



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Board of Directors

*Meeting of the
Environmental Quality and Operations Committee*

*5000 Overlook Avenue, SW, Room 407
Thursday, April 20, 2017
9:30 a.m.*

	I. Call to Order	Howard Gibbs Vice Chair
9:30 a.m.	II. AWTP Status Updates 1. BPAWTP Performance	Aklile Tesfaye
9:45 a.m.	III. Security Measures	Steve Caldwell
10:00 a.m.	IV. Action Items	John Bosley/Len Benson

A. Fact Sheet Overview

Joint Use

1. [Contract No. 17-PR-DFM-02 - Biosolids Building Roof Replacement - An Exterior, Inc.](#)
2. [Contract No. 16-PR-DWT-13A – Preliminary Treatment Facility Grit/Screening Hauling, Urban Service Systems Corp.](#)
3. [Contract No. 16-PR-DMS-43 – Repair and Rehabilitation of Various Process Assets, Electric Motor and Contracting Co., Inc.](#)
4. [DCFA #463-WSA - Construction Management Services, Anacostia River Combined Sewer Overflow \(CSO\) Control Projects, Division Z – Poplar Point Pumping Station Replacement and Main Outfall Sewers Diversion, AECOM Services of DC](#)
5. [Contract No. #130060 – Potomac Pumping Station Rehabilitation Phase III, American Contracting & Environmental Services](#)
6. [DCFA #485 – Condition Assessment of Large Diameter Water Mains and Major Sewers \(IDIQ\), Pure Technologies, Ltd](#)
7. [DCFA #490 – Condition Assessment of Large Diameter Water Mains and Major Sewers \(IDIQ\), Arcadis District of Columbia, PC](#)

Non-Joint Use

8. [Contract No. #070110 - Rehabilitation and Upgrade of the Fort Reno Pumping Station, CPP Construction Company](#)
9. [Contract No. #140160 – Local Sewer Rehabilitation #1, SAK Construction LLC](#)
10. [Contract No. #150170 – Small Diameter Water Main Cleaning and Lining 11C, J. Fletcher Creamer & Son, Inc.](#)

10:30 a.m. V. Water Quality Monitoring Charles Kiely

1. Coliform Testing
2. LCR Compliance Testing

10:40 a.m. VI. Other Business/Emerging Issues George Hawkins

1. Recommendation Re WSRF Fee – Chain Bridge and Battery Place Cooperative
2. Fact Sheet Format Revisions

11:00 a.m. VII. Adjournment Howard Gibbs
Vice Chair

* The DC Water Board of Directors may go into executive session at this meeting pursuant to the District of Columbia Open Meetings Act of 2010, if such action is approved by a majority vote of the Board members who constitute a quorum to discuss: matters prohibited from public disclosure pursuant to a court order or law under D.C. Official Code § 2-575(b)(1); contract negotiations under D.C. Official Code § 2-575(b)(1); legal, confidential or privileged matters under D.C. Official Code § 2-575(b)(4); collective bargaining negotiations under D.C. Official Code § 2-575(b)(5); facility security under D.C. Official Code § 2-575(b)(8); disciplinary matters under D.C. Official Code § 2-575(b)(9); personnel matters under D.C. Official Code § 2- 575(b)(10);proprietary matters under D.C. Official Code § 2-575(b)(11); decision in an adjudication action under D.C. Official Code § 2-575(b)(13); civil or criminal matters where disclosure to the public may harm the investigation under D.C. Official Code § 2-575(b)(14), and other matters provided in the Act.

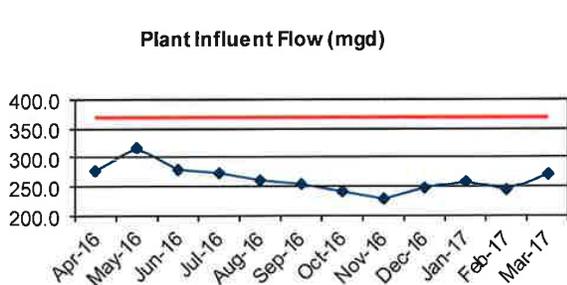
Follow-up Items from Prior Meetings:

1. Assistant General Manager, Blue Plains. In the Legend of the graph showing the ‘average Biosolids production and reuse cost’, change “series 1” to “Total Reuse Cost” and “series 2” to “Average Biosolids Produced (tons)”. **[Completed]**
2. Chief Procurement Officer, DC Water: Add a footnote on fact sheets indicating whether the prime contractors have a local office. **[Completed]**
3. Chief Engineer, DC Water: Prepare a presentation to the Committee regarding the progress of the St. Elizabeth’s Water Tank and proposed PRV projects. **[Scheduled for June 15th meeting]**
4. Chief Engineer, DC Water: Add a note on fact sheets indicating DC Water’s experience and satisfaction level with proposed contractors. **[To be discussed with Cmte at April 20th meeting]**
5. Chief Engineer, DC Water: Prepare a presentation to the Committee highlighting the policies and regulations for procurement of capital projects as set by the Governance Committee. **[To be scheduled]**

6. Manager, Department of Water Services: Going forward, provide fire hydrant status reports only on a quarterly basis. **[Completed]**
7. Assistant General Manager, Customer Care & Operations: Consider revising (lowering) the 1% or less, out-of-service fire hydrants goal. **[Scheduled for July 20th meeting]**
8. Assistant General Manager, Customer Care & Operations: Provide the Committee with information on costs spent to date, including internal staff time, to conduct the assessment regarding the issues concerning the Chain Bridge and Southern Cooperatives. **[To be discussed with Cmte at April 20th meeting]**
9. General Manager, DC Water: Provide recommendation regarding the issues concerning the Chain Bridge and Southern Cooperatives to the Committee. **[To be discussed with Cmte at April 20th meeting]**

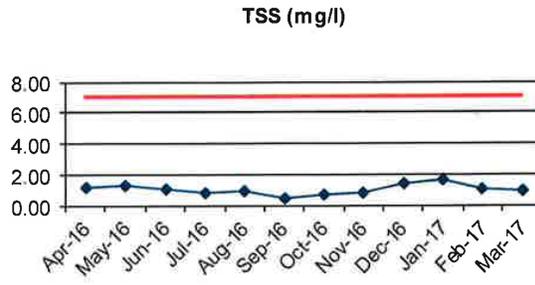
BLUE PLAINS ADVANCED WASTEWATER TREATMENT PLANT PERFORMANCE REPORT – MARCH 2017

Average plant performance for the month was excellent with all effluent parameters well below the seven-day and monthly NPDES permit requirements. The monthly average influent flow was 271 MGD. There was 10 MG of Excess Flow during this reporting period. The following figures compare the plant performance with the corresponding NPDES permit limits.



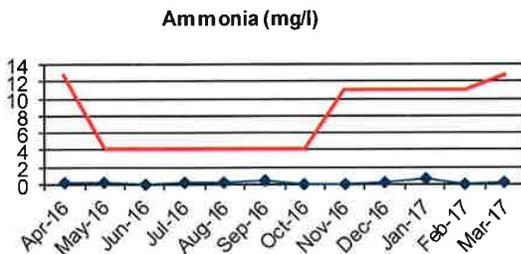
■ Influent Flow — Average Design Capacity

This graph illustrates the monthly average influent flow to the plant. The design average flow is 370 MGD. Blue Plains has a revised 4-hour peak flow capacity of 511 MGD through complete treatment. Flows up to 336 MGD in excess of the 511 MGD peak capacity receive primary treatment, disinfection and dechlorination.



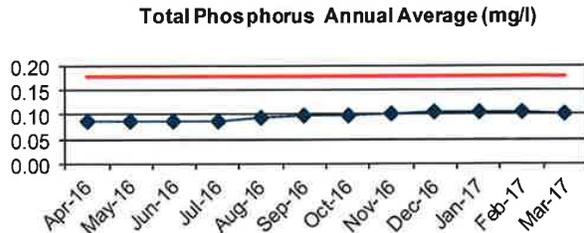
■ Effluent TSS — Permit Limit

Effluent Total Suspended Solids (TSS) is a measure of the amount of solid material that remains suspended after treatment. The effluent TSS concentration for the month averaged 0.91 mg/L, which is below the 7.0 mg/L permit limit.



■ Effluent NH3 — Permit Limit

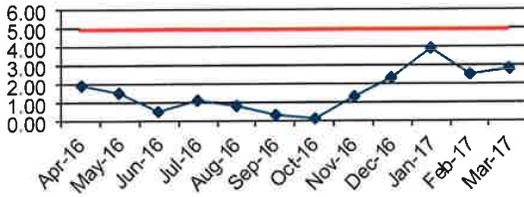
The Ammonia Nitrogen (NH₃-N) is a measure of the nitrogen found in ammonia. For the month, effluent NH₃-N concentration averaged 0.08 mg/L and is below the average 12.8 mg/L limit.



■ Effluent TP — Permit Limit

The Total Phosphorus (TP) is a measure of the particulate and dissolved phosphorus in the effluent. The annual average effluent TP concentration is 0.10 mg/L, which is below the 0.18 mg/L annual average limit.

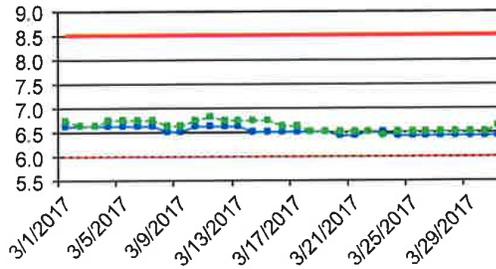
CBOD (mg/l)



■ Effluent CBOD — Permit Limit

Carbonaceous Biochemical Oxygen Demand (CBOD) is a measure of the amount of dissolved oxygen required for the decomposition of organic materials. The effluent CBOD concentration averaged 2.82 mg/L (partial month), which is below the 5.0 mg/L limit.

Min and Max Instantaneous pH

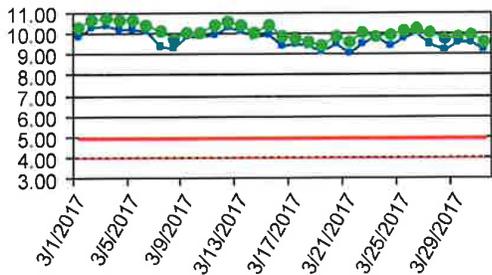


● MAX pH ■ MIN pH — Upper Limit - - Lower Limit

pH is a measure of the intensity of the alkalinity or acidity of the effluent. The minimum and maximum pH observed were 6.4 and 6.8 standard units, respectively. The pH was within the permit limits of 6.0 and 8.5 for minimum and maximum respectively.

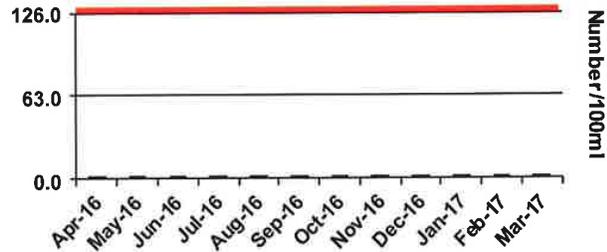
E. coli

Daily and Instantaneous Min DO



● MIN Daily Average ■ Instant MIN DO
— MIN Daily Average Limit - - Instant MIN Limit

Dissolved Oxygen (DO) is a measure of the atmospheric oxygen dissolved in wastewater. The DO readings for the month are within the permit limits. The minimum daily average is 9.4 mg/L. The minimum instantaneous DO reading is 9.0 mg/L. The minimum permit limits are 5.0 mg/L and 4.0 mg/L respectively.

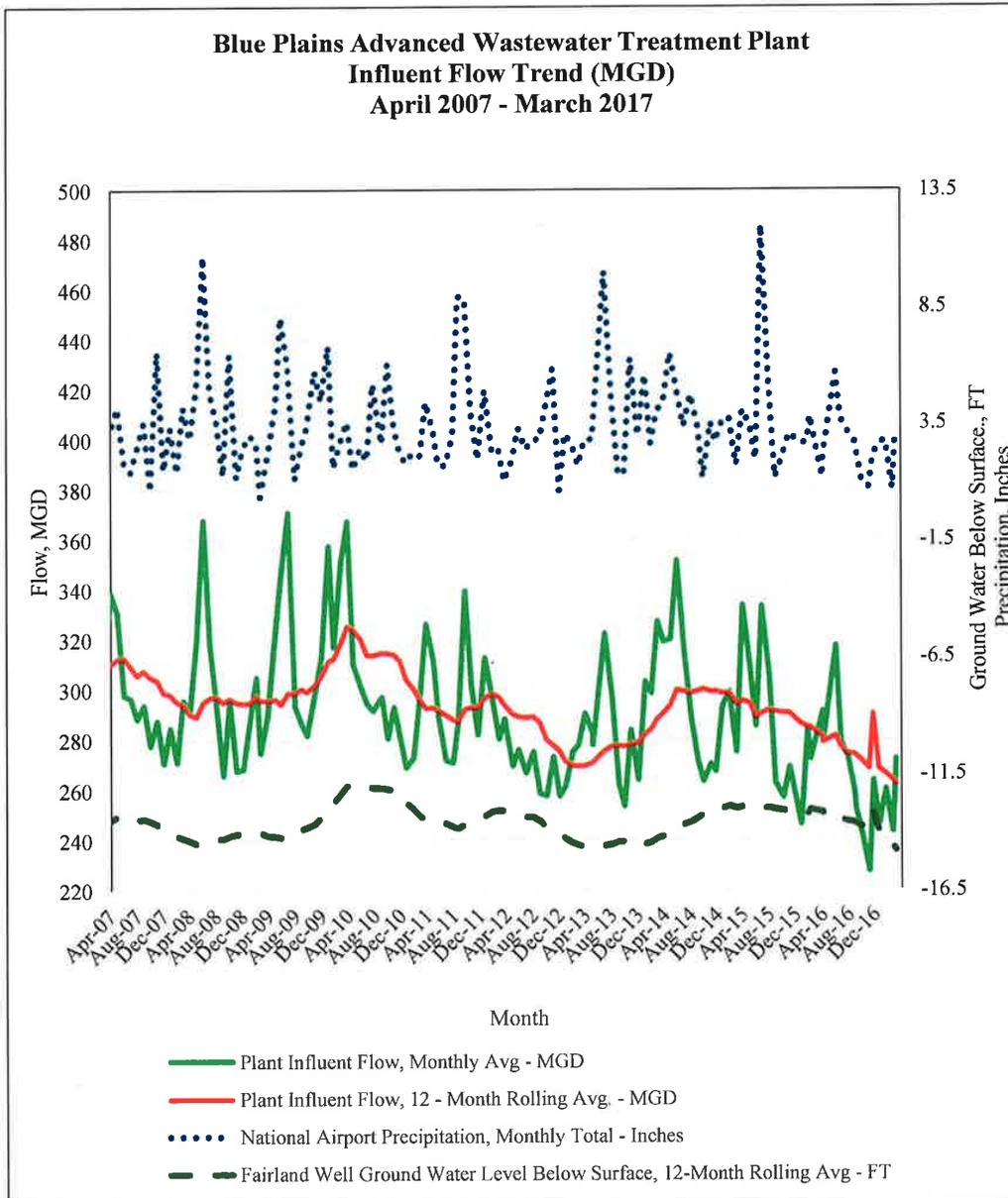


■ E. coli Geomean — Permit Limit

E.coli is an indicator of disease causing organisms (pathogens). The E.coli permit limit is 126/100mL. The E coli geometric mean is 1.4 /100mL, and well below the permit limit.

