

10:15 a.m.

VI.

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Board of Directors

Meeting of the Environmental Quality and Operations Committee

Thursday, October 21, 2021 9:30 a.m.

Microsoft Teams

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Phone Conference ID: 277 097 025#

Steve Boemerman/Kishia Powell

9:30 a.m.	l.	Call to Order	Howard Gibbs Vice Chair
	II.	Roll Call	Linda Manley Board Secretary
9:35 a.m.	III.	AWTP Status Update	Aklile Tesfaye
		1. BPAWTP Performance	
9:45 a.m.	IV.	Bloom Update	Chris Peot
9:55 a.m.	V.	Proposed Revisions to FY 2022 Capital Budget 1. Action Item: Recommendation for Board Approval of 2022 Capital Budget in the Board-Approved FY 2021 Improvement Program (CIP)	

Joint Use

Action Items

- 1. Contract No.: 10068 Calcium Hydroxide, W.K. Merriman, Inc.
- 2. Contract No.: 19-PR-OCEO-24 Strategic Planning Advisory Services, ARUP-Deloitte
- **3.** Contract No.: 200110 Public Space Restoration Contract, Capitol Paving of D.C., Inc.
- **4.** Contract No.: DCFA 506A Construction Management for Water & Sewer System Infrastructure (Basic Ordering Agreement), AECOM Technical Services, Inc.
- **5.** Contract No.: DCFA 506B Construction Management for Water & Sewer System Infrastructure (Basic Ordering Agreement), Hazen and Sawyer, Inc.
- **6.** Contract No.: 190070 DC Water Fleet Maintenance Facility, Hess Construction & Engineering

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Non-Joint Use

- **1.** Contract No.: 210040 Division RC-B Rock Creek Project B (Green Infrastructure), Fort Myer Construction Corporation
- 2. Contract No.: 180010 Small Diameter Water Main Replacement 15A, Capitol Paving of D.C., Inc.
- **3.** Contract No.: 150140 Constitution Avenue Area Water Main Replacement, Sagres Construction Corp.

10:35 a.m.	VII.	DCCR: Rock Creek Project B - GI	Carlton Ray/Seth Charde
10:50 a.m.	VIII.	Other Business / Emerging Issues	
10:55 a.m.	Χ.	Executive Session*	Howard Gibbs Vice Chair
11·00 a m	ΧI	Adjournment	

Follow-up Items from Prior Meetings:

- 1. Director, DETS: The Committee requested that DC Water send information related to the Soapstone Valley Park Sewer Rehabilitation Project. [Sent to BOD Secretary on 9/24/21]
- Director, DETS: The Committee requested that DC Water inform the Virginia members of the Committee of the issues on the Potomac Interceptor Project. [Sent to BOD Secretary on 9/24/21]
- 3. VP, Procurement and Compliance: The Committee asked what percentage of solicitations received one responsive bid in the last year. [Sent to BOD Secretary on 10/06/21]
- **4.** VP, Wastewater Operations: The Committee requested additional pictures of the concrete repair of the West Grit Chamber Effluent Channels. [Sent to BOD Secretary on 9/20/21]
- **5.** VP, Wastewater Operations: To present a presentation to the Committee at the October 21st meeting to discuss Bloom and the associated program. **[On current agenda]**
- **6.** VP, DC Clean Rivers: The Committee inquired about the costs per acre to construct the GI projects and the mechanisms used to determine the effectiveness of the projects. **[On current agenda]**

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)(2); legal, confidential or privileged matters under D.C. Official Code § 2-575(b)(4)(A); 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); proprietary matters under D.C. Official Code § 2-575(b)(11); train and develop members of a public body and staff under D.C. Official Codes § 2-575(b)(12); 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.



Wastewater Operations

Blue Plains Advanced Wastewater Treatment Plant – September 2021

Accomplishments & Priorities

DC Water as part of a broad research team was awarded with U.S. Department of Energy (DOE) research grant:

DC Water as part of a team with Water Research Foundation, Hampton Road Sanitation District (HRSD), Metro Water Recovery -Colorado, U.S. Military Academy West Point, University of Michigan, Northwestern University, Oak Ridge National Laboratory, and Black & Veatch, was awarded a \$2.2 million grant to implement a project titled: "Crossing the Finish Line: Integration of Data-Driven Process Control for Maximization of Energy and Resource Efficiency in Advanced Water Resource Recovery Facilities". Water Research Foundation (WRF) agreed to lead and manage the project finances in accordance with DOE requirements and will lead the industry outreach. This project will fund one graduate student from Michigan University and one graduate student from Northwestern to work directly on Blue Plains research and implementation projects. This project is funded as part of DOE's Water Security Grand Challenge (WSGC). The WSGC is a White House initiated, U.S. DOE-led framework to advance transformational technology and innovation to meet the global need for safe, secure, and affordable water. The project started on October 1, 2021.

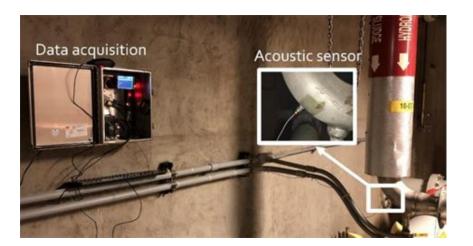
The project will provide the following value to DC Water:

- Development of data-driven decision making on secondary treatment operation. The way the return flow from dewatering building and waste sludge from BNR to the secondary system is divided over the east and west systems directly impacts settleability and effluent quality in secondary treatment. This tool will provide operational guidance on best setpoints to apply to main good effluent quality and reduce energy demand for aeration.
- Development of polymer dose prediction based on acoustic sensor to improve final cake solids and save polymer cost. Currently polymer dose settings are based on visual inspection of sludge behavior over the belt filter presses. We proposed to automate this by development of an acoustic sensor that will predict the most economical polymer dose point. The aim of this concept is to reduce polymer cost and increase cake solids levels and reliability (Figure 1)
- Access to other data-driven control concepts within this project, applicable to DC Water. This involves aeration control examples tested by HRSD as well as disinfection concepts tested by Metro Denver. Eventually, the output of the project will be a toolbox with tools and concepts transferable to different applications and situations.

Accomplishments & Priorities

• Knowledge and skill development in data analytics and tool development. We can learn and discuss ideas and needs with two major data experts in the team (Branko Kerkez and Kris Villez) that are leading experts in data analytics in the water industry. The research team is working closely together with Wastewater Treatment Process Engineering and Instrumentation groups on this project so individuals from our different groups will get opportunities to get involved, contribute, and learn.

Figure 1. Acoustic Sensor Set Up at Blue Plains Under Development to improve final Cake Solids and Save Polymer Cost



Operational **Performance**

Blue Plains Complete Treatment Performance: The plant performance for the month of September 2021 was excellent with all effluent parameters well below the seven-day and monthly NPDES permit requirements. The monthly average flow through complete treatment (Outfall 002) was 296 MGD. The total volume for the month of September of treated captured combined flow directed to Outfall 001 from the Wet Weather Treatment Facility (WWTF) was 24 MG.

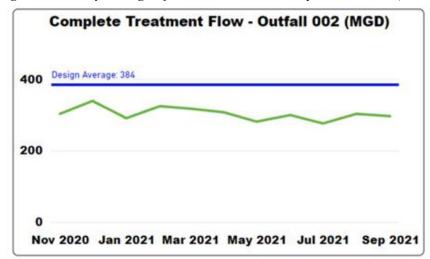


Figure 2. Monthly Average Influent Flow Trend to Complete Treatment (MGD)

Wet Weather Treatment Facility (WWTF) Performance: In September 2021, a total of 326 MG of combined wet weather flow, captured in the tunnel system, was treated through the plant. There was no measured overflow that took place on this month (Table 1).

