<u>DEPARTMENT INPUT</u> <u>CONSTRUCTION CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION</u>

Check applicable Ordinance(s	s): 🛛 90-143 Responsi	ble Wage and Benefits	☐ 03-237 (fo	rmerly 03-1) Community Workforce Progr	am
	PROJEC	CT INFORMATION	See attachme	ent 🖂		
Contract/Project/*Work O *Reference corresponding project		ng a work order				
Contract/Project Title: C	CD 2.15(3) PLANT 2 C	CLUSTER 3 DIGESTER	<u>UPGRADES</u>			
Description/Scope of Work upgrades to the existing Plant Virginia Key, 3989 Rick	ant 2 Digester Cluster	3 facility at the Central	District Wastev	vater Treat	tment Plant (CDWWTP), loca	ited
Estimated Cost: 29821902	Funding Source	e: Other (specify)				
Location of Project (street 3989 Rickenbacker Caus			45 NE 23 rd Ct or	Starts at 13	35 St. ends at 145 St.	
PROJEC	CT ANALYSIS FOR	R GOAL RECOMME	NDATION (C'	WP) See	attachment 🖂	
Engineer/Department or A	Agency's estimated re	equired workforce for P	roject 🗌 Work	Order 🗌	: _	
Trade/Skills Required	F	Est. # of workforce requir	st. # of workforce required per trade			
N/A					complete job	
N/A						
N/A						
Comments: Not Applicable PROJECT ANALYSIS	•		BE) See attack	hment 🛚		
Sub-Trade	Est. Cost	% of Item to Base H	Bid	Availabil	ity	
0	\$	0%				
0	\$	0%				
0	\$	0%				
Set-Aside: Level 1 \(\subseteq \text{Level} \)	12	RECOMMENDA ade Set-Aside ☐ Sub-Co] Workfor	ce Goal□ No Measure□	
Basis for Recommendati very large specialized eq					ject involves the replaceme	n of
Date submitted to DBD: Contact Person: <u>Isaac Sr</u>						
Telephone No.: <u>786-552-</u>	8989					

DEPARTMENTAL INPUT CONTRACT MEASURE ANALYSIS AND RECOMMENDATION

To:

Gary T. Hartfield, Division Director Internal Services Department

Small Business Development Division

From:

Isaac Smith, Chief

Construction Contracts Division

Department:

Miami-Dade Water and Sewer Department

Contract Title:

CD 2.15(3) PLANT 2 CLUSTER 3 DIGESTER UPGRADES

Contract No.:

S-915

Estimate Amount: \$27,327,784 [\$24,843,440 Construction + \$2,484,344 Contingency]

Funding Source: EW 660, Revenue Bonds Sold

Small Business Enterprise – Construction – 8.54%

Analysis for Recommendation (Attached)

Department Head or Authorized Agent

DESCRIPTION OF PROJECT:

This project is one in a series of projects that are being processed under Section 2-8.2.12 of the Code, entitled Miami-Dade Water and Sewer Department Consent Decree and Capital Improvement Programs Accelerate Ordinance.

In general, the project consists of furnishing all materials, labor, and equipment necessary for upgrades to the existing Plant 2 Digester Cluster 3 facility at the Central District Wastewater Treatment Plant (CDWWTP), located in Virginia Key, 3989 Rickenbacker Causeway, Section 16, Township 54, Range 42, Miami-Dade County, Florida 33149.

The scope of work includes, but is not limited to, the complete rehabilitation and upgrade to the CDWWTP Plant 2 Digester Cluster 3 facility. The project includes replacement of all existing equipment, valves, piping; and appurtenances; electrical panels, conduits, cables, and lighting; instrumentation and controls; building mechanical; and architectural doors, windows, and louvers within the digester Control Building and inside Digester Tank Nos. 9, 10, 11, and 12; new digester covers for Digester Tank Nos. 9, 10, 11, and 12; new valve vault for Digester Cluster 3; extension of the existing Electrical Room at the Control Building; structural repairs to and recoating of Control Building and Digester Tank Nos. 9, 10, 11, and 12.

