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

Check applicable Ordinance	e(s): 🛛 90-143 Respon	nsible Wage and Benefits	□ 03-237 (fo	ormerly 03-1) Community Workforce Program	
	<u>PROJI</u>	ECT INFORMATION	See attachme	ent 🖂		
Contract/Project/*Work *Reference corresponding pro						
		NCY GENERATORS 1 T WATER TREATMENT		CHAB		
Description/Scope of Wor	rk: See Attached					
Estimated Cost: 4387790	Funding Source: Otl	ner (specify)				
		g and ending points) i.e. 123 ant located at 23300 SW			35 St. ends at 145 St. wnship 56, Range 40; Miami	
PROJE	ECT ANALYSIS FO	OR GOAL RECOMME	NDATION (C	WP) See	attachment	
Engineer/Department or	Agency's estimated	required workforce for P	roject 🗌 Work	Order 🗌	:	
Trade/Skills Required		Est. # of workforce requi	st. # of workforce required per trade		Est. # of total days to complete job	
N/A N/A						
N/A						
Comments: PROJECT ANALYSIS	S FOR GOAL REC	COMMENDATION (CS.	BE) See attac	hment 🛚		
Sub-Trade	Est. Cost	% of Item to Base 1	3id	Availabil	bility	
Construction	\$723,757	16.49%				
G & S	\$132,673	3.02%				
		RECOMMENDA	<u>ATION</u>			
Set-Aside: Level 1 Lev	vel 2 Level 3 7	Trade Set-Aside ☐ Sub-C	ontractor Goal 🗵	Workfor	ce Goal No Measure	
Basis for Recommenda Nos. 1, 2, 3 and 4 to rer		s for the rehabilitation o	f existing gene	rator encl	osures and connect Generato	
Date submitted to DBD						

Telephone No.: (786)552-8989

DEPARTMENTAL INPUT CONTRACT MEASURE ANALYSIS AND RECOMMENDATION

To: Gary T. Hartfield, Division Director

Internal Services Department

Small Business Development Division

From: Isaac Smith, Manager

Construction Contracts Section

Department: Miami-Dade Water and Sewer Department

Contract Title: CD 1.11 – Emergency Generators 1 through 4 Rehab

South District Wastewater Treatment Plant

Contract No.: CICC 7360 Plan RPQ No. P0226RR

Estimate Amount: \$4,387,790 [\$3,988,900 Construction + \$398,890 Contingency]

Funding Source: EW 660, Revenue Bonds Sold

Small Business Enterprise - Construction - 16.49%

Analysis for Recommendation (Attached)

Department Head or Authorized Agent

DESCRIPTION OF PROJECT:

- Space Smith

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, Consent Decree Project 1.11 consists of the rehabilitation of existing generator enclosures and connect existing Generators No. 1, 2, 3 and 4 to remote radiators at the South District Wastewater Treatment Plant, located in unincorporated Miami Dade County at 23300 SW 88 Ave., Miami, FL 33190 in Section 21, Township 56, Range 40.

The scope of work includes, but is not limited to, furnishing all materials, labor, and equipment necessary to rehabilitate four (4) existing generator enclosures and connect existing Generators 1, 2, 3 and 4 to remove radiator systems; modification work; demolition work; removal of radiators and modify enclosure frame, roof, floor, walls, floor beans; removal of stack metal covers; removal of mufflers from Generator 3 and 4; removal of existing day tank and replacement with proposed double walled fuel oil day tank; furnish and install new louvers and exhaust fans; mechanical work; electrical work, including electrical systems, motor control centers, cables, raceways, conduits, disconnect switches and grounding systems; all piping (including fuel, oil and water), valves and fittings; painting; roofing; site restoration; testing and cleanup.

The work also includes installation of Department furnished radiator assembly including installing expansion tank, isolation valves and concrete base slab; connecting eight (8) proposed radiator fans (2 per radiator unit); pulling wire from junction box to two starter disconnect switches for Fans #1 and #2; furnish and install electrical conduits, cables, raceways, disconnect switches and grounding systems; modification of existing electrical conduits and electrical systems; cooling water pipe connection between existing engine and proposed radiator units; furnish and installing piping, valves and fittings; providing the services of a systems integration, provide site restoration; cleaning, and testing; submittal of O&M Documents, Record Documents (As-Builts), warranties, and punch list items; spare parts and all appurtenant and miscellaneous items and work for a complete, satisfactory, and functional installation.

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: CWP is not applicable to this Project.

QUALIFICATIONS OF BIDDERS:

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

- A. With his bid, the successful Bidder shall submit proof that his/her firm has at least the minimum successful contract experience as required below for this Contract being bid. Such proof shall consist of a list of projects, completed prior to the bid date, with the names and telephone numbers of the owners or representatives the Department can call and confirm the listed experience.
- B. In addition to submittal requirements stated elsewhere, to qualify for work on this Contract the Bidder or Bidder's Electrical Subcontractor shall be experienced with Generator installations, including medium voltage electrical power systems, and standby diesel generators. The Bidder Subcontractor shall also be experienced in construction of metal structures and steel framing welding. The welding Contractor shall be certified by the AWS with a minimum of five years of experience.
- C. The Bidder or Bidder's Electrical Subcontractor shall have successfully completed a minimum of three (3) projects demonstrating experience with low and medium voltage power supply and standby diesel generators within the last ten (10) years meeting the following requirements:
 - 1. Low Voltage: Minimum generator size 150 kW
 - 2. Medium Voltage: Minimum generator size 1,000 kW
- D. The experience of key senior personnel with other firms may be counted toward the experience requirement, if acceptable to the ENGINEER. Should such evidence not be satisfactory to the ENGINEER, whose decision shall be final.
- E. In the event a firm is established by executives, supervisors and other senior field staff (key employees) that would have met these minimum experience requirements with a prior firm, the Department reserves the right to qualify the firm based on WASD's sole determination and evaluation of the knowledge and prior experience of these key employees employed by the new firm.

