

ERIE COUNTY WATER AUTHORITY
 AUTHORIZATION FORM
 For Approval/Execution of Documents
 (check which apply)

Contract: _____ **Project No.:** _____
Project Description: 2019 Capital Budget Amendment (see attached)

Item Description:

Agreement Professional Service Contract Amendment Change Order
 BCD NYSDOT Agreement Contract Documents Addendum
 Recommendation for Award of Contract Recommendation to Reject Bids
 Request for Proposals
 Other _____

Action Requested:

Board Authorization to Execute Legal Approval
 Board Authorization to Award Execution by the Chairman
 Board Authorization to Advertise for Bids Execution by the Secretary to the Authority
 Board Authorization to Solicit Request for Proposals
 Other _____

Approvals Needed:

APPROVED AS TO CONTENT:

Department Head *D. W. [Signature]* Date: 5/3/19
 Risk Manager _____ Date: _____
 Director of Administration _____ Date: _____
 Executive Engineer *[Signature]* Date: 5/3/19

APPROVED AS TO FORM:

Legal _____ Date: _____

APPROVED FOR BOARD RESOLUTION:

Secretary to the Authority *[Signature]* Date: 5/9/19

Remarks: _____

Resolution Date: _____ **Item No:** _____



ERIE COUNTY WATER AUTHORITY
INTEROFFICE MEMORANDUM

May 6, 2019

To: Terrence D. McCracken, Secretary to the Authority

From: David M. Patton, Sr. Production Engineer

Subject: Budget Transfers, for Various Capital Items
For Sturgeon Point Water Treatment Plant, Van de Water Treatment Plant and
Distribution Pump Stations

Upon further evaluation and various discussion with ECWA staff, regarding the previously proposed 2019 budget items, it has been determined that there are various other items (as described herein) that have been identified to be of a much higher priority to have completed. Additionally, various items on the budget would require ECWA staff to perform various Work to complete and currently the WTPO and maintenance staff availability is not sufficient to complete by the end of 2019. The proposed amendments below have been reviewed and evaluated in regards to staff availability and it has been determined possible to complete by end of 2019.

The following summarizes the proposed budget amendments, with the numbering of items as same as referenced in the attached budget amendment summary table:

1. Proposed New Budget Item No. 1010-100-101294, STP HVAC Upgrades:

Sturgeon Point's HVAC system(s) require the installation of new equipment, upgrade of the alarm notifications system(s) and various other modifications/additions to complete the Work of the previous project. The entire project consists of items to be completed in both the High Service Pump Building and the Filtration/Control Building. This budget amendment item is required to cover over-run costs due to the project not being completed in 2018 and additional equipment and modifications that have been determined required to complete the overall Work as previously proposed.

The funds to be transferred are proposed from the following accounts:

- 1010-100-101377, STP Replacement of High Service Pump #4, in the amount of \$41,600:

These funds are based on a projected remaining balance, as the actual bid purchase price of the pump was lower than the proposed budget. Note, there will remain approximately \$14,500 in this budget line item for any potential future incidental, or unforeseen costs associated with the pump's final installation.

- 1010-100-101380 (STP) & 1015-100-101415 (VDW), Safety Permanent Eye Wash/Shower, in the amount of 55,000 and \$3,500, respectively:

Upon further evaluation the previously proposed installation of a permanent safety eyewash/shower system, in both plants, has been determined to be

completed as a Consultant's design project. The previous proposed budget and intended installations have been determined not to have included all necessary equipment, systems and controls necessary to comply with safety regulations. The installation of a properly designed permanent safety eyewash/shower system is required for all chemical and hazardous materials handling, storage and feed areas. Many of these areas are located throughout the water treatment plants, including solids dewatering/ treatment buildings and high/low service pump buildings. Additionally, due to various distribution system pump station buildings having liquid chlorine storage and feed system therein, these buildings will also need to be evaluated.

Accordingly, a much more detailed review and evaluation is required to determine the optimal system to fit ECWA's needs. A standard Consultant's design bid and construct project has already been developed, under Project No. 2019000017 "Control of Hazardous & Energy Program", with request for proposals (RFP) submitted on April 12, 2019. The submitted proposal(s) are under review by ECWA staff.

Project No. 1015-100-101415 line item shall be deleted.

