

TOWN OF FORT FRANCES

Operations and Facilities Executive Committee

AGENDA - May 22, 2019, 8:30 AM

MEETING - Civic Centre

Session #008

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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>	
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8. <u>Adjourn / Next Meeting Date</u>	

TOWN OF FORT FRANCES

MINUTES

SESSION NO. #007

April 17, 2019

The meeting of Operations & Facilities Executive Committee of the Town of Fort Frances was held in the Water Treatment Plant Control Room on April 17, 2019 from 8:30 a.m. to 9:40 a.m.

PRESENT: Chairperson Rick Wiedenhoeft - Councillor, Mike Behan - Councillor, John McTaggart - Councillor and Mayor June Caul

ALSO PRESENT: T. Rob, Manager of Operations & Facilities, D. Brown, CAO and Craig Miller, Environmental Superintendent (8:30 a.m. to 9:10 a.m.)

1 Call to Order

2 Disclosure of pecuniary interest and the general nature thereof

2.1 None

3 Approval of Previous Committee Minutes

3.1 Minutes from the previous meeting on April 3rd, 2019 - the minutes were approved as amended.

4 Non-agenda Items

4.1 None

5 Items Referred from Council

5.1 Request Dated March 28, 2019 from Sleepy Owl to erect a billboard on McIrvine Road - the administration report was approved as presented.

6 New Business

6.1 2019 Update to the Town of Fort Frances Drinking Water Quality Management System Operational Plan - the administration report was approved as presented.

6.2 Request for support - 2019 Fort Frances Canadian Bass Championship - the request was approved as recommended.

6.3 Capital Replacement of 2000 Sand Truck - the administration report was approved as recommended.

- 6.4 Replacement of Ice for Kids Condenser Prior to start of the Fall 2019 Ice Season - the administration report was approved as recommended.
- 6.5 Columbarium Purchase - the request to purchase a new columbarium was approved as recommended.

7 Information

8 Adjourn / Next Meeting Date

- 8.1 The meeting was adjourned at 9:40 a.m.

The next meeting date May 22, 2019

Executive Committee Chair

T. Rob, Manager of Operations & Facilities

May 22, 2019

Report To: Mayor and Council

From: Travis Rob, Manager of Operations and Facilities

RE: Letter RE: Placement of Recycle Container on Town Land

At the April 22, 2019 meeting of Council, a letter from Bill Michl of the Voyageur Lions Club was referred to the Operations and Facilities Executive Committee regarding the placement of an aluminum can collection container on Town property near the Sorting Gap Marina. This request has been reviewed by the members of the Operations and Facilities Division and the following concerns were brought forward:

1. This program provides funding for this particular community group however with the bin placed on Town property it may be seen as preferential treatment towards this group and set a precedent going forward.
2. The Town expends a great deal of money to provide a recycle depot and curbside blue box collection programs. This collection container is in direct competition with the Programs we offer funded through ratepayers.
3. The location proposed is utilized by the Fort Frances Bass Championship annually for kids events and this would impact that use.
4. The Town does not remove the snow from that parking lot off Front Street rendering this bin inaccessible through the entire winter.

It is the recommendation of the Operations and Facilities Executive Committee that the request to place a can recycling bin near the Sorting Gap Marina by the Voyageur Lions Club be denied.

Respectfully Submitted



Travis Rob, P.Eng

Council approval of this report will agree with the recommendation of the Operations and Facilities Executive Committee that the request to place a can recycling bin near the Sorting Gap Marina by the Voyageur Lions Club be denied.

Manager of Operations and Facilities

Administration & Finance Division
Planning & Development Division
Phone: 807-274-5323
Fax: 807-274-8479

Mailing Address for All Divisions:
Civic Centre
320 Portage Avenue
Fort Frances, ON
P9A 3P9



Operations & Facilities Division
Phone: 807-274-9893
Fax: 807-274-7360

Community Services Division
Phone 807-274-4561
Fax: 807-274-3799

email: town@fortfrances.com
www.fort-frances.com

April 23rd, 2019

Voyageur Lions Club
Attn: Mr. Bill Michl, Recycling Chair
344 Third Street West
Fort Frances, Ontario
P9A 3A7

Dear Sir:

At their meeting Monday April 22nd, 2019, Council referred the request from B. Michl, Recycling Chair - Voyageur Lions Club re: placement of a recycle bin in a location near the Marina on the LaVerendrye Parkway to the Operations and Facilities Executive Committee for recommendation.

By copy of this letter, your request has been referred as directed.

Please direct any questions you may have to T. Rob, Manager Operations and Facilities, at 274-9893 ext.1316.

Yours very truly,

ADMINISTRATION & FINANCE DIVISION



Elizabeth (Lisa) Slomke, Clerk

ES/kl

c.c. T. Rob, Manager Operations & Facilities

April 5, 2019

Travis Rob
Town of Fort Frances

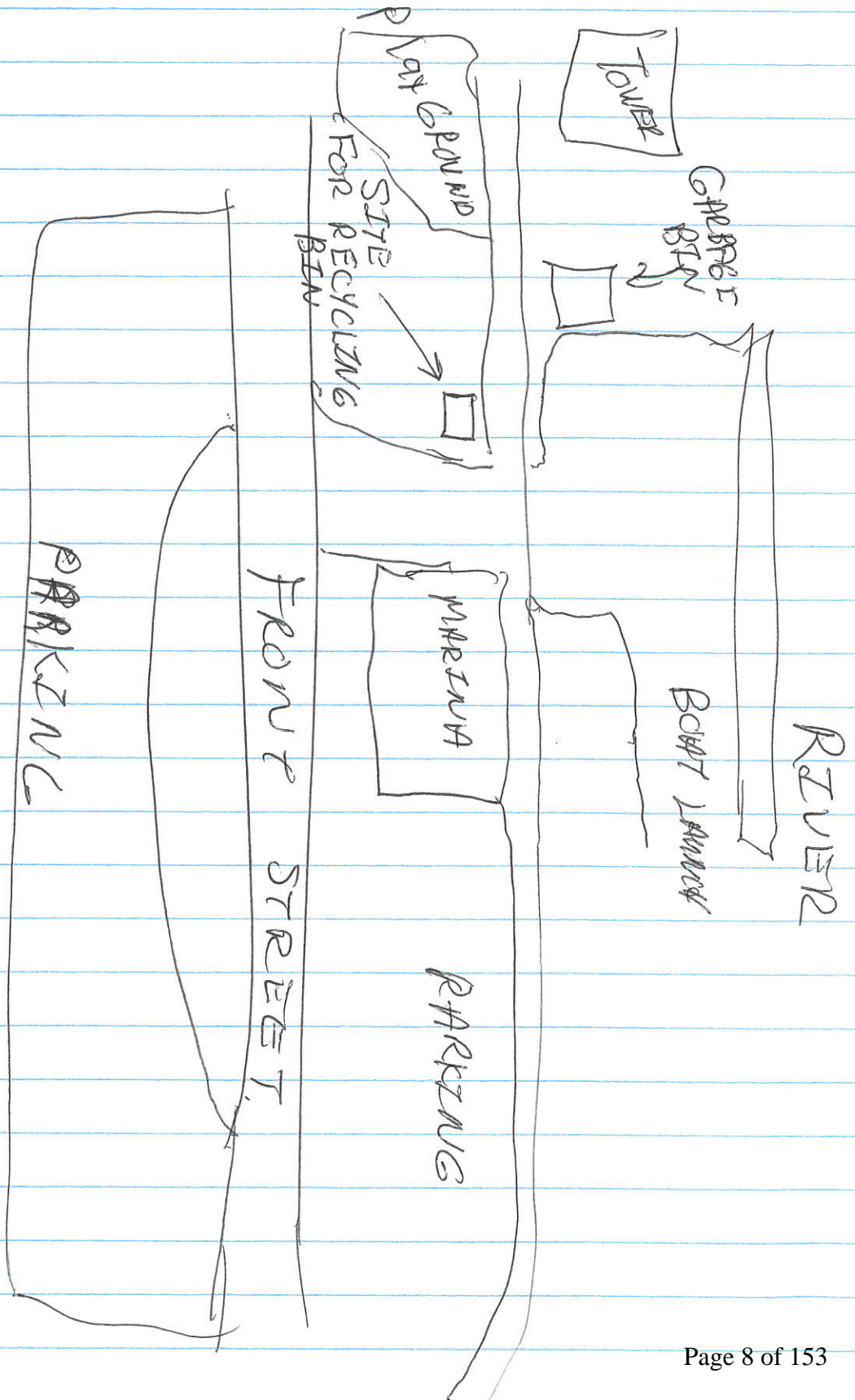
Dear Travis:

Attached to this letter is a map of where the Voyageur Lions would like to place one of our recycle bins. By placing it in this location people walking along The LaVerendrye Parkway, those launching and taking their boats out, and those driving by the Marina can access it.

Thank you very much for your consideration in this matter.

Sincerely

Bill Michl
Recycling Chair
Voyageur Lions Club



May 22, 2019

Report To: Mayor and Council

From: Travis Rob, Manager of Operations and Facilities

RE: Butler Avenue Driveway Request

At the April 22, 2019 meeting of council, a letter from Wes Dirk of 315 Butler Avenue was referred to the Operations and Facilities Executive Committee regarding his driveway on Butler Avenue, specifically the fact that the curb had heaved over time causing a substantial lip at the driveway.

This type of situation can be caused by a number of situations, shallow storm sewer pipe being heaved by frost, high groundwater table causing differential settlement between the curb and roadway or substandard road base preparation causing differential settlement to name a few. This situation will often rapidly progress once it has started as the heave in the curb causes drainage issues as the water can not get to the catchbasins until it pools sufficiently on the roadway to get into the gutter. This standing water contributes to the deterioration of the road surface and contributed to further curb heaving. This situation has happened throughout town and the practice has been, in the past, to ramp the curb lip in front of the driveway with cold mix asphalt as a temporary fix until the roadway can be reconstructed.

These types of situations are typically handled through the complaint process and in this case, was addressed with cold mix asphalt shortly after receiving the letter. Because of this there is no further action to take.

Respectfully Submitted



Travis Rob, P.Eng

Council approval of this report is not required as the issue has been addressed.

Manager of Operations and Facilities

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Planning & Development Division
Phone: 807-274-5323
Fax: 807-274-8479

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Community Services Division
Phone 807-274-4561
Fax: 807-274-3799

email: town@fortfrances.com
www.fort-frances.com

April 23rd, 2019

Mr. Wes Dirk
315 Butler Avenue
Fort Frances, Ontario
P9A 2N8

Dear Sir:

At their meeting Monday April 22nd, 2019, Council referred the request from W. Dirk re: Issues with driveway at 315 Butler Avenue to Operations and Facilities Executive Committee for recommendation.

By copy of this letter, your request has been referred as directed.

Please direct any questions you may have to T. Rob, Manager Operations and Facilities, at 274-9893 ext.1316.

Yours very truly,

ADMINISTRATION & FINANCE DIVISION

Elizabeth (Lisa) Slomke, Clerk

ES/kl

c.c. T. Rob, Manager Operations & Facilities

~~10/19~~

Mayor and Town Council
Fort Frances, Ont.



April 10/19

I live on the 300 block of Butler Ave. and was wondering why the pavement to the curb on the West side of the road is so much lower than on the East side of the street. The drain on the West side corner of Butler and Church streets is up higher. Therefore, we have water standing in front of our houses for ever, it seems. So bad, that you need rubber boots to get in and out of your yard and onto the street.

I wrote a similar letter like this a couple years back, but?? The drop between the pavement and the curb was so bad that I am convinced that is why I had to replace upper and lower balljoints on both sides of my truck. I tried smoothing the entrance to my driveway myself by buying bags of some kind of driveway repair material from Kaun's, but after \$50.00, it still didn't seem to do that much.

I've noticed that there are some driveways on Butler Ave, especially on the 400 block, that have been repaired with what appears to be actual asphalt type of material. I suspect that it was the town that did this at some point in time. Is there any chance that I could at least have the entrance to my driveway filled in with whatever was used. The ones that have it done are able to walk onto the street without being in such deep water. Sure, there is water on both sides of their driveway, but at least they can get out without rubber boots. We wouldn't be blocking water to the drain, as I mentioned before, the drain is too high. The water has to evaporate anyway.

Yes, we do live in probably the oldest part in town, so maybe our whole street should be looked at. Parking for the day care center people, or the bass tournament and the parade parking is notorius on tires the way the curbs are.

Also, I don't understand all the dips in the streets where there was digging to repair water lines, or whatever, throughout town. Is it paved over prematurely maybe? On our 300 block of Butler Ave. there is a dip so bad that I witnessed a boat coming from the marina with a 200 hp motor on it, not speeding, but when he went over that dip you could hear the clanging and it couldn't have been good for his transom.

For now, I would be happy to at least have some asphalt or whatever you use to build up the pavement to my driveway. I don't plan to spend any more money on it myself.

Thankyou,
Wes Dirk
315 Butler Ave.

May 22, 2019

Report To: Mayor and Council

From: Travis Rob, Manager of Operations and Facilities

RE: Letter dated April 29, 2019 from Audrey Livingstone – RE: Sidewalk Damage

In the summer of 2017 during the construction of Ms. Livingstone's house on Williams Avenue the sidewalk fronting her property was severely damaged, pictures attached. In the fall of 2018 the Town assessed the sidewalks and issued letters to two property owners outlining the extent of the sidewalk replacement that would be required to address the damage and that it would be at the property owners' expense.

In the case of Ms. Livingstone the damage was a total of 14.91m of sidewalk estimated at \$1878.66, see attached letter. Upon review this spring it became more apparent that one of the cracks is likely from service settlement and would be discounted from the total amount. The sidewalks installed on Williams Avenue in 2013 were installed in the same manner as all other concrete sidewalks in the Town of Fort Frances and many other municipalities. In addition, it was not only new sidewalk that was damaged, but old sidewalk. Given that 4 dwellings were constructed along that block with only 2 causing damage to the sidewalk, shows that proper care was not given to working around Town infrastructure. In the past a policy was put in place for Contractors working in the Town Right of Way as a result of careless contractors needlessly damaging infrastructure. Regardless of what the infrastructure is that is damaged, when or how it is always the property owner's responsibility to pay for the repair/replacement of that infrastructure.

The Town will endeavour to replace the effected sidewalk in the most cost-effective manner possible and invoice the property owners at the completion of the works.

It is the recommendation of the Operations and Facilities Executive Committee that the letter dated April 29, 2019 from Audrey Livingstone regarding sidewalk damage be received and the damaged sidewalk be replaced at the property owners' expense as standard practice.

Respectfully Submitted



Travis Rob, P.Eng

Council approval of this report will agree with the recommendation of the Operations and Facilities Executive Committee that the letter dated April 29, 2019 from Audrey Livingstone regarding sidewalk damage be received and the damaged sidewalk be replaced at the property owners' expense as standard practice.

Manager of Operations and Facilities

April 29, 2019.

Audrey Livingstone
838 Williams Avenue
Fort Frances, ON P9A 0A5

Town of Fort Frances.

Attention:

June Caul, Mayor

✓ Travis Rob, Manager of Operations and Facilities
Milt Strachan, Transportation Superintendent.

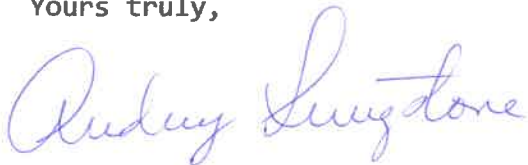
Subsequent to your letter dated September 6, 2018, I met with Travis Rob to review my concerns regarding the sidewalk damage. He agreed that one slab was unrelated to construction damage and that the 14.91 meters would be reduced appropriately.

I expressed my concern that the Township sold me the property as a building site. I purchased the property in good faith that the construction vehicles would be able to access the property. I have reviewed the Government of Canada Construction Technology Updates for Best Practices for Concrete Sidewalk Construction, June, 2002. The guidelines identify that the use of steel reinforcement in sidewalks that traverse driveways is recommended. The Town had replaced sidewalks after tearing down the school with full knowledge they would be selling building lots. I feel that the Town did not practice due diligence and transparency by not informing me that the sidewalks you installed were not adequately reinforced for construction vehicles. It is noted on the building permit that I am responsible for the cost of the private crossing. I also acknowledge on my contract of purchase that the responsibility for infrastructure damage is noted, but the construction contractor does not see that document.

I think your practice of using minimal standard for not vehicular sidewalks should be taken into consideration when calculating my share of the cost of the replacement sidewalk.

Please note I will be installing interlocking brick for the apron after the sidewalks are replaced.

Yours truly,



Audrey Livingstone



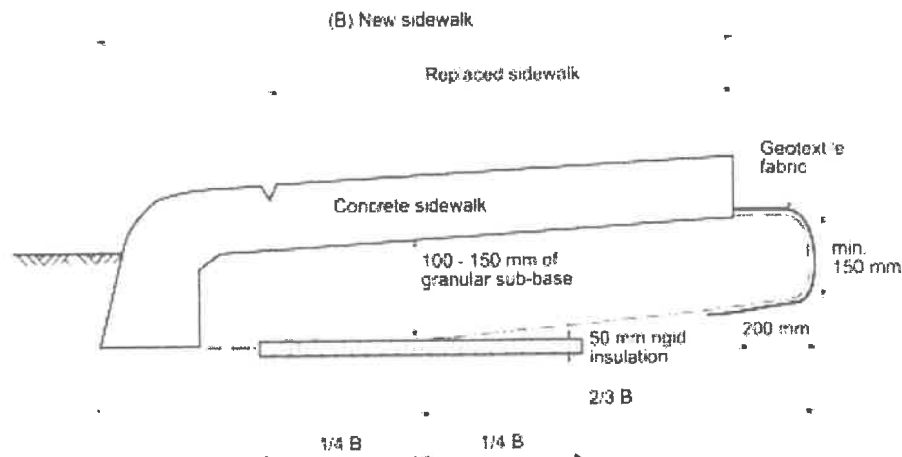


Figure 3. Typical cross-section of sidewalk with rigid insulation-enhanced sub-base.

Most concrete sidewalks in Canada are constructed without using steel reinforcement. In fact, deformation, the main cause of concrete failure, cannot be effectively eliminated through reinforcement.² For this reason, best practices do not call for reinforcement.

However, sidewalks that traverse driveway entrances will experience normal vehicle loads and occasional truck loads. It is preferable to use steel reinforcement mesh for these locations. Far greater benefits can be realized through stricter attention to the subgrade preparation.

The general practices of good concrete construction that apply to floor slabs³ also apply to sidewalks and can be summarized as follows:

1. **Formwork:** Forms should be straight, free from warping, and strong enough to resist the lateral pressure of the concrete. A form release agent should be applied to ease stripping. (Formwork is not required for sidewalks constructed using the extrusion process.)
2. **Concrete placement:** Concrete should be placed continuously as close as possible to its final position and be consolidated.
3. **Finishing:** After the concrete is levelled, the desired surface finish is applied and should be protected from damage during the curing period.
4. **Curing:** Curing has a significant influence on the wear resistance of the surface. The type of curing required is determined by weather conditions as follows:

Joints

Administration & Finance Division
Planning & Development Division
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320 Portage Avenue
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Operations & Facilities Division
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Community Service Division
Phone: (807)274-4561
Fax: (807)274-3799

Email: town@fortfrances.ca
www.fortfrances.ca

September 6, 2018

Audrey Livingstone
838 Williams Avenue
Fort Frances, ON
P9A 0A5

Dear Ms. Livingstone

The Town of Fort Frances wishes to advise that during the recent construction of your new single detached dwelling at 838 Williams Avenue, 14.91m of Town owned sidewalk fronting your property was damaged. The replacement of this sidewalk will be at the cost of the property owner, whereby the Town plans to utilize the concrete subcontractors hired during road reconstruction works. The intent is to have this sidewalk replaced in the fall of 2019 at the lowest tendered price for that year which will be billed to the property owner plus a 10% administration fee.

For example, the cost to remove and replace 14.91m of concrete sidewalk at the 2018 tender price would be \$1878.66 plus applicable taxes and administration fees.

In addition, you will require a private crossing at Williams Avenue to be installed by the Town of Fort Frances at the Town of Fort Frances User Fee Rate. This work is to be orchestrated at your earliest convenience with Milt Strachan, Transportation Superintendent by calling (807)274-9893.

Sincerely,

Travis Rob, P.Eng.
Manager of Operations and Facilities
Town of Fort Frances

CC:
Milt Strachan, Transportation Superintendent
Property File







<i>The Town of Fort Frances</i>	SECTION Operations & Facilities
CONTRACTOR' S / PROPERTY OWNER' S PROCEDURE FOR WORKING WITHIN THE TOWN' S RIGHT-OF-WAY POLICY	REVISED October 2004
Resolution No. Consent (10/04)	Supercedes Resolution No.
Policy Number 4.14	PAGE 1 of 5

1. PURPOSE:

As a result of damage occurring on a regular basis to public property and municipal infrastructure, the Town has established a work procedure for construction contractors/citizens to follow when performing work on the Town's right-of-way.

2. RESPONSIBILITY:

All individuals in the workforce, at all levels and functions, are responsible for understanding and carrying out the responsibilities and duties outlined in this procedure. Also the construction/building contractors/property owners who has requested permission to complete work within the Town's right-of-way.

3. PROCEDURE:

A. GENERAL:

- i. The contractor/property owner will initially contact the Planning & Development Division to obtain a house moving permit and/or building permit.
- ii. Prior to the Chief Building Official or designate issuing the requested permit, a copy of permission form must be completed in conjunction with personnel from the Engineering Department of the Operations & Facilities Division.
- iii. The contractor will submit a work plan with the following information; drawing showing the exact route, what portion of the right-of-way will be affected by the work, what equipment will be used to complete the work and when the work will be performed.
- iv. The contractor's representative and the Town's representative will visually inspect the Town's right-of-way and municipal infrastructure to determine the state or condition prior to commencing the work.
- v. If any tracked pieces of equipment are to be utilized on the Town's right-of-way, the personnel from the Engineering Department of the Operations & Facilities Division will take digital pictures prior to any work commencing.

- vi. The contractor will make every effort to protect public property and municipal infrastructure.
- vii. The Chief Building Official or his designate will collect a deposit of \$1,000 from the contractor and once personnel from the Engineering Department of the Operations & Facilities Division have authorized the permission form, the Chief Building Official or his designate will issue the appropriate permit. At this stage the contractor has been given authorization to complete the work.
- viii. Contractor to notify Town when work is complete, the Town's representative and the contractor's representative will complete a post-inspection of the work area as outlined in the contractor's submitted work plan.
- ix. If damage of municipal infrastructure has occurred, the Town's representative will take pictures of the damages immediately. The Town's workforce at the expense of the Contractor will repair the damages.
- x. Once the repairs are completed, the contractor will be invoiced for the repairs. The \$ 1,000 deposit will be used to offset the costs for the repairs. If the repairs are less than \$ 1,000, the contractor will be refunded the balance.
- xi. If no damage has occurred, the Town's representative will complete the section of the permission form indicating the work was completed without destroying or damaging any municipal infrastructure.

**Permission Agreement for Contractors
To Perform Work
On the Town of Fort Frances Right-Of-Way**

The contractor/property owner when performing work on the Town of Fort Frances right-of-way will adhere to the following terms and conditions;

- 1) **Road & Traffic Control** –
 - A. Traffic control shall be in accordance with Book 7 of the Ontario Traffic Manual (OTM).
 - B. Provide and maintain temporary service roads for the Work to ensure safe, convenient and adequate access. Provide access for emergency vehicles at all times. Provide and maintain sidewalk crossings, ramps, and construction runways as required for access to the Work.
 - C. When public thoroughfares are to be closed, or traffic restricted, notify the affected residents, the road authority, the Fire Department, the Ontario Provincial Police, Ambulance Services and School Board if bus route is affected, giving at least seven days notice of the closing or restriction.
 - D. Close thoroughfares or restrict normal traffic flow only with the consent of the authorities having jurisdiction, and in accordance with their requirements.
- 2) **Occupational Health & Safety** – Shall not hold the Corporation of the Town of Fort Frances responsible for any violations committed under the Occupational Health and Safety Act and that all work performed under the Permission Agreement shall be in conformity with the Occupational Health and Safety Act, and, the safety standards and policies of local authorities. All persons working within the Town's right-of-way as outlined in the submitted work plan shall be required to wear personal safety equipment at all times.

The employees, agents or representatives of the contractor within the Town's right-of-way as outlined in the submitted work plan will be versed with the requirements of the Act. These personnel are knowledgeable in the safety procedures required during the performance of the work.

- 3) **Mandatory Inspections** – Shall adhere to the terms and conditions as outlined in the Town of Fort Frances policy No. 5.1 for contractors when performing work with the Town's right-of-way. Two (2) mandatory inspections are required; Pre-work and Post-work inspection.
- 4) **Work Plan** – Shall submit a work plan prior to starting any work within the Town's right-of-way and as outlined in the Town of Fort Frances policy No. 5.1 for contractors when performing work with the Town's right-of-way
- 5) **Damage Deposit** – Shall provide the Corporation of the Town of Fort Frances with a certified cheque or money order or cash in the amount of \$ 1,000.00. This deposit will be given directly to the Chief Building Official as outlined in the Town's policy No. 5.1 for contractors performing work within the Town's right-of-way.
- 6) **Cost of Damage to Public Property** – Shall be responsible for all costs associated with damages to public property and municipal infrastructure on the Town's right-of-way as result of performing the work as outlined in the submitted work plan.
- 7) **WSIB Clearance Certificate** – Shall provide the Town with a current copy of the WSIB clearance certificate prior to commencing any work. This clearance certificate with be forwarded to personnel within the Engineering Department of the Operations & Facilities Division.
- 8) **Insurance** – Shall provide and maintain a comprehensive policy of public liability and property damage insurance in the amount of not less than \$ 5,000,000 inclusive per occurrence. A certificate of insurance will be forwarded to personnel within the Engineering Department of the Operations & Facilities Division prior to commencing any work.

I, _____, contractor's representative of the contractor company: _____
: _____ agree to the terms and conditions as stipulated in the Permission
Agreement and as outlined in the Town of Fort Frances Policy No. 5.1 – Contractor's Procedure for
Working Within the Town's Right-of-Way.

Contractor's Representative

Date

Witness

Date

Pre-Work Inspection

I, _____ of the Operations & Facilities Division, have reviewed the submitted work plan, WSIB clearance certificate, insurance certificate and have completed a pre-work inspection with the contractor's representative _____ on _____, 20__ and give my consent that _____ can commence the work once the appropriate permit is issued by the Chief Building Official.

Authorization to Contractor to Commence the Work

I, _____, Chief Building Official have received the damage deposit in the amount of \$ 1,000 and grant permission to _____ - to complete the work within the Town's right-of-way in accordance with the submitted work plan.

Post-Work Inspection – Complete Section A or B**Section A - Without Any Damages to Public Property**

I, _____, of the Operations & Facilities Division have completed a post-work inspection of the Town's right-of-way on _____, 20__ with _____ the Contractor's representative and that no damages have occurred to public property or municipal infrastructure within the Town's right-of-way as outlined in the submitted work plan. The damage deposit will be returned to contractor, once this completed permission form is received by the Chief Building Official.

Section B - With Damages to Public Property

I, _____ of the Operations & Facilities Division have completed a post-work inspection of the Town's right-of-way on _____, 20__ with _____, the contractor's representative where both parties agree that the following damage has occurred;

- A) _____
- B) _____
- C) _____
- D) _____

And that once the repairs are completed, the Town will invoice the contractor for the costs.

Town's representative: _____

Date: _____

Witness: _____

Date: _____

Contractor's representative: _____

Date: _____

Witness: _____

Date: _____

May 22, 2019

Report To: Mayor and Council

From: Travis Rob, Manager of Operations and Facilities

RE: Entering into an alternate locate agreement with Union Gas

The regulator surrounding working around buried utilities, particularly natural gas pipelines is the Technical Standards Safety Authority (TSSA) and they have tightened the regulations around excavating by means of hydro-vac to require locates prior to any work being completed. The town utilizes our hydro-vac truck extensively for making repairs to buried infrastructure in emergency situations or when the repair can be quickly completed with minimum disruption to the surrounding ground. The benefit to this method is that, historically, it could be completed without having to wait the seven days to obtain locates.

With a change in the regulation, that is no longer the situation. Union Gas has, however, worked with TSSA to develop an agreement that can be struck between the utility and an excavator such as the town so that instead of calling for locates 7 days in advance, we can call in and get immediate clearance to utilize our hydro-vac excavation equipment to complete excavations works when required.

Attached to this report is a copy of the Alternate Locate Agreement to be executed with Union Gas. In addition, this agreement will be sent to Bell and Hydro 1 from Union Gas to include those parties on it, and the Town will forward it to Fort Frances Power Corporation, Shaw and Tbaytel to ensure that going forward the Town is covered when completing Hydro-vac excavations.

It is the recommendation of the Operations and Facilities Executive Committee that the Town enter into an Alternative Locate Agreement with Union Gas and further that a By-Law be prepared authorizing Mayor and Clerk to execute the agreement on the Town's behalf.

Respectfully Submitted



Travis Rob, P.Eng

Council approval of this report will agree with the recommendation of the Operations and Facilities Executive Committee that the Town enter into an Alternative Locate Agreement with Union Gas and further that a By-Law be prepared authorizing Mayor and Clerk to execute the agreement on the Town's behalf.

Manager of Operations and Facilities

ALTERNATE LOCATE AGREEMENT

Between: Enbridge Gas Inc. (hereinafter called "EGI")
500 Consumers Road, Toronto, ON M2J 1P8
Attention: Manager Damage Prevention
Facsimile: 416-495-5128

With a copy to: Law Department
Facsimile: 416-495-5994

**Contact Telephone Number in the event EGI Underground Plant is
discovered or encountered: 1-866-922-3622**

And: _____ (hereinafter called the
"Contractor")

(Full Corporate Name)

Address

City, Province

Postal Code

WHEREAS:

1. The Contractor plans to undertake excavation work from time to time as further described in Schedule "A" attached hereto.
2. The Contractor has requested EGI to provide an alternate locate for such work.
3. EGI has agreed to grant an alternate locate, solely for such work, on the terms and conditions as further described in this Agreement.

NOW THEREFORE, in consideration of the premises, the mutual covenants contained in this Agreement and other consideration (the receipt and sufficiency of which are acknowledged), EGI and the Contractor agree as follows:

1. The Contractor shall perform the excavation work described in Schedule "A" attached hereto (the "Allowable Work") and use the Ontario One Call Contractor Alternate Locate ID number in accordance with the terms and conditions set forth in this Agreement, including without limitation the additional terms and conditions pertaining to the Allowable Work set out in Schedule "A".
2. The Terms and Conditions and Schedule "A" attached hereto form part of this Agreement and are binding upon the parties hereto and shall supersede and be unaffected by all other terms and conditions made or issued by the Contractor in relation to the Allowable Work.

Ontario One Call Contractor Alternate Locate ID:

In Witness Whereof the parties hereto have executed this Agreement.

Dated the _____ day of _____, 2019

Contractor (Full Corporate Name)

By:

Signature

Name (to be printed) and
Title

By:

Signature

Name (to be printed) and
Title

Enbridge Gas Inc.

By:

Chris Van Daele
Supervisor Distribution Protection

Name (to be printed) and
Title

By:

Michael McGiverty
Manager Distribution Protection

Name (to be printed) and
Title

I/We have authority to bind the Corporation.

C. Van Daele
M. McGiverty

May 22, 2019

Report To: Mayor and Council

From: Travis Rob, Manager of Operations and Facilities

RE: Municipal Asset Management Program Agreement

In the spring of 2018 the Town applied to the Municipal Asset Management Program Fund through the Federation of Canadian Municipalities to fund some asset condition assessment activities to help with the updating of the Town's Asset Management Plan. The application was to fund zoom camera inspections of certain storm sewer lines as well as some computer hardware to assist in the asset data collection and condition assessment program within the Town's facilities.

In late in September of 2018 the Town was notified that it was successful in receiving funding from the MAMP program totalling \$33,200.00 for the works, however at that point it was too late in the year to be able to tender and assess the infrastructure. From September to May, we urged FCM to get us a funding agreement to prevent further delays in the completion of the works. The program allows only 11 months to complete all works, however we were able to adjust our program start date to June 1 2019 due to delays in getting a funding agreement in place.

Attached to this report you will find a funding agreement between the Town of Fort Frances and the Federation of Canadian Municipalities for asset condition assessment work under the Municipal Asset Management Program. It is the recommendation of the Operations and Facilities Executive Committee to approve entering into a funding agreement with FCM for funding under the Municipal Asset Management Program and further that an authorizing by-law be prepared authorizing the Mayor and Clerk to execute the funding agreement on behalf of the corporation.

Respectfully Submitted



Travis Rob, P.Eng

Council approval of this report will agree with the recommendation of the Operations and Facilities Executive Committee to approve entering into a funding agreement with FCM for funding under the Municipal Asset Management Program and further that an authorizing by-law be prepared authorizing the Mayor and Clerk to execute the funding agreement on behalf of the corporation.

Manager of Operations and Facilities

GRANT AGREEMENT

THIS AGREEMENT is effective as of the date of last signature on the signature page.

BETWEEN:

THE CORPORATION OF THE TOWN OF FORT FRANCES

(herein called "**Recipient**")

-and-

FEDERATION OF CANADIAN MUNICIPALITIES

(herein called "**FCM**")

WHEREAS:

- (a) the Government of Canada and FCM have established the Municipal Asset Management Program (herein called **MAMP**);
- (b) the Government of Canada has funded the Municipal Asset Management Program, which is being administered by FCM;
- (c) FCM has agreed to provide the Recipient with a grant for use by the Recipient solely for the project described in this Agreement; and
- (d) this Agreement contains the terms for the administration and remittance of the grant by FCM to the Recipient and the use of the grant by the Recipient.

NOW THEREFORE, the Parties hereby agree as follows:

ARTICLE 1 DEFINITIONS AND SCHEDULES

1.01 Definitions. Whenever used in this Agreement and unless the context otherwise requires, the following terms have the following meanings:

"Agreement" means this agreement, including all schedules, and all amendments or restatements as permitted;

"Business Day" means any day other than a Saturday, Sunday or statutory holidays in the Province of Ontario;

"Claim" has the meaning ascribed thereto in Section 13.01 of this Agreement;

"Confidential Information" has the meaning ascribed thereto in Section 11.01 of this Agreement.

