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2714 MEDIA CENTER DRIVE
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November 16, 2017

To: 25 Pre-Qualified On-Call Contract Consultants of LA Sanitation

LA SANITATION ON-CALL CONSULTANT SERVICES CONTRACT ISSUANCE OF TOS SN-92 – GAUGING DATA QUALITY ASSURANCE AND QUALITY CONTROL

LA Sanitation (LASAN) is soliciting responses from 25 Prime Consultants on the On-Call List. Attached are details of the Task Order Solicitation (TOS) required services. A pre-proposal meeting for this TOS will be held on Wednesday, December 13, 2017, from 1:00 P.M. to 2:00 P.M., at 2714 Media Center Drive, Los Angeles, CA 90065, 2nd Floor, Board Room.

All questions regarding this TOS must be submitted in writing via e-mail to Mr. Manik Mohandas, before or at the meeting. Please e-mail Mr. Manik Mohandas the names of your representatives and subcontractors, who will be attending the meeting, and the company's name by Tuesday, December 12, 2017, before 12:00 P.M. (Please note that inviting your subcontractors to the meeting is optional.)

The deadline for proposal submittal is Wednesday, January 3, 2018, before 2:00 P.M. If your firm is interested in this TOS, please submit proposal via e-mail on the indicated due date to the following LASAN staff:

- Manik Mohandas, manik.mohandas@lacity.org
- Thu-Van Ho, Thu-Van.Ho@lacity.org

Thank you for your interest and we look forward to receiving your response to this TOS.

Sincerely,

for Ali Poosti, Division Manager
Wastewater Engineering Services Division
LA Sanitation



TVH/AP:tvh

Attachment: A copy of the scope of work

c: Abdul Danishwar, WESD
Fernando Gonzalez, WESD
Lenise Marrero, WESD
Scott Hare, WESD
Thu-Van Ho, WESD
Manik Mohandas, WESD
Troy Ezeh, WESD

**City of Los Angeles
Department of Public Works
Bureau of Sanitation (LASAN)**

On-call Consultant Services Contract

**Task Order Solicitation (TOS) SN-92 for
*Quality Assurance & Quality Control of Gauging Data***

November 2017

1. Introduction

The City of Los Angeles Bureau of Sanitation (LASAN) owns, operates and maintains one of the largest wastewater collection systems in the nation. The collection system conveys approximately 350 MGD of sewage through a network of 6,700 miles of sewer pipes to one of the City's four (4) water reclamation plants. In order to safely manage and convey this substantial volume, LASAN depends on a reliable and accurate Flow Monitoring Program to monitor the continuous flow depth and velocity in the collection system. Data received for the Flow Monitoring Program is essential in the calibration and validation of the Rainfall-Dependent Infiltration and Inflow (RDI/I) study and the maintenance of the Mike Urban Hydrodynamic Model (Mike Urban). Mike Urban has ultimately led to the elimination or postponement of several large-scale Wastewater Capital Improvement Program projects based on system capacity needs. The City invites proposals for the Quality Assurance and Quality Control (QA/QC) of flow gauging data to identify changes in measured flow behavior, outlier data points, and agreement between measurement points across the gauging campaign. The proposal shall include a method for data analysis through use of a computer software tool to ensure that flow data received is accurate and could be used with confidence in the Mike Urban. The anticipated term of the contract is two years commencing on the executed and stipulated start date.

2. Scope of Services

The City seeks proposals to provide a third-party QA/QC audit of data received from approximately 200 gauging sites located in primary pipes and outfalls in the Wastewater Collection System. Flow data received from gauging sites through a web application will be reviewed through a computer software tool, to be developed by the consultant, to ensure that data is complete, consistent, and accurate for use in Mike Urban. To aid the consultant in developing a tool for data QA/QC, City staff will provide near-time level and velocity flow data for gauging locations. Additionally, City staff will provide the consultant with: 1). Site sheets that include silt levels in pipes and site observations from field visits during meter installations and revalidations, 2). Up to date GIS shape files for active gauges, 3). Pipe surcharge levels, and 4). Velocity profiles for gauging sites, including data tables for non-circular pipes. The PROPOSER(S) will work with CITY staff to identify and document potential data issues at gauging locations and propose alternative solutions or locations if needed. Throughout the term of the contract, the selected consultant will be required to provide project updates to City staff through weekly meetings or conference calls at a mutually agreeable date and time.