- 1010-100-101284, STP Residual Process & Lagoon Study, in the amount of \$48,400:

Upon further discussions and evaluation, it has been determined before any study could be conducted all existing lagoons need to be emptied of sludge. Currently, all lagoons are nearly full, with limited capacity remaining due to many years storing and stock piling the sludge on-site, in lieu of disposing such on a routine basis,

At this time, ECWA staff is in the process of developing bid/contract documents, for the excavation, transportation and disposal of the "dried" sludge and for the excavation, on-site transportation of "wet" sludge to the drying areas on-site, for Board approval. The costs of the sludge removal, at STP, will be funded by Account No. 1010-186001-59598 as completed in the past.

2. Proposed New Budget Item No. 1010-100-101433, STP Sludge Density Meter Replacements, in the amount of \$51,900:

Sturgeon Point's previously installed sludge density meters were removed and/or relocated to VDW. The sludge density meters were having issues and failing due to water intrusion into the existing manholes where they were located. Accordingly, as part of the sludge density meters replacement, each manhole will be rehabilitated and sealed. The sludge density meters are required for proper control of the supper scraper sludge removal system of the coagulation basins and allows for increase process and energy efficiencies.

The funds to be transferred are proposed from the following accounts:

- 1010-100-101398, STP HACH Laster Turbidity Meters, in the amount of \$51,900:

These funds are based on a projected remaining balance, after the purchase of eight (8) new STP HACH laser turbidity meters, including subconsultants (i.e. Kaman programming) costs required to complete the installation. Note, there will remain approximately \$1,800 in this budget line item for any potential future incidental, or unforeseen costs associated with the instrument's final installation.

The previously proposed amount of existing turbidity meters was for ALL existing meters at all facilities. The meters replacement is based on HACH's decision to discontinue the "older" model meter. However, HACH has stated and committed to continuing both the service and parts availability for the existing meters for the next five (5) years. Accordingly, the meters replacements have been determined to be completed and spaced over the next three (3) years such that additional funds could be made available for recently identified higher priority items.

3. Proposed New Budget Item No. 1010-100-101434, STP Caustic Feed Pump(s) and Bulk Storage Tank, in the amount of \$113,736:

Sturgeon Point's recently relocated caustic feed point was completed with repurposing an existing polymer feed pump. The proposed two (2) metering pump purchase and installation will include replacing the re-purposed polymer feed pump and include a spare metering pump. The spare metering pump satisfies the required redundancy and could be used for various existing chemical feeds, including the caustic, coagulant, coagulant aid and sludge dewatering polymer systems.

Additionally, this proposed amendment includes the furnishing and installation of a 5,000-gallon FRP bulk storage tank, for the caustic system. The existing bulk storage capacity does not provide the recommended 30-days of storage, with the additional 5,000-gallon storage tank the WTP's storage capacity required is met based on average flows and caustic dosage.

The funds to be transferred are proposed from the following accounts:

- 1015-100-101399, VDW HACH Laster Turbidity Meters, in the amount of \$13,000:

These funds are based on a projected remaining balance, after the purchase of nine (9) new VDW HACH laser turbidity meters, including subconsultants (i.e. Kaman programming) costs required to complete the installation. Note, there will remain approximately \$1,500 in this budget line item for any potential future incidental, or unforeseen costs associated with the instrument's final installation.

The previously proposed amount of existing turbidity meters was for ALL existing meters at all facilities. The meters replacement is based on HACH's decision to discontinue the "older" model meter. However, HACH has stated and

committed to continuing both the service and parts availability for the existing meters for the next five (5) years. Accordingly, the meters replacements have been determined to be completed and spaced over the next three (3) years such that additional funds could be made available for recently identified higher priority items.

- 1015-100-101244, VDW Sludge Plant Study, in the amount of \$100,736:

Upon review of previous engineering studies, regarding the VDW sludge plant and associated equipment, in addition to the provided recommendations and further discussions and evaluations thereof, it has been determined to complete this Work as a standard Consult's design and construction project. The scope of Work required for the proposed new systems will involve multiple design disciplines and major inter-design coordination issues to complete. The Work would need to include the total demolition of existing systems, with installation of new proposed systems.

The existing system has been functioning without major issues, as routine preventative maintenance is completed on a timely manner and staff constantly monitor the sludge operations at all times.

At this time, ECWA staff is in the process of developing the consultant Request for Proposal (RFP) documents for this Work, for Board approval. It is anticipated these documents to be completed by the end of summer.

4. Proposed New Budget Item No. 1020-100-101437, Distribution System Pump Replacements, in the amount of \$120,000:

Many of the distribution system's pump stations have existing pumps and motors that are original to their construction and/or past their useful life and require frequent maintenance and repairs to maintain continuous operation. Accordingly, the proposed pump station pump replacements have been determined a much higher priority. This amendment will allow for an additional five (5) pump replacements, from two (2) additional pump stations. The additional pumps will significantly increase the overall distribution system's reliability.

