick & Bohnet, supplies .....	16.72	Wm. H. L. Rohde, supplies .....	11.02
John Wagner, supplies .....	8.26	Jno. C. Fischer Co., supplies .....	12.23
Theurer & Walker, supplies .....	17.00	Muehlig & Schmid, supplies .....	15.85
Anton Brahm, supplies .....	1.92	Kuehnle & Meyer, supplies .....	10.25
University hospital, Moncrieff case.	7.00	W. C. McMullen, oats .....	39.49
Mrs. Geo. Beckler, supplies .....	5.00	L. C. Weinmann, gravel .....	13.95
Poor fund total .....	\$59.49	G. F. Allmendinger, agent, gravel..	119.60
<b>Dog License Fund.</b>		Robison & Co., use of horse .....	18.00
Meyer & Wenthe, supplies .....	\$53.20	Bailey & Edmunds, repairs .....	1.15
		S. C. Andres, repairs .....	.60
		Merley Osgood, expenses paid .....	7.85

Ann Arbor Water Co., repair flush-tanks .....	32.68
Total supplies, etc .....	\$559.71
Bridge, culvert and crosswalk fund total .....	\$931.20

**Recapitulation.**

Warrants drawn January 6th, 1913.	
Contingent fund .....	\$360.16
Fire .....	119.55
Police .....	35.35
or .....	59.49
Dog license .....	53.70
Street lighting .....	1,242.07
Sidewalk building .....	15.91
Park .....	6.15
Water .....	5,079.76
Bridge, cul. and crosswalk .....	931.20
Total .....	\$7,903.34

Ann Arbor, Mich., Jan. 6th, 1913.

To the Honorable, the Common Council: Gentlemen:—Your Finance committee have reviewed the foregoing reports of the city clerk. Warrants for salaries were drawn December 31, 1912. We recommend that same be approved and that warrants be ordered drawn for the foregoing accounts. Geo. Lutz, Wm. H. Murray, E. E. Schmid, Finance Committee.

Ald. Lutz moved the adoption of the report.

Adopted as follows: Yeas, Ald. Schmid, Ramsay, Schultz, Murray, Prochnow, Pipp, Sherk, Rash, Lutz, Pres. Mills, 10. Nays, none.

Ald Lutz presented engineer's report on Sanitary Sewer No. 50, Myrtle st., as follows:

**Engineer's Estimate.**

Ann Arbor, Mich., Jan. 6th, 1913.

To the Hon. Common Council, Ann Arbor, Mich.: Sirs—I submit herewith the following final estimate of work done and material furnished for the sanitary sewer on Myrtle st., from Oswego st. to the city limits, District No. 50, and recommend the payment of the amount due to Hochrein & Reimold, the contractors:	
386 ft. excavation, 0 ft. to 12 ft., at \$1.00 .....	\$386.00
90 ft. excavation, 12 ft. to 15 ft., at \$1.25 .....	112.50
451 ft. excavation, 15 ft. to 18 ft., at \$2.00 .....	902.00
696 ft. of 8 inch sewer tile at .16 .....	111.36
308 ft. of 4 inch sewer tile at .08 .....	24.64
17 8 in by 4 inch Ts or Ys at .70 ..	11.90
3 8 inch by 8 inch Ts or Ys at .75 .....	2.25
3 8-inch curves at .50.....	1.50
34 4 inch curves at .25 .....	8.50
1 manhole .....	45.00
1 flushtank .....	75.00
1 lamphole cover .....	4.00
Total .....	\$1684.65

Less 5 per cent retained for one year .....	84.23
	<u>\$1600.42</u>

Less amount of first estimate, Dec. 2, 1912, .....	521.88
Due contractors .....	\$1078.54
Distribution of cost:	
Amount of above final estimate ....	\$1684.65
Engineering, laying tile, etc. ....	11.04
Total ....	<u>\$1695.69</u>
City to pay .....	<u>44.68</u>

Property to pay .....

Property to pay .....	\$1651.01
-----------------------	-----------

Very respectfully submitted, Manley Osgood, City Engineer.

Moved by Ald. Lutz, that engineer's estimate be accepted and the city clerk draw warrant in favor of Hochrein & Reimold for amount due.

Adopted as follows: Yeas, Ald. Schmid, Ramsay, Schultz, Murray, Prochnow, Pipp, Sherk, Rash, Lutz, Pres. Mills, 10. Nays, none.

**Sewer Committee.**

To the Honorable Common Council: Gentlemen—Your committee, to whom the petition of the property owners on Crest Ave. for sanitary sewer, was referred, would recommend that the petition be granted, and estimate, plans and specifications be furnished by the city engineer. I. L. Sherk, Chairman Sewer Committee.

Adopted as follows: Yeas, Ald. Schmid, Ramsay, Schultz, Murray, Prochnow, Pipp, Sherk, Rash, Lutz, Pres. Mills, 10. Nays, none.