The following tasks provide more detail regarding services from the qualified consultant for the QA/QC of gauging data.

Task 1: Verify Pipe Attributes against Existing Records.

The consultant shall verify pipe shapes and pipe diameters against existing records to ensure that final flows are accurately calculated. Data tables will be utilized by the consultant to calculate observed flows for non-circular pipes. The consultant shall work in coordination with City staff to correct discrepancies found in existing records.

Deliverable(s):

- Comprehensive report indicating discrepancies found in pipe shapes and diameters.

Task 2: Conduct Scatterplot Analysis.

The consultant shall utilize the computer software tool to review scatterplots for gauging sites to observe whether there is more than one dominant flow pattern. If multiple dominant flow patterns are observed, the consultant shall inform City staff on why such a pattern is observed. The consultant shall also provide recommendations on minimizing flow pattern deviations and suggest alternative site locations (if needed) depending on pipe alignment. The computer software tool would be capable of generating and color coding scatter plots by different channels (e.g. velocity, level, flow rate, etc.). Additionally, the tool would be able to adjust origins of scatter plots and scatter points to be grouped by date ranges, flow rates, depths, velocity and visually clarify them through color or symbology representation.

Deliverables:

- Computer Software Tool that generates scatterplots for date ranges and multiple flow channels for all gauging site locations.
- Normal Scatterplot patterns for each gauging site using one representative dry weather week.
- Report on findings during Scatterplot Analysis indicating the cause for observed deviations (e.g. debris, sensor drifts, etc.) and recommendations on resolving observed deviations.

Task 3: Conduct Mass Balance Checks for Gauging Sites.

The consultant shall develop a computer software tool that uses the City's GIS network to develop auto-created flow relationships for gauging sites that any user could easily identify. The computer software tool will be used to ensure that gauging sites are balancing with one another as they move downstream in the collection system and have the ability to recommend flow splits and adjust them as needed. City staff shall provide the consultant with known conveyance information (e.g. flow splits, diversions, etc.) to assist the consultant with identifying network connectivity between gauging sites.

Deliverables:

- Computer Software Tool that develops auto-created flow relationships for gauging sites and assumed settings for diversion/flow split details (if any).
- Comprehensive report on network connectivity between gauging locations. Report may include gauging sites and their respective upstream gauge(s).

Task 4: Quantify Rainfall-Dependent Infiltration and Inflow (RDI &I) in Collection System

The computer software tool developed by the consultant shall quantify rainfall-dependent infiltration and inflow in the City’s Wastewater Collection System using any standard engineering method. This task would involve identifying locations throughout the City prone to significant RDI & I during wet weather.

Deliverable(s):

- Computer software tool capable of quantifying RDI & I for each primary sewer basin in the City.

Task 5: Train City Staff on use of Computer Software Tool

The consultant shall provide in-person training at an LASAN selected facility and provide instructions to City staff on how to use the computer software tool to be developed. Training shall involve transfer of knowledge for use of the tool to analyze scatterplots, conduct mass balance checks, and quantify rainfall-dependent infiltration and inflow.

3. Term of Engagement

The term of engagement is two years. It is estimated that the cost ceiling for this TOS is approximately \$149,250.

4. Solicitation Schedule (Tentative)

- Issue Task Order SolicitationDate of Cover Letter.
- Receive Solicitation Responses.....As indicated in Cover Letter.
- Conduct Interviews if necessary.....8 weeks after issuance of TOS.
- Select and Negotiate.....9 weeks after issuance of TOS.
- Issue Task Work Order.....10 weeks after issuance of TOS.

