

TOWN OF FORT FRANCES

Operations and Facilities Executive Committee

AGENDA - October 21, 2015, 8:30 AM

MEETING - Civic Centre

Session #018

	Page
1. <u>Call to Order</u>	
2. <u>Disclosure of pecuniary interest and the general nature thereof</u>	
3. <u>Approval of Previous Committee Minutes</u>	
3.1 Minutes from the meeting of this Committee on October 7, 2015.	2 - 3
4. <u>Non-agenda Items</u>	
5. <u>Outstanding Items</u>	
5.1 BIA Request for Town In-Kind Services to be performed by the Operations and Facilities Division workforce.	4 - 16
5.2 Sanitary Sewer By-Law - to be discussed at a later date.	
6. <u>New Business</u>	
6.1 Supply of 2016 Parks and Cemetery Flowers	17 - 19
6.2 September 2015 Drinking Water Systems Monthly Summary Report	20 - 27
7. <u>Adjourn / Next Meeting Date</u>	

TOWN OF FORT FRANCES

MINUTES

SESSION NO. #017

October 7, 2015

The meeting of Operations & Facilities Executive Committee of the Town of Fort Frances was held in the Civic Centre on October 7, 2015 from 8:30 a.m. to 9:15 a.m.

PRESENT: Paul Ryan, Chairperson, Doug Kitowski, June Caul, Mark McCaig, CAO and Doug Brown.

ALSO PRESENT: Mayor Roy Avis

1. Call to Order

The meeting was called to order at 8:30 a.m.

2. Disclosure of pecuniary interest and the general nature thereof

None.

3. Approval of Previous Committee Minutes

3.1 Minutes from the previous meeting of this Committee on September 23, 2015 - the minutes were approved as circulated.

4. Non-agenda Items

None.

5. New Business

5.1 Request from Mrs. Tammy Wihnan to have a Bench Installed Along the Waterfront Parkway - the report was reviewed and will be forwarded to Council for approval.

5.2 Intersection of Portage Avenue/First Street, East Intersection - Review of Alleged Hazardous Driving Conditions - the report was reviewed and will be forwarded to Council for approval.

6. Outstanding Items

6.1 Sanitary Sewer By-Law - to be discussed at a later date.

7. Information

7.1 2015 Capital Budget as of October 1st, 2015 - the Capital Budget Spreadsheet as of September 30, 2015 was reviewed and will be forwarded to Council as information only. No action required.

7.2 2015 - Tonnage at Landfill Site - updated October 1st, 2015 - the October 1st, 2015 Landfill Site data spreadsheet was reviewed and will be forwarded to Council as information only. No action required.

7.3 Operations and Facilities Division - Public Works Area - Operations Statistics - August 2015 - the Operations and Facilities Manager handed out a revised page one of the monthly Operational Statistics for August 2015. The statistics were reviewed and will be forwarded to Council as information only. No action required.

7.4 Operations and Facilities Division - Environmental Area - Operations Statistics - June

2015 - the Environmental Statistics for June 2015 were reviewed and will be forwarded to Council as information only. No action required.

7.5 Operations and Facilities Division - Environmental Area - Operations Statistics - July 2015 - the Environmental Statistics for July 2015 were reviewed and will be forwarded to Council as information only. No action required.

7.6 Operations and Facilities Division - Environmental Area - Operations Statistics - August 2015 - the Environmental Statistics for August 2015 were reviewed and will be forwarded to Council as information only. No action required.

8. Adjourn / Next Meeting Date

The meeting was adjourned at 9:15 a.m.

Executive Committee Chair

D. Brown, Manager of Operations & Facilities

September 11, 2015

Report To: Mayor & Council

From: Operations & Facilities Executive Committee

SUBJECT: BIA Request for Town In-Kind Services to be performed by the O & F Division workforce

Over the years the Town has provided assistance to the Downtown Scott Street BIA (property owners) organization for such items as;

- 1) Watering hanging flower baskets along Scott Street- 3times per week during the growing season
- 2) Erection of the Great Canadian Main Street Signs
- 3) Enhanced Snow Removal Services
- 4) Empty the garbage containers on a regular basis
- 5) Enhance Street Sweeping Services

