

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-930B**

*Reference corresponding project number when submitting a work order

Contract/Project Title: **ST-2D-B SOUTH DISTRICT WASTEWATER TREATMENT PLANT SUBSTATIONS 5-6 & 15-16**

Description/Scope of Work: **See Attached**

Estimated Cost: **22382305** **Funding Source:** **Federal funds**

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.
South District Waste Water Treatment Plant, located in unincorporated Miami Dade County at 8950 SW 232nd St, Miami, FL 33190.

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 for compliance with the State of Florida's Ocean Outfall Legislation. It is funded by WIFIA and required Davis Beacon Wages.

PROJECT ANALYSIS FOR GOAL RECOMMENDATION (CSBE) See attachment

Sub-Trade	Est. Cost	% of Item to Base Bid	Availability
<u>Construction</u>	\$2,511,759	11.22%	<u>N/A</u>
<u>G & S</u>	\$141,149	0.63%	<u>N/A</u>
	\$	0%	

RECOMMENDATION

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

Basis for Recommendation:Project is for the proposed construction of two(2) electrical substations at a wastewater plant, the construction of which includes numerous expensive and high voltage electrical equipment. There are limited availability of small business participation.

Date submitted to DBD:**04/15/2021**

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: ST-2D-B SOUTH DISTRICT WASTEWATER TREATMENT PLANT
SUBSTATIONS 5-6 & 15-16

Contract No.: S-930B

Estimate Amount: \$22,382,305 [\$20,347,550 Construction + \$2,034,755 Contingency]

Funding Source: EW 667, Revenue Bonds Sold
Water Infrastructure Finance and Innovation Act (WIFIA)

Small Business Enterprise – Construction – 11.22% 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. It is part of the Miami-Dade County's compliance strategy for meeting the State of Florida's Ocean Outfall Legislation (OOL) schedule requirements.

In general, the project consists of furnishing all materials, labor, and equipment necessary for the construction of two new substation 5/6 and 15/16 along with its electrical equipment, and load redistribution from existing Substation 5/6 and 15/16, including all ductbank design and installation at the South District Wastewater Treatment Plant (SDWWTP), located at 8950 SW 232nd Street Miami, Florida.

The scope of work includes, but is not limited to:

1. Construction of new Electrical Substation 5/6:
 - a. New feeders from Electrical Distribution Building (EDB)1 to provide temporary power.
 - b. New 13.2kV-480V transformers 5 and 6.
 - c. New 480V arc-resistant Switchgear fed from transformers 5 and 6.
 - d. New 480V feeders from new switchgear to Oxygenation Trains 1-4, Headworks 1, Filtrate Station, and EDB1 building service loads.
 - e. Removal and disposal of asbestos containing material and lead based paint as noted in the Asbestos and Lead Survey (Sub-Stations 5&6) report (ATC, December 2020).
 - f. Temporary power to be transferred from EDB1 to permanent power from EDB3.
 - g. Connect substation 5/6 controllers (GE RX3i programmable logic controllers) to the nearest RTU for incorporation into SCADA.
 - h. Electrical room and transformer vaults to be air conditioned.

2. Construction of new Electrical Substation 15/16:
 - a. New feeders from EDB1 to provide temporary power.
 - b. New 13.2kV-480V transformers 15/16.
 - c. New 480V arc-resistant Switchgear feed from Substation 15/16.
 - d. New 480V feeders from the Switchgear to Oxygenation Trains 5-7 and future Oxygenation Train 8.
 - e. Removal and disposal of asbestos containing material and lead based paint as noted in the Asbestos and Lead Survey (Sub-Stations 15&16) report (ATC, December 2020).
 - f. Temporary power to be transfer from EDB1 to permanent power from EDB3.
 - g. Connect substation 15/16 controllers (GE RX3i programmable logic controllers) to the nearest RTU for incorporation into SCADA.
 - h. Electrical room and transformer vaults will be air conditioned.
 - i. Modification of the existing Substation 15 - 16.
3. Construction of Electrical Ductbank System:
 - a. Connect the existing Electrical Distribution Building 2 with the new Substations 5-6 and 15-16.
 - b. Furnishing and installation of new 480V Duct banks.
 - c. Furnishing and installation of new Signal Duct banks.