"Eligible Activities" means any reasonable activities necessary to complete the Project as described in Part 2 of Schedule A attached hereto.

"Eligible Expenditure Date" has the meaning ascribed thereto in Part 4 of Schedule C attached hereto;

"Eligible Expenditures" means those permitted expenditures described in Part 4 of Schedule C attached hereto, for which the Recipient may use the Grant;

"Grant" means the grant set forth in Article 2;

“Grant Amount” means the amount to be disbursed by FCM on account of the Grant up to the maximum amount set forth in Part 1 of Schedule B attached hereto;

“Indemnified Parties” has the meaning ascribed thereto in Section 13.01 of this Agreement;

“Parties” means FCM and the Recipient, and **“Party”** refers to any one of them;

“Project” means the project described in Part 2 of Schedule A attached hereto;

“Project End Date” has the meaning ascribed thereto in Part 2 of Schedule A attached hereto; and

“Project Start Date” has the meaning ascribed thereto in Part 2 of Schedule A attached hereto;

“Receiving Party” has the meaning ascribed thereto in Section 11.01 of this Agreement.

1.02 Schedules. The following annexed Schedules form part of this Agreement and the Parties shall comply with all terms and conditions set-out therein:

Schedule A: Part 1: Conditions of Contribution
Part 2: Description of Project, Statement of Work and Project Expenditures
Part 3: Reporting Requirements and Project Deliverables

Schedule B: Part 1: Grant Amount
Part 2: Particulars of the Sources of Funding
Part 3: Payment Schedule/Period of Funding

Schedule C: Part 1: Request for Contribution, Letter of Attestation and Expense Claim
Part 2: Completion Report Templates
Part 3: Accepted Practices
Part 4: Eligible Expenditures

Schedule D: Contact Information

ARTICLE 2 THE GRANT

2.01 Grant Purpose. FCM is providing the Grant to the Recipient for the sole purpose of assisting the Recipient in the performance of the Project, as described in Part 2 of Schedule A attached hereto.

2.02 Grant Amount. Subject to and in accordance with the terms and conditions of this Agreement and in reliance upon the representations, warranties and covenants of the Recipient hereinafter set forth, FCM agrees to contribute towards the Eligible Expenditures, the Grant Amount, as more particularly described in Part 1 of Schedule B attached hereto.

2.03 Disbursement of Grant.

- (a) FCM shall disburse the Grant in accordance with Part 3 of Schedule B attached hereto.
- (b) No portion of the Grant shall be disbursed by FCM without it first receiving from the Recipient a completed Request for Contribution in accordance with Part 1 of Schedule C attached hereto.
- (c) Provided that the Conditions of Contribution set-out in Part 1 of Schedule A attached hereto are satisfied, the Recipient may request the Grant by delivering to FCM the appropriate Request for Contribution in accordance with Part 1 of Schedule C attached hereto at least

30 days before the requested date of disbursement; the requested date of disbursement may be delayed if the Request for Contribution delivered by the Recipient to FCM is not, in FCM's sole discretion, satisfactory and revisions or supplemental documentation are required.

- 2.04 Term. This Agreement shall continue in force until FCM has received and notified the Recipient of its satisfaction with all reports required to be completed by the Recipient in accordance with the terms and conditions of this Agreement, or until the Agreement has been terminated in accordance with Section 12.01, whichever shall first occur.

ARTICLE 3 CONDITIONS OF CONTRIBUTION

- 3.01 Conditions of Contribution. Subject to Section 2.03, the obligation of FCM to disburse the Grant to the Recipient is conditional upon the Recipient satisfying the conditions set-out in Part 1 of Schedule A attached hereto, to the satisfaction of FCM.

ARTICLE 4 REPRESENTATIONS AND WARRANTIES

- 4.01 Representations and Warranties. The Recipient represents and warrants that:
- (a) it is duly established under the laws of the Province of Ontario and has the legal power and authority to enter into, and perform its obligations under this Agreement and the Project;
 - (b) this Agreement has been duly authorized and executed by it and constitutes a valid and binding obligation of it, enforceable against it in accordance with its terms;
 - (c) neither the making of this Agreement nor the compliance with its terms and the terms of the Project will conflict with or result in the breach of any of the terms, conditions or provisions of, or constitute a default under any indenture, debenture, agreement or other instrument or arrangement to which the Recipient is a party or by which it is bound, or violate any of the terms or provisions of the Recipient's constating documents or any license, approval, consent, judgment, decree or order or any statute, rule or regulation applicable to the Recipient;
 - (d) no litigation, arbitration or administrative proceedings are current or pending or have been threatened, and so far as the Recipient is aware no claim has been made, which is likely to have an adverse effect on its preparation and/or delivery of the Project or its compliance with its obligations under this Agreement; and
 - (e) it has the right to grant the license set out in Section 6.02 of this Agreement.

ARTICLE 5 COVENANTS

- 5.01 Affirmative Covenants. Unless FCM shall otherwise agree in writing, the Recipient covenants and agrees that it shall:
- (a) use the Grant only for Eligible Activities relating to the Project;
 - (b) carry out the Project and conduct the activities thereof in compliance with all applicable laws and regulations and, without restricting the generality of the foregoing, in compliance with all labour, environmental, health and safety and human rights legislation applicable to the Project;

- (c) carry out the Project with due diligence and efficiency and in accordance with sound engineering, scientific, financial and business practices;
- (d) provide FCM with prompt notice of any:
 - (i) material change to the Project;
 - (ii) proposed change in the nature or scope of its legal status; or
 - (iii) act, event, litigation or administrative proceeding that does or may materially and adversely affect the Project or may materially and adversely affect the ability of the Recipient to perform its obligations under this Agreement or the Project.

5.02 **Negative Covenants.** Unless FCM shall otherwise agree in writing, the Recipient shall not:

- (a) use the Grant for expenditures that are not Eligible Expenditures;
- (b) for 5 years after the end date of this Agreement, sell, assign, transfer, lease, exchange or otherwise dispose of, or contract to sell, assign, transfer, lease, exchange or otherwise dispose of, any of the real or personal property, whether movable or immovable, acquired, purchased, constructed, rehabilitated or improved, in whole or in part, with the Grant (the “**Assets**”); if at any time within 5 years after the end date of this Agreement, the Recipient sells, assigns, transfers, leases, exchanges or otherwise disposes of any Asset other than to the Government of Canada, a local government, or with the Government of Canada’s consent, the Recipient may be required to pay back to FCM, at FCM’s sole discretion, all or a portion of the Grant that was disbursed by FCM to the Recipient.

ARTICLE 6 INTELLECTUAL PROPERTY

- 6.01 Intellectual Property. Copyright in all reports, documents and deliverables prepared in connection with this Agreement and listed in the Schedules of this Agreement by or on behalf of the Recipient (the “Recipient Documentation”) will be the exclusive property of, and all ownership rights shall vest in either the Recipient or, subject to the Recipient’s ability to grant the license set out in Section 6.02, a person or entity engaged to develop the Recipient Documentation on behalf of the Recipient.
- 6.02 License. The Recipient hereby grants to FCM an irrevocable, perpetual, worldwide, royalty-free, license, to use, publish, make improvements to, sub-license, translate and copy the Recipient Documentation. This license shall survive the expiration or termination of this Agreement.

ARTICLE 7 APPROPRIATIONS

- 7.01 Appropriations. Notwithstanding FCM’s obligation to make any payment under this Agreement, this obligation does not arise if, at the time when a payment under this Agreement becomes due, the Parliament of Canada has not passed an appropriation that is sufficient and constitutes lawful authority for the Government of Canada making the necessary payment to FCM for the project or program in relation to which the Grant is being provided. FCM may reduce, delay or terminate any payment under this Agreement in response to the reduction or delay of appropriations or departmental funding levels in respect of transfer payments, the project or program in relation to which the Grant is being provided, or otherwise, as evidenced by any appropriation act or the federal Crown’s main or supplementary estimates expenditures. FCM will not be liable for any direct, indirect, consequential, exemplary or punitive damages, regardless of the form of action,

whether in contract, tort or otherwise, arising from any such reduction, delay or termination of funding.

**ARTICLE 8
MEMBERS OF THE HOUSE OF COMMONS AND SENATE**

- 8.01 No member of the House of Commons or the Senate of Canada will be admitted to any share or part of this Agreement, or to any benefit arising from it, that is not otherwise available to the general public. The Recipient will promptly inform FCM should it become aware of the existence of any such situation.

**ARTICLE 9
NO BRIBES**

- 9.01 The Recipient guarantees that no bribe, gift or other inducement has been paid, given, promised or offered to any person in order to obtain this Agreement. Similarly, no person has been employed to solicit or secure the Agreement upon any agreement for a commission, percentage, brokerage or contingent fee. The Recipient also guarantees that it has no financial interest in the business of any third party that would affect its objectivity in carrying out the Project.

**ARTICLE 10
AUDIT AND ACCESS**

10.01 Audit and Access.

- (a) FCM reserves the right to undertake, at any time, at its expense, any audit of the records and accounts of the Recipient in relation to the Project. The Recipient agrees to ensure that prompt and timely corrective action is taken in response to any audit findings and recommendations conducted in accordance with this Agreement. The Recipient will submit to FCM in a timely manner, a report on follow-up actions taken to address recommendations and results of the audit.
- (b) The Recipient shall maintain proper and accurate financial accounts and records, including but not limited to its contracts, invoices, statements, receipts, employee timesheets, and vouchers, in respect of the Project. The Recipient covenants and agrees that it shall keep all such books and records of the Project until March 31, 2031.
- (c) Upon FCM's request with reasonable prior notice thereto, the Recipient shall provide FCM and its designated representatives with reasonable and timely access to sites, facilities, and any documentation relating to the Project for the purposes of audit, inspection, monitoring, evaluation, and ensuring compliance with this Agreement, and permit FCM to communicate directly with, including the receipt of information from, its external auditors regarding its accounts and operations relating to the Project.
- (d) The Government of Canada, the Auditor General of Canada, and their designated representatives, to the extent permitted by law, will at all times be permitted to inspect the terms and conditions of this Agreement and any records and accounts respecting the Project and will have reasonable and timely access to sites, facilities and any documentation relevant for the purpose of audit.
- (e) The covenants, rights and obligations contained in this Article 10 shall survive the termination or expiry of this Agreement.

**ARTICLE 11
CONFIDENTIALITY**

11.01 Confidentiality.

- (a) All processes, documents, data, plans, material, policies or information pertaining to either Party's operations which is obtained by the other Party ("**Receiving Party**") or furnished to the Receiving Party in connection with this Agreement and expressly identified as confidential thereby, including, without limitation, the terms of this Agreement, ("**Confidential Information**") shall be maintained by the Receiving Party in strict confidence and shall not be disclosed to any person or entity for any reason or used by the Receiving Party except as necessary for it to perform its obligations hereunder.
- (b) The limitations contained in this section shall not apply to (a) Confidential Information which is in the public domain at the time of disclosure; (b) Confidential Information that becomes part of the public domain after disclosure through no fault of the Receiving Party; (c) Confidential Information that the Receiving Party can prove was known by the Receiving Party at the time of disclosure; (d) Confidential Information that the Receiving Party can prove was supplied to the Receiving Party by a third party or was independently developed by the Receiving Party; or (e) Confidential Information required to be disclosed pursuant to judicial process.

**ARTICLE 12
TERMINATION**

12.01 Termination of the Agreement.

- (a) FCM may terminate this Agreement:
 - (i) if the Recipient breaches any term or condition of this Agreement, and fails to remedy such breach upon the expiry of 15 Business Days' written notice from FCM of such breach or, with respect to a breach that cannot be remedied within the 15 Business Day period, such longer period of time as FCM may reasonably provide the Recipient to remedy the breach, provided the Recipient has commenced to remedy the breach within the 15 Business Day period and is actively and diligently taking appropriate measures to remedy the breach;
 - (ii) if the Recipient becomes insolvent and/or proceedings have been commenced under any legislation or otherwise for its dissolution, liquidation or winding-up, or bankruptcy, insolvency or creditors' arrangement proceedings have been commenced by or against the Recipient;
 - (iii) if, in FCM's sole discretion, the Project cannot be completed as initially presented; and
 - (iv) if the Parliament of Canada fails to pass an appropriation that is sufficient and constitutes lawful authority for the Government of Canada making the necessary payment to FCM for the project or program in relation to which the Grant is being provided.
- (b) Either Party may, on not less than 30 days' prior written notice to the other Party, terminate this Agreement.

12.02 Effect of Termination. If this Agreement is terminated pursuant to Section 12.01, the Recipient may be:

- (a) reimbursed for all or a portion of the expenses they have incurred in relation to the Project up to the effective date of termination; or

- (b) required to pay back to FCM all or a portion of the Grant Amount that was disbursed by FCM to the Recipient prior to the effective date of termination;

as applicable, all subject to FCM's sole discretion and satisfaction, taking into consideration out-of-pocket expenses incurred and results reported by the Recipient in connection with the Project.

ARTICLE 13 INDEMNITY

- 13.01 Indemnity. The Recipient hereby agrees to indemnify and hold harmless FCM and its officers, directors, employees and agents (collectively, the "**Indemnified Parties**") from and against any and all liability, loss, costs, damages and expenses (including legal, expert and consultant fees), causes of action, actions, claims, demands, lawsuits or other proceedings (collectively, a "**Claim**"), by whomever made, sustained, incurred, brought or prosecuted, in any way arising out of or in connection with the Project or otherwise in connection with this Agreement, but only to the extent that such Claim arises out of or is in connection with the Recipient's breach of this Agreement or is caused by the negligence or wilful misconduct of the Recipient in the performance of its obligations hereunder or otherwise in connection with the Project.
- 13.02 Intellectual Property Indemnity. Recipient shall defend or settle at its expense any claim or suit against FCM arising out of or in connection with an assertion that the Recipient Intellectual Property infringes any intellectual property right and Recipient shall indemnify and hold harmless FCM from damages, costs, and attorneys' fees, if any, finally awarded in such suit or the amount of the settlement thereof; provided that (i) Recipient is promptly notified in writing of such claim or suit, and (ii) Recipient shall have the sole control of the defense and/or settlement thereof.

ARTICLE 14 MISCELLANEOUS PROVISIONS

- 14.01 Notice. Any notice, document or other communication required to be given under this Agreement shall be in writing and shall be sufficiently given if sent by personal delivery/courier, registered mail or email to the other Party at its address indicated in Schedule D attached hereto, or to such other address, email address or person that the Party designates in writing to the other Party. The notice shall be deemed to have been delivered on the day of personal delivery, on the day received by email (as evidenced by a transmission confirmation), or on the fifth day following mailing.
- 14.02 Relationship of the Parties. The relationship between the Recipient and FCM is, and shall at all times be and remain, essentially that of a recipient and a grantor, and this Agreement does not and shall not be deemed to create a joint venture, partnership, and fiduciary or agency relationship between the Parties for any purpose. Neither the Recipient, nor any of its personnel are engaged as an employee, servant or agent of FCM.
- 14.03 Public Announcements. The Recipient shall cooperate with FCM, who will lead the preparation and issuance of the public funding announcement for the Project and/or the coordination of a public announcement event attended by FCM and the Government of Canada. The Recipient will be informed of the process immediately after the signature of this Agreement. If any public statement or release is so required, the Recipient shall promptly inform FCM of upcoming promotional events related to the Project and allow FCM and the Government of Canada to participate in such media activities or events.
- 14.04 Project Branding. The Recipient shall recognize and state in an appropriate manner, as approved by FCM, the financial assistance offered by FCM concerning the Project and the contribution of the Government of Canada to FCM, as specified in Part 3 of Schedule C attached hereto. If requested by FCM, the Recipient shall have affixed, in content, form, location and manner acceptable to FCM, signage acknowledging the contribution of FCM and the Government of Canada to the Project. The

Recipient shall adhere to the policies regarding the use of graphic design elements and signage as specified in Part 3 of Schedule C attached hereto.

- 14.05 Entire Agreement. This Agreement constitutes the entire understanding between the Parties with respect to the subject matter hereof and supersedes all prior understandings, negotiations and discussions, whether written or oral. There are no conditions, covenants, agreements, understandings, representations, warranties or other provisions, express or implied, collateral, statutory or otherwise, relating to the subject matter hereof except as herein provided.
- 14.06 Survival. Except as otherwise provided herein, those sections of this Agreement which, by the nature of the rights or obligations set-out therein might reasonably be expected to survive any termination or expiry of this Agreement, shall survive any termination or expiry of this Agreement.
- 14.07 Amendments. No amendment of the Agreement will have any force or effect unless reduced to writing and signed by both Parties.
- 14.08 Assignment. The Recipient cannot assign this Agreement without the prior written consent of FCM.
- 14.09 Enurement. This Agreement shall enure to the benefit of, and shall be binding upon, the Parties and their respective, heirs, executors, administrators, successors and permitted assigns.
- 14.10 Governing Law. This Agreement shall be governed by and construed in accordance with the law of the Province of Ontario and the federal laws of Canada applicable therein.
- 14.11 Severability. Each of the binding provisions contained in this Agreement is distinct and severable. Any declaration by a court of competent jurisdiction of the invalidity or unenforceability of any binding provision or part of a binding provision will not affect the validity or enforceability of any other provision of this Agreement.
- 14.12 Waiver. No waiver of any provision of this Agreement shall be effective unless made in writing and signed by the waiving Party. The failure of any Party to require the performance of any term or obligation of this Agreement, or the waiver by any Party of any breach of this Agreement, shall not prevent any subsequent enforcement of such term or obligation or be deemed a waiver of any subsequent breach.
- 14.13 Counterparts. This Agreement may be executed and delivered (including by facsimile transmission or in protocol document format ("PDF")) in one or more counterparts, each of which when executed shall be deemed to be an original but all of which taken together shall constitute one and the same agreement.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties hereto have executed and delivered this Agreement as of the date written below.

THE CORPORATION OF THE TOWN OF FORT FRANCES,

Per: _____

Name: June Caul

Title: Mayor

Date: _____

Per: _____

Name: Elizabeth Slomke

Title: Municipal Clerk

Date: _____

We have authority to bind the Recipient herein.

FEDERATION OF CANADIAN MUNICIPALITIES,

Per: _____

Name: Bogdan Makuc

Title: Program Director, MAMP

Date: _____

I have authority to bind FCM herein.

Schedule A

Part 1 Conditions of Contribution

The obligation of FCM to disburse the Grant Amount is conditional upon the Recipient satisfying the following conditions, to the satisfaction of FCM:

- Completed Request for Contribution in the form of Part 1 of Schedule C;
- Receipt and acceptance of Final Report, which is due within 30 days of Project end date, in accordance with the reporting template Part 2 of Schedule C;
- Receipt and acceptance of Evidence of Deliverables, as noted in the Final Report;
- Receipt and acceptance of Expense claim;
- Letter of Attestation for Expense Claim, including confirmation that all expenses claimed are Eligible Expenditures, in the format of Part 4 of Schedule C.

The Recipient acknowledges and agrees that, notwithstanding the foregoing conditions, FCM's obligation to disburse the Grant Amount is subject to Article 7 of the Agreement.

Schedule A

Part 2 Description of Project, Statement of Work and Project Expenditures

The Recipient will undertake a Project in accordance with the phases, activities and/or milestones outlined in the below Statement of Work.

Project Number: MAMP 15970 – The Corporation of the Town of Fort Frances, Ontario

Project Title: 2018 Asset Condition Investigation

Project Sector: Asset management (MAMP)

Project Type: MAMP Projects

Project Start Date	Project End Date
3 June 2019	3 May 2020

Project Description

The Town of Fort Frances will pilot zoom camera inspection of a portion of the 52.2km of storm sewer piping within its network to gather condition data on this important piece of the Town's linear assets. This is a low cost alternative to CCTV inspection and given the larger pipe diameter of storm sewer and the few mid line connections should provide reasonable level of detail to establish the condition of these assets. The Town is looking to purchase a tablet to remotely access its asset database to assist in this work. In addition the software has the functionality to be able to scan a bar code label on an asset to bring up the asset information and update the condition remotely via app. The Town will be purchasing a bar code printer to label their assets. This work will push the Town's asset management program further and help make the program more manageable for internal staff.

Activity	Deliverable
1. Zoom Camera Inspection of a portion of the 52.2km of storm sewer piping	A set of documents confirming the results of the condition assessments completed, including: <ul style="list-style-type: none"> A copy of the condition assessment report for the Storm Sewer lines.
2. Facility Asset Capture and Identification	A set of documents confirming Facility Asset Capture and Identification, including: <ul style="list-style-type: none"> A significant sample of the bar codes and pictures of labeled assets.

Activity	Start date:	End date:	Eligible Expenditures (\$)	Ineligible Expenditures (\$)	Total Expenditure (\$)
Zoom Camera Inspection	3 June 2019	3 May 2020			
Storm Sewer network Inspection - Phase 1			\$31,000.00	\$0.00	\$31,000.00
Activity 1 Subtotals			\$31,000.00	\$0.00	\$31,000.00
Facility Asset Capture and Identification	3 June 2019	3 May 2020			
Capture and labelling of Facility Assets into database			\$800.00	\$0.00	\$800.00
Data Capture Tablet			\$0.00	\$1,400.00	\$1,400.00
Activity 2 Subtotals			\$800.00	\$1,400.00	\$2,200.00
Total Expenditures			\$31,800.00	\$1,400.00	\$33,200.00

Total Eligible Expenditures	\$31,800.00
------------------------------------	--------------------

Schedule A

Part 3 Reporting Requirements and Project Deliverables

The following report is to be provided to FCM at the completion of the Project. The format of the report is as provided in Part 2 of Schedule C.

Name of Report	Due Date:	Content
Final Report	3 June 2020	The content and format of this report is provided in Schedule C, Part 2.

Schedule B

Part 1 Grant amount

Subject to the terms and conditions of this Agreement, FCM agrees to contribute towards the Eligible Expenditures an amount (the “**Grant Amount**”) that is equal to the lesser of:

the sum of twenty five thousand, four hundred and forty dollars (\$25,440.00); or

eighty percent (80.0%) of Eligible Expenditures;

Notwithstanding the foregoing, if the aggregate amount of funding received or to be received from all sources of funding, other than the Recipient, as described in Part 2 of Schedule B (all as determined and calculated by FCM) is greater than the total expenditures incurred by the Recipient in respect of the Project then FCM may reduce the Grant Amount to such amount as it deems appropriate, in its sole and absolute discretion.

Schedule B

Part 2 Particulars of the Sources of Funding

The funding sources for this initiative are outlined in the table below. Each funding source indicates the amount of funding and when the funding was confirmed or is expected to be confirmed.

Funding source	Description	Confirmed (Y/N)	Date committed DD-MM-YYYY	Amount (\$)	% of total budget
FCM Grant	Grant	Y	20 Sept. 2018	\$25,440.00	76.6%
<i>Town of Fort Frances</i>	Operations and Facilities Division Operating Budget	Y	19 April 2018	\$7,760.00	23.4%
Total funding:				\$33,200.00	100.0%

Budget total expenditures	\$33,200.00
Budget total Eligible Expenditures	\$31,800.00

Schedule B

Part 3 Payment Schedule/ Period of Funding

FCM will disburse the Grant Amount as determined in this table upon completion of activities, as evidenced by submission and acceptance by FCM of the Final Report and a Request for Contribution.

The Final Report and Request for Contribution must be submitted at least 30 days prior to the requested date of disbursement.

The Recipient must notify FCM in writing of any anticipated delays in this disbursement schedule. FCM reserves the right to adjust dates of disbursement or amounts subject to Article 7 of the Agreement.

Deliverable	Date of Report Submission	Forecast Date of Disbursement	Maximum Amount of Disbursement
Final Report	3 June 2020	3 July 2020	\$25,440.00

Period of Funding:

The Period of Funding is defined as the period between Project Start Date and 30 days after the Project End Date as set out in Part 2 of Schedule A.

Schedule C

Part 1 Request for Contribution, Letter of Attestation and Expense Claim

[LETTERHEAD OF THE RECIPIENT]

[Address]

[Date]

Federation of Canadian Municipalities
24 Clarence Street
Ottawa, Ontario
K1N 5P3

Attention: Aymone Agossou
Project Officer - MAMP

Ladies and Gentlemen:

Re: MAMP – no. 15970 Agreement between the Federation of Canadian Municipalities (as Trustee) and the The Corporation of the Town of Fort Frances (“Recipient”) (the “Agreement”)

I, **[Instruction: insert the name of a person named in the Agreement]**, the **[Instruction: insert the title]**, of the Recipient certify and confirm that the Recipient is requesting the Contribution and that the Recipient has satisfied each condition of contribution listed below. I understand that all information below must be submitted and accepted in order for FCM to be able to proceed to funds transfer.

I am attaching to this request for contribution all documents specified in Part 1 of Schedule A:

- Project Final Report, with all content specified in the template (Part 2 of Schedule C); and
- Letter of Attestation.

In addition, I have also attached the following documents:

- The Expense Claim;
- Updated statement of funding sources and amounts (Part 2 of Schedule B);
- A void cheque, for the bank account where the Recipient would like FCM to disburse the Contribution.

Signature: _____ Date: _____

Schedule C

Letter of Attestation for Expense Claim

[LETTERHEAD OF THE RECIPIENT]

[Address]

[Date]

TO: The Federation of Canadian Municipalities

This letter of attestation (the “**Letter**”) is issued pursuant to the Agreement #15970 (project number) dated [redacted] (the “**Agreement**”) between the Federation of Canadian Municipalities (“**FCM**”) and the Corporation of the Town of Fort Frances (the “**Recipient**”), and in support of the expense claim submitted by the Recipient to FCM for reimbursement of expenses incurred and paid by the Recipient in relation to the Project (the “**Expense Claim**”).

All defined terms used in this Letter and not otherwise defined shall have the corresponding meaning in the Agreement.

I am an authorized officer of the Recipient and I hereby certify, in satisfaction of the terms and conditions of the Agreement, that:

- i. All expenses claimed in the Expense Claim have been incurred and paid by the Recipient;
- ii. All expenses claimed in the Expense Claim relate to the Project;
- iii. All expenses claimed in the Expense Claim relate to Eligible Activities in compliance with the eligible activity requirements described in Part 4 of Schedule C to the Agreement; and
- iv. All expenses claimed in the Expense Claim are Eligible Expenditures in compliance with the eligible expenditure requirements described in Part 4 of Schedule C to the Agreement.
- v. All expenses claimed have been incurred during the Period of Funding.

Name and title of authorized officer of Recipient

Signature

Date

Expense Claim

[LETTERHEAD OF THE RECIPIENT]

[Address]

[Date]

Project Number	MAMP 15970
Project Title	2018 Asset Condition Investigation

The following expenditures have been incurred from the period between XXXX and YYYY for the completion of the activities identified.

Activity Completed	Total Budgeted Expenditures (\$) (as per Part 2 of Schedule A per activity)	Total Actual Eligible Expenditures Net of Tax Rebates per activity (\$)	Total Actual Ineligible Expenditures Net of Tax Rebates per activity (\$)	Total Actual Expenditures Net of Tax Rebates per activity (\$)
Zoom Camera Inspection				
Facility Asset Capture and Identification				
Total Expenditure (\$)	\$	\$	\$	

Expenditures Incurred by Expenditure Category (as per Part 4 of Schedule C)	Total Actual Eligible Expenditures Net of Tax Rebates (\$)	Total Actual Ineligible Expenditures Net of Tax Rebates (\$)	Total Actual Expenditures Net of Tax Rebates (\$)
Administrative and Overhead Expenditures			
Capital Expenditures			
Equipment Rental			
In-Kind	N/A		
Training			
Professional and/or Technical Services			
Staff remuneration			
Supplies and Materials			
Travel and accommodation			
Total Expenditures Incurred (\$)	\$	\$	\$

Schedule C

Part 2 Completion Report Templates

FINAL REPORT

FCM's Municipal Asset Management Program (MAMP)

Project number	(Pre-filled by MAMP)(Pre-filled by MAMP)
Project title	(Pre-filled by MAMP)
Name of lead applicant (organization)	(Pre-filled by MAMP)
Name of Authorized Officer (signatory)	
Date	

Note: If completing this form electronically, the boxes will expand to accommodate text.

1. Reporting on activities

Activity	Completed? Y/Partial/No	Deliverable	Title of submitted deliverable document
1. (Pre-filled by MAMP)	Choose an item	(Pre-filled by MAMP)	
2. (Pre-filled by MAMP)	Choose an item	(Pre-filled by MAMP)	
3. (Pre-filled by MAMP)	Choose an item	(Pre-filled by MAMP)	

For any activities marked No or Partial above, please explain the deviation from the scope of work.

2. Reporting on outcomes

Conduct a final self-assessment using the [Asset Management Readiness Scale](#). We recommend that you bring a cross-functional group of staff together to do this assessment. Referring to the Asset Management Readiness Scale, look at the outcome statements for each level. Identify which outcomes you have achieved. If you have completed all the outcomes for a particular level, you have completed that level. Based on your self-assessment, complete the table below.

Competency	Project readiness level at start of project (as stated in application)	Project readiness level at end of project (level for which you have completed all outcomes)	Notes on progress made For each outcome area in which you made progress during the project, provide one sentence to describe the actions taken. (Note: these areas correspond with outcomes identified in the Asset Management Readiness Scale)	
1. Policy and governance	(Pre-filled by MAMP)	Choose a level	Policy and objectives Strategy and frameworks	
			Measurement and monitoring	
2. People and leadership	(Pre-filled by MAMP)	Choose a level	Cross-functional groups Accountability Resourcing and commitment	
3. Data and information	(Pre-filled by MAMP)	Choose a level	Asset data	
			Performance data	
4. Planning and decision-making	(Pre-filled by MAMP)	Choose a level	Financial data Documentation and standardization	
			Asset investment plans	
5. Contribution to asset management practice	(Pre-filled by MAMP)	Choose a level	Budgets Training and development Knowledge sharing — internal	
			Knowledge sharing — external	

Were there additional factors or programs — other than FCM project funding — that contributed to your project outcomes? If so, please provide a short description of any other important contributing factors.

3. Identifying other outcomes

In addition to the outcomes described in the table above, please describe any other changes that occurred because of your project. Examples might include a change in interest in asset management, cost savings, a change in departmental budget priorities, and so on.

For each additional change that you have observed, please answer the following questions:

- What change did you observe over the course of the project?
- What/who contributed to this change?
- How do you know this change has happened?
- Why is this change important?

Other changes
1.
2.
3.

4. Lessons learned

What worked well?

What would you recommend to other municipalities undertaking the same work?

Please provide 1–3 lessons.

Lesson (one short statement)	Description (provide any additional detail here)
1.	
2.	
3.	

What would you do differently?

If you were to do this project again, what would you change? Please provide 1–3 lessons.

Lesson (one short statement)	Description (provide any additional detail here)
1.	
2.	
3.	

Note: These lessons will be compiled and shared, without attribution, with other municipalities and practitioners to advance asset management knowledge.

5. Resources

Please list and describe any external human resources (i.e. organizations or personnel) that you worked with during the project.

Name of organization or person	How did you identify this organization or person?	Brief description of their contribution
1.		
2.		
3.		

Please list and evaluate other key information sources, tools, templates, training materials, etc., that you used to assist your work during this project. *Note: This list may be used to inform other municipalities and organizations of available information and resources.*

Title of tool/resource	How did you identify this tool/resource?	How useful was the tool/resource?	Description/comments
1.		Choose an item	
2.		Choose an item	
3.		Choose an item	
4.		Choose an item	
5.		Choose an item	

6. Reporting on budget

Please complete the final budget reporting template, found in Schedule C of your contract, including all eligible expenses, and submit it together with this final report. Please confirm whether either or both of the following statements are true:

- ☐ The actual expenditure for any activity in this project deviated by more than 15% from the budget presented in the application.
- ☐ Some of the expenditures included in the final budget report were used for activities marked as Partial or Not Completed in Question 1.

If you ticked either of the above statements, please explain why your actual expenditures varied from the original activity budget. FCM staff may contact you for further details.

7. Next steps

What are your next steps to improve your community's asset management practices?

Next step	Do you need outside help to take this next step? If so, what help do you need?
1.	
2.	
3.	

8. Interest in knowledge sharing

Peer learning is a priority for FCM's Municipal Asset Management Program (MAMP). Please indicate if you are interested in sharing your lessons through MAMP with peer municipalities and organizations.

☐ Yes, we are interested in sharing our results and experiences at peer learning events.

9. Individuals involved in reporting

Please list the titles of the individuals that contributed to, or were consulted in, the completion of this report.

--

10. Comments (for FCM internal use) *(optional)*

FCM will continue to adapt and improve the MAMP program throughout its life cycle. We welcome all feedback about the program, or your experience, that might help us make it more useful in the future.

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11. Testimonials (for public use) *(optional)*

FCM and Infrastructure Canada would appreciate a testimonial as to the value that MAMP funding has provided.

How has the Municipal Asset Management Program supported your municipality or organization in making better-informed infrastructure decisions? Why is this important for your community?

☐ Yes, I give my permission to use the above statements publicly, with attribution to the municipality or organization.

Signature

☐ By typing my name below and submitting this report, I am providing my signature and I certify that the above final report is complete and accurate in its entirety.

Signed by the Authorized Officer

Schedule C

Part 3 Accepted Practices

The Recipient shall incorporate the following language into the Final Plan or Final Study or Final Capital Project, as applicable, and the Final Completion Report, unless it has received written notice to the contrary from FCM:

“© 201X, **The Corporation of the Town of Fort Frances**. All Rights Reserved.
The preparation of this document was carried out with assistance from the Government of Canada and the Federation of Canadian Municipalities. Notwithstanding this support, the views expressed are the personal views of the authors, and the Federation of Canadian Municipalities and the Government of Canada accept no responsibility for them.”

Schedule C

Part 4 Eligible Expenditures

Eligible expenses must be incurred after Eligible Expenditure Date of 3 June 2019.

Expenditure Category	Eligible expenditures	Ineligible expenditures
1) Pre-application	N/A	<ul style="list-style-type: none">Any expenditure incurred prior to FCM's eligible expenditure date.Expenditure of developing this proposal or application.
2) Administrative and Overhead Expenditures	<p>Administrative expenditures that are directly linked to and have been incurred for the project, such as:</p> <ul style="list-style-type: none">Communication expenditures (e.g. long-distance calls or faxes).Outsourced printing or photocopying.Acquisition of documents used exclusively for the project.Document translation.Transportation, shipping and courier expenditures for delivery of materials essential for the project.Design and production of communication products to promote project outcomes and benefits to the public.	<p>General overhead expenditures incurred in the regular course of business, such as:</p> <ul style="list-style-type: none">Office space, real estate fees and supplies.Financing charges and interest payments.Promotional items.Permits or certifications.Advertising, website development, project education materials or expenditures to disseminate project communications products.Hospitality expenses (food and drink, alcohol, entertainment, etc.).