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Estimate Amount: \$4,387,790 [\$3,988,900 Construction + \$398,890 Contingency]

Funding Source: EW 660, Revenue Bonds Sold

Small Business Enterprise – Goods & Services – 3.02%

Analysis for Recommendation (Attached)

Department Head or Authorized Agent

DESCRIPTION OF PROJECT:

- have Smith

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, Consent Decree Project 1.11 consists of the rehabilitation of existing generator enclosures and connect existing Generators No. 1, 2, 3 and 4 to remote radiators at the South District Wastewater Treatment Plant, located in unincorporated Miami Dade County at 23300 SW 88 Ave., Miami, FL 33190

CONSIDERATIONS FOR ANALYSIS:

- 1. The project predominantly involves improvements to several backup power generator systems at the site of an operating wastewater treatment plant.
 - a. The Contractor shall exercise extreme care and precaution as not to damage existing facilities.
 - b. Only one generator may be out of operation at a time for modification.
- 2. This generator enclosures includes very large, expensive and specialized high voltage electrical equipment for power generation at the plant.
- 3. The Contractor shall provide the services of a Systems Integrator and the services of original equipment manufacturer for generator shutdown and recommissioning.
- 4. The project also includes construction of new roof, doors, louvers, exhaust fans and other structural modifications for the generator pads.

- 5. The work shall be executed while the wastewater plant is in operation. The contractor's activities shall not adversely affect the operations or impact the treatment capacity of the plant.
- 6. 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 multiple opportunities for participation on this project. The recommended areas of participation for SBE Goods & Services providers includes the possible areas:

Item	Goods & Services	Prime Contractor	Sub- Contractor	SBE Availability
1.	GOODS: Generator Enclosures Electrical Switchgear Motor Control Centers Instrumentation & Controls Doors, Louvers, fans, etc. Interior lighting Conduits and Cables Paint Fuel Double-Walled Tank	X X X X	X X X X X	X X X X
2.	SERVICES Electrical Instrumentation Civil Site work Roofing Systems Integration Hauling Painting Commissioning and Decommissioning	X	X X X X X X	X X X X

ANALYSIS FOR SBE PARTICIPATION - RPQ# P0226									
Item	Description	Cost	Availability	SBE-Con (%)	SBE-G&S(%)				
	General								
1	Mobilization & demobilization	\$ 353,000.00	8.05%						
2	Site Restoration	\$ 105,900.00	2.41%	1.41%	1.00%				
	Enclosure Rehab								
3	Excavation, Backfill and Compaction - Radiator Base	\$ 35,000.00	0.80%	0.80%					
4	Construction of Radiator Base Pad	\$ 105,000.00	2.39%						
5	New Radiator Installation	\$ 52,000.00	1.19%						
6	New Roof Sections	\$ 121,520.00	2.77%	2.77%					
7	New Wall, Floor and Exhaust End Sections	\$ 297,000.00	6.77%	4.00%					
8a	New Exhaust Fan Hood & Guard	\$ 44,000.00	1.00%						
8b	New Air Intake Hoods & Metal Pieces	\$ 529,000.00	12.06%						
9	Intake, Stack & Muffler	\$ 194,032.00	4.42%						
10	Roof Replacement	\$ 58,000.00	1.32%	1.32%					
11	Structural Work, Intake Hoods and Screens	\$ 186,080.00	4.24%						
12	Door Replacement (including overhead doors)	\$ 280,000.00	6.38%						
13	Paining - Generator enclosure	\$ 140,000.00	3.19%	2.71%					
	Mechanical								
14	Demolition & Disposal	\$ 145,000.00	3.30%	2.30%					
15	Black steel piping & fittings	\$ 224,168.00	5.11%						
16	Gate Valves	\$ 74,600.00	1.70%		1.70%				
17	Supply Fans	\$ 130,000.00	2.96%						
18	Fuel Day Tank	\$ 52,000.00	1.19%						
19	Miscellaneous Items	\$ 37,000.00	0.84%						
	Electrical								
20	Demolition & Disposal	\$ 10,000.00	0.23%	0.23%					
21	Neutral Grounding Resistors	\$ 120,000.00	2.73%						
22	Feeder, 400A	\$ 35,000.00	0.80%						
23	Supply Wiring for 480V Motors	\$ 36,000.00	0.82%	0.50%	0.32%				
24	Electrical Equipment	\$ 144,600.00	3.30%						
25	Grounding of Radiator and Resistor	\$ 20,000.00	0.46%	0.46%					
26	Control & Signal Wiring	\$ 20,000.00	0.46%						
27	Radiator & Fan Control Upgrades	\$ 168,000.00	3.83%						
28	Fuel System Alarm & Control Upgrades	\$ 136,000.00	3.10%						
29	Systems Integration	\$ 136,000.00	3.10%						
	Subtotal	\$ 3,988,900.00	90.91%						
	Contingency	\$ 398,890.00	9.09%	\$ 723,757.56	\$ 132,673.09				
	SBE Total	\$ 4,387,790.00	100.00%	16.49%	3.02%				