<u>Wastewater Treatment Facilities Upgrade, General Program #4</u> <u>CIP No. 650360-100002</u>

Information to be included in all Legislation Modifying a Contract:

1. <u>The names, contract compliance no. & expiration date, location by City/State and status of all companies (NPO, MAJ, MBE, FBE, HL1, AS1, or MBR) submitting a competitive bid or submitting an RFP or RFSQ.</u>

Name		C.C. No./Exp. Date	DAX #	City/State	Status
1.	Black & Veatch	43-1833073 - 9/2/23	8038	Columbus/OH	MAJ

2. Hazen and Sawyer

2. <u>What type of bidding process was used (ITB, RFP, RFSQ, Competitive Bid).</u> Requests for Proposals (RFP's) were opened on December 14, 2015.

3. List the ranking and order of all bidders.

- 1. Black & Veatch
- 2. Hazen and Sawyer

4. <u>Complete address, contact name, phone number, and e-mail address for the successful bidder only.</u>

Black & Veatch Corporation 4016 Townsfair Way, Suite 210, Columbus, Ohio 43219 Contact: Mr. Bob O'Bryan, PE, Project Manager, (614) 454-4397, OBryanBR@by.com

5. <u>A description of work performed to date as part of the contract and a full description of</u> work to be performed during any future phasing of the contract. The planning area should also be listed as well as any street or neighborhood names.

SCOPE OF SERVICES

The basic services to be provided under this Agreement are professional engineering services necessary for, and incident to: Overall Engineering Consultant Services for the Wastewater Treatment Facilities Upgrade - General Program #4. Overall Engineering Consultant Services (OEC) are necessary to provide technical and engineering assistance to the City and its design professionals in planning and coordination of the work. The OEC services are separated into several tasks, as follows:

- Task 1 Planning Services
- Task 2 Design Services
- Task 3 Construction Related Services
- Task 4 Commissioning and Start-up Services
- Task 5 General and Additional Services
- Task 6 Project Management

The City will request a task order from the consultant as necessary work is identified. The task order submitted will include a detailed scope of work, direct and indirect costs, task schedule, estimated hours, personnel categories required with labor rates, and reimbursable expenses.

After negotiation and upon acceptance by the city, the consultant shall commence work. The Engineer shall provide such professional engineering services as may be necessary to accomplish the work required to be performed and shall at the firm's cost, furnish all necessary competent personnel, equipment, and materials to perform the work.

The expected duration of this contact is six (6) years. The professional services hereunder shall be funded by incremental appropriation, approximately annually.

TASK 1 - PLANNING SERVICES:

Black & Veatch will assist the City with the planning and documenting the required modifications to the facilities to reliably and consistently meet all NPDES Permit conditions, all EPA air permitting requirements, anticipate future regulatory requirements and to protect the water quality and air quality in the Columbus Facilities Planning Area. The work item may include:

- 1.1. WWTF Master Planning
- 1.2. Process Improvements Investigations
- 1.3. Basis of Design
- 1.4. Program and Budget Support
- 1.5. Water and Air Quality Sampling, Analysis & Modeling
- 1.6 Assistance with Permits and Government Agency Requests
- 1.7 DOSD Environmental Audit

TASK 2 – DESIGN SERVICES

Provide general consultation on technical issues related to wastewater treatment capital improvements projects on an as-requested basis. The work may include:

- 2.1. Capital Improvement Project (CIP) Design Document Review
- 2.2. Value Engineering:
- 2.3. Master Specification, Documents and Plans Update:

TASK 3 – CONSTRUCTION RELATED SERVICES

Provide general consultation on technical issues related to wastewater treatment capital improvements projects during construction on an as-requested basis. The work may include:

- 3.1. Assistance with review of bids and bid protests.
- 3.2. Review of construction related documents prepared by others.

3.3. Assistance with construction claims evaluations, adjudication, prosecution, and defense.

3.4. Software programming and training.

TASK 4 – COMMISSIONING AND STARTUP SERVICES

Provide general consultation on technical issues related to wastewater treatment capital improvements projects during start up and commissioning on an as-requested basis.

TASK 5 – GENERAL AND ADDITIONAL SERVICES

Attend periodic and special Project meetings called by the City and generally strive to provide efficient, professional consulting services as requested to serve the City's interests. In addition, the City may determine that specialized, additional services are necessary to the performance of the work. Such services may include, but are not necessarily limited to the list provided below. Additional services shall be performed as directed by the City and may require a properly authorized and executed Contract Modification.

- 5.1. DOSD Environmental Elements: This task includes assistance to the Division of Sewerage and Drainage with addressing environmental audit findings related to air regulatory and permitting issues, and other regulatory and permitting issues associated with water, soils, and materials.
- 5.2. Specialized plans, applications and reports in connection with project funding needs and issues. Provide technical resources for the preparation of grant or loan applications and regulatory documents on an as-requested basis.
- 5.3. Complete topographic, planimetric, land or construction surveys.
- 5.4. Preparation of easement descriptions, plats, and deeds for acquisition of rights in real property.
- 5.5. Soils and geotechnical engineering, material inspections, and testing.
- 5.6. Laboratory analyses and studies.
- 5.7. Economic studies.
- 5.8 Provide as requested assistance to Treatment Engineering for electrical and instrumentation and control work to support capital projects, including, but not limited to arc flash studies, short circuit studies and coordination studies. Deliverables will be defined as needed by the City.
- 5.9 Reliability Engineering: The purpose of this work is to assist the DOSD facilities in developing operational, maintenance, and inventory plans to address problematic systems or equipment.

