
Subject: Approval of Various Single Source Public Works New Purchase Orders and Purchase Order Change Request

Report to: Public Works Committee

Report date: Tuesday, September 8, 2020

Recommendations

1. That the Purchase Order (PO) Change Requests identified in Appendix 1 of this report **BE APPROVED**.

Key Facts

- The purpose of this report is to seek Public Works Committee's approval to proceed with the Purchase Order Change Requests identified in Appendix 1.
- At the Special Council meeting on July 30, 2020, Regional Council instructed staff that, "If any single source [Public Works] procurement [over \$5000] is deemed essential there must be approval first received by the Public Works Committee."
- On August 18, 2020, the CAO provided Confidential Memorandum CONF-C 6-2020 providing key information in response to the July 30, 2020 staff direction.
- The memo identified that pursuant to a formal competitive procurement process, a change to the resulting contract (via the Change PO process) is required for any additional goods and/or services, which were not part of that formal process (consider Single Source additions). This includes most (if not all) instances where the "work" is underway when a Change PO request initiates.

Financial Considerations

All of the Change PO requests identified in Appendix 1 have approved funding in place from either Capital or Operating budgets in the respective divisions in Public Works.

Analysis

Staff within the Public Works Department are currently managing in excess of 140 essential infrastructure projects valued at more than \$160 million dollars. These include planning, design, preventative maintenance and construction.

Niagara Region's Procurement By-law 02-2016 as amended February 28, 2018 provides controls and methods that ensure, among other things, that the procurement

process achieves, “best value for the Corporation when procuring Goods and/or Services”.

Pursuant to the formal procurement process, which culminates in contract award, there are occasions, when new information identified after award, requires further consideration of how these unforeseen additional requirements will impact the final project deliverable.

When this happens, staff consider the following alternative approaches to addressing the scope change:

1. Is the original project objective still achievable or should it be abandoned?
2. Can the project proceed as originally planned and this new information be deferred to a later time without reducing the integrity of the design, construction, etc.?
3. Is the current work at a point where it can be terminated, and a new competitive procurement for the additional scope items be initiated without excessive costs or negative impacts to the community from the delays?
4. Does the addition of this new work to the current assignment still achieve best value if Staff can validate that it represents fair value?

Staff note, that where a construction project is underway, the Ontario Occupational Health and Safety Act dictates that, “When an owner undertakes a project by contracting with more than one employer (contractor), the owner is undertaking the project and is the constructor.” As a result, if Niagara Region were to initiate additional work on a project site at the same time by two contractors, Niagara Region would assume significant additional liability risk for the safety of all workers on the site. Ideally, the work of first contractor must be completed prior second contractor commencing.

Alternatives Reviewed

Staff have considered the following alternatives for each of the change order requests appended as Schedule 1:

- Closing out the current work. Abandoning the previous approach and re-considering strategy;
- Proceeding as originally planned and addressing the new information/change in scope at a later time through a competitive process; and,

- Terminating the current contract where possible and conducting a competitive procurement process to complete the work with the additional scope items added.

Staff conclude that none of the aforementioned options achieves the desired best value outcome without significant risk to the Region in terms of cost, delay and unavailability of critical infrastructure. Staff have assessed the financial impact of these additionally scoped items, deemed them fair and reasonable hence, the recommendation contained herein is presented for approval as it offers the best value for the Corporation given in the specific circumstances.

Relationship to Council Strategic Priorities

- Responsible Growth and Infrastructure Planning

Other Pertinent Reports

- CONF-C 6-2020 Update from Special Council Meeting July 30, 2020 Closed Session

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Appendices

Appendix 1 Purchase Order Change Requests to Existing Contract

Appendix 1: Purchase Order Change Requests to Existing Contracts

1. PO 65745 Niagara Transit Governance Study (NTGS) (2019-RFP-194)

Optimus SBR Inc

Increase original contract amount of \$322,826.20 by \$40,284.00 for a new total of \$363,110.20 (excl. HST)

Rationale for Increase

The request is for an extension to an existing contract.

The CAO Working Group, responsible for providing strategy direction and oversight of the NTGS, has recommended that a supplementary round of stakeholder engagement be undertaken in advance of the introduction of the study to Council. This engagement will focus on the presentation of the draft NTGS, include discussion of how stakeholder input from earlier engagement has been reflected in the study, and provide an opportunity for additional feedback to be presented to the project team for inclusion in the final report. Engagement activities are planned with all stakeholders included in earlier rounds of consultation, including post-secondary institutions, transit unions, regional transit working groups, and key municipal representatives.

