

DEPARTMENT INPUT
CONSTRUCTION CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION

Check applicable Ordinance(s): ☒ 90-143 Responsible Wage and Benefits ☐ 03-237 (formerly 03-1) Community Workforce Program

PROJECT INFORMATION See attachment ☒

Contract/Project/*Work Order No.: S-940

*Reference corresponding project number when submitting a work order

Contract/Project Title: CD Project 5.9 – Upgrade/Replace Pump Station 0301

Description/Scope of Work: See Attached

Estimated Cost: 8901767 Funding Source: Other (specify)

Location of Project (street address or beginning and ending points) i.e. 12345 NE 23rd Ct or Starts at 135 St. ends at 145 St.
350 Sunny Isles Boulevard, Sunny Isles Beach, Florida 33160

PROJECT ANALYSIS FOR GOAL RECOMMENDATION (CWP) See attachment ☒

Engineer/Department or Agency's estimated required workforce for Project ☐ Work Order ☐:

Trade/Skills Required	Est. # of workforce required per trade	Est. # of total days to complete job
N/A		
N/A		
N/A		

Comments:The project is required under the USEPA Consent Decree. Work consists of furnishing materials, labor, and equipment necessary for the construction of a new Pump Station 301 owned and operated by the Miami-Dade Water and Sewer Department. The facilities will replace the existing pump station.

PROJECT ANALYSIS FOR GOAL RECOMMENDATION (CSBE) See attachment ☒

Sub-Trade	Est. Cost	% of Item to Base Bid	Availability
Construction	\$1,181,276	13.27%	
G & S	\$466,977	5.25%	
	\$	0%	

RECOMMENDATION

Set-Aside: Level 1 ☐ Level 2 ☐ Level 3 ☐ Trade Set-Aside ☐ Sub-Contractor Goal ☒ Workforce Goal ☐ No Measure ☐

Basis for Recommendation: This project is located on a heavily traveled roadway on the north and a waterway connecting to Biscayne Bay on the South. The importance of a well coordinated project is essential to prevent the unintended release of raw sewage into the area. Also this project is for the construction of a regional pump station which has at least 10 upstream stations and it discharges directly to the North District Wastewater Treatment Plant .

Date submitted to DBD: 02/06/2019

Contact Person: Isaac Smith

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, Chief
Construction Contracts Division

Department: Miami-Dade Water and Sewer Department

Contract Title: CD 5.9 UPGRADE AND REPLACEMENT OF
REGIONAL PUMP STATION NO. 0301

Contract No.: S-940

Estimate Amount: \$8,901,767.60 [\$8,092,516.00 Construction + \$809,251.60 Contingency]

Funding Source: EW 660, WASD Revenue Bonds Sold

Small Business Enterprise – Construction – 13.27% 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 to replace Regional Pump Station 0301 (PS 0301) with a new station. PS 0301 is located at 350 Sunny Isles Blvd. in the City of Sunny Isles Beach, Florida.

The work consists of furnishing materials, labor, and equipment necessary for the construction of a new regional pump station. The new facility will replace the existing pump station. This project consists of demolition of the existing pump station and the furnishing and installing the following: Trench wet well construction; Four (4) 110 Horsepower Pumps & VFD motors, piping, and equipment into the wet well; Valves, piping and fitting (including stainless steel plug and check valves); Flow meter and flow control; Manholes; Odor control; Electrical and generator building; Generator Set and Aboveground Fuel Tank; Hoist and Trolley systems, including monorail support system; Wooden Perimeter fence and access gate; and all required By-pass pumping.

LICENSES: The types of licenses required are: State General Contractor (Prime), General Engineering Contractor (Prime), General Mechanical(sub), Demolition(Sub), Air Conditioning(Sub), Paving (Sub, Plumbing – Master (Sub), Underground Utility Excavation (Sub), Electrical (High Voltage) (Sub).and/or other categories as applicable by Chapter 489 of the Florida Statutes or Chapter 10 of Miami-Dade County Code.