Table 1. Wet Weather Treatment Facility (WWTF) Performance

	September 21	(Through September)
Total Precipitation, inches (DCA gauge)	4.29	38.57
Total Volume Captured in the Anacostia Tunnel, MG	326	2061
Measured Overflow, MG	0	86
Percent Captured**	100%	96%
Screenings and Grit Capture, tons	262	2,597

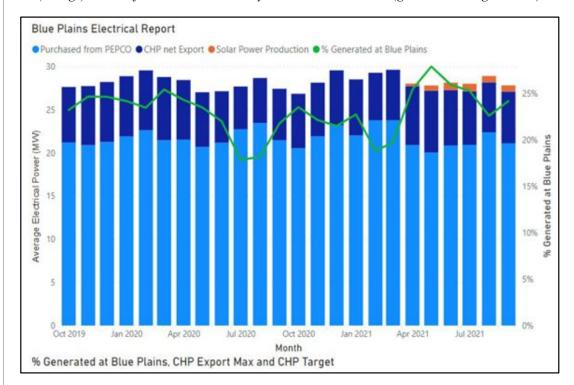
Note: *Based on preliminary data.

^{**}Expected Capture ~80%

Operational Performance

Blue Plains Electrical Energy Use and Generation: The Combined Heat and Power (CHP) facility produced an average of 7.3 megawatts (MW) of renewable electricity during this month. Contractually, the CHP performance is evaluated based on the net electricity export to the Blue Plains grid, which averaged 6.0 MW as shown in Figure 5 below. The solar system produced an additional 0.73 MW of power on average. The total electricity consumption at Blue Plains averaged 27.8 MW during the month of September. Out of total electrical consumption, 24.2% of electricity was generated onsite between CHP and solar panels, which surpassed the plant performance metrics of 20%. DC Water purchased an average of 21.1 MW of electricity from PEPCO as shown in the graph below.

Figure 3. Blue Plains Energy Report – October 2019 to September 2021: Average Electricity Purchased from PEPCO (light blue), Net Export from CHP (dark blue), Solar Power Production (orange) and % of Total Plant Electricity Use Generated Onsite (green line on right Y-axis)



Operational Performance

Class A Biosolids Production: In September, biosolids hauling averaged 450 wet tons per day (wtpd). All biosolids produced during the month met Class A Exceptional Quality (EQ) requirements required by EPA. Fecal Coliform values on daily process monitoring samples remained below the 1,000 MPN*/gram required for Class A biosolids - consistent with the low levels measured historically.

*Most Probable Number (MPN) per gram measures statistical probability of number of organisms

Bloom Marketing: The average quantities of Class A biosolids transported and applied on farms and the quantities marketed as Bloom are shown on the graph below. In September, Blue Drop sold 3,280 wet tons of Bloom (Figure 4). The remaining 10,212 wet tons not sold into the market were land applied through DC Water (through Blue Drop) and WSSC contracts.

Total Production of Class A Biosolids and Beneficial Reuse by Type

Land Application • Marketing as Bloom

15K

10K

Jan 2019

Jan 2020

Jan 2021

Jan 2021

Jan 2021

Jan 2021

Jan 2021

Figure 4. Tons of Class A Biosolids Produced - October 2018 to September 2021 Marketed as Bloom (blue) and Land Applied (green)

Progress Report

Water Quality & Pretreatment: During the month, staff issued one new Non-Significant Industrial User permit* for a low flow groundwater remediation discharge, three new Temporary Discharge Authorization permits** and two new Waste Hauler permits**. Staff conducted industrial user inspections and compliance monitoring at two Significant Industrial Users (SIUs) and have one remaining SIU inspection to conduct this calendar year. Program revenue for fiscal year 2021 included approximately \$1.13 M from 42 permitted waste haulers for disposal and permitting fees, \$0.28M from permitted temporary dischargers for groundwater fees, and \$0.11M from permitted industrial users for program fees and high strength waste fees for a total revenue of \$1.5M.

Notes:

- * Industrial user with an average process wastewater flow of <25,000 gallons or more per day and/or contributes <5% or more of the total inflow or organic loading to Blue Plains Advanced Wastewater Treatment Plan, and/or has a reasonable potential for violating any pretreatment standard or requirement, for harming the environment, or for causing a threat to wastewater utility personnel.
- ** DC Water allows residents, businesses, and government agencies to discharge stormwater, groundwater, and surface water runoff from construction/dewatering projects or other temporary water discharges (e.g., power wash runoff, hydro-demolition wastewater, etc.) to the District's wastewater system on a case-by-case basis.
- *** DC Water allows businesses and government agencies with a permit to discharge domestic (i.e., residential-type) septage, grease trap waste, uncontaminated non-wastewater flows, and other non-hazardous waste (allowed on a case-by-case basis) at the Blue Plains Advanced Wastewater Treatment Plant (AWTP). It is illegal to discharge hauled waste directly to the District's wastewater system anywhere else within the District of Columbia.



DC Water Bloom Marketing Report for FY21

Chris Peot, PE, BCEE Director of Resource Recovery





Bloom Soil Amendment Product









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Bloom Products

- •Fresh Bloom:
 - biosolid straight from process
 - Good for farming/industrial application
 - Product slinkiness, limits use in home gardening.
- •Cured Bloom (100% bloom):
 - Dried/windrowed material
 - Granular, easy to use
 - Higher nutrient content
- Blended Products
 - Wood Blend (OM augmentation)
 - Sand Sawdust (texture + OM)





Bloom On-Site Blending Facility







Our Customers







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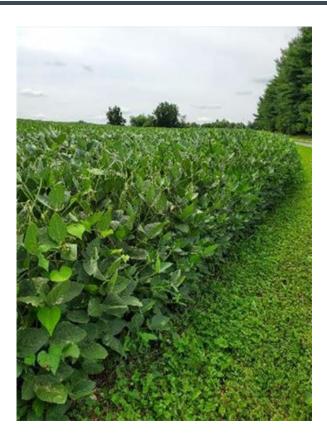
Bloom in Use





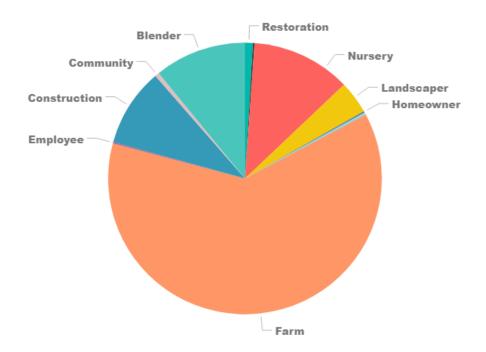






Bloom Customer Summary

Dewatered Solids



Bloom Demand is Growing

Progress Towards Bloom Marketing Goals (wet tons)

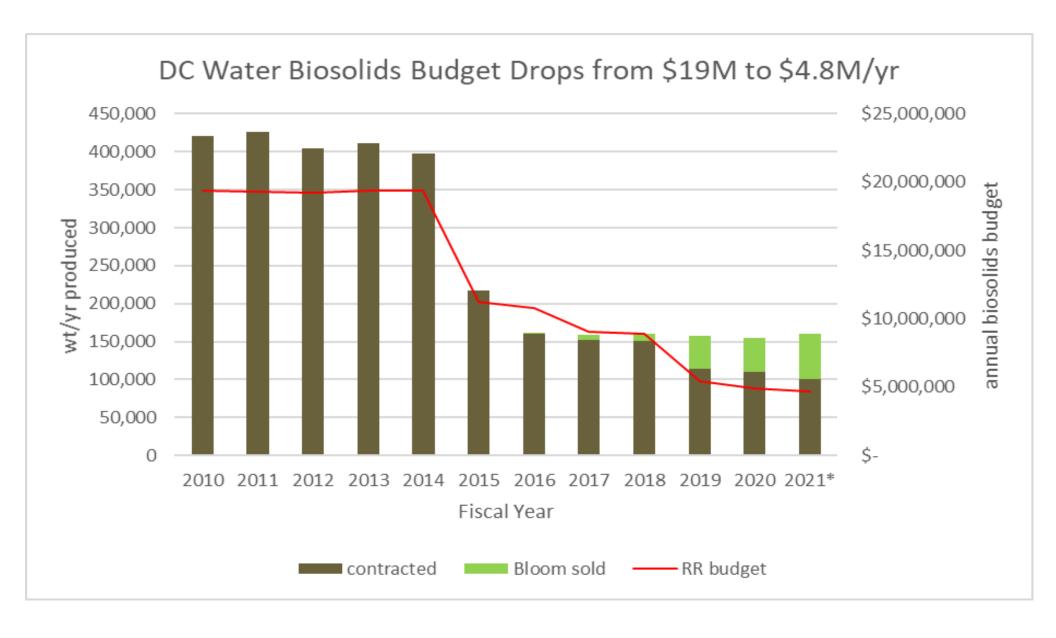


Bloom Marketing Challenges:

- Processing capacity designing a curing facility onsite, considering land purchase, building a small hoop building for product storage
- 2. Weather wet weather prevents farm deliveries bought field pads to help during these events, considering a farm purchase for storage and use
- 3. Construction soil specs working with DDOT for spec changes to allow biosolids products



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There is no such thing as waste, only wasted resources.

www.bloomsoil.com

Chris Peot PE, BCEE cpeot@dcwater.com

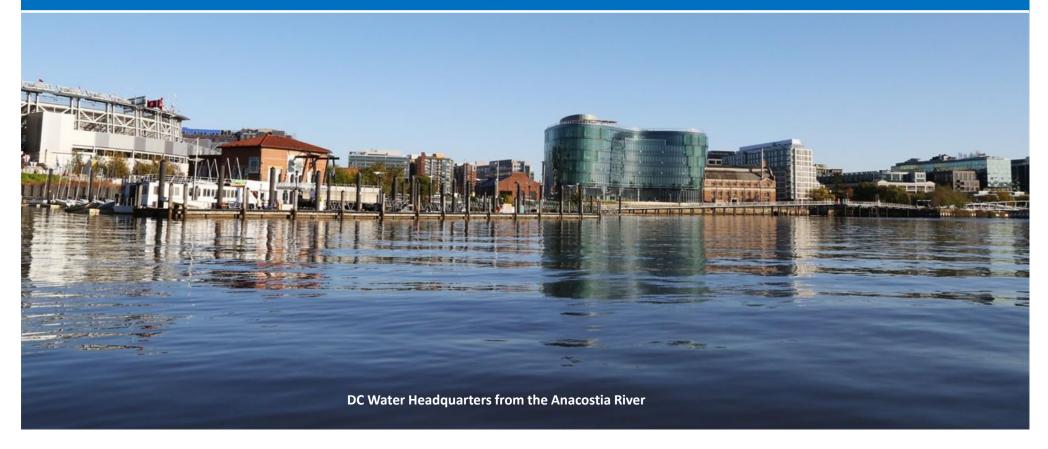


ATTACHMENT 2

Proposed Revisions to FY 2022 Capital Budget

Presentation to the Environmental Quality and Operations Committee on October 21, 2021

District of Columbia Water and Sewer Authority



Purpose

Seek Committee's recommendation to the Board for approval of management's proposal for revisions to the Board-amended FY 2022 Capital Budget based on updated forecasts for capital programs, offset by FY 2021 underspending



Capital Budgets

- For each budget cycle, the Board approves the following for the capital program
 - Annual allotments in the ten-year plan that supports the projected rates and wholesale customer revenue over the same period
 - Aggregate disbursements for the ten-year period
 - Lifetime amount for the projects, which is a combination of costs to date, estimated costs through completion and contingencies
- After Board-adoption, the capital authority request is submitted through the District for passive Congressional approval



Capital Budget Overview

- With implementation of Enterprise Resource Planning (ERP) project,
 - DC Water adopted best practices to enhance the capital budget administration and align annual spending limits with the Board-approved financial plan and rates
 - Spending controls were established to help ensure transparency and accountability to deliver Board-approved capital program
- The Board adopted the establishment of a contingency reserve of ten percent in FY 2022 within the Financial Plan as part of the last budget cycle
 - Helps ensure that funds are available if spending exceeds the Board-approved annual levels
 - Provides needed flexibility for the large capital program as projects may move more quickly or slowly than anticipated
 - For FY 2022, a total of \$39.6 million has been allocated for the LeadFree DC program (\$36.03 million) and projected increases in Washington Aqueduct's capital program (\$3.55 million)
 - Remaining balance in the contingency for FY 2022 is \$12.1 million



Board-Amended CIP Budget

- ◆ The Board of Directors adopted amendments of \$36.03 million to the FY 2022 budget for the Leadfree DC program management and construction costs from capital contingency (resolutions #21-54 and #21-70)
- Additionally, funds were allocated from the projected FY 2021 net cash surplus position to fund purchase of vehicles anticipated for delivery in FY 2022

\$ in thousands FY 2021					FY 2030 Capital Improvement Program				
	FY 2022	FY 2022 Am	nendments	Proposed	Approved	FY 2030 A n	mendments	Proposed	
	Approved	No. I	No. 2	Revision	10-Year CIP	No. I	No. 2	10-Year CIP	
NON PROCESS FACILITIES	12,725			12,725	109,776			109,776	
WASTEWATER TREATMENT	63,922			63,922	1,158,991			1,158,991	
COMBINED SEWER OVERFLOW	165,276			165,276	1,122,976			1,122,976	
STORMWATER	9,228			9,228	63,894		(2,897)	60,997	
SANITARY SEWER	75,437			75,437	1,312,973			1,312,973	
WATER	100,209	10,630	25,400	136,239	1,147,717	10,630	25,400	1,183,747	
CAPITAL PROJECTS	426,797	10,630	25,400	462,827	4,916,327	10,630	22,503	4,949,460	
CAPITAL EQUIPMENT	36,019	4,500		40,519	336,036	(10,630)	(22,503)	302,903	
WASHINGTON AQUEDUCT	13,324			13,324	180,125			180,125	
ADDITIONAL CAPITAL PROGRAMS	49,343	4,500	-	53,843	516,161	(10,630)	(22,503)	483,028	
LABOR									
TOTAL CAPITAL BUDGETS	\$476,140	\$ 15,130	\$ 25,400	\$516,670	\$ 5,432,489	\$ -	\$ -	\$ 5,432,489	



FY 2021 and FY 2022 CIP Overview

- ◆ The preliminary year-end forecast of \$370.1 million is \$101.1 million below the FY 2021 Budget.
- Proposed revisions to the FY 2022 budget includes a \$50.8 million increase compared to the amended budget (\$'s in thousands)

Service Area	FY 2021 Budget	FY 2021 Actuals*	FY 2021 Variance (Inc)/Dec	FY 2022 Amended	FY 2022 Proposed Revision	FY 2022 Variance (Inc)/Dec
Non-Process Facilities	\$38,004	\$21,508	\$16,496	\$12,725	\$31,439	(\$18,714)
Wastewater Treatment	78,992	72,007	6,985	63,922	85,979	(22,057)
DC Clean Rivers	165,434	160,359	5,076	160,582	147,347	13,235
Combined Sewer Overflow	5,407	1,158	4,249	4,694	4,919	(225)
Stormwater	5,931	1,831	4,100	9,228	7,029	2,199
Sanitary Sewer	50,547	28,204	22,343	75,437	68,086	7,351
Water	75,362	55,880	19,482	136,239	165,313	(29,074)
Total Capital Projects	\$419,678	\$340,946	\$78,732	\$462,827	\$510,112	(\$47,285)
Additional Capital Programs	51,589	29,174	22,415	53,843	57,394	(3,551)
Total CIP	\$471,267	\$370,120	\$101,148	\$516,670	\$567,506	(\$50,836)

^{*}YTD Spending through September 2021



Proposed Changes to FY 2022 CIP Budget

• Due to timing of CIP project budget estimates developed a year ago, there have been subsequent changes resulting from schedule slippages, changes in bid estimates, new projects, etc.

