



ERIE COUNTY WATER AUTHORITY

INTEROFFICE MEMORANDUM

June 6, 2022

To: Terrence D. McCracken, Secretary to the Authority

From: Michael J. Quinn, Senior Distribution Engineer

A handwritten signature in black ink, appearing to read "MJQ", is written over the name "Michael J. Quinn".

Subject: Contract MP-086
Ball Pumping Station Improvements – Phase 1
ECWA Project No. 202000177

The following material is attached:

- Authorization Form requesting Board Authorization to execute the attached Amendment No. 1 to Professional Service Agreement with Arcadis of New York, Inc. (Arcadis)
- Amendment No. 1 to Professional Service Agreement for the above referenced project.

During the preliminary design phase of this project the Engineering and Control Department identified a number of improvements to the project that were not included in the original scope of work or were originally anticipated to be included in future phases but are better suited to be completed in this phase. Further, due to the potential for more critical future capital improvement needs elsewhere in the system, the timing for future phases of the project remains undetermined.

The following presents a general list of items being considered along with a brief justification for each.

1. Electrical Panel L1, L2, and S3 replacement design – The replacement of these panels was not originally considered in the scope of work however during a more detailed evaluation of the facility during the Basis of Design Phase, it was determined that the panels were nearing the end of their useful life and should be replaced. (\$6,800 in additional design fee)
2. Asphalt pavement installation from Sweet Home Road to Electrical Substation – In 2018, the electrical substation at the Ball Station was replaced. During that project the access road was not improved. Since that time, the condition of the road has deteriorated and due to the large amount of pavement to be included in the current project it was determined that including the pavement here would be cheaper and more efficient than a standalone project. (\$4,400 in additional design fee)
3. New asphalt pavement south and west of PS Bldg, pavement replacement east of PS Bldg – Originally this pavement was anticipated to be completed under a future project phase however given the current condition of the pavement and the need for additional space, replacement of the existing pavement and incorporating additional paved areas needs to be completed sooner. (\$11,600 in additional design fee)
4. Replacement of existing access doors, OH door, and windows – This work was anticipated to be completed in a future project however based on the unknown timing, it will be more cost effective to include this work in an earlier and larger project. (\$6,000 in additional design fee)

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5. Bridge crane improvements – Replacement of the existing bridge crane was not part of the original scope of work but discussions with operations staff suggest that due to its age and current condition replacement is warranted. (\$11,700 in additional design fee)
6. Concrete in-fill for Chlorine Room floor – When the facility was constructed, it included a chlorine addition and associated gas venting system. This system included large underground ducts which penetrated the chlorine room floor. These openings were covered with grating. Since the system is no longer in use and the grating is in disrepair and unsafe, it was decided to fill the existing openings with concrete. (\$2,900 in additional design fee)
7. Pump No. 6 addition – The original scope of work contemplated designing five new pumps and associated piping modifications. During the Basis of Design phase, it was determined that a six-pump system would be preferred to allow for the handling the wide range of flow conditions required both now and in the future at the facility as well as to provide adequate redundancy. The associated piping modifications will also allow the easier installation of a seventh pump in the future if necessary. (\$13,300 in additional design fee)
8. Incorporate WIFIA requirements into Contract Documents – Following the award of the engineering contract, the project was awarded a Water Infrastructure Finance and Innovation Act (WIFIA) grant. This being the case, a number of additional requirements have been placed on the contract for Grant compliance. Additionally, several WIFIA related documents must be incorporated into the construction Contract (\$6,100 in additional design fee)
9. Replacement of exhaust actuators and dampers - Replacement of the existing exhaust dampers and actuators was not part of the original scope of work but discussions with operations staff suggest that due to their age and current condition replacement is warranted. (\$2,800 in additional design fee)
10. 36" Bypass Relocation and Interconnections – This scope item relates to replacement of existing site piping. Generally, this piping is to be replaced essentially in kind and in its existing location. In the case of this particular section of piping, during the Basis of Design phase, the engineering team developed a construction sequencing plan. The result of this planning process determined that this main could not be taken out of service for replacement but rather needed to be replaced in a different location resulting in a redesign of the piping (\$4,700 in additional design fee)
11. Storm water Pollution Prevention Plan (SWPPP) Development – The scope of work for the original project did not include sufficient site disturbance to warrant the development of a SWPPP. Due to the additional pavement outlined above, a total disturbance of greater than 1 acre is anticipated resulting in the need for a SWPPP. (\$18,600 in additional Special Services allocation)

The total additional fee to complete the work is \$88,901.00. Of that total, Contract Item 4.01.B – Design will be increased by \$70,301.00 and Special Services (Contract Item 4.03) will be increased by \$18,600.00. Currently the contract has approximately \$6,700.00 in unallocated funds in the Special Services items however we believe that those unallocated funds should be reserved for

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future use and that the Special Services item be increased by the entire \$18,600. A review of the scope of work and associated fees suggests that the additional cost is reasonable and compares favorably with the original project budget. No additional fees are being requested for construction phase services including resident inspection.