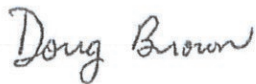
There is no written agreement in place with the Downtown Scott Street BIA. At this time the BIA is requesting the following items to be completed by the Town's workforce;

- **The O & F Division removal of all the dead trees c/w stump and all roots along Scott Street** - Based on my inspection of the trees in the 100, 200 & 300 Blocks of Scott Street there appears only two trees; one in front of Betty's (Chico) and the other in front of the Museum (Black Knot disease). See attached pictures. Based on this request it is estimated that it would take four men two days or more depending if the concrete curb and gutter structure is damaged in removing the main tap root of the tree. Thus based on two days per tree it is estimated it would cost the Town \$5624.32 with no concrete work. See attached Spreadsheet No. 1. Also it is my understanding that the trees are owned and installed by the BIA and there is no agreement in place for on-going maintenance of these trees between the Town and the BIA. Also the existing trees as they grow will continue to cause sidewalk surface continuities in the future, where it is my understanding that the Town administration did not want the BIA to plant these trees in the first place.
- **Relocate the Exterior Mural attached to the building at 261 Scott Street to the building at 335 Scott Street.** It is estimated that it would take three men 3 days to complete this work. Also there is a high chance that the Mural might be damaged and some touch up painting might be required from the original artist. See attached pictures. It is estimated it would cost the Town \$2485.52 to complete this work. See attached Spreadsheet No. 1 for a breakdown of the costs.
- **Re-set of Sidewalk paving Stones along Scott Street** – Based on my inspection of the 200 & 300 blocks of Scott Street, there are several damaged stones, a lot of surface discontinuities that exceed the two centimeter tolerance (See attached minimum maintenance standard for municipal highways section 16.1- sidewalk surface discontinuities) and several areas where water ponds on top of the stones.

It is my understanding the red stones were originally installed in the mid-1990's and in order to reset these stones the entire north and south side of Scott Street in the 200 & 300 blocks must be lifted. There is approximately 2646 square meters where it will take 4 men approximately 2.5 to 3 months to complete this work. This work will involve retaining a contractor where it is estimated that it will cost \$125 per square meter to complete this work or \$330,750. This is a labour intensive project with a substantial cost. It is suggested that this project be evaluated during the 2016 budget process. The common practice over the last couple of years in regards to sidewalk surface discontinuities is the engineering department within the O & F division inspects all of the Town's concrete sidewalks where all surface discontinuities exceeding the 20 mm tolerance are marked with highly visible orange paint. In regards to the Scott Street paving stone sidewalks and the waterfront stone sidewalks this practice was not followed as the appearance of orange paint is considered to be a negative appearance to downtown customers & tourists.

See attached two letters dated August 12, 2015 from Shelly Wepruk, secretary of the Downtown Scott Street BIA organization. While the Town wants to ensure the downtown infrastructure is maintained to a high standard and is in a state of good repair, some of the BIA requests should probably be completed by the BIA organization. There is a perception that the Town's workforce is favoring this organization where other business/property owners who don't receive this level of service.

Respectfully submitted,

A handwritten signature in cursive script that reads "Doug Brown".

Doug Brown, P. Eng.
Operations & Facilities Manager

f/n: 2015BIARquest

Spreadsheet No. 1 - Cost estimate for In-Kind BIA Requests

August 12, 2015- letter

Cost to remove a tree c/w stump and all roots

	# of Units	Hours	Rate	Unit Cost
Large backhoe	1	16	\$ 83.53	\$ 1,336.48
Tandem Truck	1	16	\$ 80.55	\$ 1,288.80
1/2 ton truck	1	16	\$ 21.56	\$ 344.96
Equipment operator	1	16	\$ 41.47	\$ 663.52
Truck driver	1	16	\$ 41.47	\$ 663.52
Labourer	2	16	\$ 41.47	\$ 1,327.04

Total per tree (no concrete curb & gutter being replaced) **\$ 5,624.32****Cost to Relocate Mural from 261 Scott Street to 335 Scott Street**

	# of Units	Hours	Rate	Unit Cost
Labourer	3	16	\$ 41.47	\$ 1,990.56
1/2 ton truck	1	16	\$ 21.56	\$ 344.96
Miscellaneous Fasteners	LS			\$ 150.00

Cost **\$ 2,485.52**









For centuries the Rainy River was the link to travel from eastern Canada to the west. For First Nations people & later explorers, frontiersmen & the earliest settlers, this was the Great Canadian Main Street.