Service Area	FY 2021 Delta	FY 2022 Delta	Total Delta FY 2021/2022 (Inc)/Dec	Explanation
Non-Process Facilities	\$16,496	(\$18,714)	(\$2,218)	Changes due to permitting delays for the Fleet Facilities, this project has slipped into FY2022
Wastewater Treatment	6,985	(22,057)	(15,072)	Increases due to; increased TDPS costs, changes to PgM plan due to staffing constraints, multiple construction Change Orders
DC Clean Rivers	5,076	13,235	18,311	Decrease due realignment of cost forecasts. DCCR schedules have not slipped
Combined Sewer Overflow	4,249	(225)	4,024	Decrease due to schedule slippage on some CSO projects
Stormwater	4,100	2,199	6,299	Decrease due to schedule slippage
Sanitary Sewer	22,343	7,351	29,694	Decrease due to schedule slippage on Potomac Interceptor projects
Water	19,482	(29,074)	(9,592)	Increase due to changes to project cost estimates and some SDWM projects progressing ahead of anticipated schedule, and LFDC reimbursable amount accounted for
Total Capital Projects	\$78,732	(\$47,285)	\$31,447	Overall reduction of \$31M across FY 2021/2022 forecast
Additional Capital Programs	22,415	(3,551)	18,865	Decrease in capital spending including roll forward of Fleet, offset by an increase in Washington Aqueduct
Total CIP	\$101,148	(\$50,836)	\$50,312	Overall reduction of \$50.3M across FY 2021/2022 forecast 7



Management Recommendation

- ◆ That the Committee recommend to the Board a revision to the FY 2022 Capital Budget to include the following:
 - Increase of \$50.8 million from \$516.7 million to \$567.5 million mainly for changes in capital projects and DC Water's share
 of the Washington Aqueduct's projects, and offset by projected underspending in FY 2021 for capital projects
 - No changes to the overall Board-adopted CIP budget of \$5.4 billion. Funding for the remaining periods in the ten-year window will be included in the next budget cycle with delivery anticipated in January 2022

(\$ in thousands)	FY 2021 - FY 20	030 Capital Improv	ement Program
	FY 2022	FY 2022	
	Amended	Proposed	10-Year CIP
	Budget	Revision	10-Tear CIF
NON PROCESS FACILITIES	12,725	31,439	109,776
WASTEWATER TREATMENT	63,922	85,979	1,158,991
COMBINED SEWER OVERFLOW	165,276	152,267	1,122,976
STORMWATER	9,228	7,029	60,997
SANITARY SEWER	75,437	68,086	1,312,973
WATER	136,239	165,313	1,183,747
CAPITAL PROJECTS	462,827	510,112	4,949,460
CAPITAL EQUIPMENT	40,519	40,519	302,903
WASHINGTON AQUEDUCT	13,324	16,875	180,125
ADDITIONAL CAPITAL PROGRAMS	53,843	57,394	483,028
TOTAL CAPITAL BUDGETS	\$ 516,670	\$ 567,506	\$ 5,432,489

Attachment A-1:
Amendments to FY 2021-2030 Capital Improvement Program

	FY 2021 - FY 2030 Capital Improvement Program				
	Amended	Proposed	Approved	Proposed	
	Budget	Revision	10-Year CIP	10-Year CIP	
(\$ in thousands)	FY 2022	FY 2022	FY 2022	FY 2022	
NON PROCESS FACILITIES	12,725	31,439	109,776	109,776	
WASTEWATER TREATMENT	63,922	85,979	1,158,991	1,158,991	
COMBINED SEWER OVERFLOW	165,276	152,267	1,122,976	1,122,976	
STORMWATER	9,228	7,029	63,894	63,894	
SANITARY SEWER	75,437	68,086	1,312,973	1,312,973	
WATER	136,239	165,313	1,147,717	1,147,717	
CAPITAL PROJECTS	462,827	510,112	4,916,327	4,916,327	
CAPITAL EQUIPMENT	40,519	40,519	336,036	336,036	
WASHINGTON AQUEDUCT	13,324	16,875	180,125	180,125	
ADDITIONAL CAPITAL PROJECTS	53,843	57,394	516,161	516,161	
TOTAL CAPITAL BUDGETS	516,670	567,506	5,432,489	5,432,489	

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

ACTION REQUESTED

GOODS AND SERVICES CONTRACT AWARD

(Joint Use)

Approval to award and fund a contract for the supply and delivery of calcium hydroxide (also called "lime slurry") in the amount of \$1,720,000.00 for the base and two option years.

CONTRACTOR/SUB/VENDOR INFORMATION				
PRIME: W.K. Merriman, Inc. 8038 Front River Road Pittsburgh, PA 15225 WBE Certified	SUBS: N/A	PARTICIPATION: WBE - 100%		

DESCRIPTION AND PURPOSE

Base Period Contract Value: \$550,000.00

Base Period Contract Dates: 12-01-2021 - 11-30-2022

No. of Option Years in Contract: 2

Total Option Year 1-2 Value: \$1,170,000.00

Option Year 1-2 Dates: 12-01-2022 - 11-30-2024

1

Number of Proposals Received

Purpose of the Contract:

To supply and deliver calcium hydroxide. The calcium hydroxide is used in the Nitrification Facility to adjust pH.

Contract Scope:

This contract is to provide calcium hydroxide to the Blue Plains Advanced Wastewater Treatment Facility for DC Water's Department of Wastewater Treatment (DWT). DWT has an ongoing need for calcium hydroxide in slurry form to feed the Nitrification Facility at the Blue Plains Wastewater Treatment Plant. The product is used in the Biological Nutrient Removal process for pH control.

Option years will be exercised annually.

Supplier Selection:

An RFP solicitation for DC Water's ongoing calcium hydroxide requirement was issued to the open market with 2% DBE and 0% WBE utilization goals. Only one company (W.K. Merriman) responded to the solicitation. W.K. Merriman, a WBE certified company, is the incumbent of current calcium hydroxide contract. DC Water is satisfied with W.K. Merriman's timeliness of deliveries and conformance to the requirements of the current contract.

PROCUREMENT INFORMATION

Contract Type:	Good and Services	Award Based On:	Best Value	
Commodity:	Calcium Hydroxide	Contract Number:	10068	
Contractor Market:	Open Market with goals for DBE/WBE Participation			

BUDGET INFORMATION

Funding:	Operating	Department:	Wastewater Treatment
Project Area:	Blue Plains AWTP	Department Head:	Aklile Tesfave

ESTIMATED USER SHARE INFORMATION

User - Operating	Share %	Dollar Amount
District of Columbia	42.79%	\$735,988.00
Washington Suburban Sanitary Commission	41.94%	\$721,368.00
Fairfax County	9.83%	\$169,076.00
Loudoun Water	4.85%	\$83,420.00
Potomac Interceptor	0.59%	\$10,148.00
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	\$1,720,000.00

Aklile Tesfaye Date

VP of Wastewater Operations

C-US, E-van be@govwier com.
O-Datric of Coumba Water and
Sever Authority, Ou-VP of
Procument & Compliance, CN=Dan
Boe.
2021.09.29.14.14.58_Arc01

Dan Bae Date VP of Procurement and Compliance

Matthew T. Digitally signed by Matthew T. Brown Date: 2021.10.14 11:36:05

Matthew T. Brown Date
CFO and EVP of Finance and Procurement

David L. Gadis Date
CEO and General Manager

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

ACTION REQUESTED

GOODS AND SERVICES CONTRACT MODIFICATION

Strategic Planning Advisory Services (Joint Use)

Approve the funding for Task Orders 2 and 3 under the Indefinite Delivery Indefinite Quantity (IDIQ) Contract for Strategic Planning Advisory Services in the amount of \$791,780.00.

PRIME: ARUP-Deloitte 77 Water St. New York, NY 10005 CONTRACTOR/SUB/VENDOR INFORMATION SUBS: N/A PARTICIPATION: N/A N/A

Base Period Contract Value: \$0.00 Original Contract Dates: 12-01-2019 – 11-31-2023 No. of Option Years in Contract: 2 Task Order 1 Value: \$697,000.00 Task Order 1 Dates: 10-06-2020 – 9-30-2025

Change Order 1 to Task 1 Value: \$210,000.00

 Change Order 1 to Task 1 Dates:
 07-19-2021-11-30-2021

 Task Order 2 Value:
 \$692,000.00

Task Order 2 Dates: 11-8-2021 – 11-07-2022

Task Order 3 Value: \$99,780.00

Task Order 3 Dates 11-8-2021 – 02-07-2022

Purpose of the Contract:

DC Water's Strategy & Performance Department needs additional funding approved to provide Emergency Management Reporting & Policy and Procedures Services and an Environmental Social & Governance Report.