In addition, the envisioned approval framework for the NTGS recommends that support in principle be sought from each of the 12 local area municipalities prior to a second subsequent triple-majority approval process. This “two-phased” approval process will ensure that each of the local area municipalities have a formal opportunity for review and input prior to ultimate approval.

This contract change notice will expand the existing consultant scope (Optimus SBR/LTRT) for the NTGS, facilitating their undertaking of the additional stakeholder engagement as well as their participation in the additional local area municipality Council meetings required by the recommended approvals process. This amendment is required as pre-LNTC and Council consultation with stakeholders and the additional engagement with the LAMS was not included as part of the original project scope, but has been identified as critical to the overall success of the NTGS by the project team and CAO Working Group based on the development of the project, previous stakeholder input received, and recommended approvals process.

2. 2019-RFP-238 Design of the J. R. Stork Bridge (Str. 038205) Replacement
Request: Additional Geotechnical Investigation for Detailed Design Assignment
Consultant: Ellis Engineering
Purchase Order Number: 0000066065
Increase original contract amount of \$221,990 (excl. HST) by \$25,635 for a new total of \$247,625.

Rationale for Increase

The request is for an extension to an existing contract.

As part of the J. R. Stork Bridge Replacement project, a 300mm trunk watermain is being relocated as it is hung from the underside of the bridge currently. The watermain replacement is being installed via Horizontal Directional Drilling (HDD) methods into the bedrock. HDD is a minimal impact trenchless method of installing underground pipe which offers significant environmental advantages over traditional open cut methods, and is routinely used when conventional open cut excavating is not practical. Boreholes were completed as part of the initial geotechnical investigation into the rock and included as part of the detailed design tendering process. Since the award and advancement of the detailed design assignment, further discussions with expert HDD contractors have indicated that the watermain will need to be installed between 2m and 3m deeper than anticipated. The increased watermain depth resulted from discussions with Niagara Peninsula Conservation Authority and an expert HDD contractor with the aim to reduce environmental impacts of Frac-outs (the unintentional return of drilling fluids to the surface during HDD). In order to obtain accurate information on the bedrock at the final required depth, advancing additional boreholes is being recommended. This work is being done on behalf of W&WW as this is being led by Transportation, and is being carried out by the sub-consultant included in Ellis Engineering's original proposal.

Alternatives Reviewed

- (i) Do nothing
- Unknown cost exposures likely to occur during construction.
 - Preference to complete additional due diligence as part of the detailed design to have this incorporated in construction specifications for tendering.

(ii) New procurement

- Increased risk exposure to the Region as a result of possible conflicting information between new investigation and the original investigation completed for the project.
- Increase in timeline (three to four months) will likely result in additional fees due to project delay

(iii) Advance additional boreholes under current contract:

- Work will be completed by the sub-consultant retained by Ellis Engineering as part of the base assignment.
- The additional information will assist with detailed design specifications to be included as part of tender process for construction and
- Work will limit cost exposures to the Region during the construction.
- Consistent professional and technical knowledge with the current professional services contract.
- Keep detailed design process and larger project timelines on track as procurement process for a new professional service will add three to four months to project.

3. 2020 Strengthening and Resurfacing Program - Part 2

Request: Looking for approval to increase the contract award amount to the lowest compliant bidder (\$3,883,357, exclusive of HST) with the remaining 2020 approved capital funds (\$550,000) to complete additional contingency roads as part of the 2020 Strengthening and Resurfacing Program –Part 2.

Contractor: Brennan Paving - Niagara, a division of Brennan Paving & Construction Ltd.

Purchase Order Number:

- Tender Closed August 18, 2020.
- As of August 21, 2020, still in Requisition status.
- A PO has not yet been formalized through procurement.

Rationale for Increase

As part of the annual capital budget process, the 2020 Strengthening and Resurfacing Program –Parts 1 and 2 received an approved budget number to complete a series of road improvements throughout Niagara Region. Also identified are a series of contingent roads to be advanced if the tenders for Parts 1 and 2 were to close lower than the approved budget number.

Tender 2020-T-104 (2020 Strengthening and Resurfacing Program – Part 2) closed with favourable competitive pricing. Based on the bid results received during the procurement process, the PO for the 2020 Strengthening and Resurfacing Program – Part 2 will be \$3,883,357 (exclusive of HST). In order to take advantage of favourable competitive pricing, and to maximize the lane kilometers that can be resurfaced within the approved budget for the Strengthening and Resurfacing Program, it is recommended that an additional \$550,000 (exclusive of HST) contingency line be added to the PO for 2020 Strengthening and Resurfacing Program - Part 2.