THE GREAT CANADIAN
MAIN STREET



For centuries, the Rainy River was the link to travel from eastern Canada to the west. For First Nations people & later explorers, fur traders & the earliest settlers, this was the Great Canadian Main Street.

O. Reg. 239/02, s. 16, Table.

Sidewalk surface discontinuities

16.1 (1) The minimum standard for the frequency of inspecting sidewalks to check for surface discontinuity is once per calendar year, with each inspection taking place not more than 16 months from the previous inspection. O. Reg. 23/10, s. 10; O. Reg. 47/13, s. 16 (1).

(1.1) A sidewalk that has been inspected in accordance with subsection (1) is deemed to be in a state of repair with respect to any surface discontinuity until the next inspection in accordance with that subsection, provided that the municipality does not acquire actual knowledge of the presence of a surface discontinuity in excess of two centimetres. O. Reg. 47/13, s. 16 (2).

(2) If a surface discontinuity on a sidewalk exceeds two centimetres, the minimum standard is to treat the surface discontinuity within 14 days after acquiring actual knowledge of the fact. O. Reg. 23/10, s. 10; O. Reg. 47/13, s. 16 (3).

(2.1) A surface discontinuity on a sidewalk is deemed to be in a state of repair if it is less than or equal to two centimetres. O. Reg. 47/13, s. 16 (4).

(3) For the purpose of subsection (2), treating a surface discontinuity on a sidewalk means taking reasonable measures to protect users of the sidewalk from the discontinuity, including making permanent or temporary repairs, alerting users' attention to the discontinuity or preventing access to the area of discontinuity. O. Reg. 23/10, s. 10.

(4) In this section,

“surface discontinuity” means a vertical discontinuity creating a step formation at joints or cracks in the surface of the sidewalk. O. Reg. 23/10, s. 10.

REVIEW OF REGULATION**Review**

17. (1) The Minister of Transportation shall conduct a review of this Regulation and Ontario Regulation 612/06 (Minimum Maintenance Standards for Highways in the City of Toronto) made under the *City of Toronto Act, 2006* every five years. O. Reg. 613/06, s. 2.

(2) Despite subsection (1), the first review after the completion of the review started before the end of 2007 shall be started five years after the day Ontario Regulation 23/10 is filed. O. Reg. 23/10, s. 11.

18. Omitted (provides for coming into force of provisions of this Regulation). O. Reg. 239/02, s. 18.

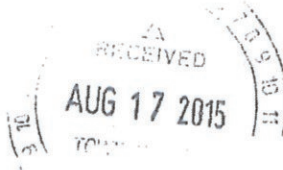
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Downtown Scott Street B.I.A.
335 Scott Street
Fort Frances, Ontario
P9A 1H1
807-274-7502 Phone
807-274-0783 Fax



12 August, 2015

Town of Fort Frances
320 Portage Avenue
Fort Frances, Ontario

ATTN: Mayor Roy Avis & Council

Dear Sir/Madam

RE: Tree Removal

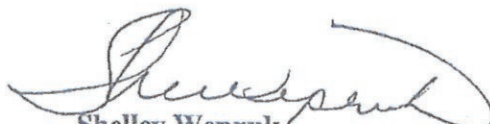
It has been brought to the attention of the BIA board that a number of the trees that we placed on Scott Street have died.

In order for us to replace the existing dead ones we need the trees, including their roots, to be removed by the Public Works Department as this is not a job we can tackle ourselves.

Therefore, we are requesting that a work order to Mr. Milt Strachan's department be issued advising him of the situation and requesting the work to be put on his department schedule. The sooner the trees are replaced the better chance they stand of establishing themselves before winter.

Thanking you in advance for your attention to these matters, I remain.