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:

1. With the bid, the successful Bidder shall submit proof that the firm has at least the minimum successful contract experience as required below for this Contract. Such proof shall consist of a list of projects, completed prior to the bid date, with the names and telephone numbers of the Department's or representatives that the Department can contact to confirm the listed experience.
2. The Bidder or Bidder's Subcontractor shall be experienced in substations, procurement and installation of main electrical equipment, including medium and low voltage electrical power systems, and instrumentation and controls including connections into an existing SCADA. The experience may be demonstrated by the general contractor or a specialty sub-consultant for their discipline work). The BIDDERS shall be experienced in performing WORK while maintaining operations of a wastewater facility

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. Project not in a DTA.

SPECIAL FUNDING SOURCES & REQUIREMENTS

Funding has been approved from the Water Infrastructure Finance Innovation Act (WIFIA) Program, which requires the use of Davis Bacon Wages.

Bidders shall take into consideration and be prepared to fully comply with the requirements provided in the Florida Department of Environmental Protection Supplementary Conditions.

CONTRACT NO. S-930B
ANALYSIS FOR RECOMMENDATION
(Part 1 of 2)

Item	Item Description	Cost	Percent
1	General Requirements: includes all preconstruction services and expenses; home/field office overhead; general and administrative cost, etc.	\$2,431,000.00	10.9%
2	Mobilization: includes all preparatory work required in mobilizing to the project site all of the contractor's construction equipment, supplies, materials and labor	\$210,200.00	0.9%
3	Engineer's Field Office: includes providing the Engineer's Field Office Trailer, including design, construction and installation of trailer, including utility connections	\$140,400.00	0.6%
4	Plantwide Ductbanks: includes providing all labor, materials and equipment for the installation of required ductbanks, manholes and conduits at all locations shown on the plans throughout the plant	\$308,400.00	1.4%
5	Plantwide Civil: includes providing all general site civil; yard piping; storm drain piping and structures; furnishing and installing retaining walls and related work, as shown on the Plans	\$3,560,500.00	15.9%
6	Plantwide Electrical: includes providing and installing all plantwide electrical, fiber optic cables at all locations shown on the plans; including all required testing	\$7,276,050.00	32.5%
7	Construction of new Electrical Substation 5/6: includes all structural, architectural & mechanical; all electrical work, electrical equipment; all instrumentation & control work	\$3,260,500.00	14.6%
8	Construction of new Electrical Substation 15/16: includes all structural, architectural & mechanical; all electrical work, electrical equipment; all instrumentation & control work	\$3,160,500.00	14.1%
	Project Subtotal	\$20,347,550.00	
	Contingency (10%)	\$2,034,755.00	9.1%
	Project SBE Total	\$22,382,305.00	100.0%

NOTE: See Part 2 of 2 for Breakdown of SBE-Cons and SBE Goods & Services Analysis

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Estimate Amount: \$22,382,305 [\$20,347,550 Construction + \$2,034,755 Contingency]

Funding Source: EW 667, Revenue Bonds Sold
Water Infrastructure Finance and Innovation Act (WIFIA)

Small Business Enterprise – Goods & Services – 0.63% Analysis for Recommendation (Attached)
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Department Head or Authorized Agent

DESCRIPTION OF PROJECT:

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SPECIAL FUNDING SOURCES & REQUIREMENTS

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CONSIDERATIONS FOR ANALYSIS:

1. The project involves the construction at an operating wastewater treatment plant.
2. The project involves the construction of 2 proposed electrical substations, both with 13.2 kV – 480V transformers.
3. The project also includes modifications to existing substations.
4. Item 2 requires the installation of high powered switchgear, breakers, motor control centers, etc.
5. 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 limited 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: Structural Fill Storm Drain Structure & Piping Electrical Switchgear Instrumentation & Controls Electrical Ductbanks Sitework Architectural	X X X X X	X X X X	X X X X
2.	SERVICES Structural Electrical Instrumentation Testing & Compaction Civil Site work Systems Integration Utility Piping Painting	X X	X X X X X X	X X X X X X