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1149 SOUTH BROADWAY, 9TH FLOOR LOS ANGELES, CA 90015 TEL: (213) 485-2210 FAX: (213) 485-2979 WWW.LACITYSAN.ORG

August 16, 2023

ELECTRONIC MAIL

To: 24 Pre-Qualified On-Call Contract Consultants of LA Sanitation

LA SANITATION ON-CALL CONSULTANT SERVICES CONTRACT ISSUANCE OF TOS SN-165 – HWRP EMERGENCY STORAGE FACILITY FOR DIGESTED SLUDGE OR BIOSOLIDS STUDY

LA Sanitation (LASAN) is soliciting responses from 24 Prime Consultants on the Pre-Qualified On-Call List. Attached are details of required services for the Task Order Solicitation (TOS). To be considered responsive, Prime Consultants must attend a **mandatory** virtual pre-proposal meeting to be held on:

Date and Time: Wednesday, August 30, 2023, from 10:00 A.M. to 12:00 A.M.

Location: Virtual: https://meet.google.com/ekb-jhti-vfm
By Phone: (US) +1 614-758-9157 PIN: 693 730 395#

See RAMP Opportunity ID: 209606

Please note that inviting your subcontractors to the meeting is optional.

All questions, before or after, the meeting regarding this TOS must be submitted in writing via e-mail to the staff listed below.

The **deadline for proposal submission** is <u>Tuesday, September 26, 2023, before 2:00</u> <u>P.M.</u> If your firm is interested in this TOS, please submit a proposal via e-mail by the indicated due date to the following LASAN staff:

- Mr. Michael Lee, michael.w.lee@lacity.org
- Ms. Wanda Epps, san.oncall@lacity.org

Thank you for your interest and we look forward to receiving your response to this TOS. Should you decide not to submit a proposal, a **negative response** is **requested** with a

brief explanation of the reason. Your decision to not submit a proposal will not affect your eligibility for future work.

Sincerely,

Nancy Lantin, Sr. Management Analyst II

On-Call Contracts Representative

Administration Division

LA Sanitation and Environment

NL:wae

Attachment: Scope of Services

c: Master Files
On-Call Consultants List
Timeyin Dafeta, LASAN
Michael Lee, LASAN
CCU Staff

City of Los Angeles LA Sanitation and Environment (LASAN)

On-Call Consultant Services Contract

Task Order Solicitation (TOS) SN-165 for the

HWRP Emergency Storage Facility for a Digested Sludge or Biosolids Study

August 2023

1. INTRODUCTION

The Hyperion Water Reclamation Plant (HWRP) is the main water reclamation facility serving the City of Los Angeles and 28 other contract cities and agencies. HWRP receives sewage from 4 million people living in its 600 square mile service area. HWRP is situated on 144 acres of prime beachfront property just south of Los Angeles International Airport. The treatment process consists of preliminary screening, enhanced primary treatment, pure oxygen secondary activated sludge treatment, egg-shaped digesters for anaerobic digestion, solid bowl centrifuges for thickening and dewatering, and advanced foul air handling and treatment systems. The HWRP has a designed capacity of 450 million gallons per day (MGD) based on daily peak dry weather flow and peak wet weather flow rate of 850 MGD. Currently, the average daily flow rate is approximately 260 MGD due to water conservation.

HWRP operates a high-rate two-stage digestion process. The digestion system consists of 16 egg-shaped primary digesters and 4 batch digesters, each with a capacity of approximately 2.5 million gallons. The digesters stabilize thickened primary sludge and thickened waste activated sludge through the thermophilic anaerobic process for approximately 15 days. Digested sludge from the first-stage digesters is routed to one of the four second-stage digesters operated in a batch mode to meet target pathogen reduction requirements by maintaining sludge retention at thermophilic temperatures (126 °F < T < 131 °F) for a set period time of 16 hours. The second-stage digesters operate such that while one tank is in fill mode, one is in drain mode, and two are in sludge holding mode.

