

JOINT BOARD OF MANAGEMENT

Wednesday, November 20, 2019
9:00 AM
Unico Community Centre,
37 Beech Street,
Kingsville

AGENDA

- A. Call to Order:
- B. Disclosures of Pecuniary Interest:
- C. Approval of Minutes:

Minutes of the meeting of the Union Water Supply System Joint Board of Management Meeting held Wednesday, October 16th, 2019 Pages 2 - 5

- D. Business Arising Out of the Minutes
- E. Items for Consideration:
 - UW/31/19 dated November 15, 2019 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works to November 15, 2019 Pages 6 - 8
 - 2. Verbal presentation of the preliminary 2020 Union Water Supply System Budget and Six Year Capital Plan
 - UW/33/19 dated November 15, 2019 re: Payments from October 11th to November 1st, 2019 Pages 9 - 13
- F. New Business:
- G. Adjournment:
- H. Date of Next Meeting: December 18, 2019 TBD

/kmj



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JOINT BOARD OF MANAGEMENT

Wednesday, October 16, 2019
9:00 AM
Ruthven Water Treatment Plant
1615 Union Avenue,
Ruthven

MINUTES

Members Present: Deputy Mayor Verbeke; Councillors Dunn, Jacobs, Wilkinson -

Leamington

Mayor Nelson Santos (Vice-Chair); Deputy Mayor Queen,

Councillors DeYong, Neufeld, Patterson - Kingsville

Councillor VanderDoelen - Essex Councillor Walstedt - Lakeshore

Members Absent: Mayor MacDonald (chair), Councillor Hammond - Leamington

UWSS Staff: Rodney Bouchard, Manager

Khristine Johnson, Recording Secretary

Staff Present: Shannon Belleau - Leamington

OCWA Staff Susan Budden Present: Dale Dillen

Call to Order: 9:02 am

Disclosures of Pecuniary Interest: none

Adoption of Board Minutes:

Councillor VanderDoelen asks that the minutes from September 18, 2019 be revised to include the total amount of coliform that was identified in the water sampled that resulted in the Boil Water Advisory affecting a small portion of the Town of Essex and that the minutes also reflect the questions posed by Councillor VanderDoelen at the September 18, 2019 UWSS Board meeting in regards to the Essex Boil Water Advisory.

No. UW-46-19

Moved by: Councillor Jacobs

Seconded by: Councillor Dunn

That the amended Minutes of the UWSS Joint Board of Management meeting of September 18, 2019 be received.

Business Arising Out of the Minutes:

There was none.

Report UW/29/19 dated, 2019 re: Status Update of the UWSS Operations & Maintenance Activities and Capital Works to October 11, 2019

The Manager reviews his report with board members. He confirms that the Cottam Booster Station (CBS) grading project has been completed and grass is now growing. The only item left is the final inspection by the engineer to close out the project.

OCWA maintenance staff have been working on innovations to correct issues with Valve Chamber 9 (VC9) and VC26. These are the valves that control the supply of water and pressure to the Town of Essex. These are very complicated valve chambers and there has been some difficulties with them, therefore a valve expert has been brought in. The company out of Markham has been brought in the assist specifically with VC26, which also includes a flow meter. The Manager feels that this outside assistance will help resolve some of the issues.

The Manager explains that Clarifier #3 has been taken out of service, drained, cleaned and the necessary repairs have been made. This Clarifier should be brought back online later this week. Clarifier #2 will be taken out of service next as the drive is leaking oil and requires repairs. The Manager reminds the board members that not all four (4) clarifiers run during the winter when the flows are lower. The Clarifier #3 carbon pump was not working optimally and required replacement.

OCWA staff is working on the sump and the piping in the boiler room and the new system should prevent future failures from occurring. Wastewater Pump #2 failed on October 8, 2019, resulting in the pump running dry and causing a failure to the electrical feed. Staff installed a new blow off in the waste water pit and new electrical wiring was installed. The pump was put back into service on October 11, 2019.

The Manager provides and update on the SCADA project. He notes to Board members that the project is about three (3) weeks behind schedule, however, this is not considered a substantial delay. Another Factory Accepted Test (FAT) is scheduled for the following week in Etobicoke. At this point of the project the cabinets are being built with the potential of them being brought to the plant in early November. He feels that by December everything should be in place.

