

Maison Normandin

GRAND MAGASIN DEPARTEMENTAL

1531 et 1533, RUE NOTRE-DAME

Téléphone Bell (Main) 3307

Montréal, 17 Octobre 1904

A M^{rs} le président et aux membres du Comité de l'Agueduc

Messieurs

Nous avons l'honneur de vous adresser pour la fourniture de huit uniformes pour les inspecteurs du département de l'Agueduc au prix de \$7.50 chacun les habits seront fait avec la marchandise tel que l'échantillon que nous produisons.

Vos dévoués
J. A. Normandin

Normandis
v Normandes
Luceu Gas
Pauis & Texts
18 Oct 1904

JOSEPH LEVY, B.C.L.,

Notary Public.

36 ST. VINCENT STREET.

Montreal, 13th October 1904
 To Alderman J. B. Clarihue
 President Louis Gendron
 14 Wellington City

My Dear Colleague

Would you give orders to Mr Fallon of the St Charles
 Performance & Workshops to have John Dwyer, tumbler
 or tip cart presently in the employ of the department
 transferred in the name of Mr. Ed. Godeas Lavasseur.
 Her late husband had purchased it from the said Dwyer
 as appears by receipt dated 25th Jan'y 1904 handed to me by
 the widow, which I enclose. Mr. Lavasseur (nee Wilfred Foster)
 who is in very reduced circumstances has made arrangements
 for a man to run the vehicle in her behalf. The case as far as
 Jean judge is a very deserving one.

Yours truly
 J. Levy
 also William Southward

Mrs. G. Lavie⁶¹¹⁷
re. changing
name of Carter
at Central Shop.

18 Oct 1904.



City Hall

Montreal June 9th 1904

Geo Irvine Esq.

Supt. M. H. H.

Dear Sir

Mr. Fook Chang a Chinese Laundryman
2131 St. Catherine St. has been charged
The sum of \$12.00 damages to water caused
by frost in January last, besides this sum
the Province Dep^t. sued him for adding \$2.50
Costs, making \$14.50 in all.

Mr. Fook Chang considers this charge too high
and requests you to make some reduction. He
having paid the \$2.50 costs he asked for the
obtained a month's delay pending a reply
from you.

The facts are as follows, this water tap being
#1686 was in use at his laundry at above
address, and during the severe cold weather
in January was damaged by frost. It with
7 others damaged in the same manner. Nos



City Hall

Montreal 19

sent to the maker in Boston for repairs,
this meter cost \$12⁰⁰ for repairs, whilst the
other 7 only averaged \$9.71 each, at the
time the invoice was received from the
Agents Messrs. Deunmond & McCall I noticed
this high charge & returned the invoice for
correction, thinking there was some mistake
Messrs. Deunmond & McCall wrote to Boston
& received word that this particular meter
was damaged beyond repair, & that they
had sent a new meter charging us \$12⁰⁰
The original cost of this meter 5 years ago
when purchased was \$13.10. We have already
collected \$10⁰⁰ cents.

Under these circumstances I consider the
request for a reduction very reasonable.

Respectfully Submitted

Your obedient servant
Thos. A. Tracy

646.
Wah Abauz
re. job, age 41
repuis 10 ans
18 Oct 1904.

reduction
granted.

7/11/04

The water committee
would not have any
minutes recorded
in connection with
this matter but added
the Dept. to grant a fair
reduction in their rate,
which he did, granting
a reduction of 50% -
J.D.

McGILL UNIVERSITY,
MONTREAL.

SECRETARY AND BURSAR'S OFFICE.



Sept. 15th, 1904.

George Janin Esq.
Water Department,
City Hall, MONTREAL.

Dear Sir:-

In accordance with your wish I enclose you a memorandum in connection with the increased water tax in the Arts Building. If you will make a comparison between the amount used last year and this year I think you will find that 40-% would be a reasonable proportion for us to pay. I should be obliged if you will make the arrangement on this basis.

Yours very truly,

Samuel Clay
Acting-Bursar.



MEMORANDUM FOR WATER RATE IN ARTS BUILDING FOR

George Janin Esq.



Comparison between amount of water consumed in Arts Building (Meter No. 1019) in 1902-03 and 1903-04

| | 1902 - 3 | | 1903 - 4 | |
|--------------|------------|---------|------------|----------|
| | Cubic feet | Value | Cubic feet | Value |
| July to Oct. | 2245 | 2 58 | 16343 | 18 79 |
| Oct. to Jan. | 6058 | 6 97 | 24709 | 28 41 |
| Jan. to Apl. | 15511 | 17 84 | 27000 | 31 05 |
| Apl. to July | 5717 | 6 57 | | 23 57 |
| | | \$33 96 | | \$101 82 |

I propose seeing the foregoing consumption, that the University pay 40-% or 2/5 of the bills rendered.

S. Clay
Acting Secretary
McGill University



1902 * 3.58 1903. * 19.79 + * incr 16.21
July Oct Oct Jan July Oct Oct Jan + 21.44

Ejector put in in July 1903

McGILL UNIVERSITY,
MONTREAL.

SECRETARY AND BURSAR'S OFFICE.

February 29th, 1904.

George Janin, Esq.,
Superintendent, Water Department,
M o n t r e a l.



Dear Sir:-

I have written a letter to the Chairman of the Water Committee in connection with the great increase in the charge for water in the Arts building, owing to the working of the ejector. I enclose you a copy and ask you to put the same before the Committee as early as possible, in accordance with your promise to me.

Yours very truly,

Samuel Clay
Acting Secretary.

Enclosure.

C O P Y

February 29th, 1904.

Alderman J.B. Clearihue,
Chairman, Water Committee,
City Hall.

Dear Sir:-

I desire to draw your attention to the following facts:

In the month of July last the University placed in the Arts building a new furnace. The water from the City reservoir percolated through into the ash pit and we had to put in an ejector to keep the ash pit clear, otherwise we should have been unable to use the furnace. In consequence of the ejector, our consumption of water has very seriously increased.

In the year 1902 from July 22 to Oct. 22 the charge for water was \$3.58: the corresponding quarter in the year 1903, July 22 - Oct. 22, \$19.79 - an increase of \$16.21.

For the year 1902, from Oct. 22 to Jan. 22, 1903, the amount was \$7.97; for the corresponding quarter, Oct. 22 1903 Jan. 22 1904, the amount charged is \$29.41 - an increase of \$21.44

This, of course, is due entirely to the working of the ejector, owing to the percolating of the water through from the city reservoir.

I have already drawn Mr. Janin's attention, both Montréal verbally and in my letter to him of November 9th last, and the

2.

matter was placed before your committee.

I again draw your committee's attention to these facts and ask that a proportionate reduction be made on the account due by us to the City for water.

I am,

Very truly yours,

Acting Secretary.



Département en Loi. Montréal, le 9 décembre 1903/89

AU PRESIDENT ET AUX MEMBRES
DU COMITÉ DE L'EAU.

re Réclamation de l'Université Mc Gill.

Messieurs :-

Avec la résolution de Votre Comité en date du 10 novembre dernier, une lettre des autorités de l'Université Mc Gill nous est soumise dans laquelle on se plaint de la condition d'un mur qui supporte le chemin appelé "Carleton Road" et de plus cette lettre contient une demande à l'effet d'être libérée ^{de l'Université} de l'obligation de payer de l'eau pour mettre en opération un éjecteur dans la bâtisse des Arts, cette dépense étant nécessitée par des fuites d'eau à travers le réservoir de la Cité.

D'après les instructions de Votre Comité, notre opinion est requise sur ces différentes questions et nous avons maintenant l'honneur de répondre comme suit :

Nous avons obtenu du Surintendant de l'Aqueduc un rapport sur la^s cause^s et l'origine des inconvénients et des troubles dont se plaignent les autorités de l'Université Mc Gill.

Il résulte de ce rapport et des explications verbales du Surintendant que nous avons appris qu'il existe des fuites d'eau assez considérables dans les murs et surtout dans le fonds du réservoir de la Cité, mais d'un autre côté il est constaté qu'une notable quantité d'eau descend de la montagne

montagne et passant à travers les fentes du roc s'infiltré jusqu'au sous-sol de l'Université. Ceci est une question purement technique, en dehors de notre compétence ; pour déterminer la responsabilité de la Cité dans le cas particulier qui nous occupe, il nous faudrait des données beaucoup plus considérables, mais nous croyons à tout événement que la Cité n'est pas tout à fait indemne d'une certaine responsabilité et afin d'éviter des dommages à l'avenir, il y a lieu de mettre à l'étude les moyens et les mesures nécessaires pour prévenir les recours en dommages de la part des autorités de l'Université Mc Gill et des personnes qui se trouvent dans le voisinage immédiat du réservoir.

Nous avons l'honneur d'être, Messieurs,

Vos humbles et obéissants serviteurs,


Avocats de la Cité.

Sujet



Bureau du Surintendant de l' Aqueduc,
Hôtel-de-Ville,

Montréal, le 25 Novembre, 1908

A M.M. les Avocats de la Cité

Hôtel - de - Ville.

Re. Reclamations de l'Université McGill

Messieurs, -

En réponse à votre lettre du 23 courant, je m'empresse de vous informer que rien ne prouve absolument que l'eau que cette institution trouve à diverses places, dans le sous sol de sa propriété, provient des fuites du réservoir de la Cité.

Néanmoins je ne saurais nier que des fuites assez considérables existent dans les murs et surtout le fond du dit reservoir; mais je crois devoir aussi prétendre qu'une notable quantité d'eau descend de la montagne et, passant à travers les fentes du roc, s'infiltré jusqu'au sous-sol de l'Université.

Cette opinion est basée sur le fait que des infiltrations de même nature sont visibles dans les couches coupées du roc, au dessus même de notre reservoir.

J'ai l'honneur d'être

Messieurs, Votre tout dévoué,

Geo. J. J. J.

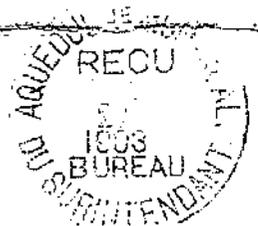
Surintendant de l' Aqueduc.



Hotel de Ville

Montreal, le 23 novembre 1903. 19

M. Georges Janin,
Surintendant de l'aqueduc,
Cité.



re Réclamation de l'Université Mc Gill.

Monsieur:-

Le Secrétaire du Département de l'aqueduc nous a transmis une résolution du Comité de l'Eau demandant notre opinion sur une plainte des autorités de l'Université Mc Gill, au sujet de l'eau du réservoir s'introduisant sur leur propriété. La question qui nous est posée, est de savoir si la Ville est responsable de cet état de choses.

Avant de donner notre opinion, nous désirons avoir un rapport circonstancié sur les faits et notamment sur l'origine et les causes de la plainte.

Vous voudrez bien annexer votre rapport aux pièces que nous vous communiquons sous pli.

Nous avons l'honneur d'être, Monsieur,

Vos humbles et obéissants serviteurs,

Ethier Archambault
Archives de la Ville de Montréal
Avocats de la Cité.

EXTRACT

From the Minutes of a Meeting of the WATER
Held on the Nov. 10th 1903. 189

Submitted and read a letter from McGill University complaining of the condition of the retaining wall supporting Carleton Road. Also asking the Department to remake the surface drain on their property at the foot of the retaining wall. They also ask to be relieved from paying for the water used to operate ejector in the Arts building to drain water out of the furnace ash pit, as they claim the water comes from the leaks in the reservoir.

Resolved To refer the whole to the City Attornet for his opinion.

Certified



Secretary Water Committee.



Montreal, November 9th, 1903.

George Janin, Esq.,
Supt., Water Department,
City.