Task 2 Scope:

The contractor shall furnish an Enterprise Risk Management program and a centralized Policies and Procedures program for the Authority.

Task 3 Scope:

The contractor shall furnish an environmental social and governance report in support of an upcoming bond sale.

Spending Previous Year:

Cumulative Contract Value: 12-01-2019 to 10-05-2021: \$907,000.00 Cumulative Contract Spending: 12-01-2019 to 10-05-2021: \$650,000.00

Contractor's Past Performance:

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

PROCUREMENT INFORMATION

Contract Type:	Fixed Price	Award Based On:	Highest-Ranking Offeror
Commodity:	Advisory Services	Contract Number:	19-PR-OCEO-24
Contractor Market:	Open Market with Preference Points for LBE and LSBE Participation		

BUDGET INFORMATION

Funding:	Operating	Department:	Strategy & Performance
Project Area:	DC Water wide	Department Head:	Wayne Griffith

ESTIMATED USER SHARE INFORMATION

User	Share %	Dollar Amount
District of Columbia	70.05%	\$554,641.89
Washington Suburban Sanitary Commission	21.95%	\$173,795.71
Fairfax County	5.15%	\$40,776.67
Loudoun Water	2.54%	\$20,111.21
Potomac Interceptor	0.31%	\$2,454.52
TOTAL ESTIMATED DOLLAR AMOUNT	100.00%	\$791,780.00

A /	M.	
Wayne Griffith	11-6	114 Oct 2021
Wayne Griffith	11	Date

EVP and Chief Strategy and Performance Officer

Dan Bae Date
VP of Procurement and Compliance

Matt Brown Date
CFO and EVP of Finance and Procurement

David L. Gadis Date
CEO and General Manager

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

ACTION REQUESTED

CONSTRUCTION CONTRACT:

Public Space Restoration Contract (Joint Use)

CONTRACTOR/SUB/VENDOR INFORMATION

Approval to execute a construction contract for \$21,880,658.00.

PRIME:	SUBS:		PARTICIPATION:
Capitol Paving of DC Inc. 2211 Channing St., NE Washington, DC 20018	United Construction Services, LLC Washington, DC	DBE	36.0%
	Royal Construction materials		1

WBE

10.0%

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed: \$21.880.658.00

Contract Time: 1096 Days (3 Years, 0 Months)*

Mclean, VA

Anticipated Contract Start Date (NTP): 01-05-2022 Anticipated Contract Completion Date: 01-06-2025

*Agreement also provides 2 option years

Bid Opening Date: 06-21-2021

Bids Received: 3

Other Bids Received:

\$ 25,591,912.16 Fort Myer Construction Corp

Metro Paving Corporation N/A

Purpose of the Contract:

DC Water is required to permanently restore all paved and non-paved public space areas roadways, sidewalks, tree spaces, and other structures that are damaged or disturbed during infrastructure rehabilitation and replacement activities. The Public Space Restoration Contract provides permanent restoration and pavement services for Water and Sewer construction locations in public space.

Contract Scope:

- Restore and/or replace asphalt and concrete roadways, brick and concrete sidewalks, landscaped areas, and other miscellaneous replacement activities that result from excavations performed in
- Scope of work is developed and issued as a task order and as needed. Restoration work is at various locations throughout Washington, DC.
- The nature, extent, and location of the work for each task order varies.
- On average the water and sewer operations generate 1,700 public space restorations task orders annually.

PROCUREMENT INFORMATION				
Contract Type:	Unit Price	Award Based On:	Request for Proposal, Best Value	
Commodity:	Construction	Contract Number:	200110	
Contractor Market:	Open Market			

BUDGET INFORMATION				
Funding:	Capital	Department:	Water Services & Sewer Services	
Service Area:	Water, Sanitary	Department H	ead: Jason Hughes	
Project:	M8,M9,MG,NV,PI,MF,N	W,OX,BW,KX,KY,KZ,LI		

User	Share %	Dollar Amount	
District of Columbia	100.00%	\$ 21,880,658.00	
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%	\$ 21,880,658.00	

^{**} Work under this contract will be assigned as needed under specific task orders. It is anticipated that Joint Use work may be assigned during the contract period. As tasks are developed for work associated with specific facilities and costs are developed, the individual users will be notified and billed according to agreed cost sharing.

Salil M Kharkar Digitally signed by Salil M Kharkar DN: dc=com, dc=dcwasa, ou=WASA Users, ou=Waste Water Operations, on=Salil M Kharkar, email=Sali Kharkar@dowşter.com Date: 2021.10.13.09:30.3≸ -04'00'

Salil Kharkar

Date

Senior Technical Advisor to COO

Dan Bae
C=US, E=dan bae@dowater.com,
O=District of Columbia Water and Sewer
Authority, OU=VP of Procurement &
Compliance, CN=Dan Bae
2021.10.13 10:14:18-04/00/
Date

Dan Bae

Date

VP Director of Procurement

Matthew T. Brown Brown Date: 2021.10.13 16:97:46 -04'00' Digitally signed by Matthew T.

Matthew T. Brown CFO and EVP

Date

Finance and Procurement

David L. Gadis Date

CEO and General Manager

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

ACTION REQUESTED

ENGNERING SERVICES:

Construction Management for Water & Sewer System Infrastructure (BOA). Basic ordering Agreement

Joint Use

Approval to execute an architectural and engineering services contract not to exceed \$6,000,000.00 for the contract period of three years plus two renewal periods of one year each. The renewal periods will be approved at DC Water's sole discretion.

PRIME:	SUBS:		PARTICIPATION:
AECOM Technical Services, Inc., 3101 Wilson Boulevard,	CUBE ROOT Washington, DC 20005	DBE	8.0%
Arlington, VA 22201 Headquarters	EBA Engineering Laurel, MD 20707	DBE	8.0%
Los Angeles, CA	SAVIN Engineering Pleasantville, NY 10570	DBE	5.0%
	DP CONSULTANT Washington, DC 20005	WBE	3.0%
	The Robert B. Balter Company Owings Mills, MD 21117	WBE	2.0%

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed:

\$6,000,000.00

(3 Years, 2 option years)

Contract Time:

1.097 Days 12/01/2021

Anticipated Contract Start Date (NTP):

Anticipated Contract Completion Date:

12/01/2024

06/04/2021

Bid Opening Date:

Bids Received:

Other Bids Received

Arcadis District of Columbia*

Hazen and Sawyer

McKissack and McKissack

RK&K*

The Temple Group

Whitman Requardt & Associates*

WSP USA Inc.*

^{*} Asterisk indicates short listed firms.

Purpose of the Contract:

To provide construction management services during construction of various projects in support of DC Water's Sewer and Water infrastructure 10-year Capital Improvement Program (CIP)

Contract Scope:

- Provide construction management, contract administration and resident engineering and inspection services to assist DETS Water & Sewer Construction Branch during construction of CIP projects.
- Water & Sewer System Infrastructure projects will be constructed at multiple locations.
- Additional support services shall include constructability reviews, cost estimating and scheduling, services during bid phase and dispute resolution.

Federal Grant Status:

This Contract is not eligible for Federal grant funding assistance.

PROCUREMENT INFORMATION				
Contract Type:	Cost Plus Fixed Fee	Award Based On:	Highest Ranking Score	
Commodity:	Engineering Design Services	Contract Number:	DCFA #506A	
Contractor Market:	Open Market			

BUDGET INFORMATION				
Funding:	Capital	Department:	Engine	ering and Technical Services
Service Area:	Water, Sanitary, Stormwater, Combined Sewer			Mark Babbitt (Acting)
Project:	LZ,RU,QG,QS, RC,MC,MB, CS	9.CY, F2, FA, FV	V.G2.G6.	GR.HX.IL.JZ.KE.KF.IE

*ESTIMATED USER SHARE INFORMATION					
User Share % Dollar Amount					
District of Columbia	100.00%	\$ 6,000,000.00			
Federal Funds	0.00%	S			
Washington Suburban Sanitary Commission	0.00%	S			
Fairfax County	0.00%	\$			
Loudoun County & Potomac Interceptor	0.00%	S			
Total Estimated Dollar Amount	100.00%	\$ 6,000,000.00			

^{*}Work under this contract will be assigned as needed under specific task orders. It is anticipated that Joint Use work may be assigned during the contract period. As tasks are developed for work associated with specific facilities and costs are developed, the individual users will be notified and billed according to agreed cost-sharing.