There are various reliability engineering techniques that may be used to address the situation at hand. These include, but may not be limited to:

- Failure Modes and Effects Analysis (FMEA)
- Preventive Maintenance Optimization (PMO)
- Root Cause Failure Analysis (RCFA)
- Reliability Centered Maintenance (RCM)

The City shall select the appropriate technique depending on the circumstances and data available to support the analysis. All reliability analyses shall be conducted by a degreed engineer that has suitable experience as demonstrated on their resume.

As part of this work, all final results must be entered in the city's computerized maintenance management system (CMMS), Oracle WAM. The engineering technician selected to perform this work shall have suitable experience as demonstrated on their resume.

The City will request a task order from the consultant as necessary work is identified. The task order submitted will include a detailed scope of work, direct and indirect costs, task schedule, estimated hours, personnel categories required with labor rates, and reimbursable expenses. After negotiation and upon acceptance by the city, the consultant shall commence work.

TASK 6 – PROJECT MANAGEMENT

Provide project management services to direct and coordinate the various tasks being performed under the OEC contract.

Community Planning Area: 99 - Citywide

6. <u>An updated contract timeline to contract completion.</u>

- a. The original agreement allowed for a total term of six years.
- b. This unplanned modification provides additional funding for year six of six.
- c. The expiration date of this agreement is December 2022 (completion of sixth year). Work performed during the last year of the contract may extend into the following calendar year, using funds previously authorized.
- 7. <u>A narrative discussing the economic impact or economic advantages of the project;</u> <u>community outreach or input in the development of the project; and any environmental</u> <u>factors or advantages of the project.</u>

The project provides many metrics on various environmental factors that are noted in the work to be performed. The information provided assists and guides the City in decision making on environmental issues. These decisions have a direct impact on the capital improvement program budget amounts and scheduling to address the environmental needs. No community outreach is considered for this project.

8. <u>A description of any and all modifications to date including the amounts of each modification and the Contract Number associated with any modification to date. (List each modification separately.)</u>

Please note that contract modification no.1 occurred prior to the City Code change making a distinction between modifications and renewals. That was essentially a planned renewal.

Original Contract (2016)	\$1,000,000		
Modification No. 1 (2017) PO095735-1			\$1,000,000
Renewal No. 1 (2018)	PO153882-1		\$1,000,000
Renewal No. 2 (2019)	PO209574		\$1,609,900
Renewal No. 3 (2021)	PO264043		\$1,000,000
Renewal No. 4 (2022)	PO308100		\$1,000,000
Unplanned Modification No. 2 (current)			\$ 500,000
			\$7,109,900

9. <u>A full description of the work to be performed as part of the proposed contract</u> <u>modifications. (Indicating the work to be a logical extension of the contract is not</u> <u>sufficient explanation.)</u>

This legislation is for an unplanned modification to an existing contract. It leaves the time unchanged and adds \$500,000 of additional budget to perform additional work that is urgent. See number 5 above for detailed scope of services. This unplanned modification makes no change to the nature of the scope of services it only increases the amount of those services being purchased.

10. If the contract modifications was not anticipated and explained in the original contract legislation a full explanation as to the reasons the work could not have been anticipated is required. (Changed or field conditions is not sufficient explanation. Describe in full the changed conditions that require modifications of the contract scope and amount.)

The additional work comes from two sources; the newly announced Intel facility, and the existing CEPT treatment system at Southerly. Neither of these could have been anticipated during previous legislation for this project and have arrived near the end of the 6 year contract period when there is little flexibility to redirect budgets.

The new Intel plant will send large volumes of new wastewater flows to the treatment system and the materials in these discharges are unusual. Previous work on this contract created a large and detailed master plan for the wastewater plants, and that work was just being completed when the Intel plant was announced. The new funding will allow DOSD to characterize these new wastewater flows from Intel and will update the master plan to include the required new wastewater treatment facilities to accommodate the discharges from the new Intel plant during the twenty year planning period.

The CEPT system at Southerly requires a detailed treatment effectiveness study as a part of the new Ohio EPA NPDES permit that became effective January 2022. This CEPT Treatment Effectiveness Study includes significant amounts of work to plan and prepare for a study that will collect hundreds of special samples throughout the Southerly plant and then analyze the results to modify certain allowable discharge limits governed by the permit. The new funding will allow this study to be planned and conducted, and allow the results to be analyzed and reported back to the Ohio EPA as required by the permit.

11. <u>An explanation of why the work to be performed as part of the contract modifications</u> cannot be bid out. (Indicating the work to be a logical extension of the contract is not sufficient explanation.)

This work was originally planned as a 6-year effort funded by annual renewals because it includes tasks which stretch across several funding years, and because the nature of the work requires the firm to develop a deep and detailed understanding of our plants and how we operate them. Bidding out this work would risk funding this substantial startup effort again, and would require the multi-year work to start again at the beginning.

ORD #1752-2022

12. A cost summary to include the original contract amount, the cost of each modifications to date (list each modifications separately), the cost of the modification being requested in the legislation, the estimated cost of any future known modifications and a total estimate of the contract cost. Original Contract \$1,000,000 Modification No. 1 (2017) \$1,000,000 Renewal No.1 (2018) \$1,000,000 \$1,609,900 Renewal No.2 (2019) Renewal No.3 (Q1 2021) \$1,000,000 Renewal No.4 (Q4 2021) \$1,000,000 Unplanned Mod No. 2 (current) \$500,000 CONTRACT TOTAL (estimated) \$7,109,900

13. <u>An explanation of how the cost of the modifications was determined.</u>

The cost proposal was provided by Black & Veatch Corporation, reviewed by the Division of Sewerage and Drainage, and was deemed acceptable.