Yours


Shelley Wepruk
Secretary



Downtown Scott Street B.I.A.
335 Scott Street
Fort Frances, Ontario
P9A 1H1
807-274-7502 Phone
807-274-0783 Fax

12 August, 2015



Town of Fort Frances
320 Portage Avenue
Fort Frances, Ontario

ATTN: Mayor Roy Avis & Council

Dear Sir/Madam

**RE: Relocation of Mural &
Sidewalk Brick Replacements**

It has been brought to the attention of the BIA board that a great number of the sidewalk bricks on Scott Street are heaved due to frost and have become a safety issue.

It is our request that the Public Works department re-do those portions of Scott Street that are in need of repairs.

Mr. Guy Donaldson has submitted a request to have the mural that is attached to his building (the former Nirvana building) be removed and relocated. Murray & Shelley Wepruk have indicated that they are more than happy to have it relocated to the west side of their building at 335 Scott Street.

We are therefore requesting that this work be handled by the Public Works Department also.

Should you need a letter of authorization from the Wepruk's stating their approval, please advise and one will be obtained.

Thanking you in advance for your attention to these matters, I remain.

Yours


Shelley Wepruk
Secretary

October 19, 2015

Report To: Mayor & Council

From: Doug Brown, Manager Operations & Facilities

SUBJECT: Supply of 2016 PARKS & CEMETERY FLOWERS

The usual practice for the Town is to give a purchase order in December prior to the new budget being finalized to the supplier of the flowers for the upcoming planting season. However based on information received from one (1) of the suppliers during the 2011 process, Administration started the quotation process early this year (Mid-September) for the supply of the 2016 flowers.

For 2015 a report was approved on October 28, 2014. The Town ordered 5292 dozen flowers for planting in 2015 at a cost of \$14,292.00 (taxes extra). The average cost per dozen is \$2.70 (taxes extra).

For 2016 the Town obtained quotations from two (2) businesses for the supply of 5292 dozen flowers to be available during the third week in May 2016. See attached spreadsheet outlining the quotes from Lowey's Greenhouse and Hammond's Landscaping Ltd.

It is recommended by the Operations & Facilities Executive Committee that the Town approve the purchase of 5292 dozen flowers from Hammonds Landscaping Ltd. at a cost of \$19,262.88 (taxes extra) or \$3.70 (taxes extra) per dozen for the 2016 season prior to the 2016 operating budget being finalized.

Respectfully submitted,
Operations & Facilities Division

A handwritten signature in cursive script that reads "Doug Brown".

Doug Brown, P. Eng.
Manager Operations & Facilities

Council approval of this report will authorize Administration to purchase 5292 dozen flowers from Hammonds Landscaping at a cost of \$19,262.88 (taxes extra).

2015OctFlowers2016

	Vista	Silverberry	20	\$3.64	\$72.80	\$12.00	\$240.00
		White	12	\$3.64	\$43.68	\$12.00	\$144.00
		Blue	12	\$3.64	\$43.68	\$12.00	\$144.00
		Red	20	\$3.64	\$72.80	\$12.00	\$240.00
		Citrus	12	\$3.64	\$43.68	\$12.00	\$144.00
		Bordeaux	12	\$3.64	\$43.68	\$12.00	\$144.00
		Raspberry Blast	10	\$3.64	\$36.40	\$12.00	\$120.00
		Fuchsia	10	\$3.64	\$36.40	\$12.00	\$120.00
		Bubble Gum	10	\$3.64	\$36.40	\$12.00	\$120.00
s							
		Blackberry Punch	10	\$3.64	\$36.40	\$12.00	\$120.00
		Cherry Blossom	10	\$3.64	\$36.40	\$12.00	\$120.00
		White	20	\$3.64	\$72.80	\$12.00	\$240.00
		Lemon Slice	10	\$3.64	\$36.40	\$12.00	\$120.00
		Sweet Tart	10	\$3.64	\$36.40	\$12.00	\$120.00
ons- snapshots							
	Montego	mix	2000	\$3.64	\$7,280.00	\$4.00	\$8,000.00
	Montego	Red	500	\$3.64	\$1,820.00	\$4.00	\$2,000.00
	Montego	orange bicolour	285	\$3.64	\$1,037.40	\$4.00	\$1,140.00
	Montego	rose bicolour	285	\$3.64	\$1,037.40	\$4.00	\$1,140.00
	Montego	Sunset	500	\$3.64	\$1,820.00	\$4.00	\$2,000.00
	Twinny Series	mix	16	\$3.64	\$58.24	\$4.00	\$64.00
	Aztec	Dark Red	2	\$3.64	\$7.28	\$12.00	\$24.00
		White	2	\$3.64	\$7.28	\$12.00	\$24.00
e Pansy	Spring Matrix	tricolour mix	12	\$3.64	\$43.68	\$12.00	\$144.00
	Happy Trail	Mix	15	\$3.64	\$54.60	\$2.00	\$30.00
	Cutesy Mix	Mix	10	\$3.64	\$36.40	\$4.00	\$40.00
ter Flowers			25	\$3.64	\$91.00	\$12.00	\$300.00
ubtotal			5292		\$19,262.88		\$19,990.00
ST- 13%					\$2,504.17		\$2,598.00
Total					\$21,767.05		\$22,588.00
ost to Town					\$19,601.91		\$20,341.00
st per Dozen					\$3.70		\$3.84
der/flowerquotation/2016flower listing							