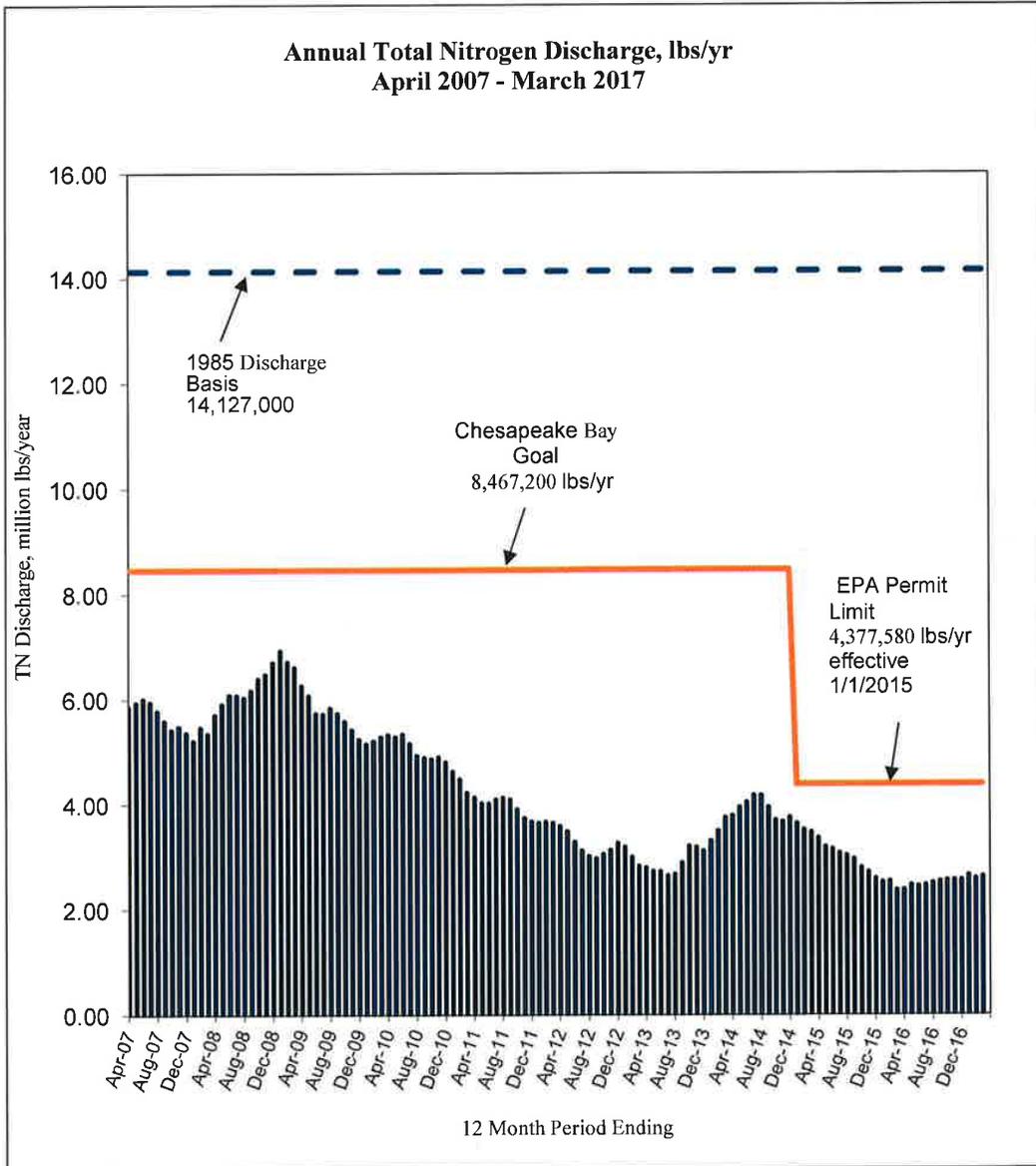
Plant Influent Flow Trend

The graph below shows influent flow trend to the plant over a 10-year period ending March 2017. While for any given month the flow is weather dependent, the 12-month rolling average influent flow has remained at or below 300 MGD since February 2011.



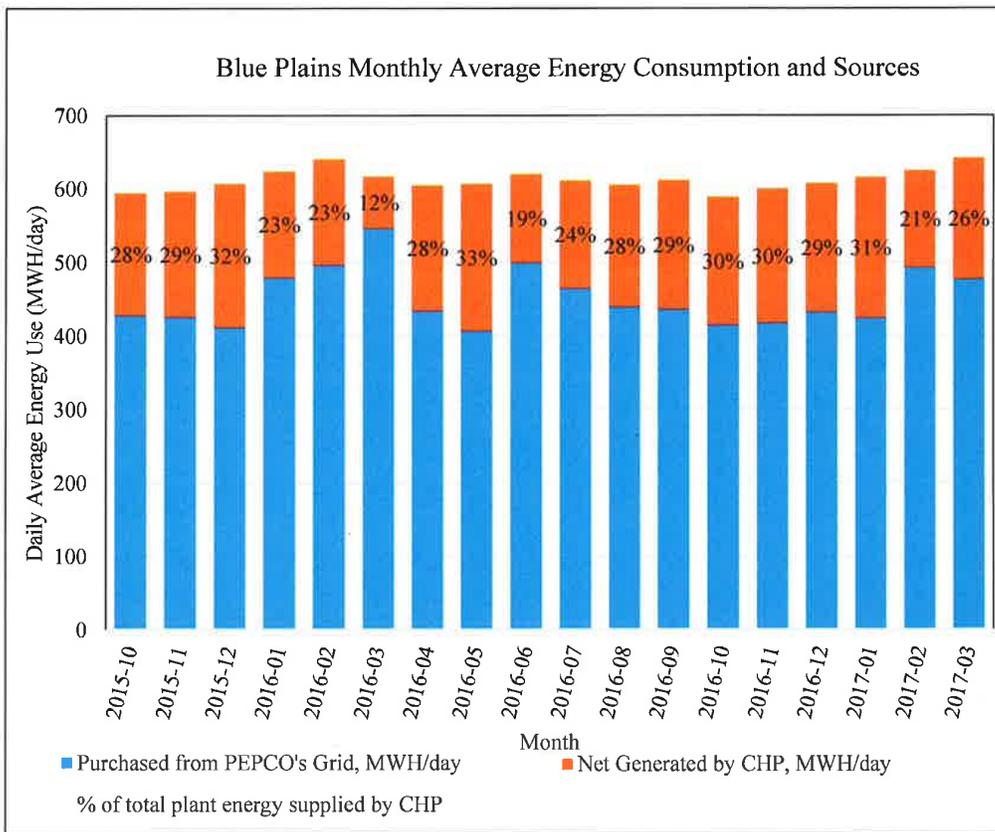
Blue Plains Total Nitrogen (TN) Removal - Performance

The graph below shows the rolling 12-month total effluent TN discharge, in pounds per year, over a 10-year period ending March 2017. During the month, the TN average concentration and total load in the effluent were 3.48 mg/L and 244,200 lbs respectively. The effluent quality is on track to remain below the NPDES permit annual load limit of 4,377,580 lbs/year.



Blue Plains Electricity Generation and Usage

In March 2017, the average energy consumed at Blue Plains was 642 megawatt hours per day (MWH/day) or 2.37 MWH of electricity per million gallon of wastewater processed through complete treatment. The Combined Heat and Power (CHP) facility generated an average of 165 MWH/day, making up for 26% of total energy consumed at Blue Plains. The remaining 477 MWH/day was purchased from PEPCO.



The graph above is based on power monitors installed at the Main Substation and CHP, and reflects average energy consumed at Blue Plains in MWH/day. Of the total use, the energy purchased from PEPCO and net energy supplied by CHP are indicated by the blue and orange highlights, respectively.

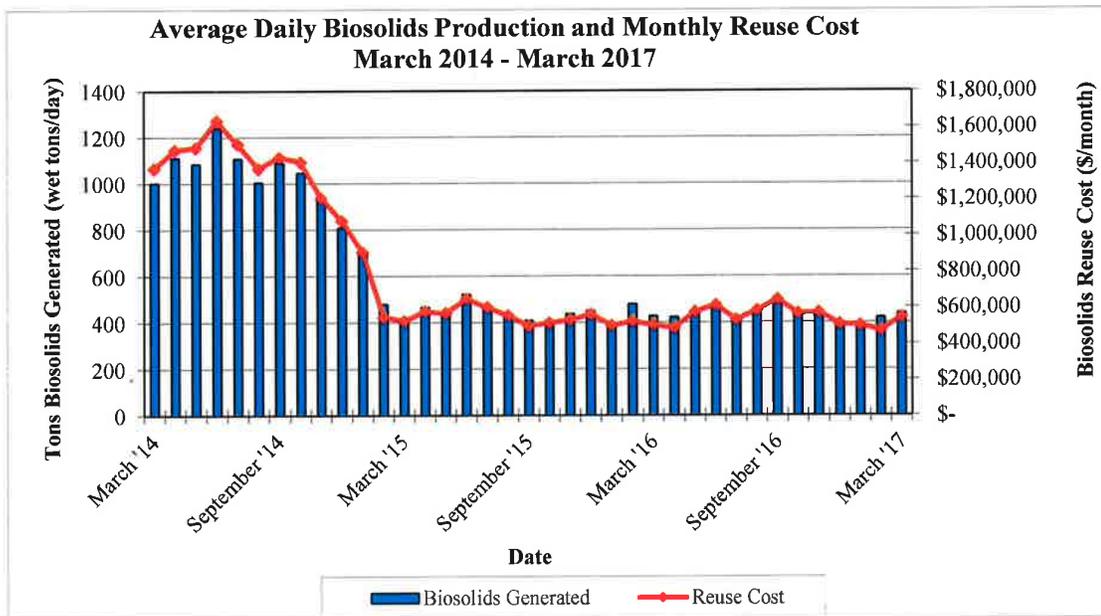
Combined Heat and Power (CHP) Performance

In March, the net electricity produced was higher as compared to the total net generated during the previous month. However, a scheduled corrective maintenance activity on a combustion turbine, completed during the first week of March, reduced generation capacity to ultimately result in 165 MWH/day or 26 percent of average daily energy use at Blue Plains.

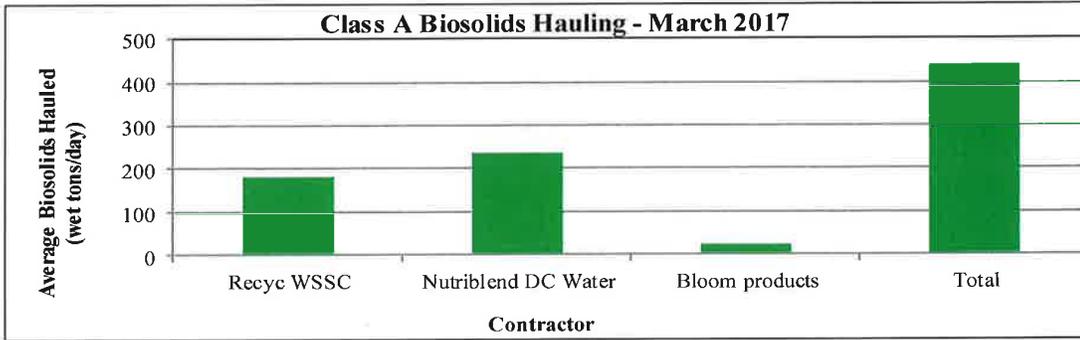
Inspections completed on a Heat Recovery Steam Generator (HRSG) – a waste heat boiler - revealed a need to schedule corrective maintenance to repair or replace refractory; a heat resistant material that contains heat and protects the interior of the boiler from thermal stress. Pepco Energy Services is currently finalizing a plan and schedule to execute corrective maintenance activities on this and the remaining two units. These activities require downtime of a combustion turbine paired with the corresponding waste heat boiler. The schedule will be implemented to repair one unit at a time, but will result in low generation of electricity during the month of April 2017.

RESOURCE RECOVERY

In March, biosolids hauling averaged 441 wet tons per day (wtpd). The average percent (%) solids for the Class A material was 30.1%. The graph below shows average daily biosolids produced and the associated monthly cost for reuse (transportation and application cost) for a three-year period ending March 2017. In March, diesel prices averaged \$2.75/gallon, and with the contractual fuel surcharge, the weighted average biosolids reuse cost (taking into account the marketed material) was \$40.49 per wet ton.

