

**Date:** May 4, 2021

**To:** Gary Hartfield, Division Director

Small Business Development Division

Internal Services Department

From: Alfredo E. Munoz, P.E. 4

Chief, Capital Improvements

Department of Transportation and Public Works

**Subject:** Notice of Design/Build Services:

DTPW Project No. 20210090

Replacement of Existing Span-Wire Signalized Intersections for Mast-Arm Configuration

#### RECOMMENDATION

Department of Transportation and Public Works (DTPW) Capital Improvements staff completed the review of Design/Build Services project 20210090 in accordance with the applicable provisions of Implementing Order 3-22 and requested the review and approval from Small Business Division (SBD). Attached is the Project Measure Analysis and Recommendation along with other supporting documentation.

Scope of Work:

The project consists of performing all Work pursuant to the requirements of the Contract Documents. Work includes all management, design, coordination, permitting, and construction services necessary to replace existing span-wire with mast-arm configurations at the signalized intersections identified. All impacts to existing adjacent facilities including, but not limited to, minor roadway restoration, sidewalk reconstruction or restoration, ADA compliance, curb and gutter reconstruction or restoration, signalization (including new controller cabinet and location specific deficiencies identified), pedestrian features, loops, service disconnect, drainage, lighting, landscape, signage, and pavement markings which are caused by the implementation of the new mast-arm signals must be restored following current standards and design criteria. A minimum of three (3) soft dig test holes shall be performed per mast arm to avoid underground conflicts.

Work also includes, but is not limited to, providing all geotechnical, survey, and design services necessary to produce the required construction documents, signalization plans, roadway plans, signing and marking plans, lighting plans, landscaping plans, traffic control and maintenance of traffic plans to detour traffic; project permitting; public involvement plan; and all project coordination, supervision, labor, materials, tools, and equipment

needed for completing the Work in accordance with the Contract Documents. Work performed within FDOT state roads shall be coordinated with FDOT at the beginning of the contract to identify potential conflicts with ongoing as well as planned FDOT projects affecting the Project signals.

**Engineer Project Total** 

Cost Estimate

(Including Contingency): \$8,262,504.80 (Construction)

\$1,502,273.60 (Design)

SBE A/E Measure: 11.00%

SBE G/S Measure: Not Applicable

SBE Construction

Measure: 8.61%

CWP Goal: As Applicable by SBD

If any additional information is required you may contact me at (305) 375-2097, or Katherine Fernandez at (305) 375-2726

AM/rb

Attachments (2)

C: Roxana Bayarre, P.E., DTPW Claudia Diaz, P.E., DTPW Alfredo E. Munoz, P.E., DTPW Darlene Fernandez, P.E., I

Laurie Johnson, ISD Jhonnatan Escalante, ISD

File

Darlene Fernandez, P.E., DTPW
William Salazar, DTPW
Alice Hidalgo-Gato, ISD

## MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS CONTRACT / PROJECT MEASURE ANALYSIS AND RECOMMENDATION

**To:** Gary Hartfield, Division Director

Small Business Development Division

Internal Services Department

From: Alfredo E. Munoz, P.E.

Chief, Capital Improvements Section

Department of Transportation and Public Works

Date: Tuesday, May 4, 2021

## **CONTRACT INFORMATION**

**DTPW Project No.:** 20210090

ISD Project No.: DB21-DTPW-TBD

Project Title: Replacement of Existing Span-Wire Signalized Intersections for Mast-Arm

Configuration

Re-submittal: No

Standard Industrial Code (SIC) / North American Industry Classification

Code (NAICS): 1610 / 237310 - Construction — Highway, Street & Bridge Construction

**Estimated Project Total** 

Cost

(including Contingency): \$8,262,504.80 - Construction

\$ 1,502,273.60 - Design

Funding Source: Road Impact Fee (RIF)

**Bonding Requirements:** Bid Bond– 5% of base bid amount

Performance Bond- 100% of Contract Award Amount

#### PROJECT INFORMATION

#### Scope of Work

The project consists of performing all Work pursuant to the requirements of the Contract Documents. Work includes all management, design, coordination, permitting, and construction services necessary to replace existing span-wire with mast-arm configurations at the signalized intersections identified. All impacts to existing adjacent facilities including, but not limited to, minor roadway restoration, sidewalk reconstruction or restoration, ADA compliance, curb and gutter reconstruction or restoration, signalization (including new controller cabinet and location specific deficiencies identified), pedestrian features, loops, service disconnect, drainage, lighting, landscape, signage, and pavement markings which are caused by the implementation of the new mast-arm signals must be restored following current standards and design

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### MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS CONTRACT / PROJECT MEASURE ANALYSIS AND RECOMMENDATION

criteria. A minimum of three (3) soft dig test holes shall be performed per mast arm to avoid underground conflicts.

