Miami Shores Village



ADDENDUM NO. 1 STORMWATER MASTER PLANNING SERVICES RFQ #2024-05-01

May 22, 2024

This Addendum No. 1 to the above-referenced Request for Qualifications "RFQ" is issued in response to questions from prospective respondents, or other clarifications and revisions issued by the Village. The RFQ is amended in the following particulars only.

Section 3.0 Scope of Services has been revised. All references to the wording "newly update SWMP" and previous studies have been deleted. The documents do no exist.

Revisions:

- Section 3.1 The newly updated and comprehensive SWMP...
- **Section 3.4** The Successful Proposer shall provide a full range of engineering services in the planning and development of a clear, comprehensive and forward-looking framework that encompasses the existing stormwater management program and makes full use of the results of the previous studies to avoid duplication of Work.
 - Develop a cost-effective and phased Capital Improvement Plan (CIP) itemizing the capital improvement projects that can be implemented and constructed based on Level Basis Analysis at the Basin Level. The results from the newly updated and comprehensive SWMP will be utilized to incorporate resiliency planning into current and future Village-wide drainage projects.

Any questions regarding this Addendum should be submitted in writing to the Procurement Administrator at <u>bids@msvfl.gov</u>.

Proposers are reminded to acknowledge receipt of this addendum as part of your RFQ submission.

Sincerely,

Aona Rockfeld

Donna Rockfeld Procurement Administrator

SECTION 3.0 SCOPE OF SERVICES

3.1 **PURPOSE AND INTENT**

Miami Shores Village, Miami-Dade County, Florida ("the Village") is seeking professional engineering services from a qualified firm for the purpose of planning and developing a comprehensive Stormwater Master Plan (SWMP), and to provide the following list of services, on an as-needed basis, as deemed necessary by the Village, at its sole discretion.

The Village intends to use the Statement of Qualifications (SOQs) submitted in response to this RFQ to rank the Proposers according to the most qualified and to then initiate contract negotiations with the top ranked firm. The qualifications and selection of the firm(s) shall be in accordance with F.S.§287.055, Florida Statutes.

The newly updated and comprehensive SWMP shall:

- A. Evaluate potential Sea Level Rise scenarios and provide recommendations to raise seawall and bulkhead elevations, propose new pump stations, deep well systems, and installation of backflow preventers to existing and future stormwater drainage infrastructure.
- B. Evaluate and provide recommendations to improve the resiliency of coastal and upland infrastructure, as well as, the existing ecosystem to mitigate damages sustained from severe storm events.
- C. Provide recommendations to address water quality and environmental issues (e.g., manatees, sea grass, legacy sediments and contaminated groundwater, sanitary interconnections) in accordance with local, state, and federal regulations.
- D. Create a ranking and priority list for capital projects that address stormwater drainage and water quality improvements, as well as Village maintained seawalls/bulkheads and outfalls.
- E. Analyze, model, and provide recommendations to reduce the depth, extent, frequency, and duration of flooding events.
- F. Provide recommendations for the conservation and reuse of stormwater.
- G. Evaluate ways to improve aquifer recharge to reduce saltwater intrusion, and protect the potable water supply.
- H. Identify best management practices utilizing a tiered approach based on scope and cost of project.
- I. Identify and recommend green design and Sustainable Engineering standards.
- J. Conduct a coordinated analysis identifying existing conditions of Village parks (especially waterfront parks), and major public facilities, including transportation, parking and other infrastructure (e.g., water and sewer and transportation programs), as well as coordination with Miami-Dade County and FDOT

transportation programs, in the context of a larger, regional area. Development and redevelopment standards and design criteria.

3.2 **DESCRIPTION OF MIAMI SHORES VILLAGE**

Miami Shores Village is vibrant community situated in Miami-Dade County and is located in close proximity to I-95 and just north of downtown Miami. The Village has a resident population of approximately 11,570 and was incorporated in 1932.

The Village encompasses approximately 3.5 square miles. Of this total, approximately 2.25 square miles are located in upland areas while the remaining 1.25 square miles are found within coastal basins and Biscayne Bay.