He then provides an update on the CO2 project as this is moving forward as planned. The Chlorine scrubber and blower have been installed. The piping in the yard still needs to be completed, but this is a difficult process as there are multiple pipes in the yard to be careful of. This project is delayed slightly as well, however no additional costs on the part of UWSS.

The Manager reminds members of the Board of the residual pile near the lagoons. He states that approximately 3,500 tons of material have been removed from the pile this year. This material is now being used as daily cover for the EWSWA. He is hoping to have the remainder of the pile removed next year and then it will be maintenance mode for the piles.

Members ask how much material is removed from the lagoons when they are excavated. The Manager indicates that it is difficult to determine but he estimates 1500-2000 tons. He also reminds members it is best to allow the material to de-water so that when sending to EWSWA we are not paying for the extra weight of wet material. Board members ask if the residual material is still being tested. The Manager explains that as part of the UWSS's licence the material must be tested.

Associated Engineering (AE) has been retained to assist the Manager with a complete review of the Historical Secondary Disinfection for the UWSS. The Manager reminds members that the UWSS is currently on free chlorine until December 4th. He explains that AE and members of the UWSS attended a workshop on October 8th to review the initial data. He expects the report to be ready for the November Board meeting.

The Manager then provides an update on the restructuring of the UWSS. He explains that he has had meeting with Kingsville, Learnington and Lakeshore, which included the legal and financial consultants. He notes that the meeting with Essex is forthcoming. He feels that his report will be ready for the December Board meeting.

The Manager informs the Board that he met with ENWIN Windsor Utilities Commission (WUC) to develop a scope of work for a proposed collaborative study between UWSS and WUC on an emergency water sharing provision between both parties. He hopes to start this study in 2020. Members ask if there is any cost to upgrade the infrastructure. The Manager explains that there are valves that could potentially be opened in an emergency situation, however, the purpose of the study is to determine at what capacity UWSS and/or WUC can assist. He notes UWSS will not be able to supply 100% capacity to them, but what they would require to keep going in an emergency situation. The Manager explains that he would need to determine the costs associated to each of the four (4) municipalities.

Finally, the Manager notes that NOAA has sent out their last Harmful Algae Bloom (HAB) bulletin for the 2019 season. The Manager explains that the conditions to form HAB is no longer present and the water temperature is now below the threshold of concern. He confirms that UWSS will continue to monitor until the end of November and then start back up in the Spring. Council VanderDoelen asks if the bloom grew large this year. The Manager explains that the bloom was present but never really made its way to our side of Lake Erie. He is still working with the University of Windsor to study HAB more closely.

The flows are up quite a bit over the last year, which will also help the 2019 budget. This is good, but still a concern for the Manager as he is concerned that the trend could continue. He will continue to monitor closely. There is a brief discussion on the number of greenhouse acres applied for this year. Shannon Belleau notes that Leamington has had over 300 greenhouse acre applications this year. The Manager notes that the days of greenhouses applying for 10 acres at one time has passed, now they are applying for 25+ acres or more at one time. This trend does not appear to be slowing down.

No. UW-47-19

Moved by: Deputy Mayor Verbeke

Seconded by: Councillor Walstedt

That report UW/29/19 dated October 11, 2019 re: Status Update of the UWSS Operations & Maintenance Activities and Capital Works to October 11, 2019 is received.

Carried (UW/29/19)

Report UW/30/19 dated October 11, 2019 re: Payments from September 13 to October 11, 2019

No. UW-48-19

Moved by: Councillor Wilkinson

Seconded by: Councillor Patterson

That report UW/30/19 dated October 11, 2019 re: Payments from September 13 to October 11, 2019 is received.

Carried (UW/30/19)

New Business

The Manager reminds members that at the September UWSS Board meeting there was a discussion regarding Boil Water Advisories (BWA). He received direction from the Board members at that meeting. He explains that he has met with the Town of Essex Administration and there is now a tentative date of October 22, 2019 to meet with the WECHU to review the protocol in place and potentially improve the notification system. Shannon Belleau of Leamington asks that this information is shared. The Manager indicates that it is his intention to bring in all four (4) municipalities after this initial meeting. Councillor VanderDoelen asks if the WECHU was agreeable to the new protocol. The Manager indicates that the WECHU accepted the invitation quickly, so he feels that everyone is agreeable at this point. Councillor DeYong indicates that perhaps a regularly scheduled review should be included in the new protocol as well.

