

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-944

*Reference corresponding project number when submitting a work order

Contract/Project Title: 60-INCH FORCE MAIN (NL-1A) BETWEEN THE INTERSECTIONS OF NE 151 STREET & BISCAYNE BOULEVARD AND NE 163 STREET & NE 8 AVENUE

Description/Scope of Work: See Attached

Estimated Cost: 26356585 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.
NE 151 Street and Biscayne Boulevard and NE 163 Street and NE 8 Avenue, located in Sections 16, 17 & 18, Township 52 S, Range 42E, in Miami-Dade, Florida.

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 ANALYSIS FOR GOAL RECOMMENDATION (CSBE) See attachment

| Sub-Trade | Est. Cost | % of Item to Base Bid | Availability |
|---------------------|----------------|-----------------------|--------------|
| Construction | \$1,797,519.11 | 6.82% | |
| G & S | \$521,860.39 | 2.00% | |
| | \$ | 0% | |

RECOMMENDATION

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

Basis for Recommendation: This project involves large diameter concrete pipe installation, several microtunnel installations and provides limited participation for Small Business Enterprise firms.

Date submitted to DBD: 5/24/2019

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: 60-INCH FORCE MAIN (NL-1A) BETWEEN THE INTERSECTIONS OF NE 151 STREET & BISCAYNE BOULEVARD AND NE 163 STREET & NE 8 AVENUE

Contract No.: S-944

Estimate Amount: \$26,356,585.20 [\$23,960,532.00 Construction + \$2,396,053.20 Contingency]

Funding Source: EW 660, WASD Revenue Bonds Sold

Small Business Enterprise – Construction – 6.82%
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 is for the construction of a 60-inch Prestressed Concrete Cylinder Pipe (PCCP) Force Main between the intersections of NE 151 Street and Biscayne Boulevard and NE 163 Street and NE 8 Avenue, located in Sections 16, 17 & 18, Township 52 S, Range 42E, in Miami-Dade, Florida.

The scope of work includes, but is not limited to, the furnishing and installation of approximately 12,500 linear feet of 60-inch PCCP, including the corresponding fittings and valves; microtunnel installation at NE 151st Street between Biscayne Boulevard and FEC Railroad including two (2) 30-foot deep shafts and 600 linear feet of 72-inch steel casing and 60-PCCP; microtunnel installation at the intersection of NE 154 Street and West Dixie Highway including two (2) 30-foot deep shafts and 200 linear feet of 72-inch steel casing and 60-PCCP; making one (1) tapping connections to existing 72-inch force main at NE 151 Street east of Biscayne Boulevard; furnishing and installing Air Release Valves including fifteen (15) Automatic Air Release Valves; furnishing and installing six (6) 60-inch Flanged Plug valves; relocation of approximately 1,400 feet of 12-inch ductile iron water main including one(1) fire hydrant assembly; temporary relocation of approximately a 16-inch force main; furnishing and installation of 28 access manholes; furnishing and installation of approximately 100 feet of 18-inch HDPE storm drainage pipe and 2 storm inlets.

The project also includes cleaning and testing the proposed mains; providing Maintenance of Traffic (MOT); providing off-duty police for traffic control; temporary and permanent pavement restoration; full width milling and asphalt overlay; replacing pavement markings; dewatering; stormwater pollution

prevention; replacement of sod and shrubs, tree protection, trimming and root pruning, replacement of sidewalk, curb and gutter and brick pavers, and all other appurtenant and miscellaneous items and work for a complete and fully functional installation.

MINIMUM CONTRACTOR EXPERIENCE:

In addition to licensing requirements, Bidders shall be experienced in the installation of large diameter force mains (i.e. greater than 48-inch inside diameter) and experienced in construction or managing pipeline construction by involving horizontal directional drilling.

- A. Bidders shall submit proof that their firm (which can include the experience of key supervisory employees that would man the project) has successfully completed at least three (3) comparable projects meeting the following criteria:
 - 1. For each project listed, the pipe installation shall have been completed and accepted by the project owner prior to the bid submittal date.
 - 2. Each project shall be for a minimum of 48-inch nominal inside diameter or larger.
 - 3. At least two (2) projects shall be for the installation of a concrete water or sanitary sewer main of at least 1,000 feet each of a minimum of 48-inch diameter pipe or larger.
- B. The Bidder or his trenchless construction subcontractor shall furnish a list of at least three (3) microtunnel projects for a minimum of 48-inch diameter pipe successfully completed by him or his trenchless construction subcontractor.

CONSIDERATIONS FOR ANALYSIS:

- 1. This project involves installation of a large diameter force main involving PCCP, which requires the use of large equipment and capable of deeper trench installations. Trench line shoring and use of highly specialized divers to guide installation will be necessary.
- 2. In addition, the success of the project involves several 60-inch diameter pipe installations by microtunnel, including 72-inch steel casings.
- 3. The project also involves an interconnection to an existing 72-inch diameter PCCP force main and relocation of several existing 12-inch and 16-inch mains.
- 4. Recommended opportunity for SBE-Construction participation are in the area of roadway pavement restoration, milling, drainage and utility relocation, pavement marking restoration, installation of sidewalk curb and gutter, storm drain and ductile iron pipe and fittings.

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.