3) Capital Expenditures	<p>Asset management-related software.</p> <p><i>Note: FCM's contribution to this expense may not exceed 50% of FCM's total contribution to the project.</i></p>	Any other capital expenditures or amortization expenses.
4) Equipment Rental	<ul style="list-style-type: none"> • Rental of tools and equipment. • Related operating expenditures such as fuel and maintenance expenditures. 	Rental of tools or equipment related to regular business activities.
5) In-Kind	N/A	Any goods and services received through donation.
6) Training	<ul style="list-style-type: none"> • Expenditures associated with accessing reference materials such as standards, templates and toolkits. • Expenditures associated with attending training sessions, (provided externally) or bringing training in-house. 	<p>Any hospitality expenses such as:</p> <ul style="list-style-type: none"> • Food and drink • Alcohol • Door prizes • Entertainment • Music • Decorations • Flowers, centerpieces • Etc.
7) Professional and/or Technical Services	Fees for professional or technical consultants and contractors, incurred in support of eligible activities.	<ul style="list-style-type: none"> • Expenditures associated with regular business activities not related to the project. • Legal fees.
8) Staff Remuneration	<p>Daily rates actually paid by the Eligible Recipient to its Employees in Canada for time actually worked on the implementation of the Project.</p> <p>The daily rate per employee shall include the following costs:</p> <ol style="list-style-type: none"> a) direct salaries: actual and justifiable sums paid by the Eligible Recipient to Employees in accordance with the Eligible Recipient's pay scales as regular salary <u>excluding</u> overtime pay and bonuses. b) fringe benefit: in accordance with the Eligible Recipient's policies, as follows: <ol style="list-style-type: none"> i. time-off benefits (prorated to the annual percentage (%) of time actually worked on the 	<ul style="list-style-type: none"> • In-kind contribution of services. • Participant salaries. • Expenditures related to regular business activities. • Overtime Pay • Bonuses / performance pay. • Fringe benefits such as; <ul style="list-style-type: none"> ○ sick days ○ pension plan ○ any other fringe benefits not listed as eligible • Costs related to ongoing or other business activities and not specifically required for the project. • Staff wages while receiving training or attending learning events. • Professional membership fees or dues.

	<p>implementation of the Project): allowable number of days to be paid by the Eligible Recipient for the following payable absences: statutory holidays, annual vacation, and paid benefits: actual sums paid by the Eligible Recipient for paid benefits (prorated to the annual percentage (%) of time actually worked on the implementation of the Project): the Eligible Recipient's contribution to employment insurance and workers' compensation plans (where applicable), health and medical insurance, group life insurance, or other mandatory government benefits;</p> <p><i>Note: Labour costs must be documented in a manner that meets audit standards for verification of eligibility of cost and level of effort.</i></p>	
9) Supplies and materials	Supplies and materials required to undertake the project.	Expenditures related to regular business activities
10) Taxes	The portion of Provincial/Harmonized Sales Tax and Goods and Services Tax for which your organization is not eligible for rebate.	The portion of Provincial /Harmonized Sales Tax and Goods and Services Tax for which your organization is eligible for rebate, and any other expenditures eligible for rebates.
11) Travel and Accommodation	<p><u>For individuals on travel status</u> (individuals travelling more than 16 km from their assigned workplace - using the most direct, safe and practical road.);</p> <ul style="list-style-type: none"> Travel and associated expenses for implementing partners, guest speakers and consultants to the extent that the travel and accommodation rates comply with the Treasury Board of Canada guidelines, and to the extent that such travel is necessary to conduct the initiative. <p>www.canada.ca/en/treasury-board-secretariat/services/travel-</p>	

	relocation/travel-government-business.html <ul style="list-style-type: none"> • <i>Where justified, participant travel costs may be claimed with prior written consent from FCM. Under no circumstances will participant honorariums be covered.</i> 	
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Note: Invoices, receipts and timesheets (where applicable), must be sufficiently detailed to enable verification of expenditure eligibility and level of effort.

Schedule D

Contact Information

Notices and Requests

Any notice, demand, request or other communication to be given or made under this Agreement to FCM or to the Recipient, other than a notice of default, shall be in writing and may be made or given by personal delivery, by ordinary mail, by facsimile or by electronic mail. A notice of default shall be in writing and delivered by registered mail. Notices shall be addressed as follows:

FCM

Federation of Canadian Municipalities
24 Clarence Street
Ottawa, Ontario
K1N 5P3

Attention: Aymone Agossou, Project Officer
Email: aagossou@fcm.ca

Recipient

The Corporation of the Town of Fort Frances
320 Portage Avenue
Fort Frances, Ontario
P9A 3P9

Attention: Travis Rob, Manager of Operations and Facilities
Email: trob@fortfrances.ca

February 15, 2019

Report To: Mayor & Council

From: Travis Rob, P.Eng., Manager of Operations & Facilities

SUBJECT: January 2019 Drinking Water Systems Monthly Summary Report

Please find attached the January 2019 Summary Report on the drinking water systems, prepared by Randy White, Senior WTP Operator.

Your Administration recommends that Operations & Facilities Executive Committee accept the January 2019 report as presented.

Respectfully submitted,
Operations & Facilities Division

Travis Rob, P.Eng.
Manager of Operations & Facilities

Council approval of this report will accept the January 2019 report prior to it being made available to the general public.
--

c.c. – Craig Miller, P.Eng., Environmental Superintendent
Randy White, ORO, Senior WTP Operator

January 2019

**Monthly Summary Report
Water Systems**

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

Dated: February 14, 2019

1) **Introduction:**

This report contains the major maintenance activities and operational events that occurred during the month of January 2019 at the Water Treatment Plant - Water Works # 220000978 and the Airport Groundwater Well Water Works No. 849N7DGE0 (Precedes Airport Groundwater Well Water Works No. 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. The water treatment plant falls under the requirements of Ontario Regulation 170/03 – Drinking Water Systems.

The Airport Small Drinking Water System, System No. 849N7DGE0, was put into service August 01, 2017. The system falls under the requirements of Ontario Regulation 319/08 – Small Drinking Water Systems.

2) **Flow Data:**

Water Treatment Plant: See attached spreadsheet.

Airport Groundwater Well :

Estimated Daily Usage	0.21 m3
Estimated December Usage	6.5 m3

3) **Microbiological (Health Related) Water Analysis - Main Water System No. 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.

Water distribution samples taken at the following locations:

1. 1111 First St. E.	2. 1104 Church St	3. 901 Wright Ave.	4. W. Tower
5. 740 Scott St.	6. 1036 Victoria Ave.	7. 901 Wright Ave.	8. W. Tower
9. 740 Scott St.	10. 320 Portage Ave.	11. 901 Wright Ave.	12. W. Tower
13. 1111 First St. E.	14. 1104 Church St.	15. 740 Scott St.	16. W. Tower

4) Microbiological (Health Related) Water Analysis - Airport Groundwater Well No. 849N7DGE0:

New drinking water system put online August 01, 2017. No treatment required as the Airport groundwater tested negative for bacteria.

The Airport drinking water system is to be sampled and tested for bacteria once every three (3) months in accordance with Section 25 – Microbiological Sampling and Testing of the Small Drinking Water Systems Regulation, O. Reg. 319/08.

Water distribution sample taken January 14, 2019 – no adverse results.

5) Free Available Chlorine Residual (FAC) - Main Water System No. 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 No. 849N7DGE0:

New drinking water system put on line August 01, 2017. No treatment required as the Airport groundwater well tested negative for bacteria.

7) Maintenance Activities at the WTP:

Jan 3rd cleaned all 4 check valves on the poly unit
 Cleaned top and bottom tanks on the poly unit

Jan 8th greased both clarifiers, chains, bearings and gears

Jan 9th cleaned and mopped plant

Jan 10th calibrated the distributor chlorine analyzer

Jan 11th cleaned and organized the plant

Jan 16th changed the oil in high lift pumps 2 and 3
 Changed oil in low opuok lift pump 3

Jan 18th fusion welding have welding leak in pipe

Jan 21st calibrated distribution chlorine analyzer

Jan 31st ran the standby generator
 Cleaned the check valves on the poly unit
 Cleaned top and bottom tanks on the poly unit

8) **Water Complaints:**

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

9) **Other Miscellaneous Information:**

Jan 2 nd	routine micro samples not received at ALS Labs in allotted time frame – M.O.E. was notified
Jan 7 th	routine micro sample collection
Jan 9 th	water main break – 1301 Calder Drive (Point Park Playground)
Jan 9 th	took grab samples off the filters
Jan 14 th	took micro sample at the Airport
Jan 21 st	routine micro sample collection
Jan 24 th	water main break – 384 Holmes – repaired
Jan 28 th	routine micro sample collection water main repair samples – Thompson Street – 1 st set
Jan 29 th	water main repair samples – Thompson Street – 2 nd set

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: _____
- Craig Miller, P.Eng. Environmental Superintendent: _____
- Travis Rob, P.Eng. Manager of Operations & Facilities: _____
- Doug Brown, P.Eng CAO: _____
- Rick Wiedenhoeft, Chair O & F Exec Committee: _____
- June Caul, Mayor: _____
- John McTaggart, Councillor: _____
- Mike Behan, Councillor: _____
- Wendy Brunetta, Councillor: _____
- Doug Judson, Councillor: _____
- Andrew Hallikas, 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 January	Units	2017	2018	2019
Total Raw Water	m ³	168830	161760	160760
Raw Maximum Day	m ³	5640	5460	6200
Raw Minimum Day	m ³	5140	4930	4890
Raw Average Daily Consumption	m ³	5450	5220	5190
Total Treated Water	m ³	114550	119180	115440
Treated Water Maximim Day Consumption	m ³	4130	4110	4850
Treated Water Minimim Day Consumption	m ³	3460	3590	2810
Treated Water Average Day Consumption	m ³	3700	3850	3710
Daily Average Per Household Consumption Rate	m ³	0.978	1.018	0.981
* Daily Average Per Person Consumption Rate	m ³	0.463	0.482	0.465
Monthly Averages - Operating Parameters WTP:				
FAC Residual - Treated Water	mg/L	2.25	2.22	2.24
Total Chlorine Residual - Treated Water	mg/L	2.46	2.41	2.46
Aluminum Sulphate - Raw Water	mg/L	35.0	35.0	35.0
Aluminum Sulphate - Treated Water Residual	mg/L	0.04	0.04	0.03
Fluoride - Treated Water	mg/L	0.54	0.55	0.62
Soda Ash - Raw Water	mg/L	35.0	35.0	35.0
pH - Adjusted	mg/L	7.24	7.18	7.19
Temperature	C	2.5	2.0	2.0
Quantity of Chemical Used:	kg			
Aluminum Sulphate	kg	5909.1	5661.6	5626.6
Polyelectrolyte	kg	75.0	62.5	75
Chlorine Gas	kg	647	623	621
Soda Ash - Used for PH Adjustment	kg	5909.1	5661.6	5626.6
Fluoride	kg	553	604	581

- * 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	Total	Average
		or Range																															
Flow rates																																	
Raw Water	10^3 M^3	17	5.27	5.12	5.31	5.18	5.10	5.28	4.99	5.24	5.56	5.13	4.82	5.20	5.13	5.19	5.20	5.20	5.18	5.16	5.11	5.10	5.19	5.10	5.05	5.23	5.20	5.09	5.12	5.18		144.63	5.17
Peak Instantaneous - Raw Water	L/s	n/a	60.69	60.56	60.51	60.56	60.59	60.54	60.62	60.55	60.62	60.51	60.45	60.53	60.47	60.43	60.36	60.43	60.43	60.34	60.35	60.31	60.28	60.30	60.29	60.24	60.12	60.18	60.11	60.06		1691.43	60.41
Treated Water	10^3 M^3	17	4.33	4.30	4.43	4.22	4.09	4.19	4.05	4.03	4.32	4.23	4.17	3.86	3.92	4.01	3.91	3.89	4.02	3.96	4.07	3.79	3.76	3.70	3.60	3.83	3.89	4.06	4.21	3.58		112.42	4.02
Peak Instantaneous - Treated Water	L/s	n/a	64.63	64.35	65.32	63.58	64.83	65.83	64.87	65.62	64.90	64.18	63.88	64.78	64.86	65.37	65.17	66.25	64.57	64.10	63.72	64.18	63.50	65.20	63.41	62.81	62.45	64.61	65.61	63.29		1805.87	64.50
BackWash Water	10^3 M^3	n/a	0.266	0.239	0.288	0.268	0.239	0.286	0.268	0.000	0.169	0.286	0.266	0.216	0.286	0.266	0.236	0.286	0.000	0.268	0.000	0.234	0.286	0.265	0.247	0.286	0.267	0.227	0.287	0.268		6.50	0.232
Fluoride Information																																	
Fluoride Residual - Treated Water	mg/l	0.5 to 0.8	0.60	0.60	0.59	0.58	0.58	0.58	0.57	0.57	0.54	0.55	0.57	0.57	0.58	0.57	0.57	0.57	0.57	0.58	0.57	0.58	0.58	0.58	0.59	0.58	0.58	0.59	0.59	0.59		16.17	0.58
Turbidity Information																																	
Raw Water	NTU	n/a	1.18	1.22	1.16	1.23	1.24	1.28	1.21	1.26	1.31	1.25	1.17	1.24	1.22	1.26	1.29	1.29	1.19	1.23	1.27	1.16	1.19	1.26	1.16	1.22	1.26	1.22	1.27	1.25		34.49	1.23
Settled Water	NTU	n/a	0.12	0.11	0.10	0.10	0.10	0.10	0.11	0.11	0.09	0.11	0.12	0.11	0.11	0.10	0.09	0.11	0.11	0.10	0.12	0.11	0.10	0.14	0.10	0.10	0.11	0.10	0.11	0.10		2.99	0.11
Treated Water	NTU	1	0.04	0.05	0.05	0.04	0.05	0.05	0.07	0.04	0.07	0.06	0.05	0.04	0.05	0.04	0.04	0.04	0.05	0.04	0.04	0.05	0.04	0.03	0.04	0.06	0.05	0.04	0.05	0.05		1.32	0.05
Other Operating Parameters																																	
pH - Treated Water	no units	6.5 to 8.5	7.08	7.16	7.06	6.99	7.06	7.01	7.02	7.00	7.12	7.10	7.01	7.03	7.04	6.97	7.00	7.00	6.98	6.97	6.95	7.04	7.08	7.12	7.11	7.02	6.97	6.93	6.95	6.97		196.74	7.03
pH - Settled water	no units	n/a	6.06	6.22	6.27	6.27	6.29	6.27	6.32	6.23	6.35	6.32	6.37	6.30	6.36	6.28	6.05	6.28	6.26	6.28	6.24	6.18	6.20	6.22	6.25	6.26	6.32	6.27	6.30	6.26		175.28	6.26
pH - Raw Water	no units	n/a	7.04	7.11	7.11	7.06	7.01	7.09	7.10	7.11	7.07	7.10	7.09	7.10	7.10	7.06	6.77	7.08	7.10	7.07	6.77	7.01	7.00	7.08	7.10	7.04	7.03	7.04	7.06		197.34	7.05	
FAC - Treated Water	mg/l	0.2 to 4	2.32	2.28	2.30	2.26	2.30	2.20	2.00	2.11	2.09	2.05	2.20	2.26	2.28	2.30	2.20	2.20	2.26	2.24	2.22	2.30	2.16	2.10	2.18	1.98	2.40	2.28	2.12	2.19		61.78	2.21
Total Chlorine Residual Treated	mg/l	0.3 to 7	2.56	2.48	2.54	2.40	2.42	2.34	2.22	2.46	2.48	2.28	2.38	2.36	2.40	2.38	2.32	2.34	2.40	2.34	2.50	2.56	2.42	2.32	2.38	2.16	2.52	2.40	2.26	2.30		66.92	2.39
Temperature	C	15	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		56.0	2.00	
Fluoride used (Total Daily Consumption)	kg	n/a	21.0	21.0	20.0	20.0	20.0	20.0	19.0	20.0	21.0	19.0	17.0	19.0	18.0	19.0	18.0	18.0	18.0	17.0	18.0	19.0	21.0	20.0	20.0	20.0	20.0	20.0	20.0		543.0	19.39	
Chlorine used (Total Daily Consumption)	kg	n/a	21.0	19.0	22.0	20.0	19.0	21.0	24.0	20.0	22.0	20.0	19.0	20.0	20.0	20.0	19.0	20.0	20.0	20.0	20.0	20.0	20.0	18.0	20.0	20.0	20.0	19.0	19.0	19.0		561.0	20.04
Soda ash (Total Daily Consumption)	kg	n/a	184.5	179.2	185.9	181.3	178.5	184.8	174.7	183.4	194.6	179.6	168.7	182.0	179.6	181.7	182.0	182.0	181.3	180.6	178.9	178.5	181.7	178.5	176.8	183.1	182.0	178.2	179.2	181.3		5062.1	180.79
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		980.0	35.00	
Alum residual - (Total Daily Consumption)	kg	n/a	184.5	179.2	185.9	181.3	178.5	184.8	174.7	183.4	194.6	179.6	168.7	182.0	179.6	181.7	182.0	182.0	181.3	180.6	178.9	178.5	181.7	178.5	176.8	183.1	182.0	178.2	179.2	181.3		5062.1	180.79
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		980.0	35.00	
Alum residual - Treated Water	mg/l	0.1	0.04	0.02	0.06	0.04	0.04	0.03	0.05	0.04	0.02	0.02	0.04	0.04	0.03	0.03	0.04	0.02	0.03	0.02	0.04	0.02	0.04	0.01	0.01	0.01	0.07	0.0	0.04	0.04		0.92	0.03
Poly bags added (25 kg bags)	kg		0.5				0.5			0.5						0.5					0.5		0.5					0.5				87.5	

March 15, 2019

Report To: Mayor & Council

From: Travis Rob, P.Eng., Manager of Operations & Facilities

SUBJECT: February 2019 Drinking Water Systems Monthly Summary Report

Please find attached the February 2019 Summary Report on the drinking water systems, prepared by Randy White, Senior WTP Operator.

Your Administration recommends that Operations & Facilities Executive Committee accept the February 2019 report as presented.

Respectfully submitted,
Operations & Facilities Division

Travis Rob, P.Eng.
Manager of Operations & Facilities

<p>Council approval of this report will accept the February 2019 report prior to it being made available to the general public.</p>
--

c.c. – Craig Miller, P.Eng., Environmental Superintendent
Randy White, ORO, Senior WTP Operator

February 2019

**Monthly Summary Report
Water Systems**

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

Dated: March 14, 2019

1) **Introduction:**

This report contains the major maintenance activities and operational events that occurred during the month of February 2019 at the Water Treatment Plant - Water Works # 220000978 and the Airport Groundwater Well Water Works No. 849N7DGE0 (Precedes Airport Groundwater Well Water Works No. 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. The water treatment plant falls under the requirements of Ontario Regulation 170/03 – Drinking Water Systems.

The Airport Small Drinking Water System, System No. 849N7DGE0, was put into service August 01, 2017. The system falls under the requirements of Ontario Regulation 319/08 – Small Drinking Water Systems.

2) **Flow Data:**

Water Treatment Plant: See attached spreadsheet.

Airport Groundwater Well:

Estimated Daily Usage 0.21 m³

Estimated January Usage 6.5 m³

3) **Microbiological (Health Related) Water Analysis - Main Water System No. 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) – one (1) adverse result (February 27th). Direction from MECP was to perform 2 sets of resamples at the adverse result location.

Subsequent resamples had 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.

Water distribution samples taken at the following locations:

- | | | | |
|-----------------------|-----------------------|---------------------|--------------|
| 1. 1111 First St. E. | 2. 1104 Church St | 3. 901 Wright Ave. | 4. W. Tower |
| 5. 740 Scott St. | 6. 1036 Victoria Ave. | 7. 901 Wright Ave. | 8. W. Tower |
| 9. 740 Scott St. | 10. 320 Portage Ave. | 11. 901 Wright Ave. | 12. W. Tower |
| 13. 1111 First St. E. | 14. 1104 Church St. | 15. 740 Scott St. | 16. W. Tower |

4) Microbiological (Health Related) Water Analysis - Airport Groundwater Well No. 849N7DGE0:

New drinking water system put online August 01, 2017. No treatment required as the Airport groundwater tested negative for bacteria.

The Airport drinking water system is to be sampled and tested for bacteria once every three (3) months in accordance with Section 25 – Microbiological Sampling and Testing of the Small Drinking Water Systems Regulation, O. Reg. 319/08.

Water distribution sample taken October 11, 2018 – no adverse results.

5) Free Available Chlorine Residual (FAC) - Main Water System No. 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 No. 849N7DGE0:

New drinking water system put online August 01, 2017. No treatment required as the Airport groundwater well tested negative for bacteria.

7) Maintenance Activities at the WTP:

- Feb 5th Changed oil in both Compressors
 Cleaned lower level of the plant
- Feb 7th Cleaned all 4 check valves on the poly unit
 Cleaned top and bottom tanks on the poly unit
- Feb 8th Greased Clarifiers chains, bearings and gears
- Feb 12th Cleaned upper level of plant
- Feb 16th Calibrated Dist Cl2 analyzer
- Feb 21st Calibrated Dist Cl2 analyzer
 Took grab samples off the filters
- Feb 27th Ran standby generator for 1 hour
- Feb 28th Cleaned top and bottom of tanks on the poly unit
 Cleaned all 4 check valves on the poly unit
 Worked on Filter No. 2 Effluent valve

8) **Water Complaints:**

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

9) **Other Miscellaneous Information:**

Feb 5 th	Health and Safety Inspection
Feb 6 th	Routine micro sample collection Received a bulk load of alum
Feb 11 th	Routine micro sample collection Annual MOE inspection
Feb 12 th	Annual MOE inspection Service repair samples - Metis Hall
Feb 19 th	Routine micro sample collection
Feb 20 th	Service repair samples - 907 Victoria Ave Training course WTP staff
Feb 21 st	Training course WTP staff
Feb 22 nd	Training course WTP staff
Feb 25 th	Routine micro sample collection
Feb 27 th	Adverse result received for sample taken at From The Grind Up
Feb 27 th	Resampled on an adverse sample taken at From The Grind Up

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: _____
- Craig Miller, P.Eng. Environmental Superintendent: _____
- Travis Rob, P.Eng. Manager of Operations & Facilities: _____
- Doug Brown, P.Eng. CAO: _____
- Rick Wiedenhoeft, Chair O & F Exec Committee: _____
- June Caul, Mayor: _____
- John McTaggart, Councillor: _____
- Mike Behan, Councillor: _____
- Wendy Brunetta, Councillor: _____
- Doug Judson, Councillor: _____
- Andrew Hallikas, 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 FEBRUARY	Units	2017		2018		2019	
Total Raw Water	m ³		150010		146620		144630
Raw Maximum Day	m ³		5640		5460		5560
Raw Minimum Day	m ³		4300		5040		4820
Raw Average Daily Consumption	m ³		5360		5240		5170
Total Treated Water	m ³		103680		107410		112420
Treated Water Maximim Day Consumption	m ³		4300		4090		4430
Treated Water Minimim Day Consumption	m ³		3350		3500		3580
Treated Water Average Day Consumption	m ³		3700		3840		4020
Daily Average Per Household Consumption Rate	m ³		0.978		1.015		1.063
* Daily Average Per Person Consumption Rate	m ³		0.463		0.481		0.503
Monthly Averages - Operating Parameters WTP:							
FAC Residual - Treated Water	mg/L		2.15		2.15		2.21
Total Chlorine Residual - Treated Water	mg/L		2.34		2.36		2.39
Aluminum Sulphate - Raw Water	mg/L		35.0		35.0		35.0
Aluminum Sulphate - Treated Water Residual	mg/L		0.05		0.03		0.03
Fluoride - Treated Water	mg/L		0.56		0.57		0.58
Soda Ash - Raw Water	mg/L		35.0		35.0		35.0
pH - Adjusted	mg/L		7.19		7.20		7.03
Temperature	C		2.68		2.0		2.0
Quantity of Chemical Used:	kg						
Aluminum Sulphate	kg		5099.9		5131.7		5062.1
Polyelectrolyte	kg		75.0		62.5		87.5
Chlorine Gas	kg		571		574		561
Soda Ash - Used for PH Adjustment	kg		5099.9		5131.7		5062.1
Fluoride	kg		467		494		543

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

Town of Fort Frances - Water treatment Plant - Water Works # 220000978
Monitoring Record
February 2019

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	Total	Average
		or Range																															
Flow rates																																	
Raw Water	10^3 M^3	17	5.27	5.12	5.31	5.18	5.10	5.28	4.99	5.24	5.56	5.13	4.82	5.20	5.13	5.19	5.20	5.20	5.18	5.16	5.11	5.10	5.19	5.10	5.05	5.23	5.20	5.09	5.12	5.18		144.63	5.17
Peak Instantaneous - Raw Water	L/s	n/a	60.69	60.56	60.51	60.56	60.59	60.54	60.62	60.55	60.62	60.51	60.45	60.53	60.47	60.43	60.36	60.43	60.43	60.34	60.35	60.31	60.28	60.30	60.29	60.24	60.12	60.18	60.11	60.06		1691.43	60.41
Treated Water	10^3 M^3	17	4.33	4.30	4.43	4.22	4.09	4.19	4.05	4.03	4.32	4.23	4.17	3.86	3.92	4.01	3.91	3.89	4.02	3.96	4.07	3.79	3.76	3.70	3.60	3.83	3.89	4.06	4.21	3.58		112.42	4.02
Peak Instantaneous - Treated Water	L/s	n/a	64.63	64.35	65.32	63.58	64.83	65.83	64.87	65.62	64.90	64.18	63.88	64.78	64.86	65.37	65.17	66.25	64.57	64.10	63.72	64.18	63.50	65.20	63.41	62.81	62.45	64.61	65.61	63.29		1805.87	64.50
BackWash Water	10^3 M^3	n/a	0.266	0.239	0.288	0.268	0.239	0.286	0.268	0.000	0.169	0.286	0.266	0.216	0.286	0.266	0.236	0.286	0.000	0.268	0.000	0.234	0.286	0.265	0.247	0.286	0.267	0.227	0.287	0.268		6.50	0.232
Fluoride Information																																	
Fluoride Residual - Treated Water	mg/l	0.5 to 0.8	0.60	0.60	0.59	0.58	0.58	0.58	0.57	0.57	0.54	0.55	0.57	0.57	0.58	0.57	0.57	0.57	0.57	0.58	0.57	0.58	0.58	0.58	0.59	0.58	0.58	0.59	0.59	0.59		16.17	0.58
Turbidity Information																																	
Raw Water	NTU	n/a	1.18	1.22	1.16	1.23	1.24	1.28	1.21	1.26	1.31	1.25	1.17	1.24	1.22	1.26	1.29	1.29	1.19	1.23	1.27	1.16	1.19	1.26	1.16	1.22	1.26	1.22	1.27	1.25		34.49	1.23
Settled Water	NTU	n/a	0.12	0.11	0.10	0.10	0.10	0.10	0.11	0.11	0.09	0.11	0.12	0.11	0.11	0.10	0.09	0.11	0.11	0.10	0.12	0.11	0.10	0.14	0.10	0.10	0.11	0.10	0.11	0.10		2.99	0.11
Treated Water	NTU	1	0.04	0.05	0.05	0.04	0.05	0.05	0.07	0.04	0.07	0.06	0.05	0.04	0.05	0.04	0.04	0.04	0.05	0.04	0.04	0.05	0.04	0.03	0.04	0.06	0.05	0.04	0.05	0.05		1.32	0.05
Other Operating Parameters																																	
pH - Treated Water	no units	6.5 to 8.5	7.08	7.16	7.06	6.99	7.06	7.01	7.02	7.00	7.12	7.10	7.01	7.03	7.04	6.97	7.00	7.00	6.98	6.97	6.95	7.04	7.08	7.12	7.11	7.02	6.97	6.93	6.95	6.97		196.74	7.03
pH - Settled water	no units	n/a	6.06	6.22	6.27	6.27	6.29	6.27	6.32	6.23	6.35	6.32	6.37	6.30	6.36	6.28	6.05	6.28	6.26	6.28	6.24	6.18	6.20	6.22	6.25	6.26	6.32	6.27	6.30	6.26		175.28	6.26
pH - Raw Water	no units	n/a	7.04	7.11	7.11	7.06	7.01	7.09	7.10	7.11	7.07	7.10	7.09	7.10	7.10	7.06	6.77	7.08	7.10	7.07	6.77	7.01	7.00	7.08	7.10	7.04	7.03	7.04	7.06		197.34	7.05	
FAC - Treated Water	mg/l	0.2 to 4	2.32	2.28	2.30	2.26	2.30	2.20	2.00	2.11	2.09	2.05	2.20	2.26	2.28	2.30	2.20	2.20	2.26	2.24	2.22	2.30	2.16	2.10	2.18	1.98	2.40	2.28	2.12	2.19		61.78	2.21
Total Chlorine Residual Treated	mg/l	0.3 to 7	2.56	2.48	2.54	2.40	2.42	2.34	2.22	2.46	2.48	2.28	2.38	2.36	2.40	2.38	2.32	2.34	2.40	2.34	2.50	2.56	2.42	2.32	2.38	2.16	2.52	2.40	2.26	2.30		66.92	2.39
Temperature	C	15	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		56.0	2.00	
Fluoride used (Total Daily Consumption)	kg	n/a	21.0	21.0	20.0	20.0	20.0	20.0	19.0	20.0	21.0	19.0	17.0	19.0	18.0	19.0	18.0	18.0	18.0	17.0	18.0	19.0	21.0	20.0	20.0	20.0	20.0	19.0	19.0		543.0	19.39	
Chlorine used (Total Daily Consumption)	kg	n/a	21.0	19.0	22.0	20.0	19.0	21.0	24.0	20.0	22.0	20.0	19.0	20.0	20.0	20.0	19.0	20.0	20.0	20.0	20.0	20.0	20.0	18.0	20.0	20.0	20.0	19.0	19.0		561.0	20.04	
Soda ash (Total Daily Consumption)	kg	n/a	184.5	179.2	185.9	181.3	178.5	184.8	174.7	183.4	194.6	179.6	168.7	182.0	179.6	181.7	182.0	182.0	181.3	180.6	178.9	178.5	181.7	178.5	176.8	183.1	182.0	178.2	179.2	181.3		5062.1	180.79
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		980.0	35.00	
Alum residual - (Total Daily Consumption)	kg	n/a	184.5	179.2	185.9	181.3	178.5	184.8	174.7	183.4	194.6	179.6	168.7	182.0	179.6	181.7	182.0	182.0	181.3	180.6	178.9	178.5	181.7	178.5	176.8	183.1	182.0	178.2	179.2	181.3		5062.1	180.79
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		980.0	35.00	
Alum residual - Treated Water	mg/l	0.1	0.04	0.02	0.06	0.04	0.04	0.03	0.05	0.04	0.02	0.02	0.04	0.04	0.03	0.03	0.04	0.02	0.03	0.02	0.04	0.02	0.04	0.01	0.01	0.01	0.07	0.0	0.04	0.04		0.92	0.03
Poly bags added (25 kg bags)	kg		0.5				0.5			0.5						0.5					0.5		0.5					0.5				87.5	

April 15, 2019

Report To: Mayor & Council

From: Travis Rob, P.Eng., Manager of Operations & Facilities

SUBJECT: March 2019 Drinking Water Systems Monthly Summary Report

Please find attached the March 2019 Summary Report on the drinking water systems, prepared by Randy White, Senior WTP Operator.

Your Administration recommends that Operations & Facilities Executive Committee accept the March 2019 report as presented.

Respectfully submitted,
Operations & Facilities Division

Travis Rob, P.Eng.
Manager of Operations & Facilities

Council approval of this report will accept the March 2019 report prior to it being made available to the general public.
--

c.c. – Craig Miller, P.Eng., Environmental Superintendent
Randy White, ORO, Senior WTP Operator

March 2019

**Monthly Summary Report
Water Systems**

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

Dated: April 10, 2019

1) **Introduction:**

This report contains the major maintenance activities and operational events that occurred during the month of March 2019 at the Water Treatment Plant - Water Works # 220000978 and the Airport Groundwater Well Water Works No. 849N7DGE0 (Precedes Airport Groundwater Well Water Works No. 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. The water treatment plant falls under the requirements of Ontario Regulation 170/03 – Drinking Water Systems.

The Airport Small Drinking Water System, System No. 849N7DGE0, was put into service August 01, 2017. The system falls under the requirements of Ontario Regulation 319/08 – Small Drinking Water Systems.

2) **Flow Data:**

Water Treatment Plant: See attached spreadsheet.

Airport Groundwater Well:

Estimated Daily Usage 0.21 m3

Estimated January Usage 6.5 m3

3) **Microbiological (Health Related) Water Analysis - Main Water System No. 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.

Water distribution samples taken at the following locations:

- | | | | |
|-----------------------|-----------------------|---------------------|--------------|
| 1. 1111 First St. E. | 2. 1104 Church St | 3. 901 Wright Ave. | 4. W. Tower |
| 5. 740 Scott St. | 6. 1036 Victoria Ave. | 7. 901 Wright Ave. | 8. W. Tower |
| 9. 740 Scott St. | 10. 320 Portage Ave. | 11. 901 Wright Ave. | 12. W. Tower |
| 13. 1111 First St. E. | 14. 1104 Church St. | 15. 740 Scott St. | 16. W. Tower |

4) Microbiological (Health Related) Water Analysis - Airport Groundwater Well No. 849N7DGE0:

New drinking water system put online August 01, 2017. No treatment required as the Airport groundwater tested negative for bacteria.

The Airport drinking water system is to be sampled and tested for bacteria once every three (3) months in accordance with Section 25 – Microbiological Sampling and Testing of the Small Drinking Water Systems Regulation, O. Reg. 319/08.

Water distribution sample taken October 11, 2018 – no adverse results.

5) Free Available Chlorine Residual (FAC) - Main Water System No. 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 No. 849N7DGE0:

New drinking water system put online August 01, 2017. No treatment required as the Airport groundwater well tested negative for bacteria.

