

SBD – CM REVIEW FORM

To: Project Review and Analysis Section – A/E
From: SBD CM Vivian Forhat-Díaz
Department: WASD
Date: 12/29/14

Contact: Patty David
RESUBMITTAL: No

PROJECT NUMBER: DB14-WASD-03
PROJECT TITLE: Design-Build Services for the Installation of a 48-inch diameter Water Transmission Main for Area N
PROJECT LOCATION: Area N along SW 152 St at SW 127 Ave

SCOPE OF WORK/DESCRIPTION:

The Design-Builder shall provide existing conditions investigations, engineering, design, preparation of technical specifications, permitting, construction, testing and commissioning services, and customer contact for the implementation of a new 48-inch diameter water transmission main for "Area N". The design and construction services rendered by the Design-Builder shall result in a complete, functional, and operable piping project with a minimum 80 year design life. The scope of services shall include, but is not limited to, the following main Project elements:

- a) Coordinate the design and installation of the new 48-inch diameter water transmission main to connect to the Miami-Dade Water and Sewer Department's new 36-inch diameter water transmission main project along S.W. 152 Street at S.W. 127 Avenue.
- b) Approximately 6.7 miles of 48-inch diameter water transmission main, to be constructed of either ductile iron pipe or concrete (prestressed concrete cylinder or bar wrapped) pipe approximately along the route described below, including approximately 2,000 linear feet of micro-tunneling for the 48-inch diameter carrier pipe at crossings with canals, railroads, highways, and major intersections:
- c) Tap the existing 60-inch diameter PCCP water transmission main approx. at the intersection of S.W. 61 Street and North Snapper Creek Drive. The Design-Builder shall design and construct the tapping and connection, and commissioning the new 48-inch diameter water transmission main without any interruption of service to the existing Miami-Dade Water and Sewer Department customers.
- d) Install of all required fittings and valves, manholes/vaults, ancillary piping, tapping, utility relocation, temporary bypass, and tie-in connections to facilitate successful construction and commissioning.
- e) Clean, disinfect and test the new water transmission main.
- f) Restore of all areas disturbed by construction activities to conditions equal or better to those before the commencement of work activities.

The scope of services shall include all professional services, all labor, supervision, quality control, project controls, safety programs, materials, tools, equipment, services, methods and procedures necessary or convenient for the Contractor to fulfill all duties and obligations imposed by the Contract Documents, which can be reasonably assumed as necessary to fulfill the intent of the Contract Documents and to provide a complete, fully functional and satisfactory Project.

SPECIAL REQUIREMENTS:

Lead Designers:

1. The Lead Designer firm performing the design of the water transmission main installation must have a minimum of 10 years total industry experience as of the date of this solicitation. It also must have designed at least 3 pressure pipeline installation projects in an urban environment consisting of a minimum of 10,000 total linear feet of minimum 42-inch nominal diameter within the last 10 years.
2. The Lead Designer firm or its Sub-consultant performing the design of the micro-tunnel(s) must have designed at least 3 micro-tunneling projects consisting of jacking a similar casing pipe as proposed for this project. Total length of the projects shall be a minimum of 1,000 linear feet of 5-foot diameter casing pipe or larger. At least 2 of the micro-tunnel segments shall have been in similar ground conditions and similar crossings to those proposed (under active railroad tracks, under four lanes of limited access roadways and one under open water).
3. The Lead Designer firm or its Sub-consultant performing the design of the carrier pipe within the casing pipe shall have designed 1 project with a carrier/product pipe of 42-inches minimum nominal diameter, and required a detailed geotechnical instrumentation program to monitor the ground behavior to the tunneling.
4. The Lead Designer firm or its Sub-consultant performing design for the deep shafts shall have designed a deep shaft project to support a micro-tunneling operation. The shaft shall be at least 50-foot deep (below grade).

Sub-consultants: Sub-consultants to the Lead Designer must provide three (3) projects that were completed within the last ten (10) years from the date of the solicitation that involved the main project element for which the Sub-consultant is being proposed unless the experience and qualifications of the Lead Designer listed above require otherwise.