October 19, 2015

Report To: Mayor & Council

From: Doug Brown, Manager of Operations & Facilities

SUBJECT: September 2015 Drinking Water Systems Monthly Summary Report

Please find attached the September 2015 Summary Report on the drinking water systems, prepared by Randy White, Senior WTP Operator.

Your Administration recommends that Operations & Facilities Executive Committee accept the September 2015 report as presented.

Respectfully submitted,
Operations & Facilities Division



Doug Brown, P. Eng.
Manager of Operations & Facilities

<p>Council approval of this report will accept the September 2015 Drinking Water Systems Monthly Summary Report and approve the report prior to it being made available to the general public.</p>

c.c. – Doug Herr, Environmental & Facilities Supt.
Randy White, Senior WTP Operator

03CouncilwaterreportMarch 2015

September, 2015

**Monthly Summary Report
Water Systems**

**Prepared by: Randy White, ORO
Senior Water Treatment Plant Operator**

Dated: October 14 , 2015

1) **Introduction -**

This report contains the major maintenance activities and operational events that occurred during the month of September 2015 at the Water Treatment Plant - Water Works # 220000978 and the Airport Groundwater Well Water Works # 26002736. This information report has been prepared for Council to better understand how the water systems they own and operate are maintained on a monthly basis. Also, this report will assist Council as Directors of the Corporation in exercising its obligation to meet a reasonable Standard of Care as outlined in Section 19 of the Safe Drinking Water Act.

2) **Flow Data**

Water Treatment Plant: See attached spreadsheet. No flow data for Airport groundwater well.

3) **Microbiological (Health Related) Water Analysis– Main Water System # 220000978**

Water Treatment Plant (treated): 4 samples taken no adverse results

Water Treatment Plant (raw): 4 samples taken no adverse results

Water Distribution System: 16 samples taken where 25% of samples were tested for heterotrophic plate count HPC no adverse results

We take microbiological samples on a weekly basis, which includes 1 raw sample, 1 treated sample and 4 distribution samples. The 4 distribution samples are taken at different locations throughout the distribution system.

4) **Microbiological (Health Related) Water Analysis– Airport Groundwater Well # 26002736**

No samples taken.

The Airport has signs posted in the men's and women's washroom stating that the water has not been tested or treated for drinking purpose in accordance with the Health Protection and Promotion Act – Section 7 of the Small Drinking Water Systems Regulation, O. Reg. 318/08 (*Amended to Safe Drinking Water Act, 2002 - Section 6 of Ontario Regulation 252/05*). The operators do a visual inspection of the warning notices at a minimum of once per week to ensure that they are legible and comply with Ontario Regulation 318/08, Section 7(5).

**5) Free Available Chlorine Residual (FAC) – Main Water System –
220000978**

FAC residuals are taken at a minimum daily at both the Water Treatment Plant and within the Water Distribution System.

**6) Free Available Chlorine residual (FAC) – Airport Groundwater Well
System # 26002736**

Signs posted, exempt from testing.