7) Maintenance Activities at the WTP:

Mar 1st Greased both clarifiers, chains, gears and bearings
Calibrated distribution chlorine analyzer

Mar 7th Cleaned top and bottom tanks on the poly unit
Cleaned all 4 check valves on the poly unit

Mar 13th Took grab samples off the filters

Mar 25th Changes chlorine tanks

Mar 27th Took grab samples off the filters

Mar 28th Calibrated distribution Chlorine analyzer

Mar 31st Calibrated distribution Chlorine analyzer

8) **Water Complaints:**

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

9) **Other Miscellaneous Information:**

Mar 4 th	Routine micro sample collection
Mar 5 th	Resample on Adverse From the Grind Up QMS Meeting
Mar 11 th	Routine micro sample collection
Mar 12 th	Took quarterly samples at the Plant and Tower Took T.S.S. Samples off Filter #3
Mar 13 th	Took DWSP samples at the Plant and Tower
Mar 14 th	Received a shipment of chlorine
Mar 18 th	Received a bulk load of Liquid alum Routine micro sample collection
Mar 19 th	QMS meeting
Mar 25 th	Routine micro sample collection
Mar 26 th	QMS meeting
Mar 28 th	Began Spring Community Lead Sampling Program

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: _____
- Craig Miller, P.Eng. Environmental Superintendent: _____
- Travis Rob, P.Eng. Manager of Operations & Facilities: _____
- Doug Brown, P.Eng. CAO: _____
- Rick Wiedenhoeft, Chair O & F Exec Committee: _____
- June Caul, Mayor: _____
- John McTaggart, Councillor: _____
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- Doug Judson, Councillor: _____
- Andrew Hallikas, 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 and Operating Data

Flow Data MARCH	Units	2017		2018		2019	
Total Raw Water	m ³		171720		160430		158980
Raw Maximum Day	m ³		5760		5470		5380
Raw Minimum Day	m ³		5280		4800		4680
Raw Average Daily Consumption	m ³		5540		5180		5130
* Daily Instantaneous Peak Flow	L/min.						
Total Treated Water	m ³		113560		124800		121380
Treated Water Maximim Day Consumption	m ³		4600		4640		4880
Treated Water Minimim Day Consumption	m ³		2950		3170		3440
Treated Water Average Day Consumption	m ³		3660		4030		3920
Daily Average Per Household Consumption Rate	m ³		0.97		1.07		1.04
* Daily Average Per Person Consumption Rate	m ³		0.46		0.50		0.49
Monthly Averages - Operating Parameters WTP:							
FAC Residual - Treated Water	mg/L		2.22		2.15		2.14
Total Chlorine Residual - Treated Water	mg/L		2.41		2.38		2.33
Aluminum Sulphate - Raw Water	mg/L		35.0		35.0		35.0
Aluminum Sulphate - Treated Water Residual	mg/L		0.05		0.03		0.03
Fluoride - Treated Water	mg/L		0.56		0.60		0.6
Soda Ash - Raw Water	mg/L		35.0		35.0		35.0
pH - Adjusted	mg/L		7.20		7.16		6.83
Temperature	C		2.4		2.0		2.1
Quantity of Chemical Used:							
Aluminum Sulphate	kg		6010.2		5615.1		5564.3
Polyelectrolyte	kg		62.5		75.0		75
Chlorine Gas	kg		674		615		590
Soda Ash - Used for PH Adjustment	kg		6010.2		5615.1		5564.3
Fluoride	kg		580		504		563

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

Town of Fort Frances - Water treatment Plant - Water Works # 220000978
Monitoring Record
March 2019

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	31	Total	Average
		or Range																																	
Flow rates																																			
Raw Water	10^3 M^3	17	5.11	5.38	5.36	4.68	5.25	5.02	5.23	5.08	5.20	5.04	4.87	5.17	5.08	5.30	5.21	5.27	5.04	5.01	5.09	5.04	5.15	5.18	5.23	5.07	4.89	5.21	5.34	5.16	5.10	5.13	5.09	158.98	5.13
Peak Instantaneous - Raw Water	L/s	n/a	60.01	60.09	60.16	60.05	60.14	59.94	60.03	60.00	60.01	60.16	60.06	60.17	60.11	60.10	60.08	60.00	60.00	59.93	59.94	59.86	59.93	59.81	59.73	59.66	59.59	59.43	59.46	59.46	59.39	59.35	59.48	1856.13	59.88
Treated Water	10^3 M^3	17	3.85	4.11	4.09	3.50	3.96	3.75	3.95	3.78	3.87	3.78	3.44	3.82	4.58	4.88	4.10	3.89	3.79	3.77	3.77	3.70	3.92	3.92	3.93	3.78	4.11	3.97	3.55	3.85	4.37	3.84	3.76	121.38	3.92
Peak Instantaneous - Treated Water	L/s	n/a	64.69	64.65	62.97	62.86	64.37	65.15	65.23	64.49	64.45	63.78	63.20	64.30	65.01	64.81	65.87	64.07	63.15	62.83	64.13	64.58	65.56	64.18	64.33	62.96	63.44	64.56	64.70	64.24	67.03	64.80	62.30	1992.69	64.28
BackWash Water	10^3 M^3	n/a	0.220	0.248	0.260	0.226	0.285	0.266	0.226	0.285	0.268	0.000	0.218	0.284	0.215	0.268	0.000	0.225	0.296	0.266	0.218	0.285	0.267	0.219	0.255	0.266	0.234	0.285	0.266	0.234	0.285	0.269	0.242	7.381	0.238
Fluoride Information																																			
Fluoride Residual - Treated Water	mg/l	0.5 to 0.8	0.59	0.58	0.59	0.58	0.58	0.58	0.59	0.58	0.58	0.59	0.60	0.60	0.60	0.60	0.60	0.61	0.59	0.60	0.60	0.60	0.60	0.57	0.59	0.58	0.61	0.61	0.60	0.60	0.62	0.62	0.63	18.47	0.60
Turbidity Information																																			
Raw Water	NTU	n/a	1.23	1.31	1.33	1.28	1.23	1.24	1.19	1.23	1.27	1.22	1.27	1.23	1.12	1.01	1.17	1.25	1.22	1.26	1.23	1.00	1.16	1.21	1.25	1.22	1.26	1.25		1.28	1.25	1.21	1.18	36.56	1.22
Settled Water	NTU	n/a	0.10	0.12	0.09	0.10	0.10	0.10	0.10	0.11	0.10	0.11	0.10	0.11	0.09	0.10	0.10	0.10	0.12	0.11	0.10	0.11	0.10	0.09	0.09	0.10	0.11	0.10		0.10	0.10	0.11	0.10	3.07	0.10
Treated Water	NTU	1	0.06	0.07	0.07	0.05	0.05	0.06	0.05	0.05	0.04	0.04	0.04	0.04	0.05	0.05	0.04	0.07	0.06	0.04	0.05	0.05	0.05	0.04	0.06	0.05	0.05	0.05		0.06	0.05	0.05	0.05	1.54	0.05
Other Operating Parameters																																			
pH - Treated Water	no units	6.5 to 8.5	6.96	2.07	7.12	6.94	6.91	6.98	7.01	6.98	6.97	6.95	6.97	6.93	6.97	6.98	6.96	7.01	7.07	6.97	6.98	7.01	7.00	7.07	7.04	7.10	6.99	7.00		6.98	7.00	6.97	6.95	204.84	6.83
pH - Settled water	no units	n/a	6.28	6.25	6.22	6.27	6.27	6.21	6.28	6.24	6.34	6.25	6.27	6.23	6.30	6.18	6.26	6.22	6.24	6.20	6.19	6.22	6.23	6.25	6.17	6.21	6.27	6.25		6.30	6.31	6.28	6.30	187.49	6.25
pH - Raw Water	no units	n/a	7.06	7.00	7.07	6.98	7.01	7.05	7.03	7.01	7.00	6.99	7.03	6.97	6.99	7.05	7.01	7.00	7.01	7.08	6.91	6.93	7.07	7.01	7.04	7.01	7.07	7.03		7.05	7.07	7.01	6.99	210.53	7.02
FAC - Treated Water	mg/l	0.2 to 4	2.11	2.09	2.01	2.09	2.19	2.13	2.14	2.18	2.22	2.18	2.15	2.22	2.26	2.20	2.12	2.00	2.20	2.18	2.14	2.13	2.11	2.19	2.21	2.06	2.07	2.05	2.16	2.16	2.18	2.11	2.15	66.39	2.14
Total Chlorine Residual Treated	mg/l	0.3 to 7	2.22	2.20	2.22	2.38	2.46	2.30	2.36	2.38	2.40	2.30	2.44	2.36	2.32	2.52	2.36	2.18	2.36	2.48	2.48	2.42	2.28	2.40	2.44	2.18	2.22	2.17	2.34	2.26	2.30	2.26	2.26	72.25	2.33
Temperature	C	15	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	66.0	2.1	
Fluoride used (Total Daily Consumption)	kg	n/a	19.0	20.0	19.0	18.0	19.0	17.0	19.0	18.0	17.0	8.0	17.0	18.0	17.0	18.0	17.0	20.0	19.0	20.0	19.0	19.0	20.0	20.0	19.0	19.0	18.0	19.0	18.0	19.0	18.0	17.0	563.0	18.2	
Chlorine used (Total Daily Consumption)	kg	n/a	19.0	21.0	20.0	17.0	19.0	18.0	21.0	19.0	19.0	19.0	18.0	19.0	19.0	20.0	19.0	19.0	19.0	19.0	19.0	18.0	20.0	19.0	19.0	19.0	19.0	18.0	18.0	20.0	19.0	18.0	20.0	590.0	19.0
Soda ash (Total Daily Consumption)	kg	n/a	178.9	188.3	187.6	163.8	183.8	175.7	183.1	177.8	182.0	176.4	170.5	181.0	177.8	185.5	182.4	184.5	176.4	175.4	178.2	176.4	180.3	181.3	183.1	177.5	171.2	182.4	186.9	180.6	178.5	179.6	178.2	5564.3	179.5
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	35.0	35.0	1085.0	35.0
Alum residual - (Total Daily Consumption)	kg	n/a	178.9	188.3	187.6	163.8	183.8	175.7	183.1	177.8	182.0	176.4	170.5	181.0	177.8	185.5	182.4	184.5	176.4	175.4	178.2	176.4	180.3	181.3	183.1	177.5	171.2	182.4	186.9	180.6	178.5	179.6	178.2	5564.3	179.5
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	35.0	35.0	1085.0	35.0
Alum residual - Treated Water	mg/l	0.1	0.03	0.01	0.01	0.03	0.03	0.04	0.04	0.04	0.04	0.06	0.05	0.02	0.03	0.04	0.03	0.03	0.03	0.01	0.04	0.03	0.04	0.01	0.02	0.03	0.03	0.03	0.01	0.03	0.05	0.03	0.03	0.95	0.03
Poly bags added (25 kg bags)	kg						0.5			0.5					0.5		0.5				0.5							0.5						75.0	

OPERATIONS AND FACILITIES DIVISION - PUBLIC WORKS AREA
OPERATIONS STATISTICS
January 2019

STAFFING

The following table is a breakdown of lost man shifts during the month:

	2018	2019
WSIB	0.00	0.00
WI/LTD	0.00	0.00
SICK DAYS	18.44	9.88
COMPASSIONATE LEAVE	0.00	5.00
FLOATERS	11.00	7.00
VACATION	39.25	13.75
BANKED TIME USED	3.00	4.06
OFF	2.50	0.00
STATUTORY HOLIDAYS	28.00	30.00
TOTAL	102.19	69.69

OVERTIME HOURS

Equivalent Straight Time Hours:

	2018 Current Month	2019 Current Month	2018 Year To Date	2019 Year To Date
ADMINISTRATION	0.00	0.00	0.00	0.00
TRAVEL	2.50	4.00	2.50	4.00
ENGINEERING	0.00	0.00	0.00	0.00
INTERDEPARTMENTAL	0.00	12.00	0.00	12.00
PRIVATE WORK	0.00	0.00	0.00	0.00
RECYCLE/GARBAGE	5.25	16.00	5.25	16.00
ROADS	125.75	106.75	125.75	106.75
SEWER COLLECTION	28.50	32.00	28.50	32.00
SIDEWALKS	27.00	19.50	27.00	19.50
STORES	16.00	1.50	16.00	1.50
VEHICLE & EQUIPMENT	4.00	12.00	4.00	12.00
WATER TREATMENT PLANT	11.00	24.00	11.00	24.00
WATER DISTRIBUTION	0.00	42.50	0.00	42.50
WATER TOWER	0.00	0.00	0.00	0.00
TOTAL	220.00	270.25	220.00	270.25

TRANSPORTATION REPORT

January 2019

ROADS:

Storm Water Management – Urban:

Storm Water Management - Rural:

Hard Top Maintenance:

- Levelled utility cuts – twice weekly
- Pothole patching as required

Loose Top Maintenance

Roadside Maintenance:

Winter Control:

- Three (3) events – January 7th, January 21st and January 23rd
- Plowed all roadways and lanes as required
- Sanded/salted roads as required
- Removed snow from the Downtown area twice
- Removed snow from municipal parking lots twice
- Removed snow from OPP parking lot twice
- Removed snow from all cul-de-sacs twice
- Removed snow from underpass twice
- Removed Zamboni snow from Sports Centre twice
- Began removing snow from lane piles and intersections
- Removed snow from handicap parking spots twice
- Removed snow from all hydrants
- Removed snow from businesses and churches outside of the downtown area
- Removed snow on Frenette Avenue from Scott Street to Second Street
- Removed snow from intersections on priority routes
- Removed snow banks on Third Street West from Central Avenue to York Avenue
- Pushed up piles at snow dump daily
- Plowed snow dump as required.

Traffic Operations:

- Repaired and replaced signs as required
- Continued replacing signs that failed reflectivity testing

Regular Maintenance:

- Garbage pickup - Tuesday and Friday - Downtown and Public Works Shop
- Assisted Engineering with locates and CCTV inspections.
- Assisted with tasks at Civic Centre as required.
- Maintenance checks at the Civic Centre as required
- Repaired deficiencies found in Routine Road Patrols

Buildings and Grounds:

- Cleaned Shop as required
- Cleaned vehicles and equipment as required
- Plowed snow in all yards as required.

Private Work:**Sidewalks – Winter:**

- Cleaned snow and ice from Civic Centre sidewalks and applied ice melt as required
- Cleaned snow from underpass sidewalks and downtown corners and applied ice melt or sand/salt as required
- Plowed all sidewalks as required

Sidewalks – Summer:**Vehicles and Equipment:**

- Preventative Maintenance – pre-trip inspections 5:30 – 7:30 am Monday to Friday
- Regular scheduled maintenance of all vehicles and equipment
- Maintenance and repairs, Fire Department, Water Treatment Plant, Memorial Sports Centre, Day Care, Handi-Van, Airport and Civic Centre Vehicles as required
- Cleaned vehicles and equipment as required.

Public Relations:

Sewer and Water:

- Provided labour and equipment for Water Distribution and Sewer Collection repairs and maintenance.
- Handed out “Water Turn Off Advisories”, “Drinking Water Advisories” and “Lifting of Drinking Water Advisories” when required
- Issued “Delinquent Account Notices” and turned off water for non-compliance as required.

Interdepartmental:

- Jeff Bragg provided coverage for vacation at the Airport January 11th and 13th.

Recycling:

- Emptied glass recycling bin as required
- Pushed up piles in recycling building as required
- Loaded Commercial Recycling Bin as required
- Cleaned up recycling yard

Training:**Health & Safety:**

- A workplace inspection was done at the Public Works Shop area on January 16th.

Milt Strachan,
Superintendent of Transportation

OPERATIONS AND FACILITIES DIVISION - PUBLIC WORKS AREA
OPERATIONS STATISTICS
February 2019

STAFFING

The following table is a breakdown of lost man shifts during the month:

	2018	2019
WSIB	0.00	0.00
WI/LTD	0.00	0.00
SICK DAYS	9.94	7.00
COMPASSIONATE LEAVE	5.00	0.00
FLOATERS	9.00	3.00
VACATION	14.56	6.00
BANKED TIME USED	11.63	11.69
OFF	0.63	0.00
STATUTORY HOLIDAYS	27.00	30.00
TOTAL	77.76	57.69

OVERTIME HOURS

Equivalent Straight Time Hours:

	2018	2019	2018	2019
	Feb	Feb	Year To	Year To
			Date	Date
ADMINISTRATION	0.00	0.00	0.00	0.00
TRAVEL	0.00	2.50	5.00	6.50
ENGINEERING	2.00	0.00	2.00	0.00
INTERDEPARTMENTAL	2.00	0.00	2.00	12.00
PRIVATE WORK	0.00	0.00	3.00	0.00
RECYCLE/GARBAGE	0.00	3.75	8.00	19.75
ROADS	125.25	279.25	157.75	386.00
SEWER COLLECTION	38.75	21.50	75.50	53.50
SIDEWALKS	12.00	79.50	18.00	99.00
STORES	0.00	0.00	6.00	1.50
VEHICLE & EQUIPMENT	8.00	20.00	24.00	32.00
WATER TREATMENT PLANT	14.00	6.50	30.00	30.50
WATER DISTRIBUTION	84.50	109.75	97.75	152.25
WATER TOWER	0.00	0.00	0.00	0.00
TOTAL	286.50	522.75	429.00	793.00

TRANSPORTATION REPORT

February 2019

ROADS:

Storm Water Management – Urban:

Storm Water Management - Rural:

Hard Top Maintenance:

- Levelled utility cuts – twice weekly
- Pothole patching as required

Loose Top Maintenance

Roadside Maintenance:

Winter Control:

- Five (5) events – February 4th, 7th, 21st, 23rd and 28th
- Plowed all roadways and lanes as required
- Sanded/salted roads as required
- Removed snow from the Downtown area three times
- Removed snow from municipal parking lots twice
- Removed snow from OPP parking lot twice
- Removed snow from all cul-de-sacs
- Removed snow from underpass twice
- Removed Zamboni snow from Sports Centre three times
- Began removing snow from lane piles and intersections
- Removed snow from handicap parking spots twice
- Removed snow from all hydrants again
- Removed snow banks on Third Street West from Central Avenue to York Avenue
- Continued removing snow from lane piles and intersections
- Removed snow from all intersections along King's Hwy
- Removed snow on Keating Avenue from King's Hwy to First Street
- Mixed additional sand/salt on February 12th and 13th
- Cut down ice and removed snow banks on Portage Avenue North and Sixth Street in North End
- Removed snow banks on Scott Street from Armit Avenue to Colonization Road East
- Removed snow banks on Second Street from Colonization Road East to Shevlin

Winter Control (cont'd)

Avenue

- Removed snow banks on 200 and 300 blocks of Second Street East
- Pushed up piles at snow dumps daily
- Plowed snow dumps as required
- Hired 2 additional tandems for both day shift and night shift starting February 18th to the end of February.

Traffic Operations:

- Repaired and replaced signs as required
- Replaced battery in speed sign on King's Hwy.

Regular Maintenance:

- Garbage pickup - Tuesday and Friday - Downtown and Public Works Shop
- Assisted Engineering with locates and CCTV inspections.
- Assisted with tasks at Civic Centre as required.
- Maintenance checks at the Civic Centre as required
- Repaired deficiencies found in Routine Road Patrols

Buildings and Grounds:

- Cleaned Shop as required
- Cleaned vehicles and equipment as required
- Plowed snow in all yards as required.

Private Work:

Sidewalks – Winter:

- Cleaned snow and ice from Civic Centre sidewalks and applied ice melt as required
- Cleaned snow from underpass sidewalks and downtown corners and applied ice melt or sand/salt as required
- Plowed all sidewalks after every snow event

Sidewalks – Summer:

Vehicles and Equipment:

- Preventative Maintenance – pre-trip inspections 5:30 – 7:30 am Monday to Friday
- Regular scheduled maintenance of all vehicles and equipment

Vehicles and Equipment (cont'd)

- Maintenance and repairs, Fire Department, Water Treatment Plant, Memorial Sports Centre, Day Care, Handi-Van, Airport and Civic Centre Vehicles as required

Public Relations:

Sewer and Water:

- Provided labour and equipment for Water Distribution and Sewer Collection repairs and maintenance.
- Handed out “Water Turn Off Advisories”, “Drinking Water Advisories” and “Lifting of Drinking Water Advisories” when required
- Issued “Delinquent Account Notices” and turned off water for non-compliance as required.

Interdepartmental:

- Hauled ski trail groomer to Caron’s to be re-wired
- Delivered 12 barricades to the Memorial Sports Centre parking lot to keep vehicles away from the ice on the 52 Rink roof
- Jeff Bragg provided coverage for vacation at the Airport on February 1st and again from February 21st to 24th.

Recycling:

- Emptied glass recycling bin as required
- Pushed up piles in recycling building as required
- Loaded Commercial Recycling Bin as required
- Cleaned up recycling yard

Training:

Health & Safety:

- A Tailgate Meeting was held in the Public Works Shop Area on February 5th.

Milt Strachan,
Superintendent of Transportation

OPERATIONS AND FACILITIES DIVISION - PUBLIC WORKS AREA
OPERATIONS STATISTICS
March 2019

STAFFING

The following table is a breakdown of lost man shifts during the month:

	2018	2019
WSIB	0.00	0.00
WI/LTD	0.00	0.00
SICK DAYS	11.63	9.81
COMPASSIONATE LEAVE	0.00	3.00
FLOATERS	6.00	9.00
VACATION	29.50	42.50
BANKED TIME USED	10.38	9.69
OFF	2.19	0.00
STATUTORY HOLIDAYS	25.00	0.00
TOTAL	84.70	74.00

OVERTIME HOURS

Equivalent Straight Time Hours:

	2018	2019	2018	2019
	March	March	Year To	Year To
			Date	
ADMINISTRATION	0.00	0.00	0.00	0.00
TRAVEL	2.50	0.00	7.50	6.50
ENGINEERING	0.00	0.00	2.00	0.00
INTERDEPARTMENTAL	0.00	6.00	2.00	18.00
PRIVATE WORK	0.00	3.75	3.00	3.75
RECYCLE/GARBAGE	12.00	0.75	20.00	20.50
ROADS	16.75	137.75	174.50	523.75
SEWER COLLECTION	21.50	12.50	97.00	66.00
SIDEWALKS	0.00	24.00	18.00	123.00
STORES	0.00	0.00	6.00	1.50
VEHICLE & EQUIPMENT	0.00	3.00	24.00	35.00
WATER TREATMENT PLANT	31.00	4.00	61.00	34.50
WATER DISTRIBUTION	13.50	76.00	111.25	228.25
WATER TOWER	0.00	0.00	0.00	0.00
TOTAL	97.25	267.75	526.25	1060.75

TRANSPORTATION REPORT

March 2019

ROADS:

Storm Water Management – Urban:

- Steamed catch basins to get water moving
- Flushed storm sewer laterals to get water moving.

Storm Water Management - Rural:

- Steamed culverts to get water moving
- Flushed culverts to get water moving

Hard Top Maintenance:

- Levelled utility cuts – twice weekly
- Pothole patching as required

Loose Top Maintenance:

Roadside Maintenance:

Winter Control:

- Two (2) events – March 9th and 10th
- Plowed all roadways, lanes and parking lots as required
- Sanded/salted roads as required
- Continued removing snow from intersections and lane entrances
- Removed snow from hydrants
- Removed snow from downtown area, municipal parking lots and OPP parking lot twice
- Removed snow on King's Hwy from Central Avenue to McIrvine Road
- Removed snow on Second Street East from Victoria Avenue to Shevlin Avenue
- Removed snow on the 500 and 600 blocks of Victoria Avenue
- Removed snow from cul-de-sacs
- Removed snow on First Street East from Central Avenue to Frenette Avenue
- Removed snow from 400, 500 and 600 blocks of Armit Avenue
- Removed snow from 500, 600 and 700 blocks of Crowe Avenue
- Removed snow on Portage Avenue from Fifth Street to Sixth Street
- Removed snow on Central Avenue for Third Street to Church Street
- Continued using hired trucks up until March 15th

Winter Control (cont'd)

- Removed snow to curb on 800 and 900 blocks of Third Street East
- Night shift ended on March 22nd
- Pushed up piles at snow dumps daily.

Traffic Operations:

- Repaired and replaced signs as required

Regular Maintenance:

- Garbage pickup - Tuesday and Friday - Downtown and Public Works Shop
- Assisted Engineering with locates and CCTV inspections.
- Assisted with tasks at Civic Centre as required.
- Maintenance checks at the Civic Centre as required
- Repaired deficiencies found in Routine Road Patrols

Buildings and Grounds:

- Cleaned Shop as required
- Cleaned vehicles and equipment as required
- Plowed all yards as required

Private Work:**Sidewalks – Winter:**

- Cleaned snow from Civic Centre sidewalks, downtown corners and underpass sidewalks and applied ice melt as required.
- Cleaned snow from underpass sidewalk and downtown corners and applied ice melt or sand/salt as required.
- Plowed all sidewalks after snow events.

Sidewalks – Summer:**Vehicles and Equipment:**

- Preventative Maintenance – pre-trip inspections 5:30 – 7:30 am Monday to Friday

Vehicles and Equipment (cont'd)

- Regular scheduled maintenance of all vehicles and equipment
- Maintenance and repairs, Fire Department, Water Treatment Plant, Memorial Sports Centre, Day Care, Handi-Van, Airport and Civic Centre Vehicles as required

Public Relations:

Sewer and Water:

- Provided labour and equipment for Water Distribution and Sewer Collection repairs and maintenance.
- Handed out “Water Turn Off Advisories”, “Drinking Water Advisories” and “Lifting of Drinking Water Advisories” when required
- Issued “Delinquent Account Notices” and turned off water for non-compliance as required.

Interdepartmental:

- Jeff Bragg provided coverage for vacation at the Airport from March 8th to March 26th

Recycling:

- Emptied glass recycling bin as required
- Pushed up piles in recycling building as required
- Loaded Commercial Recycling Bin as required
- Cleaned up recycling yard

Training:

- Paul Lemesurier, Greg Wiedenhoeft, Bryan Patterson, Cathy Westover, Randy McArthur, Eric Onichuk, Dan Boileau, Larry Bragg and James Garvie attending Working from Heights Training on March 27th.
- Jay Bruyere, Paul LaFreniere, Rich Walton, Darwin Woods, Nick Wreggitt, Matt McLellan, Eric Gustafson and Jeff Bragg attended Working from Heights Training on March 28th.

Health & Safety:

- A tailgate meeting was held in the public works shop area on March 21st. The tailgate included the annual WHIMIS Training.

Milt Strachan,
Superintendent of Transportation

Overtime Hours

The following is the monthly summary of Overtime hours expressed as equivalent straight time hours

2018	January	February	March	April	May	June	July	August	September	October	November	December
ADMINISTRATION	0	0	0	0	0	0	0	0	0	0	0	0
TRAVEL	5	0	2.5	33	0	0	0	2.5	5	0	0	2.5
ENGINEERING	0	2	0	4	0	0	0	0	0	0	1.5	0
INTERDEPARTMENTAL	0	2	0	0	8	8	3.75	3	18.75	0.75	3	0
PRIVATE WORK	3	0	0	0	0	0	0	0	0	0.75	0	1.5
RECYCLE/GARBAGE	8	0	12	4	0.75	1.5	0	0	15.25	0	0	0.75
ROADS	32.5	125.25	16.75	12	32.75	9	6.75	31.5	5.25	17.25	136	185.5
SEWER COLLECTION	21.75	38.75	21.5	22.25	20.75	57.5	12	22.25	14	24.38	20.75	16.5
SIDEWALKS	6	12	0	0	0	0	0	0	0	0	0	36
STORES	6	0	0	0	0	0	0	0	0	0	0	13.5
VEHICLES & EQUIPMENT	16	8	0	0	0	0	0	0	0	0	4	10
WATER TREATMENT PLANT	16	14	31	8	16	32.5	23.75	38.5	26.75	16	20	12
WATER DISTRIBUTION	13.25	84.5	13.5	48.5	76.75	52.25	48.5	112.75	39.25	15.25	20	12
WATER TOWER	0	0	0	0	0	0	0	0	0	0	0	0
TRAINING	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	127.5	286.5	97.25	131.75	155	160.75	94.75	210.5	124.25	74.38	205.25	290.25

2017	January	February	March	April	May	June	July	August	September	October	November	December
ADMINISTRATION	0	0	0	0	0	0	0	0	0	0	0	0
TRAVEL	2.5	0	0	0	11.5	0	0	0	0	0	0	0
ENGINEERING	0	0	0	0	0	6	0	1.5	0	0	0	0
INTERDEPARTMENTAL	0	0	0	0	10.5	6	14.25	0	16	3.75	0	2.25
PRIVATE WORK	0	3	0	2.25	0	1.5	0	0	0	0	0	0
RECYCLE/GARBAGE	5.25	4	0	4	4.75	4	0.75	0	0	0	0	4
ROADS	125.75	46.5	0	4	0	85.5	11.5	8.5	0	14	204.75	192.5
SEWER COLLECTION	28.5	11	3	24	1.5	23.75	62	0	16	0	32.75	52
SIDEWALKS	27	15	0	0	0	3.75	0	45.25	0	0	12	13.5
STORES	16	0.75	0	0	0	0	0	0	0	0	0	38
VEHICLES & EQUIPMENT	4	0	0	0	0	0	0	0	0	3	19	0
WATER TREATMENT PLANT	11	3	10.25	5.5	4	23	22.75	0	13.25	27	13.5	20
WATER DISTRIBUTION	0	34.75	1.5	40.75	4.5	37.25	32.25	12	24.75	36.25	25.75	12
WATER TOWER	0	2.25	0	0	0	0	0	39.25	0	0	0	0
TRAINING	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	220	120.25	14.75	80.5	36.75	190.75	143.5	106.5	70	84	307.75	334.25

2016	January	February	March	April	May	June	July	August	September	October	November	December
ADMINISTRATION		0	0	0	142.5	0	0	0	0	0	0	0
TRAVEL		2.5	0	0	0	0	0	0	0	0	0	0
ENGINEERING		0	4	0	4	0	0	0	0	0	0	0
INTERDEPARTMENTAL	8.25	0.75	0	0	0	8	6.75	0	0	0	0	0
PRIVATE WORK		0	8	0	0	0	0	21	1.5	0	0	0
RECYCLE/GARBAGE	16	0	1.5	4	0	0	0	0.75	9.5	0	0	0
ROADS	27	63	68.75	8	0	12	63	27.75	19.75	25.5	50	298.5
SEWER COLLECTION	27.25	17.5	63.5	16	18.25	54.25	43	24	82.5	18.25	32	19
SIDEWALKS		3	0	0	0	0	0	0	0	0	0	33.75
STORES	30	0	0	0	0	0	0	0	0	0	0.75	0
VEHICLES & EQUIPMENT		0	0	4	0	0	0	0	0	0	0	11
WATER TREATMENT PLANT	40.5	82.25	29.75	9.25	30.5	16	35.5	44	8	24	34.25	20
WATER DISTRIBUTION	129.5	48.5	51.75	4	62.5	131	45.75	42.75	65	5.25	7.5	0
WATER TOWER		0	0	0	0	0	0	0	0	0	0	0
TRAINING		0	0	0	0	0	0	0	0	0	0	0
TOTAL	278.5	217.5	227.25	45.25	257.75	221.25	194	160.25	186.25	73	124.5	382.25

Staffing

The following is an annual Summary of lost man shifts during each month:

2018	January	February	March	April	May	June	July	August	September	October	November	December
WSIB	0	0	0	0	0	0	0	0	0	14	0	10
W/LTD	0	0	0	0	0	0	0	19	20	23	21	3.81
SICK DAYS	18.44	9.94	11.63	6.13	7.38	11.44	9.31	4.13	6.59	10.06	14	4
COMPASSIONATE LEAVE	0	5	0	3	0	0	0	11	3	0	0	5
FLOATERS	11	9	6	5	3	1	6	1	2	3	0	64.38
VACATION	39.25	14.56	29.5	20.75	37.38	40.13	72.75	76	14	40.5	32	23.91
BANKED TIME USED	3	11.63	10.38	11.63	9.41	7	8.44	7.06	6.38	5.31	9.88	0.72
OFF NO PAY	2.5	0.63	2.19	0	2.63	5.5	18.19	5.38	0	3.25	4.63	90
STATUTORY HOLIDAYS	28	27	25	0	27	0	28	29	23	24	29	0
TOTAL	102.19	77.76	84.7	46.51	86.8	65.07	142.69	152.57	74.97	123.12	110.51	201.82

2017	January	February	March	April	May	June	July	August	September	October	November	December
WSIB	0	0	0	0	0	0	0	0	0	0	0	0
W/LTD	15	12	23	5	2	14	20	0	0	0	17	32
SICK DAYS	12.56	13.38	16	8.06	10.81	10.44	7.5	7.25	10.13	13.25	14.44	4.75
COMPASSIONATE LEAVE	0	10	8	3	0	0	0	0	0	0	0	0
FLOATERS	9	8	7	4.5	4	2	0	1	4	0	1	1
VACATION	7.25	16.63	31	21.13	28.5	46	89	88.25	42.31	42.63	20.25	51.63
BANKED TIME USED	9.5	5.63	7.75	10.38	5.81	4.25	14.34	10.75	5	9.06	4.45	13.63
OFF NO PAY	0.38	0	0	0	0.5	3.75	11.19	10.94	0	0	2.25	0.44
STATUTORY HOLIDAYS	25	26	0	0	28	0.5	26	29	24	24	23	72
TOTAL	78.69	91.64	92.75	52.07	79.62	80.94	168.03	147.19	85.44	88.94	82.39	175.45

2016	January	February	March	April	May	June	July	August	September	October	November	December
WSIB	0	0	0	0	0	0	0	0	0	0	0	0
W/LTD	0	12	0	21	5	0	20	23	22	8	17	0
SICK DAYS	13.56	13.38	14.88	12.38	6.25	7.78	7.5	5.31	3.13	10.31	14.44	9.34
COMPASSIONATE LEAVE	0	10	0	1	1	0	0	0	0	0	0	0
FLOATERS	7	8	9	1	3	3	0	1	0	2	1	7.5
VACATION	21.5	16.63	29	40.75	19	36	89	103.13	24.81	41.13	20.25	66
BANKED TIME USED	4.38	5.63	8.63	6.53	11.69	7	14.34	6.38	22	14.78	15.44	11.28
OFF NO PAY	0	0	0.63	0.5	1.25	8.25	11.19	4.5	2	1.84	2.25	1.75
STATUTORY HOLIDAYS	26	26	0	0	27	0	26	27	23	22	23	75
TOTAL	72.44	91.64	62.14	83.16	74.19	62.03	168.03	170.32	96.94	100.06	93.38	170.87

TOWN OF FORT FRANCES
Operations and Facilities Division - Environmental Area - Operations Statistics
January-19

STAFFING:

See Operations Statistics prepared by M. Strachan, Superintendent of Transportation

OVERTIME HOURS - Equivalent Straight Time Hours

See Operations Statistics prepared by M. Strachan, Superintendent of Transportation

WATER DISTRIBUTION & WASTE WATER COLLECTION:

See Monthly Summary (Attached)

Repaired main breaks at Calder Drive (Point Park) and Holmes Ave.