**Fire Committee.**

To the Honorable, the Common Council: Gentlemen: Your fire committee and fire commissioners respectfully recommend that the commissioners be authorized to purchase a suitable horse to replace one that died Friday last. Henry G. Pipp, Chas. R. Rash, Geo. E. Apfel, Sid W. Millard, Moses Seaboldt, Fire Committee and Commissioners.

Ald Pipp moved the adoption of report.

Adopted as follows: Yeas, Ald. Schmid, Ramsay, Schultz, Murray, Prochnow, Pipp, Sherk, Rash, Lutz, Pres. Mills, 10. Nays, none.

**Park Committee.**

To the Honorable, the Common Council: Gentlemen—Your park committee have had under consideration the petition relative to maintaining skating places at West park and the Fair Grounds. We find that it



would be impracticable to flood West park by a dam on Allen's creek.

We respectfully recommend that some of the low places at West park and the Fair Grounds be flooded by fire hose under direction of the Street Commissioner. Respectfully submitted, Theo. F. Prochnow, Chairman Park Committee.

Ald. Prochnow moved the adoption of the report.

Adopted as follows: Yeas, Ald. Schmid, Ramsay, Schultz, Murray, Prochnow, Pipp, Sherk, Rash, Lutz, Pres. Mills, 10. Nays, none.

#### Special Water Committee.

through the city engineer, presented a report of the work done at the

Steere farm since Nov. 4th, 1912, the date of last report.

City Engineer's Office, Ann Arbor, Mich., Jan. 6, 1913.

To the Special Water Committee of The Hon. Common Council, Ald. Geo. Lutz, Chairman, Ann Arbor, Mich.:

Dear Sirs—I wish to submit the following report of work done at the Steere farm since November 4, 1912, the date of my last report.

Flow of Wells: The five wells which were flowing at the time of the last report were capped on November 13, p. m., and I have in my office a tabulated statement of their flow up until that time. From this table I have computed the following averages:

#### Mean Daily Flow in Gallons Per Twenty-Four Hours.

	Average	Maxim.	Minm.
Well No. 1 .....	138,200	148,500	127,000
Well No. 2 .....	143,800	155,000	133,400
Well No. 3 .....	156,000	168,000	146,700
Well No. 4 .....	98,600	104,250	95,400
Well No. 5 .....	206,300	221,600	194,600
Total .....	742,900		

Pumping Wells: Complying with your instructions of November 8, 1912, I drew up specifications for these five wells to be pumped simultaneously and continuously, twenty-four (24) hours per day and for thirty (30) successive days. The water level in each well to be lowered to an elevation one (1) foot above the topmost perforations in the casing, and amaintained at that elevation during the pumping. All machinery, power, tools and supplies necessary to do the work under the specifications to be furnished by the contractor. I inserted advertisements for this work in the local paper and in three prominent engineering and contracting papers and sent out fourteen (14) copies of the specifications to prospective bidders, but when the bids were opened on December 20, 1912, only two bids had been received. These bids were as follows:

From W. J. Harper, Well Driller, Wauseon, Ohio:  
 Using vertical thrust pumps of the Roth or Hill-Tripp make ..... \$7,350.00  
 Using ordinary centrifugal pumps ..... 6,050.00  
 From the Hill-Tripp Pump Company Pump Manufacturers, Anderson, Ind.:  
 Using Hill-Tripp Vertical Thrust pumps ..... \$8,400.00  
 Or if the City of Ann Arbor keeps the pumps on the completion of this test ..10,000.00  
 Only the Hill-Tripp Pump company complied completely with the requirements of the specifications, for the check of Mr. W. J. Harper was not certified.

I submitted the following estimate of the amount for which I thought the City of Ann Arbor could do this same work:

	Type of Pump.		
	Roth	Centrifugal	Hill-Tripp
Price of five pumps f. o. b. factory ..	\$2,000.00	\$ 800.00	\$2,750.00
Freight and cartage (one way) ....	60.00	60.00	60.00
Rent of five traction engines with attendants .....	1,500.00	1,500.00	1,500.00
Rent of one traction engine without attendants .....	150.00	150.00	150.00
Coal for engines, approx. 225 ton ..	1,000.00	1,000.00	1,000.00
Reading guages, engineering, livery .	240.00	240.00	240.00
Labor setting pumps .....	100.00	100.00	100.00
Shelter for pumps, machinery, etc. .	600.00	600.00	600.00
<b>Totals .....</b>	<b>\$5,650.00</b>	<b>\$4,450.00</b>	<b>\$6,400.00</b>

For several of the above amounts, I have used what I consider a fair average unit of price or quantity in cases where a contractor bidding on the work would have used greater units in order to protect himself and insure a profit in the work. You will note, however, that in my estimate I have used the purchase price of the pumps, which we could not rent. Only the Hill-Tripp or Roth pump could pump these wells to comply completely with the specifications.