Budget Information:

Unit: 2520 Eng/Const Control

Item 101512 Ball PS Pumping Improvements

- 2022 Budget – Engineering Services and Construction

MJQ:jmf

Attachments

cc: L.Kowalski

C. Johnson

CONT-MP-086-2001-X-01

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

Contract: MP-086 **Project No.:** 202000177
Project Description: Ball Pump Station Phase-1 Rehabilitation

Item Description:

<input type="checkbox"/> Agreement	<input checked="" type="checkbox"/> Professional Service Contract	<input checked="" type="checkbox"/> Amendment	<input type="checkbox"/> Change Order
<input type="checkbox"/> BCD	<input type="checkbox"/> NYSDOT Agreement	<input type="checkbox"/> Contract Documents	<input type="checkbox"/> Addendum
<input type="checkbox"/> Recommendation for Award of Contract	<input type="checkbox"/> Recommendation to Reject Bids		
<input type="checkbox"/> Request for Proposals			
<input type="checkbox"/> Other _____			

Action Requested:

<input checked="" type="checkbox"/> Board Authorization to Execute	<input checked="" type="checkbox"/> Legal Approval
<input type="checkbox"/> Board Authorization to Award	<input checked="" type="checkbox"/> Execution by the Chairman
<input type="checkbox"/> Board Authorization to Advertise for Bids	<input type="checkbox"/> Execution by the Secretary to the Authority
<input type="checkbox"/> Board Authorization to Solicit Request for Proposals	
<input type="checkbox"/> Other _____	

Approvals Needed:

APPROVED AS TO CONTENT:

<input checked="" type="checkbox"/> Sr. Distribution Engineer	<u></u>	Date: <u>6/6/2022</u>
<input checked="" type="checkbox"/> Chief Operating Officer	<u></u>	Date: <u>6/6/2022</u>
<input checked="" type="checkbox"/> Executive Engineer	<u></u>	Date: <u>06/06/2022</u>
<input checked="" type="checkbox"/> Director of Administration	<u></u>	Date: <u>06/06/2022</u>
<input checked="" type="checkbox"/> Risk Manager	<u></u>	Date: <u>06/06/2022</u>
<input checked="" type="checkbox"/> Chief Financial Officer	<u></u>	Date: <u>06/06/2022</u>
<input checked="" type="checkbox"/> Legal	<u></u>	Date: <u>6/6/2022</u>

APPROVED FOR BOARD RESOLUTION:

<input checked="" type="checkbox"/> Secretary to the Authority	<u></u>	Date: <u>6/8/22</u>
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Remarks: Amendment No. 1

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

**AMENDMENT NO. 1 TO
PROFESSIONAL SERVICES AGREEMENT**

AMENDMENT, effective June 16, 2022 (“Amendment No. 1”), to the Professional Services Agreement, effective on June 18, 2020, by and between

ERIE COUNTY WATER AUTHORITY
295 Main Street, Room 350
Buffalo, New York 14203

hereinafter referred to as the “Authority,” and

ARCADIS OF NEW YORK, INC.
50 Fountain Plaza, Suite 600
Buffalo, New York 14202

hereinafter referred to as the “Engineer.”

WHEREAS, on June 18, 2020 the Authority awarded the Engineer a professional service contract to provide engineering and consulting services relating to Phase I of the rehabilitation of the Ball Pump Station (the “Agreement”); and

WHEREAS, based on the recommendation of the Authority’s Chief Operating Officer and Executive Engineer, the Authority seeks to amend the Agreement’s scope of services to include additional work to improve the initial phase of this project; and

WHEREAS, the Engineer has agreed to the amendment of the scope of services and has requested an additional fee of \$88,901 dollars to perform the additional services; and

WHEREAS, in accordance with Article 5, paragraph 5.02 of the Agreement, any modification or variation from the terms of the Agreement, must be in writing, authorized by a resolution of the Board of Commissioners of the Authority (the “Board”), and signed by all parties to be effective;

NOW, THEREFORE, in consideration of mutual promises herein set forth, the parties agree to the following:

- (1) The parties agree that Article 1, Paragraph 1.03 is deleted in its entirety and replaced with the following:

1.03 The project has three main components: Pump System Improvements, Yard Piping Improvements, and HVAC System/Miscellaneous Improvements.

