

CITY ENGINEER'S REPORT.

CITY WORKS DEPARTMENT.

COMMITTEE ON WORKS, 1909-10.

JOSEPH A. CHISHOLM, Mayor, *Chairman.*

ALDERMAN ALFRED WHITMAN,

ALDERMAN NELSON B. SMITH.

OFFICIALS :

F. W. W. DOANE, M. CAN. SOC. C. E., *City Engineer.*

H. W. JOHNSTON, C. E., *Assistant City Engineer.*

T. W. J. LYNCH, *Surveyor and Draughtsman.*

MISS H. M. DUSTAN, *Stenographer.*

WATER WORKS.

EWEN MORRISON.....*Foreman.*

DANIEL J. McLEAN.....*Assistant Foreman.*

ARTHUR MEAGHER.....*Plumbing Inspector.*

JOHN E. BURNS.....*Chief Water and Meter Inspector.*

STREETS, SEWERS, &c.

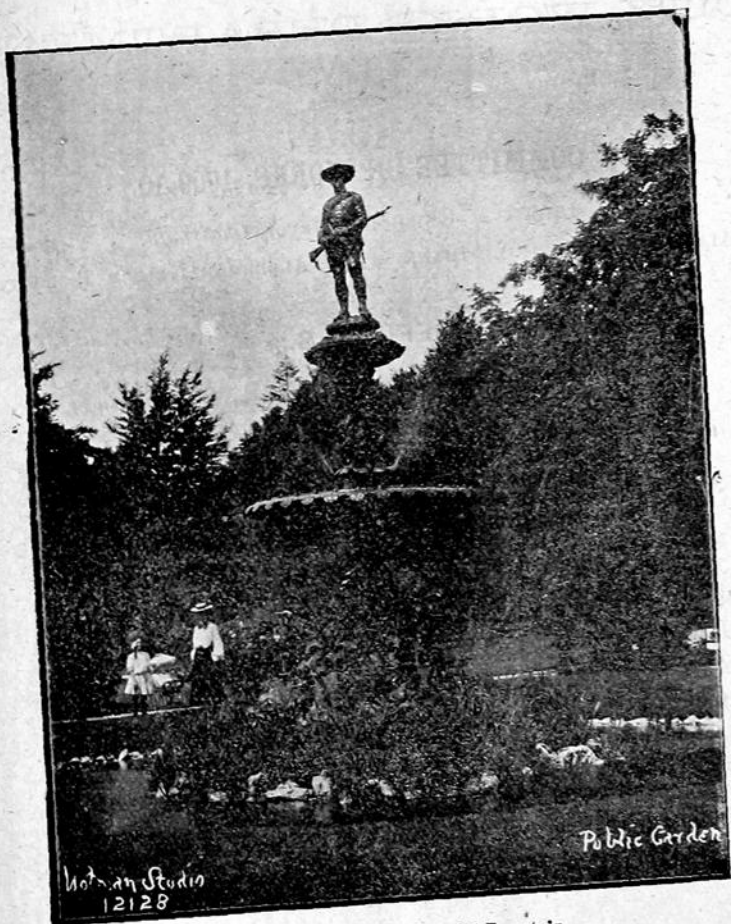
JOHN McDONALD.....*Foreman.*

JAMES DOWNIE.....*Assistant Foreman.*

OFFICE.

JAMES J. HOPEWELL... ..*Clerk of Works.*

MISS MINNIE HUNTER.....*Stenographer.*



South African War Memorial Fountain.

CITY ENGINEER'S OFFICE, CITY HALL,
HALIFAX, N. S., April 30th, 1910.

To His Worship the Mayor :

SIR,—I have the honor to submit my (nineteenth) annual report dealing with the public works of the City, under the supervision of the City Works Department:—

WATER WORKS.