WATER TREATMENT PLANT:

January 2019 - In receipt of the Water Treatment Plant Monthly Report

G. Wiedenhoeft cross - training at WTP

WASTE-WATER TREATMENT FACILITY:

January 2019 - In receipt of the Wastewater Treatment Facility Monthly Report.

Have ordered new polymer system for Fournier press - expect April / May delivery

WASTE MANAGEMENT:

Garbage Collection:

- Number of complaints regarding garbage collection:
 - Town - 1 complaints, Asselin's - 0 complaints

Sanitary Landfill (Waste Disposal Site):

Landfill Scales functioning during this period.

- Amount of residential waste delivered to the landfill:
 - 149,540 kg
- Amount of ICI waste delivered to the landfill:
 - 387,830 kg

Recycling:

- Number of complaints regarding recycled materials:
 - Town - 0 complaints, Asselin's - 1 complaint
- Amount of recycled waste diverted from the landfill:
 - 44.02 tonnes Emterra

Prepared By: Craig Miller, P.Eng.



Environmental Superintendent

Date: 5/16/19

5/16/19

TOWN OF FORT FRANCES
Operations and Facilities Division - Environmental Area - Operations Statistics
February-19

STAFFING:

See Operations Statistics prepared by M. Strachan, Superintendent of Transportation

OVERTIME HOURS - Equivalent Straight Time Hours

See Operations Statistics prepared by M. Strachan, Superintendent of Transportation

WATER DISTRIBUTION & WASTE WATER COLLECTION:

See Monthly Summary (Attached)

B. Patterson attended Water Distribution Class 1 training in Dryden

Adverse routine water sample at From The Grind Up - retested ok per MECP

J. Nicolay, G. Wiedenhoeft, B. Patterson, J. Bruyere attended Rigid rooter training

WATER TREATMENT PLANT:

February 2019 - In receipt of the Water Treatment Plant Monthly Report

MECP Annual Inspection - Feb 11, 12

R. White, B. Webb, P. Lemesurier, G. Wiedenhoeft, J. Bruyere attended Pressure Filter Training

R. White, B. Webb, P. Lemesurier, G. Wiedenhoeft, J. Bruyere attended WTP Emergency Plan Training

G. Wiedenhoeft cross - training at WTP

WASTE-WATER TREATMENT FACILITY:

February 2019 - In receipt of the Wastewater Treatment Facility Monthly Report.

WASTE MANAGEMENT:

Garbage Collection:

- Number of complaints regarding garbage collection:
 - Town - 0 complaints, Asselin's - 0 complaints

Sanitary Landfill (Waste Disposal Site):

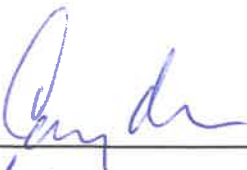
Landfill Scales functioning during this period.

- Amount of residential waste delivered to the landfill:
 - 124,494 kg
- Amount of ICI waste delivered to the landfill:
 - 227,790 kg

Recycling:

- Number of complaints regarding recycled materials:
 - Town - 0 complaints, Asselin's - 0 complaint
- Amount of recycled waste diverted from the landfill:
 - 29.72 tonnes Emterra

Prepared By: Craig Miller, P.Eng.



Environmental Superintendent

Date: 5/16/19

TOWN OF FORT FRANCES
Operations and Facilities Division - Environmental Area - Operations Statistics
March-19

STAFFING:

See Operations Statistics prepared by M. Strachan, Superintendent of Transportation

OVERTIME HOURS - Equivalent Straight Time Hours

See Operations Statistics prepared by M. Strachan, Superintendent of Transportation

WATER DISTRIBUTION & WASTE WATER COLLECTION:

See Monthly Summary (Attached)

J. Nicolay attended Water Certificate Entry Level Course (Mandatory)

G. Wiedenhoeft, P. Lemesurier, B. Patterson, J. Bruyere attended Working at Heights training

Repaired water main break on Armit Ave

All water staff attended annual WHMIS training

WATER TREATMENT PLANT:

March 2019 - In receipt of the Water Treatment Plant Monthly Report

Reviewed and updated all elements of DWQMS per 2.0 requirements

G. Wiedenhoeft cross - training at WTP

WASTE-WATER TREATMENT FACILITY:

March 2019 - In receipt of the Wastewater Treatment Facility Monthly Report.

WASTE MANAGEMENT:

Notified CBSA that we would no longer be accepting international waste at landfill due to site requirements from CFIA

Garbage Collection:

- Number of complaints regarding garbage collection:
- Town - 0 complaints, Asselin's - 0 complaints

Sanitary Landfill (Waste Disposal Site):

Landfill Scales functioning during this period.

- Amount of residential waste delivered to the landfill:
 - 166,770 kg
- Amount of ICI waste delivered to the landfill:
 - 311,350 kg

Recycling:

- Number of complaints regarding recycled materials:
 - Town - 0 complaints, Asselin's - 0 complaint
- Amount of recycled waste diverted from the landfill:
 - 60.71 tonnes Emterra

Prepared By: Craig Miller, P.Eng.  Environmental Superintendent

Date: 5/16/19

TOWN OF FORT FRANCES
Operations and Facilities Division - Environmental Area - Operations Statistics
April-19

STAFFING:

See Operations Statistics prepared by M. Strachan, Superintendent of Transportation

OVERTIME HOURS - Equivalent Straight Time Hours

See Operations Statistics prepared by M. Strachan, Superintendent of Transportation

WATER DISTRIBUTION & WASTE WATER COLLECTION:

See Monthly Summary (Attached)

J. Nicolay, G. Wiedenhoeft, P. Lemesurier, B. Patterson, J. Bruyere attended DBH training

C. Miller attended JHSC training - Part 1 of 2.

Repaired sewer main on Minnie between 2nd E and 3rd E - very poor condition

WATER TREATMENT PLANT:

April 2019 - In receipt of the Water Treatment Plant Monthly Report

C. Miller attended DWQMS workshop in Thunder Bay

Completed DWQMS DCR's and updated DWQMS Operational Plan per 2.0 requirements

G. Wiedenhoeft cross - training at WTP

R. White gave notice for retirement effective May 31, 2019

WASTE-WATER TREATMENT FACILITY:

April 2019 - In receipt of the Wastewater Treatment Facility Monthly Report.

In receipt of Annual WWTP report by OCWA

WASTE MANAGEMENT:

Garbage Collection:

- Number of complaints regarding garbage collection:
 - Town - 0 complaints, Asselin's - 0 complaints

Sanitary Landfill (Waste Disposal Site):

Landfill Scales functioning during this period.

- Amount of residential waste delivered to the landfill:
 - 333,909 kg
- Amount of ICI waste delivered to the landfill:
 - 398,166 kg

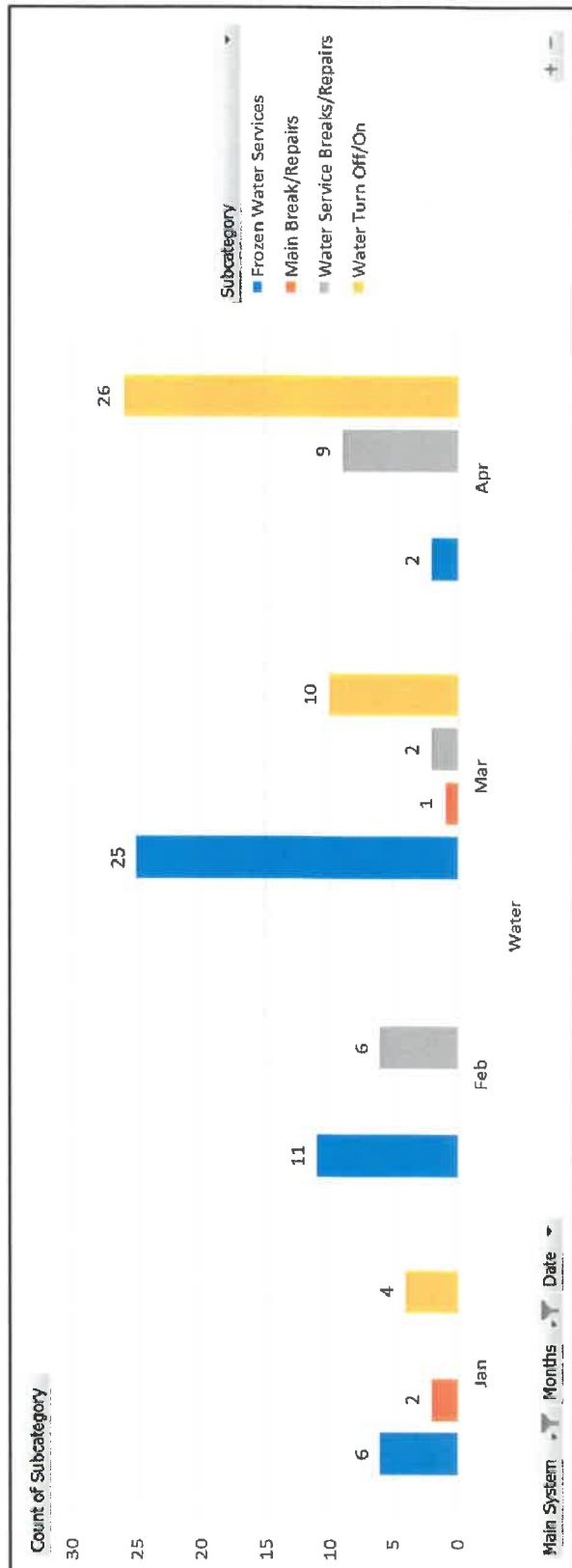
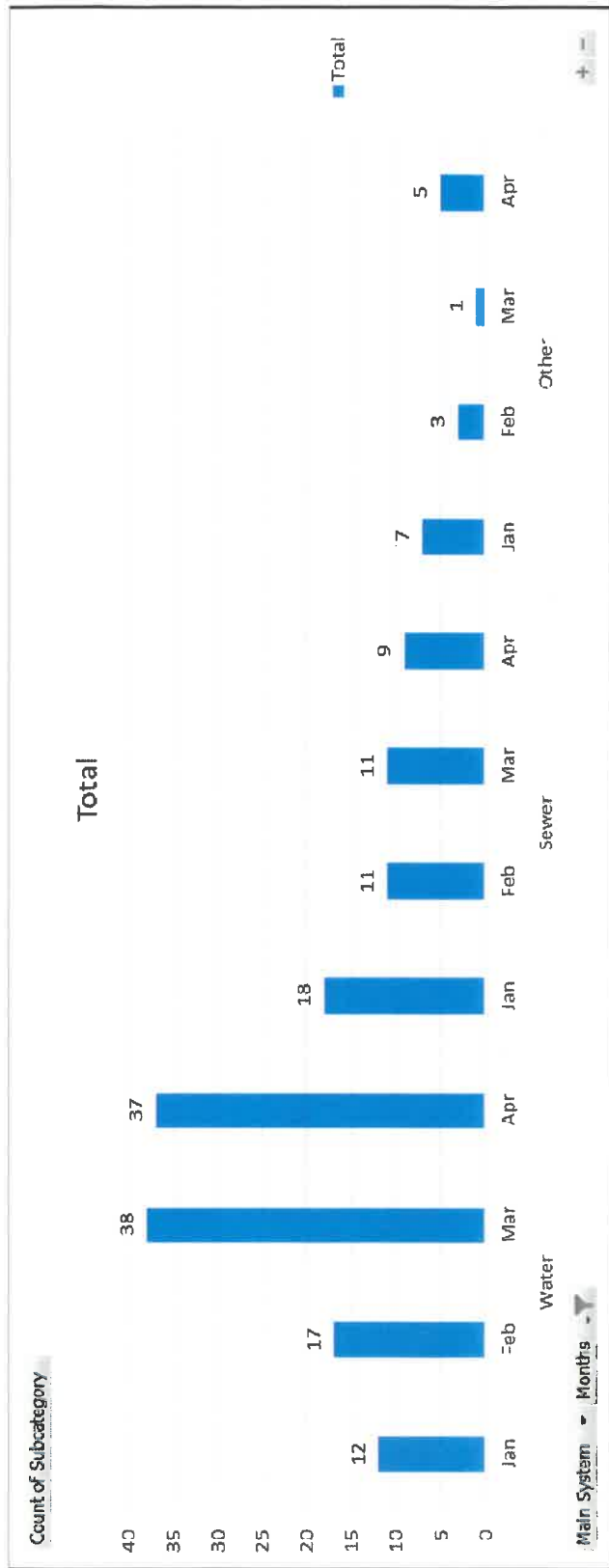
Recycling:

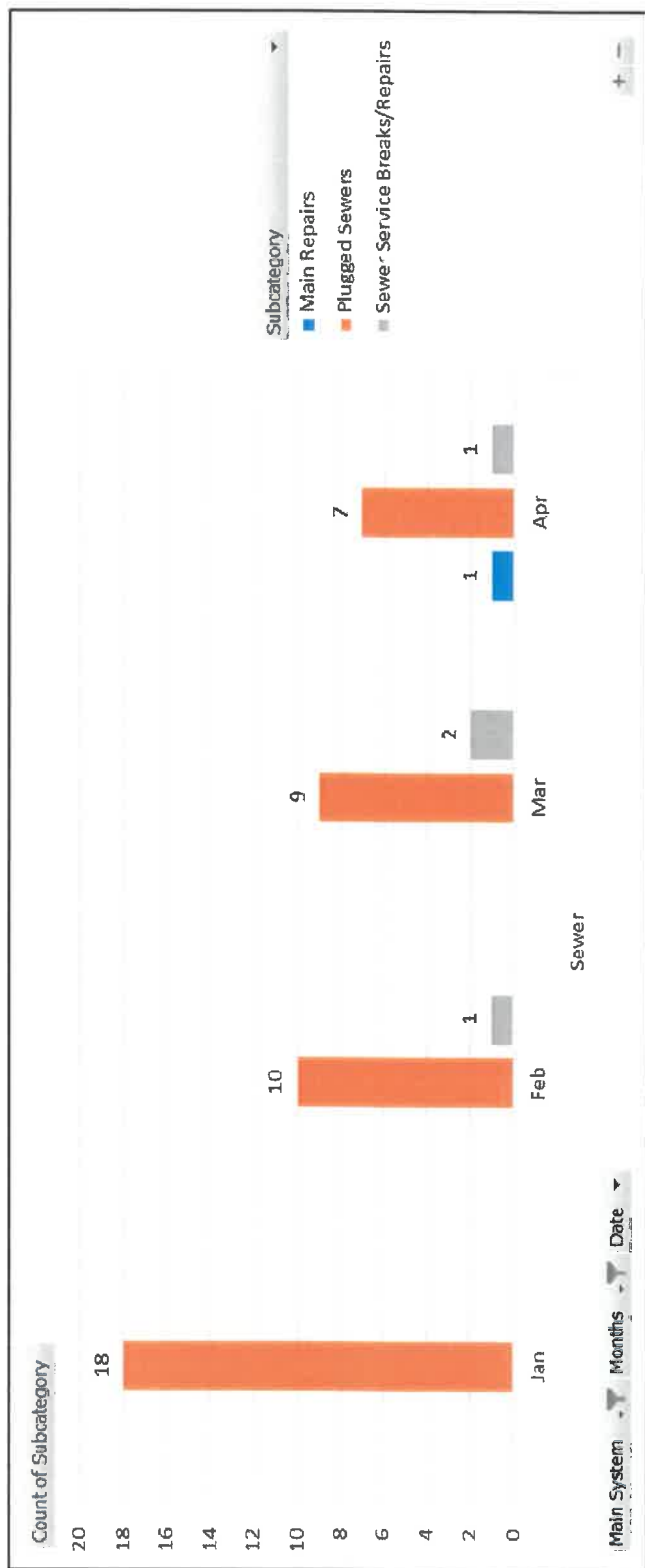
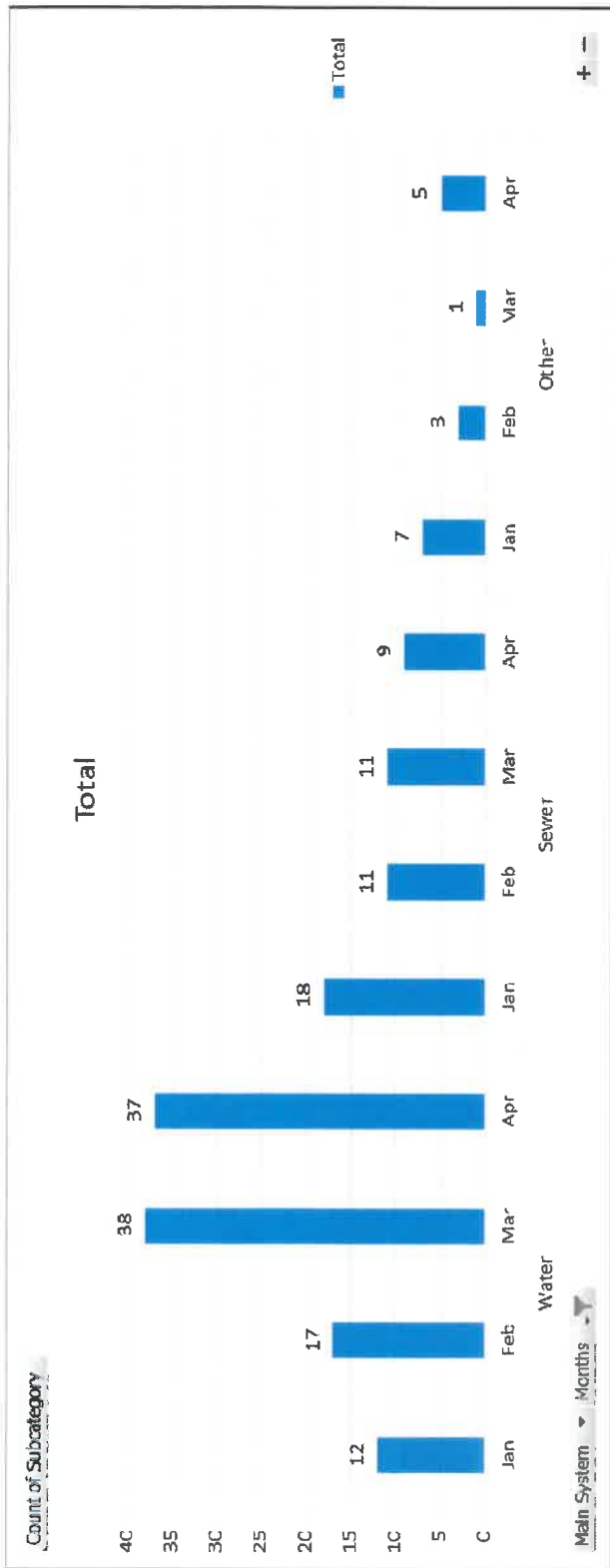
- Number of complaints regarding recycled materials:
 - Town - 0 complaints, Asselin's - 0 complaint
- Amount of recycled waste diverted from the landfill:
 - (No data) Emterra

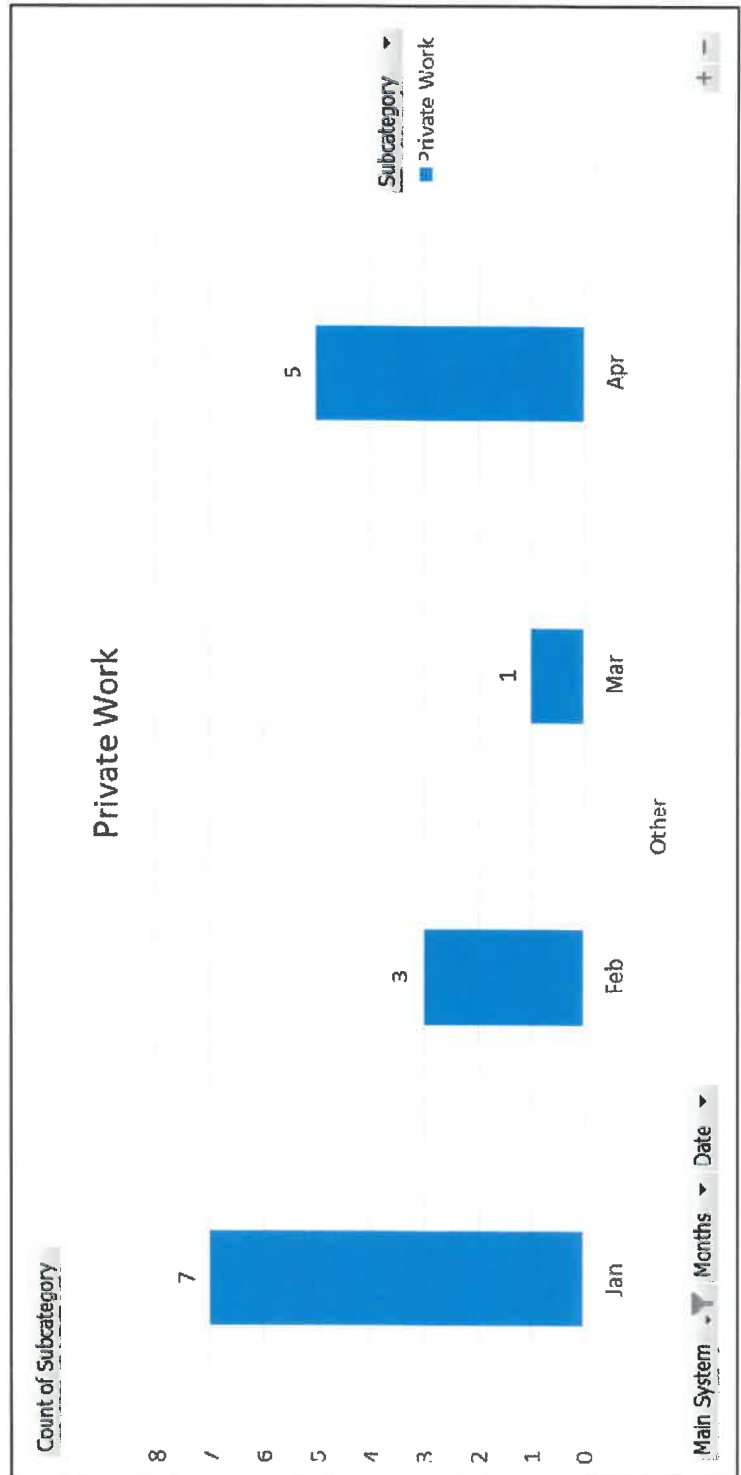
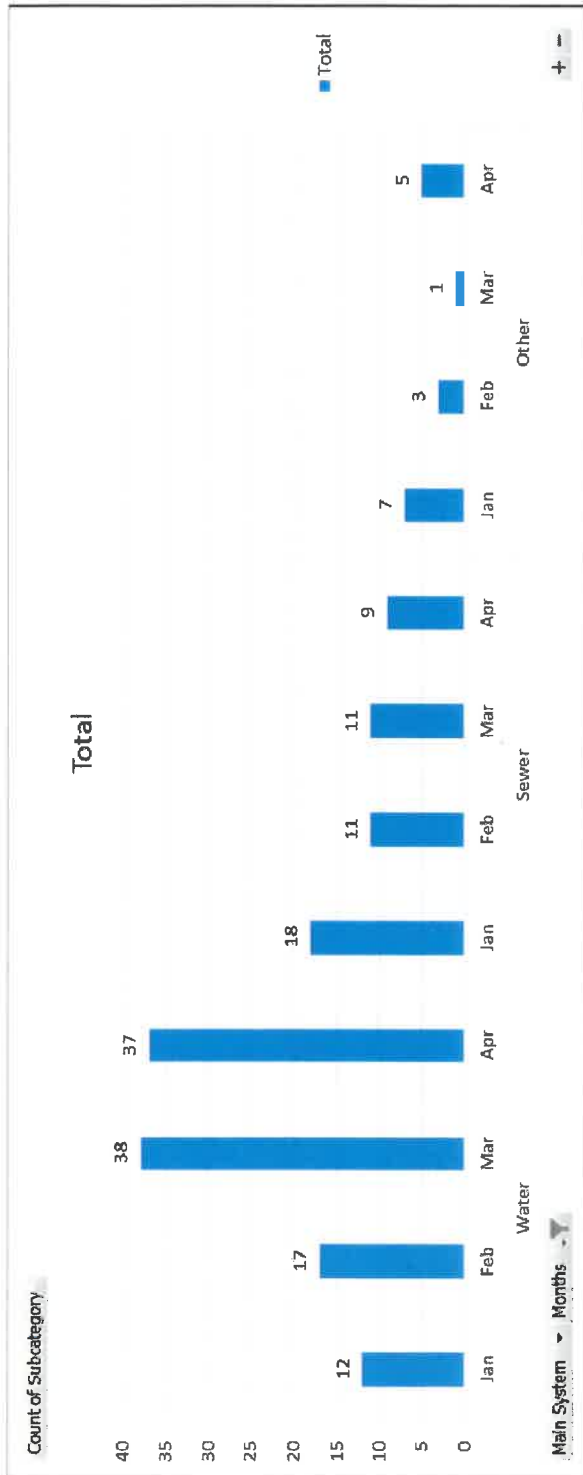
Prepared By: Craig Miller, P.Eng.  Environmental Superintendent

Date: 5/16/19

Count of Subcategory		Column Labels			
Row Labels	Water	Sewer	Other		Grand Total
Jan		12	18	7	37
Frozen Water Services		6			6
Main Break/Repairs		2			2
Plugged Sewers			18		18
Private Work				7	7
Water Turn Off/On		4			4
Feb		17	11	3	31
Frozen Water Services		11			11
Plugged Sewers			10		10
Private Work				3	3
Sewer Service Breaks/Repairs			1		1
Water Service Breaks/Repairs		6			6
Mar		38	11	1	50
Frozen Water Services		25			25
Main Break/Repairs		1			1
Plugged Sewers			9		9
Private Work				1	1
Sewer Service Breaks/Repairs			2		2
Water Service Breaks/Repairs		2			2
Water Turn Off/On		10			10
Apr		37	9	5	51
Frozen Water Services		2			2
Main Repairs			1		1
Plugged Sewers			7		7
Private Work				5	5
Sewer Service Breaks/Repairs			1		1
Water Service Breaks/Repairs		9			9
Water Turn Off/On		26			26
Grand Total		104	49	16	169









Ontario Clean Water Agency
Agence Ontarienne Des Eaux

Fort Frances WPCP
200 McIrvine Rd
Fort Frances, Ontario
P9A 3S3
Tel: 807-274-3121
Fax: 807-274-8381

April 17, 2019,

Town of Fort Frances
320 Portage Avenue
Fort Frances Ontario
P9A 3M5

Attention: Mr. Craig Miller
Environmental and Facilities Superintendent

Dear Craig:

**Re: Fort Frances Wastewater Treatment Facility
March 2019 Monthly Report**

As per the operating agreement, the attached document is the March 2019 monthly report for the Fort Frances Wastewater Treatment Facility.

The report highlights the influent and effluent quality and the process parameters. Additionally, the routine operation and maintenance activities conducted by the operators are summarized.

If you have any questions regarding this report do not hesitate to contact Mr. Larry Wachter – Sr. Operations Manager.

Yours truly,

A handwritten signature in black ink, appearing to read 'Kelly CTD'.

Kelly Cunningham
Team Lead

For Larry Wachter
Sr. Operations Manager

**The Corporation of the Town of Fort Frances
Wastewater Treatment Plant
(Sewage Plant)
March 2019 Monthly Operations Report**

INTRODUCTION

In accordance with the Agreement between the Ontario Clean Water Agency (Operating Authority) and the Town of Fort Frances, the Fort Frances Sewage Treatment Plant is required to prepare a monthly report. This document covers the reporting month of March 2019; the facility performance report summarizes important information regarding the quality of the effluent, wastewater, analytical test results, maintenance operations, and relevant activities of the WWTP.

DESCRIPTION OF WORKS

Capacity of Works	9000 m ³ /day (average flow)
Service Area	Town of Fort Frances and Couchiching Reserve
Service Population	9000
Effluent Receiver	Rainy River
Major Process	Secondary treatment facility complete with a phosphorus removal system; ultra violet disinfection; aerobic sludge stabilization and dewatering

The Fort Frances Sewage Treatment Plant operates under *Environmental Compliance Approval Number 6786-A44PWG*. The ECA outlines the terms and conditions, and the report captures these terms and conditions in the following sections.

LABORATORY

ALS Laboratory Group – Thunder Bay is contracted to conduct the required analytical tests of the influent (raw) and effluent samples; weekly requirement.

MARCH 2019 EFFLUENT QUALITY

<i>Parameters</i>	<i>Monthly Actual Concentration mg/L</i>	<i>Compliance Criteria Concentration mg/L</i>	<i>Performance Objective Concentration mg/L</i>	<i>Monthly Actual Loading, kg/d</i>	<i>Compliance Criteria Loading kg/d</i>	<i>Performance Objective Loading kg/d</i>
CBOD ₅	2.5 mg/L	25 mg/L	15 mg/L	15.0 kg/d	225 kg/d	135 kg/d
Total Suspended Solids	5.5 mg/L	25 mg/L	15 mg/L	36.0 kg/d	225 kg/d	135 kg/d
Total Phosphorus	0.12 mg/L	1.0 mg/L	0.9 mg/L	0.82 kg/d	9 kg/d	8.1 kg/d
Total Nitrogen Nitrate Nitrogen	11.13 mg/L 6.30 mg/L					
Total Cl ₂ Residual		<0.01 mg/L (when in use)				
E-Coli		16.8 count/100 ml (geometric mean)		200 count/100ml (geometric mean)		E-coli not to exceed 150 organisms/100ml (monthly geometric mean density)
pH				pH range 6.7 to 7.0; average pH was 6.9		
Temperature degrees C				Temperatures ranged from 6.5 to 7.5 C; average temperature of effluent was 7.1 C		

Compliance criteria are mandatory requirements of the ECA and performance objectives are a goal to be achieved using best reasonable efforts.

WASTEWATER LIQUID PROCESS

The average daily flow for March was 6180.7 m³/day. This represents 69% of the design average flow. Total treated flow for the month was 191603 m³.

The Fort Frances WWTP met all effluent compliance criteria for the parameters listed above and additionally was well within the recommended more stringent monthly performance objective levels as outlined in the Environmental Compliance Approval.

**The Town of Fort Frances accepted an additional 231.9 m³ of sewage from the New Gold mine site into the collection system. Lab analyses have not been provided.

MAINTENANCE

The operators performed the routine operations and maintenance at the treatment plant and pumping stations. The activities are highlighted as follows and a summary will be included:

Treatment Plant:

- Alternated lead/lag pumps
- Adjusted fluidizing water to head cell and grit snail as needed
- Greased all blowers
- Regular cleaning of head works EW basket strainer
- Greased Grit Snail and lubricated drive chain
- Monthly inspection of spiral screen access hatch, removed wrapped debris
- Weekly manifold wash on the Fournier press
- Drained and inspected teacup, hosed snail
- Replaced belts in both head works air handlers
- Wiped DO probes
- Changed oil blowers 3 and 4
- Replaced air filter blower 5
- RAS pump 2 failed and was replaced
- New DO controller was installed
- Cross collector 2 was repaired and 1 link removed from flight chain
- Lakeside Controls replaced a failed DeltaV VIM card

Pump Stations:

- Ran gensets
- Changed seal water strainers

PROCESS AND OPTIMIZATION ISSUES

A new progressive cavity polymer pump and VFD have been ordered from Fournier. Fournier will be handling the installation and commissioning.

SLUDGE SUMMARY

Dennis Robinson Limited hauled a calculated total of 109.2 m³ (10 bins) of thickened digested sludge to the Town of Fort Frances landfill site. The hauled sludge averaged 16.3 % TS for the month but slump test results from the landfill have not been provided. The Fournier press ran for 134 hours in February.

COMPLAINTS

There were no complaints during the report period.

BYPASS/OVERFLOW REPORT(S)

There were no bypass events during the month.

COMMENTS

Plant power consumption for the month was 609 (x 180 multiplier) kWh.

The Fournier press has been operated for 355 hours in 2019 (119 in January, 102 in February and 134 in March).