Salil M	Digitally signed by Salil M Kharkar DN: dc=com, dc=dcwasa, ou=WASA Users, ou=Waste Water		itally signed by tthew T. Brown	
Kharkar	Operations, cn=Salil M Kharkar, email=Salil.Kharkar@dcwater.com Date: 2021.10.08 16:35:15 -04'00'		Date: 2021.10.13 09:57:14 -04'00'	
Salill Kharkar Senior Technical Ac	Date Dan Bae C=US, E=dan bae@dcwater.com, O=District of Columbia Water and Sewer Authority, OU=VIP of Procutement & Compliance, CN=Dan Bae 2021.10.12 16:36:57-04*90*	Matthew T. Brown CFO and EVP Finance and Procurement	Date	
Dan Bae, VP Procurement and C	Date	David L. Gadis	/Date	

Fact Sheet DCFA-506A- CM for Water & Sewer System Infrastructure BOA

Prepared September 30, 2021

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

ACTION REQUESTED

ENGINEERING SERVICES

Construction Management for Water & Sewer System Infrastructure (BOA), Basic Ordering Agreement

Joint Use

Approval to execute an architectural and engineering services contract not to exceed \$6,000,000.00 for the contract period of three years plus two renewal periods of one year each. The renewal periods will be approved at DC Water's sole discretion.

CONTRACTOR/SUB/VENDOR INFORMATION			
PRIME:	SUBS:		PARTICIPATION:
Hazen and Sawyer, Inc 4035 Ridge Top Road Fairfax, VA 22030	BVF ENGINEERING Columbia, MD 21045	DBE	6.5%
	EBA Engineering Laurel, MD 20707	DBE	6.5%
Headquarters New York, NY	DM ENTERPRISES Laurel, MD 20207	DBE	6.5%
	PEER CONSULTANTS Washington, DC 20024	WBE	10.0%
	The Robert B. Balter Company Owings Mills, MD 21117	WBE	6.5%

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed: \$6,000,000.00

Contract Time: 1,097 Days (3 Years, 2 option years)

Anticipated Contract Start Date (NTP): 12/01/2021
Anticipated Contract Completion Date: 12/01/2024
Bid Opening Date: 06/04/2021

Bids Received: 8

Other Bids Received

AECOM Technical Services Inc* Arcadis District of Columbia McKissack and McKissack

RK&K*

The Temple Group

Whitman Requardt & Associates*

WSP USA Inc.*

^{*} Asterisk indicates short listed firms.

Purpose of the Contract:

To provide construction management services during construction of various projects in support of DC Water's Sewer and Water infrastructure 10-year Capital Improvement Program (CIP).

Contract Scope:

- Provide construction management, contract administration and resident engineering and inspection services to assist DETS Water & Sewer Construction Branch during construction of CIP projects.
- Water & Sewer System Infrastructure projects will be constructed at multiple locations.
- Additional support services shall include constructability reviews, cost estimating and scheduling, services during bid phase and dispute resolution.

Federal Grant Status:

This Contract is not eligible for Federal grant funding assistance.

TO THE WAY	PROCUREMENT I	NFORMATION	
Contract Type:	Cost Plus Fixed Fee	Award Based On:	Highest Ranking Score
Commodity:	Engineering Design Services	Contract Number:	DCFA #506B
Contractor Market:	Open Market		

BUDGET INFORMATION					
Funding:	Capital	Department:	Enginee	ring and Technical Services	
Service Area:	Water, Sanitary, Stormwater, Combined Sewer	Department He		Mark Babbitt (Acting)	
Project:	LZ,RU,QG,QS, RC,MC,MB, C	9,CY, F2, FA, FW	/.G2.G6, G	R.HX.IL.JZ.KE.KF.IE	

*ESTIMATED USER SHARE INFORMATION			
User	Share %	Dollar Amount	
District of Columbia	100.00%	\$ 6,000,000.00	
Federal Funds	0.00%	S	
Washington Suburban Sanitary Commission	0.00%	\$	
Fairfax County	0.00%	\$	
Loudoun County & Potomac Interceptor	0.00%	S	
Total Estimated Dollar Amount	100.00%	\$ 6,000,000.00	

^{*}Work under this contract will be assigned as needed under specific task orders. It is anticipated that Joint Use work may be assigned during the contract period. As tasks are developed for work associated with specific facilities and costs are developed, the individual users will be notified and billed according to agreed cost-sharing.

Salil M Digitally signed by Salil M Kharkar Matthew T. DN: dc=com, dc=dcwasa, Digitally signed by Matthew T. ou=WASA Users, ou#Waste Water Operations, cn=Salil M Kharkar, Kharkar #=Salit.Kharkar@dcwater.com Date: 2021.10.13 09:57:51 -04'00' Brown Date: 2021,10.08 16:34:14 -04'00" Salil Kharkar Matthew T. Brown Date Date Senior Technical Advisor to COO CFO and EVP Finance and Procurement C=US, E=dan.bae@dcwater.com, O=District of Columbia Water and Sewer Authority, OU=VP of Procurement & Compliance, CN=Dan Bae 021.10.12.16:39:15-04'00' Dan Bae, VP Date David L. Gadis Date Procurement and Compliance CEO and General Manager

Fact Sheet DCFA-506B- CM for Water & Sewer System Infrastructure BOA

Prepared September 30, 2021

ACTION REQUESTED

CONSTRUCTION CONTRACT CHANGE ORDER:

DC Water Fleet Maintenance Facility (Joint Use)

Approval to execute Change Order No's. 01, 02, 03 and 04 with a cumulative value of \$1,266,646.00. The modification exceeds the Chief Executive Officer's approval authority.

PRIME:	SUBS:	PARTICIPATION:
HESS Construction & Engineering Services, Inc. 804 West Diamond Ave. Suite 200 Gaithersburg, MD 20818	See Attachment A for list of DBE/WBE participants	

DESCRIPTION AND PURPOSE

Original Contract Value: \$17,800,000.00

Value of this Change Order: \$1,266,646.00

Cumulative CO Value, including this CO: \$1,266,646.00

Current Contract Value, including this CO: \$19,066,646.00

Original Contract Time: 330 Days (11 Months)

Time extension, this CO: 289 Days

Total CO contract time extension: 289 Days (9.5 Months)

Contract Start Date (NTP): 01-06-2020
Anticipated Contract Completion Date: 04-22-2022
Cumulative CO % of Original Contract: 7.1%
Contract completion %: 60%

Purpose of the Contract:

To construct a new fleet facility at Walker Mill Road, in Prince Georges County Maryland in accordance with agreement between DC Water and the District of Columbia to relocate Fleet operations from 125 O Street SE.

Original Contract Scope:

 To construct a 26,200 square feet Fleet Maintenance Facility on 6.25 acres site on Walker Mill Road Prince Georges County Maryland. Of the 6.25 acres approximately 3.51 will be developed as part of the project for the building and site. Remaining area is partly wet-land and/or to be used for future needs.

Previous Change Order Scope:

N/A

Current Change Order Scope:

- The existing site was found to be on a debris field with some locations containing hazardous material. This change order covers the additional work and delay caused by handling the debris and hazardous material and associated disposal, specifically:
 - o Removal of 3 feet of debris and unsuitable soil from under the building slab.
 - Excavated entire site (parking lot and landscape areas) and removed contaminated, unsuitable and debris filled soil to natural or suitable soil.
 - Imported suitable fill to an equal amount of the debris filled dirt that was removed from site.