Dear Sir:-

I desire to draw your attention to the following facts: In the month of July last the University placed in the Arts Building a new furnace. We found, in preparing the place for the furnace, ^{that} we had great difficulty with the percolating of the water from the City Reservoir. Our only method to remedy this was to put in an ejector. If it were not for this ejector the ashpit would be constantly full of water, and we should be unable to use the furnace at all. Our consumption of water has very seriously increased. I have had the whole matter examined into by our plumbers. The amount of water passing through the ejector is forty-five gallons per hour, and we often have to keep it going the whole twenty-four hours. I need scarcely point out that this is entirely owing to the fault of the City in failing to keep the City Reservoir water-tight. I draw your attention to these facts and ask you to place the same before your Committee, in order that we may not be called upon to pay for the amount of water used in working the ejector.

Yours very truly,

Samuel Gray
Acting Secretary, Ville de Montréal



Montreal, October 27th, 1903.

George Janin, Esq., C. E.,
Supt. Water Department,
Montreal.

Dear Sir:-

I shall be obliged if you will inform me how soon you will be able to complete the making of the drain at the back of the Arts Building. I understood you to say that the matter would have to be decided by the Finance Committee, but that a recommendation from you would suffice. I am anxious to get the matter disposed of while the weather is still mild. Kindly give this your attention.

Yours very truly,

Samuel Clery

Acting Secretary.

Mr. Gill College
re. reductions
in rates
on account of work
entering after
Building

50% granted.

4 Nov 1904

Montreal, le 14 Novembre 1904.

A Son Honneur le Maire

MM. les Membres du Conseil de Ville.

Messieurs:-

Conformément à la résolution du Conseil en date du 10 Octobre dernier, j'ai l'honneur de vous soumettre le mémoire ci-joint en réponse aux questions qui me sont posées.

Il convient de faire remarquer que j'emploie les chiffres de 1904; à cette époque de l'année il est assez facile d'évaluer les résultats probables de l'exercice qui se terminera le 31 décembre prochain.

Bien respectueusement soumis



Contrôleur & Auditeur.

Extract from the Minutes of the Council of the City of Montreal,
Monthly Meeting, Monday, 10th October 1904.

At the request of Ald. L. A. Lapointe, it was
Resolved... That the City Comptroller be instructed to reply to the fol-
lowing questions:-

1-What is the cost of the administration of the Water-Works
Department?

2-What is the amount of interest paid on the capital inves-
ted in the Montreal Water-Works?

3-What is the approximate cost of the collection of the
water rates?

4-How much do the damages paid, annually, by the City for
flooding, etc., resulting from the operation of the aqueduct, amount to?

(Certified)

assh *Rue Garneau*
City Clerk.

Réponses aux questions faites par l'Échevin L.A. Lapointe
à l'assemblée du Conseil le 10 Octobre 1904.

| | | |
|-----------------|--|-----------|
| 1 ^{er} | Les dépenses de l'administration du département de l'Aqueduc, en 1904 s'élèveront approximativement à | \$167.000 |
| 2 ^{me} | L'intérêt payé sur le capital investi dans l'Aqueduc de Montréal, au taux moyen, soit 4% sur \$9.229.210 | 369.168 |
| 3 ^{me} | Le coût approximatif de la perception de la taxe de l'eau est, à 5% sur \$890.000, de..... | 44.500 |
| 4 ^{me} | Le montant des dommages payés, résultant de l'exploitation de l'Aqueduc, (moyenne des 4 dernières années | 3.700. |

Belletier
cra

City Comptroller
Replying to certain
questions re cost
of the administration
of the Water Works

Presented to Council 18th Nov. 1914
Presented to Council

Y^{rs} truly
C. G. G.

A.

Montréal, 16 Nov. 1954.
Comité de l'Eau.

Monsieur le Président

J'ai
l'honneur de faire
application pour une
position dans votre
Département. J'ose
espérer que vous
prendrez ma de-
mande en conside-
ration.

Votre dévoué
serviteur.

Louis Gutton.
654 Cadieux
Montréal.

Louis Gauthier
arrivé par la
paquette
21/11/04

Très précieusement
pour la collection

Montréal, 22 novembre, 1904.

A M. Le Président et M.M. les Membres
de la Commission du Revenu.

Messieurs,

Conformément à vos instructions, j'ai l'honneur de
vous transmettre ci-dessous, la liste des crédits nécessaires
pour les améliorations générales de l'aqueduc: -

- | | | |
|-----|--|-----------|
| 1. | Bornes-fontaines nouvelles à poser 200 à 150.00 | 30000.00 |
| 2. | Conduites etc 4" et 6" à remplacer par des condui- tes de plus gros diamètres | 400000.00 |
| 3. | Prolongement des conduites de refoulement de 30" jusqu'au réservoir | 75000.00 |
| 4. | Nouvelle conduite pour la distribution du pompage de la nouvelle pompe de douze millions de gallons | 35000.00 |
| 5. | Conduite principale cde 24" rues Wellington, Young et Ottawa | 45000.00 |
| 6. | Remplacement sous le canal des conduites en acier | 40000.00 |
| 7. | Extension du haut niveau dans les parties nord de la Ville | 70000.00 |
| 8. | Canalisation dans les rues projetées de la Ville (quarantaine, pontonnage et autres) | 150000.00 |
| 9. | Raccordement de la conduite de 24" sous les voies de la Gare Viger | 25000.00 |
| 10. | Fermeture des Valves de gros diamètre au niveau de la rue | 6500.00 |
| 11. | Raccordement des bouts morts | 20000.00 |

a reporter

385500

RESERVOIRS

rapporté ... # 885,500.00

BAS NIVEAU

- 12. Cimentage du fond du réservoir côté nord 30000.00
- 13. Reconstruction des murs du pourtour à la hauteur
- 14. Plâtras pour les rendre étanches à 5.00 15000.00

Repointement des dits murs sur le reste de leur hauteur 5000.00

HAUT NIVEAU

- 15. Cimentage du fond 3000.00
- 16. Reconstruction des murs 2000.00
- 17. Re-pointement idem 500.00

STATION DU BAS NIVEAU

- 18. Améliorations aux bâtiments 5000.00

STATION DU HAUT NIVEAU

- 19. Améliorations idem 1500.00

AQUEDUC

- 20. Estacade flottante 3000.00
- 21. Reconstruction de la jetée 17000.00
- 22. Reconstruction d'un pilier et du tablier du pont des
1ères portes régulatrices 25000.00
- 23. Reconstruction id. du pont des secondes portes
régulatrices 5000.00
- 24. Remplacement du pont de pierre à 2 arches
(Côte St Paul) par un pont à 1 arche 2000.00
- 25. Construction d'un système de filtration 50000.00

Total: ~~50000.00~~
1,500,500.00

Outre ces besoins bien déterminés je crois devoir vous signaler, comme je l'ai déjà fait, l'utilité d'étudier un projet d'élargissement et d'approfondissement du canal de l'aqueduc à l'effet de produire une

une force motrice hydraulique suffisante pour tous les besoins
de la fourniture d'eau à la cité dans le présent, et avec une
marge raisonnable pour l'avenir.

respectueusement soumis.

Geo. Jarvis

Rapport de
M. Lamoignon

Le Amélioration de
l'Aqueduc
24 Septembre 1904

a

A cet endroit se trouvent
des tableaux comparatifs de
soumissions pour l'approvisionnement
de matériaux

VOIR: 089-01-01

VM 47/4,34

grand format # 75

(3 pages)

657

Form 501

WATER WORKS OFFICE

No. *Extract from*
From *Minutes of Council*
12 Dec 1904.

Date _____ 190

Subject *Re. letter from*
R. J. de
fire protection

Sent to *Desoye.*

Date *3 July* 1905

Remarks _____

Sup⁶³⁸rs Report
re. condition of
bailers on W. S.

9 Aug 1904

work record

Published in the
Public Accounts
Municipal Report.

H. Montagu Allan, President.

D. Lorne Mc Gibbon, General Manager.

E. Alex. Wright, Secy & Treas.

ADDRESS ALL COMMUNICATIONS TO THE COMPANY

The Canadian Rubber Co. of Montreal,
Manufacturers of
all kinds of Rubber Goods.

Cable Address "Rubber Co."
Code used: A. B. C. 4th Edition.

Head Office & Factories, Cor. Notre-Dame St. & Papineau Ave. Montreal.
Branches at Halifax, N.S. Toronto, Ont. Winnipeg, Man. Vancouver, B.C.

OFFICE OF
GENERAL SUPERINTENDENT.

Montreal, P.Q. August, 15th, 1904.
Canada.

The Chairman & Members of the Water Committee,
City.

Gentlemen:-

We beg to enclose herewith a list of Boilers, which we have had in use for some little time and which we are now willing to dispose off. Mr. McEvoy, our Engineer in charge of Construction, will be pleased to supply you with any information regarding the same, also the prices, etc.

If you can utilize these in any way, we would like you to give this matter your consideration.

We beg to remain,

Yours truly,

THE CANADIAN RUBBER CO. OF MONTREAL.

Per... *[Signature]*

The following is the type and dimensions of the old
Boilers now in use:-

- 4 Lancashire Boilers 29'3" long, 7' dia. thickness of plate $\frac{5}{8}$ "
2 Furnaces 6'6" x 33" dia. Steam outlet 6".
One 4" Leaver safety valve,
One 3" " " "
One 3" Pop Valve.
Three Safety valves on each boiler
 $2\frac{1}{2}$ " Fuel water connections, 2" Blow off,
Working pressure 100 lbs, Cold water test 150 lbs. Feed check & Blow off valve.
- 3 Cornish Boilers 25'6" long 6' dia. thickness of plate $\frac{3}{4}$ ". Two furnaces 6' x 29" dia., Steam outlet 6". Three Safety valves to each boiler. One 4" Leaver Valve, One three inch Leaver Valve, $2\frac{1}{2}$ " Pop Valve, 2" fuel water connections, 2" Blow off, Working pressure 80 lbs. Cold water test 120 lbs.
- 3 Cornish Boilers 20' long 5' dia. thickness of Plate $\frac{1}{2}$ ", Furnace 6'3" x 34" Steam Outlet 5", 3 Safety valves to each boiler, One 4" Leaver valve, One 3" Leaver Valve, 1, $2\frac{1}{2}$ " Pop Valve, 2" fuel water connections, 2" Blow off. Working Pressure 80 lbs, Cold water test 120 lbs.
- 1 Mumford Improved Type Boiler Shell, 54" dia, 16' long, $11/32$ thick, Tube sheets $7/16$ " furnace plain type 46" dia 96" long $\frac{1}{2}$ " thick, 119 tubes $2\frac{1}{2}$ " dia 8feet long, Steam Drum 34" dia, 18' long $\frac{1}{4}$ " thick grates 69" long 46" wide One 4" Safety Valve, One 4" Pop Valve, Steam outlet 4" fuel pipe $1\frac{1}{2}$ " Blow off. $1\frac{1}{2}$ " Working Pressure 100 lbs, cold water Test 150 lbs.

640
Dawson
Rubber Co.
Office of Rubber

15 Aug 1904

to the

RECEIVED
BY THE
CITY OF MONTREAL

Low Level Pumping Station,

Montreal August 14th. 1904.

To the Chairman and Members of the Water Committee,
of the City of Montreal,

Gentlemen,

I wish to bring under your notice, that I am being unfairly represented
by those who say, that I sent a public report exaggerating the condition of the
boilers under my charge.

What I did was, to solicit Mr. E. O. Champagne, in a private letter, to
come to the Works that I wished to consult with him, and get the benefit of his
large experience, in what I thought was a serious situation, and in doing so,
brought the reason why I wanted him, fully under his notice.