The funds to be transferred are proposed from the following accounts:

- 1015-100-101399, VDW HACH Laster Turbidity Meters, in the amount of \$34,700:

These funds are based on a projected remaining balance, after the purchase of nine (9) new VDW HACH laser turbidity meters, including subconsultants (i.e. Kaman programming) costs required to complete the installation. Note, there will remain approximately \$1,500 in this budget line item for any potential future incidental, or unforeseen costs associated with the instrument's final installation.

The previously proposed amount of existing turbidity meters replacements were for ALL existing meters at all facilities. The meters replacement is based on HACH's decision to discontinue the "older" model turbidity meter. However,

HACH has stated and committed to continuing both the service and parts availability for the existing meters for the next five (5) years. Accordingly, the meters replacements have been determined to be completed and spaced over the next three (3) years such that additional funds could be made available for recently identified higher priority items.

- 1015-100-101415, VDW Safety Permanent Eye Wash/Shower, in the amount of 41,500:

As per #1 above. Project No. 1015-100-101415 shall be deleted.

- 1020-100-101371, Pump replacements East Aurora and Clark St. in the amount of \$43,800:

These funds are based on a projected remaining balance, as the newly projected purchase price of the pump is lower than the proposed budget.

5. Proposed New Budget Item No. 1015-100-101436, VDW Crane Upgrades, in the amount of \$10,000:

VDW has two (2) cranes that require upgrades for increased performance and safety of staff. The upgrades include installation of variable frequency drives and additional controls.

The funds to be transferred are proposed from the following accounts:

- 1015-100-101415, VDW Safety Permanent Eye Wash/Shower, in the amount of \$10,000:

As per #1 above. Project No. 1015-100-101415 shall be deleted.

Budget Transfer Authorization

Budget Transfer No: _____

Date: May 3, 2019

Transfer From:

Unit	Dept	Exp/Capital No.	Description	Amount
1010, 1015 & 1020			Various Capital Items	\$444,136
			(See Attached)	

Transfer To:

Unit	Dept	Exp/Capital No.	Description	Amount
1010, 1015 & 1020			Various Capital Items	\$444,136
			(See Attached)	

Statement as to Necessity of Budget Transfer:

Funding for various capital projects deemed necessary along with overrun costs for projects not completed in 2018.

Required Approvals*:

Unit Head:

Dept. Head:

Budget/Financial Analyst:

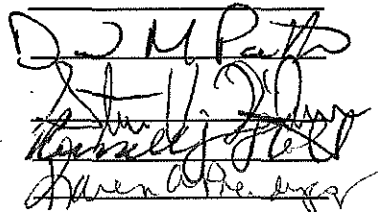
Executive Engineer:

Comptroller:

Deputy Director:

Executive Director:

Board Resolution Date:



* See Back of Form for "Outline of Approvals Required for Budget Transfers", Schedule A and "Approvals Required for Creation of New Budget Items", Schedule B

Budget Amendment for May 16, 2019

<u>Transfer #</u>	<u>Unit No</u>	<u>Capital No</u>	<u>Description</u>	<u>Increase</u>	<u>Decrease</u>
1	1010	101294	HVAC High Service Upgrades	148,500	
2	1010	101433	Sludge Density Meter Replacement	51,900	
3	1010	101434	Caustic Feed System Pump	113,736	
4	1020	101437	Pump Replacement Jewett Holmwood & Marilla	120,000	
5	1015	101436	Crane Upgrades	<u>10,000</u>	
				444,136	
1	1010	101377	High Service Pump Replacement		41,600
	1010	101380	Safety Permanent Eye Wash/Shower		55,000
	1010	101284	Residual Process & Lagoon Study		48,400
	1015	101415	Safety Permanent Eye Wash/Shower		<u>3,500</u>
			Subtotal		148,500
2	1010	101398	HACH Turbidity Meters		51,900
3	1015	101244	Sludge Plant Study		100,736
	1015	101399	HACH Turbidity Meters		<u>13,000</u>
			Subtotal		113,736
4	1015	101399	HACH Turbidity Meters		34,700
	1015	101415	Safety Permanent Eye Wash/Shower		41,500
	1020	101371	Pump Replacements East Aurora and Clark St		<u>43,800</u>
			Subtotal		120,000
5	1015	101415	Safety Permanent Eye Wash/Shower		<u>10,000</u>
					444,136