

City of Columbus

Office of City Clerk 90 West Broad Street Columbus OH 43215-9015 columbuscitycouncil.org

Legislation Text

File #: 1756-2015, Version: 1

1. BACKGROUND: This legislation authorizes the Director of Public Utilities to modify (Modification No.1) an existing professional engineering services agreement with Black & Veatch Corporation for the Southerly Wastewater Treatment Plant (SWWTP) Biosolids Land Application Facility project, CIP number 650356-100002. The original professional engineering services agreement authorized Black & Veatch, as Design Professional (DP), to provide Preliminary Design Services (Step 1) and Detailed Design Services (Step 2). Modification No. 1 will provide Engineering Services During Construction (Step 3) and additional Detailed Design Services (Step 2).

The City has been working on incinerator upgrade designs to meet a Maximum Achievable Control Technology Standards (MACT) compliance date of March 21, 2016. The City has concluded that it is better to cease operation of the current Southerly Wastewater Treatment Plant (SWWTP) incinerator process and provide alternate means to handle the biosolids that have been historically disposed of by the incinerator process. With this project, the City plans to provide avenues to beneficially re-use biosolids. This project will provide infrastructure to the SWWTP in order to facilitate the maximum beneficial agricultural use of the plant's biosolids by land application including biosolids storage tanks with associated recirculation and pumping equipment, liquid biosolids piping, truck load-out facilities, and an odor control system. This project will also provide piping to pump digested and undigested biosolids cake sludge simultaneously to the cake storage silos, and piping to link the biosolids land application tanks with the dewatering, thickening, and digestion processes. The primary goal of this project is to provide sufficient storage facilities and basic feed piping and pumping by March 21, 2016; thereby, reducing the need to incinerate. After the MACT compliance date, construction of facilities will be completed to permanently eliminate the need to incinerate. In order to meet this goal, the project design process was expedited to accelerate activities for this purpose by combining Step 1 and Step 2 design services into the original agreement.

Initial Professional Engineering Services were previously requested for Preliminary Design (Step 1) and Detailed Design (Step 2). These services included the following tasks: project management, investigation of existing facilities, gathering and evaluating process information and refining project goals, an evaluation of locations, size, and number of biosolids tanks and load-out facilities, preparation of a preliminary design report, surveying and geotechnical investigations for plan development, preparation of detailed design drawings and specifications, preparation of documents and drawings for permit approval, preparation of bid documents, and bidding assistance.

At the inception of the project, it is necessary to estimate the costs for the design effort; however, it is difficult to determine and define all of the items that will need to be considered. As the design developed for this project, it only then became apparent that an additional design effort, above that initially planned, would be required to address all items required to provide a complete design for a fully functioning facility. The additional design effort performed was within the existing contract's scope of services. During the accelerated design process, it was anticipated that additional funding may be required, but every effort was focused to have the design completed, bid, and constructed to meet the March 21, 2016, MACT compliance date. The additional Step 2 tasks included the following: Parts Storage Building & Carpenter's Shop demolition and replacement, Digester gas seal replacement, odor mitigation for the Digester Feed Wells, operator work station, replacement of problematic valves, an expanded chemical feed system, stormwater plan revisions, replacement of sludge pumps, and training by the centrifuge manufacturer for proper equipment operation. This modification will pay for these services that have been previously completed.

In addition, with this request for modification, the DP will be tasked with Engineering Services During Construction (Step 3). These tasks will include construction phase engineering consisting of Technical Project Representation (TPR) to interpret contract requirements and to verify the construction contractor's compliance with the project's technical requirements, Resident Technical Representation, programming services, training services, start-up and commissioning assistance, generation of Standard Operating Procedures (SOP) manuals, and record project documentation. Construction Management, Administrative Services, Field Project Representation (FPR), and Materials Testing and Evaluation Services will be performed by others.

2. PROJECT TIMELINE: Preliminary Design began on July 23, 2014 and was completed with the submission of a Preliminary Design Report (PDR) on November 17, 2014. Detailed Design began in November 2014 after the submission of the PDR and was completed on March 26, 2015. Advertisement for bids started on March 27, 2015 and was completed with a bid opening on May 6, 2015. The Notice to Proceed for the construction contract was issued on June 17, 2015. The DP will perform Services During Construction after this modification is approved.