On December 27, 1912, at a meeting of the special water committee, both of these bids were rejected, the city engineer instructed to return the bidders' checks, and committee composed of Alderman Lutz, Alderman Sherk, and the city engineer appointed to make arrangements for and proceed with the pumping of two of these five wells, using ordinary centrifugal pumps which might be rented or borrowed locally.

New Wells: Meanwhile, in accordance with your instructions of November 22, 1912, arrangements were made to have two wells drilled on the east side of State street road, the five already finished all being on the west side. Well No. 6 was located about 50 feet north of the county ditch and about 1,500 feet east from the road. Well No. 7 was located about 50 feet north of the county ditch and about 900 feet east from the road. The casing in well No. 6 was started on December 8 and both wells were completed by December 14, 1912. The amount paid to the contractor for drilling these two wells was \$256.10.

The character of the soil through which these two wells was drilled was as follows:

Well No. 6. Muck 0.9 feet; gray clay 5 feet; hardpan 10 feet; sand and gravel 16 feet, being fine sand

on top and getting coarser toward the bottom of this layer; and below this drilled 23 feet into hardpan expecting at any time to break through it into another bed of water gravel but stopping before such water gravel was reached. This well was cased 37.4 feet deep from the top of the casing which is about two feet above the ground. The lower 14 feet of pipe is perforated with 3-8 inch holes spaced quite closely.

Well No. 7. Muck 2 feet; clay 19.5 feet; hardpan and stones 0.5 feet; coarse water gravel 8.0 feet. This well was cased 33.9 feet deep from the top of the casing which is 1.5 feet above the ground. The bottom of the casing rests on hardpan. The lower 14 feet of this casing is perforated with 3-8 inch holes spaced closely.

These two wells have a very strong flow; well No. 6 flowing about the same as well No. 5, the best of the first five wells, and well No. 7 flowing better than any of the other wells. These wells were allowed to flow until December 26, 1912, when they were capped in the usual manner. On December 30, I inspected them and removed the caps and found that well No. 7 was flowing around the outside of the pipe enough so that it would not flow up through the pipe when the cap was removed. Well No. 6, also, was flowing around the outside of the pipe but not so strongly. This will necessitate putting down casing of a larger diameter and removing the 8 inch casing. This should, also, increase the flow of the wells.

Cleaning Ditch: I have had two men cleaning the county ditch into which these wells discharge, and widening a part of the county ditch and the private ditch on Mr. Steere's



farm in order to care for the greatly increased discharge when pumping. This work will probably be completed within these next two weeks.

Costs: The costs of this work to date have been as follows:

Concrete basins, flumes, gauges, etc. ....	\$270.90
Cleaning ditches .....	37.17
Reading gauges, computing flow of wells, etc. ....	65.50
Specifications, advertising, etc. for pumping test .....	74.01
New wells No. 6 and No. 7 ..	277.85

Total .. . . . . \$725.43

These costs include that part of my own time properly chargeable to this account. Also items of tools which are still on hand in good condition and can be used for other work which may arise.

Analysis of Water: I took a sample of the water from well No. 6 and your chairman had same analyzed at the University of Michigan laboratory of hygiene. A copy of the analysis is on file in my office. The water is remarkably pure, both chemically and bacteriologically; is good drinking water, and is considerably softer than the present Ann Arbor city water or than the water in the Huron river.

Water Consumption Statistics: I am corresponding with the city engineer in cities of about Ann Arbor's population, including student population, in this and nearby states, with a view to determining the daily quantity of water necessary to supply the city of Ann Arbor. At some future date, when I have obtained sufficient data, I will present the same to you in a tabulated statement report.

All of which is very respectfully submitted,

MANLEY OSGOOD,  
City Engineer.

Moved by Ald Lutz, that the report be accepted and printed with the minutes.

Adopted as follows: Yeas, Ald. Schmid, Ramsay, Schultz, Murray, Prochnow, Pipp, Sherk, Rash, Lutz, Pres. Mills, 10. Nays, none.

#### Officers' Reports.

Report of City Marshal for month of December, 1912, and report of Justice Doty for quarter ending December 31, 1912, received and ordered on file.

#### Street Commissioner's Report.

Ann Arbor, Mich., Dec. 7, 1912.

