

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-908

*Reference corresponding project number when submitting a work order

Contract/Project Title: CD 5.3 – Upgrade to Pump Station 0692

Description/Scope of Work: See Attached

Estimated Cost: 7012402 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.
Pump Station 0692A and 0692B located at 30211 SW 147th Street, Homestead, FL

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: Project location not in a DTA.

PROJECT ANALYSIS FOR GOAL RECOMMENDATION (CSBE) See attachment ☒

Sub-Trade	Est. Cost	% of Item to Base Bid	Availability
Construction	\$1,203,969	15.61%	
G & S	\$617,365	8.00%	
	\$	0%	

RECOMMENDATION

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

Basis for Recommendation: This is the rehabilitation and upgrading of an existing in service Water and Sewer Department pump station required for compliance with the EPA Consent Decree by May 8, 2018. Pumps and motors are being replaced with a sophisticated Variable Frequency Drive units requiring expertise in control circuitry and system integration.

Date submitted to DBD: 08/18/2018

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, Sr. Program Manager
Construction Contracts Section

Department: Miami-Dade Water and Sewer Department

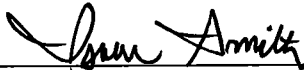
Contract Title: CD 5.3 UPGRADE OF PUMP STATION NO. 0692

Contract No.: S-908

Estimate Amount: \$7,713,643 [\$7,012,402 Construction + \$701,240 Contingency]

Funding Source: EW 660, WASD Revenue Bonds Sold

Small Business Enterprise – Construction – 15.61% 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.

The work consists of furnishing all materials, labor, and equipment necessary to rehabilitate Pump Station 692A and Booster Pump Station 692B, which includes 100 horsepower pumps and motors, located at 30211 SW 147th Street, Homestead, Florida. The project is required under the USEPA Consent Decree and must be in service by May 8, 2018.

The work also includes upgrades to replace equipment that has reached its useful life. The project includes, but is not limited to, replacement of booster and wetwell 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 removal of an existing indoor generator, converting the existing generator room into an electrical room and adding a new outdoor generator with integral fuel storage tank. Site work includes erosion control, sodding, paving, grading and drainage. Electrical work includes switchgear; replace the motor starters with VFDs; electrical equipment and instrumentation. The project also includes installing and maintaining a by-pass pumping system.

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.

**DEPARTMENTAL INPUT
CONTRACT MEASURE ANALYSIS AND RECOMMENDATION**

To: Gary T. Hartfield, Division Director
Internal Services Department
Small Business Development Division

From: Isaac Smith, Sr. Program Manager
Construction Contracts Section

Department: Miami-Dade Water and Sewer Department

Contract Title: CD 5.3 UPGRADE OF PUMP STATION NO. 0692

Contract No.: S-908

Estimate Amount: \$7,713,643 [\$7,012,402 Construction + \$701,240 Contingency]

Funding Source: EW 660, WASD Revenue Bonds Sold

Small Business Enterprise – Goods & Services – 8.00% Analysis for Recommendation (Attached)
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Department Head or Authorized Agent

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CONSIDERATIONS FOR ANALYSIS:

1. The project involves construction and upgrades to an existing wetwell and booster sewage pump station. This undertaking includes furnishing and installation of very large, expensive equipment, such as: 100 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 general site work (i.e., site clearing, grubbing and grading), yard piping, landscaping, masonry walls, roofing, doors, painting, plumbing 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: 100 Horsepower Pumps Pump Motors Mechanical Equipment Electrical Switchgear Variable Frequency Drives Instrumentation & Controls Piping, Valves & Fittings Drainage	X X X X X X X	 X X	 X X
2.	SERVICES Structural Electrical Instrumentation Testing & Compaction Demolition Civil Site work Systems Integration Utility Piping Concrete Restoration Finishing Painting Plumbing Masonry	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-908