7) Maintenance Activities at the WTP

- Sept. 03rd - cleaned the inline mixer.
- Sept. 03rd - calibrated alum pump.
- Sept. 03rd - cleaned the top and bottom tank on the poly unit.
- Sept. 03rd - cleaned the four (4) check valves on the poly unit.
- Sept 09th - calibrated dist chlorine analyzer.
- Sept 10th - took grab samples of the filters.
- Sept 14th - calibrated dist chlorine analyzer.
- Sept 11th - greased poly unit.
- Sept 15th - repaired compressor # 2.
- Sept 15th - changed oil and filters on compressor # 2.
- Sept 22nd - M.O.L. visit to plant
- Sept 23rd - calibrated dist chlorine analyzer.
- Sept 24th - cleaned the four (4) check valves on the poly unit.
- Sept 24th - cleaned the top and bottom tank on the poly unit.

8) **Water Complaints –**

- Poor Pressure – 0 complaint.
- Water quality – 0 complaints.

9) **Other Miscellaneous Information:**

Sept. 01st - Service repair samples at Acklands 2nd set.

Sept. 01st - did quarterly samples at the plant and water tower.

Sept. 02nd - took water samples at landfill site.

Sept. 03rd -Temp main samples on Nelson St.

Sept. 08th - took weekly routine bacteria samples.

Sept. 09th - took bacteria samples at Sunny Cove.

Sept. 14th - took weekly routine bacteria samples.

Sept. 15th -Lakeside here for computer upgrade.

Sept. 16th - Lakeside here for computer upgrade.

Sept. 17th - Lakeside here for computer upgrade.

Sept. 18th - Lakeside here for computer upgrade.

Sept. 21st - took weekly routine bacteria samples.

Sept. 18th - reviewed chlorine S.O.P. (Draft)

Sept. 28th - New main samples at Tim Horton's 1st set.

Sept. 28th - took weekly routine bacteria samples.

Sept. 29th - New main samples at Tim Horton's 2nd set.

Sept. 30th -Service repair at 1228 Emo Road.

10) In order to acknowledge that all levels of responsibility within the Corporation of the Town of Fort Frances have received and reviewed this monthly report, it is necessary to sign-off in the appropriate location below:

- Randy White, ORO, Senior WTP Operator: _____
- Doug Herr, Environmental & Facilities Supt.: _____
- Doug Brown, Manager of Operations & Facilities: _____
- Mark McCaig, CAO: _____
- Paul Ryan, Chair O& F Exec Committee: _____
- Roy Avis, Mayor: _____
- John Albanese, Councillor: _____
- June Caul, Councillor: _____
- Wendy Brunetta, Councillor: _____
- Doug Kitowski, Councillor: _____
- Ken Perry, Councillor: _____

Note: Once all signatures have been obtained, the report will be distributed and made available to the public. If you have any questions, please feel free to contact myself or Randy White, Senior WTP Operator at 274-2325.

Flow Data	SEPTEMBER	Units	2013		2014		2015	
	Day of the		Day of the Month		Day of the Month		Day of the Month	
Total Raw Water	m ³		151120		142440		166270	
Raw Maximum Day	m ³	Saturday 07th	6390	Monday 01st	6270	Monday 14th	5810	
Raw Minimum Day	m ³	Saturday 21st	4370	Monday 29th	3290	Sunday 20th	5150	
Raw Average Daily Consumption	m ³		5040		4750		5450	
Total Treated Water	m ³		117050		106940		121920	
Treated Water Maximim Day Consumption	m ³	Sunday 08th	4390	Tuesday 16th	4700	Tuesday 29th	4590	
Treated Water Minimim Day Consumption	m ³	Saturday 21st	3310	Monday 22nd	3000	Monday 21st	3450	
Treated Water Average Day Consumption	m ³		3900		3560		4060	
Daily Average Per Household Consumption Rate	m ³		1.03		0.94		1.07	
* Daily Average Per Person Consumption Rate	m ³		0.49		0.45		0.51	
Monthly Averages - Operating Parameters WTP:								
FAC Residual - Treated Water	mg/L		1.81		1.72		2.18	
Total Chlorine Residual - Treated Water	mg/L		2.18		2.04		2.5	
Aluminum Sulphate - Raw Water	mg/L		34.0		36.8		35	
Aluminum Sulphate - Treated Water Residual	mg/L		0.06		0.04		0.02	
Fluoride - Treated Water	mg/L		0.58		0.62		0.55	
Soda Ash - Raw Water	mg/L		34.0		36.6		35	
PH - Adjusted	mg/L		7.15		7.25		7.25	
Temperature	C		19.3		16.8		18.8	
Quantity of Chemical Used:	kg							
Aluminum Sulphate	kg		5138.1		5246.1		5819.5	
Polyelectrolyte	kg		62.5		50		50	
Chlorine Gas	kg		475		653		796	
Soda Ash - Used for PH Adjustment	kg		5138.1		5210.9		5819.5	
Fluoride	kg		578		439		510	