Had he extended to me that courtesy which, I think was not too much
to ask from the ^{boiler} ~~boiler~~ inspector, under the circumstances, there would have been
no trouble, as I would have made suggestions, that I think would have settled
the question of new boilers in a manner, that would have obviated all the troubles
which has arisen, I would have suggested, ~~that~~ should he agree with me, that new
boilers are urgently needed, that he and Supt. Janin should jointly report to
the Finance Committee and Council, the pressing necessity there is for new boil-
ers, and I feel satisfied they would not hesitate to furnish them.

I felt sure that I was within my right, in writing thus to the boiler inspector, a City Official, asking him to consult with me concerning the boilers, the property of the City.

Trusting, Gentlemen, that you will see the justice of my representations and exonerate me from all blame

I remain

Your humble servant

J. Kearney

Eng.

Gravel & Quinnet
Under St. Louis
Sq. Paris
25/8/04

Fred^K McKeown

294 Marie-Anne Street.

MONTREAL.

August 23rd. 1904.

To the Chairman & Members of the Water-Works Committee,
Corporation of Montreal.

Montreal.

Gentlemen:-

I hereby tender for the concrete work required to be done in
the Basin of St-LOUIS SQUARE and according to the plans & specifications
shown in your Office for the sum of THREE THOUSANDS, FOUR HUNDREDS & NINETY
DOLLARS. (\$3,490.00)

Yours truly,

J. M. McKeown
Contractor

J. W. Keaton
1904

Yours truly,

DOLLARS (\$3,480.00)

shown in your office for the sum of THREE THOUSANDS, FOUR HUNDREDS & NINETY

the Parish of St-Louis Square and according to the plans & specifications

I hereby tender for the concrete work required to be done in

Montréal.

Corporation of Montréal.

Chairman & Members of the Water-Works Committee.

Witness my hand this 25th day of August, 1904.

MONTRÉAL.

384 Marie-Victe Street.

J. W. Keaton

J. W. Keaton
Tender for the
St. Louis
Sq. Basin
25 Aug. 1904

+ + LAURIN & LEITCH + +

ENGINEERS & CONTRACTORS

OFFICE: No. 5 BEAVER HALL SQUARE

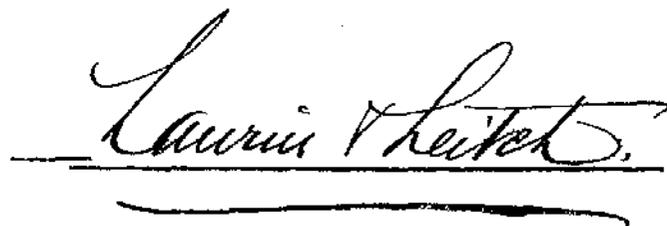
Montreal, 23rd August 1904. 190

To the Water Committee
of the City of Montreal -

Gentlemen:

We hereby offer to concrete the bottom of the bassin
in St. LOUIS PARK according to the plans and specifications of your
perintendent Mr. GEORGES JANIN for the lump sum of four thousand three
hundred and seventy five dollars and fifty cents. (\$4,375.50.)

Yours truly,



Laurin & Leitch

Laurin Leitch
Deputy Sheriff
Sq. Basin
26 Aug 1904.

FORM OF TENDER

TENDER FOR WORK OF LEVELLING OFF AND CEMENTING BOTTOM OF McTAVISH STREET RESERVOIR. - South side -

To the WATER COMMITTEE of the CITY of MONTREAL.

Gentlemen,

We the undersigned, *Laurin Leites* residing in *The City of Montreal*

having carefully read and considered the Plans and specifications, Terms and conditions for the Levelling off and cementing bottom of McTavish street Reservoir (south side) hereby agree to execute the said work in accordance with said plans and specifications, and generally to the satisfaction of the Superintendent of Water Works, for the following prices. Viz:

10. For the whole work comprised in the 1st & 2nd. parts of this specification .(Levelling off, Concrete and cement mortar Coating) For the sum of *\$ 23097.⁷⁵/₁₀₀*

20. For the whole work comprised in the 1st. part of this specification. (Levelling off, and concrete filling) For the sum of *\$ 15574.⁵⁰/₁₀₀*

30. For the whole work comprised in the 2nd. part of this specification. (Cement mortar coating) For the sum of *\$ 4523.²⁵/₁₀₀*

40. For the whole work comprised in the 1st. & 3rd. parts of this specification. (Levelling off, concrete & Asphalt mastic Coating) For the sum of

50. For the whole work comprised in the 3rd. part of this specification. (Asphalt mastic Coating.) For the sum of _____

Laurin Leites
N° 5 Beaver Hall Square
City.

Testing Number No 3414.

Result of Test by Henry Faija & Co. Labelled: Portland Cement »

Vise

« Made in Belgium ».

On a sample of Cement received on August 18th 1903.

Fineness } Residue when sifted through a No 100 X 100 sieve 2.0 per cent.
 dito 76 X 76 " 0.2 do
 dito 50 X 50 " trace do

TENSILE STRENGTH PER SQUARE INCH

Water used for gauging 17.50 per cent. Briquettes placed in water 24 hours after gauging.
 Strain applied at the rate of 100 lbs in 15 seconds in a Faija Testing Machine.

Tree Days Test

Seven Days Test

Twenty Eight Days Test

| | | | | |
|------------------------|-------|----|-----|-----|
| No 1 | broke | at | 540 | lbs |
| " 2 | " | " | 610 | " |
| " 3 | " | " | 540 | " |
| " 4 | " | " | 560 | " |
| " 5 | " | " | 545 | " |
| Average | | " | 559 | " |
| 39.29 kil. per sq. cm. | | | | |

| | | | | |
|-----------------------|-------|----|-----|-----|
| No 6 | broke | at | 830 | lbs |
| " 7 | " | " | 815 | " |
| " 8 | " | " | 780 | " |
| " 9 | " | " | 860 | " |
| " 10 | " | " | 810 | " |
| Average | | " | 809 | " |
| 56.8 kil. per sq. cm. | | | | |

| | | | | |
|-------------------------|-------|----|-----|-----|
| No 11 | broke | at | 790 | lbs |
| " 12 | " | " | 855 | " |
| " 13 | " | " | 710 | " |
| " 14 | " | " | 835 | " |
| " 15 | " | " | 945 | " |
| Average | | " | 831 | " |
| 58.357 kil. per sq. cm. | | | | |

Sand Test

Three parts of standard sand to one of cement by weight gauged with 8.33 per cent of water.
 The briquettes were placed in water twenty four hours from gauging, where they remained until due for testing when they were broken in a Faija machine with the following results.

Seven Days Test

Twenty Eight Days Test

| | | | | |
|------------------------|-------|----|-----|-----|
| No 1 | broke | at | 310 | lbs |
| " 2 | " | " | 260 | " |
| " 3 | " | " | 310 | " |
| " 4 | " | " | 290 | " |
| " 5 | " | " | 320 | " |
| Average | | " | 298 | " |
| 20.95 kil. per sq. cm. | | | | |

| | | | | |
|-------------------------|-------|----|-----|-----|
| No 6 | broke | at | 375 | lbs |
| " 7 | " | " | 375 | " |
| " 8 | " | " | 355 | " |
| " 9 | " | " | 350 | " |
| " 10 | " | " | 350 | " |
| Average | | " | 367 | " |
| 26.015 kil. per sq. cm. | | | | |

The sample has an initial set of One and a half hours and is set hard in Eight Hours.

HENRY FAIJA & Co.

London, 1st October 1903.

Cement's Analysis.

Specific gravity } 3.125
 or density }

| | | |
|--------------|-----|-------|
| Loss by fire | o/o | 1.36 |
| Silicium | " | 24.00 |
| Alumine | " | 6.45 |
| Iron | " | 2.51 |
| Clalk | " | 63.85 |

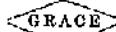
} 8.96

| | | |
|----------------|-----|------------|
| Magnesia | o/o | 0.58 |
| Sulphuric | " | 1.20 |
| Loss of weight | " | 0.10 |
| | | o/o 100.00 |

To Messrs

The Portland Cementfabrik "Saturn". (Hamburg.) Testing Number No. E. 04.

Result of Tests by Henry Faija & Co. (D. B. BUTLER, Assoc. M. Inst. C. E.; F. C. S.)
of a sample of Cement in Cask received on the 31st May 1900, bearing the seals of Dr. CARL GUSTAV FERDINAND VON SYDOW, Notary of Hamburg. His certificate, dated the 16th May 1900, states that the cask was selected and sealed by him from a shipment of 2000 casks on board the S/V "Lucipara" bound from Hamburg to Portland, Oregon, and that the said casks bore on the one end the paper label "Portland Cementfabrik Saturn, Hamburg" together with the trade-mark of the firm, and on the other end the mark



GERMANY

also that the staves were marked "Saturn" and "Made in Germany".

Fineness { Residue when sifted through a No. 120 x 120 sieve 5.0 per cent (= 14400 meshes per square inch)
" " " " " " " 80 x 80 " 0.6 " " (= 6400 " " " ")

Tensile strength per square inch.

Water used for gauging 16.12 per cent. Briquettes placed in water, 24 hours after gauging.
Strain applied at the rate of 100 lbs in 15 seconds in a Faija Testing Machine.

| Three Days Test: | Seven Days Test: | Twenty Eight Days Test: |
|---------------------------|---------------------------|---------------------------|
| No. 1 broke at 805 lbs | No. 6 broke at 910 lbs | No. 11 broke at 910 lbs |
| " 2 " " 710 " | " 7 " " 860 " | " 12 " " 915 " |
| " 3 " " 830 " | " 8 " " 915 " | " 13 " " 955 " |
| " 4 " " 760 " | " 9 " " 920 " | " 14 " " 945 " |
| " 5 " " 815 " | " 10 " " 860 " | " 15 " " 955 " |
| Average 784 lbs | Average 893 lbs | Average 942 lbs |

Tensile strength per square inch.**Sand Test.**

Three parts of standard sand to one of cement by weight, gauged with 8.33 per cent of water.
The briquettes were placed in water in twenty four hours from gauging, where they remained until due for testing, when they were broken in a Faija machine with the following results:

| Seven Days Test: | Twenty Eight Days Test: |
|---------------------------|---------------------------|
| No. 1 broke at 320 lbs | No. 6 broke at 450 lbs |
| " 2 " " 335 " | " 7 " " 370 " |
| " 3 " " 335 " | " 8 " " 445 " |
| " 4 " " 325 " | " 9 " " 380 " |
| " 5 " " 330 " | " 10 " " 395 " |
| Average 329 lbs | Average 404 lbs |

Pats of neat cement, treated as above, shew no cracks or signs of expansion.

Specific Gravity: 3.15.

Chemical Test: A small quantity of the cement exposed to a slow stream of dry carbonic acid gas until constant in weight, absorbed the gas in the proportion of 2.7 milligrammes to 3 grammes of cement.
The sample has an initial set of fifteen minutes and is set hard in six and a half hours.

A pat treated in the Faija apparatus for soundness, gives no indications of either expansion or contraction.

London, 29th June 1900.

(signed) Henry Faija & Co.

SPECIFICATIONS FOR MIXING, COOKING AND LAYING
SICILIAN ROCK ASPHALT MASTIC.

Mixture

8 blocks of mastic = 800 lbs.
Grit = 400 "
Paving Cement = 100 "

Cooking.

Paving Cement broken into small pieces and placed at the bottom and sides of kettle; then three (3) blocks of mastic each broken into four or five pieces are added, whereupon the fire is started. When thoroughly melted and stirred, three (3) more blocks are added; when they are melted and stirred, the last two (2) blocks are put in. When the whole mass is melted, one-half of the grit is put into the kettle, which will entirely cover the upper surfaces to a depth of several inches. After this has become hot and consequently free from moisture it is thoroughly stirred up with the asphalt, whereupon the rest of the grit is added and stirred in the same manner.