Small Business Development Signature: Vivian Forhat-Díaz Date: 01/07/15

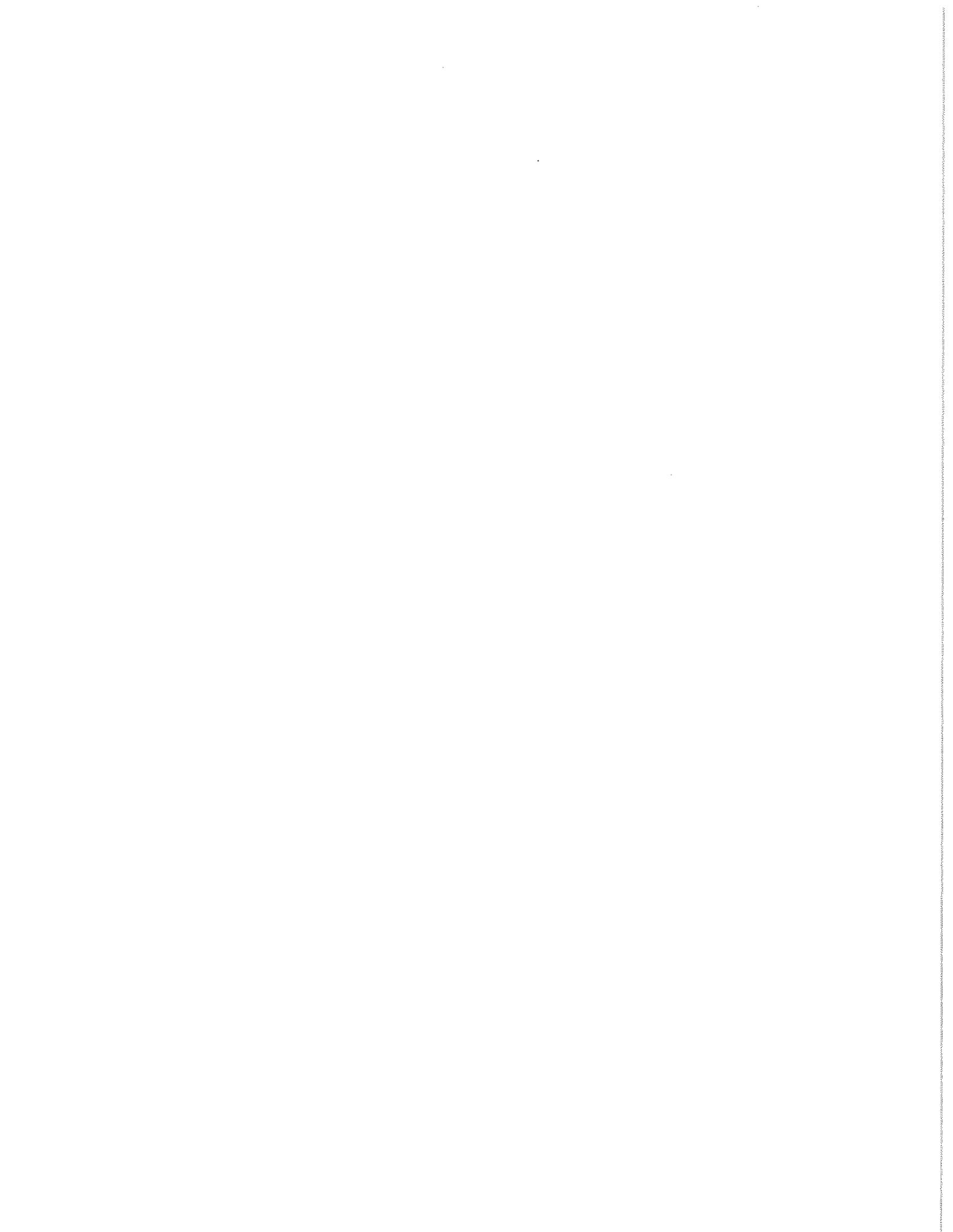
*Trades/Subtrades identified for possible subcontracting opportunities by SBD CM

WASD is recommending 15 % goal for SBE-A/E participation

PROJECT NUMBER: DB14-WASD-03 (Continuation)

CATEGORIES	PERCENTAGE	COMMENTS
PRIME		
3.02A Highway Systems – Tunnel Design	5%	Must meet special Requirements. * Possible Small Business Participation
6.01 Water And Sanitary Sewer Systems - Water Distribution And Sanitary Sewage Collection And Transmission Systems	32%	
16.00 General Civil Engineering	25%	
17.00 Engineering Construction Management	10%	
SUB-CONSULTANTS		
3.04 Highway Systems - Traffic Engineering Studies	3%	Must meet special requirements. *Possible Subcontracting opportunities
9.01 Soils, Foundations And Material Testing - Drilling, Subsurface Investigations And Seismographic Services	1%	
9.02 Soils, Foundations And Material Testing - Geotechnical And Materials Engineering Services	5%	
9.04 Soils, Foundations And Material Testing - Non-Destructive Testing And Inspections	1%	
10.02 Geology Services	2%	
10.05 Environmental Engineering - Contamination Assessment And Monitoring	1%	
11.00 General Structural Engineering	3%	
12.00 General Mechanical Engineering	2%	
15.01 Surveying And Mapping - Land Surveying	5%	
15.03 Underground Utility Location	5%	
TOAL COST	\$5,500,000.00	
TOTAL	100%	

WASD is recommending 15 % goal for SBE-A/E participation.