- * The Canadian Average is 450 Litres (0.45 m³) per day.
- * Population is 7986
- * Number of Households is 3783

Operating Data	Units	*MAC	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total	Average
		or Range																																
Flow rates																																		
Raw Water	10^3 M^3	17	5.49	5.51	5.49	5.49	5.68	5.56	5.63	5.58	5.54	5.48	5.64	5.37	5.57	5.81	5.57	5.44	5.58	5.56	5.60	5.15	5.77	5.56	5.46	5.61	5.54	5.54	5.56	5.50	5.53	5.46	166.27	5.54
Peak Instantaneous - Raw Water	L/s	n/a	65.26	64.31	65.4	65.5	65.6	65.81	65.8	65.6	65.3	65.13	65.3	65.99	65	65.1	65.1		65.01	65	64.9	88.5	65.2	65	64.8	64.7	64.8	64.6	64.7	64.7	64.61	1912.07	65.93	
Treated Water	10^3 M^3	17	4.23	4.25	4.13	4.42	3.84	3.57	3.66	3.96	3.63	3.89	3.96	3.77	4.07	4.04	4.12	4.33	4.38	3.99	4.23	4.08	3.45	4.29	4.05	4.23	4.44	4.25	3.95	3.89	4.59	4.23	121.92	4.06
Peak Instantaneous - Treated Water	L/s	n/a	73.56	74.42		74.49	74.98	72.16	72.22	73.33	72.84	72.84	73.20	74.19	74.40	73.82	75.93	75.44		74.91	74.91	75.79		74.46	73.49	73.70	76.55	73.76	73.83	74.01	74.05	73.82	2001.10	74.11
BackWash Water	10^3 M^3	n/a	0.464	0.522	0.252	0.240	0.223	0.260	0.251	0.246	0.360		0.584	0.223	0.254	0.235	0.222	0.258	0.223	0.233	0.253	0.223		0.232	0.254	0.231	0.230	0.251	0.231	0.229	0.248	0.230	7.662	0.274
Fluoride Information																																		
Fluoride Residual - Treated Water	mg/l	0.5 to 0.8	0.53	0.51	0.66	0.54	0.53	0.53	0.58	0.52	0.54	0.56	0.56	0.56	0.56	0.52	0.50	0.51	0.54	0.55	0.52	0.53	0.53	0.55	0.52	0.52	0.54	0.57	0.56	0.57	0.64	0.53	16.38	0.55
Turbidity Information																																		
Raw Water	NTU	n/a	1.27	1.08	1.04	1.15	1.04	1.18	1.24	1.01	1.14	1.28	1.54	1.61	1.41	1.30	1.48	1.35	1.39	1.32	1.21	1.27	1.47	1.46	1.63	1.68	1.87	1.74	1.43	1.49	1.66	1.51	41.25	1.38
Settled Water	NTU	n/a	0.09	0.12	0.13	0.34	0.16	0.16	0.10	0.09	0.09	0.09	0.18	0.11	0.10	0.14	0.13	0.15	0.12	0.17	0.12	0.14	0.12	0.13	0.11	0.12	0.13	0.14	0.18	0.11	0.10	0.12	3.99	0.13
Treated Water	NTU	1	0.06	0.08	0.08	0.07	0.08	0.09	0.09	0.08	0.08	0.07	0.07	0.05	0.05	0.07	0.08	0.08	0.07	0.12	0.06	0.09	0.09	0.09	0.07	0.07	0.09	0.08	0.07	0.07	0.07	0.08	2.30	0.08
Other Operating Parameters																																		
pH - Treated Water	no units	6.5 to 8.5	7.17	7.12	7.31	7.34	7.36	7.16	7.10	7.39	7.31	7.36	7.38	7.32	7.32	7.27	7.36	7.36	7.25	7.22	7.17	7.12	7.24	7.23	7.18	7.28	7.15	7.24	7.19	7.21	7.23	7.27	217.61	7.25