The additional \$550,000 contingency will be utilized to complete additional resurfacing of candidate road sections. The following road is recommended as a candidate to be completed utilizing the \$550,000 contingency for the 2020 Road Resurfacing Program:

- RR3 (Lakeshore Rd) From Daley Ditch to Sideroad #32, Wainfleet (approximately 5.7 lane kilometers). This road section currently has a Low PCI and is deteriorating at a faster rate than other road sections with similar conditions and if not resurfaced, it will be a reconstruct at a later date costing more dollars to repair.

Alternatives Reviewed

(i) Do Nothing

- Additional roads will not be resurfaced which decreases their overall longevity with increases to future capital requests for full reconstruction which are significantly more expensive.

(ii) Increase the contract award

- Allows the program to capitalize on the full 2020 Strengthening and Resurfacing Program approved capital budget amount as a result of favourable pricing.

4. Road Weather Information System (RWIS) Station Sensor Replacements
Single Source Request: Special Circumstance for Maintenance and Repair
Consultant: Complete System Installations (CSI)
Purchase Order Number: PO #79630

Increase the current PO amount of \$134,135 by \$34,500 (excl. HST) to an overall amount of \$168,635 (excl. HST).

Rationale for Increase

The request is to increase the current purchase order in order to complete the maintenance and repair for the upcoming winter maintenance season.

The Regional Road Weather Information System (RWIS) is inspected bi-annually; spring and fall and is a vital part of the Division's weather tracking and forecasting. The scientific weather equipment is used to actively monitor current weather and road conditions with the data being pulled daily for the preparation of the 5 day weather forecasts used by the Region and all local area municipalities in road operations planning and operational activities associated with winter road maintenance. The information is shared currently at no cost with the 12 Local Area Municipalities.

Due to the pandemic, the 2020 spring inspection was delayed on the seven (7) RWIS stations due to COVID-19 restrictions forcing the work to be completed in early August. During the inspection and testing of the metrological sensor hardware, CSI identified several non-reporting/defective units. Under non-COVID restrictions, the equipment deficiencies would have been identified in the spring thus providing sufficient time to issue a formal quotation as per the Region's Procurement By-Law.

With the late inspection, issuing a formal quotation for the acquisition of replacement sensors (there is a minimum six (6) week manufacturer order fulfilment from purchase date) and a contractor to perform the service will take this beyond the required start date of winter maintenance activities of October 15th. October 15 represents the date the Region is required to have 50% of its winter maintenance vehicle compliment ready in order to meet service levels for weather and road condition monitoring for winter road operations. Unless the approval to replace the inoperative equipment is provided, the Region will not have the required data to effectively monitor the most up-to-date weather and road conditions to pro-actively plan and manage the winter road maintenance response.

CSI was the successful bidder who won the initial installation of the weather stations and network for Niagara Region. Subsequently, the Region has worked with CSI on an annual basis related to maintenance of the seven (7) RWIS sites for more than five (5) years due to the limited number of vendors. Only two vendors are known in the Province who provide this type of technical maintenance and replacement service. In the past, the other vendor was not able to meet the required timelines for service.

Therefore, the Region has single sourced the annual maintenance on an as needed basis and average annual costs have been approx. \$7,700 for years 2016 - 2019.

2020 has been an anomaly year in that repairs to multiple components have been identified. An existing contract with CSI for the 2020 annual station inspection and upgrading communication hardware and replacement of damaged in-road sensors is in place and requires an additional \$34,500 to be added to the \$134,135.

In addition, the Region has been collaborating with the MTO on their new maintenance contract model for metrological services who also currently use CSI as the vendor for the maintenance of their RWIS sites; including the MTO owned sites in Niagara. The Region and MTO each have signed data licence agreements with one another to share weather data.

An RFP will be issued later this year to publicly procure a multi-year metrological maintenance and repair services contract using a competitive process allowing for active monitoring of system components and short replacement timelines; similar to MTO's newer contract model.

Alternatives Reviewed

(i) Do Nothing

- Will result in failure to comply with Ontario Regulation 239/02. Regulatory Non-Compliance; failure for Winter Road Maintenance Operations - Weather station repair is critical to Regions' winter road maintenance (salting, sanding and/or plowing) operations for compliance with the Regulatory requirements set out in Ontario Regulation 239/02 – Minimum Maintenance Standards. The information is used to plan and react to winter weather and significant weather events.
- Limits Transportation's ability to forecast and observe daily weather and road conditions which will impact the delivery and service for winter maintenance operations. If the equipment is not replaced, contracted localized meteorological forecasts will be inaccurate and will have a high negative impact on the planning and proactive road operational activities and subsequent road safety. The lack of data will result in a more reactionary response to weather conditions, thus greatly increasing the risk to Regional motorists with increased costs.

