

**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-898

\*Reference corresponding project number when submitting a work order

**Contract/Project Title:** CD 4.5(1) INSTALLATION OF 4.1 MILES OF 54 INCH FORCE MAIN FROM SW 280 ST. AND SW 127 AVENUE TO EXISTING 54 INCH FORCE MAIN AT SW 248 ST. AND SW 107 AVENUE

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

**Estimated Cost:** 25471288      **Funding Source:** Other (specify)

**Location of Project** (street address or beginning and ending points) i.e. 12345 NE 23<sup>rd</sup> Ct or Starts at 135 St. ends at 145 St.  
From SW 127 Ave. & SW 280 Street to SW 107 Ave. & SW 248 Street

**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:Not Applicable, Project is not in a DTA.

**PROJECT ANALYSIS FOR GOAL RECOMMENDATION (CSBE)**    See attachment

Sub-Trade	Est. Cost	% of Item to Base Bid	Availability
0	\$	0%	
0	\$	0%	
0	\$	0%	

**RECOMMENDATION**

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

**Basis for Recommendation:** Availability among CSBE subcontractors.

**Date submitted to DBD:** 03/25/2016

**Contact Person:** Isaac Smith

**Telephone No.:** 786-552-8255

**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

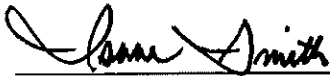
Contract Title: CD 4.5(1) INSTALLATION OF 4.1 MILES OF 54 INCH FORCE MAIN FROM SW 280 ST. AND SW 127 AVENUE TO EXISTING 54 INCH FORCE MAIN AT SW 248 ST. AND SW 107 AVENUE

Contract No.: S-898

Estimate Amount: \$25,471,288.67 [\$23,155,716.97 Construction + \$2,315,571.70 Contingency]

Funding Source: EW 658, WASD Revenue Bonds Sold

**Small Business Enterprise – Construction – 5.11%**  
**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 project consists of furnishing all materials unless otherwise specified in the specifications, all labor and all equipment necessary for the installation of a new 54-inch force main starting at SW 127 Avenue and SW 280 Street, continuing north along SW 127 Avenue, then east along SW 268 Street, then north along SW 112 Avenue, then east along SW 248 Street connecting to the existing 54-inch force main at SW 107 Avenue and SW 248 Street. The new force main will be installed for redundancy and will be connected to an existing 48-inch force main at SW 280 Street and SW 127 Avenue, connected to an existing 54-inch force main at SW 248 Street and SW 107 Avenue with provisions for a cross connection at SW 268 Street and 112 Avenue. The project is located in unincorporated Miami Dade County.

The scope of work includes, but is not limited to the following: the installation of approximately 23,000 lineal feet of Department furnished 54-inch force main and approximately fifteen (15) Department furnished 54-inch plug valves and one (1) 48-inch plug valve; furnishing and installing joint material; making connections to existing mains; constructing a microtunnel force main installation under the Florida Turnpike; constructing a microtunnel force main installation under C-102 canal; furnishing traffic control and maintenance of traffic (M.O.T.); making temporary and permanent paving repairs, including milling; pavement markings restoration; cleaning and testing the mains and all other appurtenant and miscellaneous items and work for a complete, functional and satisfactory installation.

## **CONSIDERATIONS FOR ANALYSIS:**

1. This project involves installation of a large diameter sewage force main. Trench depth for this project will average 12 feet deep and a significant portion of the pipe installation will occur where the pipe is totally submerged due to ground water levels. Trench line shoring and use of highly specialized divers to guide installation will be necessary.
2. In addition, the success of the project involves the construction of two (2) deep trenchless crossings via micro tunneling, as follows: the construction of a micro tunnel under the Florida Turnpike and the construction of a micro tunnel under the C-102 canal.
3. Many portions of the work requires the use of heavy equipment, such as the installation of fifteen (15) 54-inch eccentric plug valves weighing 23,000 pounds each.
4. Recommended opportunity for SBE-Construction participation is in the area of roadway pavement restoration and hauling.
5. **Therefore, this project is recommended for SBE-Const participation goal of 5.11%.**

**LICENSES:** The types of licenses required are: General Engineering, State Underground, Pipeline 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.

**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 4.5(1) INSTALLATION OF 4.1 MILES OF 54 INCH FORCE MAIN FROM SW 280  
ST. AND SW 127 AVENUE TO EXISTING 54 INCH FORCE MAIN AT SW 248  
ST. AND SW 107 AVENUE

Contract No.: S-898

Estimate Amount: \$25,471,288.67 [\$23,155,716.97 Construction + \$2,315,571.70 Contingency]

Funding Source: EW 658, WASD Revenue Bonds Sold

**Small Business Enterprise – G&S –5.16% (Hauling)  
Analysis for Recommendation (Attached)**



Department Head or Authorized Agent

**DESCRIPTION OF PROJECT:**

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The project consists of furnishing all materials unless otherwise specified in the specifications, all labor and all equipment necessary for the installation of a new 54-inch force main starting at SW 127 Avenue and SW 280 Street, continuing north along SW 127 Avenue, then east along SW 268 Street, then north along SW 112 Avenue, then east along SW 248 Street connecting to the existing 54-inch force main at SW 107 Avenue and SW 248 Street. The new force main will be installed for redundancy and will be connected to an existing 48-inch force main at SW 280 Street and SW 127 Avenue, connected to an existing 54-inch force main at SW 248 Street and SW 107 Avenue with provisions for a cross connection at SW 268 Street and 112 Avenue. The project is located in unincorporated Miami Dade County.