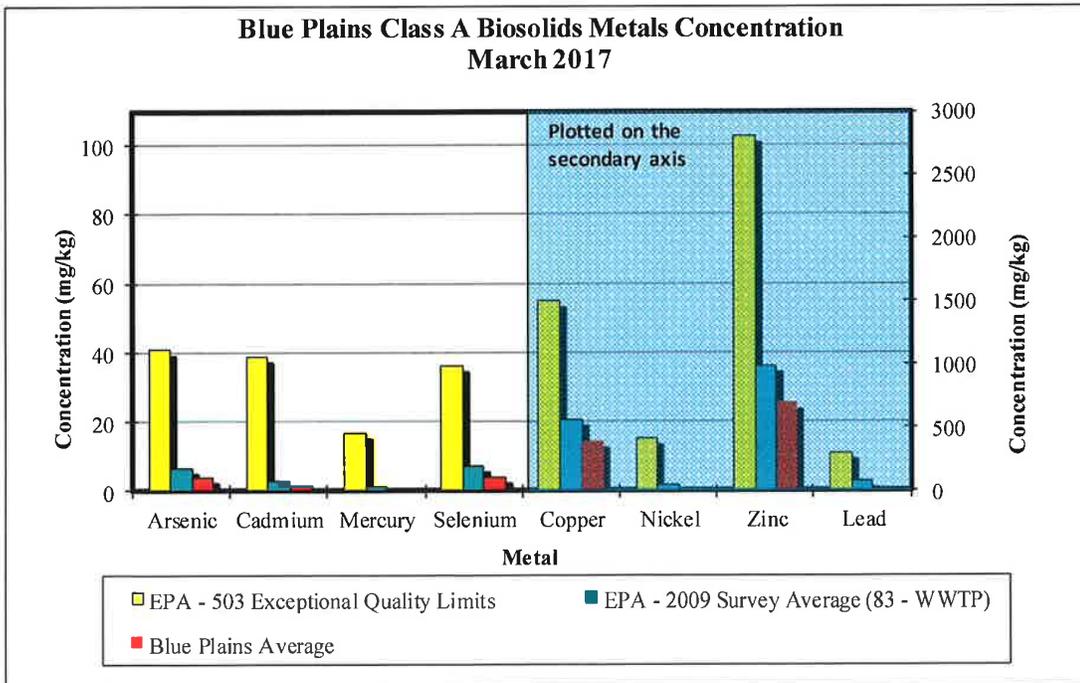


The average quantities of Class A biosolids transported and applied on farms by the two major contracts (WSSC's Recyc and DC Water's Nutriblend) and the quantities marketed as Bloom are shown on the graph below. In March, 750 wet tons of Bloom were distributed to 16 different customers.

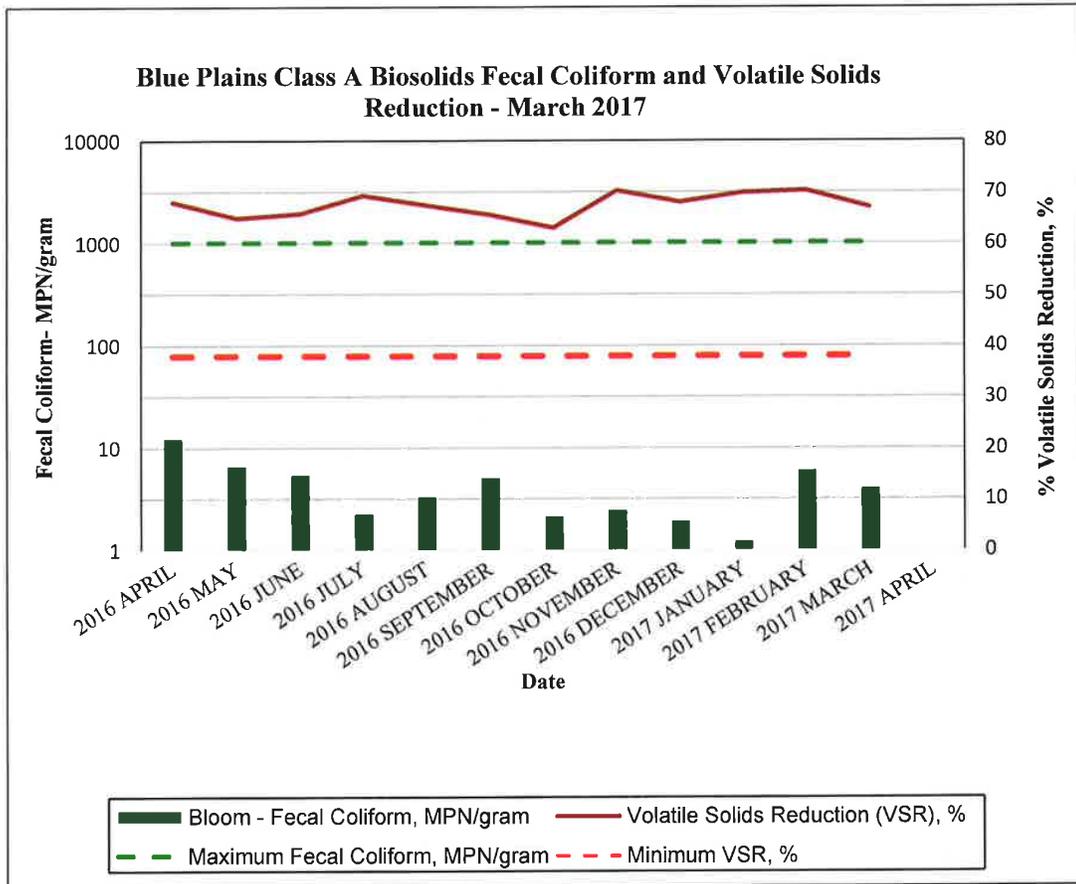


Product Quality

All biosolids produced during the month of March met Class A Exceptional Quality (EQ) requirements required by EPA. The graph below shows the EPA regulated heavy metals average concentrations in the Class A biosolids (Blue Plains Average). The concentrations are considerably below the regulated exceptional quality limits (EPA-503 Exceptional Quality Limits) and the national average (EPA-2009 Survey Average).

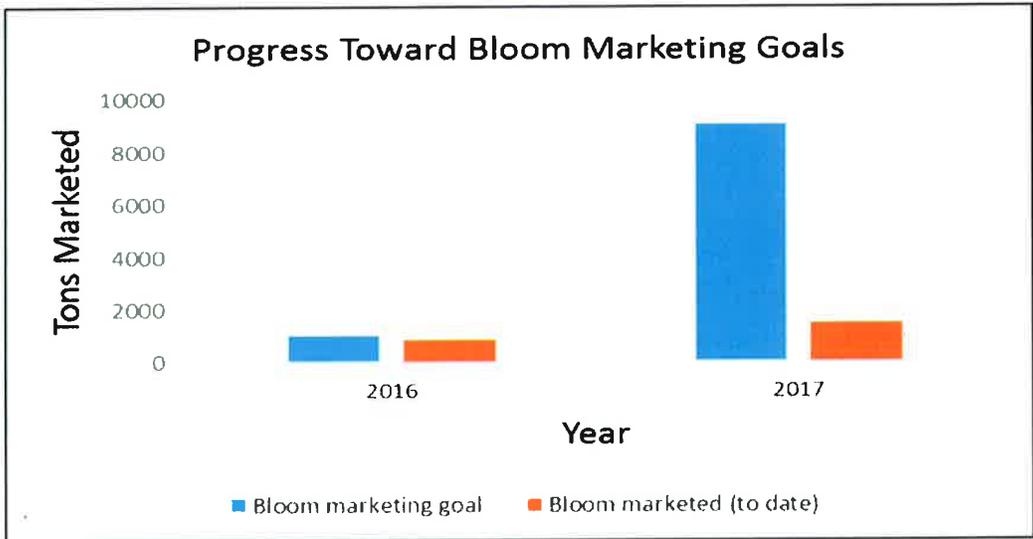


The graph below shows both Vector Attraction Reduction (VAR) and Fecal Coliform (FC) results in the Class A product, both of which are required to maintain the Class A Exceptional Quality (EQ) status. Vector Attraction Reduction is measured by the reduction in Volatile Solids (VS) or organic compounds that may be odorous and attract nuisance vectors such as flies and rodents. DC Water anaerobic digesters reduced VS by over 65 percent, well above the required 38 percent minimum. In addition, the graph shows fecal coliforms levels in the Class A product. Fecal coliforms are indicators of disease causing organism (pathogens), and must be below 1,000 MPN/gram to meet Class A standards. The fecal coliform levels in the Class A product are two or three orders of magnitude less than the maximum allowable level.



Bloom Marketing

Staff received delivery of a new piece of equipment this month, a soil blender. We can now make customized blends for customers, and begin to develop new products for sale in the market. The National Park Service (NPS) is using a mulch/Bloom mix for use in DC on a demonstration basis. Once demonstration is complete and successful, NPS will purchase more for other sites in the city.



Distribution and Marketing Permit Update

Currently, the Bloom program possesses permits to distribute and market Bloom in Washington DC, Maryland, and Pennsylvania. Staff is working with Maryland Department of the Environment (MDE) to obtain a letter of authorization for potential soil blenders, a requirement for their use of biosolids products. The requirement is simply for “written authorization” from MDE, but it is unclear what is required to obtain “written authorization”. Staff is meeting with MDE to determine this and develop a template for soil blenders. The application for the Virginia distribution and marketing permit was submitted and under review by the Virginia Department of Environmental Quality. Receipt of the final draft permit is expected by summer of this year.

CLEAN WATER QUALITY AND TECHNOLOGY

The Department of Clean Water Quality and Technology includes the research and development, pretreatment and laboratory programs. A summary of activities for each group is provided below.

Research and Development

The research and development team focuses on research topics associated with the planning and operation of Blue Plains. The current focus of research is to optimize treatment process capacity and to work toward achieving energy neutral operations.

Improving Hydrolysis to Increase Solids Destruction and Production of Biogas in Anaerobic Digesters

Introduction

DC Water commissioned its new solids treatment train at Blue Plains AWTP in October of 2014. The new train is comprised of thermal hydrolysis followed by anaerobic digestion and dewatering. Biogas is produced in the digesters from the biological degradation of organic material and this biogas is further converted to electricity and steam in a combined heat and power facility. The current volatile solids destruction in the digesters is approximately 65%. The research team is currently involved in a WERF study looking at understanding and improving hydrolysis in the anaerobic digester to improve the rate and extent of biogas production and thus energy recovery.

Like DC Water, a number of utilities are working towards intensification of their anaerobic digestion systems as an approach to help achieve energy neutrality. The drivers include the increased cost of energy, a desire to reduce carbon footprint, and opportunities to increase revenue streams through resource recovery. Anaerobic digestion is a multi-step process that includes hydrolysis (breakdown of particles and larger molecules), acidogenesis, acetogenesis, and methanogenesis (converting organic acids to biogas). In most cases, hydrolysis is the rate limiting step in the digestion process. This means hydrolysis limits the rate and extent of solids degradation and subsequent biogas production. If hydrolysis can be further improved, the full biogas potential and increased capacity of digesters can be realized.

The Water Environment Research Foundation and other agencies have supported research to better understand the impacts of solids pre-treatment strategies and co-digestion on anaerobic digester performance. However, there has not yet been much focus on improving the rate of hydrolysis. The goals of this project are to improve our understanding of the underlying factors that affect hydrolysis and evaluate approaches for increasing hydrolysis rates during anaerobic digestion. Three main mechanisms are studied with their subsequent technological approach to intensify hydrolysis:

1. Improve hydrolysis through **physical** approaches to solubilize particulates into readily available substrate (pretreatment operation and position)

2. Improve hydrolysis through improved operational conditions to increase **biological** hydrolytic enzyme production (co-substrate, bio-P sludge with P stripping, recuperative thickening)
3. Improve hydrolysis through allowing more **time** available for reactions to take place (SRT, recuperative thickening, cake digestion).

Table 1 shows the overall objectives of this project and the role of each collaborator in the project. The collaborators include four utilities, two universities and two industrial partners.

Table 1: A 3-level approach for improving hydrolysis rates in intensified AD systems

Mechanism	Technology	Testing plans		
		Lab testing	Pilot reactor runs	Full scale
physically	Thermohydrolysis	TW	TW/BU	PUB/DCW
	Co-substrate			
biologically	Kitchen waste	DCW/GW	DCW	
	Carbon rich	DCW/GW	BU/HRSD	
	Protein rich	DCW/GW	DCW	
	Bio-P			
time	Without P stripping	BU	BU/HRSD	
	With P stripping	BU	BU/HRSD	
	Recuperative thickening		DCW	PUB
	Cake digestion	BU	BU	

Note: HRSD - Hampton Roads Sanitation District, Virginia; PUB, Singapore National Water Agency; TW – Thames Water Utilities, Ltd., United Kingdom; DCW – DC Water; BU – Bucknell University; and GW – George Washington University.

Preliminary results from DC Water research

The DC Water team is conducting laboratory testing using pilot digesters to evaluate the impact of an operational technique called recuperative thickening (RT) on the hydrolysis rates in digesters. The hydrolysis rate is dependent on the enzyme production rate and the available active biomass. In most anaerobic digestions, the hydraulic retention time (HRT) is equal to the solids retention time (SRT). Recuperative thickening involves thickening a portion of the solids from the digester (to remove the liquid) and returning the solids back to the digestion process. This practice allows the HRT and SRT to be controlled independently from one another to improve hydrolysis. In addition, this technology could potentially lower the total ammonium concentrations at higher SRT, allowing for higher enzyme production rate and increased hydrolysis rate.



The research team has completed two phases of testing. In the first phase, the aim was to evaluate whether running the digesters at higher SRT [i.e. retaining more biomass in the digester] will improve hydrolysis. To accomplish this goal, two types of digesters were operated - the first is conventional digester where the SRT and HRT both were 15 days (similar to the design basis used for the full-scale digesters at Blue Plains), and the second type incorporated recuperative thickening where the same HRT was maintained but the SRT was doubled. In the second phase, the aim was to evaluate the impact of running the digesters at lower ammonia concentrations. This was achieved by running the recuperative thickening digesters at the same SRT as the conventional digesters, but at a diluted feed solids concentration to allow the ammonia concentration in the digester to drop by half. Operational parameters for the pilot digesters are shown in **Table 2**.

Table 2: Summary of average operational parameters for recuperative thickening (RT) and conventional digesters including Phase I and Phase II.

	Phase I		Phase II	
	Conventional	RT	Conventional	RT
SRT	15	30	15	15
HRT	15	15	15	7.5
HRT	666	666	666	666
THP Feed (mL/d)	0	0	0	666
Tap Water Feed (mL/d)				
Dig. Inlet Solids (%)	9.5	9.5	9.5	4.8
Dig. Solids (%)	5.2	7.9	5.2	5.2

The digester pilot performance data for Phases 1 and 2 of testing are summarized in **Table 3**. The results show that operating the digesters at SRT higher than 15 days did not improve hydrolysis and overall gas production. The results also showed that dropping the ammonia concentration in the digesters did not improve the hydrolysis rate and gas production. A third phase of the study will determine the ceiling at which ammonia (or ammonium) impacts the digesters performance under acclimated conditions.

Table 3: Summary of average values for performance parameters in recuperative thickening (RT) and conventional digesters including Phase I and Phase II.