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

MINIMUM QUALIFICATION:

This regional sewage pumping station is a critical facility for WASD and is located in an environmentally sensitive area between a State Highway and a tributary of the Intracoastal Canal. Therefore, in addition to license requirements above, bidders shall also meet the minimum experience listed below:

- a) The Bidder shall demonstrate relevant experience of directing/managing specialty contractors such as structural, electrical and instrumentation subcontractors by listing a least three (3) projects completed as the prime contractor within the last ten (10) years at sewage facilities, with a minimum total construction cost of three million dollars (\$3,000,000) or more each.
- b) The Bidder, as prime contractor, shall have successfully completed the installation or removal and replacement of pumps and motors for at least one (1) raw sewage pump station within the last ten (10) years which included the Installation of submersible centrifugal pumps (minimum 100 horsepower)
- c) The Bidder or Bidder's Electrical Subcontractor shall have successfully completed at least one (1) project demonstrating experience with 460 VAC power supply and pump station controls/integration within the last ten (10) years meeting the following requirements:
 - 1. 460 VAC switchgear
 - 2. 460 VAC variable frequency drives
 - 3. PLC auxiliary control panel
 - 4. Pump Station Control System Integrator
- d) The Prime Contractor or Subcontractor responsible for installing new wet well shall have completed at least three (3) projects within the past ten (10) years demonstrating:
 - 1. Experience with deep excavations, dewatering and concrete placement near coastal/marine waterways
 - 2. Experience mitigating environmental issues raise during construction near wetlands/marine/coastal waterways

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, COUNTY reserves the right to qualify the firm based on the COUNTY's sole determination and evaluation of the knowledge and prior experience of these key employees employed by the new firm. The experience of key senior personnel with other firms may be counted towards the experience requirement, if acceptable to the ENGINEER. Should such evidence not be satisfactory to the ENGINEER, whose decision shall be final, the bid will be considered non-responsive, and the second lowest bidder will be considered for award. The qualifying proof shall be submitted in a separate sealed envelope with the bid.

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Small Business Development Division

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Department: Miami-Dade Water and Sewer Department

Contract Title: CD 5.9 UPGRADE AND REPLACEMENT OF
REGIONAL PUMP STATION NO. 0301

Contract No.: S-940

Estimate Amount: \$8,901,767.60 [\$8,092,516.00 Construction + \$809,251.60 Contingency]

Funding Source: EW 660, WASD Revenue Bonds Sold

Small Business Enterprise – Goods & Services – 5.25% Analysis for Recommendation (Attached)
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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 to replace Regional Pump Station 0301 (PS 0301) with a new station. PS 0301 is located at 350 Sunny Isles Blvd. in the City of Sunny Isles Beach, Florida.

The work also includes upgrades to replace equipment that has reached its useful life. The project includes, but is not limited to, replacement of pumps, piping, valves, appurtenances, modified bitumen roofing system, doors, windows, louvers, HVAC and ventilation equipment, plumbing, field instruments, site work and by pass pumping. The work also includes replacement of an existing generator set, Aboveground fuel storage tank, constructing an electrical room and generator building. Site work includes erosion control, landscaping, paving, grading and drainage. Electrical work includes switchgear; MCCs, VFDs; electrical equipment and instrumentation. The project also includes installing auger cast piles and maintaining a by-pass pumping system. The services of a Systems Integrator shall be provided for systems integration, control and instrumentation.

CONSIDERATIONS FOR ANALYSIS:

1. The project involves construction and replacement of an existing regional sewage pump station. This undertaking includes furnishing and installation of very large, expensive equipment, such as: 110 horsepower pumps and motors with variable frequency drives, medium voltage switchgear and motor control centers

2. The project involves the synchronization of multiple processes, remote telemetry and providing the services of a systems integrator.
3. The work requires highly skilled trades with special equipment. However, the Small Business Opportunities identified for this project include demolition, general site work (i.e., site clearing, grubbing and grading), drainage, landscaping, masonry walls, roofing, doors, painting and HVAC.
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 several opportunities for participation on this project. Please find an analysis and recommended areas of participation for SBE Goods & Services providers:

Analysis for Small Business Enterprise – Goods and Services Recommendation				
Item	Goods & Services	Prime Contractor	Sub-Contractor	SBE Availability
1.	GOODS: 110 Horsepower Pumps Pump Motors Mechanical Equipment Electrical Switchgear Variable Frequency Drives Instrumentation & Controls Piping, Valves & Fittings Drainage Stainless Steel Valves PVC C900 Piping & Fittings Stainless Steel Piping & Fittings Wooden Fence & Gate	X X X X X X X X X X X X	X X X X X X X X X X X X	X X X X X X X X X X X X
2.	SERVICES Structural & Piling Electrical Instrumentation Testing & Compaction Demolition Civil Site work Systems Integration Utility Piping Concrete Restoration Finishing Painting Landscaping Masonry	X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X