pH - Settled water	no units	n/a	6.06	6.10	6.23	6.59	6.41	6.34	6.26	6.34	6.38	6.3	6.66	6.21	6.31	6.37	6.27	6.32	6.21	6.19	6.31	6.40	6.57	6.36	6.37	6.57	6.41	6.36	6.28	6.34	6.31	6.32	190.15	6.34
pH - Raw Water	no units	n/a	7.01	7.01	7.09	7.12	7.13	7.09	7.08	7.00	7.07	7.15	7.09	7.09	7.04	7.11	7.11	7.12	7.10	7.05	7.12	7.15	7.15	7.12	7.16	7.12	7.09	7.05	7.05	7.14	7.09	7.15	212.85	7.10
FAC - Treated Water	mg/l	0.2 to 4	2.16	2.26	2.17	2.14	1.97	1.68	1.82	2.0	2.06	2.02	2.14	2.22	2.34	2.20	2.19	2.19	2.06	2.00	2.50	2.20	2.34	2.20	2.17	2.30	2.28	2.32	2.26	2.28	2.38	2.48	65.35	2.18
Total Chlorine Residual Treated	mg/l	0.3 to 7	2.60	2.60	2.50	2.44	2.28	1.90	2.06	2.28	2.36	2.32	2.48	2.52	2.64	2.54	2.66	2.54	2.27	2.20	3.00	2.41	2.68	2.58	2.52	2.62	2.66	2.68	2.68	2.70	2.60	2.76	75.08	2.50
Temperature	C	15	19.0	19.0	20	21	22	22	21	21	21	19	19	19	19	19	19	19	19	19	18	18	18	18	18	17	16	18	18	17	16	16	565.0	18.8
Fluoride used (Total Daily Consumption)	kg	n/a	15.0	17.0	20.0	19.0	19.0	18.0	18.0	18.0	18.0	17.0	17.0	17.0	16.0	18.0	16.0	17.0	16.0	17.0	16.0	15.0	17.0	16.0	16.0	16.0	15.0	16.0	19.0	19.0	16.0	16.0	510.0	17.0
Chlorine used (Total Daily Consumption)	kg	n/a	26.0	27.0	26.0	26.0	27.0	26.0	29.0	28.0	27.0	27.0	26.0	27.0	28.0	28.0	26.0	26.0	26.0	26.0	27.0	24.0	28.0	26.0	26.0	25.0	27.0	26.0	26.0	27.0	26.0	796.0	26.5	
Soda ash (Total Daily Consumption)	kg	n/a	192.2	192.9	192.2	192.2	198.8	194.6	197.1	195.3	193.9	191.8	197.4	188.0	195.0	203.4	190.4	195.3	194.6	196.0	180.3	202.0	194.6	191.1	196.4	193.9	193.9	194.6	192.5	193.6	191.1	5819.5	5819.5	381.5
Soda Ash - Dosage	mg/l	n/a	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	1050.0	35.0	
Alum residual - (Total Daily Consumption)	kg	n/a	192.2	192.9	192.2	192.2	198.8	194.6	197.1	195.3	193.9	191.8	197.4	188.0	195.0	203.4	190.4	195.3	194.6	196.0	180.3	202.0	194.6	191.1	196.4	193.9	193.9	194.6	192.5	193.6	191.1	5819.5	5819.5	381.5
Alum residual - Dosage	mg/l	n/a	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	1050.0	35.0	
Alum residual - Treated Water	mg/l	0.1	0.04	0.03	0.02	0.02	0.01	0.02	0.02	0.01	0.02	0.02	0.01	0.04	0.02	0.01	0.04	0.04	0.03	0.04	0.03	0.02	0.02	0.02	0.03	0.02	0.03	0.02	0.01	0.03	0.02	0.05	0.74	0.02
Poly bags added (25 kg bags)	kg		0.5								0.5						0.5									0.5							50.0	