There is then a brief discussion on the greenhouse light pollution affecting the area in general.

Adjournment

No. UW-38-19

Moved by: Councillor Patterson

Seconded by: Councillor DeYong

That the meeting adjourn at 9:37

Carried

Date of Next Meeting: Wednesday, November 20, 2019, at the **Unico Building, 37 Beech Street, Kingsville**.

UW/31/19

To: Chair and Members of the Union Water Supply

System Joint Board of Management

From: Rodney Bouchard, Union Water Manager

Date: November 15, 2019

Re: Status Update of UWSS Operations & Maintenance Activities and Capital

Works to November 15, 2019

Aim:

To inform the UWSS Board about operational and maintenance activities and capital works projects for the Union Water Supply System since the last Board meeting on.

Discussion:

The UWSS Manager conducts regular meeting with OCWA Operations staff in regards to on-going operations and maintenance programs for the UWSS facilities. The following provides an update on UWSS operations, regular maintenance and major maintenance and Capital Works at UWSS facilities:

- 1. Regular Maintenance on all process equipment and analyzers continue to be completed through OCWA's Workplace Maintenance Management System.
- 2. Low Lift well #2 was isolated, drained cleaned and inspected on October 30th, 2019. No issues were observed.
- 3. The Cottam Booster Reservoir was inspected by Watech services on November 13th and 14th, 2019. No issues were observed during their inspection.
- 4. The Cottam Booster Reservoir soil cover rehabilitation project has been completed. A site visit between UWSS, OCWA, the Engineer (Stantec) and the Contractor (Rudak) took place on Oct 29th, 2019. Some bare spots were observed and they agreed to come back in the spring to add more seed if required. Otherwise, the soil cover drainage system installed appears to be working very well. The contract for this project includes a two-year maintenance warranty.
- 5. During a maintenance activity, the wastewater pumping station piping was observed to be very corroded. OCWA staff scraped all the rust off all the components and wrapped the pipes with Denso waterproofing materials to preserve the piping for the remainder of its life.
- 6. Clarifier #3 mixer motor variable frequency drive (VFD) repairs were completed and the clarifier is back in service.

7. The two new gate valves for filters #2 & #4 have been received at the water treatment plant. OCWA staff are gathering some required parts for the install. These will be installed once the CO2 system has been commissioned. Clarifiers #1 and #2 must be offline to complete the install and these clarifiers cannot be taken offline until the CO2 system is commissioned.

8. SCADA Upgrade Project Update

SCADA System software Factory Acceptance Testing (FAT) for the Low Lift and parts of the Treatment Plant was completed on October 23-24, 2019 at Summa Offices in Etobicoke, ON. The final FAT for all remaining components of the Treatment Plant is scheduled for November 21-22, 2019. FAT testing for the four water towers and the valve chambers have been completed already.

On-site construction activities relating to the new SCADA system were started by SUMMA on October 28, 2019. Installed components to date include the server cabinet, HMIs for Filters #5, #6, #7 and #8 and some cabling. All the other components will be installed once the final Treatment Plant FAT is completed.

Substantial completion is scheduled for mid-January 2020.

CO2 pH Adjustment/ Chlorine System Improvements Project Update -The CO2 feed piping from the CO2 tank to the plant and CO2 injection piping from the plant to the injection chambers has been installed and partially backfilled. Tapping of the 2 raw water mains for installation of injection ports has been completed.

In-plant CO2 piping for CO2 dissolution and control skids is basically complete. The Motor Control Center (MCC)/ electrical panel for the CO2 injection system and wiring for the control skids, dissolution skids, etc. is basically complete.

The dry chlorine scrubber tank and piping installation has been completed. The scrubber system media has been installed. The new chlorine tonner scales have been installed. The new rack mounts for the chlorine tonners are being constructed off-site and will be delivered and installed in December 2019.

Commissioning of the CO2 and chlorine systems will be completed in early December 2019. A specific date has yet to be established.

10. UWSS retained Associated Engineering (AE) to complete a review of Historical Secondary Disinfection Practices and Performance for the Union Water Supply System. The purpose of the review is to evaluate and provide recommendation on the secondary disinfection practice that is best suited for UWSS. Associated Engineering held a meeting/workshop at the UWSS Ruthven Water Treatment Plant with UWSS and OCWA operations staff on October 8th, 2019 to review the draft evaluation report and risk evaluation scoring methodology. A final report was issued to UWSS on November 15th, 2019.