REPORTS

ALS – Environmental Analytical Reports (on-file at plant)

Fort Frances WPCP Equipment Run Time Report (on-file at plant)

Bypass Report (on-file at plant as per occurrence)

Incident Report (on-file at plant as per occurrence)

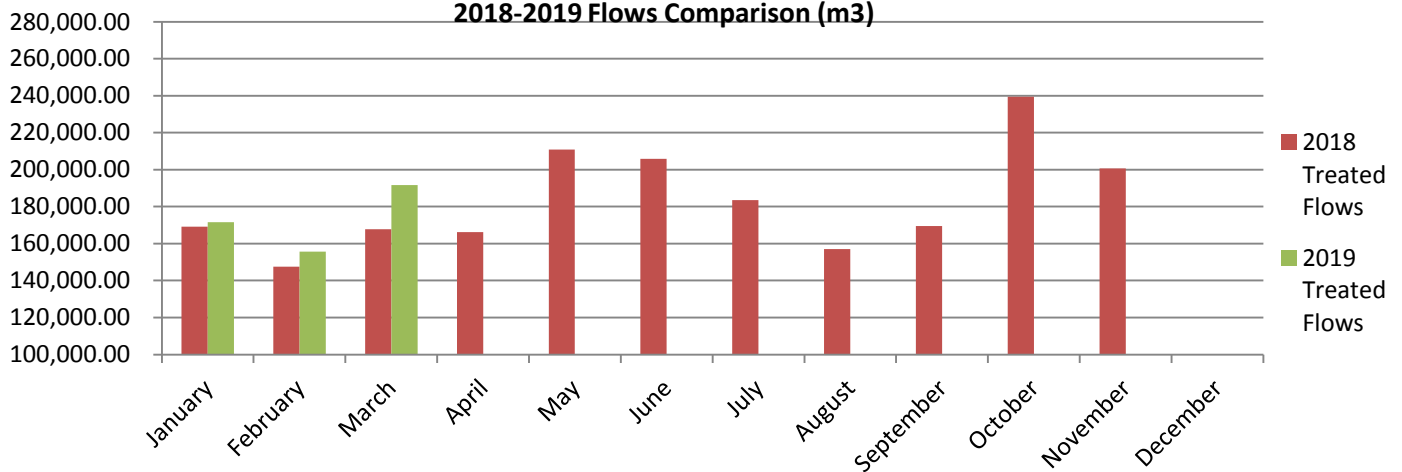
Month	Sewage Flows Year 2019					Usage	Calculated	Sludge	Removal Efficiency	
	Avg. Day	Max Day	Total	Total	Total	% Plant	Volume	Bins	CBOD5 0.977516779	
	Flow	Flow	Treated	ByPass	Volume	Capacity	Hauled	Hauled	Suspended Solids 0.972136902	
	m3	m3	Volume ML	Volume ML	ML		M3		Total Phosphorus 0.957295374	
January	5536.2	5933	171621		171621	62%	136	14		
February	5561.0	6023	155707		155707	62%	106.7	12		
March	6180.7	8247	191603		191603	69%	109.2	10		
April						0%				
May						0%				
June						0%				
July						0%				
August						0%				
September						0%				
October						0%				
November						0%				
December						0%				
Sum				0	518931		351.9	36		
Average	5759		172977		172977	64%	117.3	12.0		
Max		8247	191603		191603			14		
ECA	9000	18000								

	BOD5/CBOD5			Suspended Solids			Total Phosphorus			Nitrogen		E. Coli
	Avg. Raw	Avg. Eff.	Avg. Load	Avg. Raw	Avg. Eff.	Avg. Load	Avg. Raw	Avg. Eff.	Avg. Load	Avg. Raw	Avg. Eff.	Geo Mean
Month	BOD	CBOD	CBOD	S.S	S.S	S.S	T.P	T.P	T.P	TKN	Total N	Counts
	(mg/L)	(mg/L)	(kg/day)	(mg/L)	(mg/L)	(kg/day)	(mg/L)	(mg/L)	(kg/day)	(mg/L)	(mg/L)	/100ml
January	110.2	2.1	11.5	160.1	3.9	21.4	2.52	0.12	0.69	20.9	8.8	11.5
February	103.8	2.1	11.7	152.9	3.3	18.2	3.61	0.12	0.67	19.3	9.9	16.8
March	84.0	2.5	15.0	142.8	5.5	36.0	2.30	0.12	0.82	18.2	11.1	16.8
April												
May												
June												
July												
August												
September												
October												
November												
December												
Average	99.3	2.2	12.7	151.9	4.2	25.2	2.8	0.12	0.73	19.5	9.9	15.0
Max	110.2	2.5	15.0	160.1	5.5	36	3.6	0.12	0.82	20.9	11.1	16.8
ECA		25	225		25	225		1.0	9.0			200

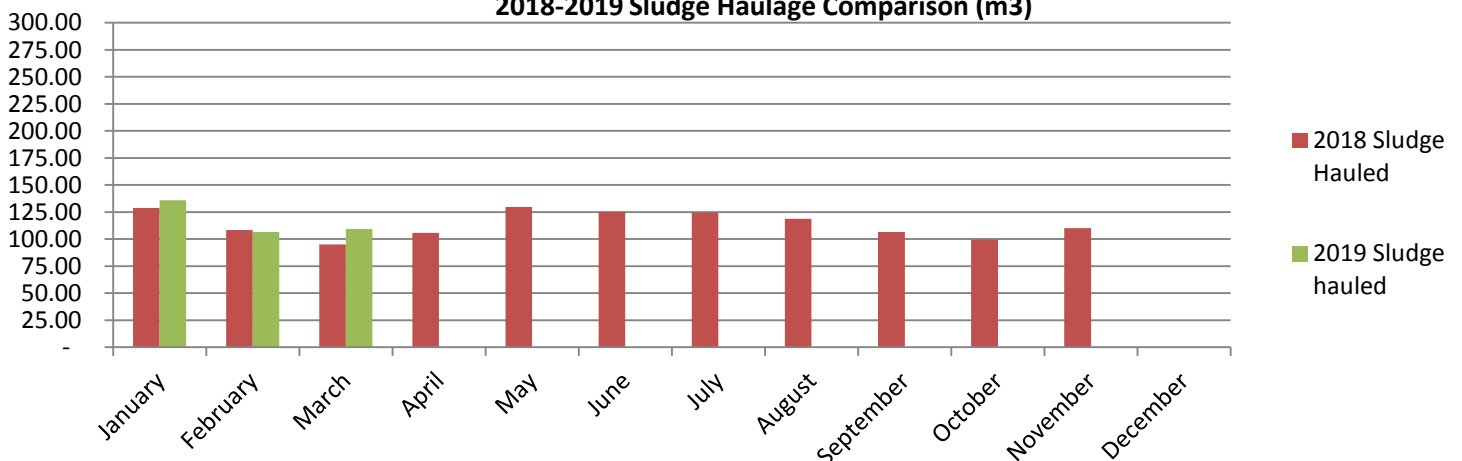
2018-2019 Comparison Chart

Month	2018 Treated Sewage	2019 Treated Sewage	% Variance 2018 to 2019	2018 Hauled Sludge	2019 Hauled Sludge	% Variance 2018 to 2019
	m3	m3	m3	m3 (calculated)	m3 (calculated)	m3
January	169,201.00	171,621.00	1%	128.90	136.00	6%
February	147,497.00	155,707.00	5%	108.30	106.70	-1%
March	167,707.00	191,603.00	12%	95.00	109.20	15%
April	166,292.00		#DIV/0!	105.70		-100%
May	210,932.00		#DIV/0!	129.70		-100%
June	205,818.00		#DIV/0!	125.30		-100%
July	183,465.00		#DIV/0!	124.70		-100%
August	157,126.00		#DIV/0!	118.60		-100%
September	169,565.00		#DIV/0!	106.50		-100%
October	239,494.00		#DIV/0!	99.60		-100%
November	200,745.00		#DIV/0!	110.10		-100%
December						
Totals	2,017,842.00		#DIV/0!	1,252.40	351.90	-72%

2018-2019 Flows Comparison (m3)



2018-2019 Sludge Haulage Comparison (m3)



March 25, 2019

Ministry of the Environment
Thunder Bay Regional Office
435 James St. South
Thunder Bay ON
P7E 6S7

Attention: Mr. Dave Manol
Water Compliance Supervisor (A)

Re: 2018 Performance Report for Fort Frances Sewage Treatment Plant

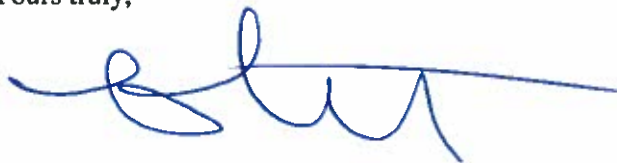
Dear Mr. Manol:

Attached is the 2018 Performance Report for the **Fort Frances Sewage Treatment Plant** located in the Town of Fort Frances. This report has been completed in accordance with Condition No. 10 (5) cited in *Amended Environmental Compliance Approval Number 6786-A44PWG* dated January 6 2016 and issued to the Town of Fort Frances.

This report was prepared by the Ontario Clean Water Agency on behalf of the Town of Fort Frances based on the information kept on record by OCWA at the Fort Frances Sewage Treatment Plant location; and the report covers the period from January 1 to December 31, 2018.

Should you have any questions or comments in regards to this annual report, please do not hesitate to contact David Hoffman at 807-876-1141 ext 325.

Yours truly,



Larry Wachter
Operations Manager
Ontario Clean Water Agency
Northwestern Ontario Hub

Copy to: Craig Miller– Fort Frances Environmental and Facilities Superintendent
Operations Staff – Fort Frances Sewage Treatment Plant

2018 Annual Report

Fort Frances

Wastewater Treatment Plant

Prepared by the Ontario Clean Water Agency



Ontario Clean Water Agency
Agence Ontarienne Des Eaux

**The Corporation of the Town of Fort Frances
Wastewater Treatment Plant
(Sewage Plant)
2018 Annual Report**

Introduction

In accordance with the Amended Environmental Compliance Approval Number 6786-A44PWG section 10(5), the Town of Fort Frances Wastewater Treatment Plant is required to prepare an annual performance report. The 2018 annual performance report summarizes important information regarding the treatment quality of the effluent wastewater, analytical test results, relevant activities and maintenance operations of the Works.

Description of the Works

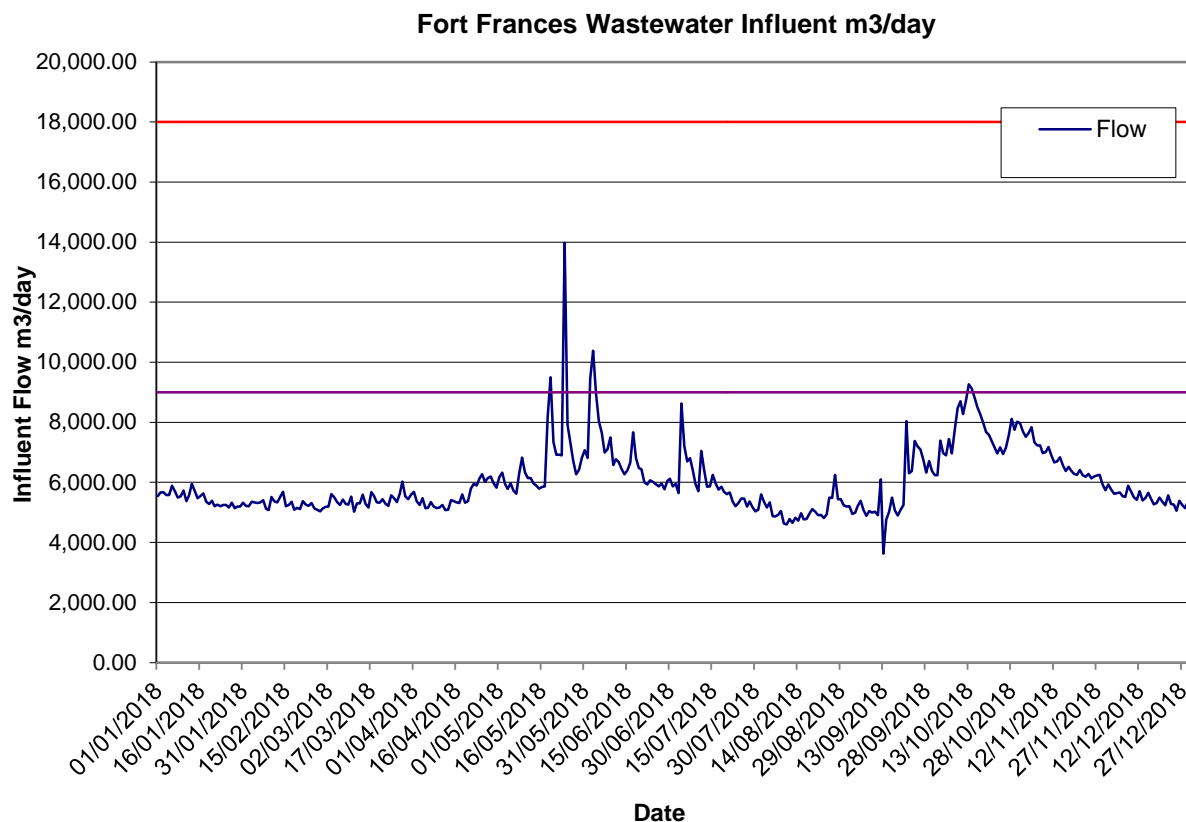
Capacity of Works	9000 m ³ /day (average flow) Peak 18000 m ³ /day
Service Area	Town of Fort Frances and Couchiching Reserve
Service Population	9000
Effluent Receiver	Rainy River
Major Process	Secondary treatment facility complete with a phosphorus removal system; ultra violet disinfection; aerobic sludge stabilization and dewatering

1. Summary and Comprehensive Interpretation of Data

Flow Summary	2014	2015	2016	2017	2018	5-yr avg.
Avg. Day m ³ /day	7646	5942	6731	6476	5988	6557
Design m ³ /day	9000	9000	9000	9000	9000	9000
Utilization (Avg. Day/ Design)	85%	66%	75%	72%	67%	74 %
Max Day m ³ /day	21000*	15983	18874	12238	13977	16414
Max Day Factor	2.7	2.7	2.8	1.9	2.3	2.5

* Estimated volume

The daily flow of influent into the Fort Frances Wastewater treatment plant is presented in the following graph.



The peak flow occurred on May 24 2018. The peak flow through the treatment plant was 13977m³/day. The flow through the plant exceeded the design flow of 9000 m3/day on two days in May, two days in June, two days in October for 2018.

The daily analytical and process data for the plant is attached as the Monthly Operations Summary. This data is summarized in the Annual Summary also attached to the report.

In the following table the Carbonaceous Biochemical Oxygen Demand, Suspended Solids and Total Phosphorus are compared to the Certificate of Approval effluent concentrations and loadings as specified in section 7.

Month	CBOD5		Suspended Solids		Total Phosphorus		E. Coli	pH	
	Avg. Eff.	Avg. Load	Avg.Eff.	Avg. Load	Avg. Eff.	Avg. Load	Geo Mean	Monthly	Monthly
	CBOD	CBOD	S.S	S.S	T.P	T.P	Counts	Minimum	Maximum
	(mg/L)	(kg/day)	(mg/L)	(kg/day)	(mg/L)	(kg/day)	/100ml		
January	3.3	18.1	6.4	34.8	0.22	1.19	69.5	7.3	7.9
February	2.5	13.0	6.2	32.5	0.17	0.87	14.1	7.1	7.8
March	3.1	16.7	7.6	41.4	0.16	0.86	14.1	6.9	7.5
April	5.1	28.1	5.9	32.7	0.16	0.86	32.8	7.0	7.7
May	2.6	15.9	8.2	56.3	0.20	1.36	67.7	7.3	7.8
June	3.0	22.3	6.5	46.5	0.14	0.97	21.7	7.3	7.9
July	2.0	11.1	2.8	17.1	0.08	0.46	7.3	7.4	7.8
August	2.0	10.6	3.0	15.6	0.16	0.81	16.4	7.3	8.0
September	2.3	13.2	3.7	20.4	0.13	0.74	6.7	7.6	7.9
October	2.0	15.3	2.5	20.3	0.12	0.90	10.0	7.6	8.0
November	2.0	13.3	2.8	19.1	0.10	0.68	11.9	7.2	8.0
December	2.2	11.6	3.1	16.6	0.11	0.60	10	6.9	7.3
Average	2.7	15.8	4.5	29.4	0.15	0.86	23.5	7.2	7.8
Max (Min)	5.1	28.1	7.8	56.3	0.22	1.36	69.5	(6.9)	8
C of A Limit	<25	<225	<25	<225	<1	<9	<200	>6.0	<9.5
C of A Obj.	<15		<15		<0.9		<150		

The Certificate of Approval Limits for CBOD5 and suspended solids are 25 mg/l with an objective target of 15 mg/l and loading limits of less than 225 kg/day. The levels for total phosphorus are less than 1 mg/l and a loading limit of 9 kg/day. In the reporting year 2018, CBOD₅, suspended solids and total phosphorus concentration limits and loading limits met both the Certificate of Approval limits and the objectives.

The Certificate of Approval states the pH of the effluent shall be maintained between 6.0 and 9.5, inclusive, at all times. The pH during this period was a high of 8.0 and a low of 6.9. The pH met the requirements of the Certificate of Approval in 2018.

The Certificate of Approval also requires the E-coli results to be less than 200 organisms per 100 ml and an objective of less than 150 organisms per 100 ml as a monthly geometric mean density. The effluent met the limit targets and objective targets with a maximum monthly geometric mean density of 69.5 organisms per 100 ml.

2. Effluent Quality Assurance or Control Measures

The effluent sample is a 24 hour composite sampled downstream of the UV disinfection system. The influent and effluent samplers are set to collect samples at a frequency of at the least one sample per hour interval.

The operators send weekly influent and effluent samples to ALS Laboratories in Thunder Bay. The effluent samples are analyzed for carbonaceous biochemical oxygen demand, total phosphorus, ammonia, total nitrogen, and nitrates. E-coli are sampled from the effluent only. The influent samples are tested for biochemical oxygen demand, total Kjeldahl nitrogen and total phosphorus. The digester contents are analyzed on an annual basis.

Suspended solids are sampled and tested in house on both influent and effluent and total phosphorus is tested on the effluent. The plant operators perform in-house laboratory testing for several other process parameters to monitor plant performance.

3. Maintenance

The operators performed required routine maintenance through the 2018 period. Additional maintenance activities conducted during the year are as follows:

Treatment Plant:

- Thawed frozen sump line in aeration channel
- Removed ice from manhole 8 grating
- Thawed frozen sump line in aeration channel
- Replaced missing linkage from polymer water proportioning valve
- Garage floor drain was repaired by town plumber
- Replaced the UPS for the main plant controller panel
- New sump pump 2 replaced main building basement
- Installed spare DO probe in cell #1
- Replaced RAS pump #1 with spare
- Replaced the motor on blower #3
- Shear pin was replaced longitudinal clarifier drive #2
- Removed large rag ball from clarifier #2 inlet channel
- Replaced Aeration cell #1 recirculation pump LRP 3-1-2 @ 11900 hrs with spare
- Replaced Digester transfer pump STP 10-3 @ 31940 hrs with spare (John Gavel Crane)
- New garage lighting was installed by Cannect Electric
- New UPS was installed for Head Works CP-2
- Spiral screen drive flange connection failed and was repaired
- The VFD and control valves were installed for blower 3 and Lakeside did programming.
- Two factory calibrated DO probes were installed in aeration cells

- Software was updated in the DO controller
- The Delta V SCADA system was upgraded by Lakeside Controls.

Pump Stations:

- Replaced the generator batteries at Central Avenue lift station
- Installed rebuilt pump 2 at Central Avenue lift station
- Pulled pump 3 at Fifth Street lift station and sent out for repair
- Installed rebuilt pump 3 at 5th Street lift station
- Fuel filters were replaced on all lift station gensets by Peterbilt
- A PLC power supply failure at Central Avenue lift station was diagnosed and remedied
- Water pump was repaired on 5th Street lift station genset by Peterbilt

4. Operational issues

The Town of Fort Frances has accepted 2195.7 m³ of untested sewage from the New Gold mine site into the collection system in 2018. The additions were made in every month in the year. The operators of the wastewater plant are not aware of when the addition sewage material is added to the town collection system. Additional testing of the sewage from the New Gold mine has been requested but the results of the testing have not been provided to the Fort Frances wastewater plant operators.

The sludge haulage/transportation contract with Hammond Landscaping came to an end in late 2014. The Town of Fort Frances installed a Fournier rotary press designed to dewater the sludge and allow for the hauled sludge to meet the MOE criteria for landfill disposal without further drying. A new ECA was received from the MOE on January 6 2016 allowing for the installation of the new dewatering equipment. The new equipment began processing sludge on September 19 2016.

Optimization of the sludge dewatering process using the new equipment has been continuing in 2018.

A Fournier press technician visited the plant August 1st and 2nd to give us some suggestions for optimization. He recommends a water heater be installed for polymer dilution water and that the sludge be tested in colder weather for SVI and filaments that could potentially impede drainage. Ongoing pumping issues with the LMI polymer pumps have made it necessary to delay trials of alternate polymer samples. A screw pump is being looked at as a replacement. A new progressive cavity polymer pump and VFD have been ordered from Fournier. Fournier will be handling the installation and commissioning.

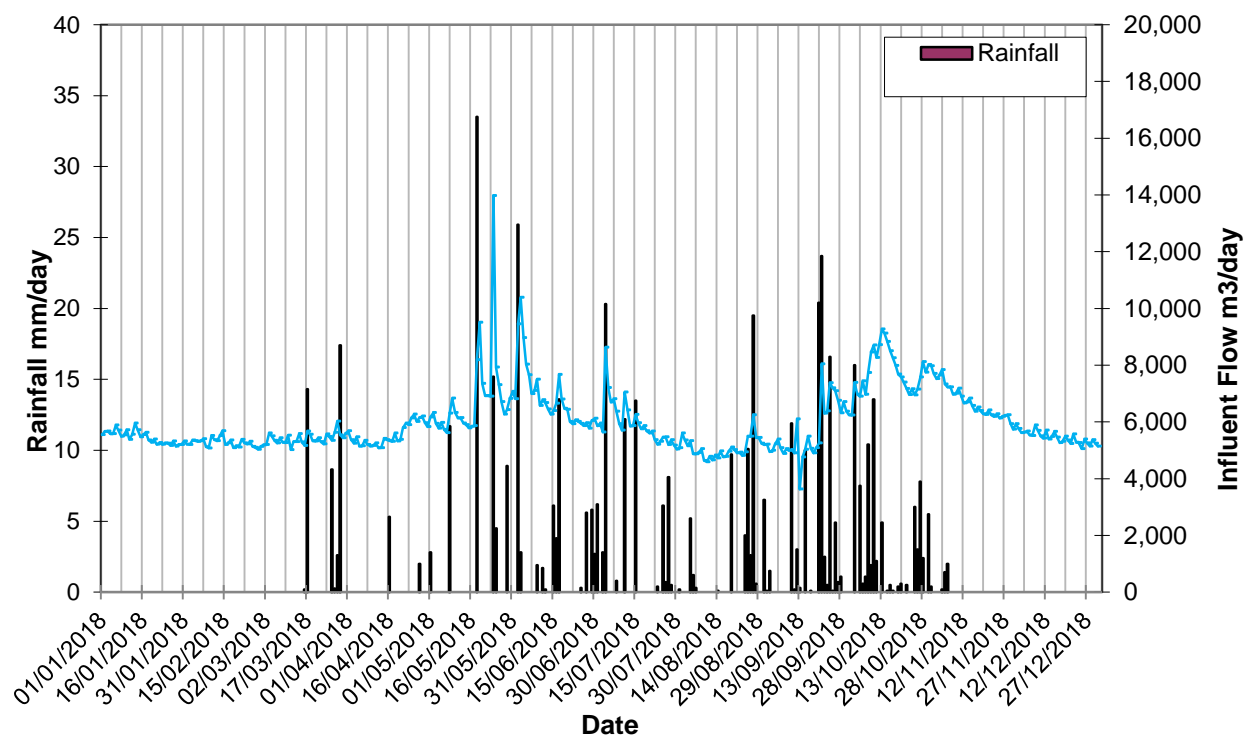
There was one reported bypass during 2018. A power interruption at the plant resulted in 1410 m³ of effluent not being disinfected by the UV disinfection equipment. The normal grit separation and aeration systems were also not functioning. A manual bar screen was used in the headworks and a back-up sodium hypochlorite pump injected disinfectant into the plant UV effluent channel. This event occurred on June 10 2018 and lasted for 5 hours and 13 minutes.

There was no community complaints received during the period of this report.

The weekly samples from December 27th arrived at the lab on December 31st which exceeded the 48 hour hold time for e-coli testing but the delayed tests were within limits. Operations staff had tried to fly the samples to Thunder Bay but flights were cancelled due to snow storm and then the couriers had difficulty with weather and holiday schedules.

A graph of the influent flows and rainfall as recorded at the Fort Frances Airport sourced from Environment Canada is included illustrating several rainfall events closely correlating to influent flow spikes. There were a number of rainfall data gaps in the Environment Canada database; these were supplemented by data from the International Falls Airport. The highest rainfall event occurred on May 18 2018 with a recorded rainfall amount of 33.5 mm. The flow at the sewage plant was 8189 m³ on May 18 and 9505 m³ May 19 2018. The peak flow of 13977m³ was recorded on May 24 2018 with a rainfall of 15.2 mm. The rainfall in the town may have been higher than the recorded value as the airport is located outside of the town.

Rainfall vs influent Flow 2018



5. Sludge Generation and Disposal

In the past, the sludge was processed in drying beds for use as an organic soil conditioner at a sod farm. This arrangement ended in November 2014. A new Fournier Rotary Press was installed and in operation as of September 19 2016 decreasing the water content of the sludge for disposal at the landfill. The rotary press operated for 1349 hours in 2018.

Sludge Volume Hauled in 2018

Month	Total Volume(m3)
January	128.9
February	108.3
March	95.0
April	105.7
May	129.7
June	125.3
July	124.7
August	118.6
September	106.5
October	99.6
November	110.1
December	90.7
Total	1343.1

There was 1343.1 m³ of sludge generated and hauled in 2018 with an average of 111.9 m³ per month. The sludge analytical sample results for 2018 are appended to this report.

The Town of Fort Frances installed a Fournier rotary press designed to dewater the sludge and allow for the hauled sludge to meet the MOE criteria for landfill disposal without further drying. The new equipment began processing sludge on September 19 2016. The sludge will continue to be disposed in the municipal landfill site.

The optimization of the dewatering process continued in 2018. Fournier recommended a water heater be installed for polymer dilution water and that the sludge be tested in colder weather for SVI and filaments that could potentially impede drainage. Ongoing pumping issues with the LMI polymer pumps have made it necessary to delay trials of alternate polymer samples. A screw pump is being looked at as a replacement. A new progressive cavity polymer pump and VFD have been ordered from Fournier. Fournier will be handling the installation and commissioning. The only anticipated potential changes to volumes of sludge hauled from the system are dependent on further optimization of the dewatering process.

6. Calibrations

The owner shall maintain a continuous flow-measuring device to measure the flow rate within an accuracy of +/- 5% of actual rate of flow within the range of 10% to 100% of the full-scale reading of the measuring devices.

In 2018, calibration of the plant bypass weir was completed on July 10 2018 and effluent parshall flume was completed on August 13 2018; results attached to this report. Both flow measuring devices passed the verification testing.

2018 Annual Summary Report

2018 Fort Frances Wastewater

Month	Sewage Flows Year 2018					Usage % Plant Capacity	Calculated Volume Hauled M3	Sludge Bins Hauled	Removal Efficiency	
	Avg. Day Flow m3	Max Day Flow m3	Total Treated Volume ML	Total ByPass Volume ML	Total Volume ML				Suspended Solids	CBOD5
									0.971615527	0.968367732
January	5458.1	5955	169201		169201	61%	128.9	13	Total Phosphorus	0.943438914
February	5267.8	5685	147497		147497	59%	108.3	11		
March	5409.9	6024	167707		167707	60%	95.0	9		
April	5543.1	6269	166292		166292	62%	105.7	11		
May	6804.3	13977	210932		210932	76%	129.7	12		
June	6860.6	10382	205818	1410	205818	76%	125.3	13		
July	5918.2	8623	183465		183465	66%	124.7	12		
August	5068.6	6250	157126		157126	56%	118.6	12		
September	5652.2	8044	169565		169565	63%	106.5	10		
October	7725.6	9271	239494		239494	86%	99.6	11		
November	6691.5	7840	200745		200745	74%	110.1	12		
December	5460.1	5935	169263		169263	61%	90.7	9		
Sum				1410	2187105		1343.1	135		
Average	5988		182259		182259	67%	111.9	11.3		
Max		13977	239494		239494			13		
C of A	9000	18000								

The weekly samples from December 27th arrived at the lab on December 31st which exceeded the 48 hour hold time for e-coli testing but the delayed test results were within limits. Operations staff had tried to fly the samples to Thunder Bay but flights were cancelled due to snow storm and then the couriers had difficulty with weather and holiday schedules.

Month	BOD5/CBOD5				Suspended Solids				Total Phosphorus				Nitrogen				E. Coli		pH	
	Avg. Raw BOD (mg/L)	Avg. Eff. CBOD (mg/L)	Avg. Load CBOD (kg/day)	Avg. Raw S.S. (mg/L)	Avg. Eff. S.S. (mg/L)	Avg. Load S.S. (kg/day)	Avg. Raw T.P. (mg/L)	Avg. Eff. T.P. (mg/L)	Avg. Load T.P. (kg/day)	Avg. Raw TKN (mg/L)	Avg. Eff. Total N (mg/L)	Geo Mean Counts /100ml	Avg. Raw	Avg. Eff.	Total N	Geo Mean Counts /100ml	Monthly Minimum	Monthly Maximum		
January	102.6	3.3	18.1	155.8	6.4	34.8	2.64	0.22	1.19	19.4	8.1	69.5	19.4	8.1	8.1	69.5	7.3	7.9		
February	112.0	2.5	13.0	157.2	6.2	32.5	2.82	0.17	0.87	21.8	11.1	14.1	21.8	11.1	11.1	14.1	7.1	7.8		
March	104.5	3.1	16.7	156.5	7.6	41.4	2.73	0.16	0.86	19.1	12.6	14.1	19.1	12.6	12.6	14.1	6.9	7.5		
April	103.6	5.1	28.1	167.2	5.9	32.7	2.79	0.16	0.86	19.3	13.1	32.8	19.3	13.1	13.1	32.8	7.0	7.7		
May	79.8	2.6	15.9	154.9	8.2	56.3	2.50	0.20	1.36	17.2	10.9	67.7	17.2	10.9	10.9	67.7	7.3	7.8		
June	64.3	3.0	22.3	138.8	6.5	46.5	2.02	0.14	0.97	14.6	8.7	21.7	14.6	8.7	8.7	21.7	7.3	7.9		
July	84.4	2.0	11.1	150.2	2.8	17.1	2.34	0.08	0.46	17.7	8.3	7.3	17.7	8.3	8.3	7.3	7.4	7.8		
August	113.0	2.0	10.6	181.2	3.0	15.6	2.98	0.16	0.81	22.0	9.06	16.4	22.0	9.06	9.06	16.4	7.3	8.0		
September	112.8	2.3	13.2	174.0	3.7	20.4	3.27	0.13	0.74	21.5	7.62	6.7	21.5	7.62	7.62	6.7	7.6	7.9		
October	76.8	2.0	15.3	125.9	2.5	20.3	1.84	0.12	0.90	15.0	6.94	10.0	15.0	6.94	6.94	10.0	7.6	8.0		
November	81.8	2.0	13.3	141.4	2.8	19.1	2.48	0.10	0.68	18.2	8.9	11.9	18.2	8.9	8.9	11.9	7.2	8.0		
December	95.3	2.2	11.6	152.6	3.1	16.6	2.53	0.11	0.60	20.3	9.9	10	20.3	9.9	9.9	10	6.9	7.3		
Average	94.2	2.7	15.8	154.6	4.9	29.4	2.6	0.15	0.86	18.8	9.6	23.5	18.8	9.6	9.6	23.5	7.2	7.8		
Max	113	5.1	28.1	181.2	8.2	56.3	3.3	0.22	1.36	22	13.1	69.5	22	13.1	13.1	69.5	7.6	8		
C of A		25	225		25	225		1.0	9.0	200	6.0	200	200	6.0	6.0	200	6.0	9.5		

Monthly Operations Summary Report

Fort Frances Wastewater Treatment Plant
Monthly Operations Summary

2018		Raw Sewage				Final Effluent												
Day		Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	PH	E. Coll. (cfu/100 mL)	Bypass Volume (m3)
01/01/2018		5,543.00			152	5,543.00	91	3.3	0.226	0.167	5.74	0.24		6.4	9.5	7.9		
02/01/2018		5,665.00	94	2.43	194	5,665.00	90					0.22	0.236	8	10	7.7	10	
03/01/2018		5,674.00			136	5,674.00	91					0.25		10.8	9.5	7.7		
04/01/2018		5,582.00			139	5,582.00	90					0.15		5.2	9.5	7.6		
05/01/2018		5,577.00			143	5,577.00	90					0.13		6.4	9.5	7.7		
06/01/2018		5,886.00			156	5,886.00	97					0.17		10.4	9.5	7.7		
07/01/2018		5,705.00			176	5,705.00	99					0.12		1.2	9	7.8		
08/01/2018		5,491.00	86	2.9	209	5,491.00	91	3.2	0.569	0.26	4.68	0.15	0.17	3.6	9	7.7	300	
09/01/2018		5,533.00			192	5,533.00	92					0.11		4	9	7.7		
10/01/2018		5,723.00			174	5,723.00	91					0.13		3.6	9	7.8		
11/01/2018		5,381.00			139	5,381.00	86					0.16		7.2	9	7.8		
12/01/2018		5,554.00			150	5,554.00	96					0.21		6.8	9	7.8		
13/01/2018		5,955.00			166	5,955.00	97					0.16		7.2	9	7.8		
14/01/2018		5,720.00			179	5,720.00	96					0.12		8.4	9	7.8		
15/01/2018		5,472.00	127	2.5	163	5,472.00	91	4.3	1.18	0.234	4.84	0.11	0.195	6.8	9	7.8	1080	
16/01/2018		5,552.00			148	5,552.00	92					0.19		7.6	9	7.6		
17/01/2018		5,629.00			155	5,629.00	90					0.21		9.2	9	7.9		
18/01/2018		5,357.00			131	5,357.00	88					0.16		6.4	9	7.8		
19/01/2018		5,281.00			142	5,281.00	87					2		11.2	9	7.7		
20/01/2018		5,387.00			191	5,387.00	90					0.16		5.6	9	7.4		
21/01/2018		5,207.00			119	5,207.00	90					0.18		4.8	9	7.3		
22/01/2018		5,261.00			114	5,261.00	91					0.16		6	9.5	7.5		
23/01/2018		5,205.00	93	2.37	129	5,205.00	86	3.9	2.2	0.162	5.25	0.14	0.196	4.4	9	7.6	10	
24/01/2018		5,254.00			174	5,254.00	89					0.17		4.8	9	7.5		
25/01/2018		5,247.00			142	5,247.00	89					0.18		8.4	9	7.7		
26/01/2018		5,166.00			151	5,166.00	90					0.15		6.4	9	7.6		
27/01/2018		5,327.00			132	5,327.00	92					0.17		4.8	9	7.6		
28/01/2018		5,142.00			175	5,142.00	87					0.16		2.4	9	7.6		
29/01/2018		5,200.00	113	2.98	164	5,200.00	90	2	1.8	0.197	4.61	0.06	0.11	2.8	9	7.7	50	
30/01/2018		5,200.00			147	5,200.00	90					0.17		8.8	9	7.6		
31/01/2018		5,325.00			149	5,325.00	88					0.13		7.2	8.5	7.6		
Total		169,201.00				169,201.00												0.00
Average		5,458.10	102.60	2.64	155.84	5,458.10	90.87	3.34	1.20	0.20	5.02	0.22	0.18	6.35	9.11	7.68	69.49	0.00
Minimum		5,142.00	86.00	2.37	114.00	5,142.00	86.00	2.00	0.23	0.16	4.61	0.06	0.11	1.20	8.50	7.30	10.00	0.00
Maximum		5,955.00	127.00	2.98	209.00	5,955.00	99.00	4.30	2.20	0.26	5.74	2.00	0.24	11.20	10.00	7.90	1,080.00	0.00
Count		31	5	5	31	31	31	5	5	5	5	31	5	31	31	31	5	0