	Phase I		Phase II	
	Conventional	RT	Conventional	RT
VSR (%)	52.4	52.8	53.1	54.4
Biogas (L/day)	26.89	27.8	28.58	28.59
Methane content (%)	64.73	64.8	63.88	63.91
Final rate (L/hr)	0.61	0.68	0.63	0.79
NH₄ (mg N-NH₄/L)	2051	1818	2047	1149
Alkalinity (mg CaCO₃/L)	9459	8848	11065.5	6701
sCOD (mg/L)	5382	4852	4396	2901
pH	7.82	7.81	7.71	7.49

Blue Plains Main Laboratory

The Main Laboratory staff conducts analyses on Blue Plains AWTP effluent for NPDES Permit requirements, as well as on biosolids, pretreatment samples, storm water runoff, and process samples, on a daily basis, 365 days a year. The laboratory currently analyzes approximately 2,800 samples each month and conducts approximately 8,000 analyses, including Total Suspended Solids; Volatile Suspended Solids; Total and Volatile Solids; Ammonia Nitrogen; Nitrite and Nitrate Nitrogen; Total, Soluble, and Ortho Phosphorus; Total and Soluble Kjeldahl Nitrogen; Carbonaceous Biochemical Oxygen Demand; Chemical Oxygen Demand; Total Alkalinity and Hardness; and Fecal Coliform and E. Coli microbiological testing.

In addition to comprehensive testing to support operation of liquid stream processes, the laboratory analyzes Belt Filter Press cake samples for fecal coliform bacteria for DC Water's Class A Biosolids reporting, as well as digester samples from the new Cambi Thermal Hydrolysis and Anaerobic Digestion facility, including Total and Volatile Solids, Total and Volatile Suspended Solids, Ammonia Nitrogen, alkalinity and pH. Fecal coliforms in the BFP dewatered cake and TS and VS upstream and downstream of the digestion process are monitored to show compliance with 40 CFR 503 Pathogen and Vector Attraction Reduction requirements.

The laboratory also assisted the Department of Sewer Services conducting microbiological analysis of water samples for E. Coli bacteria, as well as monitoring the Northeast Boundary Swirl Facility Effluent for NPDES compliance. Laboratory staff also participated in the WWOA Executive Board.

This month the Main Laboratory received the official announcement from the USEPA to initiate the 2017 Discharge Monitoring Report – Quality Assurance (DMR-QA) Study 37. Participation in the DMR-QA study is required by the Clean Water Act – Section 308. The study commenced on March 24, 2017 and concludes on July 7, 2017.

Blue Plains Pretreatment Program

The Blue Plains Pretreatment Program manages the Industrial Pretreatment Program, including temporary dewatering dischargers from construction and other activities, as well as the Hauled Waste Program. Additional responsibilities include providing specialized sampling and program management support for the Blue Plains NPDES permit and facilitating the quarterly Blue Plains Storm Water Committee meetings.

Industrial Pretreatment Program

DC Water currently manages fourteen (14) Significant Industrial User (SIU) permits and sixteen (16) Non-Significant Industrial User (NSIU) wastewater discharge permits. DC Water received monthly self-compliance monitoring reports for six (6) SIUs and one NSIU. Compliance monitoring was conducted for one NSIU this month: Georgetown University/Hospital. All SIUs and NSIUs are in compliance with discharge standards for the current month.

DC Water currently manages 78 Temporary Discharge Authorization (TDA) permits, primarily for construction site discharges of groundwater and/or surface runoff in the combined sewer area. Two new TDA permits were issued this month. All TDA discharges are currently in compliance with pretreatment standards.

Hauled Waste Program

As of the end of the current month, the hauled waste program had 33 permitted haulers authorized to discharge domestic septage, portable toilet waste, grease trap waste, groundwater or surface runoff, and other types of waste, if approved in advance and have been characterized and meet pretreatment standards. DC Water collected fees from thirteen waste haulers this month, including those on a monthly payment plan option.

DC Water received 812 hauled waste loads (1,688,862 gallons) from permitted haulers this month. Manifest forms from each truck entering the plant are collected by the security guards and picked up daily by Pretreatment staff. Data is entered into an Excel spreadsheet to track the volume and type of loads being discharged daily and the results of sampling. Two hauled waste samples were collected this month.

An additional 53 hauled waste loads (270,000 gallons) of industrial hauled waste was received at the Loudoun Water septage receiving station (S-17) discharging to Blue Plains this month and was directly invoiced by DC Water since the waste was not typical domestic septage.

NPDES Permit Sampling

Pretreatment staff collected two 24-hour composite dry weather low level PCB samples at outfall 002. Staff also collected low level mercury influent samples the end of the month as part of the quarterly sampling activities.



Briefing on

DC Water Security Measures

Presented to:

DC Water Board of Directors

Environmental Quality and Operations Committee

James Patteson, Chairperson

April 20, 2017

George S. Hawkins, General Manager & Chief Executive Officer



Operating Authority & Standards



- DC Code: DCMR Title 6-A, Chapter 11 & DCMR Title 17, Chapter 21
 - Security Operations
 - Special Police powers including arrest authority
 - Investigative authority as DC Licensed PI entity
- Requirements & Standards
 - 2002/3 Federal mandates - Vulnerability Assessments/SMP
 - Update every 10 years – DC Water updates every 5 years
 - DHS Standards – National Infrastructure Protection Plan 2013
 - EPA Sector Specific Plan – Water & Wastewater
 - American Society of Industrial Standards (ASIS) – Physical Security
 - American National Standards Institute (ANSI) – First Responders
 - Crime Prevention Through Environmental Design (CPTED)



THREAT LEVEL

Continually ongoing general threat due to:

National Capitol status

“Protecting the Water of the Leading Government of the Free World”

Population size & Growth

DC = 680K+ (4-5K per year), NCR = 6M+ (50/60K per year)

(Sixth largest metro region in US)

DC Water technology leadership

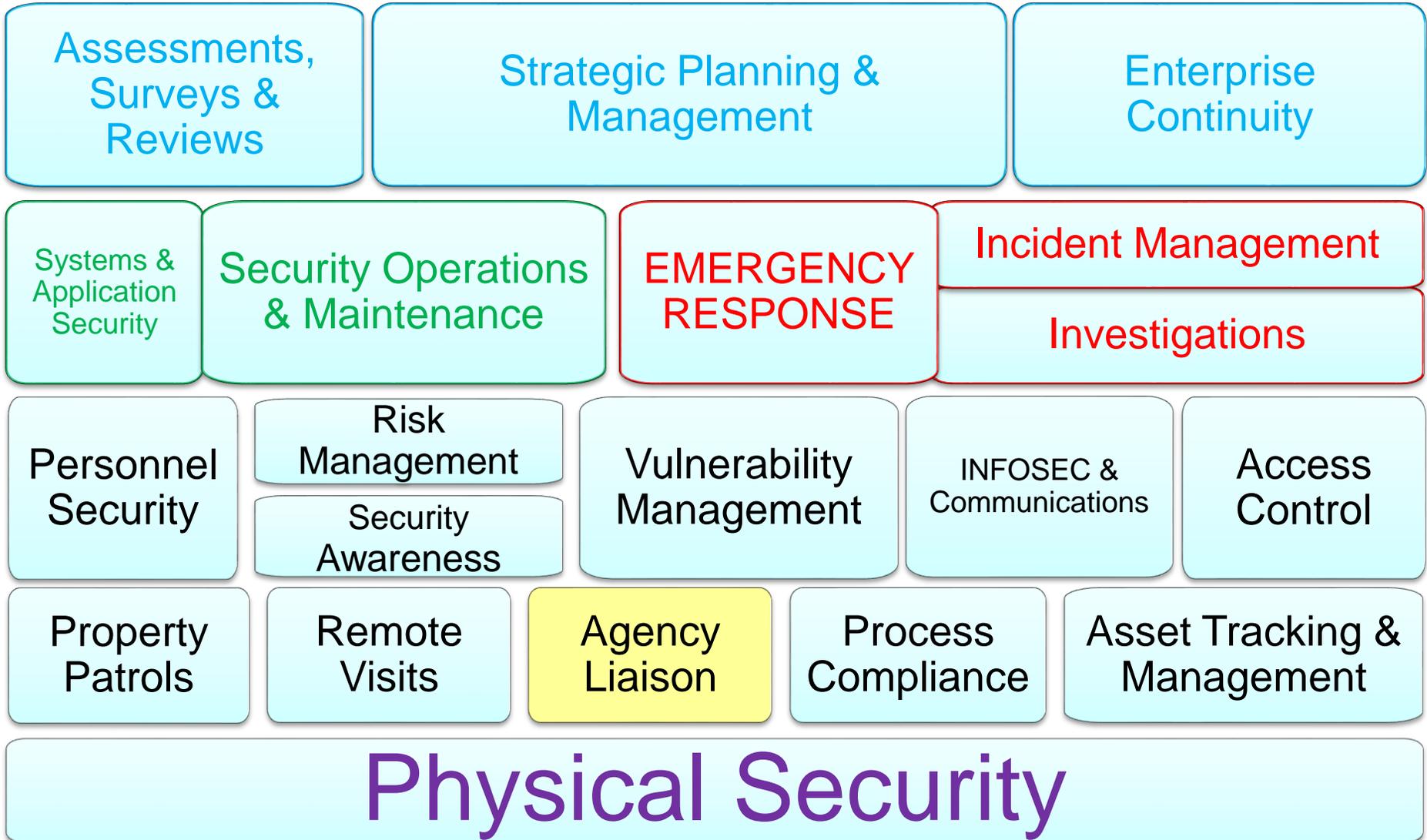
CAMBI/Powertrain, Clean Rivers, Bloom, Leed Platinum HQ

DC Water operational size

Largest AWWTP, City & Two States, multiple counties

Tourism/Visitors/Business

21M+ Visitors per annum in DC, 43M+ in NCR



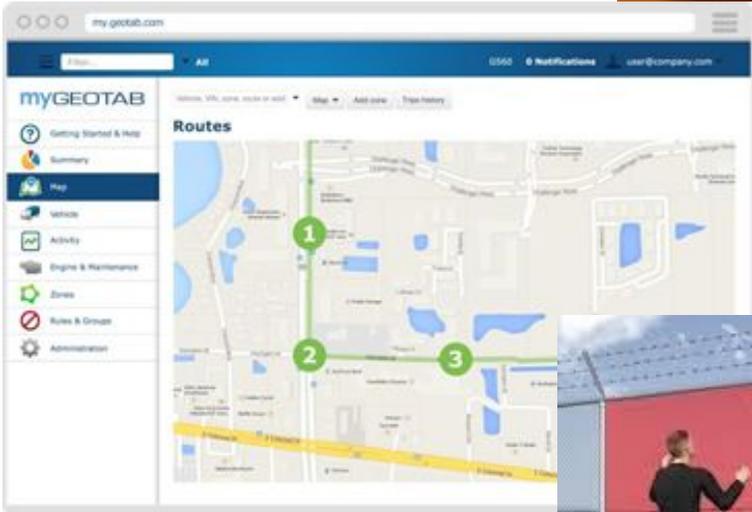


Some of the agencies DSEC works with...





A multi-layered approach...



4/14/2017

6



PSIM

(Physical Security Information Management)





Positive Results

Increased reporting/detection of:

- Alleged Workplace Violence
- Property damage/loss
- Time card fraud
- Accidents & incidents
- Unsecured properties
- Breach events

For example: Since 2013 DC Water has experienced an 81% reduction in reported/confirmed WPV incidents through education, detection and investigation efforts.



Construction Phase Plan

- **Phase One (2012-2014) – BASICS - COMPLETE**
 - \$3.7M Upgrades throughout DC Water to ensure minimum operational capability
 - 42 separate completed projects throughout DC Water
 - 90% of DC Water above ground assets at BS and BP
 - Some projects separately funded, i.e.,: Security Command Center, Potomac Pumping Station, St. E's water tower
- **Phase Two (2015-2020) – 84 Projects, upgrades and non-populated critical facilities**
 - \$7M in refinements: All funding in place
 - \$2.5 in DWS (\$800K for BS)
 - \$1.8 in DSS
 - \$830K at BP
 - \$1M for new HQ
- **Phase Three (2020 – Out years) – New Projects, upgrades and vaults/valves/sensors**
 - \$6M in refinements, D & C system, Outfalls
 - Estimated \$1M annually CIP improvements
 - Estimated \$0.5M annually for maintenance/repairs



Security Master Plan – Long Term Efforts

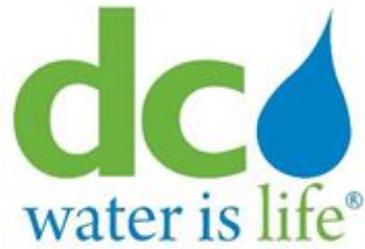
- Redundant and Cross-Connected Capabilities
 - Gradual Expansion of Network Topology
- Ongoing upgrades based on design & reality
- 24/7 SCC collaboration expansion
 - Ops and OEM
- Detection, Tracking & Alarm Systems and Monitoring
 - Service yards, surface parking controls, Asset storage
- CPTED Physical barriers
- Integrate Emergency Response/COOP programs
- INFOSEC integration
- Specialized Asset Management support
- Expand TTX and FTX with local/Federal entities
- Process Assessment support



DSEC - Security

Questions?

Thank You!