(ii) Future Procurement Plan

- Issue RFP in Q4 of 2020 for RWIS Maintenance and Meteorological Services for next 3 years plus optional 1 + 1 years. Duration of contract based on the current rate of technological changes and ability to adapt to changing weather and business climates.

(iii) Increase Current PO

- Work will be completed in time for Winter Operations and planning.

5. Interim Supply of Custom Electrical Cabling/Wire

Single Source Request: Interim Supply - Custom Electrical Cabling/Wire

Vendor: Impulse Technologies Ltd.

Purchase Order Number: PO #78427

Increase the current PO amount of \$62,790.90 by \$8,598.10 (excl. HST) to an overall amount of \$71,389.00 (excl. HST).

Rationale for Increase

The request is to increase the current purchase order in order to account for additional quantities that were realized through the manufacturing process.

The Region requires approximately \$165,000 worth of electrical cabling each year to support the installation and maintenance of traffic signals and streetlights. \$135,000 is considered customer or proprietary and has been single sourced from one (1) supplier and manufacturer. These custom specifications were developed over 10 -20 years ago and have been purchased since that time from specialty suppliers and manufacturers who consider their products proprietary. This is a relatively standard practice for larger government agencies for this type of application.

When electrical cabling/wiring companies manufacture custom products like this, they are not able to manufacture the product to within tight tolerances (for meterage) so when an order is placed, staff estimate requirements understanding that there may be a variation in the actual quantities that are manufactured. Three (3) of the five (5) cabling/wire products that staff procured did have variations in the quantities; resulting in the need to adjust the quantities of custom wire that need to be procured.

Staff are actively reviewing the current specifications to determine if we need to continue to procure "custom" cabling/wire going forward. There are more standard cabling/wire products on the market that staff might be able to use and obtain more quickly and less expensively. In addition, we are also considering if the "custom" cabling/wire could be procured elsewhere.

Alternatives Reviewed

(i) Do Nothing:

- The custom cabling/wire has been manufactured and this change PO request is simply to adjust quantity variations through the manufacturing process.

(ii) Future Procurement Plan:

- Issue RFT to competitively procure cabling/wire products in Q3 of 2020 with a contract duration of one year plus optional 1 + 1 years, or;
- Request authority to procure custom cabling/wire products on a go forward basis through a single source procurement if alternate products are not sufficient.

6. PO 43271 Associated Engineering (2017-RFP-49)

Welland WTP Upgrades Phase 2 – Design

Increase original pre-tax amount of \$1,358,970 by \$402,594.50 for a new total of \$1,761,664

Rationale for Increase

The request is to increase the current purchase order in order to account for additional work for:

- a) Additional design for the relocation of the existing municipal parking lot and features in Merritt Island Park to increase the additional space required to accommodate the construction of the second phase to new Water Treatment Plant (note: this scope of work has already been added to the consultants scope through an amending agreement). This cost is included in this request in order to move this portion of budget to Line 1 on the PO, restoring the contingency amount on Line 2 to its original value of \$159,000)
- b) An amendment to the original Municipal Class EA to include the new raw water Intake; and,
- c) Redesign work associated with reducing the overall plant capacity and provide design services to incorporate the addition of treatment trains features and other appearances to allow for future Plant expansion

The extra scope of work is to address:

- a) Requests from City of Welland for replacement of infrastructure necessitated by the acquisition of land to the north of the WTP reservoir required for construction of Phase 2 of the WTP upgrade.
- b) The need for a new raw water intake was confirmed during preliminary design which showed that it was not feasible to extend the existing intake to the new Low Lift pumping location.
- c) The need to reduce the overall capital costs for the upgrade. Initial estimates projected the cost of the full capacity upgrade to be in excess of \$81 million. W&WW Engineering staff reviewed the existing and projected demands in the system and, in conjunction with Regional Planning staff, have determined that a staged approach to constructing the capacity of the plant would reduce the capital cost of this upgrade by over \$26 million. Future expansion would not be required until the customer population exceeds full buildout of current municipal limits.