Laying

The hot material is filled into buckets and then carried to the spreader who spreads and firmly compresses the asphalt to the required thickness.

THE SICILY ASPHALT COMPANY

J. J. Johnson
Secretary

-----oOo-----

THE TECHNICAL POLICE

THE TECHNICAL POLICE AND CIVIL ENGINEERS THE SERVICE

THE POLICE DEPARTMENT IN LITIGATION AND THE COURTS

Sicity asphalt Pav. to
Under for Cement
Reservoir.

25 Aug 90

SPECIALTY ROCK GRANITE
SPECIALTY ROCK GRANITE
SPECIALTY ROCK GRANITE

6 pieces of granite 300 lbs

FORM OF TENDER

TENDER FOR WORK OF LEVELLING OFF AND CEMENTING BOTTOM
OF McTAVISH STREET RESERVOIR. - South side -

To the WATER COMMITTEE of the CITY OF MONTREAL.

Gentlemen.-

We the undersigned

and Montreal Canada residing in *Land Title Building*
Philadelphia PA
having carefully read and considered the Plans and specifications, Terms

and conditions for the Levelling off and cementing bottom of McTavish
street Reservoir (south side) hereby agree to execute the said works in
accordance with said plans and specifications, and generally to the satisfac-
tion of the Superintendent of Water Works, for the following prices. Viz:

- ~~10. For the whole work comprised in the 1st & 2nd. parts
of this specification. (Levelling off, Concrete and
cement mortar Coating) For the sum of~~
- ~~20. For the whole work comprised in the 1st. part of
this specification. (Levelling off, and concrete filling)
For the sum of~~
- ~~30. For the whole work comprised in the 2nd. part of
this specification. (Cement mortar coating) For the sum of~~
- ~~40. For the whole work comprised in the 1st. & 3rd. parts
of this specification. (Levelling off, concrete & Asphalt
mastic Coating) For the sum of~~
50. For the whole work comprised in the 3rd. part of
this specification. (Asphalt mastic Coating) For the sum of *\$26,450⁰⁰*

*Twenty six Thousand four hundred & fifty
Dollars*

Genasco Roofing Co

*by John Dillon
Ag't*

Montreal, P.Q., August 23rd, 1903.

To the Chairman and Members,

Of the Water Committee,

City Hall, Montreal, P.Q.

Gentlemen;--

We beg to enclose herewith specification and tenders for
1 inch Asphalt Mastic Coating on bottom McTavish St. Reservoir, South Side.

Our company has had considerable experience, in fact more
experience than any concern we know of, in the lining of reservoirs,
and we think we are better prepared to do this work, as we have learn-
ed from past experience exactly how work of this kind should be done,
and have given the matter a great deal of thought.

The most important reservoirs which we have lined during
recent years are the following: The Coatesville Reservoir, which we
did about eight or nine years ago; the Queen Lane Reservoir, which was
done about the same time as the one at Coatesville; the Belmont Filter
sedimentation basins, done last year which contain 72,000,000 gallons;
also the reservoir at Dillsburg, Pa., near Harrisburg, which we did
last year.

We are at present lining two supply basins of the Oak Lane
Reservoir, containing about 70,000,000 gallons.

Any further information you may desire regarding the lining
of reservoirs, we will be very glad to furnish you, and will also sub-
mit samples of the crude and powdered rock and of our different mastics.

Regarding the reservoir at Dillsburg, referred to above, we
received a letter from the Dillsburg Water Company, last week, unsol-
icited, from which we quote as follows:

DEPARTEMENT DE L'AQUEDUC

POSTE DES POMPES DE LA HAUTE PRESSION RUE McTAVISH.

APPAREIL DE CHAUFFAGE A BASSE PRESSION AVEC SYSTEME DE RETOUR.

DEVIS DESCRIPTIF

Des soumissions cachetées seront reçues au bureau du greffier de la Cité, Hôtel de ville, Montréal, jusqu'à midi, le 10 Octobre 1903, pour la fourniture et la pose au poste des pompes du haut niveau de l'aqueduc de Montréal, d'un appareil de chauffage à vapeur avec système de retour.

DONNEES L'Entrepreneur pour le chauffage doit choisir lui-même l'es-
et pace nécessaire pour établir son atelier, les matériaux, etc.,
CONDITIONS il sera tenu responsable pour tout dommage qui pourrait ar-
GENERALES. river à la bâtisse durant l'exécution et jusqu'à la fin du
travail de l'appareil de chauffage.

Il ne sera permis à l'Entrepreneur ou à ses ouvriers de faire des feux dans les fournaies ou pot à feu qu'aux endroits indiqués par le surintendant de l'aqueduc; l'entrepreneur ou ses ouvriers devront s'assurer que les feux sont complètement éteint avant de laisser les lieux de travail.

Indépendamment des renseignements fournis par le plan ci-annexé, l'entrepreneur devra prendre ses mesures dans la bâtisse, mettre en oeuvre le travail et être responsable de son exactitude. il fournira tout le travail, le transport des matériaux, et de l'outillage, à l'exception des chaudières déjà en position, il surveillera personnellement son travail, et il sera responsable pour tout dommage fait aux planchers, mur ou toute autre partie de la bâtisse, il devra exécuter le travail selon les règlements de la corporation, donner les avis nécessaires et payer tous les honoraires.

Tous les ouvrages ou les matériaux clairement nécessaires pour bien compléter l'ouvrage, bien qu'ils ne soient pas spécifiés ici, doivent être faits, ou fournis, par l'entrepreneur sans charge additionnelle, il est bien compris que le prix stipulé dans la soumission sera pour un travail parfait et complet.

Toute indication sur les plans dont il ne serait pas fait mention dans le devis ou tout ouvrage mentionné dans le devis et non montré sur les plans, ainsi que tout ouvrage non mentionné par omission doivent être inclus dans la soumission.

Durant la construction de l'ouvrage et jusqu'à son achèvement, épreuve finale et acceptation de l'appareil par le département de l'aqueduc, l'entrepreneur devra, à ses frais, fournir les hommes compétants pour s'occuper de l'appareil. La chaleur sera réglée selon les besoins du département, le combustible sera fourni par le dept.

TRAVAIL ET L'entrepreneur devra faire tous les percements dans les murs,
MATERIAUX. planchers, corniches, colombages, etc., là où il sera néces-
saire, et où il lui sera indiqué par le Surintendant de l'aqueduc,
et remettre, ^{en} en bon ordre, à son état primitif, après que le tra-
vail sera fini.

TUYAUTERIE. Un tuyau conduira la vapeur de chaque chaudière jusqu'à la

soupape d'arrêt et de là, tel que montré, se raccordera à l'embranchement de la soupape régulatrice de pression et sera muni d'un "by-pass" approprié, il sera posé un tuyau spécial pour la force motrice de la pompe.

Le tuyau de vapeur et le tuyau de retour se prolongeront et se diviseront tel que montré et selon les grandeurs indiquées sur les plans, Certaines exigences architecturales nécessiteront peut-être une modification du plan, et dans ce cas ces modifications seront permises, sans cependant, dans aucun cas, diminuer la surface chauffante.

La conduite principale à vapeur sera soutenue par des bons crochets en métal, après avoir pris les mesures de précaution nécessaires contre la poussée de l'expansion ou la contraction. La tuyauterie principale sera munie de tés d'échappement convenables pour les raccords d'embranchement "risers and coils and radiators". On ne devra pas se servir de tés de réduction mais bien d'accouplements excentriques.

La pente de tous les tuyaux à vapeur principaux se fera vers des endroits qui seront indiqués sur les plans, afin d'écouler l'eau de condensation, la pente de toutes les connections branchées depuis les "risers" au tuyau principal sera vers le tuyau principal excepté aux endroits d'écoulement (drips) montrés sur les plans.

Le retour principal sera posé en dessous du plancher et sera supporté par des crochets convenables.

La grandeur des différents raccords qui approvisionnent les circulations et radiateurs est indiquée sur les plans.

Les raccords seront faits de tuyaux choisis droits, exposés à la vue dans les chambres et bien exécutés. Les raccords seront munis de tés de sortie nécessaires pour les circulations de raccordement, etc., et le centre de ces tés sera placé de manière que l'embranchement du maître-tuyau aux circulations, aura sa pente vers les "risers" pour l'écoulement des eaux, lorsque les soupapes à vapeur des circulations sera fermée, il est préférable que l'embranchement à vapeur soit le plus long, car le plus petit tuyau de retour s'adaptera facilement de la tuyauterie verticale.

La tuyauterie sera en fer malléable avec fillets (full cut standard); et les ajustages pour les raccords seront en fonte pour usage à vapeur.

Toutes les circulations seront faites uniformément de tuyaux en fer malléable d'un pouce, celles qui se trouveront sous les chassiss seront de hauteur convenable pour les finir en dessous de ces chassiss.

Le tarandage du tuyau d'admission de vapeur pour les circulations sera fait à droite pour soupapes Union, des dimensions indiquées. Les robinets d'issue pour soupapes de détente s'ouvriront à droite pour les raccords Union.

SURFACES CHAUFFANTES. Les surfaces chauffantes seront établies d'après les plans, cependant le Surintendant de l'aqueduc aura la faculté d'augmenter ou de diminuer la superficie de chauffage dans aucuns des circulations calorifères en autant que la quantité totale montrée ne sera pas dépassée.

PEINTURE. Les circulations, radiateurs, conduites principales, accessoires et tous les tuyaux reliés à l'appareil seront peints avec le vernis asphaltum de la meilleure qualité.

RADIATEURS. Les radiateurs seront en fonte de manufacture canadienne, de la meilleure qualité, approuvés par le Surintendant de l'aqueduc. Les chiffres qui accompagnent la circulation ou les radiateurs, indiquent la longueur de pieds d'un pouce de diam. sans comprendre les raccords, coudes de retour, etc., le déficit ou surplus de ces tuyaux ne devra pas être au dessus de 5 pds. de long de tuyau d'un pouce de la quantité totale demandée. L'entrepreneur finira et installera toutes les soupapes nécessaires pour le contrôle ou la manipulation de l'appareil. Les soupapes

pour la circulation, les soupapes d'arrêt, les soupapes de détente seront semblables à celles de la manufacture Jenkins Bros., Genuine ou Fairbanks.

Les soupapes en contact avec la haute pression seront d'un modèle plus pesant que les autres.

POMPE ALIMENTAIRE ET RÉSERVOIR. L'entrepreneur fournira une pompe alimentaire automatique "Burnham" et réservoir. Les dimensions de la pompe seront de 4" x 2½" x 5" et le réservoir 15" x 26", il fournira aussi toutes les soupapes pour la dite pompe, les tuyaux alimentaires, les raccords d'épuisement et de vapeur et tout robinet à air à vapeur automatique des circulations et radiateurs.

L'entrepreneur fournira les matériaux, les fondations de pompes là où le réservoir et la pompe seront placés, les garnitures de soupapes, la main d'oeuvre, et construira l'appareil selon les détails supplémentaires qui lui seront fournis sur demande.

L'entrepreneur posera de manière convenable, sur le tuyau de retour un tés d'émission de 2" et un "by-pass" avec valve ou contrôle.

L'entrepreneur fournira tous les raccords de tuyauterie, les pompes des chaudières complètes, munies de soupapes, raccords de tuyaux à eau, à vapeur ou à évacuation.