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CONTRACT MEASURE ANALYSIS AND RECOMMENDATION**

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Construction Contracts Division

Department: Miami-Dade Water and Sewer Department

Contract Title: 60-INCH FORCE MAIN (NL-1A) BETWEEN THE INTERSECTIONS OF NE 151 STREET & BISCAYNE BOULEVARD AND NE 163 STREET & NE 8 AVENUE

Contract No.: S-944

Estimate Amount: \$26,356,585.20 [\$23,960,532.00 Construction + \$2,396,053.20 Contingency]

Funding Source: EW 660, WASD Revenue Bonds Sold

Small Business Enterprise – Goods & Services – 2.00%
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 is for the construction of a 60-inch Prestressed Concrete Cylinder Pipe (PCCP) Force Main between the intersections of NE 151 Street and Biscayne Boulevard and NE 163 Street and NE 8 Avenue, located in Sections 16, 17 & 18, Township 52 S, Range 42E, in Miami-Dade, Florida.

CONSIDERATIONS FOR ANALYSIS:

1. This project involves installation of large diameter (60-inch) force main involving Prestressed Concrete Cylinder Pipe (PCCP).
2. The project also involves an interconnection to existing 72-inch Prestressed Concrete Cylinder Pipe (PCCP).
3. The construction required for this project requires the use of very large machinery to accommodate the depth and trench widths required for large concrete pipe installation.
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 are limited opportunities for participation in this project.

ANALYSIS FOR SBE PARTICIPATION - CONTRACT NO. S-944

| Item | Description | Cost | Availability | SBE (%) | G&S(%) |
|-------------|---|-------------------------|---------------------|----------------|-------------------|
| 1 | Mobilization & demobilization | \$ 1,143,000.00 | 4.34% | | |
| 2 | Furnish 60" PCCP. Pipe and fittings w/ interior coating | \$ 11,328,175.00 | 42.98% | | |
| 3 | Install 60" PCCP. Pipe and fittings w/ interior coating | \$ 2,349,050.00 | 8.91% | | |
| 4 | Furnish 60" Flg. Plug Valve (Assembly Complete) | \$ 2,436,320.00 | 9.24% | | |
| 5 | Install 60" Plug Valve (Assembly Complete) | \$ 282,000.00 | 1.07% | | |
| 6 | Furnish 60" x 24" PCCP for access manhole | \$ 276,275.00 | 1.05% | | |
| 7 | Furnish 12" & 16" DIP WM Pipe and Fittings | \$ 403,500.00 | 1.53% | 1.53% | 1.53% |
| 8 | Install 12" & 16" DIP WM Pipe and Fittings | \$ 242,850.00 | 0.92% | 0.92% | |
| 9 | For constructing all microtunnel crossings | \$ 2,165,500.00 | 8.22% | | |
| 10 | For Constructing Air Release Valve Assemblies (ARVs) | \$ 128,600.00 | 0.49% | 0.49% | |
| 11 | For removal and disposal of debris & unsuitable material | \$ 50,000.00 | 0.19% | 0.19% | |
| 12 | For furnishing & Installing suitable backfill material | \$ 60,000.00 | 0.23% | | 0.23% |
| 13 | Construction limerock base for Type "II" Permanent Paving | \$ 702,440.00 | 2.67% | 2.67% | |
| 14 | Milling existing Asphalt Pavement | \$ 5,000.00 | 0.02% | | |
| 15 | For Replacing concrete pavement in driveways | \$ 36,666.00 | 0.14% | 0.14% | |
| 16 | For Replacing tiles/bricks pavement in driveways | \$ 26,666.00 | 0.10% | 0.10% | |
| 17 | For Replacing pavement markings damaged | \$ 30,000.00 | 0.11% | | |
| 18 | For Restoring Sodded Area | \$ 10,125.00 | 0.04% | 0.04% | |
| 19 | For constructing Concrete Curb & Gutter restoration | \$ 17,500.00 | 0.07% | 0.07% | |
| 20 | Sheeting and Shoring | \$ 160,500.00 | 0.61% | | |
| 21 | Polyethylene Wrap (V Bio Polyethylene) for D.I. Fittings | \$ 3,340.00 | 0.01% | | 0.01% |
| 22 | For access manholes | \$ 510,000.00 | 1.94% | | |
| 23 | For installing inductive loop detectors | \$ 35,000.00 | 0.13% | | 0.13% |
| 24 | For construction of all drainage utilities | \$ 46,900.00 | 0.18% | 0.18% | |
| 25 | For constructing Fire Hydrant Assemblies | \$ 4,000.00 | 0.02% | | |
| 26 | For installing viton gaskets for PCCP | \$ 132,000.00 | 0.50% | 0.50% | |
| 27 | Furnish Traffic Control for MOT | \$ 1,129,270.00 | 4.28% | | |
| 28 | For providing public outreach | \$ 20,000.00 | 0.08% | | 0.08% |
| 29 | For Stormwater Pollution Prevention Plan | \$ 225,855.00 | 0.86% | | |
| | Subtotal | \$ 23,960,532.00 | 90.91% | | |
| | Contingency (10%) | \$ 2,396,053.20 | 9.09% | | |
| | SBE Total | \$ 26,356,585.20 | 100.00% | 6.82% | 1.98% |