It is Miami-Dade Water and Sewer Department's intent to obtain a completely functional and satisfactory installation under this project, and any items of labor, equipment or materials which may be reasonably assumed as necessary to accomplish this and shall be supplied whether or not they are specifically shown on the plans or stated in the specifications. The Contractor shall provide all sheeting, shoring, bracing and all other labor, material or equipment required to preclude damage to, or loss of functionality of, any existing facility or system.

QUALIFICATIONS OF BIDDERS:

Bidders shall submit proof that his/her firm has at least the minimum successful contract experience as requested below:

- a. The Contractor shall be experienced in the construction of new or rehabilitation of existing wastewater treatment plant biosolids systems, which include return/waste activated sludge pump stations, sludge thickening, digester, and dewatering systems.
- b. The Contractor must have successfully completed the construction of two (2) projects which included new wastewater digester tanks or rehabilitation of existing wastewater digester tanks.
- c. Experience is required with the installation of at least one (1) new digester tank floating cover. This requirement can be met by the experience of the Bidder or Bidder's Subcontractor.
- d. The Contractor or Contractor's Electrical Subcontractor shall have successfully completed a minimum of two (2) projects demonstrating experience with installation of electrical equipment rated for 480V power supply.

LICENSES: The types of licenses required are: General Engineering, General Building Contractor and/or other categories as applicable by Chapter 489 of the Florida Statutes or Chapter 10 of Miami-Dade County Code.

COMMUNITY WORKFORCE PROGRAM

CWP PARTICIPATION: Not Applicable, project is not located in a DTA.

Analysis for SBE - Construction Recommendation - 8.54%						
Item	Description		Cost	Item %	SBE Amt.	SBE %
No. 1	Site Mobilization & Demobilization	\$	1,487,470	5.44%		
2	Demolition & Disposal of Yard Piping	\$	8,800	0.03%	8,800.00	0.03%
3	Demolition & Disposal of Digester Covers	\$	241,770	0.88%		
	Demolition of Process Mechanical in Control Bldg. & Digester	Ť		0.88%	54,770.00	0.20%
4	Tanks	\$	705,940	2.58%	125,860.00	0.46%
5	Equipment Salvaging and Providing to Owner	\$	15,020	0.05%	50,860.00	0.19%
6	Process Mechanical Equipment Demolition	\$	68,510	0.25%	34,250.00	0.13%
7	Salvage Electrical Room Equipment	\$	41,460	0.15%	41,460.00	0.15%
8	Demolition of Electrical Equipment	\$	50,510	0.18%	50,510.00	0.18%
9	Site Civil Work: clearing and grubbing, dewatering, erosion control, compaction, fencing, grading, restoration of roadways, sidewalks, and sodding	\$	174,840	0.64%	134,400.00	0.49%
10	New Cluster 3 Valve Vault	\$	113,670	0.42%		
9	Structural/architectural work: roofing, windows, doors; metal stairs; louvers; and all other necessary structural components	\$	431,220	1.58%	135,200.00	0.49%
10	Process Mechanical in Digester Cluster Control Building	\$	1,883,660	6.89%		
11	Furnish Tube-in-Tube type Heat Exchangers	\$	746,240	2.73%		
11	Furnish Sludge Recirculation Chopper Pumps & Motors	\$	237,500	0.87%		
12	Furnish Radial beam type floating digester covers, flame arrestors, and appurtenances	\$	4,509,900	16.50%		
13	Furnish Linear motion mixer systems and appurtenances	\$	2,263,220	8.28%		
14	Furnish Sludge Transfer Pumps	\$	170,390	0.62%		
15	Furnish Gas Booster blowers	\$	450,280	1.65%		
16	Install Radial beam type floating digester covers, flame arrestors, and appurtenances	\$	1,667,240	6.10%		
17	Install Linear motion mixer systems and appurtenances	\$	119,420	0.44%		
18	Install Process Mechanical Equipment	\$	152,690	0.56%		
18	Building Mechanical Work, including plumbing and HVAC	\$	342,150		220 600 00	0.040/
19	Electrical: MCCs, VFDs, enclosures, lightning protection, etc.	\$	2,257,920	1.25% 8.26%	220,680.00 745,920.00	0.81% 2.73%
20	Instrumentation, Control Work, Systems Integration; programming & SCADA for Digester Cluster 3	\$	1,050,180	3.84%	- 12,525133	
21	For startup, testing and commisioning	\$	89,430	0.33%		
22	For all painting, coating and finishing	\$	1,421,840	5.20%	608,800.00	2.23%
23	Final clean up	\$	35,620	0.13%		0.13%
24	Concrete restoration	\$	147,670	0.54%		0.32%
28	Stainless steel radial beam type floating digester covers	\$	3,958,880	14.49%	- 07,300	J.J2/0
	Subtotal	\$	24,843,440		2,334,630.00	8.54%
**********************	Contingency Allowance	\$	2,484,344	9.09%		
	SBE TOTAL	\$	27,327,784	100.00%		