Amount of funded debt on Water Account.....	\$1,183,441	00
“ transferred from revenue	36,000	00
“ of funded debt redeemed by sinking fund.....	8,000	00
“ “ “ revenue.....	30,000	00
“ “ “ premiums on loans	4,073	33
	<u>\$1,261,514</u>	<u>33</u>
Amount expended to April 30, 1909...	\$1,190,103	04
“ “ 1909-10..	\$58,943	53
“ repaid “	6,975	27
	<u>51,968</u>	<u>26</u>
Discount on loan (\$70,000.00)	1,066	00
Total cost of Water Works to date.....	1,243,137	30
Balance on hand.....	\$18,377	03
Amt. paid into sinking fund in excess of debt redeemed	27,857	00

COST OF MAINTENANCE, 1909-10.

Interest	\$50,644	32
Sinking fund	4,857	00
Maintenance of system	35,613	30
	<u>\$91,114</u>	<u>62</u>

or 7.33 per cent. of the total cost of the system to date, interest and sinking fund being 4.46 per cent., maintenance and renewals 2.87 per cent.

RENEWALS.

A twelve-inch main was laid in Gerrish Street between Lockman Street and Gottingen Street and in Proctor Street between Brunswick Street and Water Street replacing three, six and nine inch pipe which had become inadequate to meet the modern demands for fire protection. The six-inch main in North Street opposite the Silliker Car Works was also taken up, and nine-inch pipe laid to improve the fire service.

The six-inch main in Duke Street between Argyle Street and Barrington Street was replaced by a nine-inch main. It had been claimed by the Fire Department that this main was corroded on the inside so that it was not giving as good a supply as at first in the past. It was found to be in good condition however, and was therefore not responsible for the failure to throw good streams. The pipe was also examined at the foot of Duke Street and found to be in good condition. Looking to the future when higher and larger buildings will be erected on Barrington Street and other streets in the neighbourhood of this pipe, it was decided to take up that portion between Argyle Street and Barrington Street and lay it elsewhere.

In September the Tobin Street main, being uncovered in places, was examined. It had been in service between thirty and forty years. The outside was in as good condition as the day it was laid. The inside was in almost as good condition. There were a few tubercles to be seen, but nothing to affect the capacity of the pipe.

Where these old pipes were renewed or tapped no leakage was discovered in the mains. If there is any shadow of truth in the guess made by a few persons that the great waste is due to leakage from the mains, surely we should have discovered at least some slight trace in the miles of old pipe which we have uncovered during the last few years in connection with the paving of streets and sidewalks.

NEW WORK.

Distribution mains were laid for thirteen extensions of the water service. All extensions made were in the high service district, the

total length being 8,933 feet. The total length of mains now in use is 75 miles.

Three hundred and eighty-seven feet of twelve-inch pipe was laid on Oxford Street from the end of the pipe between Coburg Road and Jubilee Road northwardly. This pipe will be a part of the trunk pipe supplying the whole district south of Quinpool Road and west of Oxford Street also as far east as the low service will rise. The supply in this district now is from the High Service and the lowest taps are almost at tide level. No time should be lost in transferring this district to the low service system by extending the Oxford Street twelve-inch main to Quinpool Road. There is urgent necessity for reducing the consumption and increasing the pressure in the high service system by every means available.

Twenty-nine new main stop valves and twenty-one hydrant valves were placed in service, and nine old valves removed, making a total of 924.

Twelve new hydrants were installed, increasing the total to 456. Five old hydrants were replaced with improved City design frost jacket hydrants with steamer nozzle.

Six thousand eight hundred and twenty-three feet of pipe was laid for one hundred and ninety-four new services and two thousand eight hundred and ninety-six feet of old service pipe was renewed. The total number of service pipes laid is 7,591.

FENERTY VS. CITY.

Mr. E. L. Fenerty has again given notice of action for alleged wrongfully obstructing the stream of water which would naturally flow from Chain Lakes. The necessary calculations, tabulation of records and statement of the City's case is being prepared in consultation with the City Solicitor.

CLEANING MAINS.

The high service twenty-inch and fifteen-inch supply main was cleaned twice and the six-inch distribution main in Gottingen Street was cleaned between Gerrish Street and North Street.



Jubilee Fountain.