Hon. Board of Public Works: Wirt Cornwell, Esq., President: Gentlemen:—

The following is a report of the work done by the Street Department during the month of November, 1912:

Oct. 31-Nov. 13; Nov. 14-27—Cleaning paved streets, labor .....	\$500.36
Grading, graveling and patching streets, labor .....	287.23
(North Division; Geddes; south of Wash-tenaw av. and east of Ferdon road; South Main; South 4th av.; N. Ingalls; Lincoln; East and South University aves.; Hill between 5th av. and Division st.; Stoll st. at Brown st.; Chubb road; and patching holes at various points in the several wards.)	
Cleaning gutters, labor .....	512.36
(South 4th av.; E. Jefferson; Thompson; N. and S. Ingalls; Catherine; Miller av.; Ann; N. State; E. University; Detroit; W. Huron; S. University; WiWillard; N. and S. Thayer; Geddes; Volland; Depot; Forest; Wilmot; Tappan, WW. Liberty; Monroe; S. 12th; E. Huron; N. 5th av.; S. Main; E. Madison; Division; Cornwell place; Kingsley; corners 2nd ward.)	
Repairs block and brick pavements, labor .....	22.20
(S. 4th av.; W. Huron; State and Liberty; S. State st.)	
Miscellaneous work and repairs, labor .....	19.79
(Work with city team, \$3.11; removing blank Edwin st. culvert, \$1.13; repairs 6th ward polling place, \$0.71; hauling tile, \$0.71; laying up cement mixer, \$2.67; repairs railing culvert 5th st., \$2.36; piling and sorting lumber city yard, \$6.68; removing ashes city hall, \$2.02; cleaning lan-terns, \$0.40.)	
Cleaning crosswalks, catch basins and inlets, labor .....	12.43
(Crosswalks, \$11.48; inlets, etc., \$0.95.)	
Repairs and making new snow plows, labor .....	45.97
Cleaning M. C. R. overhead crossing and No. 1 bridge, labor .....	2.60
Grading sidewalks, labor .....	1.50
(South Main south of West st.)	
Repairs inlets, gutter boxes, etc., labor .....	5.28
Handling and shipping empty cement sacks, labor .....	5.11
Cleaning culvert, 7th bet. Liberty and Jefferson, labor .....	7.20
Extensions and crosswalks, labor ..	5.51
(Lowering two crosswalks across Stoll st. at Brown st.)	
Repairs sidewalks, labor .....	7.97
(Packard bet. Sate and Arch; Huron bet. 7th av. and Division; Broadway at City park; N. Main; Belser; Church bet. Willard and Hill; cor. Monroe and State st.; at driveway Spring north of Summit st.)	
Wagon and Oswego paving No. 20, labor acct. (tarring) .....	64.00
Ashley st. paving No. 7, labor acct. (tarring) .....	71.33

Total .. . . . . \$1 570.84  
Respectfully submitted, J. WISNER,  
Street Commissioner.

Street Commissioner's report on work done during month of November, 1912, received and ordered printed with the minutes.

#### Resolutions.

By Ald. Murray—Resolved, that,

and this common council hereby requires and orders the sum of six thousand, three hundred thirty-four and 31-100 dollars (\$6,334.31) payable in ten equal annual installments with four per cent interest, or at the option of the tax payers in one payment, to be raised by tax and a special assessment on and against the lots, parts of lots, lands and tenements situated in the special assessment district, paving No. 27, and as a tax against the owners thereof. All to be assessed on and against said lands, tenements and premises according to the benefits coming to each parcel thereof from such local public improvement, and the city assessor is hereby required to levy and assess the said sum of money as aforesaid on and against the lands and tenements aforesaid on and upon the special assessment roll for the paving district aforesaid and on and upon each and every of the regular assessment rolls of the City of Ann Arbor for the year and during which any such special assessment may be payable, until the whole of such special assessment shall be paid in full, all to be assessed in the manner and for the purpose aforesaid pursuant to law.

Resolved, further, that the sum of two thousand, five hundred seventy and 22-100 dollars (\$2,570.22) is

hereby appropriated for the purpose of defraying the cost of such public improvement at street and alley intersections and twenty per cent of the balance of costs of said public improvement; all of which sum of money in ten equal annual installments with interest be and the same is hereby ordered and required to be levied, spread and assessed on and upon each and every of the regular annual assessment rolls of the City of Ann Arbor, and on and against all the taxable property within the said city in and during the period in which any part of this appropriation and assessment is or shall be payable.

Resolved, further, that the city clerk do certify this determination and order of assessments to the city assessor pursuant to law.

Adopted as follows: Yeas, Ald. Schmid, Ramsay, Schultz, Murray, Prochnow, Pipp, Sherk, Rash, Lutz, Pres. Mills, 10. Nays, none.

Moved by Ald Schmid, that the sidewalks along property of Young Woman's Christian Association on S. Main st. be repaired with cinders by the street commissioner.

Adopted as follows: Yeas, Ald. Schmid, Ramsay, Schultz, Murray, Prochnow, Pipp, Sherk, Rash, Lutz, Pres. Mills, 10. Nays, none.

The Council adjourned.

ROSS GRANGER, Clerk.