DEPARTMENTAL INPUT CONTRACT MEASURE ANALYSIS AND RECOMMENDATION

To: Gary T. Hartfield, Division Director

Internal Services Department

Small Business Development Division

From: Isaac Smith, Chief

Construction Contracts Division

Department: Miami-Dade Water and Sewer Department

Contract Title: CD 2.15(3) PLANT 2 CLUSTER 3 DIGESTER UPGRADES

Contract No.: S-915

Estimate Amount: \$27,327,784 [\$24,843,440 Construction + \$2,484,344 Contingency]

Funding Source: EW 660, Revenue Bonds Sold

Small Business Enterprise – Goods & Services – 1.00%

Analysis for Recommendation (Attached)

Department Head or Authorized Agent

DESCRIPTION OF PROJECT:

This project is one in a series of projects that are being processed under Section 2-8.2.12 of the Code, entitled Miami-Dade Water and Sewer Department Consent Decree and Capital Improvement Programs Accelerate Ordinance.

In general, the project consists of furnishing all materials, labor, and equipment necessary for upgrades to the existing Plant 2 Digester Cluster 3 facility at the Central District Wastewater Treatment Plant (CDWWTP), located in Virginia Key, 3989 Rickenbacker Causeway, Section 16, Township 54, Range 42, Miami-Dade County, Florida 33149.

The scope of work includes, but is not limited to, the complete rehabilitation and upgrade to the CDWWTP Plant 2 Digester Cluster 3 facility. The project includes replacement of all existing equipment, valves, piping; and appurtenances; electrical panels, conduits, cables, and lighting; instrumentation and controls; building mechanical; and architectural doors, windows, and louvers within the digester Control Building and inside Digester Tank Nos. 9, 10, 11, and 12; new digester covers for Digester Tank Nos. 9, 10, 11, and 12; new valve vault for Digester Cluster 3; extension of the existing Electrical Room at the Control Building; structural repairs to and recoating of Control Building and Digester Tank Nos. 9, 10, 11, and 12.

It is Miami-Dade Water and Sewer Department's intent to obtain a completely functional and satisfactory installation under this project, and any items of labor, equipment or materials which may be reasonably assumed as necessary to accomplish this and shall be supplied whether or not they are specifically shown on the plans or stated in the specifications. The Contractor shall provide all sheeting, shoring, bracing and all other labor, material or equipment required to preclude damage to, or loss of functionality of, any existing facility or system.