• Design for work at Merritt Island Park requested by City of Welland:	\$85,166.00
• Amendment to Class EA for Raw Water Intake:	\$37,000.00
• Design for reduced Plant Capacity with Future Expansion capability:	\$280,528.50
Total Additional Fee Request (w/o tax):	\$402,594.50

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the needs of the project.

(ii) Proceed with competitive RFP process:

- This will not address the increased costs and complications of incorporating designs from two consultants in one tender package;

7. PO 66644 Environmental Infrastructure Services (EIS) (2019-RFP-239)

Niagara Falls WWTP (NFWWTP) Secondary Upgrade

Increase original pre-tax amount of \$678,106.82 by \$181,986 for a new total of \$860,092.82

Rationale for Increase

This work is critical and needs to be completed as soon as possible as the MECP has issued a compliance order on the NFWWTP site. The order has a deadline of January 15th, 2021 for the Region to submit its 90% finalized design, with construction planned for 2021.

The request is to increase the current purchase order in order to account for additional work for:

a) NFWWTP Grit System Redesign

Additional design funds are required to ensure that the newly selected Moving Bed Bio-Reactor Tanks (MBBR) treatment system will function as intended. Through extensive consultation with other municipalities who have implemented a MBBR system, it was found that proper grit removal is crucial as the MBBR is not designed to handle foreign matter that should be separated and removed by the grit tanks.

The grit separation system at the NFWWTP has currently been suffering repeated mechanical failures, and therefore this process system will need to be addressed to ensure proper MBBR performance going forward. In light of this additional design engineering services is needed to redesign and increase the robustness of the NFWWTP Grit system to ensure proper influent will be sent to the MBBR once installed and operational. This work can be done in parallel to the current detailed design being completed by EIS. The cost of this added scope is \$145,698.

b) Secondary Influent Bypass Disinfection Conceptual Design

The Ministry of Environment, Conservation and Parks (MECP) instructed that a conceptual design for the disinfection of the bypass system must be submitted with the ECA application. This was not part of the original scope for EIS as the site does not currently provide bypass disinfection at this time. The MECP has agreed that only the conceptual design and logic will be required at this stage. The final secondary influent bypass disinfection design can be submitted as part of the Phase 2 design, commencing in 2021 (Digester and Solids Treatment Phase). The total cost of this assignment is \$36,288.

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the needs of the project and increases the risk to operation of the new system as well as inadequate information in the ECA application.

(ii) Proceed with competitive RFP process:

- A competitive process will take more time than is available as there is immediate need for these services;
- A different consultant will require additional cost, effort and time to become familiar with the project and requirements and will complicate the Tender process with 2 design consultants and one tender package and one ECA submission.
- Having another consultant complete this work would also cause inefficiency in design cohesion and difficulty with construction and commissioning coordination.

8. PO 76050 Palmer Environmental Consulting Group (2020-RFP-20)
Niagara Falls WWTP Secondary Upgrade Geotechnical and Hydrogeological
Increase original pre-tax amount of \$145,065 by \$146,720 for a new total of \$291,785.

Rationale for Increase

This work is critical and needs to be completed as soon as possible as the MECP has issued a compliance order related to the NFWWTP site. The order has a deadline of January 15th, 2021 for the Region to submit its 90% finalized design, with construction planned for 2021. This additional geotechnical work will help mitigate risk to understand the technical requirements for the main design, to identify the magnitude of contamination for more accurate construction costing and to manage potential human health impacts during construction and post-construction. It needs to be completed in a timely manner to support the design.

The request is to increase the current purchase order in order to account for additional work for:

a) Further Geotechnical and Hydrogeological Investigations

Needed as the initial study conducted in April 2020 by Palmer revealed contaminant concentrations in exceedance of the applicable Table 3 Site Condition Standards in both soil (Metals and Inorganics) and groundwater (Metals and Inorganics, and Petroleum Hydrocarbons [PHCs]) inside the future construction boundaries. The horizontal and vertical extents of this impacted area are currently unknown. Items included in this are additional boreholes, monitoring wells, and soil stockpiling sampling.

b) A Due Diligence Risk Assessment (DDRA)

To assess the potential human and ecological risks. The completion of the DDRA will evaluate the health risk of impacted soil and groundwater remaining in place, as is, without conducting site remediation. In addition, the DDRA will assess the suitability of excavated soil for reuse as backfill material and identify any potential risks and/or mitigation measures that should be implemented at the site. Current design and budget had assumed that the excavated soil would be able to be used as backfill material. If this material were found not to be suitable, it could have significant capital budget implications.

The information provided from the above will be collected and summarized in the form of a Phase II Environmental Site Assessment Report.