	Description summary	Total Price	% of Construction	SBE Construction - Availability (\$)	SBE Construction - % of Total	Description of SBE Construction work	SBE G&S - Availability (\$)	SBE G&S - % of Total	Description of SBE G&S work
1	Mobilization & Demob.	\$403,706	5.23%	\$0	0.00%		\$4,037	0.05%	
2	Sitework: clearing, grubbing, excavating, etc.	\$133,335	1.73%	\$106,668	1.38%	clearing, grubbing, site preparation, earthwork, excavation and all services required to prepare the site	\$0	0.00%	
3	Demolition, hauling and disposal	\$146,157	1.89%	\$116,926	1.52%	Non pipe excavation	\$116,926	1.52%	Includes hauling and disposal
4	Owner furnished ball valves and accessories	\$49,088	0.64%	\$0	0.00%	Owner furnished Ball Valves	\$0	0.00%	Owner furnished Ball Valves
5	Owner furnished 42-inch and 48-inch plug valves and accessories	\$121,794	1.58%	\$0	0.00%	Owner furnished Valves	\$0	0.00%	Owner furnished Valves
6	Masonry walls, stucco, railings, stairs, thermal and moisture protection, doors, louvers, and roofing	\$190,949	2.48%	\$181,402	2.35%	door frames, foundations, etc	\$9,547	0.12%	stucco, primer and paint
7	Plumbing upgrades and toilet room fixtures and accessories	\$46,599	0.60%	\$45,201	0.59%	Small bsthroom	\$1,398	0.02%	Fixtures
8	HVAC upgrades	\$201,892	2.62%	\$201,892	2.62%	Includes proving AC Units	\$0	0.00%	plants, soil, mulch, etc.
9	Miscellaneous metals including handrails & hatches	\$71,296	0.92%	\$0	0.00%		\$0	0.00%	
10	Painting of all interior walls, exterior walls and floors, including surface preparation	\$182,064	2.36%	\$182,064	2.36%		\$0	0.00%	
11	Site restoration including paving and sodding	\$49,925	0.65%	\$49,925	0.65%	Service Road and small part of ROW	\$0	0.00%	
12	Specialties and miscellaneous work	\$52,499	0.68%	\$0	0.00%		\$0	0.00%	
13	Furnishing 12-inch through 24-inch Plug Valves	\$438,701	5.69%	\$0	0.00%		\$350,961	4.55%	Valves from local distributor
14	Installation of interior 12 though 24-inch Plug Valves	\$235,883	3.06%	\$0	0.00%		\$0	0.00%	
15	Furnishing 12-inch Check Valves for upgrade	\$77,268	1.00%	\$38,634	0.50%		\$61,814	0.80%	Valves from local distributor
16	Installation of 12-inch Check Valves for upgrade	\$31,386	0.41%	\$15,693	0.20%		\$0	0.00%	
17	Furnishing wetwell, pumps and 100 HP motors	\$771,772	10.01%	\$0	0.00%		\$0	0.00%	
18	Installing wetwell, pumps and 100 HP motors	\$86,932	1.13%	\$0	0.00%		\$0	0.00%	
19	Owner furnished 4 booster pumps and motors	\$101,946	1.32%	\$0	0.00%		\$0	0.00%	
20	Furnishing interior piping and fittings	\$156,040	2.02%	\$0	0.00%		\$15,604	0.20%	
21	Installing interior piping and fittings	\$49,109	0.64%	\$9,822	0.13%		\$0	0.00%	
22	Furnishing exterior piping and fittings	\$310,546	4.03%	\$0	0.00%		\$31,055	0.40%	
23	Installing exterior piping and fittings	\$385,831	5.00%	\$0	0.00%		\$0	0.00%	
24	Installating hydraulic accumulator	\$63,605	0.82%	\$63,605	0.82%		\$0	0.00%	
25	Furnishing the services of a Control System Integrator (CSI) and installing the PLC Auxiliary Panel	\$250,000	3.24%	\$0	0.00%		\$0	0.00%	
26	Furnishing 100 hp motor starter units	\$175,356	2.27%	\$0	0.00%		\$0	0.00%	
27	Installing 100 hp motor starter units	\$75,783	0.98%	\$0	0.00%		\$0	0.00%	
28	Furnishing 300 hp Variable Frequency Drives (VFD) units	\$460,374	5.97%	\$0	0.00%		\$0	0.00%	
29	Installing 300 hp Variable Frequency Drives (VFD) units	\$62,203	0.81%	\$0	0.00%		\$0	0.00%	
30	Electrical switchgear, ATS, MCCs, conductors, conduits, terminations, panelboards, etc.	\$804,076	10.42%	\$0	0.00%		\$0	0.00%	
31	Furnishing and installing yard piping modifications	\$50,000	0.65%	\$0	0.00%		\$5,000	0.06%	Owner furnished pipe and valves

SBE ANALYSIS FOR CONTRACT NO. S-908

	Description summary	Total Price	% of Construction	SBE Construction - Availability (\$)	SBE Construction - % of Total	Description of SBE Construction work	SBE G&S - Availability (\$)	SBE G&S - % of Total	Description of SBE G&S work
32	Furnishing generator and fuel piping	\$420,468	5.45%	\$0	0.00%		\$21,023	0.27%	Pipe and fittings
33	Installing generator and fuel piping	\$79,575	1.03%	\$19,894	0.26%	installing piping and conduits	\$0	0.00%	
34	Remove & replace 48" PCCP effluent pipe	\$104,000	1.35%	\$0	0.00%		\$0	0.00%	
35	Type C - Strucrual Repairs	\$74,498	0.97%	\$74,498	0.97%		\$0	0.00%	
36	Type E - Strucrual Repairs	\$60,748	0.79%	\$60,748	0.79%		\$0	0.00%	
37	Type F - Structural Repairs	\$36,998	0.48%	\$36,998	0.48%		\$0	0.00%	
38	Subtotal	\$7,012,402	90.91%	\$1,203,969	15.61%		\$617,365	8.00%	
39	Contingency Allowance (10%)	\$701,240	9.09%						
	SBE TOTAL	\$7,713,643	100.00%						