CONSIDERATIONS FOR ANALYSIS:

- 1. The project involves the construction of a new and rehabilitation of a wastewater treatment plant biosolids system. This sub-system of the plant includes very large, expensive and specialized equipment. During normal operations the metal digester covers float above the structure.
- 2. The major portions of the work involves the complete rehabilitation and upgrade of all 4 digesters that comprise Cluster, including all structural, mechanical and electrical repairs, including floating covers.
- 3. The project site shall be within an existing and operating wastewater treatment plant.
- 4. The Department has evaluated the project for possible opportunities for participation in the area of SBE Goods and Services. Based on the scope and nature of the work, we have concluded that there are a wide range of opportunities for participation on this project. The recommended areas of participation for SBE Goods & Services providers includes the possible areas:

Analysis for Small Business Enterprise – Goods and Services Recommendation						
Item	Goods & Services	Prime Contractor	Sub- Contractor	SBE Availability		
1.	GOODS: Mechanical Process Equipment Biosolids Systems Electrical Switchgear Instrumentation & Controls Piping & Fittings HVAC Sitework & Sodding	X X X X	X X X	X X X		
2.	SERVICES Structural Electrical Instrumentation Testing & Compaction Paving Civil Site work Systems Integration Paving Utility Piping Finishing Painting Plumbing Fencing	X X	× × × × × × × × × × × × × × × × × × ×	X X X X X X X		

······································	Analysis for SBE - G Recommendation - 1	 			
Item No.	Description	Cost	Item %	SBE Amt.	SBE %
1	Site Mobilization & Demobilization	\$ 1,487,470	5.44%		
2	Demolition & Disposal of Yard Piping	\$ 8,800	0.03%		
3	Demolition & Disposal of Digester Covers	\$ 241,770	0.88%		
4	Demolition of Process Mechanical in Control Bldg. & Digester Tanks	\$ 705,940	2.58%		
5	Equipment Salvaging and Providing to Owner	\$ 15,020	0.05%		
6	Process Mechanical Equipment Demolition	\$ 68,510	0.25%		
7	Salvage Electrical Room Equipment	\$ 41,460	0.15%		
8	Demolition of Electrical Equipment	\$ 50,510	0.18%		
9	Site Civil Work: clearing and grubbing, dewatering, erosion control, compaction, fencing, grading, restoration of roadways, sidewalks, and sodding	\$ 174,840	0.64%	40,440.00	0.15%
10	New Cluster 3 Valve Vault	\$ 113,670	0.42%		
9	Structural/architectural work: roofing, windows, doors; metal stairs; louvers; and all other necessary structural components	\$ 431,220	1.58%		
10	Process Mechanical in Digester Cluster Control Building	\$ 1,883,660	6.89%		
11	Furnish Tube-in-Tube type Heat Exchangers	\$ 746,240	2.73%		
11	Furnish Sludge Recirculation Chopper Pumps & Motors	\$ 237,500	0.87%		
12	Furnish Radial beam type floating digester covers, flame arrestors, and appurtenances	\$ 4,509,900	16.50%		
13	Furnish Linear motion mixer systems and appurtenances	\$ 2,263,220	8.28%		
14	Furnish Sludge Transfer Pumps	\$ 170,390	0.62%		
15	Furnish Gas Booster blowers	\$ 450,280	1.65%		
16	Install Radial beam type floating digester covers, flame arrestors, and appurtenances	\$ 1,667,240	6.10%		
17	Install Linear motion mixer systems and appurtenances	\$ 119,420	0.44%		
18	Install Process Mechanical Equipment	\$ 152,690	0.56%		
18	Building Mechanical Work, including plumbing and HVAC	\$ 342,150	1.25%	22,530.00	0.08%
19	Electrical: MCCs, VFDs, enclosures, lightning protection, etc.	\$ 2,257,920	8.26%	183,490.00	0.67%
20	Instrumentation, Control Work, Systems Integration; programming & SCADA for Digester Cluster 3	\$ 1,050,180	3.84%		
21	For startup, testing and commisioning	\$ 89,430	0.33%		
22	For all painting, coating and finishing	\$ 1,421,840	5.20%	25,750.00	0.09%
23	Final clean up	\$ 35,620	0.13%		
24	Concrete restoration	\$ 147,670	0.54%		
28	Stainless steel radial beam type floating digester covers	\$ 3,958,880	14.49%		***************************************
	Subtotal	\$ 24,843,440		272,210.00	1.00%
	Contingency Allowance	\$ 2,484,344	9.09%		
	SBE TOTAL	\$ 27,327,784	100.00%		