UWSS is in process of scheduling a meeting with appropriate municipal staff to present the findings of the report and seek comments. The report conclusions and recommendations will be presented to the UWSS Board at the December 18th, 2019 UWSS Board meeting.

Comparative Flows for 2015 through 2019 in Millions of Imperial Gallons (for the period January 1st to November 14th, 2019)

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|-------------------|----------|----------|----------|----------|----------|
| Flow to Date (MG) | 2,912.97 | 3,113.77 | 3,080.10 | 3,277.69 | 3,396.50 |
| Max Day (MGD) | 15.36 | 16.75 | 16.62 | 18.14 | 18.79 |
| Min Day (MGD) | 3.79 | 4.29 | 4.56 | 5.18 | 4.43 |
| Average Day (MGD) | 9.16 | 9.76 | 9.69 | 10.31 | 10.68 |
| No of Days | 318 | 319 | 318 | 318 | 318 |

Flows to date are up 118.81 MIG or 3.62% from last year. The 2019 flows to date are up 9.70% over the previous 4 year average.

Recommendation:

A.R.A

That this report be received by the UWSS Board for information purposes.

Respectfully submitted,

Rodney Bouchard, Manager

Union Water Supply System Joint Board of Management

/kmj

Filename: t:\union wtr\reports to board\2019\uw31-19 uwss operations report for november 2019.docx

UW/32/19

To: Chair and Members of the Union Water Supply

System Joint Board of Management

From: Rodney Bouchard, Union Water Manager

Date: November 15, 2019

Re: Payments for the UWSS from October 11th to November 1st, 2019



Aim:

To provide the Board with a copy of payments made by the Union Water Supply System from October 11th to November 15th, 2019.

Recommendation:

A. R. An

For information purposes.

Respectfully submitted,

Rodney Bouchard, Manager

Union Water Supply System Joint Board of Management

/kmj

Filename: t:\union wtr\reports to board\2019\uw32-19 payments from october to november 2019.docx

MUNICIPALITY OF LEAMINGTON

Council/Board Report By Dept-(Computer)

0011450 To PT00000165 Vendor :

Batch: All

70-5-0700-7420

002073



AP5130 Page: 37 Date: Nov 01, 2019

Cheque Print Date: 14-Oct-2019 To 18-Oct-2019

215.62

7.98

Bank: 07 To 08

| Department : | All | | | | | Class: All | | | |
|--|-------------------------------------|-----------------------------|---------|----------|----------------------------|------------|-----------------|------------------------|------------------|
| Vendor Invoice G.L. Account | Vendor Name Description t CC1 | | CC2 CC3 | | GL Account Name | | Batch Invc Date | Invc Due Date Amoun | |
| DEPARTMENT | 0700 | | Union | Water Sy | stem | | | | |
| 020120 | BELL MO | BILITY C | ELLULA | R | | | | | |
| 514877178-OC 70-5-0700-7110 | | CELL P 002070 | | HARGES | Telecommunications Usage | | 577 01-Oct-2019 | 16-Oct-2019 | 44.71 |
| 050003 | E.L.K. EN | ERGY IN | IC | | | | | | |
| 40010915-SEP 70-5-0700-7420 70-5-0700-7420 |) | - ESSEX 002073 002073 | (WATER | TOWER | Electricity Electricity | | 581 01-Oct-2019 | 16-Oct-2019 | -16.23 229.24 |
| 40047150-SEP | 177KWH - | METER: | #9 | | | | 581 01-Oct-2019 | 16-Oct-2019 | |
| 70-5-0700-7420 70-5-0700-7420 | | 002073 002073 | | | Electricity Electricity | | | | -2.94 41.55 |
| 51976611-SEP 70-5-0700-7420 | | - KINGS 002073 | VILLE W | ATER TO | WER Electricity | | 581 01-Oct-2019 | 16-Oct-2019 | -15.26 |

90006300-SEP 21360KWH - COTTAM BOOSTER STATION 581 01-Oct-2019 16-Oct-2019 70-5-0700-7420 002073 3,522.62 Electricity