	SBE ANALYSIS FOR CONTRACT NO.S-940 - NEW PUMP STATION NO. 0301						
Item No.	Item Description	Item Price	% of SBE Total	SBE Construction Availability	SBE Construction Percent (%)	SBE - G & S Availability	SBE - G & S Percent (%)
1	Mobilization & Demob.	\$411,450.00	4.62%	\$ -		\$ -	
2	Sitework: clearing, grubbing, excavating, etc.	\$277,950.00	3.12%	\$ 27,795.00	0.31%	\$ -	
3	Demolition, hauling and disposal	\$496,840.00	5.58%	\$ 245,790.00	2.76%	\$ -	
4	Concrete pavement and grading of parking lot and driveway entrance	\$90,500.00	1.02%	\$ 81,450.00	0.91%	\$ -	
5	Constructing masonry walls, stucco, thermal and moisture protection, doors, decorative screen, and roofing for the electrical building	\$245,320.00	2.76%	\$ 180,760.00	2.03%	\$ 24,385.00	0.27%
6	HVAC equipment and materials	\$105,260.00	1.18%	\$ 94,734.00	1.06%	\$ -	
7	Odor control equipment and material	\$291,930.00	3.28%	\$ -		\$ -	
8	Miscellaneous metals	\$201,790.00	2.27%	\$ 181,611.00	2.04%	\$ -	
9	Painting and coating of the electrical building	\$87,990.00	0.99%	\$ 79,191.00	0.89%	\$ -	
10	Auger-cast piles and reinforced concrete structural elements	\$474,080.00	5.33%	\$ -		\$ -	
11	Coating of the sewage wet well	\$188,570.00	2.12%	\$ 169,713.00	1.91%	\$ -	
12	Landscaping	\$41,830.00	0.47%	\$ 37,647.00	0.42%	\$ -	
13	Furnishing Stainless Steel Plug & Check Valves	\$262,680.00	2.95%	\$ -		\$ 236,412.00	2.66%
14	Installing Stainless Steel Plug & Check Valves	\$168,440.00	1.89%	\$ -		\$ -	
15	Hoist and Trolley systems, structural monorail support system	\$101,110.00	1.14%	\$ -		\$ -	
16	Flow Meter & Flow Control	\$148,710.00	1.67%	\$ -		\$ -	
17	Furnish & Install 110 HP Submersible Sewage Pumps	\$564,646.00	6.34%	\$ -		\$ -	
18	Trench wet well	\$517,450.00	5.81%	\$ -		\$ -	
19	Furnishing HDPE piping and fittings	\$127,420.00	1.43%	\$ -		\$ 114,678.00	1.29%
20	Installing HDPE piping and fittings	\$94,150.00	1.06%	\$ -		\$ -	
21	Furnishing all stainless steel piping and fittings	\$315,235.00	3.54%	\$ -			
22	Installing all stainless steel piping and fittings	\$216,130.00	2.43%	\$ -		\$ -	
23	Furnishing all C900 PVC piping and fittings	\$64,300.00	0.72%	\$ -		\$ 57,870.00	0.65%
24	Installing all C900 PVC piping and fittings	\$43,940.00	0.49%	\$ 40,545.00	0.46%	\$ -	
25	Mechanical work & Specialities	\$92,960.00	1.04%	\$ -		\$ -	
26	Control System Integrator (CSI) and PLC Auxiliary Panel	\$291,800.00	3.28%	\$ -		\$ -	
27	Furnish & Install Variable Frequency Drives (VFD) units	\$754,050.00	8.47%	\$ -		\$ -	
28	Electrical panel boards, switchgear, MCCs and all other electrical and Control equipment and materials	\$604,520.00	6.79%	\$ -		\$ -	
29	Sewer By-pass Pumping System	\$92,045.00	1.03%	\$ -		\$ -	
30	Generator set, complete with fuel storage tank & appurtenances	\$419,690.00	4.71%	\$ -		\$ -	
31	French drain, inlets, drainage piping	\$84,080.00	0.94%	\$ 42,040.00	0.47%	\$ 33,632.00	0.38%
32	Sanitary Sewer Manholes greather than 10 ft. deep	\$215,650.00	2.42%	\$ -		\$ -	
	Subtotal	\$8,092,516.00					
				\$ 1,181,276.00	13.27%	\$ 466,977.00	5.25%
	Contingency Allowance	\$809,251.60	9.09%		SBE		SBE
	SBE TOTAL	\$8,901,767.60	100.00%		Construction		G&S