Pump system improvements include, but are not limited to, the following: (1) replacement of all five pumps with new 1,000 – 1,250 HP horizontal split-case pumps (all of similar capacity) equipped with VFDs to expand preferred operating ranges and improve operations and maintenance activities; (2) design pump station to meet a current firm capacity of 71 MGD that is expandable to 82.5 MGD by the addition of a sixth pump (3) new conditioned room to protect VFDs from ambient temperature and humidity fluctuations; (4) replacement of pump suction and discharge piping in between isolation butterfly valves; (5) new cushioned check valves for each pump; (6) surge relief system improvements; (7) installation of all electrical equipment (power, cable, conduit, etc.) associated with the replacement pumps and VFDs; and (8) SCADA integration associated with the replacement pumps and VFDs.

Yard Piping Improvements include, but are not limited to: (1) replacement of the buried 48-inch and 54-inch piping between the two water storage tanks (North and South), west of the pump station building; (2) replacement of sections of the buried 60-inch inlet pipe located south of the pump station building with 48-inch piping and an additional parallel 48-inch pipe to provide redundancy; (3) Addition of a parallel main and other piping improvements to remove a single point of failure of the current 48-inch transmission main east of the pump station building; (4) replacement of the piping associated with the venturi meters, located east of the pump station building; (5) installation of all new piping to a depth to be directly supported on competent rock (approximate depth of 580 – average grade elevation around the Ball Pump Station is 600); and (6) the Engineer shall confirm the location of tie-in points, pipe fittings, pipe alignments, and pipe diameters during basis of design.

HVAC System and Miscellaneous Improvements component includes, but are not limited to: (1) replacement of gas unit heaters, exhaust fan components, and other outdated HVAC components; (2) installation of new 2-inch water supply line within the pump station building; (3) replacement of sump pumps within the three Venturi pits; (4) installation of new instrumentation conduit between the pump station and the three Venturi pits; (5) replacement of the existing sanitary sewer service lateral; (6) installation of a new access man-door on the east side of the building near Pump 1; (7) installation of new electrical, PLC, and associated controls (SCADA) for the pumps and HVAC; (8) Electrical panel L1, L2, and S3 replacement and design; (9) asphalt pavement installation from Sweet Home Road to electrical substation; (10) new asphalt pavement south and west of pump station building with pavement replacement east of building; (11) replacement of existing access

doors, overhead door and windows; (12) bridge crane improvements; (13) concrete in-fill for chlorine room floor; (14) pump number 6 addition; (15) incorporate WIFIA requirements into Contract Documents; (16) replacement of exhaust actuators and dampers; and (17) 36" bypass relocation and interconnections; and

- (2) The parties agreement to amend Article 4, Paragraph 4.04 (A)(2) of the Agreement to increase the lump sum for Design by \$70,301.00, changing the current figure of \$470,000.00 to \$540,301.00; and
- (3) The parties agree to amend Article 4, Paragraph 4.04 (C) of the Agreement to increase the total not to exceed by \$18,600.00, changing the current figure of \$50,000.00 to \$68,600.00; and
- (4) The parties agree all other terms and conditions of the Agreement shall remain without change or amendment; and
- (5) This Amendment may be executed in counterparts, each of which is deemed an original, but all of which together are deemed to be one and the same agreement.

IN WITNESS WHERETO, the parties hereto have caused this Amendment No. 1 to be signed by their respective duly constituted officers, attested and sealed pursuant to proper authority.

ERIE COUNTY WATER AUTHORITY

By _____
Jerome D. Schad, Chair

ARCADIS OF NEW YORK, INC.

By _____
Mark R. Lenz, PE, Vice President

STATE OF NEW YORK)
COUNTY OF ERIE) ss:

On the _____ day of June, in the year 2022, before me personally came Jerome D. Schad, to me known, who, being by me duly sworn, did depose and say that he resides in Amherst, New York, that he is the Chair of the Board of Commissioners for the Erie County Water Authority described in the above instrument; and that he signed his name thereto by order of the Board of Commissioners.

Notary Public

STATE OF NEW YORK)
COUNTY OF ERIE) ss:

On the _____ day of _____, in the year 2022, before me personally came Mark R. Lenz, PE, Vice President, to me known, who, being by me duly sworn, did depose and say that he resides in Amherst, New York, that he is the Vice President of the Corporation described in the above instrument; and that he signed his name thereto by order of the Board of Directors of said Corporation.

Notary Public