- Removed additional unsuitable material below the building footings, maintenance bays and column footings then install Geotech fabric and imported fill to design elevation.
- Installed a double and single fabric liner to bio ponds side walls, and 30 mil PVC liner to entire pond area to mitigate potential additional contamination.
- 24 day delay resulting in additional contractor's general conditions costs.
- Following discovery of the unsuitable fill and potentially contaminated ground the permit was amended causing a 209 day delay and resulting in additional contractor's general conditions costs
- Notice to proceed was issued prior to permit approval causing a 56 day delay resulting in additional contractor's general conditions costs.

PROCUREMENT INFORMATION					
Contract Type:	Fixed Price	Award Based On:	Lowest responsive, responsible bidder		
Commodity:	Construction	Contract Number:	190070		
Contractor Market:	Open Market		10.000		

2 1 1 2 3 1 1 7	BUI	DGET INFORMATIO	N	WANTED SERVICE THE PARTY OF THE
Funding:	Capital	Department:	Engine	eering and Technical Services
Service Area:	Non-Process Facility	Department H		Mark Babbitt (Acting)
Project:	HH			(total g)

ESTIMATED USER SHARE INFORMATION		
User	Share %	Dollar Amount
District of Columbia	87.69%	\$1,110,721.88
Washington Suburban Sanitary Commission	8.43%	\$ 106,778.26
Fairfax County	2.48%	\$ 31,412.82
Loudoun County & Potomac Interceptor	1.40%	\$ 17,733.04
Total Estimated Dollar Amount	100.00%	\$1,266,646.00

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Salil Kharkar Date
Senior Technical Advisor to COO

Dan Bae
C=US, E=dan.bae@dcwater.com,
O=District of Columbia Water and
Sewer Authority, OU=VP of
Procurement & Compliance,
CN=Dan Bae
2021.10,1216.37.44-0#100*

Date

Dan Bae VP Director of Procurement Matthew T. Brown

Digitally signed by Matthew T. Brown Date: 2021.10.13 16:53:21 -04'00'

Date

Matthew T. Brown CFO and EVP Finance and Procurement

David L. Gadis Date
CEO and General Manager

CONSTRUCTION CONTRACT CHANGE ORDER: CONTRACT NUDBER:190070 DC WATER FLEET MAINTENANCE FACILITY ATTACHMENT A- SUBCONTRACTOR LISTING PARTICIPATION AND DOLLAR AMOUNT

SUBCONSULTANT:		PARTICIPATION:
DBE/WBE:		
C&H Mechanical Annapolis, MD	DBE	7.0%
Ironshore Contracting Baltimore, MD	DBE	4.5%
Matai Construction Silver Springs, MD	DBE	1.9%
Geotech Engineers Beltsville, MD	DBE	0.5%
Paragon Chantilly, VA	DBE	0.4%
Jett Caulking Glen Burnie, MD	DBE	0.3%
Debra's Glass Rockville, MD	WBE	2.7%
Oelmann Electric Supply Lutherville, MD	WBE	1.3%
Century Fence Construction Upper Marlboro, MD	WBE	1.1%
Gryphon Tile Middletown, VA	WBE	0.4%
Steel Products Rockville, MD	WBE	0.1%

ACTION REQUESTED

CONSTRUCTION CONTRACT

Division RC-B – Rock Creek Project B (Green Infrastructure) (Non-Joint Use)

Approval to execute a construction contract for \$15,856,873.00

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	107	PARTICIPATION:
Fort Myer Construction Corporation	CBE Eligible Am	nounts:	
2237 33rd Street, NE			100%
Washington, DC 20018	Total Eligible	\$14,130,859	
	CBE* Total	\$14,130,859	
(CBE)	100000000000000000000000000000000000000	.,	1
	See Attachment	A for list of firms	

^{*}Based upon the Green Infrastructure (GI) Memorandum of Understanding with the District of Columbia, this contract shall utilize best efforts to maximize Certified Business Enterprise (CBE) participation, with a goal that at least 50% of the dollar amount of this contract be awarded to CBEs. No Federal funding (i.e. EPA) will be used for this contract.

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed: \$15,856,873.00

Contract Time: 642 Days (1 Year, 09 Months)

Anticipated Contract Start Date (NTP): 12-08-2021
Anticipated Contract Completion Date: 09-11-2023
Bid Opening Date: 07-27-2021

Bids Received: 2
Number of Firms Shortlisted: 2

Other Bids Received

Anchor Construction Corporation \$17,582,963,00

Purpose of the Contract:

Provide construction of Division RC-B – Rock Creek Project B (Green Infrastructure) in support of DC Clean Rivers Project.

This work is required by a Consent Decree.

Contract Scope:

- Construct Green Infrastructure (GI) practices located in the public Right of Way (ROW) to manage 1.2" of rain falling on the equivalent of approximately twenty-two (22) impervious acres within the Rock Creek sewershed
- Project includes the construction of 20 planter bioretention's and 48 permeable alley facilities.
- Both the bioretention and alleys will be constructed utilizing a standardized design. The standardization (depth, check dam spacing, size (for bioretention) will facilitate efficient construction and is part of an overall effort to lower GI implementation cost.

Federal Grant Status:

Construction Contract is not eligible for Federal grant funding assistance.

PROCUREMENT INFORMATION					
Contract Type:	Fixed Price	Award Based On:	Best Value Selection		
Commodity:	Construction	Contract Number:	210040		
Contractor Market:	Open Market	W.			

BUDGET INFORMATION					
Funding:	Capital	Department:	DC Clea	an Rivers Project	
Service Area:	Combined Sewer	Department H	ead:	Carlton Ray	
Project:	DZ			***************************************	

ESTIMATED USER SHARE INFORMATION			
User	Share %	Dollar Amount	
District of Columbia	100.00%	\$15,856,873.00	
Federal Funds	0.00%	\$	
Washington Suburban Sanitary Commission	0.00%	S	
Fairfax County	0.00%	\$	
Loudoun County & Potomac Interceptor	0.00%	\$	
Total Estimated Dollar Amount	100.00%	\$15,856,873.00	

Salil M Kharkar Digitally signed by Salil M Kharkar DN: 60*com, 60*dowasa, ou*WASA Users, ou*Waste Water Operations, cn*Salil M Kharkar, email*Salil Kharkar@dowater.com Date: 2021.10.08 13:39/01 -04*00*

Salil Kharkar Senior Technical Advisor to COO

Dan Bae C=US, E=dan bas@dcwater.com, O=Datric of Columbia Water and Sewer Authority, OU=VP of Procurement & Compliance, CN=Dan Bae 2021;10.12 16:38:28-04:07

Dan Bae

Date

Date

VP Director of Procurement

Digitally signed by Matthew T. Matthew T. Brown Date: 2021.10.13 09:39:27 -04'00' Brown

Matthew T. Brown Date CFO and EVP

Finance and Procurement

David L. Gadis Date

CEO and General Manager

210040 DIVRCB GI Factsheet

CONTRACT 210040 Division RC-B – Rock Creep Project B (GI)

ATTACHMENT A CBE CONTRACTOR LISTING

CONSULTANTS/ CONTRACTOR/ SUBCONTRACTORS/ SUPPLIERS

1	TYPE	AMOUNT:	PARTICIPATION:
Fort Myer Construction Corporation 2237 33rd Street, NE Washington, DC 20018	CBE	\$14,130,859.00	100%*
CBE Total	CBE	\$14,130,859.00	100%

^{*}Fort Myer Construction Corporation, a CBE, will perform 100% of the work and will utilize best efforts to meet or exceed the CBE objectives by involving other CBE firms or self-performing additional portions of the work, as the final construction progresses.

ACTION REQUESTED

CONSTRUCTION CONTRACT:

Small Diameter Water Main Replacement 15A (Non-Joint Use)

Approval to execute a construction contract for \$9,555,526.00

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:	PARTICIPATION:
Capital Paving of DC Inc. 2211 Channing Street, N.E P.O. Box 21248 Washington , DC 20018	Amerigal Construction Company, Inc. Glenn Dale, MD DBE Acorn Supply & Distributing, Inc White Marsh, MD WBE	

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed: \$9,555,526.00

Contract Time: 389 Days (1 Year 1 Month)

Anticipated Contract Start Date (NTP): 12-15-2021
Anticipated Contract Completion Date: 01-08-2023

Bid Opening Date: 09-14-2021

Bids Received:

Other Bids Received

 Fort Myer Construction Corp
 \$10,955,649.50

 Civil Construction LLC
 \$11,161,207.00

 Sagres Construction Corp
 \$12,337,229.00

 Anchor Construction Co Inc
 \$12,610,915.00

Purpose of the Contract:

Replacement of small diameter water mains that have experienced failures, or have a history of low water pressure, or water quality issues across various locations within the District of Columbia.