Fact Sheet Overview

GOODS AND SERVICES

The Fact Sheet is a public document summarizing a requested contract action for Committee & Board review and approval

- A Fully-Approved Fact Sheet Allows the Associated Contract Action to be Executed.
Fact Sheet Process:
 - Procurement prepares the Fact Sheet
 - Finance reviews budget and spending information
 - Signatures by end-user AGM, Procurement Director, CFO
 - Review by Committee and recommend to the full Board for approval. If approved, signature by General Manager
- Contract Actions Necessitating a Fact Sheet – Purpose is to provide information to the Board to allow the GM (as CO) the authority to approve contracts beyond his stated authority.
 - New contracts >\$1 million
 - Contract modifications (e.g. option years, adding funds) >\$500 thousand
 - Contract modifications causing the total approved value to cross a multiple of \$1 million
- Fact Sheet Contents
 - Supplier/contractor; subcontractor(s); LBE/LSBE status
 - Summary of historical funding approvals and spending
 - Contract scope and purpose
 - Budget information
 - Signatures



The Fact Sheet first page summarizes the requested contract action, what we are buying, from which supplier(s), and why

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED		
GOODS AND SERVICES CONTRACT OPTION YEAR		
Solids Screening Facility Hauling (Joint Use)		
Approval to exercise option year one (1) for the hauling of grit and scum from the solids screening facility in the amount of \$850,000.00.		
CONTRACTOR/SUB/VENDOR INFORMATION		
PRIME: Urban Service Systems Corporation 212 Van Buren St., NW Washington, D.C. 20012 LBE	SUBS: N/A	PARTICIPATION: N/A
DESCRIPTION AND PURPOSE		
Original Contract Value:	\$900,000.00	
Original Contract Dates:	04-18-2016 – 04-17-2017	
No. of Option Years in Contract:	4	
Modification Value:	\$50,000.00	
Modification Dates:	04-18-2017 – 06-18-2017	
Option Year 1 Value:	\$850,000.00	
Option Year 1 Dates:	06-19-2017 – 04-17-2018	
Purpose of the Contract: This contract provides DC Water’s Department of Wastewater Treatment (WWT) with hauling/disposal services for grit/scum collected at the Solids Screening Facility. The Contractor also manages the free water and liquids that may collect in the trailers and oversees the proper disposal of these liquids. Finally, the Contractor also manages the weighing and hauling of the trailers to a permitted disposal site (sanitary landfill).		
Contract Scope: Wastewater contains large solids and grit that can interfere with treatment processes or cause undue mechanical wear and increased maintenance on wastewater treatment equipment. To minimize potential problems, these materials require separate handling. The Contractor provides all necessary labor, supervision, equipment, materials, tools, insurance and personnel for the hauling of roll-off trailers of grit, screenings, and scum. The Contractor shall perform the services on the Blue Plains Advanced Waste Water Treatment Plant (AWWTP), in areas located where DC Water’s grit, scum and screening conveyance and loading systems are actively operating. This process requires continuous availability and monitoring of the trailers and dumpsters located under the loading chutes to collect the residuals.		
Spending Previous Year: Cumulative Contract Value: 04-18-2016 to 06-18-2017: \$950,000.00 Cumulative Contract Spending: 04-18-2016 to 02-28-2017: \$726,337.80		
Contractor’s Past Performance: According to the COTR, the Contractor’s quality of workmanship; timeliness of deliverables; conformance to DC Water’s policies, procedures and contract terms; and invoicing all meet expectations.		

Title information, including contract title and the contract action requested. Also included is indication of Joint Use or Non-Joint Use.

Contractor and subcontractors; LBE/LSBE status.

Summary of contract funding approvals. Base term, each option year, and combined modifications shown individually. Subject of contract action request in bold.

“Purpose of the Contract” describes the goods or services under the contract.

“Contract Scope” describes why the goods or services are needed, and by which unit of DC Water.

“Spending Previous Year” shows cumulative approved contract value and cumulative invoice value.

Statement based on COTR input describing the quality of products and services thus far.



The Fact Sheet second page summarizes budgetary information supporting the request, and has approval signatures.

PROCUREMENT INFORMATION			
Contract Type:	Fixed Price	Award Based On:	Best Value
Commodity:	Services	Contract Number:	16-PR-DWT-13A
Contractor Market:	Open Market with Preference Points for LBE and LSBE participation		

BUDGET INFORMATION			
Funding:	Operating	Department:	WWT
Service Area:	Blue Plains	Department Head:	Sahil Kharkar

ESTIMATED USER SHARE INFORMATION		
User	Share %	Dollar Amount
District of Columbia	41.92%	\$356,320.00
Washington Suburban Sanitary Commission	43.33%	\$368,305.00
Fairfax County	9.81%	\$83,385.00
Loudoun Water	4.29%	\$36,465.00
Other (PI)	0.65%	\$5,525.00
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	\$850,000.00

_____/ Date
 Akille Tesfaye
 Assistant General Manager,
 Blue Plains

_____/ Date
 Dan Bae
 Director of Procurement

_____/ Date
 Mark Kim
 Chief Financial Officer

_____/ Date
 George S. Hawkins
 General Manager

Type of contract and how it was awarded

“Budget Information” header with DC Water end user

Funding “split” shows how the funding will be attributable to the areas within the User Jurisdiction. The split:

- varies by funding source (operating vs. capital);
- depends on whether the contract supports operations within or outside Blue Plains;
- is determined by Finance and Budget;
- and is fixed for the year.

Along with Budget Information, the tables may be repeated two or more times if there are more than one end user or funding source.

- End-user AGM signature signifies agreement to the expenditure
- Procurement signature means the Fact Sheet and supporting information meet the requirements of the requested contract action
- CFO signature means Finance confirms budget availability
- GM signature indicates Board approval, and as Contracting Officer, that the requested contract action may be executed

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

GOODS AND SERVICES CONTRACT AWARD

**Biosolids Building Roof Replacement
(Joint Use)**

Approval to execute a contract for the replacement of the biosolids building roof in the amount of \$1,349,846.10.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME: AN Exterior, Inc. 14522 C Lee Road Chantilly, VA 20151 LSBE	SUBS: N/A	PARTICIPATION: N/A
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DESCRIPTION AND PURPOSE

Base Period Contract Value:	\$1,349,846.10
Base Contract Period:	7 Months
Anticipated Contract Start Date:	05-15-2017
Anticipated Contract Completion Date:	12-14-2017
Bid Opening Date:	03-29-2017
Bids Received:	6
Bid Price Range:	\$1,319,900.00-\$1,797,463.00
Preference Discount Received:	\$100,000.00
Winning Evaluated Bid Amount:	\$1,249,846.10

Purpose of the Contract:

This contract is to provide roof replacement at the Biosolids Building at Blue Plains, 5000 Overlook Avenue, SW, Washington, DC.

Contract Scope:

The Department of Facilities is responsible for all building conditions for DC Water. This contract replaces approximately 57,000 SF of roof for the Biosolids Building. The contractor shall provide all necessary materials, tools, equipment and personnel to remove, properly dispose of and replace the existing roof materials with a manufactured green roofing system.

Evaluated Companies and Any Preference Points:

AN Exterior, Inc. (LSBE) (Chantilly, VA)	\$1,249,846.10 - (Bid Amount \$1,349,846.10)
ADP Construction, Inc. (LSBE) (Washington, DC)	\$1,294,892.33 - (Bid Amount \$1,394,892.33)
Allstates Contractors, Inc. (Centerville, VA)	\$1,319,900.00
Northeast Contracting Corp. (Lorton, VA)	\$1,495,707.00
Kalkreuth Roofing and Sheet Metal (Fredrick, MD)	\$1,666,050.00
Structural Engineering Group, Inc. (Sterling, VA)	\$1,797,463.00

DC Water's LSBE program allows for certified LSBE bids to be evaluated at 10% or \$100,000.00 lower than offered. The bid submitted by Allstates Contractors, Inc. was the apparent low bidder prior to applying the LSBE program bid discount which resulted in an evaluated bid amount from AN Exterior, Inc. of \$1,249,846.10.

PROCUREMENT INFORMATION

Contract Type:	Firm Fixed Price Contract	Award Based On:	Lowest Responsive and Responsible Bidder
Commodity:	Construction	Contract Number:	17-PR-DFM-02
Contractor Market:	Open Market with Preference Points for LBE and LSBE Participation		

BUDGET INFORMATION

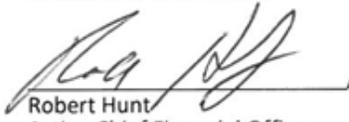
Funding:	Capital	Department:	Facilities
Service Area:	Wastewater	Department Head:	Johnnie Walker
Project:	LS		

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	41.22%	\$556,406.56
Washington Suburban Sanitary Commission	45.84%	\$618,769.45
Fairfax County	8.38%	\$113,117.11
Loudoun Water	3.73%	\$50,349.26
Other (PI)	0.83%	\$11,203.72
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	\$1,349,846.10


 Rosalind R. Inge
 Assistant General Manager
 Support Services
 Date: 4/11/17


 Dan Bae
 Director of Procurement
 Date: 4/13/17


 Robert Hunt
 Acting Chief Financial Officer
 Date: 4/14/17

 George S. Hawkins
 General Manager
 Date

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

GOODS AND SERVICES CONTRACT OPTION YEAR

**Preliminary Treatment Facility Grit/Screening Hauling
(Joint Use)**

Approval to exercise option year one (1) for the hauling of grit and scum from the Preliminary Treatment Facility in the amount of \$850,000.00.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME: Urban Service Systems Corporation 212 Van Buren St., NW Washington, D.C. 20012 LBE	SUBS: N/A	PARTICIPATION: N/A
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DESCRIPTION AND PURPOSE

Original Contract Value:	\$900,000.00
Original Contract Dates:	04-18-2016 – 04-17-2017
No. of Option Years in Contract:	4
Modification Value:	\$50,000.00
Modification Dates:	04-18-2017 – 06-18-2017
Option Year 1 Value:	\$850,000.00
Option Year 1 Dates:	06-19-2017 – 04-17-2018

Purpose of the Contract:

This contract provides DC Water’s Department of Wastewater Treatment (WWT) with hauling/disposal services for grit/screening collected at the Preliminary Treatment Facility. The Contractor also manages the free water and liquids that may collect in the trailers and oversees the proper disposal of these liquids. Finally, the Contractor also manages the weighing and hauling of the trailers to a permitted disposal site (sanitary landfill).

Contract Scope:

Wastewater contains large solids and grit that can interfere with treatment processes or cause undue mechanical wear and increased maintenance on wastewater treatment equipment. To minimize potential problems, these materials require separate handling. The Contractor provides all necessary labor, supervision, equipment, materials, tools, insurance and personnel for the hauling of roll-off trailers of grit, screenings, and scum. The Contractor shall perform the services on the Blue Plains Advanced Waste Water Treatment Plant (AWWTP), in areas located where DC Water’s grit, scum and screening conveyance and loading systems are actively operating. This process requires continuous availability and monitoring of the trailers and dumpsters located under the loading chutes to collect the residuals.

Spending Previous Year:

Cumulative Contract Value:	04-18-2016 to 06-18-2017: \$950,000.00
Cumulative Contract Spending:	04-18-2016 to 02-28-2017: \$795,046.50

Contractor’s Past Performance:

According to the COTR, the Contractor’s quality of workmanship; timeliness of deliverables; conformance to DC Water’s policies, procedures and contract terms; and invoicing all meet expectations.

PROCUREMENT INFORMATION

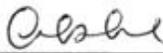
Contract Type:	Fixed Price	Award Based On:	Best Value
Commodity:	Services	Contract Number:	16-PR-DWT-13A
Contractor Market:	Open Market with Preference Points for LBE and LSBE participation		

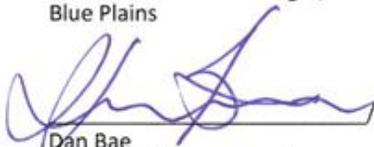
BUDGET INFORMATION

Funding:	Operating	Department:	WWT
Service Area:	Blue Plains	Department Head:	Salil Kharkar

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	41.92%	\$356,320.00
Washington Suburban Sanitary Commission	43.33%	\$368,305.00
Fairfax County	9.81%	\$83,385.00
Loudoun Water	4.29%	\$36,465.00
Other (PI)	0.65%	\$5,525.00
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	\$850,000.00

 _____, 4/6/17
 Akile Tesfaye
 Assistant General Manager,
 Blue Plains
 Date

 _____, 4/16/17
 Dan Bae
 Director of Procurement
 Date

 _____, 4/12/17
 Mark Kim
 Chief Financial Officer
 Date

_____, _____
 George S. Hawkins
 General Manager
 Date

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

GOODS AND SERVICES CONTRACT YEAR

**Repair and Rehabilitation of Various Process Assets
(Joint Use)**

Approval to add funding to the Repair and Rehabilitation of Various Process Assets contract in the amount of \$700,000.00

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME: Electric Motor & Contracting Co., Inc.(EMC) 3728 Profit Way Chesapeake, VA 23323	SUBS: M&M Electric Motor Repair, Inc. LSBE	PARTICIPATION: 29%
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DESCRIPTION AND PURPOSE

Original Contract Value: \$2,150,000.00
 Base Year Dates: 01-01-2017 - 12-31-2017
 No. of Option Years in Contract: 2
This Modification Value: \$700,000.00
This Modification Dates: 05-05-2017 – 12-31-2017

Purpose of the Contract:

The Department of Maintenance Service (DMS) and Department of Distribution & Conveyance Systems (DDCS) require the services of a qualified contractor to provide inspection, repair, replacement, and upgrade services for various process assets (pumps, motors, blowers, valves, etc.) located at all DC Water facilities.

Scope of the Contract:

In 2017, the DMS contract for "Large Motors and Eddy Current Drives" contract (WAS-11-049-AA-JR) expired and the services to that contract were merged into this "Repair and Rehabilitation of Various Process Assets" contract (16-PR-DMS-43). The amount of this request is the average spending for the past 5 years under the prior contract. The requested funding will cover previously-forecasted maintenance of large motors, and would have otherwise gone toward the expired contract.

Prior to the contract merger in March, 2017, both contracts were held by Electric Motor and Contracting, Inc. (EMC) and had overlapping scopes of work. The newer Repair and Rehabilitation of Various Process Assets contract was awarded to EMC and its LSBE subcontractor, M&M Electric Motor Repair in December, 2016, resulting from an open solicitation. This solicitation and the accompanying vendor outreach were so recent that no new contractors have since developed the capability to address DC Water's requirement to repair large motors.

Savings:

Consolidating the contracts presents DC Water with an incremental 0.5% savings, or \$14,250 over the combined base year contract value. Other savings include: an extended warranty of 18 months from 12 on the incremental scope, not just the original scope; extended warranty during controlled storage; and process simplification for both DC Water and EMC with few POs needed and consolidated reporting.