The overall contract duration, from initiation of Preliminary Design services to completion of Services During Construction, is estimated to be two and one-half years.

The contract is being funded by incremental appropriation through the use of modifications. The original award provided funding for the Preliminary Design (Step 1) and Detailed Design (Step 2). This request for modification will provide additional Detailed Design Services (Step 2), that are within the scope of services, but their needs were not fully determined at the time of the original contract, and Services During Construction (Step 3).

2.1 Amount of additional funds to be expended: \$3,739,887.00

The original engineering contract for Preliminary Design Services (Step 1) and Detailed Design Services (Step 2) was for an amount of \$3,221,708.00. This request for modification for additional Detailed Design Services (Step 2), that are within the scope of services and Engineering Services During Construction (Step 3) will be \$3,739,887.00. The following is an estimate of costs for the contract:

Original Contract (Step 1 and Step 2) \$3,221,708.00 Modification No. 1 (Additional Step 2 and Step 3) \$3,739,887.00 CURRENT PROPOSED TOTAL \$6,961,595.00

If unforseen issues or difficulities are encountered that would require additional funding, a modification would be requested.

2.2 Reasons additional goods/services could not be foreseen:

This Contract Modification No. 1, for Services During Construction (Step 3), was planned and anticipated, and so stated in the original contract's legislation. The additional Detailed Design (Step 2) work performed was not planned, but is a continuation of the services included within the existing contract's scope of services. At the inception of a project, it is necessary to estimate the costs for the design effort; however, it is difficult to determine and define all of the items that will need to be considered.

2.3 Reason other procurement processes are not used:

Due to the highly complex and technical nature of this wastewater treatment plant infrastructure, it is not reasonable or cost efficient to undertake a new procurement effort to acquire these services. This would require a new entity to gain understanding of the project, which may cause an unacceptable project delay and additional cost.

2.4 How cost of modification was determined:

A cost proposal was provided by Black & Veatch and reviewed by the Division of Sewerage and Drainage

and was deemed acceptable. The funding provided by this contract modification is for continuation of the existing work of the contract. It is not reasonable or cost effective to undertake a new procurement to acquire these services.

This company is not debarred according to the Federal Excluded Parties Listing or the State Auditor's Findings for Recovery Database.

- 3. Contract Compliance No.: 43-1833073 | MAJ | Exp. 09/25/2015
- 4. <u>EMERGENCY DESIGNATION:</u> Emergency designation <u>is requested</u> at this time.
- 5. EMERGENCY JUSTIFICATION: The City has been working on incinerator upgrade designs to meet a Maximum Achievable Control Technology Standards(MACT) compliance date of March 21, 2016. In order to meet the MACT date and its requirements, the City has concluded that it is better to cease operation of the current Southerly Wastewater Treatment Plant (SWWTP) incinerator process and provide alternate means to handle the biosolids that have been historically disposed of by the incinerator process. Construction Contract S84 will provide these alternate means by providing infrastructure to the SWWTP to facilitate the maximum beneficial agricultural use of the plant's biosolids by land application, including biosolids storage tanks with associated recirculation and pumping equipment, liquid piping, load-out facilities, an odor control system, and piping to link the biosolids land application tanks with the dewatering, thickening, and digester processes. The primary goal of this project is to provide sufficient storage facilities, basic feed piping, and a temporary digested liquid biosolids load-out facility by March 21, 2016; thereby, reducing the need to incinerate. The MACT compliance date will be 278 days from Contract S84's 6/17/15 Notice to Proceed (NTP).
- 6. ECONOMIC IMPACT: With the planned increase in or expansion of beneficial re-use of biosolids facilitated by this project, the SWWTP will have the necessary infrastructure to facilitate the maximum beneficial agricultural use of the plant's biosolids by land application. With the elimination of incineration at SWWTP, there will be a corresponding improvement in air quality due to the elimination of the incinerator emissions. Both of these items are beneficial environmental advantages of this project since the City of Columbus Green Action Plan specifically calls for expanded reuse of biosolids and reduction of incineration. Land application uses are currently the lowest cost method for biosolids utilization. Expansion of these beneficial uses presents an economic advantage. No community outreach impact is considered for this project.
- 7. <u>FISCAL IMPACT:</u> This ordinance authorizes the appropriation and transfer of funds from the Sanitary Sewer Reserve Fund to the Sanitary Sewer General Obligation (G.O.) Bond Fund, Fund 664; to authorize the expenditure of \$3,739,887.00 from the G.O. Bond Fund, Fund 664 and to amend the 2015 Capital Improvement Budget to establish sufficient budget authority for this ordinance. Monies for this contract from the Sanitary Sewer Reserve Fund will be provided from a future Bond Sale via the transfer detailed in this ordinance.