Contract Scope:

- Replace 2.62 miles of water mains ranging from four (4) inches to twelve (12) inches in diameter and associated valves and appurtenances
- Replace water services two (2) inches in diameter and smaller in public and private space as needed
- Replace 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
- Provide permanent pavement and surface restoration

Federal Grant Status:

 Construction contract is anticipated to be funded in part from a Water Infrastructure Finance and Innovation Act (WIFIA) loan.

PROCUREMENT INFORMATION			
Contract Type:	Unit Price	Award Based On:	Lowest responsive, responsible bidder
Commodity:	Construction	Contract Number:	180010
Contractor Market:	Open Market		

BUDGET INFORMATION			
Funding:	Capital	Department:	Engineering and Technical Services
Service Area:	Water	Department Head:	Mark Babbitt
Project:	GR, BW		1

User	Share %	Dollar Amount
District of Columbia	100.00%	\$9,555,526.00
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%	\$9,555,526.00

Salil M Kharkar	October 8, 2021	Dan Bae	October 12, 2021
Salil M Kharkar Senior Technical Advisor to	Date COO	Dan Bae, VP Procurement and Complianc	Date e
Matthew 7. Brown	October 12, 2021		7

ACTION REQUESTED

CONSTRUCTION CONTRACT:

Constitution Avenue Area Water Main Replacement (Non-Joint Use)

Approval to execute a construction contract for \$10,887,767.00

CONTRACTOR/SUB/VENDOR INFORMATION

PRIME:	SUBS:		PARTICIPATION:
Sagres Construction Corp. 3680 Wheeler Ave.	Phoenix Constructions Capital Heights, MD	DBE	12.3%
Suite 300 Alexandria, VA 22304	Aviman (Material Supply) Wilmington, DE	DBE	11.2%
	Arthur Construction Dulles, VA	DBE	4.7%
	Monumental Maintenance Servi Boonsboro, MD	ces DBE	0.3%
	Key Materials and Utilities Mount Airy, MD	WBE	4.9%
	Acorn Supply and Distribution White Marsh, MD	WBE	1.1%

DESCRIPTION AND PURPOSE

Contract Value, Not-To-Exceed: \$10,887,767.00

Contract Time: 540 Days (1 Year 6 Months)

Anticipated Contract Start Date (NTP): 11-23-2021 Anticipated Contract Completion Date: 05-17-2023 Bid Opening Date: 09-08-2021

Bids Received:

Other Bids Received

Fort Myer Construction Corp. \$12,822,109.00 Capitol Paving of DC Inc. \$12,993,297.00 Civil Construction LLC. \$13,854,283.00 Anchor Construction Co. Inc. \$14,445,610.00

Purpose of the Contract:

Replacement of small diameter water mains that have experienced failures, or have a history of low water pressure, or water quality issues across various locations within the District of Columbia.

Contract Scope:

- Replace 2.1 miles of small diameter water mains ranging from four (4) inches to twelve (12) inches in diameter and associated valves and appurtenances
- Replace 0.5 miles of 20-inch diameter water main and associated valves and appurtenances. between 4th Street, NE and Constitution Avenue, NE.
- Replacement of SDWM North from the US Supreme Court.
- Replacement of hydrants and valves within the project limits.
- Provide permanent pavement and surface restoration

Federal Grant Status:

Construction contract is funded in part by Federal grant.

PROCUREMENT INFORMATION			
Contract Type:	Fixed Price	Award Based On:	Lowest responsive, responsible bidder
Commodity:	Construction	Contract Number:	150140
Contractor Market:	Open Market		

BUDGET INFORMATION			
Funding:	Capital	Department:	Engineering and Technical Services
Service Area:	Water	Department Head:	
Project:	C9, F2, BW		

ESTIMATED USER SHARE INFORMATION			
User	Share %	Dollar Amount	
District of Columbia	85.50%	\$9,309,040.79	
Federal Funds	14.50%	\$1,578,726.22	
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%	\$10,887,767.00	

Salil M Kharkar	October 13, 2021	Dan Bae	October 13, 2021
Salil M Kharkar Senior Technical Advisor to	Date o COO	Dan Bae, VP Procurement and Compliance	Date e
Matthew 7. Brown	October 13, 2021		W
Matthew T. Brown	Date	David L. Gadis	Date



District of Columbia Water and Sewer Authority David L. Gadis, CEO and General Manager

Briefing on:

DC CLEAN RIVERS PROJECT Rock Creek Project B – GI (RC-B)

Briefing for:

Environmental Quality and Operations Committee GI Program Questions

October 21, 2021



DCWATER.COM

EQ&Op's Question:

The Committee inquired about the costs per acre to construct the GI projects and the mechanisms used to determine the effectiveness of the projects.



Green Infrastructure

CONSTRUCTION COST



DC Water GI Project Cost Data

DC Water assessed cost of GI as part of 2020 Practicability Assessment:

Project	Delivery Method	Construction Cost		Construction Cost per Acre Managed
Rock Creek Project A	Design-Build	\$18.54 M	18.8	\$ 976,000
Pot. River Project A	Design-Bid-Build	\$ 5.22 M	7.8	\$ 654,000

Practicability Assessment concluded \$600,000/ac in year 2020 dollars was achievable by driving costs down

- First GI Project bid after Practicability Assessment was Rock Creek Project B
- Rock Creek Project B costs are consistent with Practicability expectations
 - RC-B cost = \$628,000/ac exclusive of contingency items
 - Practicability cost = \$636,540/acre (year 2020 cost of \$600K escalated to RC-B midpoint of construction year 2022 @ 3%/yr)



Methods used to Manage Costs

Project and Facility Location Selection

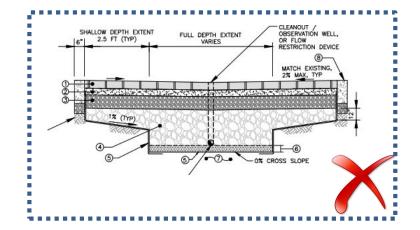
- Sited throughout sewershed to target cost-saving locations
 - Sites with limited or no utilities
 - Avoided tree conflicts
 - Locations with minimal site restoration requirements
 - Located in alleys in "Good" or "Excellent" condition

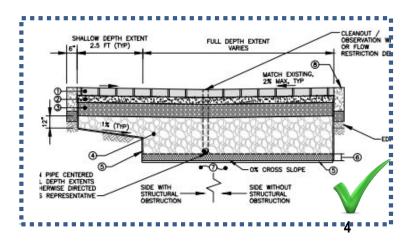
Increase volume in a reduced footprint

- Optimizes initial capital investment
- Lowers maintenance cost per acre managed

Standardized Alley and Bioretention Design

- Simplified construction for contractors
- Contractor Familiarity with Green Infrastructure
 - Greater experience and comfort level with work





Green Infrastructure

DETERMINATION OF EFFECTIVENESS



Determination of GI Effectiveness

- Functional Test is performed at end of construction
 - Infiltration test and draw down test in permeable pavement and in bioretentions are used to "accept" facility from Contractor
- Consent Decree requires one-year post construction monitoring
 - Practice level monitors installed to record performance
 - Monitors record facility water levels during and after storm events
 - Allows DC Water to observe rate of "filling" and rate of "infiltration/release"
 - Post Construction Report to EPA







Determination of GI Effectiveness

Monthly / Quarterly / Annual Inspections

- During monthly, quarterly and annual maintenance, visual inspections confirms facilities are properly filling and draining
- Additional inspections occur after large storms to ensure facility performance
- Functional testing required after yearly maintenance
- Ability to provide corrective repair as needed

Post Program Monitoring

 Long-term CSO Outfall flow monitoring to ensure performance after all green and gray controls constructed