Spending Previous Year:

Cumulative Contract Value: 01-01-2017 to 01-01-2018: \$2,150,000.00
 Cumulative Contract Spending: 01-01-2017 to 03-28-2017: \$0.00

Contractor's Past Performance:

According to the COTR, the Contractor's quality of workmanship; timeliness of deliverables; conformance to DC Water's policies, procedures and contract terms; and invoicing all meet expectations.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price Requirement Contract	Award Based On:	Best Proposal and Responsible Bidder
Commodity:	Goods and Services	Contract Number:	16-PR-DMS-43

BUDGET INFORMATION

Funding:	Capital Equipment	Department:	DMS
Service Area:	Blue Plains AWTP	Department Head:	Anthony Mack

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	41.22%	\$288,540.00
Washington Suburban Sanitary Commission	45.84%	\$320,880.00
Fairfax County	8.38%	\$58,660.00
Loudoun Water	3.73%	\$26,110.00
Other (PI)	0.83%	\$5,810.00
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	\$700,000.00

Aklile Tesfaye / 4/12/17
 Aklile Tesfaye Date
 Assistant General Manager,
 Blue Plains

Dan Bae / 4/12/17
 Dan Bae Date
 Director of Procurement

Joel Grosser, Acting Director of Procurement

Robert Hunt / 4/14/17
 Robert Hunt Date
 Acting Chief Financial Officer

_____/_____
 George S. Hawkins Date
 General Manager

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

ENGINEERING SERVICES SUPPLEMENTAL AGREEMENT

**Construction Management Services, Anacostia River Combined Sewer Overflow (CSO) Control Projects, Division Z - Poplar Point Pumping Station Replacement and Main Outfall Sewers Diversion
(Joint Use)**

Approval to execute Supplemental Agreement No. 1 for \$1,992,719.57. The modification exceeds the General Manager's approval authority.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
AECOM Services of DC 3101 Wilson Boulevard Suite 900 Arlington, VA 22201	SZ PM Consultants, Inc. Oakton, VA	MBE 28.6%
	Savin Engineers, PC Washington, DC	MBE 7.1%
	Sigma Associates, Inc. Detroit, MI	WBE 5.3%
<u>Headquarters</u> Los Angeles, CA 90067		

DESCRIPTION AND PURPOSE

Original Contract Value:	\$4,891,074.00
Value of this Supplemental Agreement:	\$1,992,719.57
Cumulative SA Value, including this SA:	\$1,992,719.57
Current Contract Value, Including this SA:	\$6,883,793.57
Original Contract Time:	958 Days (2 Years, 8 Months)
Time Extension, this SA:	335 Days
Total SA contract time extension:	335 Days (0 Years, 11 Months)
Contract Start Date:	11-15-2014
Contract Completion Date:	05-31-2018

Purpose of the Contract:

To provide onsite construction management (CM) of Division Z – Popular Point Pumping Station Replacement (DC Clean Rivers Project) construction contract.

This work is required by Consent Decree

Original Contract Scope:

- Provide CM and other services to assist DC Water with construction of Division Z. Division Z includes construction of a new 55 MGD Poplar Point Sewage Pumping Station (PP-PS), the Anacostia Main Interceptor (AMI) Diversion Chamber, the AMI Diversion Sewer, the Emergency Overflow Structure, the 42" Force Main, the Discharge Connection Chamber, and the Main Outfall Sewers Diversion Chamber.
- Provide CM services to assist DC Water with the replacement of the Barry Road sewer.
- Work in cooperation and consultation with DC Water and the DC Clean Rivers Project Program Consultants Organization to effectively manage the construction work required to provide completed Division Z facilities.
- Provide field inspection services for the oversight of the construction work as well as oversight during startup and operational training for the newly constructed PP-PS.

Current Supplemental Agreement Scope:

- To extend onsite CM of Division Z Poplar Point Pumping Station Replacement and Main Outfall Sewers Diversion due to unforeseen delay in the construction of the project. The Contractor will be working 24/7 to recover schedule which requires augmented CM manpower to provide appropriate construction oversight.
- Extend CM, contract administration and resident engineering and inspection services by 335 days to assist DC Water with Division Z Construction Contract.

Future Supplemental Agreement Scope:

- No future supplemental agreement is anticipated at this time.

PROCUREMENT INFORMATION

Contract Type:	Cost Plus Fixed Fee	Award Based On:	Highest Ranking Score
Commodity:	Professional Services	Contract Number:	DCFA - #463-WSA
Contractor Market:	Open Market		

BUDGET INFORMATION

Funding:	Capital	Department:	DC Clean Rivers Project
Service Area:	Combined Sewer	Department Head:	Carlton Ray
Project:	CY, G1		

ESTIMATED USER SHARE INFORMATION

CY – Allocation (Division Z, MJ20 - Poplar Point Pump Station)

User	Share %	Dollar Amount
District of Columbia	90.00%	\$ 1,403,631.67
Federal Funds	0.00%	\$ 0.00
Washington Suburban Sanitary Commission	10.00%	\$ 155,959.08
Fairfax County	0.00%	\$ 0.00
Loudoun County & Potomac Interceptor	0.00%	\$ 0.00
Total Estimated Dollar Amount	100.00%	\$ 1,559,590.75

G1 –Allocation (Division Z, CAPM – Barry Road Sewer)

User	Share %	Dollar Amount
District of Columbia	100.00%	\$ 30,467.37
Federal Funds	0.00%	\$ 0.00
Washington Suburban Sanitary Commission	0.00%	\$ 0.00
Fairfax County	0.00%	\$ 0.00
Loudoun County & Potomac Interceptor	0.00%	\$ 0.00
Total Estimated Dollar Amount	100.00%	\$ 30,467.37

CY – Allocation (Division Z, GIBP – Main Outfall Sewer Diversion)

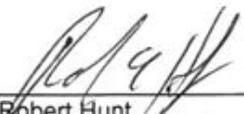
User	Share %	Dollar Amount
District of Columbia	41.22%	\$ 165,977.05
Federal Funds	0.00%	\$ 0.00
Washington Suburban Sanitary Commission	45.84%	\$ 184,580.01
Fairfax County	8.38%	\$ 33,743.03
Loudoun County & Potomac Interceptor	4.56%	\$ 18,361.36
Total Estimated Dollar Amount	100.00%	\$ 402,661.45

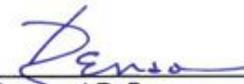
Total Combined Allocation

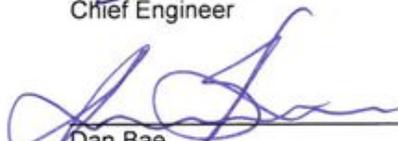
User	Share %	Dollar Amount
District of Columbia	80.30%	\$ 1,600,076.09
Federal Funds	0.00%	\$ 0.00
Washington Suburban Sanitary Commission	17.09%	\$ 340,539.09
Fairfax County	1.69%	\$ 33,743.03
Loudoun County & Potomac Interceptor	0.92%	\$ 18,361.36
Total Estimated Dollar Amount	100.00%	\$ 1,992,719.57

ENGINEERING SERVICES SUPPLEMENTAL AGREEMENT

Construction Management Services, Anacostia River Combined Sewer Overflow (CSO) Control Projects, Division Z - Poplar Point Pumping Station Replacement and Main Outfall Sewers Diversion (Joint Use)

 _____ 4/14/17
Robert Hunt Date
Acting Chief Financial Officer

 _____ 4-12-17
Leonard R. Benson Date
Chief Engineer

 _____ 4/14/17
Dan Bae Date
Director of Procurement

_____ / _____
George S. Hawkins Date
General Manager

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

**CONSTRUCTION CONTRACT CHANGE ORDER:
Potomac Pumping Station Rehabilitation Phase III
(Joint Use)**

Approval to execute Change Order No. 7 for \$1,762,011. The modification exceeds the General Manager's approval authority.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
American Contracting & Environmental Services 10330 Old Columbia Road, Suite 102 Columbia, MD 21046	SQN Systems Columbia, MD APRO Enterprises, Inc. Laurel, VA	MBE MBE 16.9% 1.0%

DESCRIPTION AND PURPOSE

Original Contract Value:	\$ 9,450,000.00	
Value of this Change Order:	\$ 1,762,011.00	
Cumulative CO Value, including this CO:	\$ 2,543,861.24	
Current Contract Value, including this CO:	\$11,993,861.24	
Original Contract Time:	730 Days	(2 Years, 0 Months)
Time extension, this CO:	401 Days	
Total CO contract time extension:	401 Days	(1 Year, 1 Month)
Contract Start Date (NTP):	09-30-2014	
Contract Completion Date:	11-04-2017	
Cumulative CO % of Original Contract:	26.9%	
Contract completion %:	74.0%	

Purpose of the Contract:

To provide construction services for rehabilitation of major equipment at the Potomac Pumping Station.

Original Contract Scope:

- Replace bar screens, sluice gates, and pump discharge valves
- Replace medium voltage switchgear and pump motor starters

Previous Change Order Scope:

- Increase Contingency Allowance
- Provide miscellaneous electrical, mechanical, and utility changes

Current Change Order Scope:

- Compensate the Contractor for impacts to the construction schedule due to the emergency repair of the 72-inch force main, the required heavy cleaning of the Upper Potomac Interceptor Relief Sewer, and major repair of Sewage Pump 1 (SP-1) due to inoperability.

See Supplemental Information for this Change Order (attached)

PROCUREMENT INFORMATION

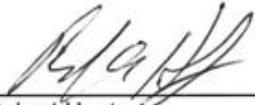
Contract Type:	Fixed Price	Award Based On:	Lowest responsive, responsible bidder.
Commodity:	Construction	Contract Number:	130060
Contractor Market:	Open Market		

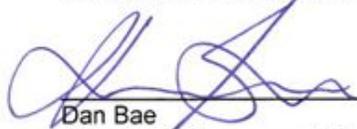
BUDGET INFORMATION

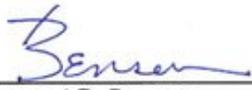
Funding:	Capital	Department:	Engineering and Technical Services
Service Area:	Combined Sewer	Department Head:	Craig Fricke (Acting)
Project:	EJ		

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	49.78%	\$ 877,129.08
Washington Suburban Sanitary Commission	29.37%	\$ 517,502.63
Fairfax County	14.72%	\$ 259,368.02
Loudoun County & Potomac Interceptor	6.13%	\$ 108,011.27
Total Estimated Dollar Amount	100.00%	\$ 1,762,011.00


 _____ 4/14/17
 Robert Hunt Date
 Acting Chief Financial Officer


 _____ 4/14/17
 Dan Bae Date
 Director of Procurement Services


 _____ 4-10-17
 Leonard R. Benson Date
 Chief Engineer

 George S. Hawkins Date
 General Manager

Supplemental Information for Change Order No. 7

Issue 2: Critical Shutdown Delay Timeline

8/1/2015	DDCS initiates emergency repair of 72" Force Main	
8/17/2015	Contractor scheduled to start critical shutdown. Shutdown postponed.	Delay to Critical Path begins, 8/17/15
93 11/18/2015	DDCS restores 72" FM to service	Impact 1; 93 calendar days
12/1/2015	ACE begins wet well shutdowns for bar rack installation	
12/14/2015	UPIRS Contract NTP	
12/30/2015	ACE completes bar rack installation	
1/18/2016	UPIRS cleaning commences	Impact 2; 243 calendar days
3/31/2016	UPIRS Original Contract Completion Date	
6/6/2016	Revised UPIRS Completion Date	
243 7/18/2016	UPIRS Contractor Vacates Potomac Pump Station	Impact 3; 65 calendar days
7/21/2016	ACE submits request to schedule Initial Shutdown for 8/15/16	
8/3/2016	DDCS removes damaged SP-1 from service	
65 9/21/2016	Initial Shutdown Commences, at SP-1, ending delay to Critical Path	Delay to Critical Path ends, 9/21/16
401	calendar days total delay	

Potomac Pumping Station Rehabilitation Phase III

Contract No. 130060

Fact Sheet Supplemental Information for Change Order No. 7

Background & Causal Issues

- The Potomac Pump Station has two discharge force mains (96-Inch & 72-inch) which handle the flow of sewage at the station. To ensure that DC Water is in compliance with mandated EPA capacity requirements (firm pumping capacity of 460 MGD), at least one force main must be in service at all times. In response to an inspection that identified significant leaks in the 72-inch force main, DDCCS shut down the force main and performed the necessary repairs. These repairs took approximately eight weeks to complete. During this time, the 96" force main remained in service, and the contract work, to be performed by ACE, related to Gate Valve 3-B was delayed.
- DC Water executed a contract and issued NTP with a date of December 14, 2015 to perform heavy cleaning of a portion of the Upper Potomac Interceptor Relief Sewer (UPIRS) during the period of December 14, 2015 through March 31, 2016 (original UPIRS contract completion date). Figure 1 shows an overview of the initial debris levels (at minimum depth of .5" to a maximum depth of 52" in some places) and Figure 2 shows the transition in size at points along this segment of the 81" x 156" sewer. This work had to be performed during a specified time period in coordination with work being performed by the DC Water Clean Rivers Program at the Kennedy Center (per agreement), since there would not be another opportunity to clean the sewer from this access point- Structure 35 (located in the Kennedy Center parking lot) in the future. The alternate access point (Structure 37A), located on 27th St near Rock Creek Pkwy presented large impacts to traffic flow and the cleaning operation would be performed working against the flow, unlike working with the flow when accessed from Str. 35 for cleaning. In performing the heavy cleaning of the UPIRS, supplemental bar screens (Figure 3) were installed to protect the existing wet well self-cleaning screens and periodic wet well shutdowns at Potomac Pump Station were required to allow for the removal of the wash debris from the heavy cleaning of the upstream sewer. With the anticipated potential for periodic shutdowns at the pump station, the contract work for the Potomac Pumping Station Rehabilitation project was deferred until the UPIRS was completed. Figure 4 displays photographs of the UPIRS contractor mobilized at the site along the Rock Creek Parkway.
- Due to the volume and density of the material inside the sewer, progress was slower than anticipated. Figure 5 displays photographs of heavy debris material encountered during the cleaning process. By March 13, 2016 the UPIRS contractor had advanced 1,850lf into the sewer or 58% of the UPIRS' length. DC Water was required to vacate the access point, Structure 35, on March 31st to avoid penalty per the agreement. After discussions, a decision was made to re-mobilize the cleaning contractor to the Potomac Pump Station itself and allow the sewer cleaning to continue beyond the March 31, 2016 date for an additional sixty- seven days. The extended contract time allowed cleaning of 2,413lf (approx.75%) of UPIRS out of the total projected length of 3,200lf. 18,285 cubic ft. of material was removed during the operation. This