SOUPAPE DE CONTRE-PRESSION. L'entrepreneur fournira une soupape de contre-pression de la grandeur voulue, munie d'une soupape de style diaphonique de 2" x 3½" d'une fabrication supérieure et d'un ajustage si particulier qu'elle devra en tout temps réduire la pression dans le calorifère à pas moins de 10 livres. Cette soupape aura une collerette (outlet), une soupape de contrôle de chaque côté et devra être complète, munie d'un levier et de poids régulateurs. Le diaphragme sera muni d'une soupape, et sera raccordé à un tuyau de basse pression à pas moins de 10 pieds de distance de la soupape.

ÉPREUVE. Lorsque le travail et tous les raccords seront terminés, l'entrepreneur soumettra tout le système de tuyautage ainsi que les radiateurs à une épreuve à la vapeur de 20 lbs. de pression pendant l'examen sérieux de l'appareil pour découvrir la présence de fissures dans les tuyaux, fuites, ajustages mal faits ou défauts quelconques dans la construction ou dus à un travail défectueux.

Les défauts devront être corrigés immédiatement et l'épreuve sera renouvelée et continuée jusqu'à ce que tout le travail soit trouvé sans défaut aucun. La pression sera alors abaissée de manière à produire une circulation complète, en laissant le système fonctionner, avec échappement de condensation par le "by pass pipe" jusqu'à l'égout, aussi longtemps qu'il sera trouvé nécessaire pour éliminer les bûchilles de plomb, huile ou autres sédiments renfermés dans la tuyauterie, les circulations et radiateurs.

Après avoir fini le nettoyage, le by-pass sera fermé et on laissera passer la condensation au récepteur pour revenir à la chaudière de la manière régulière, par la pompe alimentaire.

PLANS. On pourra voir les plans des bâtisses etc., montrant la disposition de l'appareil de chauffage, au bureau du Surintendant de l'aqueduc. Ces plans n'indiquent que les dispositions générales et ne sont qu'un guide. Il est clairement entendu que les soumissionnaires doivent visiter les lieux et prendre leurs propres mesures des dimensions exactes et de la vraie disposition de tuyauterie requise.

DATE DE LA CONSTRUCTION: L'appareil tel que décrit ci-dessus doit être installé complet, et en état de fonctionner dans l'espace de 3 semaines après la signature du contrat, sous peine d'une amende de 5 piastres pour chaque vingt-quatre (24) heures de retard après ce temps.

PRIX DE LA SOUMISSION. Le prix de la soumission sera un prix en bloc pour l'appareil à chauffage, complet, sans la chaudière.

CHEQUE CERTIFIÉ. Chaque soumission devra être accompagnée d'un chèque certifié

sur une banque incorporée, de cent piastres (\$100.00) payable à l'ordre du trésorier de la cité de Montreal. Ce cheque sera ~~sera~~ forfait si le soumissionnaire dont la soumission aura été acceptée, refuse de signer le contrat après que la com. de l'Aq. l'aura approuvé et lorsque requis de le faire, ou s'il ne remplit pas intégralement les termes du dit contrat.

L'entrepreneur devra payer le prix du contrat notarié et une copie pour la cité de Montreal.

PAIEMENT. Lorsque l'ouvrage sera terminé et après que l'épreuve de l'appareil aura été faite, le tout à l'entière satisfaction du Surintendant de l'Aqueduc, un paiement de quatre vingt dix par cent (90%) du prix du contrat sera fait à l'entrepreneur et son cheque de cent piastres (\$100.00) lui sera remis.

Les autres dix pour cent (10%) du prix du contrat seront retenus par la cité durant 3 mois comme une garantie contre un travail défectueux ou de matériaux inférieurs qui pourront se déclarer dans l'appareil.

AUCUN PRIX EXTRA. L'entrepreneur n'aura aucun droit de réclamer une indemnité quelconque ou prix supplémentaire pour aucun ouvrage à moins qu'il ne montre pour cela un ordre écrit, donné par la Com. de l'Aq. et endossé par le Sur. de l'Aq.

MONTREAL WATER WORKS

HIGH LEVEL PUMPING STATION McTAVISH STREET

SPECIFICATION FOR STEAM HEATING APPARATUS, LOW PRESSURE BY
RETURN SYSTEM. -----

PROPOSALS.-

Sealed proposals will be received at the office of the
City Clerk, City Hall, Montreal, until 12 o'clock noon on
10th the ~~October~~ ^{November} 1903, for the furnishing and putting into
place at the High Level pumping station of the Montreal Water
Works, a steam heating apparatus by return system.

GENERAL
DATA &

CONDITIONS

The Contractor for heating must make his own arrangements
for space required for work shops, storage of material etc.
and will be held responsible for any damage that may occur to
portions of the building during the progress and up to the
entire completion of the works appertaining to the heating
apparatus. The contractor and his men are prohibited from
lighting fires for furnaces or fire pots except at the places
designated by the Superintendent of the Water Works, and parti-
cular care must be taken in all cases to have such fires proper-
ly extinguished before the men leave the premises.

The Contractor is to take measurement at the building,
set out all work and be responsible for the accuracy of the
same; he is to provide all labor, transportation, materials and
plant, excepting the boilers which are in place, to give person-
al and constant attention to the work, and be responsible for
any damage done to floors, walls or any portion of the buildings,
he is to execute the work in accordance with the by-law and
other regulations of the Civic authorities as well as give all
requisite notice and pay all fees.

Any work or material obviously necessary for the proper
completion of the work, although not specified herein, is to be
done or supplied by the Contractor without additional charge, it
being understood that the amount of the tender covers everything
necessary for a complete and first class job.

Anything shown on the drawing and not mentioned in the specification, or mentioned in specification and not shown in drawing, or forgotten, must be included when tendering.

During construction and until completion, final test and acceptance of the apparatus by the Superintendent of the Montreal Water Works, the Contractor, at his own cost, must provide competent men to attend apparatus. Heat to be regulated to suit the requirements of the department, the fuel to be supplied by the department.

WORK
&
MATERIAL.

Contractor to do all the required cutting through walls, floors, cornices, partitions, etc., wherever required, and afterwards made good all stonework brickwork ironwork carpentry, joinery, etc.

The Contractor is to make out, subject to the approval of the Superintendent of Water Works, the area of any opening for the proper fitting up of the piping. The Contractor must understand fully that the direction and position of the cutting or holes must be approved by the Superintendent of Water Works.

PIPING.

A pipe will lead from each boiler, to stop valve, and thence as shown to connect with branch to the pressure regulating valve with a suitable valve by-pass, and power line for pump, etc.,

The steam supply and return mains will extend and ramify generally as shown, and in sizes noted on plans. Certain structural requirements may demand a modification of the plans and such modification is permissible, but in no case must the area of piping be reduced.

The main steam pipe must be supported on substantial metal hangers, with all provision made for the thrust of expansion and contraction, the main piping must be provided with suitable outlet T's for branch connections to risers and coils and radiators. No reducing T's allowed, excentric reducing couplings will take place of reducing T's.

The grade of all main steam piping will be towards such points designated on plans for the relief of condensation, the grade of all branch connections from risers to main will be to main, except where noted for drips, shown on plan.

Muri Larin,

951 Naudie St,

Send him notice when
statements take place

Alid. Levy

N. Harris.
typewrites.

Montreal Oct. 27/02

To the Chairman and
Members of the
Water Committee

Gentlemen:-

I beg to apply for the
position rendered vacant by the
promotion of Mr. O'Neill.

Enclosed find recommendations.

Yours truly

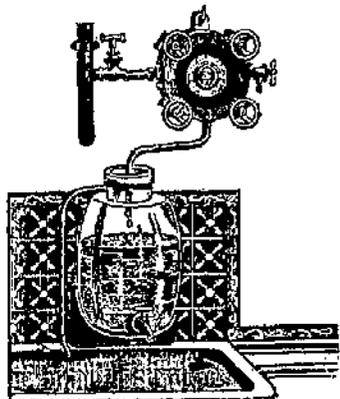
R. S. Wilson

R. S. Wilson
applications
for O'Neil's
place
Oct 04.

The New Pasteurizing Filter Co'y, (Limited,)

Head Office: 71a St. James Street,

MONTREAL, October 4th., 1904.



ABSOLUTE
STERILIZATION
and
CLARIFICATION

To the

Chairman and Members of the
Water Committee of Montreal,
C i t y.

Gentlemen, -

We respectfully ask your permission to install one of our filters in your department, at the City Hall, to demonstrate its absolute sterilizing power.

We shall be pleased to install said filter without any expense to you, and also to remove same after the tests and put the water pipe into its original condition.

Hoping to receive a favourable reply,

We remain

Yours respectfully,

THE NEW PASTEURIZING FILTER COMPANY, (Limited)

J. Raymond Beaudry
Manager.

New Pasteurizing
Filter Co.
has permission to
place filter in Supt
Office.
W. H. Oct 1904.
Salle.

JOSEPH LEVY, B.C.L.,

Notary Public.

35 ST. VINCENT STREET.

Montreal, 29th July 1904

To Frank Dowd Esq.,
 Water Department,
 City Hall.

My Dear Sir, I left on Wednesday in your absence, Raoul Bolte's application for a position, in the Department, besides J. Arthur Rasbeur's name whose address is 231 St. Charles Bonhomme Street, which I gave you to place on the list of applicants who are to undergo examination at the proper time to fill the vacant position, please add:-
 E. F. Beaudry (proposed by Ald. Pagnon) Avila Lefebvre,
 Joseph Roy, 178 Cleary Street

Joseph Levy
 Member of Water Committee

J. Arthur Barbeau.

St Charles Barrance St
recommended by
Ald. Levy to take O'Nills
place. See and certify
him when examinations
take place.

J. A. Barbeau.
paritiam as
superminles.

EXTRACT

from the minutes of a meeting of the Road Committee.

Held on 17th. June 1904. 190

On motion of Ald. R. Turner, it was

RESOLVED

That the Water Committee be requested to repair the bridge known as "Buffalo Bridge" situated between the City of Montreal and the Municipality of Verdun.

(Certified)

J. H. Bellon
Secretary.

Water Committee.



"Buffalo bridge" is the property of or is under control of the Canadian Pacific Railway Co, and they should be called on to maintain it.

639
Kard Lammille

Re Buffalo

Bridge

9 Aug 1904

Montreal Aug. 9th 1904.

To the Chairman & Members
of the Water Committee.

Gentlemen,-

As I am informed that the City Council has sent back to your Committee the report recommending the purchase of new boilers for the Low Level Pumping Station, I believe it my duty in order to not cause further delay, which may become disastrous to the City, to draw your attention at to-days meeting, to the true situation at that station, as, at the risk even of public alarm, I do no longer dare assume all the responsibility therefor.

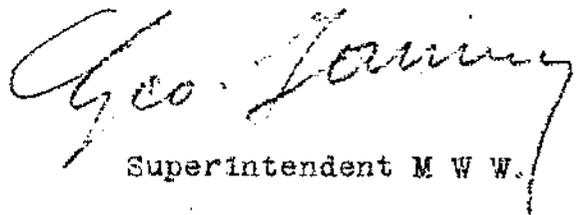
Summing up the various reports that I have addressed to you on this subject of boilers, notably those of the 9th Sept 1902 and the 23rd Jan'y 1904, and the reports that I have received from Mr. Kearney the chief of the pumping station, I would remind you that the boilers we are about to purchase are destined to replace the old ones condemned by Mr. Champagne the Inspector of boilers, and that for want of these boilers we are obliged to force the remaining ones to do the work, and that the lowering of the water in the Aqueduct which increases as the season advances, will deprive us of a portion of the power of our wheels, and therefore give more to do to the boilers in use, instead of allowing them time to be shut down for necessary cleaning and repairs.

