



Legislation Details (With Text)

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Title: To authorize the Director of Public Utilities to enter into a professional engineering agreement with Brown and Caldwell for the SWWTP Digestion Process Expansion project; to authorize the appropriation and transfer of \$2,461,829.00 from the Sanitary Sewer Reserve Fund to the Sanitary Sewer General Obligation (G.O.) Bond Fund and to authorize the expenditure of \$2,461,829.00 from the Sanitary Sewer General Obligation (G.O.) Bond Fund; and to amend the 2016 Capital Improvements Budget. (\$2,461,829.00)

Sponsors:

Indexes:

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Attachments: 1. Ord 0846-2016 SWIF Digestion Process Expansion 650353-3, 2. Ord 0846-2016 CIP 353.3 Director's Legislation Information Sheet, 3. Ord 0846-2016 Financial Template SWWTP Digestion Process Expansion

Date	Ver.	Action By	Action	Result
5/12/2016	1	CITY CLERK	Attest	
5/11/2016	1	MAYOR	Signed	
5/9/2016	1	COUNCIL PRESIDENT	Signed	
5/9/2016	1	Columbus City Council	Approved	Pass
5/2/2016	1	Columbus City Council	Read for the First Time	

1. BACKGROUND: This legislation authorizes the Director of Public Utilities to enter into an engineering agreement with Brown and Caldwell for Professional Engineering Services (Design Professional, or “DP” services) for the SWWTP Digestion Process Expansion project. Brown and Caldwell will provide Preliminary Design Services (Step 1), Detailed Design and Bidding Services (Step 2), and Services During Construction (Step 3).

The initial phase of this contract will provide Professional Engineering Services for Preliminary Design (Step 1) and Professional Engineering Services for Detailed Design and Bidding Services (Step 2). A future modification is anticipated as the third phase of Professional Engineering Services for Engineering Services During Construction (Step 3).

The scope of work for this project generally includes reconfiguring Methane Phase Digester 6 (MPD 6), reconfiguring and repurposing Acid Phase Digesters (APD) 1, 2, and 3, and building a new seventh methane phase digester (MPD 7). This project will effectively discontinue SWWTP’s acid phase digestion process and will repurpose APDs 2 and 3 as thickened primary sludge (TPS) storage tanks and repurpose APD 1 as a predigestion TPS/Thickened Waste Activated Sludge (TWAS) blending tank. This project will also provide a comprehensive analysis of identified alternative treatment technologies and digestion process configurations for producing Class B biosolids.

Step 1 of this project, Preliminary Design, will include the followings tasks: 1. Conduct a site investigation that includes discipline specific visual observations of the existing facility. 2. Review existing data and reports to verify

the design and operational deficiencies of the current two-phase anaerobic digestion system. 3. Review and revise the SWWTP Digester System Shut-Down SOP. 4. Review the current digester cover access walkway design. 5. Review solids loading assumptions from the Chemically Enhanced Primary Treatment (CEPT) Facility design. 6. Conduct an alternative analysis of Class B digestion process configurations. 7. Generate a Detailed Design Manual (DDM) with preliminary drawings, study findings, and equipment specifications. 8. Revise and submit the Final DDM.

Upon the City's approval of the DDM, Step 2, Detailed Design will include preparing construction contract documents (including specifications and drawings) in accordance with City of Columbus Division of Sewerage and Drainage standards, guidelines, and directions for construction and implementation of the proposed facility. Detailed Design will also include attendance at plan and specification review meetings, assisting in negotiations, permitting, and other matters with U.S. EPA, Ohio EPA, and other government agencies as necessary, and bidding services (which includes assisting at the Pre-Bid Conference and bid opening, tabulating bids, making an award recommendation for lowest and best bid, and preparing Conformed to Contract documents).

A future modification will be requested for Step 3, Engineering Services During Construction, which will include technical project representation (TPR) duties, construction-phase engineering, start-up and commissioning assistance, and record documentation.

Construction Management Services will be performed by others.