Figure 1: UPIRS Overview Map with Pre-Cleaning Debris Levels



Figure 2: UPIRS Sewer Section Layout from Structure 35 to Structure 37A

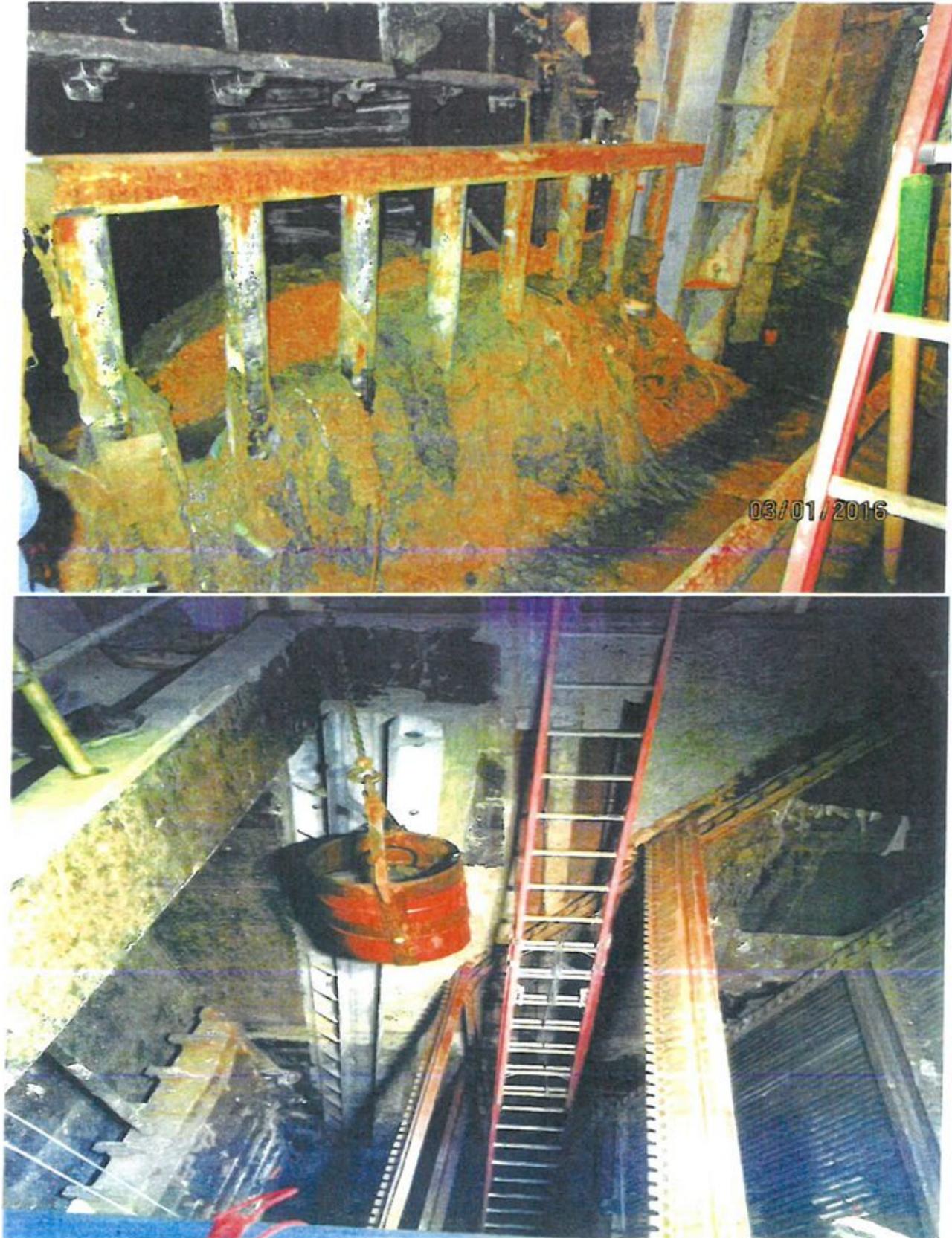


Figure 3: Wet Well Supplemental Bar Screens



Figure 4: Mobilization Efforts

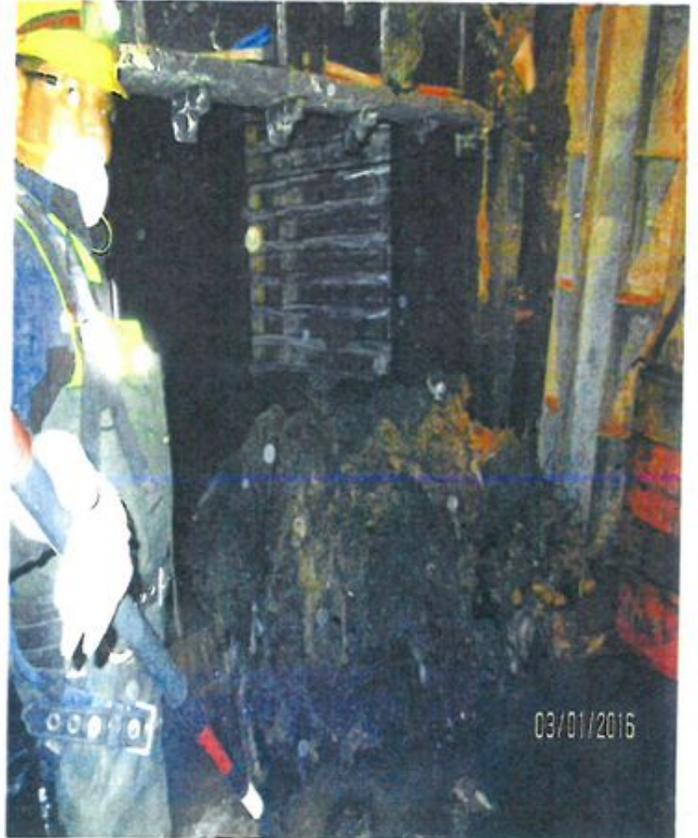
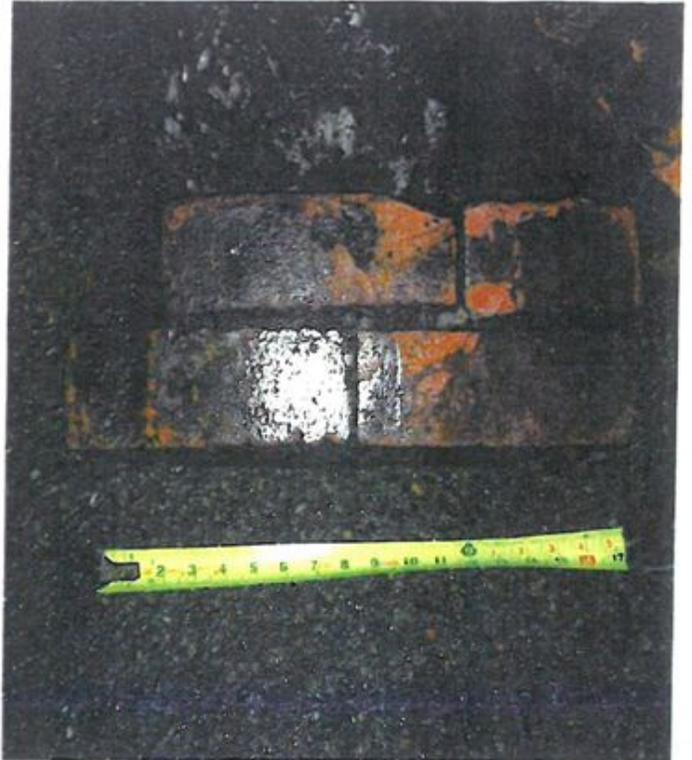


Figure 5: Debris Removed During Cleaning Operations

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

ENGINEERING SERVICES:

**Condition Assessment of Large Diameter Water Mains and Major Sewers
(Joint Use)**

Approval to execute an architectural and engineering services contract not to exceed \$10,000,000.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
Pure Technologies US, Inc 8920 MD-108 Columbia, Maryland 21045	Sagres Construction Lorton, VA	MBE 10.0%
	SaLUT, INC Washington, DC	MBE 5.0%
	Bryant and Associates Landover, MD	MBE 5.0%
	SZ PM Washington, DC	MBE 4.0%
	Phoenix Engineering Parkton, MD	MBE 4.0%
	CreativePages, LLC Sterling, VA	WBE 4.0%
	Brown and Caldwell Beltsville, MD	15.0%
	Red Zone Pittsburgh, PA	10.0%
	Engineering Design Technologies, Inc Glen Burnie, MD	1.0%
	Savin Engineers, Inc Landover, MD	1.0%

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed: \$10,000,000
 Contract Time: 1,922 Days (5 Years, 3 Months)
 Anticipated Contract Start Date: 06-26-2017
 Anticipated Contract Completion Date: 09-30-2022

Other firms submitting proposals/qualification statements:

- Arcadis*
- O'Brien & Gere Engineers
- Simpson Gumperts & Heger*

* Asterisk indicates short listed firms.

Purpose of the Contract:

To provide inspection and condition assessment, data analysis, and recommended rehabilitation options for large diameter water mains and major sewers in the District of Columbia and, to a limited extent, in the neighboring jurisdictions.

Contract Scope:

- The required services include condition assessment of large diameter water mains, construction of access ports on water mains, inspection and condition assessment of major sewers, data analysis, and preparation of condition assessment reports for each inspected asset, preparation of alternative asset renewal analysis for defective inspected linear assets, project management, permitting and coordination with DC Water's operation departments.

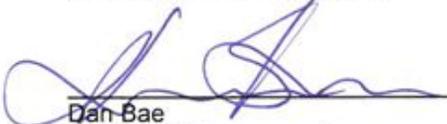
PROCUREMENT INFORMATION			
Contract Type:	Negotiated Task Order - Fixed Price	Award Based On:	Highest Ranking Score
Commodity:	Engineering Design Services	Contract Number:	DCFA #485 - WSA
Contractor Market:	Open Market		

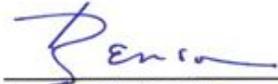
BUDGET INFORMATION			
Funding:	Capital	Department:	Engineering and Technical Services
Service Area:	Water, Sanitary, Combined Sewer	Department Head:	Craig Fricke (Acting)
Project:	FT, DN, HT, HS, IK		

ESTIMATED USER SHARE INFORMATION		
User	**Share %	Dollar Amount
District of Columbia	100.00%	\$ 10,000,000.00
Federal Funds	0.00%	\$
Washington Suburban Sanitary Commission	0.00%	\$
Fairfax County	0.00%	\$
Loudoun County & Potomac Interceptor	0.00%	\$
Total Estimated Dollar Amount	100.00%	\$ 10,000,000.00

** Under the terms of the IMA, the capital costs associated with each joint facility are to be split among the users in proportion to the peak flow each user is allocated. It is not possible, at this time, to allocate costs by individual facility. It is anticipated that as projects are developed for work associated with specific facilities and costs are developed, the individual users will be notified and billed accordingly.


 Robert Hunt
 Acting Chief Financial Officer
 Date: 4/14/17


 Dan Bae
 Director of Procurement
 Date: 4/14/17


 Leonard R. Benson
 Chief Engineer
 Date: 4-10-17

 George S. Hawkins
 General Manager
 Date: / /

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

ENGINEERING SERVICES:

**Condition Assessment of Large Diameter Water Mains and Major Sewers
(Joint Use)**

Approval to execute an architectural and engineering services contract not to exceed \$10,000,000.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
Arcadis District of Columbia, PC 2101 L Street NW Suite 200 Washington DC 20037 <u>Headquarters</u> Highlands Ranch, CO 80129	EBA Engineering Washington, DC	MBE 22.0%
	PEER Consultants PC Washington, DC	MBE 6.0%
	SZ PM Washington, DC	WBE 4.0%
	Red Zone Pittsburgh, PA	10.0%
	Hydromax USA Washington, DC	10.0%
	PICA Miami, FL	5.0%
	Savin Engineering, Landover, MD	2.0%
	Corrosion Probe, Inc Centerbrook, CT	2.0%
	Brierly Associates Bedford, NH	2.0%
	HSS Contracting Gaithersburg, MD	2.0%

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed: \$10,000,00.00
 Contract Time: 1,922 Days (5 Years, 3 Months)
 Anticipated Contract Start Date: 06-26-2017
 Anticipated Contract Completion Date: 09-30-2022

Other firms submitting proposals/qualification statements:

- O'Brien & Gere Engineers
- Pure Technologies, Ltd*
- Simpson Gumperts & Heger*

* Asterisk indicates short listed firms.

Purpose of the Contract:

To provide inspection and condition assessment, data analysis, and recommended rehabilitation options for large diameter water mains and major sewers in the District of Columbia and, to a limited extent, in the neighboring jurisdictions.

Contract Scope:

- The required services include condition assessment of large diameter water mains, construction of access ports on water mains, inspection and condition assessment of major sewers, data analysis, and preparation of condition assessment reports for each inspected asset, preparation of alternative asset renewal analysis for defective inspected linear assets, project management, permitting and coordination with DC Water's operation departments.

PROCUREMENT INFORMATION

Contract Type:	Negotiated Task Order - Fixed Price	Award Based On:	Highest Ranking Score
Commodity:	Engineering Design Services	Contract Number:	DCFA #490 - WSA
Contractor Market:	Open Market		

BUDGET INFORMATION

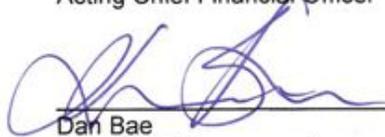
Funding:	Capital	Department:	Engineering and Technical Services
Service Area:	Water, Sanitary, Combined Sewer	Department Head:	Craig Fricke (Acting)
Project:	FT, DN, HS, HT, O4		

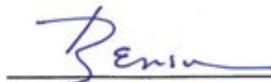
ESTIMATED USER SHARE INFORMATION

User	**Share %	Dollar Amount
District of Columbia	100.00%	\$ 10,000,000.00
Federal Funds	0.00%	\$
Washington Suburban Sanitary Commission	0.00%	\$
Fairfax County	0.00%	\$
Loudoun County & Potomac Interceptor	0.00%	\$
Total Estimated Dollar Amount	100.00%	\$ 10,000,000.00

** Under the terms of the IMA, the capital costs associated with each joint facility are to be split among the users in proportion to the peak flow each user is allocated. It is not possible, at this time, to allocate costs by individual facility. It is anticipated that as projects are developed for work associated with specific facilities and costs are developed, the individual users will be notified and billed accordingly.