The scope of work includes, but is not limited to the following: the installation of approximately 23,000 lineal feet of Department furnished 54-inch force main and approximately fifteen (15) Department furnished 54-inch plug valves and one (1) 48-inch plug valve; furnishing and installing joint material; making connections to existing mains; constructing a microtunnel force main installation under the Florida Turnpike; constructing a microtunnel force main installation under C-102 canal; furnishing traffic control and maintenance of traffic (M.O.T.); making temporary and permanent paving repairs, including milling; pavement markings restoration; cleaning and testing the mains and all other appurtenant and miscellaneous items and work for a complete, functional and satisfactory installation.

**CONSIDERATIONS FOR ANALYSIS:**

1. This project involves installation of a large diameter sewage force main. Trench depth for this project will average 12 feet deep and a significant portion of the pipe installation will occur where the pipe is totally submerged due to ground water levels. Highly specialized divers to guide installation will be necessary
2. The project involves the construction of two (2) deep trenchless crossings via micro tunneling, as follows: the construction of a micro tunnel under the Florida Turnpike and the construction of a micro tunnel under the C-102 canal.
3. Since time is of the essence for this project, most of the major material with long-lead delivery times (e.g. pipe and valves) will be furnished by WASD, with valves being furnished via a certified SBE-G&S vendor.
4. The Department has evaluated the project for possible opportunities for participation in the area of SBE – Goods and Services. In general, the work consists of the construction of approximately 23,000 linear feet of 54-inch sewage force main with fifteen (15) in-line valves, two trenchless pipe crossings and interconnections to existing utilities. Based on the scope and nature of the work, we have concluded that are limited opportunities for participation in this project. The possible areas of subcontracting are in the area of Micro-Tunneling, Maintenance of Traffic, Pavement Restoration and Hauling.
5. Our recommendation is in the area of Services for providing Hauling for the project. Since average pipe depth will be approximately 12-foot deep and since material cannot be stockpiled in the right-of-way, Hauling will be a frequent and necessary component of this project

<b>Analysis for Small Business Enterprise – Goods and Services Recommendation</b>				
Item	Goods & Services	Prime Contractor	Sub-Contractor	SBE Availability
1.	<b>GOODS:</b> 54-Pipe 54" & 48" Valves *Denotes Owner Furnished Goods	* *		
2.	<b>SERVICES</b> Pavement Markings Milling & Paving Trenchless Pipe Installation Maintenance of Traffic Hauling		X X X X X	X    X

**Miami Dade Water and Sewer**

Project # S-898

**Consent Decree Project CD 4.5(1)**

Analysis of SBE Opportunities

	QTY	UNIT	Unit Price	County Furnished Material	CONSTRUCTION CONTRACT	CSBE/SBE-G/S	Trade/Category
General Conditions	1				\$ 1,908,786.60		
Mobilization	1				\$ 381,757.32		
MOT	1				\$ 419,933.05		
54-inch Pipe Material	23,000	Linear Ft	\$ 711.00	\$ 16,353,000.00			
54-inch pipe installation	23,000	Linear Ft	\$ 327.00		\$ 7,521,000.00		
Excavation	81,000	Cubic Yards	\$ 5.50		\$ 445,500.00		
Hauling	146,170	Cubic Yards	\$ 9.00		\$ 1,315,530.00	\$ 1,315,530.00	SBE-G/S (HAULING)
Lime rock Fill	65,170	Cubic Yards	\$ 10.00		\$ 651,700.00		
48 inch Pipe material	150	Linear Ft	\$ 750.00		\$ 112,500.00		
48 inch Pipe labor	150	Linear Ft	\$ 250.00		\$ 37,500.00		
12-inch Pipe and fittings					\$ 342,596.00		
54-inch valves	15	ea	\$ 284,000.00	\$ 4,260,000.00			
54-inch valve installation	15	ea	\$ 2,800.00		\$ 42,000.00		
Paving	27,720	sq yds	\$ 47.00		\$ 1,302,840.00	\$ 1,302,840.00	CSBE Paving
48 inch valve material	1	ea	\$ 208,000.00	\$ 208,000.00			
48 inch valve labor	1	ea	\$ 2,800.00		\$ 2,800.00		
Micro Tunnel Turnpike	2,200		\$ 3,275.00		\$ 7,205,000.00		
Micro Tunnel Canal	125		\$ 3,275.00		\$ 409,375.00		
Misc Fittings (ARV, Man Holes etc)					\$ 500,000.00		
Tie-in 1 (54 inch @ 248 St)	1	ea	349999		\$ 349,999.00		
Tie-in 2 (48 inch at 280 St)	1	ea	206900		\$ 206,900.00		
Sub Total				\$ 20,821,000.00	\$ 23,155,716.97		
				10% Contingency	\$ 2,315,571.70		
		<b>Total</b>		County Material	Construction Contract	SBE Goal	
				\$ 20,821,000.00	\$ 25,471,288.67	\$ 2,618,370.00	

**Small Business Participation**

Recommend SBE- Const Goal 5%	CSBE Paving	\$ 1,302,840.00	5.11%
Recommend SBE-G/S Goal 5%	SBE-G/S (HAULING)	\$ 1,315,530.00	5.16%