SBD – CM REVIEW FORM

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Contact: Patty David
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- c) Tap the existing 60-inch diameter PCCP water transmission main approx. at the intersection of S.W. 61 Street and North Shapper Creek Drive. The Design-Builder shall design and construct the tapping and connection, and commissioning the new 48-inch diameter water transmission main without any interruption of service to the existing Miami-Dade Water and Sewer Department customers.
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- e) Clean, disinfect and test the new water transmission main.
- f) Restore of all areas disturbed by construction activities to conditions equal or better to those before the commencement of work activities.

The scope of services shall include all professional services, all labor, supervision, quality control, project controls, safety programs, materials, tools, equipment, services, methods and procedures necessary or convenient for the Contractor to fulfill all duties and obligations imposed by the Contract Documents, which can be reasonably assumed as necessary to fulfill the intent of the Contract Documents and to provide a complete, fully functional and satisfactory Project.

SPECIAL REQUIREMENTS:

Lead Constructors:

- 1 The construction firm performing the open cut installation work must have a minimum of 10 years total industry experience as of the date of this solicitation. It also must have successfully constructed at least 3 water main projects of similar size and complexity in an urban environment consisting of a minimum of 10,000 combined total linear feet of installation, and minimum 42-inch nominal diameter of such pipeline installation is required in the last 10 years of this solicitation.
- 2 The construction firm or specialty subcontractor performing the micro-tunneling work must have successfully constructed at least 3 micro-tunneling projects consisting of jacking similar type of casing pipe that is selected by the Design-Builder for the crossings, and completed a minimum of 1,200 linear feet of micro-tunneling in the last 10 years. To qualify, each of these micro-tunnels must have been a minimum of 5-feet internal diameter in soft ground below the groundwater and at least two of the micro-tunnels excavated in ground similar to the conditions expected for this Project.
- 3 The construction firm or specialty subcontractor performing the shaft construction shall have successfully constructed at least 3 deep shafts that were at least 50-foot deep (below grade). At least 2 of these shafts must have been extended below groundwater and required means of controlling inflow and bottom heave of the shaft.
- 4 The construction firm or specialty subcontractor performing the installation of the carrier pipe within the casing pipe shall have successfully completed at least 1 project involving the installation of a carrier pipe of minimum 42-inches inside diameter, similar pipe material, installation length that exceeds 1,000-feet and grout fill of the annular space between casing and carrier pipe.
- 5 The construction firm or specialty subcontractor performing the tapping of the operating 60-inch diameter PCCP water transmission main shall have successfully completed at least 1 project of similar size and type.
- 6 The Lead Constructor on the Design-Builder team shall qualify for item 1 of the above requirements.

Small Business Development Signature: Vivian Forhat-Diaz Date: 01/07/15

*Trades/Sub-trades identified for possible subcontracting opportunities by SBD – CPM

WASD is recommending 7.20% goal SBE-Construction participation

CATEGORIES	Amount	COMMENTS
		PRIME
Mobilization	\$840,487.00	Must meet special requirements mentioned above.
MOT	\$420,243.00	
Night Shift Work	\$91,030.00	
Construction Survey	\$678,964.00	
Microtunnel	\$18,812,092.00	
48" CL 150 Watermain- Under Pavement	\$24,127,433.00	
48" CL 150 Watermain- Non Paved	\$3,369,749.00	
48" Butterfly Valve in vault	\$1,512,508.00	
Tap Connection Allowance	\$792,547.00	
		General Engineering Contractor/Paving Contractor
Remove Asphalt Paving	\$255,099.00	*Possible Subcontracting opportunities
Remove Concrete Curb	\$186,272.00	
Inlet Protection	\$17,319.00	
Environmental Remediation	\$692,787.00	
Dewatering	\$587,922.00	
Rock Excavation	\$165,509.00	
Cathodic Protection	\$117,584.00	
Erosion Control Barrier	\$157,604.00	
Signalization	\$24,828.00	
2" Asphalt Overlay (12' width)	\$601,246.00	
4.5" Asphalt paving (14' width)	\$1,524,632.00	
12" Limerock Base (12' width)	\$763,786.00	
		Pipeline Engineering Contractor
Utility Relocation	\$1,385,574.00	*Possible Subcontracting opportunities
Air Release Assembly	\$606,131.00	
Blow-off Assembly	\$93,755.00	
		Concrete Contractor
Sidewalk Repair	\$41,377.00	*Possible Subcontracting opportunities
Curb & Gutter	\$939,491.00	
		Pavement Marking Contractor
Roadway Striping	\$130,247.00	*Possible Subcontracting opportunities
		Not a Construction Trade
Sodding	\$36,235.00	
Total Base Construction Cost	\$58,972,452.00	
Contingency Allowance	\$2,948,623.00	
Base Construction including Contingency	61,921,075.00	
Permitting:	\$1,857,632.00	
Total Construction Cost	\$63,778,707.00	

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