 Robert Hunt
 Acting Chief Financial Officer
 Date 4/14/17


 Dan Bae
 Director of Procurement
 Date 4/14/17


 Leonard R. Benson
 Chief Engineer
 Date 4-10-17

 George S. Hawkins
 General Manager
 Date

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

CONSTRUCTION CONTRACT CHANGE ORDER:

**Rehabilitation and Upgrade of the Fort Reno Pumping Station
(Non Joint Use)**

Approval to execute Change Order No. 7 for \$757,421. The modification exceeds the General Manager's approval authority.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
CPP Construction Company 362 B Christopher Avenue Gaithersburg, MD 20879	Arriba Mechanical Baltimore, MD	MBE 14.3%
	Handon Services Washington, DC	MBE 4.3%

DESCRIPTION AND PURPOSE

Original Contract Value:	\$ 4,100,000.00
Value of this Change Order:	\$ 757,421.00
Cumulative CO Value, including this CO:	\$ 2,378,166.00
Current Contract Value, including this CO:	\$ 6,478,166.00
Original Contract Time:	820 Days (2 Years, 3 Months)
Time extension, this CO:	45 Days
Total CO contract time extension:	1385 Days (3 Years, 9 Months)
Contract Start Date (NTP):	05-16-2011
Contract Completion Date:	05-29-2017
Cumulative CO % of Original Contract:	58.0%
Contract completion %:	94.3%

Purpose of the Contract:

Rehabilitation and Upgrade of the Fort Reno Pump Station, increase water pressure and improve water supply reliability to the 4th High Service Area west of Rock Creek Park.

Original Contract Scope:

- Replacement of the existing pump controls, electrical service, emergency back-up generator, surge valves and three variable frequency drives.
- Installation of surge relief valves and an altitude valve for the Elevated Tank No.2.
- Upgrade of two remote pressure sensing sites.
- Installation of power and communication conduits to facilitate installation of a security system in the future.

Previous Change Order Scope:

- Reroute incoming PEPCO Duct bank, electrical and communication lines to accommodate revised PEPCO permitted site drawings provided after contract Notice To Proceed (NTP).
- Modifications to the switchgear orientation and installation of a floor strengthening system to accommodate size of the new electrical equipment and the transition from original to new equipment.
- Relocation of PEPCO termination points and modification to the existing electrical Pump Station Panels;
- Hazardous material abatement of pump station ceiling paint.
- Addition of the commissioning scope of work for new process controls.

Current Change Order Scope:

- Provide temporary stabilization and abatement for the Watchman's Tower building
- Re-configure the Programmable Logic Controller (PLC) to guarantee functionality between the PLC input, output data and the operator interface terminal in station.
- Refurbish pump motors to ensure proper functionality with new Variable Frequency Drives and electrical system.
- Modify remote site unit equipment to comply with new DC Water SCADA equipment standards.

See Supplemental Information for this Change Order (attached)

PROCUREMENT INFORMATION

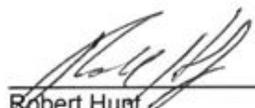
Contract Type:	Fixed Price	Award Based On:	Lowest responsive, responsible bidder.
Commodity:	Construction	Contract Number:	070110
Contractor Market:	Open Market		

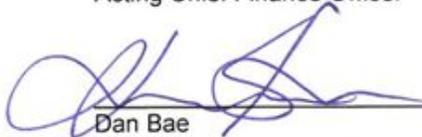
BUDGET INFORMATION

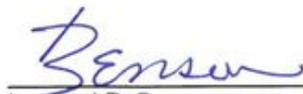
Funding:	Capital	Department:	Engineering and Technical Services
Service Area:	Water	Department Head:	Craig Fricke (Acting)
Project:	AY		

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	100.00%	\$ 757,421.00
Federal Funding	0.00%	\$
Washington Suburban Sanitary Commission	0.00%	\$
Fairfax County	0.00%	\$
Loudoun County & Potomac Interceptor	0.00%	\$
Total Estimated Dollar Amount	100.00%	\$ 757,421.00


 Robert Hunt
 Acting Chief Finance Officer
 Date: 4/14/17


 Dan Bae
 Director of Procurement
 Date: 4/14/17


 Leonard R. Benson
 Chief Engineer
 Date: 4-12-17

 George S. Hawkins
 General Manager
 Date: / /

Rehabilitation and Upgrade of the Fort Reno Pumping Station Project
Supplemental Information - Summary of Impacts

Safety Netting	
8/12/2013	<p>Notice to Proceed</p> <p>While excavating for the installation of the storm drain piping, DC Water's Department of Occupational, Safety and Health required that a Safety Plan and Netting system was needed to work around Elevated Tank 1 due to loose slate shingles</p>
61 calendar day delay	<p>Impact 61 calendar day delay</p> <p>Delay to Critical Path ends, 10/12/2013</p> <p>Executed Change Order No.2 - Submittal preparation (30 days) - Submittal review and approval (31 days)</p>
DESIGN REVISION 2	
10/12/2013	<p>DR 2 - While reviewing the submittal for the Switchgear, DC Water noticed there were a number of safety issues related to the orientation of the switchgear and MCC. The area to service the switchgear faced the railing that overlooked the pump station several floors below. DC Water's Department of Occupational, Safety and Health felt that if there were an arc flash while servicing the equipment that the maintenance individual could potentially be thrown back and fall over the railing. DR-2 changed the orientation of both the MCC and the Switchgear to address the safety concerns of DC Water</p>
419 calendar day delay	<p>Impact 419 calendar days</p> <p>Delay to Critical Path ends, 12/5/2014</p> <p>Executed Change Order No.2 - Revised Design (272 days) - Negotiations (87 days) - Submittal preparation (30 days) - Submittal review and approval (30 days)</p>
PEPCO PERMIT SITE LAYOUT DRAWINGS	
12/5/2014	<p>Pepco Layout drawings were not available prior to the contract award. Also, after the submittal process, the location of the Network Transformer and Tie-Bus vaults had to be relocated due to differing site conditions</p>
105 calendar day delay	<p>Impact 105 calendar days</p> <p>Delay to Critical Path ends, 3/21/2015</p> <p>Executed Change Order No.2 - Submittal preparation (30 days) - PEPCO review and approval (75)</p>
RE-ROUTE INCOMING SECONDARY DUCTBANK	
3/21/2015	<p>Re-route Secondary ductbank due to interferences from an unknown abandoned 24 " water line and electrical hand holes</p>
96 calendar day delay	<p>Impact 96 calendar days</p> <p>Delay to Critical Path ends, 6/25/2015</p> <p>Executed Change Order No.3 - Submittal preparation (30 days) - PEPCO review and approval (66)</p>
PEPCO DESIGN FOR CABLE AND TRANSFORMER CHANGES	
6/25/2015	<p>Due to an unknown abandoned 24 " water line and electrical hand holes interfering with the location of EMH-3 containing the Network Transformer and incoming feeder lines, PEPCO had to redesign the size of the transformer and length of the incoming cables. PEPCO took 284 days to complete the redesign; 263 days to mobilize and install the Transformer and cables; and 132 days to coordinate outages to energize the incoming feeders 14329 and transformer.</p>
659 calendar day delay	<p>Impact 659 calendar days</p> <p>Delay to Critical Path ends, 4/14/2017</p> <p>Executed Change Order No.4 - PEPCO Redesign (284 days) - PEPCO Mobilization (63 days) - PEPCO Work (132 days)</p>
ELEVATED TANK 2 - MEMBRANE TANK COVER DESIGN	
4/14/2017	<p>The Elevated Tank 2 membrane cover design specified in the contract documents does not comply with current EPA regulations; therefore, the contractor had to provide a Membrane Cover design in compliance with EPA regulations.</p>
45 calendar day delay	<p>Impact 45 calendar days</p> <p>Delay to Critical Path ends, 5/29/2017</p> <p>Proposed Change Order No.7</p>
1385 TOTAL CALENDAR DAY IMPACT	

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

CONSTRUCTION CONTRACT CHANGE ORDER:

**G-100: Local Sewer Rehabilitation #1
(Non-Joint Use)**

Approval to execute Change Order No. 5 for \$1,291,775. The modification exceeds the General Manager's approval authority.

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
SAK Construction LLC 1405 Benson Court, Ste. C Arbutus, MD 21227 <u>Headquarters</u> O'Fallon, MO 63366	DACO Construction Hanover, MD	MBE 17.4%
	Luther Tylertown, MS	MBE 10.0%
	P&P Sewer Techs Fort Washington, MD	MBE 7.4%
	TFE Owings Mills, MD	MBE 2.9%
	Envirenew Gaithersburg, MD	WBE 5.2%

DESCRIPTION AND PURPOSE

Original Contract Value:	\$5,250,125.00
Value of this Change Order:	\$1,291,775.00
Cumulative CO Value, including this CO:	\$1,814,789.00
Current Contract Value, including this CO:	\$7,064,914.00
Original Contract Time:	730 Days (2 Years, 0 Months)
Time extension, this CO:	127 Days
Total CO contract time extension:	127 Days (0 years, 4 months)
Contract Start Date (NTP):	07-14-2015
Anticipated Contract Completion Date:	11-17-2017
Cumulative CO % of Original Contract:	34.6%
Contract completion %:	60.0%

Purpose of the Contract:

Repair and rehabilitation of sewer and storm water/sewer (combined) assets.

Original Contract Scope:

Install approximately 15,000 LF of Cured in Place Pipe (CIPP) in various sizes and locations. Rehabilitation of lateral connections. Rehabilitation of approximately 140 manholes located throughout the District. Surface restoration as required for the above work. Maintenance of traffic for the above work. Various other work as noted in the contract documents. Obtain all permits required by the contract.

Previous Change Order Scope:

- Due to flooding on the Capital Crescent Trail an 18" partially blocked sewer was rehabilitated with CIPP. A CCTV inspection took place before and after completion.
- Additional manhole rehabilitated, and some bypass pumping was required.

Current Change Order Scope:

Install 1,681 LF of CIPP between 12"-24" diameter at various locations. Rehabilitation of lateral connections. Rehabilitation of approximately 25 manholes located throughout the District. Surface restoration as required for the above work. Maintenance of traffic for the above work. Obtain all required permits. This work was transferred from another Small Local Sewer Rehabilitation Contract (130190) because the Contractor's performance was unsatisfactory.

The reason this work was assigned to SAK Construction LLC is:

1. The repair of the specific segment of sewer had been identified through the inspection program as "in need of immediate repair".
2. This contract was originally bid with fixed unit price work items, including CIPP, sewer lining, and manhole rehabilitation.
3. The competitively bid fixed unit prices were very favorable to DC Water.

PROCUREMENT INFORMATION			
Contract Type:	Fixed Price	Award Based On:	Lowest responsive, responsible bidder
Commodity:	Construction	Contract Number:	140160
Contractor Market:	Open Market		

BUDGET INFORMATION			
Funding:	Capital	Department:	Engineering and Technical Services
Service Area:	Sanitary	Department Head:	Craig Fricke (Acting)
Project:	G1		

ESTIMATED USER SHARE INFORMATION		
User	Share %	Dollar Amount
District of Columbia	100.00%	\$ 1,291,775.00
Washington Suburban Sanitary Commission	0.00%	\$
Fairfax County	0.00%	\$
Loudoun County & Potomac Interceptor	0.00%	\$
Total Estimated Dollar Amount	100.00%	\$ 1,291,775.00


 _____ 4/14/17
 Robert Hunt Date
 Acting Chief Financial Officer


 _____ 4/14/17
 Dan Bae Date
 Director of Procurement


 _____ 4-12-17
 Leonard R. Benson Date
 Chief Engineer

_____ / _____
 George S. Hawkins Date
 General Manager

**DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS CONTRACTOR FACT SHEET**

ACTION REQUESTED

CONSTRUCTION CONTRACT:

**Small Diameter Water Main Cleaning and Lining 11C
(Non Joint Use)**

Approval to execute a construction contract for \$4,294,482.00

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
J. Fletcher Creamer & Son, Inc 11800 Old Baltimore Pike Beltsville, Maryland 20705 <u>Headquarters</u> Hackensack, NJ 17601 (MBE)	Metro Paving Hyattsville, Maryland MBE	14.3%
	Aves Construction Corporation Temple Hills, Maryland MBE	11.6%
	Omega Supply Services, Inc Washington, DC MBE	4.7%
	BOTA Consulting Services, Inc Lanham, Maryland MBE	1.2%
	Capital Development Design, Inc Beltsville, Maryland MBE	0.4%
	R+R Contracting Utilities, Inc Olney, Maryland WBE	4.2%
	Acorn Supply and Distributing White Marsh, Maryland WBE	1.8%

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed:	\$4,294,482.00
Contract Time:	420 Days (1 Year, 2 Months)
Anticipated Contract Start Date (NTP):	06-19-2017
Anticipated Contract Completion Date:	08-13-2018
Bid Opening Date:	01-25-2017
Bids Received:	2
Other Bids Received	
Fort Myer Construction Corporation	\$ 4,697,988.00

Purpose of the Contract:

Cleaning, Lining and Replacement of water mains to eliminate water quality issues due to tuberculation of the unlined cast iron mains in the project area.

Contract Scope:

- Cleaning & Cement Mortar lining of approximately 1.24 miles of 8-inch water mains within Wards 2 and 3.
- Replace approximately 0.36 miles of water mains 12-inch diameter and smaller, associated valves, and appurtenances at various locations within Wards 2 and 3.
- Replace approximately 0.34 miles of copper or lead water services, 2 inch diameter and smaller, in public and private space.
- Install curb stop /curb stop box, meter box and penetration through building wall and connection to first fitting inside the building including installation of a shut-off valve and pressure reducing valve.
- Install permanent pavement and surface restoration.

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	Award Based On:	Lowest responsive, responsible bidder
Commodity:	Construction	Contract Number:	150170
Contractor Market:	Open Market		

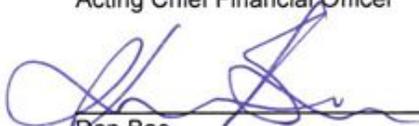
BUDGET INFORMATION

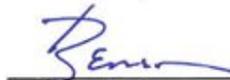
Funding:	Capital	Department:	Engineering and Technical Services
Service Area:	Water	Department Head:	Craig Fricke (Acting)
Project:	O3		

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	100.00%	\$4,294,482.00
Federal Funds	0.00%	\$
Washington Suburban Sanitary Commission	0.00%	\$
Fairfax County	0.00%	\$
Loudoun County & Potomac Interceptor	0.00%	\$
Total Estimated Dollar Amount	100.00%	\$4,294,482.00


 Robert Hunt
 Acting Chief Financial Officer
 Date: 4/14/17


 Dan Bae
 Director of Procurement
 Date: 4/14/17


 Leonard R. Benson
 Chief Engineer
 Date: 4-10-17

 George S. Hawkins
 General Manager
 Date: / /