



## Legislation Text

File #: 3049-2019, Version: 1

**1. BACKGROUND:** During the original contract the Engineer conducted a review of the existing sewer system, with the purpose of planning the implementation of a real time control (RTC) strategy. The goal of RTC is to reduce overflows, plant bypasses, and DOSD operational costs. The original phase of the contract identified areas within the collection system that would benefit from RTC, and those that would not. Operational constraints and existing modeling was studied and used to propose the initial RTC implementation plan.

This contract renewal will expand the RT-DSS developed in Modification No.1. Rainfall data and new flow monitor locations will be used to develop optimized control strategies for dewatering the OARS tunnel and operating CEPT. Historical rainfall data will be added to the RT-DSS screens and a “flight-simulator” will be developed that will allow the operators to simulate operation of the collection system during different rain events using the RT-DSS interface providing modeled recommendations.

This Contract renewal also will provide BLU-X engineering portal for long term continuous data viewing. Sensors that are integrated with SCADA will be shown in the engineering portal in an organized fashion. The engineering portal will also include a map of the location of rain gauges, level sensors, meters’ temperature sensors, and flow monitors currently integrated into the SCADA system or One-Rain system.

The planning area is 99 (Citywide).

**1.1 Amount of additional funds to be expended: \$519,832.41**

Original Contract	\$ 741,036.22	PO003393
Modification 1	\$ 519,832.41	PO153805
Renewal 1 (this ordinance)	\$ 518,273.78 (TBD)	
<b>CONTRACT TOTAL</b>	<b>\$1,779,142.41</b>	

**1.2 Reasons additional goods/services could not be foreseen:**

Renewals were planned for this project/contract.

**1.3 Reasons other procurement processes are not used:**

The current consulting firm has spent significant time and resources familiarizing themselves with the City’s sewer system, hydraulic models, and operational constraints. They have put together the plan for how they will implement the RTC technologies. There would be duplication of these efforts if it were to be bid out at this time. Bidding the project again at this time, would slow the progress and delay RTC implementation.

**1.4 How cost of modification was determined:**

The cost was determined by negotiations between EmNet, LLC and DOSD

**2. PROJECT TIMELINE:** It is anticipated that the work should be complete by the end of 2020.

**3. CONTRACT COMPLIANCE NO.:** 20-1118177 | MAJ | EXP 11/02/2020 | 001012

**4. EMERGENCY DESIGNATION:** Emergency designation **is not** requested.

**5. ECONOMIC IMPACT:** Real time control is expected to optimize the City’s wastewater treatment plants by

maximizing sewer storage and conveyance, maximizing treatment, and reducing overflows. Reduction of overflow will have positive environmental benefits to receiving streams and public health.

**6. FISCAL IMPACT:** This ordinance authorizes the expenditure of up to \$518,273.78 from the Sanitary Sewer General Obligation Bond Fund 6109 and amends the 2019 Capital Improvements Budget to provide sufficient budget authority.

To authorize the Director of Public Utilities to renew an existing engineering agreement with EmNet, LLC for the Real Time Control - Sewer System Optimization project; to expend up to \$518,273.78 from the Sanitary Sewer General Obligation Bond Fund; and to amend the 2019 Capital Improvements Budget. (\$518,273.78)

**WHEREAS**, it is necessary to renew (renewal #1) an existing engineering agreement with EmNet, LLC for the Real Time Control - Sewer System Optimization, CIP 650009-100002; and

**WHEREAS**, the goal of Real Time Control (RTC) is to reduce overflows, plant bypasses, and DOSD operational costs; and

**WHEREAS**, the original contract number, PO003393, with EmNet, LLC was authorized by Ordinance No. 2882-2015, passed by the Columbus City Council on December 14, 2015; executed by the Director on March 9, 2016, approved by the City Attorney on March 16, 2016; certified by the City Auditor March 17, 2016; and

**WHEREAS**, the original contract number, PO003393, with EmNet, LLC was modified by Ordinance No. 3201-2018, passed by the Columbus City Council on December 10, 2018; executed by the Director on January 10, 2019, approved by the City Attorney on January 18, 2019; certified by the City Auditor on January 18, 2019; and

**WHEREAS**, it is necessary to authorize the expenditure of up to \$518,273.78 from the Sanitary Sewer General Obligation Bond Fund 6109; and

**WHEREAS**, it is necessary to amend the 2019 Capital Improvements Budget for purposes of providing sufficient budget authority for the aforementioned expenditures; 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 of Public Utilities to renew (renewal #1) an existing engineering agreement with EmNet, LLC for the Real Time Control - Sewer System Optimization project, CIP 650009-100002 for the preservation of the public health, peace, property, safety and welfare; **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 renew (renewal #1) an existing engineering agreement with EmNet, LLC, 121 S. Niles Ave., Suite 22, South Bend, IN 46617 for the Real Time Control - Sewer System Optimization project, CIP # 650009-100002 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 the Director of Public Utilities is hereby authorized to expend up to \$518,273.78 for the Real Time Control - Sewer System Optimization Project per the accounting codes detailed in the attachment to this ordinance.

**SECTION 3.** That the 2019 Capital Improvements Budget is hereby amended as follows:

**Fund No. | Project No. | Project Name | Current | Revised | Net Change**

6109 | 650009-100001 | Real Time Control Alum Creek Storm Tanks | \$150,000 | \$56,726 | (-\$93,274)

6109 | 650009-100002 | Real Time Control - Sewer System Optimization | \$425,000 | \$518,274 | +\$93,274

**SECTION 4.** That the said firm, EmNet, LLC, shall perform the work to the satisfaction of the Director of Public Utilities and the Administrator of the Division of Sewerage and Drainage.

**SECTION 5.** 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 6.** That the City Auditor is authorized to establish proper project accounting numbers as appropriate.

**SECTION 7.** 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 8.** That the funds necessary to carry out the purpose of this Ordinance are hereby deemed appropriated, and the City Auditor shall establish such accounting codes as necessary.

**SECTION 9.** That this ordinance shall take effect and be in force from and after the earliest period allowed by law.