Work also includes, but is not limited to, providing all geotechnical, survey, and design services necessary to produce the required construction documents, signalization plans, roadway plans, signing and marking plans, lighting plans, landscaping plans, traffic control and maintenance of traffic plans to detour traffic; project permitting; public involvement plan; and all project coordination, supervision, labor, materials, tools, and equipment needed for completing the Work in accordance with the Contract Documents. Work performed within FDOT state roads shall be coordinated with FDOT at the beginning of the contract to identify potential conflicts with ongoing as well as planned FDOT projects affecting the Project signals.

#### Design:

Due to the specialty required in this work and the need of highly specialized consultants for the design phase of this project, DTPW recommends the following certifications for SBE A/E goal: 15.01 and 15.03. See table below.

#### A/E Consultant Selection: Technical Certification Categories:

Roadway Improvements to Bay Vista Blvd. from NE 151 Street to Gwen Margolis Blvd						
3.11	Lead A/E	SIGNALIZATION	65.00%	\$976,477.84		
3.07	Lead A/E	TRAFFIC SIGNAL TIMING	1.00%	\$15,022.74		
3.02	Lead A/E	HIGHWAY DESIGN	15.00%	\$225,341.04		
3.09	Sub	SIGNING, PAVEMENT MARKING, AND CHANNELIZATION	4.00%	\$60,090.94		
9.02	Sub	GEOTECHNICAL AND MATERIALS ENGINEERING SERVICES	2.00%	\$30,045.47		
11.00	Sub	GENERAL STRUCTURAL ENGINEERING	2.00%	\$30,045.47		
15.01	Sub	LAND SURVEYING 5.00% \$75,113.68				
15.03	Sub	UNDERGROUND UTILITY LOCATION	6.00%	\$90,136.42		
		Total of technical categories to be Sub	11.00%	\$165,250.10		

## **Required Contractor's Certification:**

At the time of Bid and pursuant to the requirements of Section 10-3 of the Code of Miami-Dade County, Florida and these Solicitation and Contract Documents, the Bidder must hold a valid, current, and active:

Certificate of Competency from the County's Construction Trades Qualifying Board as a General Engineering Contractor, an Electrical Contractor, or as a Specialty Engineering Contractor, commensurate to the requirements of the Scope of Work, in one or more engineering crafts to include paving engineering contractor, concrete engineering contractor, or painting. The specialty contractor shall subcontract with a qualified contractor any work which is incidental to the specialty but is specified in the aforementioned Code as being the work of other than that of the Engineering Specialty for which certified; or

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## MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS CONTRACT / PROJECT MEASURE ANALYSIS AND RECOMMENDATION

Certification, as an electrical contractor provided by the State of Florida Electrical Contractors' Licensing Board, pursuant to the provisions of Section 489.511 of the Florida Statutes (F.S.).

Pursuant to Section 255.20, F.S. and in lieu of the above, the County may consider a bid from a Bidder that is a duly licensed Contractor in good standing that has been prequalified and considered eligible by the Florida Department of Transportation (FDOT) under Section 337.14, F.S. and Chapter 14-2, Florida Administrative Code, to perform the work described in the Contract Documents. Contractors seeking consideration under this Paragraph shall submit along with the Bid Documents for review and consideration, current copy(ies) of their FDOT Certificate(s) of Qualification, Certification of Work Underway, and Status of Contract(s) On Hand. Acceptable FDOT prequalification(s) necessary to perform the Work specified in the Contract Documents which may include the Drainage, Electrical Work, Pavement Marking, Roadway Signing, Sidewalk, or Traffic Signal Work Class, depending on the type of work to be performed.

#### Additional Contractor Requirements:

In addition to the license(s) required of Contractor, all personnel engaged in installing, modifying, repairing, removing or maintaining: traffic signalization or any other electrical/electronic device in Miami-Dade County must:

- A. Perform work under the direction of a Master Electrician that is present at the job site or able to respond within 2 hours of notification.
- B. Perform all work under the direct supervision of a Journeyman Electrician. The Journeyman Electrician must be certified as an International Municipal Signal Association (IMSA) certified Traffic Signal Technician (TST) Level II or Level III. All work related at or pertaining to the controller must be performed by an IMSA certified TST Level II (Field).

Additional Information – Permits, Licenses, Certifications, and General Regulations

Permits that are issued by DTPW for construction within the public right-of-way, as well as additional permits, which may be required by other municipalities or agencies, including those required for tree removal, will be the responsibility of the Design - Builder.

## **RECOMMENDATION**

#### DTPWM Areas recommended for SBE Subcontractor Goal:

SBE A/E Measure: 11.0%,

G/S Measure: Not Applicable

SBE Construction Measure: Concrete 4.79%

Signage & Pavement Markings 3.82% Total Construction Goal 8.61%

CWP: As Applicable

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# MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS CONTRACT / PROJECT MEASURE ANALYSIS AND RECOMMENDATION

Contract Measure Recommendation:						
	No Measure					
	Set-Aside:					
	Level I Level II	Level III				
	Trade Set-Aside(s):					
	Aggregate Set-Aside					
	SBE Subcontractor Goal 8.61%					
	CWP: As Applicable					
	DBE Subcontractor Goal: Not Applicable					
Reason for R	;	The recommendations are based on the information provided in the attached cost estimate and the DTPW experience from previous projects.				

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