QUALIFICATIONS OF PROPOSER INCLUDING EXPERIENCE AND PAST PERFORMANCE

The Village is seeking a qualified and experienced multidisciplinary engineering firm, as defined in Section 287.055, Florida Statutes, CCNA. The Proposer shall, as of the Proposal Submission Due Date:

- 3.3.1 Have been licensed, registered, and practicing as an engineering firm for a minimum of five (5) consecutive years, authorized to conduct business in the State of Florida under its current business name.
- 3.3.2 Possess a minimum of five (5) years of experience in the planning and development of large stormwater structure systems, municipal stormwater master plans, and stormwater modeling and infrastructure design projects.
- 3.3.3 Have a licensed and practicing engineer, as stipulated under Title XXXII, Regulation of Professions and Occupations, Florida Statutes, Chapter 471, "Engineer", who shall serve as the Project Manager for this Project, with a minimum of five (5) years of experience, including the completion of three (3) planning and development of large stormwater structure systems, municipal stormwater master plans, and stormwater modeling and infrastructure design projects, including but not limited to, deep wells, pump stations, backflow prevention devices, roadway and drainage, ADA sidewalk, permitting, stormwater conservation and reuse, green infrastructure/filtering systems, utility work schedules, and coordination with utility companies.
- 3.3.4 Consultant must have sufficient qualified staff to complete applicable work in the time required and in accordance with State statutes and standards.

3.4 DELIVERABLES / SCOPE OF SERVICES

The Successful Proposer shall provide a full range of engineering services in the planning and development of a clear, comprehensive and forward-looking framework that encompasses the existing stormwater management program, and makes full use of the results of the previous studies to avoid duplication of Work. Scope of services includes, but is not limited to:

3.4.1 PHASE ONE: DATA COLLECTION AND EVALUATION

- 1. Review data sources such as, but not limited to, Miami Shores Village, Miami-Dade County, National Resources Conservation Service (NRCS), U.S. Army Corps of Engineers (USACE), National Oceanic and Atmospheric Administration (NOAA), USGS, FEMA, South Florida Water Management District (SFWMD), Florida Department of Environmental Protection (FDEP) and FDOT.
- 2. Develop a project management plan that establishes communication protocols, data collection methodology, design and process standards.
- 3. Review current Level of Service (LOS) of existing stormwater drainage and water quality systems in the Village and identify areas and facilities such as water, sewer, stormwater, roadways, seawalls/bulkheads and emergency facilities, and outfalls at risk from rainfall, sea level rise, tidal flooding, and storm surge, and recommend design criteria changes as warranted to mitigate said risk.
- 4. Validate the <u>Villages'sVillage's</u> existing stormwater database.
- 5. Evaluate current tidal guidelines and requirements by various government agencies such as Miami Shores Village, USACE, NOAA, United States Geological Survey (USGS), FEMA, SFWMD, FDEP, FDOT and Miami-Dade County.
- 6. Collect updated information to complete the Village's stormwater and best management practice (BMP) infrastructure Geographic Information System (GIS) database; assist with the incorporation of information into the Village's Capital Improvement Program database.
- 7. Review FEMA's repetitive losses within Village limits.
- 8. Review and provide information that will assist the Village in complying with the National Flood Insurance Program's Community Rating Services (NFIP-CRS) requirements.

3.4.2 PHASE TWO: DT MODELING

- 1. Develop a village-wide Digital Terrain Model (DT Model) based on LiDAR data sets, the Capital Improvements Program (CIP) database, and other available data to generate an accurate model. The propriety rights to the model must be provided to the Village for its continued use.
- 2. Identify all basin and watershed, and prioritize the modeling analyses based on flooding severity and frequency. As a guide, analyses shall begin with North and South Biscayne Bay Basins.
- 3. Define the primary Stormwater Management System (SMS Model) and model extents.

- 4. Provide design criteria recommendations for stormwater systems, and provide updated design tail water conditions maps in a GIS format for both upland and tidal-influenced areas.
- 5. Develop an Existing Conditions Model (EC Model) utilizing the XP-SWMM model platform and evaluate scenarios for 5, 10-year 24-hour as well as, 25, 100-year, 72-hour SFWMD design storm events, to include and shall not be limited to time intervals, projections and different storm events and flood predictions.
- 6. Coordination with various Master Plans from FDOT, FDEP, SFWMD, Army Corp of Engineers and Miami-Dade County
- 7. Evaluation of Flood Protection Projects.
- 8. Evaluation of sea level rise for multiple scenarios and time horizons. Evaluate the impact of saltwater intrusion to the existing aquifer and the impact on LOS to existing and future stormwater drainage infrastructures.
- 9. Establish tidal and riverine boundary conditions (at inflows **to** the Village and outflows **from** the Village).
- 10. Execute the SMS Model based on boundary and climate conditions. The model must include future sea level rise, storm surges, and build-out scenarios, etc.
- 11. Conduct Sub-Basin Delineation and analysis to identify the level of service analysis, identification and prioritization of problem areas, and the development of effective alternatives to alleviate water quality/quantity problems village-wide, based on level of flooding, system capacity, water quality, and requirements set forth by Federal, State and Local regulations.
- 12. Provide progress updates to the Village's Project Manager via Technical Memorandums as draft report sections, at the following stages:
 - a. Data Collection and Evaluation.
 - b. Development of DT Model.
 - c. Delineation of Sub-Basins.
 - d. Define SMS Model extents and primary system.
 - e. Hydrologic and Hydraulic Modeling of Existing and Future Condition Land Uses without the Village's Flood Protection Projects.
 - f. Identification and Ranking of Problem Areas.