2. **THE PROJECT TIMELINE:** The Professional Engineering Services Agreement is anticipated to be signed at the end of June 2016 and will provide Step 1, Preliminary Design Services, and Step 2, Detailed Design and Bidding Services. The Step 1, Preliminary Design Services, are anticipated to end in December 2016. Step 2, Detailed Design and Bidding Services, will begin once the Detailed Design Manual (DDM) is approved. Step 2, Detailed Design and Bidding Services, are anticipated to end in the fourth quarter of 2017. Bids will be received in the first quarter of 2018 and it is anticipated that the Notice to Proceed of the construction contract will occur in the second quarter of 2018. The Professional Engineering Services Contract will continue beyond completion of construction to provide "as-built" record drawings of the constructed facilities.
3. **EMERGENCY DESIGNATION:** An emergency designation **is not requested** at this time.
4. **CONTRACT COMPLIANCE No.:** 94-1446346 | MAJ | Exp. 08/26/2017
5. **ENVIRONMENTAL IMPACT:** SWWTP Digestion Process Expansion project will increase the beneficial re-use of biosolids in the liquid land application and deep row hybrid poplar (DRHP) programs by providing more anaerobically-digested Class B biosolids. The primary goal of this project is to provide sufficient expanded anaerobic digestion facilities and all necessary associated piping and pumping capacity to successfully accommodate the additional solids produced by the Chemically Enhanced Primary Treatment (CEPT) process and the additional solids loadings to the SWWTP resulting from the anticipated growth of the City of Columbus.
6. **FISCAL IMPACT:** This ordinance authorizes the appropriation and transfer of \$2,461,829.00 from the Sanitary Sewer Reserve Fund to the Sanitary Sewer General Obligation (G.O.) Bond Fund, Fund 6109; to authorize the creation of sufficient budget authority; to authorize the expenditure of up to \$2,461,829.00 from the G.O. Bond Fund, Fund 6109 and amend the 2016 Capital Improvements 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. 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 enter into a professional engineering agreement with Brown and Caldwell for the SWWTP Digestion Process Expansion project; to authorize the appropriation and transfer of \$2,461,829.00 from the Sanitary Sewer Reserve Fund to the Sanitary Sewer General Obligation (G.O.) Bond Fund and to authorize the expenditure of \$2,461,829.00 from the Sanitary Sewer General Obligation (G.O.) Bond Fund; and to amend the 2016

Capital Improvements Budget. (\$2,461,829.00)

WHEREAS, SWWTP Digestion Process Expansion project generally includes reconfiguring Methane Phase Digester 6 (MPD 6), reconfiguring and repurposing Acid Phase Digesters (APD) 1, 2, and 3, and building a new seventh methane phase digester (MPD 7); and

WHEREAS, Brown and Caldwell will provide Professional Engineering Services for Preliminary Design (Step 1), Professional Engineering Services for Detailed Design and Bidding Services (Step 2), and Professional Engineering Services for Engineering Services During Construction (Step 3); and

WHEREAS, a future modification is anticipated as the third phase of the project; and.

WHEREAS, it is necessary to transfer \$2,461,829.00 from the Sanitary Sewer Reserve Fund to the Sanitary Sewer General Obligation (G.O.) Bond Fund; and

WHEREAS, it is necessary to authorize an expenditure of \$2,461,829.00 from the Sanitary Sewer General Obligation (G.O.) Bond Fund 6109; and

WHEREAS, it is necessary to amend the 2016 Capital Improvements Budget for purposes of creating and providing sufficient budget authority for the aforementioned expenditures; and

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

WHEREAS, the aggregated principal amount of obligations which the City will issue to finance this project is presently expected not to exceed \$2,461,829.00; 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, it has become necessary in the usual daily operation of the Department of Public Utilities, Division of Sewerage and Drainage, to authorize the Director to enter into an engineering agreement with Brown and Caldwell for the SWWTP Digestion Process Expansion project at the earliest practical date; **now, therefore**

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

SECTION 1. That the Director of Public Utilities is hereby authorized to enter into a professional engineering services agreement with Brown and Caldwell 4700 Lakehurst Court, Columbus, Ohio 43016, for the SWWTP Digestion Process Expansion 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. 6102, Sub-fund 610201, 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, 2016, the sum of \$2,461,829.00 is hereby appropriated to the Division of Sewerage and Drainage.

SECTION 3. That the City Auditor is hereby authorized to transfer and appropriate a total of \$2,461,829.00 from the Sanitary Sewer Reserve Fund to the Sanitary Sewer Bond Fund, Fund 6109, into SWWTP Digestion Process Expansion project, 650353-100003, at such time as deemed necessary by the Auditor, or so much thereof as may be necessary per the account codes in the attachment to this ordinance or so much thereof as may be necessary per the account codes in the

attachment to this ordinance.

SECTION 4. That the Director of Public Utilities be and hereby is authorized to expend up to \$2,461,829.00 from the Sanitary Sewer General Obligation Bond Fund, Fund 6109 | Div. 60-05 | per the account codes in the attachment to this ordinance.

SECTION 5. That the 2016 Capital Improvements Budget is hereby amended as follows:

Fund | Project Number | Project Name | Current | Revised | Change

6109 | P650725-100002 | Large Diameter Sewer Rehab - Alum Creek Trunk North Section/Alum Creek Subtrunk Sewer | \$500,000 | \$89,171 | (-\$410,829)

6109 | P650353-100003 | SWWTP Digestion Process Expansion | \$2,051,000 | \$2,461,829 | (+\$410,829)

SECTION 6: That the said engineering company, Brown and Caldwell, 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 \$2,461,829 (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 6102, which is the fund from which the advance for costs of the Project will be made.

SECTION 12. That this ordinance shall take effect and be in force from and after the earliest period allowed by law.