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the needs of the project and increases the risk during construction with inadequate information gathered for the design and specifications. This could result in significant extras during construction if not captured properly during design.

(ii) Proceed with competitive RFP process:

- A competitive process will take more time than is available as there is immediate need for these services (this information is required to support the design, which has compliance order deadlines);
- A different consultant will require additional cost, effort and time to become familiar with the project and requirements

9. PO 00927 CIMA+ Canada (2019-RFP-288)

Lake Street Sewage Pump Station (SPS) Upgrade Design

Increase original pre-tax amount of \$210,878 by \$145,155 for a new total of \$355,033

Rationale for Increase

Following completion of hydraulic modelling including transient analysis it was determined that the existing forcemain is at risk of failure with the increase in SPS capacity associated with the upgrades project. Replacement of the 1974 forcemain is recommended to mitigate the risk of failure

The request is to increase the current purchase order in order to complete the:

- a) Design a sanitary forcemain replacement for the existing 500mm Series 45 HDPE forcemain while maintaining the Lake Street SPS operational and restricting shutdowns to the forcemain switchover only. The forcemain replacement design will be incorporated into the Lake Street Sewage Pumping Station Upgrades contract documents.

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the needs of the project and increases the risk of forcemain failure.

(ii) Proceed with competitive RFP process:

- A competitive process will take more time than is available as there is immediate need for these services;
- A different consultant will require additional cost, effort and time to become familiar with the project and requirements and will complicate the Tender process with 2 design consultants and one tender package.

10. PO CNV0000156 RV Anderson (RVA) (2013-RFP-57)

Rosehill Water Treatment Plant Upgrades – Contract Administration

Increase original pre-tax amount of \$1,391,797.40 by \$236,180.00 for a new total of \$1,627,977.40

Rationale for Increase

The request is to increase the current purchase order in order to complete the following additional engineering services:

- a) Additional contract administration and inspection services required to bring the construction project to completion in early 2021 due to unforeseen time extensions to address filter pH adjustment, faulty pump motors, and extended monitoring for operational assurance. This Change PO is for the extension of an existing approved scope of work.

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the needs of the project and can result in further claims due to construction delays

(ii) Proceed with competitive RFP process:

- A competitive process will take more time than is available as there is immediate need for these services;
- A different consultant will require additional cost, effort and time to become familiar with the project and requirements and will complicate the Construction Administration and Inspection process
- A competitive RFP process will also hold up construction resulting in delay claims from the Contractor

11. PO 72318 RV Anderson (RVA) (2019-RFP-315)

DeCew Water Treatment Plant (WTP) UV Disinfection System Upgrades – Design

Increase original pre-tax amount of \$50,970.00 by \$81,120.00 for a new total of \$132,090.00

Rationale for Increase

The request is to increase the current purchase order in order to account for additional work for:

- a) UV Advanced Oxidation – UV Advanced Oxidation Process (AOP) is a treatment option that improves water quality and reduces taste and odour issues. This technology is capable of removing additional parameters compared to our current disinfection practice that will be vital as we encounter new parameters of concern. Recently, DeCew WTP has been seasonally experiencing taste and odour issues. AOP technology will be greatly improved the water taste and odour. AOP uses UV as primary disinfection with chlorination only required for secondary disinfection reducing the operating costs at DeCew WTP.
- b) The new disinfection facility would be built underground based on plant hydraulics. Addition of an aboveground building was recommended to be included as part of this project. Inclusion of an aboveground structure would provide access to the disinfection facility and connect the existing buildings (Plant 1 current administration area, existing chlorine storage area and existing gate house/training room). The new structure would provide DeCew WTP with a new administration area relocating the operations and maintenance managers and clerk to the new structure. This will provide managers and the clerk oversight of all visitors entering the plant. Currently the managers are located on the second

floor, disconnected from the plant entrance, visitor arrivals and the operators control room.

Staff recommend that RV Anderson be awarded this PO increase in accordance with Purchasing By-law 02-2016, Section 18(a)(i) as RV Anderson is familiar with this immediate area and the proposed work above directly relates to their assignment. If RV Anderson continues their assignment based on their approved scope of work, the Region will not be able to use the conceptual design work as a basis of scope for the detailed design RFP. An additional assignment would be required to re-design the UVDS incorporating AOP and an aboveground structure. This would be an inefficient use of Region's resources.

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the needs of the project.