To authorize the Director of Public Utilities to modify (Modification No.1) an existing agreement with Black & Veatch Corporation for the Southerly Wastewater Treatment Plant (SWWTP) Biosolids Land Application Facility project; to authorize the appropriation and transfer of funds from the Sanitary Sewer Reserve Fund to the Sanitary Sewer General Obligation (G.O.) Bond Fund; to authorize the expenditure of \$3,739,887.00 from the Sanitary Sewer General Obligation (G.O.) Bond Fund; to amend the 2015 Capital Improvements Budget; and to declare an emergency. (\$3,739,887.00)

WHEREAS, the City has been working on incinerator upgrade designs to meet a Maximum Achievable Control Technology Standards (MACT) compliance date of March 21, 2016; and

WHEREAS, this project will provide infrastructure to the SWWTP in order to facilitate the maximum beneficial agricultural use of the plant's biosolids by land application; and

WHEREAS, the primary goal of this project is to provide sufficient storage facilities and basic feed piping and pumping by March 21, 2016; thereby, reducing the need to incinerate; and

WHEREAS, after the MACT compliance date, construction of facilities will be completed to permanently eliminate the need to incinerate; and

WHEREAS, Contract No. EL016159 with Black & Veatch Corporation for \$3,221,708.00 was authorized by Ord 1608-2014; passed July 21, 2014; executed by the Director on September 02, 2014, approved by the City Attorney on September 10, 2014; and certified by the Auditor's office September 10, 2014; and

WHEREAS, it is necessary to authorize the Director of the Department of Public Utilities to modify the existing agreement; and

WHEREAS, it is necessary to authorize the appropriation and transfer of funds from the Sanitary Sewer Reserve Fund to the Sanitary Sewer General Obligation (G.O.) Bond Fund; and

WHEREAS, it is necessary for City Council to authorize the expenditure of funds from the Sanitary Sewer System GO Bond Fund, Fund 664; and

WHEREAS, it is necessary to amend the 2015 Capital Improvements Budget for purposes of creating and providing sufficient budget authority for the aforementioned expenditures; and

WHEREAS, it is necessary to transfer funds from the Sanitary Sewer Reserve Fund in the amount \$3,739,887.00 for this project; and

WHEREAS, this transfer should be considered as a temporary funding method; and

WHEREAS, the aggregate principal amount of obligations which the City will issue to finance this modification is presently expected to not exceed \$3,739,887.00; and

WHEREAS, the City will sell notes or bonds to fund this project and will reimburse the Sanitary Reserve Fund; and

WHEREAS, the City anticipates incurring certain Original Expenditures (as defined in Section 1.150-2(c) of the Treasury Regulations (the "Treasury Regulations") promulgated pursuant to the Internal Revenue Code of 1986, as amended) with respect to the project described in this ordinance (the "Project"); and

WHEREAS, an emergency exists in the usual daily operations of the Division of Sewerage and Drainage, Department of Public Utilities, in that it is immediately necessary to authorize the Director to modify (Modification No.1) an existing agreement with Black & Veatch Corporation for the Southerly Wastewater Treatment Plant (SWWTP) Biosolids Land Application Facility project at the earliest practicable date; Now, Therefore,

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF COLUMBUS:

SECTION 1. That the Director of Public Utilities be, and hereby is, to modify (Modification No.1) an existing agreement with Black & Veatch Corporation, 4016 Townsfair Way, Columbus, Ohio 43219 for the Southerly Wastewater Treatment Plant (SWWTP) Biosolids Land Application Facility project in accordance with the terms and conditions as shown in the agreement on file in the office of the Division of Sewerage and Drainage.