I would also remind you that the recent accident to No. 1 pump forces us to put No. 3 into continual use, which takes more power and therefore increases the work on the boilers and brings us nearer to the day when we will have to close one of our sets of boilers, to clean them. The state of things has appeared so serious that the chief of the pumping station Mr. Kearney after having verbally notified me of his unwillingness to further carry the responsibility of such a situation, has seen fit to address a report to Mr. Champagne, boiler Inspector, to whose authority engineers are beholden for the responsibility in case of accidents to the boilers they have under their care.

We are therefore in a dilemma, shut down boilers in part to allow for cleaning and repair and cause a certain famine in the City's supply of water, or continue to force the boilers and expose ourselves to the consequences of a catastrophe, with loss of life and property.

The argument which was used to decide the sending back to your committee of the report asking for the purchase of new boilers, is, I understand, that negotiations are under way by a certain Company to replace power from the steam boilers by electric power. This has nothing to do practically, with the purchase of the boilers in question, which are in any case absolutely indispensable for the operation of the present plant. For admitting that the City should decide to enter into negotiations, which would be sure to take considerable time, to employ electrically driven pumps which we know are merely in an experimental stage as yet, the necessary machinery for such a purpose would have to be installed, as no application of electricity can be made to work the present machinery. This all this will cause sufficient delay to bring on a catastrophe for the want of one boiler we have in view. In any event, in laying the situation before you clearly and frankly, my intention is to throw off my responsibility under the circumstances, and to allow you to judge of the urgency there is to no further prolonging this state of things.

Respectfully submitted,


Superintendent M W W.

Montreal le 9 Août 1904.

A. M. le Président et à M.M. les Membres

de la Commission de l'Aqueduc.

Messieurs, -

Informé que le Conseil de Ville a renvoyé devant votre Commission le rapport recommandant l'achat des chaudières pour la Station du bas niveau, je crois devoir, pour ne pas prolonger un délai qui peut devenir funeste à la Cité vous rappeler à votre séance de ce jour, la situation réelle qui existe à cette station et dont au risque d'alarmer le public, je ne saurais plus longtemps assumer la responsabilité.

Resumant les différents rapports que je vous ai adressés notamment les 9 Sept. 1902 et 23 Janvier 1904 et les rapports que j'ai reçus de M. Kearney le chef de la dite Station je vous rappelle que les chaudières à acheter sont destinées à remplacer celles qui ont été condamnées par l'Inspecteur M. O. Champagne, que faute de ces nouvelles chaudières nous sommes obligés d'imposer à celles qui sont en usage, un travail excessif, et que la baisse de l'eau dans l'aqueduc qui va s'accroître de plus en plus jusqu'à l'hiver nous privera d'une partie de la force hydraulique et par conséquent imposera aux chaudières en usage un surcroît de travail au lieu de l'arrêt ^{qui} serait nécessaire pour les nettoyer et les réparer. Je vous rappelle aussi que l'accident arrivé à la pompe No. 1 nous oblige à employer continuellement la pompe No. 3 qui requiert une force motrice plus considérable et, par conséquent, augmente encore le travail des chaudières en usage et rapproche le moment où il faudra absolument en arrêter au moins une sur deux pour les remettre en état et les nettoyer.

La position a paru si sérieuse que le Chef de la Station du bas niveau M. Kearney après m'avoir signifié verbalement qu'il ne pouvait supporter plus longtemps la responsabilité d'un tel état de choses, a cru devoir adresser un rapport à M. O. Champagne inspecteur des chaudières de l'autorité duquel relèvent les ingénieurs de chaudières pour la responsabilité en cas d'accidents.

Nous sommes donc entre deux dilemmes, arrêter les chaudières en usage l'une après l'autre pour les remettre en état et les nettoyer et causer à la ville de Montréal une disette d'eau certaine ou bien continuer à forcer de plus en plus nos chaudières et nous exposer à une catastrophe

entraîner des pertes de vies ou tout au moins des pertes matérielles considérables.

L'argument qui a servi à renvoyer devant votre Commission le projet pour le dit achat serait que des pourparlers pourraient s'engager avec une compagnie pour remplacer la force motrice à vapeur pour la force électrique.

Cela n'a rien à faire pratiquement avec l'achat des chaudières qui sont en question, de n'importe quelle façon indispensables à l'usage du plant existant. Car en admettant que la Cité décide après des pourparlers qui ne pourrait manquer de prendre un certain temps, de se servir de la force motrice électrique dont nous savons ^{que} l'application au pompage de l'eau est encore à l'état expérimental, elle devra installer une machinerie nouvelle soit pour l'usage partiel soit pour l'usage général de cette source, la machinerie actuelle ne pouvant être mue par l'électricité.

Or tel changement prendrait un assez long délai pour que l'absence des chaudières en question ait eu le temps de causer une catastrophe. En tout cas, en vous exposant franchement et clairement la situation j'entends me couvrir de toute responsabilité dans cette circonstance, et vous mettre en état de juger de l'urgence qu'il y a à ne pas prolonger cet état de choses.

Respectueusement soumis,

Surintendant de l'aqueduc.

641
Kearney's
letters re. Bailey
Spangou

I have

not

Submission pour cimenter le fond du
Bassin carri St. Louis

Alu comité de l'Agueduc

Montreal

Messieurs.

Nous soussignés M^{rs}: Omyor & Charles Strubbe
ayant leur bureau d'affaires à Montreal 96 Rue
Lafontaine ayant considéré les plans et spécifica-
tions pour cimenter le fond du Bassin Carri St. Louis,
acceptons de faire cet ouvrage pour la somme de
\$3875.⁰⁰ Trois mille huit cent soixante quinze Dollars

Montreal, le 23 Aout 1904

L. J. Amicé
C. Strubbe

Muir & Strubb
Under St Louis
Sqr. Basin.
25 Aug 1904.

Montreal 23rd August 1904
To the Chairman and Members
of Water Committee of City of Montreal
Gentlemen

I the undersigned offer
to Build a 3 x 2 Brick sewer
at the entrance of the Aqueduct
Lower Lachine Road, according
to Specifications and plans for
the Lump Sum of \$ 3596.00

Yours &c
Robert Warren & Co.
41 St. Famille St.

R. Warren Co
Quinze rue Lennox
Montréal 1904

Montréal, 23 Août 1904.

Je, soussigné, propose de faire la construction d'un égoût pour dériver les eaux des fosses sur la route basse de Lachine, à l'entrée de l'Aqueduc de Montréal, conformément aux plans et devis examinés au bureau du Surintendant de l'Aqueduc de Montréal, pour la somme de trois mille deux cent quatre-vingt-treize dollars et soixante seize centins (\$3,293.76).

Julien Toussaint

*J. Toussaint
1101 Huntley St.
Montreal*

J. Gausvain
Sunder for Suva
25 Aug 1904

Montreal 23 Aout 1904

Au Greffier de la Cité de Montreal.

Monsieur.

Je soussigné, propose de faire les ouvrages en
enduits et en ^{beton} ciment, pour le cimentage du Bassin au Carre St.
Louis, suivant le devis fourni, pour la somme de (\$4700.00)
Quatre mille sept cents dollars.

Humblement soumis.

Votre tout dévoué

Pe. Dusablou
N^o 525 rue St. André

R. Dusablau.
Quai St Louis
Sq. Paris.
25 aug 1904

A.M.le President et a M.M.les membres
de la Commission de L'Aqueduc,

Messieurs,

Nous les soussignés proposent de faire les ouvrages en ciment pour
etre fait au bassin du Carré St.Louis, Montreal, d'apres les plans et devis
qui seront fournis par le ^{Directeur} surintendant de El'aqueduc, pour le prix de la
somme de Trois Mille Huit ^{cents} Piastres (3800.),

Vos Devoués,

Grant & Currier
980 St Hubert

Laurie Letch
Comité des Ciments
Reservoir.
25 Aug 1904

M

1904

1904

1904

FORM OF TENDER

TENDER FOR WORK OF LEVELLING OFF AND CEMENTING BOTTOM OF McTAVISH STREET RESERVOIR. - South side -

To the WATER COMMITTEE of the CITY of MONTREAL.

Gentlemen,

Parviz Coy Ltd *Me* the undersigned *Sealy Asphalting* residing in *Montreal*

having carefully read and considered the Plans and specifications, Terms and conditions for the Levelling off and cementing bottom of McTavish street Reservoir (south side) hereby agree to execute the said works in accordance with said plans and specifications, and generally to the satisfaction of the Superintendent of Water Works, for the following prices. Viz:

10. For the whole work comprised in the 1st & 2nd parts of this specification. (Levelling off, Concrete and cement mortar Coating) For the sum of *30,769.50*

20. For the whole work comprised in the 1st part of this specification. (Levelling off, and concrete filling) For the sum of *16,310.00*

30. For the whole work comprised in the 2nd part of this specification. (Cement mortar coating) For the sum of *14,459.50*

40. For the whole work comprised in the 1st & 3rd parts of this specification. (Levelling off, concrete & Asphalt mastic Coating) For the sum of *30,117.55*

50. For the whole work comprised in the 3rd part of this specification. (Asphalt mastic Coating) For the sum of *13,807.55*

Sealy Asphalting Parviz Coy Ltd
D. J. Buchanan
Secretary

v3/8/04.

The Sicilian Asphalt Paving Company.

Times Building,

New York, Aug. 19, 1904.

HOWARD CARROLL,
PRESIDENT

GEORGE C. CLAUSEN,
VICE PRES & TREAS.

H. HAGGERTY,
SECRETARY.

ADDRESS ALL
COMMUNICATIONS
TO THE COMPANY

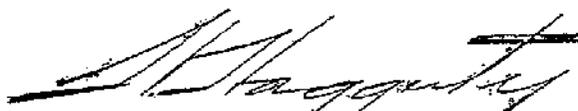
TELEPHONE CALL:
"930 CORTLANDT."

CABLE ADDRESS:
"RYQUAD NEW YORK."

To Whom it May Concern:--

Our Sicilian Rock Asphalt Mastic brand of The United Limmer & Vorwohle Rock Asphalte Co., Ltd., mined at Ragusa, Sicily, has been successfully used for lining the reservoir at Glen Island, owned by John H. Starin, in 1898, and up to to-day's date, has given entire satisfaction. Similar material is now being used for lining the Oak Lane Reservoirs, Philadelphia, Pa.

THE SICILIAN ASPHALT PAVING COMPANY,


Secretary.

RICKETTS & BANKS

Chemists Assayers and Mining Engineers

104 JOHN STREET.

Cable Address "RICKETTS" New York.

CERTIFICATE of ANALYSIS.

No. 22294.

NEW YORK, 22 Nov., 1902.

Sample of.....Sicilian Rock Asphalt Mastic.....

From.....

Marked.....

submitted.....for analysis contains:

| | |
|--|---------------|
| Bitumen. | .29.85 % |
| (Matter extracted by Carbon bisulphide) | |
| Mineral Matter. | .70.15 " |
| | <u>100.00</u> |

Note:-
The mineral matter is chiefly carbonate of Lime.

Yours respectfully,

(signed) RICKETTS & BANKS.

To THE SICILIAN ASPHALT PAVING CO.

This is to certify that the above is a true copy of
the original.

THE SICILIAN ASPHALT PAVING CO.,


Archives de la Ville de Montréal
Secretary.

COPY

T R E N T C A N A L

SUPERINTENDING ENGINEER'S OFFICE

DETERBOROUGH Mar. 24th, 1902.

The Lakefield Portland Cement Co.,

Lakefield, Ont.

Dear Sirs,-

The following are the results of tests made in the laboratory of the Department of Railways & Canals here, upon the "Monarch" brand cement received from you on the 17th inst.