(ii) Proceed with competitive RFP process:

- The deliverables provided by RV Anderson based on their current scope of work will not be able to be used as a basis for detailed design.
- A competitive process will delay the project schedule;
- A different consultant will require additional cost, effort and time to become familiar with the project and requirements.

12. PO 76219 Jacques Daoust Coatings Management Inc (2019-T-332)

Grimsby WWTP Baker Road Primary Digester - Refurbishment

Increase original pre-tax amount of \$761,800.00 by \$88,000.00 for a new total of \$849,800.00

Rationale for Increase

The request is to increase the current purchase order in order to account for additional work for:

- a) The Baker Road Digester in Grimsby is currently out of service and under construction for the replacement of the interior recoating of the digester tank. As part of the construction scope of work a metal inspection was completed on the roof of the digester. This inspection revealed the thickness of the steel skirt has eroded past the allowable limits and in certain sections created holes in the skirt.

The steel skirt must now be repaired prior to completion of the interior coating work.

Delaying the approval of this change order will result in further delaying the amount of time that this digester is out of service. This results in an overall lower sludge capacity of the WWTP and increases the cost of additional haulage experienced by the site. In addition to this delay, claims may also be brought forth by the contractor as this work must proceed before the coating can be completed.

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the needs of the project and increases the risk of not being able to get the digester back into service once construction is completed (i.e., the roof may not seal properly, in turn not passing TSSA inspection).

(ii) Proceed with competitive RFP process:

- A competitive process will take more time than is available as there is immediate need for these services;

13. PO CNV0000160 RV Anderson (RVA) (2013-RFP-66)

Master Meter Replacement Program – Decew, Niagara Falls, and Port Weller Water Treatment Plants – Contract Administration

Increase original pre-tax amount of \$326,477.00 by \$42,606.00 for a new total of \$369.083.00

Rationale for Increase

The request is to increase the current purchase order in order to account for additional work for:

- a) Niagara Region is currently undertaking the replacement of billing meters within the DeCew Falls and Niagara Falls drinking water distribution systems. New magnetic flowmeters, valves, piping, control panels and other associated appurtenance have been installed and placed into service at eight (8) different locations within the Decew and Niagara Falls drinking water distribution system. This project is currently in the warranty phase.

Shortly after the completion of these sites, Niagara Region's water and

wastewater operations and maintenance staff requested the replacement of another water meter and associated piping at Port Weller Wastewater Treatment Plant. This site was not in the original scope of work. For the contractor (Procon), this additional construction scope of work will be paid from the contingency amount on the existing purchase order, but the contract administration and inspection services by the engineering consultant (R.V Anderson) will require a scope change. This Change PO is for the extension of an existing approved scope of work.

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the needs of the project.

(ii) Proceed with competitive RFP process:

- A competitive process will take more time than is available as there is immediate need for these services;

14. PO 65140 Exp (Informal Quote during Emergency Design Work)

Dain City Emergency Forcemain Replacement – Geotechnical Testing

Increase original pre-tax amount of \$97,048.70 by \$32,495.00 for a new total of \$129,543.70

Rationale for Increase

The request is to increase the current purchase order in order to account for additional work for:

- (a) To extend Exp construction monitoring services for materials testing during construction. Exp Services Inc. completed Geotechnical Engineering and Hydrogeological Services for the design for Phases 3, 4 and 5 of the Dain City Forcemain replacement project. Due to the urgent nature of this project, as described in council report PW-42-2019, there is immediate need to progress the design of Phases 3 through 5 of the forcemain replacement project. These investigations and the subsequent reports are needed to complete the design for the proposed forcemain route.

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the needs of the project.

(ii) Proceed with competitive RFP process:

- A competitive process will take more time than is available as there is immediate need for these services;
- A different consultant will require additional cost, effort and time to become familiar with the project and requirements.

15. PO 49672 CIMA (2018-RFP-5)

Bridgeport Sewage Pump Station (SPS) Upgrades – EA Study

Increase original pre-tax amount of \$466,035.00 by \$24,925.00 for a new total of \$490,960.00

Rationale for Increase

The request is to increase the current purchase order in order to account for additional work for:

(a) The Stage 1 & 2 Archaeological Assessments resulted in the discovery of a portion of a mid-19th century Euro-Canadian archaeological site. The assessment found 45 Euro-Canadian artifacts. Based on the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) Standards and Guidelines, a Stage 3 assessment is now required. CIMA is obligated to register the site with the MHSTCI because of the findings from the Stage 2 assessment; therefore, a Stage 3 Archaeological Assessment must be undertaken.

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the MHSTCI Standards and Guidelines.