SECTION 2. That from the unappropriated monies in the Sanitary Sewer Reserve Fund No. 654, and from all monies estimated to come into said fund from any and all sources, and unappropriated for any other purpose during the fiscal year ending December 31, 2015, the sum of \$3,739,887.00 is hereby appropriated to the Division of Sewerage and Drainage:

File #: 1756-2015, Version: 1

Division 60-05 | OCA Code 655225 | Object Level One 10 | Object Level Three 5502.

SECTION 3. That the City Auditor is hereby authorized to transfer and appropriate a total \$3,739,887.00 from the Sanitary Sewer Reserve Fund to the Sanitary Sewer Bond Fund, Fund 664, into the Southerly Wastewater Treatment Plant (SWWTP) Biosolids Land Application Facility project, CIP 650356-100002, at such time as deemed necessary by the Auditor, or so much thereof as may be necessary in the following manner: Division 60-05 | 643562 | Object Level 06 | Object Level Three 6676

SECTION 4. That the 2015 Capital Improvements Budget is hereby amended as follows:

Project No. | Project Name | Current Authority | Revised Authority | (Change)

650261-101000 | WWTF Professional Construction Management | \$0 | \$5,395,200 | +\$5,395,200 (re-establish funding from ordinance 1723-2015) 650261-101000 | WWTF Professional Construction Management | \$5,395,200 | \$2,914,313 | (-\$2,480,887) 650356-100002 | SWWTP Biosolids Land App. Facility | \$1,259,000 | \$3,739,887 | (+\$2,480,887)

SECTION 5. That the Director of Public Utilities be and hereby is authorized to expend up to \$3,739,887.00 for the Southerly Wastewater Treatment Plant (SWWTP) Biosolids Land Application Facility project in the following manner for the Div. 60-05 | Obj. Lvl 3 6676:

650356-100002 | SWWTP Biosolids Land Application Facility project | 643562 | \$3,739,887.00

SECTION 6. That the said firm, Black & Veatch Corporation, shall perform the work to the satisfaction of the Director of Public Utilities and the Administrator of the Division of Sewerage and Drainage.

SECTION 7. That the City Auditor is hereby authorized to transfer any unencumbered balance in the project account to the unallocated balance within the same fund upon receipt of certification by the Director of the Department administering said project that the project has been completed and the monies are no longer required for said project; except that no transfer shall be made from a project by monies from more than one source.

SECTION 8. That the City Auditor is authorized to establish proper project accounting numbers as appropriate.

SECTION 9. That the City Auditor is authorized to make any accounting changes to revise the funding source for all contracts or contract modifications associated with this ordinance.

SECTION 10. That upon obtaining other funds for the purpose of funding sanitary sewer system capital improvement work, the City Auditor is hereby authorized to repay the Sanitary Sewer Reserve Fund the amount transferred above (Section 3), and said funds are hereby deemed appropriated for such purposes.

SECTION 11. That the City intends that this Ordinance constitute an "official intent" for purposes of Section 1.150-2(e) of the Treasury Regulations, and that the City reasonably expects to reimburse itself for certain Original Expenditures incurred with respect to the Project from the proceeds of obligations to be issued by the City in a principal amount currently estimated to be \$3,739,887.00 (the "Obligations").

The City intends to make a reimbursement allocation on its books for the Original Expenditures not later than eighteen months following the later to occur of the date of the Original Expenditure to be reimbursed or the date the Project for which such Original Expenditures were made is "placed in service" within the meaning of Treasury Regulations Section 1.150-2(c). Upon the issuance of the Obligations, the proceeds of such Obligations shall be used to reimburse Sanitary/Sewer Reserve Fund 654, which is the fund from which the advance for costs of the Project will be made.

SECTION 12. That the funds necessary to carry out the purpose of this ordinance are hereby deemed appropriated, and

File #: 1756-2015, Version: 1

the City Auditor shall establish such accounting codes as necessary.

SECTION 13. That for the reasons stated in the preamble hereto, which is hereby made a part hereof, this ordinance is hereby declared to be an emergency measure which shall take effect and be in force from and after its passage and approval by the Mayor, or ten days after passage if the Mayor neither approves nor vetoes the same.