Fort Frances Wastewater Treatment Plant
Monthly Operations Summary

2018	Raw Sewage				Final Effluent												
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coll. (ctu/100 mL)	Bypass Volume (m3)
01/02/2018	5,212.00			161	5,212.00	84					0.12		4.8	8.5	7.5		
02/02/2018	5,203.00			154	5,203.00	94					0.18		5.2	8	7.7		
03/02/2018	5,354.00			172	5,354.00	92					0.2		4.4	8	7.8		
04/02/2018	5,338.00			162	5,338.00	91					0.19		5.6	8	7.5		
05/02/2018	5,309.00	112	2.85	167	5,309.00	94	2	4.02	0.187	4	0.12	6.8	4.4	8	7.4	20	
06/02/2018	5,333.00			143	5,333.00	89					0.15		5.2	8	7.3		
07/02/2018	5,404.00			199	5,404.00	96					0.25		7.2	8	7.3		
08/02/2018	5,123.00			142	5,123.00	89					0.25		6.8	8	7.3		
09/02/2018	5,080.00			132	5,080.00	89					0.13		4.8	8	7.3		
10/02/2018	5,516.00			138	5,516.00	97					0.21		2.8	8	7.1		
11/02/2018	5,370.00			141	5,370.00	90					0.19		8.8	8.5	7.3		
12/02/2018	5,329.00	118	2.88	157	5,329.00	91	2.9	5.2	0.115	3.45	0.17	9.1	5.6	8	7.5	10	
13/02/2018	5,512.00			125	5,512.00	87					0.16		6	8	7.2		
14/02/2018	5,685.00			154	5,685.00	93					0.16		7.2	8	7.2		
15/02/2018	5,202.00			122	5,202.00	88					0.15		5.2	8	7.1		
16/02/2018	5,252.00			131	5,252.00	92					0.16		4	8	7.2		
17/02/2018	5,358.00			139	5,358.00	93					0.14		5.2	8	7.2		
18/02/2018	5,089.00			156	5,089.00	87					0.14		4.4	8	7.1		
19/02/2018	5,156.00			212	5,156.00	85					0.08		4.4	8	7.1		
20/02/2018	5,113.00	119	3.18	205	5,113.00	89	2.5	5.94	0.187	3.41	0.11	4.8	4.8	8	7.2	10	
21/02/2018	5,380.00			168	5,380.00	88					0.15		6	8	7.2		
22/02/2018	5,256.00			177	5,256.00	88					0.21		12.8	8	7.6		
23/02/2018	5,221.00			163	5,221.00	94					0.14		6.4	8	7.3		
24/02/2018	5,308.00			160	5,308.00						0.2		8.4	8	7.4		
25/02/2018	5,134.00			157	5,134.00	85					0.2		8	8	7.5		
26/02/2018	5,094.00	99	2.38	152	5,094.00	90	2.6	6.7	0.158	3.08	0.19	8.3	8.4	8	7.3	20	
27/02/2018	5,035.00			168	5,035.00	88					0.16		7.2	8	7.3		
28/02/2018	5,131.00			145	5,131.00	92					0.13		8.8	8	7.3		
Total	147,497.00				147,497.00												0.00
Average	5,267.75	112.00	2.82	157.21	5,267.75	90.19	2.50	5.47	0.16	3.49	0.17	7.25	6.17	8.04	7.33	14.14	0.00
Minimum	5,035.00	99.00	2.38	122.00	5,035.00	84.00	2.00	4.02	0.12	3.08	0.08	4.80	2.80	8.00	7.10	10.00	0.00
Maximum	5,685.00	119.00	3.18	212.00	5,685.00	97.00	2.90	6.70	0.19	4.00	0.25	9.10	12.80	8.50	7.80	20.00	0.00
Count	28	4	4	28	28	27	4	4	4	4	28	4	28	28	28	4	0

Fort Frances Wastewater Treatment Plant
Monthly Operations Summary

2018	Raw Sewage				Final Effluent												Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coll. (ctu/100 mL)	
	5,190.00			170	5,190.00	89					0.15		6.8	8	7.3		
01/03/2018	5,197.00			150	5,197.00	90					0.15		7.6	8	7.3		
02/03/2018	5,608.00			144	5,608.00	94					0.16		3.6	8	7.2		
03/03/2018	5,501.00			147	5,501.00	97					0.24		12	8	7.1		
04/03/2018	5,345.00	111	2.66	155	5,345.00	94	4.6	7.06	0.206	3.14	0.19	13.1	14	8	7	10	
05/03/2018	5,250.00			130	5,250.00	87					0.13		4.8	8	7.2		
06/03/2018	5,433.00			133	5,433.00	92					0.08		4.4	8	6.9		
07/03/2018	5,278.00			145	5,278.00	97					0.06		4	8	7		
08/03/2018	5,262.00			157	5,262.00	87					0.07		5.2	8	7.1		
09/03/2018	5,526.00			139	5,526.00	94					0.09		5.6	8	7.1		
10/03/2018	5,020.00			153	5,020.00	85					0.08		2	8	7		
11/03/2018	5,301.00	105	3.55	195	5,301.00	89	2	6.88	0.461	3.33	0.1	2.8	6.4	8	6.9	20	
12/03/2018	5,303.00			151	5,303.00	88					0.08		4	8	7		
13/03/2018	5,587.00			160	5,587.00	93					0.09		7.6	8	7		
14/03/2018	5,285.00			166	5,285.00	87					0.23		12	7.5	7.3		
15/03/2018	5,166.00			152	5,166.00	86					0.17		8	7.5	7.1		
16/03/2018	5,671.00			151	5,671.00	93					0.25		8	7.5	7.2		
17/03/2018	5,563.00			165	5,563.00	90					0.2		9.6	7.5	7.2		
18/03/2018	5,330.00	102	2.3	139	5,330.00	85	3.8	6.9	0.256	3	0.16	6.4	5.6	7.5	7.3	10	
19/03/2018	5,320.00			155	5,320.00	88					0.21		7.6	7.5	7.4		
20/03/2018	5,439.00			145	5,439.00	88					0.21		7.2	7.5	7.3		
21/03/2018	5,295.00			196	5,295.00	93					0.16		9.6	7.5	7.4		
22/03/2018	5,219.00			147	5,219.00	90					0.19		8	8	7		
23/03/2018	5,567.00			146	5,567.00	96					0.2		10	8	7.2		
24/03/2018	5,477.00			144	5,477.00	90					0.22		4.8	8	7.1		
25/03/2018	5,348.00	100	2.39	132	5,348.00	96	2.1	6.29	0.142	4.2	0.25	4.7	12.4	8	7.5	20	
26/03/2018	5,630.00			154	5,630.00	89					0.21		8.8	8	7.2		
27/03/2018	6,024.00			190	6,024.00	96					0.25		16.8	8	6.9		
28/03/2018	5,541.00				5,541.00	93											
29/03/2018	5,440.00				5,440.00	92											
30/03/2018																	
31/03/2018	5,591.00			228	5,591.00	96					0.02		4.4	8	7		
Total	167,707.00				167,707.00												0.00
Average	5,409.90	104.50	2.73	156.52	5,409.90	91.10	3.13	6.78	0.27	3.42	0.16	6.75	7.61	7.86	7.14	14.14	0.00
Minimum	5,020.00	100.00	2.30	130.00	5,020.00	85.00	2.00	6.29	0.14	3.00	0.02	2.80	2.00	7.50	6.90	10.00	0.00
Maximum	6,024.00	111.00	3.55	228.00	6,024.00	97.00	4.60	7.06	0.46	4.20	0.25	13.10	16.80	8.00	7.50	20.00	0.00
Count	31	4	4	29	31	31	4	4	4	4	29	4	29	29	29	4	0

Fort Frances Wastewater Treatment Plant
Monthly Operations Summary

2018	Raw Sewage				Final Effluent												Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coll. (cfu/100 mL)	
	5,683.00			122	5,683.00	96					0.04		4	8	0.04		
01/04/2018	5,369.00			168	5,369.00	92					0.16		8	8	0.16		
02/04/2018	5,248.00			150	5,248.00	92					0.09		5.6	8	0.09		
03/04/2018	5,470.00	95	2.73	214	5,470.00	93	2.7	8.4	0.059	4.14	0.13	3.9	4	8	0.13	10	
04/04/2018	5,147.00			182	5,147.00	89					0.21		5.6	7.5	0.21		
05/04/2018	5,151.00			175	5,151.00	85					0.16		9.6	7.5	0.16		
06/04/2018	5,347.00			175	5,347.00	95					0.17		7.2	7	0.17		
07/04/2018	5,200.00			176	5,200.00	86					0.21		5.6	7.5	0.21		
08/04/2018	5,143.00	108	3.43	170	5,143.00	89	2.3	6.84	0.128	4.71	0.14	5.6	5.2	7.5	0.14	30	
09/04/2018	5,168.00			166	5,168.00	92					0.14		6	7.5	0.14		
10/04/2018	5,254.00			180	5,254.00	92					0.14		4.8	7.5	0.14		
11/04/2018	5,083.00			163	5,083.00	89					0.19		6.8	7.5	0.19		
12/04/2018	5,091.00			238	5,091.00	90					0.12		2.4	7.5	0.12		
13/04/2018	5,409.00			170	5,409.00	90					0.17		9.6	7.5	0.17		
14/04/2018	5,373.00			172	5,373.00	90					0.12		8	7.5	0.12		
15/04/2018	5,338.00	110	2.79	181	5,338.00	92	14.5	6.23	0.097	5.19	0.24	7.6	5.6	8	0.24	63	
16/04/2018	5,308.00			168	5,308.00	89					0.16		2.8	8	0.16		
17/04/2018	5,604.00			151	5,604.00	102					0.14		5.2	8	0.14		
18/04/2018	5,323.00			172	5,323.00	89					0.05		1.2	8	0.05		
19/04/2018	5,378.00			161	5,378.00	87					0.07		4	8	0.07		
20/04/2018	5,795.00			144	5,795.00	94					0.1		4.4	8	0.1		
21/04/2018	5,949.00			182	5,949.00	98					0.09		4	8	0.09		
22/04/2018	5,898.00	105	2.81	187	5,898.00	98	2.5	5.08	0.08	4.67	0.21	4.1	6	8	0.21	50	
23/04/2018	6,136.00			191	6,136.00	98					0.15		4	8	0.15		
24/04/2018	6,269.00			184	6,269.00	101					0.13		7.2	8.5	0.13		
25/04/2018	6,013.00			145	6,013.00	97					0.15		7.2	7.5	0.15		
26/04/2018	6,149.00			118	6,149.00	102					0.15		8	7.5	0.15		
27/04/2018	6,199.00			146	6,199.00	101					0.22		6.8	7.5	0.22		
28/04/2018	5,969.00			140	5,969.00	95					0.34		8.8	8	0.34		
29/04/2018	5,828.00	100	2.21	126	5,828.00	98	3.7	5.3	0.285	3.3	0.25	9.5	8.8	8	0.25	40	
Total	166,292.00				166,292.00												0.00
Average	5,543.07	103.60	2.79	167.23	5,543.07	93.37	5.14	6.37	0.13	4.40	0.15	6.14	5.88	7.77	0.15	32.77	0.00
Minimum	5,083.00	95.00	2.21	118.00	5,083.00	85.00	2.30	5.08	0.06	3.30	0.04	3.90	1.20	7.00	0.04	10.00	0.00
Maximum	6,269.00	110.00	3.43	238.00	6,269.00	102.00	14.50	8.40	0.29	5.19	0.34	9.50	9.60	8.50	0.34	63.00	0.00
Count	30	5	5	30	30	30	5	5	5	5	30	5	30	30	30	5	0

**Fort Frances Wastewater Treatment Plant
Monthly Operations Summary**

2018	Raw Sewage				Final Effluent											Bypass Volume (m3)	
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH		E. Coll. (ctu/100 mL)
01/05/2018	6,172.00			139	6,172.00	100					0.15		7.6	8	7.6		
02/05/2018	6,321.00			144	6,321.00	113					0.21		12.8	8	7.6		
03/05/2018	5,946.00			183	5,946.00	108					0.24		4	8	7.7		
04/05/2018	5,777.00			165	5,777.00	92					0.14		7.8	8	7.6		
05/05/2018	5,977.00			129	5,977.00	100					0.2		8	8.5	7.6		
06/05/2018	5,726.00			132	5,726.00	90					0.1		5.6	8.5	7.6		
07/05/2018	5,621.00	86	2.32	157	5,621.00	96	2.1	6.82	0.15	3.01	0.22	4.5	9.2	9	7.8	60	
08/05/2018	6,300.00			170	6,300.00	102					0.29		8.8	9	7.6		
09/05/2018	6,831.00			114	6,831.00	108					0.21		10.8	9	7.7		
10/05/2018	6,332.00			127	6,332.00	104					0.14		4	9	7.5		
11/05/2018	6,140.00			144	6,140.00	96					0.12		4.4	9	7.5		
12/05/2018	6,143.00			161	6,143.00	100					0.14		4.8	9	7.6		
13/05/2018	5,959.00			173	5,959.00	96					0.21		6	8.5	7.6		
14/05/2018	5,900.00	100	3.09		5,900.00	95	3	6.18	0.248	3.05	0.16	9.3	5.2	8.5	7.5	130	
15/05/2018	5,790.00			154	5,790.00	93					0.19		7.8	8.5	7.5		
16/05/2018	5,843.00			139	5,843.00	94					0.11		5.2	9	7.5		
17/05/2018	5,863.00			169	5,863.00	96					0.2		10	8.5	7.8		
18/05/2018	8,189.00			187	8,189.00	136					0.22		12.8	8.5	7.6		
19/05/2018	9,505.00			115	9,505.00	138					0.2		13.2	8.5	7.6		
20/05/2018	7,351.00			105	7,351.00	108					0.29		10.8	8.5	7.3		
21/05/2018	6,919.00			104	6,919.00	103					0.19		7.6	9	7.4		
22/05/2018	6,919.00	56	2.29	154	6,919.00	92	2.8	3.48	0.25	2.39	0.25	8.1	8.4	9	7.6	90	
23/05/2018	6,900.00			142	6,900.00	101					0.16		9.6	9	7.5		
24/05/2018	13,977.00			421	13,977.00	109					0.11		4.8	9	7.5		
25/05/2018	7,926.00			153	7,926.00	124					0.29		11.2	10.5	7.3		
26/05/2018	7,312.00			107	7,312.00	111					0.29		7.8	10.5	7.7		
27/05/2018	6,708.00			136	6,708.00	100					0.33		14.8	10.5	7.6		
28/05/2018	6,273.00			181	6,273.00	124					0.26		9.2	10.5	7.6		
29/05/2018	6,424.00	77	2.28	119	6,424.00	106	2.3	4.84	0.169	3.43	0.28	8.9	9.2	10.5	7.7	30	
30/05/2018	6,821.00			180	6,821.00	131					0.22		10.4	11	7.6		
31/05/2018	7,067.00			144	7,067.00	107					0.1		2.8	11	7.5		
Total	210,932.00				210,932.00												0.00
Average	6,804.26	79.75	2.50	154.93	6,804.26	105.58	2.55	5.33	0.20	2.97	0.20	7.70	8.21	9.10	7.57	67.74	0.00
Minimum	5,621.00	56.00	2.28	104.00	5,621.00	90.00	2.10	3.48	0.15	2.39	0.10	4.50	2.80	8.00	7.30	30.00	0.00
Maximum	13,977.00	100.00	3.09	421.00	13,977.00	138.00	3.00	6.82	0.25	3.43	0.33	9.30	14.80	11.00	7.80	130.00	0.00
Count	31	4	4	30	31	31	4	4	4	4	31	4	31	31	31	4	0

**Fort Frances Wastewater Treatment Plant
Monthly Operations Summary**

2018	Raw Sewage					Final Effluent											
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coll. (cfu/100 mL)	Bypass Volume (m3)
01/06/2018	6,813.00			122	6,813.00	104					0.25		12.8	11	7.5		1410
02/06/2018	9,454.00			196	9,454.00	183					0.24		11.6	11	7.5		
03/06/2018	10,382.00			85	10,382.00	143					0.23		10	11	7.6		
04/06/2018	8,965.00	54	1.43	99	8,965.00	134	5	3.55	0.124	3.2	0.1	12.5	6	11	7.6	110	
05/06/2018	8,033.00			81	8,033.00	119					0.1		6	11	7.6		
06/06/2018	7,662.00			123	7,662.00	124					0.25		17.6	11.5	7.9		
07/06/2018	6,997.00			126	6,997.00	112					0.17		7.6	11.5	7.7		
08/06/2018	7,100.00			135	7,100.00	131					0.11		4.8	11.5	7.6		
09/06/2018	7,501.00			182	7,501.00	114					0.18		9.2	11.5	7.7		
10/06/2018	6,577.00			142	6,577.00	136					0.18		8.8	11.5	7.8		
11/06/2018	6,776.00	60	2.38	153	6,776.00	103	2.3	3.11	0.079	4.76	0.16		5.2	12	7.7		
12/06/2018	6,676.00			168	6,676.00	107					0.1	3.5	7.2	12	7.7	10	
13/06/2018	6,447.00			154	6,447.00	107					0.19		5.2	12	7.8		
14/06/2018	6,269.00			208	6,269.00	112					0.15		2	12	7.7		
15/06/2018	6,398.00			149	6,398.00	102					0.16		6	13.5	7.7		
16/06/2018	6,651.00			121	6,651.00	102					0.16		4	13	7.6		
17/06/2018	7,664.00			107	7,664.00	118					0.09		5.6	12.5	7.8		
18/06/2018	6,803.00	60	1.84	108	6,803.00	110	2.5	0.91	0.067	5.27	0.09	5.2	7.8	13	7.5	10	
19/06/2018	6,470.00			124	6,470.00	106					0.07		2.8	13	7.4		
20/06/2018	6,439.00			161	6,439.00	112					0.19		6.4	13	7.3		
21/06/2018	6,007.00			140	6,007.00	102					0.11		8	13	7.3		
22/06/2018	5,928.00			154	5,928.00	104					0.2		10	13	7.3		
23/06/2018	6,068.00			145	6,068.00	95					0.09		2.8	13	7.4		
24/06/2018	6,016.00			127	6,016.00	92					0.1		4	13	7.3		
25/06/2018	5,944.00	83	2.44	133	5,944.00	95	2	0.417	0.013	6.52	0.03	2	2.8	13	7.3	20	
26/06/2018	5,867.00			142	5,867.00	93					0.06		3.6	13	7.4		
27/06/2018	5,966.00			148	5,966.00	98					0.07		4.4	13	7.4		
28/06/2018	5,775.00			145	5,775.00	102					0.1		3.2	13	7.3		
29/06/2018	6,047.00			157	6,047.00	111					0.07		8.8	15	7.7		
30/06/2018	6,123.00			129	6,123.00	98					0.11		1.6	14.5	7.4		
Total	205,818.00	64.25	2.02	138.80	205,818.00	112.30	2.95	2.00	0.07	4.94	0.14	5.80	6.53	12.40	7.55	21.66	1,410.00
Average	6,860.60				6,860.60												0.00
Minimum	5,775.00	54.00	1.43	81.00	5,775.00	92.00	2.00	0.42	0.01	3.20	0.03	2.00	1.60	11.00	7.30	10.00	1,410.00
Maximum	10,382.00	83.00	2.44	208.00	10,382.00	183.00	5.00	3.55	0.12	6.52	0.25	12.50	17.60	15.00	7.90	110.00	1,410.00
Count	30	4	4	30	30	30	4	4	4	4	30	4	30	30	30	4	1

Fort Frances Wastewater Treatment Plant
Monthly Operations Summary

2018	Raw Sewage				Final Effluent												Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coll. (ctfu/100 mL)	
	5,862.00			131	5,862.00	95					0.07		2	14	7.5		
01/07/2018	5,949.00			110	5,949.00	101					0.15		6	14.5	7.5		
02/07/2018	5,639.00	58	2.13	129	5,639.00	94	2	0.288	0.033	6.6	0.08	4.8	2.4	14.5	7.7	10	
03/07/2018	8,623.00			187	8,623.00	171					0.09		4	14.5	7.8		
04/07/2018	7,205.00			144	7,205.00	108					0.07		1.6	14.5	7.6		
05/07/2018	6,695.00			162	6,695.00	161					0.08		2.8	14.5	7.6		
06/07/2018	6,806.00			182	6,806.00	107					0.11		5.2	14.5	7.8		
07/07/2018	6,374.00			157	6,374.00	104					0.1		4.4	14.5	7.8		
08/07/2018	5,937.00	78	2.17	153	5,937.00	96	2	0.548	0.058	5.87	0.07	5.2	2.8	15	7.7	10	
09/07/2018	5,706.00			148	5,706.00	94					0.06		2.4	15	7.7		
10/07/2018	7,052.00			151	7,052.00	141					0.1		3.6	15	7.6		
11/07/2018	6,413.00			121	6,413.00	105					0.12		2.8	15	7.7		
12/07/2018	5,852.00			205	5,852.00	98					0.09		2.4	15	7.6		
13/07/2018	5,866.00			176	5,866.00	99					0.11		3.6	15	7.7		
14/07/2018	5,866.00			176	5,866.00	99					0.11		3.6	15	7.7		
15/07/2018	6,255.00			137	6,255.00	96					0.05		2.8	15	7.7		
16/07/2018	5,965.00	86	2.22	130	5,965.00	95	2	0.119	0.019	5.7	0.03	2	4.8	15	7.6	10	
17/07/2018	5,756.00			154	5,756.00	92					0.02		2.8	15	7.6		
18/07/2018	5,861.00			126	5,861.00	101					0.01		2.4	15.5	7.7		
19/07/2018	5,683.00			131	5,683.00	93					0.02		2.8	15.5	7.6		
20/07/2018	5,609.00			141	5,609.00	89					0.12		1.6	16.5	7.7		
21/07/2018	5,669.00			134	5,669.00	95					0.08		2.4	16	7.8		
22/07/2018	5,369.00			142	5,369.00	93					0.08		4	16	7.4		
23/07/2018	5,209.00	85	2.44	140	5,209.00	88	2	0.22	0.025	7.16	0.11	2	4.4	16	7.6	2	
24/07/2018	5,316.00			139	5,316.00	89					0.05		3.2	16	7.6		
25/07/2018	5,462.00			164	5,462.00	92					0.08		1.6	16	7.6		
26/07/2018	5,464.00			157	5,464.00	90					0.07		2	15.5	7.5		
27/07/2018	5,195.00			160	5,195.00	85					0.05		2	16	7.8		
28/07/2018	5,366.00			158	5,366.00	98					0.08		1.6	16	7.7		
29/07/2018	5,177.00			143	5,177.00	84					0.04		0.8	16.5	7.4		
30/07/2018	5,039.00	115	2.76	162	5,039.00	90	2	0.443	0.05	7.71	0.08	2	1.2	16.5	7.7	10	
31/07/2018	5,091.00			182	5,091.00	84					0.11		1.6	16.5	7.7		
Total	183,465.00				183,465.00												0.00
Average	5,918.23	84.40	2.34	150.19	5,918.23	100.90	2.00	0.32	0.04	6.61	0.08	3.20	2.84	15.32	7.65	7.25	0.00
Minimum	5,039.00	58.00	2.13	110.00	5,039.00	84.00	2.00	0.12	0.02	5.70	0.01	2.00	0.80	14.00	7.40	2.00	0.00
Maximum	8,623.00	115.00	2.76	205.00	8,623.00	171.00	2.00	0.55	0.06	7.71	0.15	5.20	6.00	16.50	7.80	10.00	0.00
Count	31	5	5	31	31	31	5	5	5	5	31	5	31	31	31	5	0

Fort Frances Wastewater Treatment Plant
Monthly Operations Summary

2018	Raw Sewage				Final Effluent												Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coll. (cfu/100 mL)	
	5,602.00			234	5,602.00	94					0.1		2.8	16.5	7.8		
	5,358.00			226	5,358.00	99					0.07		2.8	16.5	7.8		
	5,159.00			211	5,159.00	90					0.09		3.6	16.5	7.7		
	5,333.00			161	5,333.00	93					0.06		2.8	16.5	7.7		
	4,876.00			168	4,876.00	82					0.06		1.6	16.5	7.6		
	4,870.00			197	4,870.00	83					0.05		1.2	16.5	7.6		
	4,918.00	123	3.55	186	4,918.00	90	2	0.061	0.033	7.46	0.03	2	2	17	7.7	12	
	5,048.00			177	5,048.00	96					0.13		3.2	17	7.7		
	4,636.00			157	4,636.00	83					0.08		1.2	17	7.5		
	4,595.00			164	4,595.00	81					0.13		1.6	17.5	7.7		
	4,780.00			172	4,780.00	82					0.15		1.6	18	7.7		
	4,652.00			160	4,652.00	78					0.15		0.8	17.5	7.3		
	4,823.00			164	4,823.00	85					0.23		2.8	17	7.8		
	4,729.00			151	4,729.00	81					0.19		2	17	7.7		
	4,972.00	86	2.56	165	4,972.00	91	2	0.1	0.061	7.7	0.18	2.9	3.2	17.5	7.7	10	
	4,765.00			168	4,765.00	82					0.14		3.2	17.5	7.8		
	4,779.00			165	4,779.00	84					0.19		2.8	17.5	7.8		
	4,962.00			182	4,962.00	88					0.21		2.8	17.5	7.8		
	5,106.00			187	5,106.00	86					0.18		2.4	17.5	7.9		
	5,023.00	104	2.82	179	5,023.00	88	2	0.028	0.059	7.7	0.17	3.3	3.6	17	7.8	10	
	4,907.00			199	4,907.00	87					0.21		3.6	17	7.9		
	4,923.00			175	4,923.00	86					0.21		5.6	17.5	8		
	4,812.00			183	4,812.00	86					0.22		2.8	17.5	7.8		
	4,938.00			177	4,938.00	93					0.2		4	17.5	7.8		
	5,493.00			163	5,493.00	124					0.23		4.4	17.5	7.9		
	5,488.00			231	5,488.00	98					0.23		3.6	17.5	7.9		
	6,250.00	139	2.97	222	6,250.00	122	2	0.12	0.106	6.67	0.21	2.1	5.6	17.5	7.9	60	
	5,444.00			177	5,444.00	92					0.19		4	17.5	7.8		
	5,444.00			162	5,444.00	93					0.21		4.4	17.5	7.8		
	5,243.00			186	5,243.00	92					0.2		4	17.5	7.9		
	5,198.00			168	5,198.00	84					0.24		3.6	17.5	7.7		
Total	157,126.00				157,126.00												0.00
Average	5,068.58	113.00	2.98	181.19	5,068.58	90.10	2.00	0.08	0.06	7.38	0.16	2.58	3.02	17.21	7.76	16.38	0.00
Minimum	4,595.00	86.00	2.56	151.00	4,595.00	78.00	2.00	0.03	0.03	6.67	0.03	2.00	0.80	16.50	7.30	10.00	0.00
Maximum	6,250.00	139.00	3.55	234.00	6,250.00	124.00	2.00	0.12	0.11	7.70	0.24	3.30	5.60	18.00	8.00	60.00	0.00
Count	31	4	4	31	31	31	4	4	4	4	31	4	31	31	31	4	0

Fort Frances Wastewater Treatment Plant
Monthly Operations Summary

2018	Raw Sewage				Final Effluent												Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coll. (cfu/100 mL)	
	5,207.00			171	5,207.00	96					0.22		4.4	17.5	7.8		
01/09/2018	4,949.00			163	4,949.00	85					0.2		3.6	17.5	7.7		
02/09/2018	4,991.00			209	4,991.00	86					0.11		2	17.5	7.8		
03/09/2018	5,222.00	134	3.69	220	5,222.00	87	2	0.07	0.05	7.14	0.1	2	4.8	17.5	7.8	10	
04/09/2018	5,389.00			230	5,389.00	97					0.1		3.6	17.5	7.8		
05/09/2018	5,082.00			223	5,082.00	90					0.1		4.4	17.5	7.9		
06/09/2018	4,885.00			182	4,885.00	92					0.1		2.4	17.5	7.9		
07/09/2018	5,048.00			187	5,048.00	92					0.11		2	17.5	7.8		
08/09/2018	4,994.00			207	4,994.00	88					0.11		2.4	17.5	7.9		
09/09/2018	5,023.00	116	2.99	172	5,023.00	91	2	0.168	0.019	7.91	0.11	2.4	2.4	17.5	7.9	10	
10/09/2018	4,903.00			165	4,903.00	90					0.14		1.2	17.5	7.8		
11/09/2018	6,096.00			165	6,096.00	148					0.15		8	17.5	7.6		
12/09/2018	3,629.00			185	3,629.00	135					0.3		15.2	17	7.7		
13/09/2018	4,762.00			177	4,762.00	85					0.12		4.4	17	7.7		
14/09/2018	5,030.00			168	5,030.00	89					0.1		3.6	17	7.6		
15/09/2018	5,496.00			161	5,496.00	87					0.1		2	17	7.6		
16/09/2018	5,063.00	102	3.92	173	5,063.00	92	2	0.956	0.023	1.84	0.11	2	2.4	16.5	7.8	2	
17/09/2018	4,902.00			186	4,902.00	90					0.06		1.6	17.5	7.8		
18/09/2018	5,088.00			199	5,088.00	89					0.12		4.4	17.5	7.7		
19/09/2018	5,254.00			221	5,254.00	100					0.16		2.4	16.5	7.9		
20/09/2018	8,044.00			190	8,044.00	143					0.14		5.6	16.5	7.9		
21/09/2018	6,303.00			169	6,303.00	104					0.15		3.2	16.5	7.9		
22/09/2018	6,382.00			150	6,382.00	104					0.12		2.8	16.5	7.8		
23/09/2018	7,378.00	99	2.47	153	7,378.00	121	3	0.42	0.013	6.6	0.15	2.9	5.2	17	7.7	10	
24/09/2018	7,196.00			125	7,196.00	111					0.14		3.2	17	7.8		
25/09/2018	7,095.00			125	7,095.00	107					0.12		2.4	17	7.8		
26/09/2018	6,751.00			126	6,751.00	105					0.14		2	17	7.8		
27/09/2018	6,320.00			132	6,320.00	103					0.11		2.4	17	7.8		
28/09/2018	6,706.00			112	6,706.00	109					0.13		3.6	17	7.7		
29/09/2018	6,377.00				6,377.00	144											
30/09/2018																	
Total	169,565.00				169,565.00												0.00
Average	5,652.17	112.75	3.27	174.00	5,652.17	102.00	2.25	0.40	0.03	5.87	0.13	2.33	3.71	17.16	7.78	6.69	0.00
Minimum	3,629.00	99.00	2.47	112.00	3,629.00	85.00	2.00	0.07	0.01	1.84	0.06	2.00	1.20	16.50	7.60	2.00	0.00
Maximum	8,044.00	134.00	3.92	230.00	8,044.00	148.00	3.00	0.96	0.05	7.91	0.30	2.90	15.20	17.50	7.90	10.00	0.00
Count	30	4	4	29	30	30	4	4	4	4	29	4	29	29	29	4	0

Fort Frances Wastewater Treatment Plant
Monthly Operations Summary

2018	Raw Sewage				Final Effluent												Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coli. (cfu/100 mL)	
01/10/2018	6,244.00			126	6,244.00	101					0.09		1.6	17	7.7		
02/10/2018	6,235.00	78	2.13	151	6,235.00	104	2	0.034	0.025	5.97	0.07	2	2	16.5	7.8	10	
03/10/2018	7,390.00			136	7,390.00	123					0.06		1.2	16.5	7.8		
04/10/2018	6,971.00			110	6,971.00	106					0.18		4.8	16.5	7.7		
05/10/2018	6,900.00			128	6,900.00	131					0.13		2	16	8		
06/10/2018	7,443.00			119	7,443.00	112					0.13		1.2	16	7.8		
07/10/2018	6,964.00			156	6,964.00	110					0.14		1.6	15.5	7.9		
08/10/2018	7,738.00			141	7,738.00	121					0.13		2.8	15.5	7.7		
09/10/2018	8,462.00	95	1.9	111	8,462.00	158	2	0.078	0.031	5.66	0.19	3.5	6.4	15.5	8	10	
10/10/2018	8,706.00			130	8,706.00	130					0.25		9.2	15	7.8		
11/10/2018	8,272.00			103	8,272.00	123					0.16		2	15	7.6		
12/10/2018	8,715.00			113	8,715.00	129					0.15		2.8	15	7.7		
13/10/2018	9,271.00			131	9,271.00	135					0.14		3.6	14.5	7.9		
14/10/2018	9,123.00			132	9,123.00	132					0.11		5.2	14.5	8		
15/10/2018	8,826.00	62	1.46	130	8,826.00	133	2	0.133	0.022	5.13		3.5	1.6	14.5	7.8	10	
16/10/2018	8,499.00			108	8,499.00	128					0.1		2.8	14.5	7.9		
17/10/2018	8,260.00			126	8,260.00	123					0.2		2.4	14.5	7.8		
18/10/2018	7,987.00			125	7,987.00	140					0.07		1.6	14.5	7.8		
19/10/2018	7,676.00			111	7,676.00	126					0.09		1.2	14.5	7.8		
20/10/2018	7,581.00			119	7,581.00	117					0.12		4	14.5	7.8		
21/10/2018	7,395.00			131	7,395.00	114					0.1		1.6	14.5	7.8		
22/10/2018	7,177.00			170	7,177.00	118					0.03		1.2	14.5	7.6		
23/10/2018	6,960.00	72	1.88	128	6,960.00	108	2	0.366	0.07	5.46	0.03	2	0.8	14	7.6	10	
24/10/2018	7,162.00			161	7,162.00	113					0.06		2.4	14	7.6		
25/10/2018	6,948.00			116	6,948.00	109					0.08		2.4	14	7.8		
26/10/2018	7,154.00			107	7,154.00	113					0.05		1.2	14	8		
27/10/2018	7,575.00			132	7,575.00	117					0.08		1.2	14	8		
28/10/2018	8,120.00			109	8,120.00	118					0.14		1.6	14	7.9		
29/10/2018	7,748.00	77		112	7,748.00	118	2	0.107	0.01	5.06	0.16	2	1.2	14	7.9	10	
30/10/2018	8,015.00			123	8,015.00	122					0.07		2.4	14	7.8		
31/10/2018	7,977.00			108	7,977.00	129					0.13		2.8	14	8		
Total	239,494.00				239,494.00												0.00
Average	7,725.61	76.80	1.84	125.90	7,725.61	121.32	2.00	0.14	0.03	5.46	0.11	2.60	2.54	14.87	7.82	10.00	0.00
Minimum	6,235.00	62.00	1.46	103.00	6,235.00	101.00	2.00	0.03	0.01	5.06	0.03	2.00	0.80	14.00	7.60	10.00	0.00
Maximum	9,271.00	95.00	2.13	170.00	9,271.00	158.00	2.00	0.37	0.07	5.97	0.25	3.50	9.20	17.00	8.00	10.00	0.00
Count	31	5	4	31	31	31	5	5	5	5	30	5	31	31	31	5	0