The cement required the ordinary percentage of water 22% for neat tests. The rate of setting was entirely satisfactory and for the general working of the cement the action was excellent. For fineness the results were exceedingly satisfactory, there being a residue of 15% on the sieve of 40,000 meshes per square inch. The specific gravity of 3.16 was also quite satisfactory.

The blowing test was also quite satisfactory the pats having shown no deterioration whatever.

The test for tensile strength was made with neat cement and gave the following high results, viz, 625 lbs per square inch at 48 hours and 920 lbs per square inch at 7 days. The rate of loading being 400 lbs per square inch or our usual rate of applying the strain.

These results are entirely within our specifications for Portland cement.

Yours truly

Sgt. Rich. E. Rogers.

Superintendent of Works, Ville de Montréal

COPY.

School of Practical Science.

Toronto, April 18th, 1902.

The Lakefield Portland Cement Co.,
Lakefield, Ont.

Dear Sirs,-

The following is the record of the sample of
Portland cement received from Mr. Bravender.

Hot test. The results from these tests were satisfactory.

Sifting. The residue on sieve No. 50 was nil.

" " " " " 100 was 1.8%

Tensile strength. The tensile strength when guaged neat and
not rammed into the moulds was at the end of
seven days as follows,-

Briquette No. 1 610 lbs per sq.in.

" " 2 605 " " "

" " 3 650 " " "

" " 4 640 " " "

" " 5 630 " " "

" " 6 640 " " "

" " 7 650 " " "

" " 8 injured in handling.

633 ave.

Yours truly,

Signed. C.H.C. Wright.

COPY.

CITY ENGINEER'S OFFICE.

Toronto, March 27th, 1903.

The Lakefield Portland Cement Co.,
Lakefield,

Report of tests on Monarch Portland Cement.

Date of test. March 20th. 1903.

Specific Gravity.....3.18

Residues on No.50.....0.0%

" " 70.....0.0%

" "100.....2.4%

Setting Initial.....100 Minutes

Hard.....225 "

Hot pat.....O.K.

Cold pat.....O.K.

Tensile strength Neat..... water...21.1

24 hour.....502 pds.

7 days.....837 pds.

3 parts sand to 1 part cement... water... 10.0

24 hours.....53 pds.

7 days211 pds.

Sulphuric anhydride.....1.54%

Yours truly,

Signed. C.H. Rust,

City Engineer

Montreal, December 7th 1898

REPORT OF RESULTS OF TESTS UPON "HEMLOCK" BRAND OF CEMENT

Samples selected by representative of Testing Department, McGill University, on wharf ex S/S "Mayflower", and numbered 1 to 10 inclusively.

| FINENESS | RESIDUE ON | | | RESIDUE ON | |
|-----------|------------|-----------|-----------|------------|-----------|
| | 120 sieve | 100 sieve | | 120 sieve | 100 sieve |
| Sample 1, | 11.2% | 8% | Sample 5, | 11% | 7.8% |
| 2, | | | Sample 7, | | |
| 3, | | | " 8, | 11.1% | 10.3% |
| 4, | 11.7% | 8.4% | " 9, | | |
| 6, | | | " 10, | 11.8% | 8.6% |

AVERAGE TENSILE STRENGTH OF 7 DAYS HEAT CEMENT
BRIQUETTES IN LBS PER SQ INCH

| | | | |
|-----------|---------|-----------|---------|
| Sample 1, | 638 lbs | Sample 6, | 701 lbs |
| 2, | 560 " | " 7, | 670 " |
| 3, | 691 " | " 8, | 767 " |
| 4, | 695 " | " 9, | 798 " |
| 5, | 651 " | " 10, | 692 " |

REMARKS: Pats from Samples 1 and 2, after being left in water for 7 days, adhered to glass and gave satisfactory results.

These results indicate that the cement is of excellent quality.

BSGD) Henry T Bovey

COPY

Provincial Analyst
(Appointed by the Quebec Govt)

City Analyst
(Appointed for Mtrl.)

CEMENT TESTING DEPARTMENT.

Milton L. Hersey M.Sc. (McGill)

consulting chemist of the Canadian Pacific Ry. Co.

146 St James St,

Montreal 27th July 1904.

FINAL REPORT OF TESTS OF A SAMPLE OF CEMENT.

Laboratory No. 8652.

Brand "Invincible"

For Messrs F. Hyde & Co., 31 Wellington Street, Montreal

Sample drawn by Milton L. Hersey M.Sc. personally.

Received at testing Laboratory June 25th/04

Blowing test (20% water used) entirely satisfactory specific gravity 3.1429.

Set: initial in 90 minutes Final in 5½ hours

Fineness: % residus on sieves Nos

| | |
|------|------|
| 50 | 100 |
| 0.4% | 5.8% |

Tensile strength in lbs. per square inch:-

| | | 7 days | 28 days. |
|---|---------|---------|----------|
| Neat Cement and 20% water | Highest | 646 lbs | 760 lbs |
| | Average | 603 " | 744 " |
| 1 part cement to 3 parts Standard quartz sand and 9% Water. | Highest | 192 " | 285 " |
| | Average | 181 " | 261 " |

REMARKS:- N.B.-- The BLOWING TEST above-mentioned includes what is sometimes called the BOILING TEST. Thumb pressure was used in making the briquettes. This is a first-class Portland cement in every respect and very easily conforms to the standard specifications of the Canadian Society of Civil Engineers of Jan 1903. The Can. Soc. C.E. requirements for 7 and 28 days tensile strength are as follows:-

"NEAT"----- 7 days.... 400 lbs.: 28 days.... 500 lbs..
"3 sand to 1 cement"----- 7 days.... 125 lbs.: 28 days.... 200 lbs..

(signed) Milton L. Hersey M.Sc..

COPY. *You can retain this copy -*

LAMM BROS & Co, Antwerp

Branch Offices: { London E. C. 4, East India Avenue
Vienna VI Kaiserstrasse, 22

Date of post.

High class Artificial

PORTLAND CEMENT

Dears Sirs,

We beg to call your attention to our *Vise* PORTLAND CEMENT, which is equal, or better, as regards quality, uniformity and fineness than the best English or German brands.

Our Works are equipped with the very latest plant, and best improvements known up to date.

Official Tests, copies of which we have pleasure in submitting annexed, prove that our Cement will fulfil all conditions and requirements for Public Contracting generally.

We give special care to strong packing.

We trust to be favored with your esteemed orders, which will have our special attention.

GENASCO ROOFING COMPANY
~~THE BARBER ASPHALT PAVING COMPANY,~~
ELGIN & ARCHIBALD STS.,
OTTAWA, ONT.

- 2 -

"We are very much pleased with the work you did for us.
"It stood this severe winter without a scratch. It was pretty
expensive, but I presume the cheapest in the end."

Trusting that our tender will receive your favorable,
consideration, we remain,

Yours very truly,

GENASCO ROOFING COMPANY, INC.

By



District Manager.

SPECIFICATIONS

for

LINING RESERVOIRS.

In order to make a perfect and durable reservoir lining it is essential that the underlying foundations, no matter of what material it may consist, should be thoroughly gone over if it is an old reservoir. If this foundation consists of concrete it is necessary that it be thoroughly examined in order to ascertain whether it is solid throughout and no hollows underneath; and that all holes be filled in with new concrete and the whole surface made perfectly even.

In order that the asphalt mastic will adhere to the concrete foundations on the slopes, it is necessary that the slopes should first be thoroughly cleaned and then painted with our specially prepared asphalt paint. After this is done a layer of asphalt mastic, one-half inch thick, made of a softer mixture will be laid and on top of this a one-half inch thick layer of a harder, wearing surface of asphalt mastic will be laid, breaking all joints.

Should the lining of the reservoir be of brick construction it is essential that the joints between the brick be perfectly cleaned and the brick also with a steel brush. The slopes must then be painted with our specially prepared asphalt paint, and asphalt mastic laid in two coats as above described will then be laid on the bottoms as well as the slopes, taking care to have all the joints lapped.

—The asphalt mastic wearing surface, as above referred to shall be mixed and laid as follows:--

This asphalt mastic shall be made from asphalt rock, imported in the crude state from either of the reputable mines of Europe, and pulverized and fluxed with the proper proportion of refined Trinidad and Bermudez asphalts, and made into blocks, manufacture to be carried on where the architect can have the opportunity of inspecting the same. The asphalt blocks thus prepared shall be taken to the place of work and broken and melted in the usual kettles. As the mastic is melted the grit and bitumen, consisting of Trinidad and Bermudez asphalts, shall be added, and the whole mass heated to a temperature of 250 to 300 degrees Fahrenheit, and thoroughly incorporated.

After sufficient cooking, under continual stirring, the mastic is to be carried to the work in wooden pails, and there carefully spread over the concrete foundations to the required thickness with wooden spatulas or floats. The whole shall then be thoroughly worked until it is entirely free from voids, and rubbed with bar sand or sandstone until a perfectly smooth surface is obtained.

Genasco Roofing Co.
Quand au Cementing
Reservoir.
25 Aug 1904.

BRUNNEN & CO. PHOTOGRAPHERS

Montréal le 20 Septembre 1904.

A. M. le Président et à M.M. les Membres

de la Commission de l'aqueduc,

Messieurs, -

Il y a près de 4 mois que j'ai été nommé pour remplacer M. Moretti. Je demande humblement que je sois nommé statisticien du département avec le même salaire que M. Moretti avait, savoir \$1000.-. Depuis déjà 7 ans que je suis au service du département, j'ai toujours fait mon devoir en donnant complète satisfaction à mes supérieurs, et naturellement je desirerais être promu.

Esperant que vous prendrez ceci sous considération,

Je demeure,

Votre très obeisant serviteur.



Montreal Sept. 20th 1904.

To the Chairman and Members

of the Water Committee.

Gentlemen,-

It is now 4 months since I have been appointed by your Committee to succeed the late MR. Moretti. I respectfully ask that I be named as statistician of the department at the same salary as that received by Mr. Moretti, namely \$1000.-. I have been 7 years in the department, and have always done my best in the position held, to give every satisfaction to my superiors, and naturally am seeking promotion.

Hoping that you will take this into favorable consideration,

I beg to remain,

Your obedient servant,

A handwritten signature in cursive script, appearing to read 'J. Mill', written in dark ink on a light background. The signature is fluid and somewhat stylized, with a long horizontal flourish extending to the right.

1001 RUE J. GUY, MONTRÉAL

J. W. O'Neill ⁶⁴³
643
Palmy
Sept 20/1904

RECEIVED
SEP 20 1904

BLANC DE SOUMISSION

SOUMISSION POUR L'ENTREPRISE DE NIVELLER ET CEMENTER LE FOND
DU RESERVOIR McTAVISH - Côté sud. -

A. M. le Président et à M.M. les Membres
de la Commission de l'aqueduc.

Nous soussignés *O. Martineau fils*
demeurant

avant soigneusement lu et considéré les plans et devis, termes et condi-
tions pour niveller et cimenter le fond du Reservoir McTavish, côté sud, par
le présent consentons à exécuter les dits travaux en conformité avec
les dits plans et devis, et à la satisfaction du Surintendant de l'Aqueduc,
pour les prix suivants. -

- 1^o. Pour tous les travaux compris dans la 1^{ère}. et 2^{ème} parties
de ce devis (nivèlement, beton et enduit en ciment) pour
la somme de *vingt sept mille trois cent quatre vingt dix Dollars*
\$ 27390.00
- 2^o. Pour le travail compris dans la 1^{ère}. partie de ce
devis (Nivèlement et Beton) pour la somme de. \$ 21450.00
- 3^o. Pour le travail compris dans la 2^{ème}. partie de ce
devis (enduit en ciment) pour la somme de. \$ 5940.00..
- 4^o. ~~Pour tous les travaux compris dans la 1^{ère}. et 2^{ème}.
parties de ce devis (nivèlement beton et enduit en asphalté)
pour la somme de~~
- 5^o. ~~Pour le travail compris dans la 3^{ème} partie de ce
devis (enduit en asphalté) pour la somme de.~~

Respectueusement soussigné

Vos tout dévoué

O. Martineau fils
1062 Rue St Denis

O. Martineau Jrs
Ouderjar Ceuseutig
Reservain.

25 Aug 1904.

FORM OF TENDER

TENDER FOR WORK OF LEVELLING OFF AND CEMENTING BOTTOM
OF McTAVISH STREET RESERVOIR South side

TO THE WATER COMMITTEE OF THE CITY OF MONTREAL.