997965 **EATON INDUSTRIES (CANADA) COMPANY** 02358335 LOW LIFT - ELECTRICAL SYSTEM UPGRADE 581 26-Sep-2019 16-Oct-2019

Electricity

700080 14,096.75 70-7-0700-8735 Low Lift Station

070160 **GREEN SHIELD CANADA**

OCT.-19 **OCT/19 ADJUSTMENTS** 577 09-Oct-2019 16-Oct-2019 70-5-0700-5203 002000 Extended Health

180325 **RICOH CANADA INC** SCO92550675 COPIER CONTRACT - AUG30-SEP30 581 30-Sep-2019 16-Oct-2019

70-5-0700-7010 002070 Office Supplies 104.73

230440 **WILLIS BUSINESS LAW** 11470 LEGAL FEES - RESTRUCTURING

581 30-Sep-2019 16-Oct-2019 70-5-0700-7950 002070 **Professional Services** 137.30

Department Totals: 18,366.07

MUNICIPALITY OF LEAMINGTON Council/Board Report By Dept-(EFT)

0011450 To PT00000165

AP5130 Date:

Page: 91

EFT Paid Date: 14-Oct-2019 To 18-Oct-2019

07 To 08 Bank:

16-Oct-2019

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Class: ΑII

Vendor Code **Vendor Name**

Vendor :

Batch :

Department:

Invoice No. Description G.L. Account

ΑII

ΑII

CC3 CC1 CC2 **GL Account Name** **Batch Invc Date** Invc Due Date

587 10-Oct-2019

587 30-Sep-2019

587 09-Oct-2019

587 09-Oct-2019

587 09-Oct-2019

587 30-Sep-2019

Amount

74.58

-58.09

25,947.40

71,120.08

40,504.64

241,376.00

-4.96

-2.83

40.04

Union Water System DEPARTMENT 0700

ENBRIDGE GAS INC 050099

1929770177678 COTTAM BOOSTER STATION - JUL5-OCT4

70-5-0700-7410 002073 Gas 70-5-0700-7410 002073 Gas

050230 **ESSEX-WINDSOR SOLID WASTE AUTHORITY**

28695 RESIDUAL MANAGEMENT

70-7-0700-8745 700180 Treatment Plant

080250 HYDRO ONE NETWORKS INC

200141677460-{ SEP/19 HYDRO - RUTHVEN WATER TREATMENT PLANT

70-5-0700-7420 002073 Electricity

200141680692-(SEP/19 HYDRO - LOW LIFT

70-5-0700-7420 002073 Electricity 70-5-0700-7420 002073 Electricity

200152134969-(SEP/19 HYDRO - METER#17

70-5-0700-7420 002073 Electricity 70-5-0700-7420 002073 Electricity

200208899066-(SEP/19 HYDRO - METER#16

587 15-Oct-2019 16-Oct-2019 70-5-0700-7420 002073 Electricity -7.13 100.72

70-5-0700-7420 002073 Electricity

150365 **ONTARIO CLEAN WATER AGENCY**

INV000116367 SEP/19 OPER&MTCE

70-5-0700-6720 002071 **OCWA Operating Contract**

190755 SUN LIFE ASSURANCE COMPANY OF CANADA

OCT-19 OCT/19 UNION WATER LOAN 3724:1

587 01-Oct-2019 16-Oct-2019 002020 006901 70-5-0700-6000 Debenture Principal

81,255.02 70-5-0700-6100 002010 006901 Debenture Interest 105,328.98

565,674.45 **Department Totals:**

MUNICIPALITY OF LEAMINGTON Council/Board Report By Dept-(Computer) Vendor : 0011450 To PT0000165 Ва



AP5130 Date: Nov 01, 2019

27

Page:

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|---|-------------------------|------------------|----------|-----------|---|--------|----------------|------------------|---------------------|------------------|--|
| Batch : | All | | | | | Bank : | Bank: 07 To 08 | | | | |
| Department : | All | | | | | | Class: All | | | | |
| Vendor Invoice | Vendor Na Descriptio | | | | | | | Batch Invc Date | Invc Due Date | | |
| G.L. Account | : | CC1 | CC2 | CC3 | GL Account Name | | | | | Amount | |
| DEPARTMENT | 0700 | | Union | Water Sy | rstem | | | | | | |
| 010103 | ASSOCIAT | ED EN | GINEERII | NG (ONT) | LTD | | | | | | |
| 526507 70-7-0700-8780 | SCADA PR | ROCESS | S NARRA | TIVE - OC | CT4 SCADA System | | | 602 17-Oct-2019 | 31-Oct-2019 | 5,798.42 | |
| 526509 70-7-0700-8745 | CO2 PH AI | DJUSTN 700200 | MENT - O | CT4 | Treatment Plant | | | 602 17-Oct-2019 | 31-Oct-2019 17 | ,181.34 | |
| 526510 70-7-0700-8745 | PH ADJUS | TMENT 700200 | SYSTEM | 1 - OCT4 | Treatment Plant | | | 602 17-Oct-2019 | 31-Oct-2019 | ,633.00 | |
| 526513 70-5-0700-7950 | | F SEC0 | ONDARY | DISINFE | CTION - OCT4 Professional Services | | | 602 17-Oct-2019 | 31-Oct-2019 | 5,243.25 | |
| 030004 | C3 WATER | RINC | | | | | | | | | |
| 201909-288 70-5-0700-7989 | WATER MO | ODELIN 002075 | | ΓES | Operational Programs & Studies | S | | 602 27-Sep-2019 | 31-Oct-2019 7 | 7,667.76 | |
| 030256 | CARMEN'S | CATE | RING SE | RVICE IN | C | | | | | | |
| 7735 70-5-0700-7052 | | REVIEW 002070 | | DARY DIS | INFECTION Meeting Expenses | | | 602 17-Oct-2019 | 31-Oct-2019 | 144.08 | |
| 997710 | RUDAK EX | (CAVAT | ING INC | | | | | | | | |
| PC#3 16562019 70-7-0700-8729 70-7-0700-8729 | 5 | 700030 700030 | BOOSTER | R STATIO | N - RESERVOIR GRADING Cottam Booster Station Cottam Booster Station | | | 602 21-Oct-2019 | 31-Oct-2019 | 829.54 361.17 | |
| | | | | | | | | | | | |

70-7-0700-8725 700030 Cottam Booster Station 4,147.73

190751 **SUMMA ENGINEERING LIMITED**

PC#6 114798 PMT#6 SCADA UPGRADES 602 25-Oct-2009 31-Oct-2019

70-7-0700-8780 SCADA System 38,224.34

100,230.63 Department Totals :

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MUNICIPALITY OF LEAMINGTON Council/Board Report By Dept-(EFT)

0011450 To PT00000165

700030

AP5130 Date:

Page: 45

EFT Paid Date : 28-Oct-2019

Department Totals:

To 31-Oct-2019

917.13

2,107.02

Bank: 07 To 08 Class: ΑII

Vendor Code **Vendor Name** Invoice No.

ΑII

ΑII

Vendor:

Batch : Department:

70-7-0700-8725

Description

CC2 CC3

Batch Invc Date Invc Due Date

G.L. Account CC1 **GL Account Name Amount** Union Water System DEPARTMENT 0700 190185 SGS CANADA INC. ENVIRONMENTAL SERVICES 11280610 WATER QUALITY STUDIES CORROSION-UWSS 605 09-Oct-2019 31-Oct-2019 70-5-0700-7989 002070 Operational Programs & Studies 531.10 11280637 WATER QUALITY STUDIES CORROSION-KINGSVILLE 605 09-Oct-2019 31-Oct-2019 70-5-0700-7989 002070 Operational Programs & Studies 98.31 11280643 WATER QUALITY STUDIES CORROSION-LAKESHORE 605 09-Oct-2019 31-Oct-2019 70-5-0700-7989 002070 Operational Programs & Studies 98.31 11280821 WATER QUALITY STUDIES CORROSION-ESSEX 605 09-Oct-2019 31-Oct-2019 98.31 70-5-0700-7989 002070 Operational Programs & Studies 11282363 WATER QUALITY STUDIES CORROSION-UWSS 605 17-Oct-2019 31-Oct-2019 70-5-0700-7989 002070 Operational Programs & Studies 265.55 11282369 WATER QUALITY STUDIES CORROSION-LEAMINGTON 605 17-Oct-2019 31-Oct-2019 70-5-0700-7989 98.31 002070 Operational Programs & Studies STANTEC CONSULTING LTD 190635 1431432 - 1467{ CBS - GRADING - OCT11 605 21-Oct-2019 31-Oct-2019

Cottam Booster Station

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