- g. Hydrologic and Hydraulic Modeling of Existing and Future Condition Land Uses with Village Flood Protection Projects under Design.
- h. Identification, Ranking and Prioritizing of Future Village Flood Protection Projects under design that take into consideration the cost-benefit analysis (including social, equity and environmental costs and benefits), flood protection and sustainability based on sea level rise and progressive improvement.
- i. Update of Village Stormwater Infrastructure Database.
- 13. Pursuant to the completion of the above-mentioned Technical Memorandums, provide the model results and solutions in a comprehensive deliverable hard copy report and electronic formats (see item #5 above) for future use by the Village.

3.4.3 <u>PHASE THREE: SEA LEVEL RISE EVALUATION AND</u> <u>CONSIDERATIONS</u>

In addition to the required modeling activities described above, the Successful Proposer shall also conduct the following evaluations:

- 1. Evaluate flood control LOS, vulnerability, resiliency, and potential risk for the Stormwater Management System and infrastructure from existing sea level conditions and tides (normal ranges of high tides and extreme event surges generated from severe storm events).
- 2. Project potential ranges of sea level rise (SLR) on normal and extreme tide and surge conditions. Utilizing SLR projects from USACE, NOAA, USGS, SFWMD, and Miami-Dade County, consistent with the southeast Florida climate.
- 3. Evaluate the potential impact of high and intermediate SLR scenarios on the Stormwater Management System over the different time horizons (i.e., 5, 20, 50, and 75 years).
- 4. Evaluate the potential vulnerability and risk from SLR range over the time periods on public safety, Village infrastructure, and operations.
- 5. Plan resilient, adaptable capital improvement features in to the comprehensive SWMP update to mitigate impacts through the design period (i.e., 5, 20, 50, and 100 years).
- 6. Consider project benefits (i.e., flood damage reduction and cost for the capital projects using FEMA-HAZUS (Hazard US) method, FEMA Benefit-Cost Analysis (BCA) Tool, or equivalent.
- 7. Identify and prioritize project phasing as needed to meet flood control LOS at each time horizon.

3.4.4 PHASE FOUR: CAPITAL IMPROVEMENT PROGRAM PHASE

- 1. Develop a cost-effective and phased Capital Improvement Plan (CIP) itemizing the capital improvement projects that can be implemented and constructed based on Level Basis Analysis at the Basin Level. The results from the newly updated and comprehensive SWMP will be utilized to incorporate resiliency planning into current and future Village-wide drainage projects.
- 2. For the project planning phase, at a minimum, the CIP categories for public and private systems are as follows:
 - a. Neighborhood or community stormwater drainage improvements;
 - b. Primary Stormwater Management System improvements; and,
 - i. Pump stations.
 - ii. Waterways, canals, and waterbodies
 - iii. Pipes and culverts.
 - iv. Storage (i.e., wet detention, dry retention, etc.).
 - v. Exfiltration.
 - vi. Recharge wells.
 - vii. Roadways.
 - c. Coastal areas
 - i. Seawalls/bulkheads, floodwalls and levees.
 - ii. Backflow preventers.
- 3. Develop a prioritized list of CIP projects and provide justifications for the areas of highest concern and based on cost benefit analysis and its impact on sea level rise, resiliency and water quality.
- 4. Provide cost-effective alternatives for stormwater drainage improvement projects to comply with Environmental Resource Permit (ERPs), National Pollutant Elimination System (NPDES) and Total Maximum Daily Load (TMDL) goals.
- 5. As deemed necessary, at the Village's sole discretion, assist the Village in facilitating presentations to the Miami Shores Village Commission, the community at large, and all stakeholders.

END OF SECTION