5. Solicitation Response Requirements

Solicitation Responses shall not exceed twenty (20) pages, exclusive of cover, dividers and resumes. Solicitation Responses shall be submitted to the following Bureau's staff via e-mail, no later than 2:00 pm of proposal due date indicated in cover letter:

- Manik Mohandas, Manik.Mohandas@lacity.org
- Thu-Van Ho, thu-van.ho@lacity.org

Solicitation Responses shall include:

- Resume demonstrating that the candidate is capable of meeting the requirements of the Scope of Work. Resume shall include work experience history with dates, and references from past employers, owners, and/or organizations.
- Provide a proposed individual cost breakdown by tasks.
- Provide a breakdown of estimated time for completion of task.
- Proposed Billing Salary Rate Summary for the proposed candidate with all respective direct and indirect costs, markups, expenses, overhead rates and profit. (See Attachment A).
- MBE/WBE/SBE/EBE/DVBE/OBE subcontractors utilized and the percent utilization. (See Attachment A)

Note: Department of Public Works only recognizes:

- MBE/WBE certifications certified by City of LA – Bureau of Contract Administration (LABCA), LA County Metropolitan Transportation Authority (MTA), CalTrans, The Southern California Minority Supplier Development Council (SCMSDC), or Women's Business Enterprise National Council (WBENC)-WEST; and any member of California Unified Certification Program (CUCP); and
- SBE/EBE/DVBE certifications certified by LABCA or State of California – Department of General Services (CA-DGS)
- A firm can only be a MBE or WBE (not both)
- A firm with multiple certifications is acceptable (i.e. a MBE/SBE/EBE/DVBE firm will fulfill 4 of 6 required categories)
- Provide a copy of valid MBE/WBE/SBE/EBE/DVBE Certifications of MBE/WBE/SBE/EBE/DVBE subcontractors utilized.
- Statement pertaining to the candidate's availability.

6. Selection Criteria

The selection team will evaluate the proposals with the following criteria:

- Capability, and experience in providing the Scope of Services as demonstrated by the proposal.
- Expert knowledge and work experience associated with understanding of the issues, options, and approaches related to the flow monitoring.
- Proposals overall responsiveness to the requests of this TOS.

7. Suggested MBE/WBE/SBE/EBE/DVBE/OBE Participation Levels

The City had set anticipated participation levels (APLs) for sub-consultants as follows: 18% MBE, 4% WBE, 25% SBE, 8% EBE, and 3% DVBE. The City encourages the Primes to utilize these subconsultants wherever feasible, especially MBE/WBE subconsultants.

Note: Sub-consultants that are not listed on Schedule A in your contract cannot be added and/or utilized without the performance of the outreach and approval of the LASAN.

8. Task Order Manager

The City's On-Call Contract Manager is: Ali Poosti, Division Manager, Wastewater Engineering Services Division, (323) 342-6228.

The Task Manager for this designated TOS is: Manik Mohandas, Environmental Engineer Associate III, Wastewater Engineering Services Division, (323) 342-1579.

9. Disclaimer

The City may or may not decide to award any or part of this task order based on its sole convenience and shall not be responsible for any solicitation response costs.

ATTACHMENT A

COST REIMBURSEMENT - BILLING SALARY RATE BASIS

Firm Name	Status	Last Name	First Name	Position	Raw Rate (\$/hr)	Approved Overhead Rate	Profit	Billing Rate (\$/hr)	Effective Date	Note
Prime Firm	Prime									
Prime Firm	Prime									
Prime Firm	Prime									
Subcontracting Firm Name 1	MBE/SBE/EBE									
Subcontracting Firm Name 2	WBE/SBE/EBE									
Subcontracting Firm Name 3	MBE/SBE									
Subcontracting Firm Name 4	WBE/SBE									
Subcontracting Firm Name 4	SBE/EBE/DVBE									
Subcontracting Firm Name 5	SBE/EBE									
Subcontracting Firm Name 6	OBE									

SUMMARY

Firm Name	Status	Fee	%Fee
Prime			
Subcontracting Firm Name 1	MBE/SBE/EBE		
Subcontracting Firm Name 2	WBE/SBE/EBE		
Subcontracting Firm Name 3	MBE/SBE		
Subcontracting Firm Name 4	WBE/SBE		
Subcontracting Firm Name 4	SBE/EBE/DVBE		
Subcontracting Firm Name 5	SBE/EBE		
Subcontracting Firm Name 6	OBE		
Total Direct Labor Cost of the Prime			
Total Subcontract Expenses			
5% Administrative Fee (markup)			
Other Direct Costs (with no markup)			
Total Task Order Amount			

Total Subconsultant Participation

Pledged	MBE	WBE	SBE	EBE	DVBE	OBE
% of Total Task Order	%	%	%	%	%	%
\$ Amount	\$	\$	\$	\$	\$	\$