We the undersigned *Ed. Omyot*
Ch. Stube residing in *Montreal 46 Rue St-Joseph*
have carefully read and considered the Plans and specifications and
conditions for the levelling off and cementing bottom of McTavish
Street Reservoir (south side) hereby agree to execute the said work
in accordance with said plans and specifications and generally to the satisfaction
of the Superintendent of Water Works for the following prices: VIZ:

For the whole work comprised in the 1st & 2nd parts
of this specification (levelling off, concrete and
cement mortar coating) for the sum of *\$22.950*

For the whole work comprised in the 1st part of
this specification (levelling off and concrete filling)
for the sum of *\$15.500*

For the whole work comprised in the 2nd part of
this specification (Cement mortar coating) for the sum of *\$7.500*

For the whole work comprised in the 1st & 3rd parts
of this specification (levelling off, concrete & Asphalt
coating) for the sum of *\$34.500* *Limmes*
41.500 *Seysel*

For the whole work comprised in the 3rd part of
this specification (Asphalt mastic coating) for the sum of *\$20.500* *Limmes*
27.000 *Seysel*

L. Armiot
Ch. Stube

Amiel Strubbs
Quidam for Cement
Reservoir.

25 Aug 1904.

The main return will be run below floor and be supported by neatly made hangers.

Plans will show sizes of the various connections for supplying the coils and radiators.

Connections will of select straight pipes, and run, exposed in the rooms in a neat and workmanlike manner. Connection will have all necessary outlet T's for connection coils etc., and the centres of such T's will be so placed, that the branch from main to coil will grade to risers for relief when steam valve to coils will be closed; it is preferable the steam branch be the longer, as the smaller return piping will the more readily adapt itself to the expansion and contraction of the vertical piping.

All piping to be wrought iron with full cut standard thread, and to have cast steel fittings for connections.

All coils will be constructed uniformly of 1" wrought iron pipe, coils occurring under windows will be of heights to finish below sills of same, the steam inlet tapping for coils will be right hand for union valves and of sizes shown, outlet tap for check valves ~~will be~~ will be right hand for union connections.

Heating surfaces to be as per plan but it will ^{be} optional for the Superintendent of Water Works to increase or diminish the quantity of heating surface in any of the coils or radiators so long as the total quantity asked for is not exceeded.

RADIATORS. Radiators to be cast iron of good Canadian manufacture of the best quality, subject to the approval of the Superintendent of Water Works.-

Figures accompanying coils or radiators give running feet (or equal thereto) of 1" pipe independent of connections return bends etc., deficit or excess in any one not to exceed 5 ft lineal of 1" pipe but total quantity asked for to be supplied.

The Contractor ^{will furnish} and install all valves required for the control or manipulation of the apparatus. Those for coils, shut valves and check valves will be equal to Jenkin's Bros. Genuine or of Fairbanks manufacture, and will have rough bodies loose discs, wood wheel globe or angle pattern union; other valve 2" and

smaller will be steam metal brass, rough bodies iron wheels gate or angle patterns, large valve will be iron bodies brass mounted gate or angle pattern with iron wheels.

Valves subjected to high pressure will be heavy patterns with yokes and improved forms of stuffing boxes and suitable for the situation.

FEED PUMP & RECEIVER. The Contractor will furnish a Burnham automatic feed pump and receiver, the pump dimensions to be 4" x 2 1/2" x 5" and receiver 15" x 26", also all the valves for the said pump, feed water service, and exhaust and steam connections and all automatic steam air cocks for coils and radiators.

The Contractor for the heating apparatus will furnish all materials, pump foundations where the receiver and pump will be placed, valve fittings, labour and erect the same in accordance with such details as will be furnished him when required.

The Contractor will provide conveniently on the return main a 2" outlet T and run by pass from same to serve as catch basin for relief of condensation; this by pass pipe to have a 2" open way controller valve. The Contractor will furnish all branch piping, pump to boilers complete, with valves, water steam and exhaust connections.

BACK PRESSURE VALVE. The Contractor will also furnish a back pressure valve of size required with a 2" x 3 1/2" valve of diaphragm pattern of such superior make and adjustment as to accurately and at all times reduce the pressure in the heat mains to not more than 10 lbs.

This valve is to be flanged on outlets, have controlling valve both sides and be complete with lever and regulating weights. The diaphragm will have a small operating pipe with valve, and be connected to some low pressure steam pipe not less than ten feet remote from the valve.

TEST.- Upon completion of the work and all connections the Contractor will subject the entire system of piping and radiators to a steam test of 20 lbs. pressure, sustained during careful inspection of the apparatus for split pipes, leaks, imperfect fittings or defects of a structural character or due to faulty

workmanship.

Defects if any to be remedied at once, and test repeated and sustained until the entire work shall have been proven free from blemish. Whereupon the pressure will be lowered to that sufficient for a complete circulation and the system allowed to run on, with condensation escaping at the by pass pipe to sewer, for such duration of time as will be required to work away all lead chips, oil and hindred sediment from the piping and coils and radiators.

Upon completion of the washing out process, the by pass to sewer will be closed and the condensation allowed to go to the receiver and be returned to the boilers in the regular manner by boiler feed pump.

PLANS. A plan of the buildings and premises showing the disposition of the heating apparatus may be seen at the office of the Superintendent of the Montreal Water Works, City Hall. These plans show only the general arrangement and serve only as a guide, and it is clearly understood that the tendering parties must visit the premises and take their own measurements of the exact dimensions and the true disposition of the piping required.

DATE OF ERECTION. The complete apparatus as described above must be installed and in working order complete within three weeks of the signing of the contract under a penalty of five dollars for every twenty four (24) hours that the said Contractor may be in default there after.

TENDER PRICE. The price tendered must be for the heating apparatus complete without the boiler, one lump sum for the whole.

CERTIFIED CHEQUE. Each proposal must be accompanied by a certified cheque on an incorporated bank for one hundred (\$100.00) dollars payable to the order of the City Treasurer of Montreal.

This cheque to be forfeited if the tenderer whose offer has been accepted refuses to sign the contract when approved by the Water Committee, when requested to do so, if he does not

faithfully carry out the terms of said contract.

The Contractor to pay the cost of the notarial deed and a copy for the City of Montreal.

PAYMENT . On completion of the work and after the tests called for have been made, all to the satisfaction of the Superintendent of the Water Works, a payment of ninety per cent (90%) of the contract price will be made the Contractor, and his deposit cheque of one hundred (\$100.00) dollars will be returned to him.

The remaining ten per cent (10%) of the contract price to be kept by the City for a period of three months as a guarantee against defective workmanship or faulty material in the apparatus.

NO. EXTRA CHARGE. The Contractor shall have no right to claim any indemnity or extra charge, for pretended extra work under any pretence whatsoever, unless he shall produce a written order for the same signed by the Water Works Committee and endorsed by the Superintendent of the Water Works.

Superintendent M.W.W.

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Supt's Report
re. John Markum
heating apparatus
N.R.
Oct 4/04

| | | | |
|---------------------------------|---|-----------------|--------------------------------|
| R. N. Lévesque | — | 730 | ⁰⁰ / ₁₀₀ |
| Cardina et Picard | — | 1115 | ⁰⁰ / ₁₀₀ |
| E. J. Murray et C ^{ie} | — | 1350 | ⁰⁰ / ₁₀₀ |
| Pierre Leclerc, fils | — | 998 | ⁷⁵ / ₁₀₀ |
| John Markham | — | 625 | ⁰⁰ / ₁₀₀ |
| <u>90</u> | | 5115 | ⁰⁰ / ₁₀₀ |



Hotel de Ville

Montréal

le 19 Octobre 1904

A. M. le Président et M.M. les Membres

de la Commission de l'aqueduc.

Messieurs, -

Le 10 Nov. 1903 des soumissions ont été ouvertes par la Commission de l'aqueduc pour la fourniture et la pose d'un système de chauffage à vapeur à la station des pompes du Haut Niveau. Les soumissionnaires étaient :

| | |
|---------------------|-------------|
| M. E.S.Manny | \$ 1,350.00 |
| MM.Cadieux & Briard | 1,115.00 |
| MM.Leclerc & Fils | 998.75 |
| M. R.M.Sevigny | 730.00 |
| M. John Markum. | 625.00 |

Le contrat à été accordé au plus bas soumissionnaire M.John Markum. M.Markum à fourni et a installé les tuyaux les calorifères et les radiateurs nécessaires d'après le plan et les devis, mais il a négligé de poser le recepneur et la pompe voulus paur dégager l'eau de condensation et rétablir la circulation en rendant cette eau chaude à la chaudière.

La pompe et le recepneur en question coûteraient environ \$125.00 et elle est indispensable pour le fonctionnement économique du système. J'ai écrit à M.Markum plusieurs fois d'avoir à remplir son contrat à ce sujet, mais toujours sans resultat. La saison froide avance et le besoin de chaleur commence à se faire sentir dans les bâtisses. Je voudrais savoir si je dois faire installer cette pompe avec le montant de la retenue que nous avons en main. M.Markum a reçu \$500.- et il reste donc \$125.00 de disponible pour cette fin.

Votre dévoué serviteur,

Geo. J. J. J.
Surintendant de l'aqueduc.



*Bureau du Surintendant de l'Acqueduc,
Hôtel de Ville,*

Montréal, le 11 juin 1904 19

M. Geo. Janin.

Surintendant de l'Acqueduc.

Hôtel de Ville.

Monsieur

Le premier du mois courant nous avons fait l'essai du système de chauffage à vapeur, installé à la station des pompes du Haut niveau par l'entrepreneur M. John Markum. Cet essai a été fait pour voir si l'appareil dit le "Wright Emergency Steam Trap" installé par l'entrepreneur pouvait servir à retourner les eaux condensées du système à la chaudière. Cet appareil ou "trap" est situé dans le sous sol de la bâtisse de la pompe électrique, à environs 25 pieds de distance de la chaudière et à 11 pieds 9 pouces au dessous du niveau de l'eau dans la chaudière.

Dès 8 heures du soir la chaudière portait 20 livres de pression et tous les radiateurs et les coils de l'appareil était plein de vapeur et en bon état de fonctionnement, on ferma la soupape de renvoi d'eau au canal d'égout. Le "Trap" se remplit d'eau bientôt et resta plein, et petit à petit tous le bas du système perdit sa chaleur, montrant qu'il n'y avait pas de circulation et que l'eau condensée dans les tuyaux ne pouvait se dégager. De neuf heures à 10.40 des thermomètres attachés aux coils ont montré une diminution de chaleur de 20 degrés Fahr. en moyenne. Vous même étiez présent à l'essai ainsi que M. Hector Lefebvre de chez M. Markum, Nap Cusson, plombier employé de l'Acqueduc, et moi-même.

Votre dévoué serviteur,

T. W. Lesage

Assistant surintendant de l'Acqueduc.