16. PO 74188 Environmental Infrastructure Services (EIS) (2018-RFP-17)

Port Colborne Water Treatment Plant Upgrades - Design

Increase original pre-tax amount of \$223,600.00 by \$24,748.50 for a new total of \$248,348.50

Rationale for Increase

The request is to increase the current purchase order in order to account for:

(a) Additional engineering design work to add filter control panels to the design-tender package. These panels were not included in original design package

provided by Cole Engineering Group. The filter control panels will provide additional operational and maintenance efficiencies.

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the needs of the project.

17. PO 11929 Parsons (2016-RFP-34)

Tupper Drive Sewer Relining - Design

Increase original pre-tax amount of \$98,235.00 by \$15,508.00 for a new total of \$113,643.00.

Rationale for Increase

The request is to increase the current purchase order in order to account for:

- (a) Additional engineering services to change the current Request for Tender documentation to a Request for Proposal Document (RFP). Through discussions with procurement, contracting strategies have changed and the project is moving forward with a RFP for this type of specialty construction work. This contract strategy will require further effort to develop a new for procurement document. Project on hold until approval.

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the needs of the project.

18. PO CNV0000224 Associate Engineering (2015-RFP-22)

Niagara Falls Water Treatment Plant Dechlorination and Waste System – Contract Administration

Increase original pre-tax amount of \$195,784.84 by \$207,281.00 for a new total of \$403,065.84.

Rationale for Increase

The request is to increase the current purchase order in order to account for additional work for:

- a) Extension of Contract to include provisional CA & I during construction. Original provisional was \$158,865 (competitively bid through 2015-RFP-22). The single source amount to be awarded is \$48,416.00. This change is due to an increase in contract duration than what was originally estimated in the RFP.

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the needs of the project as Contract Administration and Inspection is required for the duration of the Contract.

(ii) Proceed with competitive RFP process:

- A different consultant will require additional cost, effort and time to become familiar with the project and requirements and will complicate the Construction Administration and Inspection process.
- Standard practice for Niagara Region WWW is to have the design consultant complete the Contract Administration and Inspection services as this makes shop drawing reviews, field inspection, requests for information and design changes more straightforward.

19. PO 64477 Wood

Garner Road Biosolids Laneways Upgrades - Geotechnical Testing

Increase original pre-tax amount of \$32,655.0 by \$25,000.00 for a new total of \$57,655.30

Rationale for Increase

The request is to increase the current purchase order in order to account for additional work for:

- a) To extend Wood for materials testing and inspection for Phase 2 construction. Wood completed materials testing and inspection for Phase 1 construction that was recently completed in July 2020. Wood was originally retained through informal quotes.

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the needs of the project as materials testing and inspection (QA/QC) is required for the duration of the Contract.

(ii) Proceed with competitive RFQ process:

- A different consultant will require additional cost, effort and time to become familiar with the project and requirements.
- Standard practice for Niagara Region WWW is to have the consultant that completed the geotechnical investigations during design also complete the materials testing and inspection as they are intimately familiar with the site conditions and constraints.

20. PO CNV0000122 Hatch (2014-RFP-15)

Welland WTP WTM Extension – Canal Crossing Design

Increase original pre-tax amount of \$278,728.00 by \$27,636.00 for a new total of \$306,364.00

Rationale for Increase

The request is to increase the current purchase order in order to account for additional work for:

Hatch was awarded the assignment of the Region's Trunk Watermain design task through 2014-RFP-15. Following the award of this assignment the City approached the Region in 2018 to coordinate a cost sharing strategy for complete road reconstruction within the project limits as a Consultant was already designing works in the area and combining the projects together in a single tender (Contract) would minimize service disruption to local residents and would reduce construction costs from duplicate effort.

- a) Additional Engineering effort required for Region Watermain Design and Investigation of existing conditions. These changes are to modify the current design to ensure redundancy and operational flexibility with the water transmission system.
- b) Additional Engineering effort required for City Sewer Design and Tendering Services. These changes are needed to obtain the required MECP permits and additional effort during the Tender phase which was not accounted for in the original proposal as the City's works were added after the RFP process.

Alternatives Reviewed

(i) Do Nothing:

- This alternative does not address the needs of the project for the Region or the City.

(ii) Proceed with competitive RFP process:

- A competitive process will take more time and would delay the tender process. Some construction activities have seasonal time constraints, specifically the Canal works and an RFP process would delay construction of these works.
- A different consultant will require additional cost, effort and time to become familiar with the project and requirements and will complicate the Construction Administration and Inspection process