Fort Frances Wastewater Treatment Plant
Monthly Operations Summary

2018	Raw Sewage				Final Effluent													
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coll. (ctu/100 mL)	Bypass Volume (m3)	
01/11/2018	7,700.00			118	7,700.00	116					0.01		2	13.5	7.6			
02/11/2018	7,522.00			126	7,522.00	113					0.04		2.4	13.5	7.7			
03/11/2018	7,641.00			135	7,641.00	114					0.07		4	13.5	7.7			
04/11/2018	7,840.00			153	7,840.00	118					0.01		1.2	13.5	7.6			
05/11/2018	7,332.00	86		140	7,332.00	114	2	1.23	0.01	5.58	0.02	2	0.8	13.5	7.6	10		
06/11/2018	7,228.00			119	7,228.00	113					0.08		4.4	13.5	7.6			
07/11/2018	7,229.00			184	7,229.00	112					0.17		5.2	13.5	8			
08/11/2018	6,970.00			136	6,970.00	110					0.1		3.6	13	8.1			
09/11/2018	7,008.00			171	7,008.00	116					0.1		3.2	13	8			
10/11/2018	7,182.00			166	7,182.00	115					0.15		3.2	12.5	8			
11/11/2018	6,902.00			149	6,902.00	106					0.16		4	12.5	7.9			
12/11/2018	6,664.00			136	6,664.00	99					0.12	4.1	2.8	13	7.9			
13/11/2018	6,699.00	85	2.14	137	6,699.00	103	2	0.283	0.01	7.17	0.12		3.6	12.5	8	10		
14/11/2018	6,837.00			129	6,837.00	114					0.14		4	12.5	7.7			
15/11/2018	6,574.00			111	6,574.00	104					0.13		2	12.5	7.9			
16/11/2018	6,376.00			133	6,376.00	101					0.11		4	12.5	7.7			
17/11/2018	6,516.00			126	6,516.00	108					0.13		3.2	12.5	7.8			
18/11/2018	6,390.00			144	6,390.00	100					0.09		2	12.5	7.8			
19/11/2018	6,285.00	84	3.14	136	6,285.00	102	2	0.448	0.01	7.58	0.1	2	2.4	12.5	7.7	20		
20/11/2018	6,254.00			139	6,254.00	98					0.05		2.4	12.5	7.7			
21/11/2018	6,414.00			120	6,414.00	115					0.06		2	12	7.5			
22/11/2018	6,243.00			142	6,243.00	103					0.14		3.2	12	7.9			
23/11/2018	6,186.00			138	6,186.00	96					0.15		1.2	12	8			
24/11/2018	6,278.00			126	6,278.00	102					0.11		4	12	8			
25/11/2018	6,131.00			139	6,131.00	98					0.12		2	11.5	7.9			
26/11/2018	6,192.00	72	2.17	163	6,192.00	102	2	0.074	0.028	8.73	0.1	2.8	3.6	11.5	7.9	10		
27/11/2018	6,227.00			170	6,227.00	102					0.12		2.4	11.5	7.5			
28/11/2018	6,251.00			157	6,251.00	109					0.17		3.6	11.5	7.2			
29/11/2018	5,936.00			159	5,936.00	98					0.12		1.2	11.5	7.2			
30/11/2018	5,738.00			139	5,738.00	99					0.11		1.6	11.5	7.2			
Total	200,745.00	81.75	2.48	141.37	200,745.00	106.67	2.00	0.51	0.01	7.27	0.10	2.73	2.84	12.52	7.74	11.89	0.00	
Average	6,691.50				6,691.50												0.00	
Minimum	5,738.00	72.00	2.14	111.00	5,738.00	96.00	2.00	0.07	0.01	5.58	0.01	2.00	0.80	11.50	7.20	10.00	0.00	
Maximum	7,840.00	86.00	3.14	184.00	7,840.00	118.00	2.00	1.23	0.03	8.73	0.17	4.10	5.20	13.50	8.10	20.00	0.00	
Count	30	4	3	30	30	30	4	4	4	4	30	4	30	30	30	4	0	

Fort Frances Wastewater Treatment Plant
Monthly Operations Summary

2018	Raw Sewage				Final Effluent												Bypass Volume (m3)
	Raw Flow: Sum (m3/d)	BOD5 (mg/L)	Total Phosphorus (mg/L)	SS (mg/L) IH	Final Eff. Flow: Sum (m3/d)	Final Eff. Flow: Max. (L/s)	CBOD5 (mg/L)	NH3 + NH4 as N (mg/L)	Nitrite - N (mg/L)	Nitrate-N(mg/L)	Total Phosphorus (mg/L)	Suspended Solids (mg/L)	SS (mg/L) IH	Temperature (C)	pH	E. Coli. (cfu/100 mL)	
01/12/2018	5,935.00			151	5,935.00	99					0.08		4	11.5	7.2		
02/12/2018	5,761.00			146	5,761.00	96					0.06		2	11.5	7.2		
03/12/2018	5,619.00			139	5,619.00	92					0.01		1.2		7.1		
04/12/2018	5,638.00	83	2.39	133	5,638.00	93	2	0.461	0.019	8.54	0.05	2	2	11.5	7.1	10	
05/12/2018	5,668.00			124	5,668.00	95					0.11		4	11.5	7.2		
06/12/2018	5,536.00			132	5,536.00	98					0.1		3.6	11	7.1		
07/12/2018	5,516.00			132	5,516.00	92					0.12		2.4	11	7.2		
08/12/2018	5,888.00			169	5,888.00	107					0.13		2.8	11.5	7		
09/12/2018	5,698.00			164	5,698.00	91					0.11		2.8	11	7.1		
10/12/2018	5,502.00	106	2.49	150	5,502.00	91	2	0.048	0.019	8.21	0.13	2	2	11	7.1	10	
11/12/2018	5,424.00			156	5,424.00	89					0.11		2.4	11	7.1		
12/12/2018	5,705.00			133	5,705.00	103					0.09		3.6	11	7		
13/12/2018	5,393.00			146	5,393.00	93					0.12		2.4	11	7.1		
14/12/2018	5,478.00			197	5,478.00	94					0.14		4	11	7.1		
15/12/2018	5,658.00			188	5,658.00	92					0.11		2.8	11	7.1		
16/12/2018	5,463.00			154	5,463.00	90					0.08		1.2	11	7		
17/12/2018	5,265.00	106	2.41	150	5,265.00	92	2.6	0.524	0.035	7.28	0.07	2	0.8	11	7.2	10	
18/12/2018	5,313.00			149	5,313.00	88					0.2		7.6	11	6.9		
19/12/2018	5,497.00			152	5,497.00	99					0.16		6.4	10.5	7.1		
20/12/2018	5,356.00			160	5,356.00	87					0.18		2.8	10.5	6.9		
21/12/2018	5,236.00			158	5,236.00	92					0.2		3.6	10	7		
22/12/2018	5,571.00			158	5,571.00	96					0.17		4.8	10	7		
23/12/2018	5,283.00			141	5,283.00	87					0.12		3.2	10	7.3		
24/12/2018	5,262.00			147	5,262.00	95					0.11		2.8	10	7		
25/12/2018	5,053.00			193	5,053.00	83					0.12		2.4	10	7		
26/12/2018	5,389.00			148	5,389.00	91					0.1		2	10	7		
27/12/2018	5,252.00	86	2.81	152	5,252.00	88	2	0.172	0.063	9.27	0.13	2	3.6	10	7	10	
28/12/2018	5,147.00			161	5,147.00	89					0.09		2	10	7		
29/12/2018	5,372.00			156	5,372.00	91					0.06		3.6	10	7		
30/12/2018	5,243.00			167	5,243.00	90					0.08		1.6	10	7		
31/12/2018	5,142.00			124	5,142.00	91					0.1		4	9.5	7		
Total	169,263.00				169,263.00												0.00
Average	5,460.10	95.25	2.53	152.58	5,460.10	92.71	2.15	0.30	0.03	8.33	0.11	2.00	3.05	10.67	7.07	10.00	0.00
Minimum	5,053.00	83.00	2.39	124.00	5,053.00	83.00	2.00	0.05	0.02	7.28	0.01	2.00	0.80	9.50	6.90	10.00	0.00
Maximum	5,935.00	106.00	2.81	197.00	5,935.00	107.00	2.60	0.52	0.06	9.27	0.20	2.00	7.60	11.50	7.30	10.00	0.00
Count	31	4	4	31	31	31	4	4	4	4	31	4	31	30	31	4	0

Biosolids Quality Report

Flow Meter Calibrations

Instrument Verification Report

Ontario Clean Water Agency, 200 McIlrvine Road, Fort Frances, ON

Test Date: August 13, 2018

Device: Miltronics OCM III 25C TS-2, Identifier # 120296126 HM

For: Plant Final Effluent flow as measured using a 12 inch Parshal flume

Table 1: Verification Data for Miltronics OCM and Final Effluent Parshal Flume

Measured Effluent Head (mm)	Indicated flow on OCM (L/s)	Calculated flow (L/s)	Percent error
200	50.6	49.0	-3.2
260	88.5	89.3	0.9
300	110.8	111.0	-0.3
400	172.8	171	1.1
455	209.5	208	0.7

Notes: For the Parshal Flume: Flow rate, $Q \text{ (ft}^3/\text{s)} = 3.95 * (\text{Head} / ((12) * (25.4)))^{1.522}$

Flow rate, $Q \text{ (L/s)} = Q \text{ (ft}^3/\text{s)} * 28.31 \text{ (L/ft}^3)$

Summary:

The error in indicated values for final effluent flow rate is within the range of +/- 5%.

The alarm condition for flow in excess of UV capability operated at 208 L/sec.



Geoff Pearce

Aug 13, 2018

Ontario Clean Water Agency

Instrument Verification Report

Ontario Clean Water Agency, 200 McIlrvine Road, Fort Frances, ON

Test Date: July 10, 2018

Device: Miltronics Multiranger Plus XPS 10, Identifier 04-235-96-432 MU

For: Plant influent Bypass Overflow Level, as measured in Manhole #8

Detail:

- 1) Influent water level of 1.5 m was simulated with a fixture in manhole #8.
The bypass warning alarm (high level) was activated.
- 2) Influent water level of 1.96 m was simulated with a fixture in manhole #8.
The bypass high-high alarm was activated and a bypass flow value 5.0 m^3 was indicated.

Summary:

The DeltaV alarms for bypass high and bypass high-high were tested and they both functioned as required.



Geoff Pearce

July 10, 2018

Ontario Clean Water Agency

Fort Frances, Ontario

ESA Inspections

Continuous Safety Services Site Visit Report

The electrical systems of the site listed below were inspected on 2018/12/03 by Electrical Inspector Brian Williams and the findings from that inspection are identified on this report. In addition, you will also find an Outstanding Defect Report attached that outlines any electrical defects that are still in our records as uncorrected. Please advise Brian Williams once you have corrected any defects that were found.

Customer Information	Site Information
TOWN OF FORT FRANCES 320 PORTAGE AVE FORT FRANCES, ON Attn: TRAVIS ROB	LIFT STATION CHURCH ST 1107 CHURCH ST FORT FRANCES, ON Attn: TRAVIS ROB

Issue Date: 2018/12/03

Purpose of Visit: Inspection

Visit Contact:
Inspector Name: Brian Williams

Inspector Cell #: 807-275-7658

Inspector Email: BRIAN.WILLIAMS@ELECTRICALSAFETY.ON.CA

Recommendations

1	Risk Factor	Notification #: 20480428	Issue Date: 2018-12-03	Defect Status: Completed	Initial if corrected
	N/A	Rule Reference: 02-004(a) No defects			
		Defect Location:		Defect #: 1	
Code Rule: No defects were identified.					
Inspector Comments:					

Thank you for giving us the opportunity to help you improve the safety of your facility. Your attention to these hazards, defects and recommendations will ensure continued safety on your premises. Should you have any questions regarding the items listed in this report, please do not hesitate to contact us.

Can your employees identify electrical hazards in the workplace? Do your electrical workers and maintenance staff understand the requirements of the OESC? ESA encourages supervisors and workers to continually improve their knowledge and follow safe work practices. Visit www.esasafe.com & choose "Safety and Technical Training" for dates and locations of workshops in your area or contact us at 1-877-854-0079.

Outstanding Defect Summary Report

The following list of defects are still outstanding from our previous inspection visit(s). These items not only represent contraventions to the Ontario Electrical Safety Code but they also expose workers and employees to an electrical safety risk. As per Rule 2-018 of the Electrical Safety Code, all defects regardless of the risk factor assigned must be corrected as soon as possible. Please notify the Electrical Inspector by email indicating which defects have been corrected. Alternatively you can initial corrections and fax this report to 905-712-7886.

Customer Information	Site Information
TOWN OF FORT FRANCES 320 PORTAGE AVE FORT FRANCES, ON Attn: TRAVIS ROB	LIFT STATION CHURCH ST 1107 CHURCH ST FORT FRANCES, ON Attn: TRAVIS ROB
Outstanding Defects	

There are currently no outstanding defects from previous visits. Please refer to the previous pages of this report to review any electrical deficiencies that were found on the most recent inspection visit.

Continuous Safety Services Site Visit Report

The electrical systems of the site listed below were inspected on 2018/12/03 by Electrical Inspector Brian Williams and the findings from that inspection are identified on this report. In addition, you will also find an Outstanding Defect Report attached that outlines any electrical defects that are still in our records as uncorrected. Please advise Brian Williams once you have corrected any defects that were found.

Customer Information	Site Information
TOWN OF FORT FRANCES 320 PORTAGE AVE FORT FRANCES, ON Attn: TRAVIS ROB	LIFT STATION PATCIN AV 936 KAITLYN DR FORT FRANCES, ON Attn: TRAVIS ROB

Issue Date: 2018/12/03

Purpose of Visit: Inspection

Visit Contact:
Inspector Name: Brian Williams

Inspector Cell #: 807-275-7658

Inspector Email: BRIAN.WILLIAMS@ELECTRICALSAFETY.ON.CA

Recommendations

1	Risk Factor	Notification #: 20480429	Issue Date: 2018-12-03	Defect Status: Completed	Initial if corrected
	N/A	Rule Reference: 02-004(a) No defects			
		Defect Location:		Defect #: 1	
	Code Rule: No defects were identified.				
Inspector Comments:					

Thank you for giving us the opportunity to help you improve the safety of your facility. Your attention to these hazards, defects and recommendations will ensure continued safety on your premises. Should you have any questions regarding the items listed in this report, please do not hesitate to contact us.

Can your employees identify electrical hazards in the workplace? Do your electrical workers and maintenance staff understand the requirements of the OESC? ESA encourages supervisors and workers to continually improve their knowledge and follow safe work practices. Visit www.esasafe.com & choose "Safety and Technical Training" for dates and locations of workshops in your area or contact us at 1-877-854-0079.

Outstanding Defect Summary Report

The following list of defects are still outstanding from our previous inspection visit(s). These items not only represent contraventions to the Ontario Electrical Safety Code but they also expose workers and employees to an electrical safety risk. As per Rule 2-018 of the Electrical Safety Code, all defects regardless of the risk factor assigned must be corrected as soon as possible. Please notify the Electrical Inspector by email indicating which defects have been corrected. Alternatively you can initial corrections and fax this report to 905-712-7886.

Customer Information	Site Information
TOWN OF FORT FRANCES 320 PORTAGE AVE FORT FRANCES, ON Attn: TRAVIS ROB	LIFT STATION PATCIN AV 936 KAITLYN DR FORT FRANCES, ON Attn: TRAVIS ROB
Outstanding Defects	

There are currently no outstanding defects from previous visits. Please refer to the previous pages of this report to review any electrical deficiencies that were found on the most recent inspection visit.

Continuous Safety Services Site Visit Report

The electrical systems of the site listed below were inspected on 2018/12/03 by Electrical Inspector Brian Williams and the findings from that inspection are identified on this report. In addition, you will also find an Outstanding Defect Report attached that outlines any electrical defects that are still in our records as uncorrected. Please advise Brian Williams once you have corrected any defects that were found.

Customer Information	Site Information
TOWN OF FORT FRANCES 320 PORTAGE AVE FORT FRANCES, ON Attn: TRAVIS ROB	LIFT STATION WHITE PINE ST 780 SCOTT ST FORT FRANCES, ON Attn: TRAVIS ROB

Issue Date: 2018/12/03

Purpose of Visit: Inspection

Visit Contact:
Inspector Name: Brian Williams

Inspector Cell #: 807-275-7658

Inspector Email: BRIAN.WILLIAMS@ELECTRICALSAFETY.ON.CA

Recommendations

1	Risk Factor	Notification #: 20480432	Issue Date: 2018-12-03	Defect Status: Completed	Initial if corrected
	N/A	Rule Reference: 02-004(a) No defects			
		Defect Location:		Defect #: 1	
Code Rule: No defects were identified.					
Inspector Comments:					

Thank you for giving us the opportunity to help you improve the safety of your facility. Your attention to these hazards, defects and recommendations will ensure continued safety on your premises. Should you have any questions regarding the items listed in this report, please do not hesitate to contact us.

Can your employees identify electrical hazards in the workplace? Do your electrical workers and maintenance staff understand the requirements of the OESC? ESA encourages supervisors and workers to continually improve their knowledge and follow safe work practices. Visit www.esasafe.com & choose "Safety and Technical Training" for dates and locations of workshops in your area or contact us at 1-877-854-0079.

Outstanding Defect Summary Report

The following list of defects are still outstanding from our previous inspection visit(s). These items not only represent contraventions to the Ontario Electrical Safety Code but they also expose workers and employees to an electrical safety risk. As per Rule 2-018 of the Electrical Safety Code, all defects regardless of the risk factor assigned must be corrected as soon as possible. Please notify the Electrical Inspector by email indicating which defects have been corrected. Alternatively you can initial corrections and fax this report to 905-712-7886.

Customer Information	Site Information
TOWN OF FORT FRANCES 320 PORTAGE AVE FORT FRANCES, ON Attn: TRAVIS ROB	LIFT STATION WHITE PINE ST 780 SCOTT ST FORT FRANCES, ON Attn: TRAVIS ROB
Outstanding Defects	

There are currently no outstanding defects from previous visits. Please refer to the previous pages of this report to review any electrical deficiencies that were found on the most recent inspection visit.

Continuous Safety Services Site Visit Report

The electrical systems of the site listed below were inspected on 2018/12/03 by Electrical Inspector Brian Williams and the findings from that inspection are identified on this report. In addition, you will also find an Outstanding Defect Report attached that outlines any electrical defects that are still in our records as uncorrected. Please advise Brian Williams once you have corrected any defects that were found.

Customer Information	Site Information
TOWN OF FORT FRANCES 320 PORTAGE AVE FORT FRANCES, ON Attn: TRAVIS ROB	LIFT STATION CENTRAL AV 712 CENTRAL AVE FORT FRANCES, ON Attn: TRAVIS ROB

Issue Date: 2018/12/03

Purpose of Visit: Inspection

Visit Contact:
Inspector Name: Brian Williams

Inspector Cell #: 807-275-7658

Inspector Email: BRIAN.WILLIAMS@ELECTRICALSAFETY.ON.CA

Recommendations

1	Risk Factor	Notification #: 20480433	Issue Date: 2018-12-03	Defect Status: Completed	Initial if corrected
		Rule Reference: 02-004(a) No defects			
	N/A	Defect Location:		Defect #: 1	
	Code Rule: No defects were identified.				
Inspector Comments:					

Thank you for giving us the opportunity to help you improve the safety of your facility. Your attention to these hazards, defects and recommendations will ensure continued safety on your premises. Should you have any questions regarding the items listed in this report, please do not hesitate to contact us.

Can your employees identify electrical hazards in the workplace? Do your electrical workers and maintenance staff understand the requirements of the OESC? ESA encourages supervisors and workers to continually improve their knowledge and follow safe work practices. Visit www.esasafe.com & choose "Safety and Technical Training" for dates and locations of workshops in your area or contact us at 1-877-854-0079.

Outstanding Defect Summary Report

The following list of defects are still outstanding from our previous inspection visit(s). These items not only represent contraventions to the Ontario Electrical Safety Code but they also expose workers and employees to an electrical safety risk. As per Rule 2-018 of the Electrical Safety Code, all defects regardless of the risk factor assigned must be corrected as soon as possible. Please notify the Electrical Inspector by email indicating which defects have been corrected. Alternatively you can initial corrections and fax this report to 905-712-7886.

Customer Information	Site Information
TOWN OF FORT FRANCES 320 PORTAGE AVE FORT FRANCES, ON Attn: TRAVIS ROB	LIFT STATION CENTRAL AV 712 CENTRAL AVE FORT FRANCES, ON Attn: TRAVIS ROB
Outstanding Defects	

There are currently no outstanding defects from previous visits. Please refer to the previous pages of this report to review any electrical deficiencies that were found on the most recent inspection visit.

Continuous Safety Services Site Visit Report

The electrical systems of the site listed below were inspected on 2018/12/03 by Electrical Inspector Brian Williams and the findings from that inspection are identified on this report. In addition, you will also find an Outstanding Defect Report attached that outlines any electrical defects that are still in our records as uncorrected. Please advise Brian Williams once you have corrected any defects that were found.

Customer Information	Site Information
TOWN OF FORT FRANCES 320 PORTAGE AVE FORT FRANCES, ON Attn: TRAVIS ROB	LIFT STATION BOUNDARY RD 1713 COLONIZATION RD W FORT FRANCES, ON Attn: TRAVIS ROB

Issue Date: 2018/12/03

Purpose of Visit: Inspection

Visit Contact:
Inspector Name: Brian Williams

Inspector Cell #: 807-275-7658

Inspector Email: BRIAN.WILLIAMS@ELECTRICALSAFETY.ON.CA

Recommendations

1	Risk Factor	Notification #: 20480434	Issue Date: 2018-12-03	Defect Status: Completed	Initial if corrected
	N/A	Rule Reference: 02-004(a) No defects			
		Defect Location:		Defect #: 1	
	Code Rule: No defects were identified.				
Inspector Comments:					

Thank you for giving us the opportunity to help you improve the safety of your facility. Your attention to these hazards, defects and recommendations will ensure continued safety on your premises. Should you have any questions regarding the items listed in this report, please do not hesitate to contact us.

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Outstanding Defect Summary Report

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Customer Information	Site Information
TOWN OF FORT FRANCES 320 PORTAGE AVE FORT FRANCES, ON Attn: TRAVIS ROB	LIFT STATION BOUNDARY RD 1713 COLONIZATION RD W FORT FRANCES, ON Attn: TRAVIS ROB
Outstanding Defects	

There are currently no outstanding defects from previous visits. Please refer to the previous pages of this report to review any electrical deficiencies that were found on the most recent inspection visit.

Aircraft Landings 2019
As of April 30, 2019

Month	Bearskin Flights			Bearskin- Passengers			Air Bravo Passengers		Government			Private			Med-I-vacs			International			Commercial			Totals			Variance
	2019	2018	2017	2019	2018	2017	2019	2018	2019	2018	2017	2019	2018	2017	2019	2018	2017	2019	2018	2017	2019	2018	2017	2019	2018	2017	2019-2018
January	54	68	76	160	198	308	8	0	0	0	0	4	3	2	60	55	42	0	2	4	42	73	48	160	143	177	17
February	56	66	80	197	187	334	15	0	13	0	1	1	2	1	43	57	32	0	3	0	38	56	39	151	156	155	-5
March	61	73	90	160	249	336	11	0	13	0	10	10	5	4	52	43	50	2	6	14	42	57	51	180	178	192	2
1/4 Total	171	207	246	517	634	978	34	0	26	0	11	15	10	7	155	155	124	2	11	18	122	186	138	491	477	524	14
April	59	77	67	197	270	289	7	0	5	0	0	9	7	18	57	42	40	3	6	4	40	42	41	173	186	201	-13
May		77	87		276	389		2		4	8		19	8		35	50		28	0		54	54	0	229	259	-229
June		68	82		219	324		4		4	10		24	16		36	38		70	14		49	63	0	273	328	-273
1/2 Total	230	429	482	714	1399	1980	41	6	31	8	29	24	60	49	212	268	252	5	115	36	162	331	296	664	1165	1312	-501
July		74	70		228	224		7		10	3		40	26		38	51		79	76		41	54	0	286	324	-286
August		69	82		219	292		5		6	4		41	27		41	66		65	80		44	50	0	322	313	-322
September		66	79		197	267		2		29	7		33	14		44	40		45	42		37	39	0	230	249	-230
3/4 Total	230	638	713	714	2043	2763	41	20	31	53	43	24	174	116	212	391	409	5	304	234	162	453	439	664	2003	2198	-1339
October		68	72		254	255		8		5	6		18	16		37	44		8	18		43	42	0	203	214	-203
November		71	71		209	281		1		2	0		5	2		41	28		1	0		40	40	0	168	146	-168
December		55	62		197	199		7		0	0		7	2		41	36		0	0		34	40	0	122	139	-122
Total	230	832	918	714	2703	3498	41	36	31	60	49	24	204	136	212	510	517	5	313	252	162	570	561	664	2496	2697	-1832

Fort Frances Airport - Page 2/2 - Fuel Sales - April 30, 2019																			
Fuel Sales Recap - 2019									2019	2018	2017	2016	2015	2014	2013	2012	2011	9 year	Variance
	100LL		Jet Trk		Jet Cab		Month	Year	per	per	per	per	per	per	per	per	per	Average	2019-2018
Month	Liters	Total	Liters	Total	Liters	Total	Total	Total	month	month	month	month	month	month	month	month	month	2019 to 2011	month
January	132	132	7,918	7,918	546	546	8,596	8,596	8,596	16,597	25,675	7,528	8,692	11,543	7,216	10,252	7,308	11,940	-8,001
February	27	159	7,964	15,882	10,602	11,148	18,593	27,189	18,593	16,286	12,503	11,904	11,231	12,304	6,197	6,918	3,687	11,276	2,307
March	840	999	12,876	28,758	12,380	23,528	26,096	53,285	26,096	9,798	21,928	13,255	17,795	10,508	12,077	9,329	10,390	14,079	16,298
April	1,379	2,378	11,631	40,389	12,836	36,364	25,846	79,131	25,846	10,398	13,102	8,592	13,219	8,377	4,453	8,251	5,294	10,821	15,448
May						36,364	0	79,131		24,839	21,362	24,681	16,161	29,753	18,350	21,891	19,790	22,318	-24,839
June						36,364	0	79,131		27,380	27,380	26,015	45,698	30,789	22,786	23,537	25,723	27,967	-27,380
July						36,364	0	79,131		23,461	24,642	29,002	28,150	14,441	19,232	32,650	19,124	23,959	-23,461
August						36,364	0	79,131		30,430	23,029	21,119	36,638	20,450	20,075	30,783	21,467	25,805	-30,430
September						36,364	0	79,131		25,191	13,489	21,325	24,238	21,837	18,005	19,431	22,511	20,552	-25,191
October						36,364	0	79,131		10,769	16,604	30,655	8,216	15,472	13,109	11,325	13,677	15,681	-10,769
November						36,364	0	79,131		10,748	9,924	22,349	11,616	7,238	6,398	8,170	6,785	10,442	-10,748
December						36,364	0	79,131		13,243	6,560	13,797	7,592	6,849	2,028	8,179	2,446	7,588	-13,243
Total	2,378		40,389		36,364		79,131		79,131	219,140	216,198	230,222	229,246	189,561	149,926	190,716	158,202	202,426	-140009

Lowest month in last 9 years

Highest month in last 9 years

Highest month

lowest month

MONTH	Residential Waste tonnes	Res %	ICI Waste tonnes	ICI %	Non Community Waste tonnes	Non Com %	Covering Material tonnes	2018			2019				
								2018 Total Tonne	Average last 10 years Total Tonne	2019 Total Tonne	2018 Total Fees	Average last 10 years Fees 2009 to 2018	2019 Total Fees	2019-2018 Tonnes	2019-2018 Fees
JAN	149.54	27.28	387.83	70.75	10.82	1.97	16.76	495.69	370.24	548.19	\$30,177.28	\$20,128.17	\$27,590.90	52.50	-\$2,586.38
FEB	124.49	34.52	227.79	63.15	8.41	2.33	0.00	406.46	310.55	360.69	\$23,347.65	\$16,847.30	\$21,887.90	-45.77	-\$1,459.75
MAR	166.77	34.34	311.35	64.10	7.59	1.56	4137.48	463.54	408.18	485.71	\$27,716.10	\$22,813.66	\$76,269.12	22.17	\$48,553.02
APRIL	333.91	45.09	398.17	53.76	8.54	1.15	0.00	570.00	561.20	740.62	\$35,930.07	\$32,008.80	\$49,329.50	170.62	\$13,399.43
MAY		#DIV/0!		#DIV/0!		#DIV/0!		704.26	712.14	0.00	\$42,835.55	\$38,717.06		-704.26	-\$42,835.55
JUNE		#DIV/0!		#DIV/0!		#DIV/0!		636.08	818.82	0.00	\$45,718.15	\$39,435.12		-636.08	-\$45,718.15
JULY		#DIV/0!		#DIV/0!		#DIV/0!		317.41	593.33	0.00	\$37,855.70	\$36,663.59		-317.41	-\$37,855.70
AUG		#DIV/0!		#DIV/0!		#DIV/0!		687.72	650.90	0.00	\$43,983.95	\$36,983.59		-687.72	-\$43,983.95
SEPT		#DIV/0!		#DIV/0!		#DIV/0!		647.03	651.00	0.00	\$42,404.90	\$37,190.53		-647.03	-\$42,404.90
OCT		#DIV/0!		#DIV/0!		#DIV/0!		843.41	817.13	0.00	\$43,140.48	\$42,161.43		-843.41	-\$43,140.48
NOV		#DIV/0!		#DIV/0!		#DIV/0!		555.90	551.11	0.00	\$33,490.70	\$29,847.06		-555.90	-\$33,490.70
DEC		#DIV/0!		#DIV/0!		#DIV/0!		398.55	403.14	0.00	\$27,798.40	\$21,267.10		-398.55	-\$27,798.40
Average per monthly	193.68	30.90	331.28	66.95	8.84	2.15	1038.56	560.50	570.65	177.93	\$36,199.91	\$31,171.95	\$43,769.36	199.51	-30,647.38
Total	774.71		1325.14		35.36		4154.24	6726.05	6847.74	2135.21	\$434,398.93	\$374,063.40	\$175,077.42	-4590.84	-\$259,321.51
Town of Fort Frances Tonnage	2099.85										\$434,398.93 Actual		\$175,077.42		
											\$396,950.00 Budget		\$407,271.00		
Total Tonnage	2135.21										\$434,398.93 Forecasted		\$525,232.26		
Residential Tonnage	774.71	36.28%													
ICI Tonnage	1325.14	62.06%													
Coverage material	4154.24														

Sewer & Water Data for 2019

up-dated May 15, 2019

Month	Days per month	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019	2019-2018	2019-2018	2019	2019	Monthly
		Total	daily	Couch.	Couch.	Couch.	Total	daily	Couch.	Couch.	Couch.	Diff	Diff	Difference	Infiltration	Infiltration
		Sewage	Sewage	Sewage	Sewage	Sewage	Treated	Treated	2 Water	2 Water	Water	Treated	Wastewater	STP-WTP	daily average	US Gallons
		STP	STP	Meters	Meters	%	WTP	WTP	Meters	Meters	%	WTP	STP			
		cu. meters monthly	cu. meters daily	cu. meters monthly	cu. meters daily		cu. meters monthly	cu. meters daily	cu. meters monthly	cu. meters daily						
January	31	171621	5536.16	10692	344.90	6.23%	115440	3723.9	8570	276.5	7.42%	-3740.0	2420.0	56181.0	1812.3	14,841,447
February	28	155707	5560.96	9024	322.29	5.80%	112420	4015.0	8570	306.1	7.62%	5010.0	8210.0	43287.0	1546.0	11,435,213
March	31	191603	6180.74	10980	354.19	5.73%	121380	3915.5		0.0	0.00%	-3420.0	23896.0	70223.0	2265.3	18,550,950
April	30	251711	8390.37	13350	445.00	5.30%		0.0		0.0	#DIV/0!	-115850.0	85419.0	251711.0	8390.4	66,494,998
May	31		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-112970.0	-210932.0	0.0	0.0	-
June	30		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-119760.0	-205818.0	0.0	0.0	-
July	31		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-125810.0	-183465.0	0.0	0.0	-
August	31		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-132730.0	-157126.0	0.0	0.0	-
September	30		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-104130.0	-169565.0	0.0	0.0	-
October	31		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-103780.0	-239494.0	0.0	0.0	-
November	30		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-101430.0	-200745.0	0.0	0.0	-
December	31		0.00		0.00	#DIV/0!		0.0		0.0	#DIV/0!	-104790.0	-218710.0	0.0	0.0	-
Total	365	770642		44046			349240.0		17140.0			-1023400.0	-1465910.0	421402.0	1154.5	111,322,609
Monthly Average		192660.5	2139.02	11011.5	122.20		116413.3	971.2	8570.0	48.5		-85283.3	-122159.2	35116.8	1167.8	9,276,884