Digested sludge is delivered to the digester screening facility (DSF) where contaminants such as fibrous materials, hair and grits are screened and removed. These contaminants are conveyed to Andritz belt presses for dewatering the solids, then they are conveyed to the hoppers and discharged to transport trucks for disposal at a sanitary landfill.

The filtrate digested sludge is discharged to DICE-II Wet Wells A and B in the DICE-II facility. The DICE-II facility dewaters the filtrate digested sludge using the dewatering centrifuges and the biosolids which is dewatered digested sludge are dropped into the Schwing Bioset biosolids cake pump through the hoppers. Then the cake pump pushes the biosolids to the silos in the Truck Loading Facility (TLF). The DICE-II wet wells have the capacity of 58,500 gallons each, a total of approximately 117,000 gallons to store the digested sludge. In the event of an emergency with a typical maximum flow of 2,500 gallons per minute (GPM) of digested sludge, each of the wet wells will be completely full in less than 25 minutes and both wet wells under 50 minutes. As a result, managing and controlling the flow of biosolids in the processes of DSF, DICE-II wet wells, and dewatering centrifuges can be challenging and extremely sensitive. Therefore, it is critical to construct an additional storage capacity in the process to increase the buffer time.

The first option is the addition of an emergency storage facility at a location immediately after the DSF by adding two additional wet wells with a capacity of 600,000 gallons each, a total of 1,200,000 gallons for digested sludge. These two new wet wells will increase the buffer time for an additional 8 hours during a typical maximum flow of 2,500 GPM.

From the two existing DICE-II wet wells, the digested sludge is pumped to the dewatering centrifuges. Four of six Alfa Laval G3-165 centrifuges are typically in operation dewatering at an average of 3.6 MGD (2,500 GPM) and dewatering from 2.0 percent TS to 30 percent TS. Cationic Mannich polymer is made-down and added. Each of these centrifuges is connected to dedicated Schwing Bioset wet cake pumps. Thus a loss of a pump means that the associated centrifuge will be off-duty accordingly. On average maximum cake production is approximately 800 wet tons per day. Due to the high TS contents after the digested sludge are dewatered, the pumps frequently break down and require high maintenance. When this occurs, other centrifuges and associated pumps must be used to make up the flow. The pumps govern the quantity of biosolids that can be processed.

There are four (4) truck loading bays with two silos on each bay at the TLF. Each silo has a capacity of 100 wet tons of biosolids storage, therefore the overall wet biosolids storage system provides 800 wet tons of biosolids storage. The data analysis showed that the plant produces approximately 800 wet tons of biosolids per day. Therefore, the existing biosolids storage does not have any emergency storage capacity.

A second option is the addition of an emergency storage facility at a location right before the existing biosolids storage silos in the Truck Loading Facility. By adding an additional storage facility with a capacity of approximately 500 wet tons each, a total of 1,000 wet tons of biosolids could be stored. This facility will increase the buffer time to store biosolids for an additional 1.25 days.

HWRP currently produces approximately 650-750 wet tons of Class A (EPA rule 40 CFR, Part 503) biosolids each day and one hundred percent of the biosolids are used for land applications since 2003. Biosolids are hauled to Green Acre Farm in Kern County to be used by farmers in growing crops such as forage mix, alfalfa, Sudan grass, feed oats, and Sudan hay.

2. SCOPE OF SERVICES

HWRP is seeking a qualified consulting firm to provide technical support in the assessment and evaluation of existing digested sludge wet wells, conveyance system in the following process areas and develop two best options to add an emergency storage facility to either store digested sludge or biosolids in a period of 8- or 30-hours of the buffer time, respectively.

- Digester Screening Facility to DICE-II wet wells
- DICE-II wet wells to Dewatering Centrifuges
- Dewatering Centrifuges to Schwing Bioset wet cake pumps
- Schwing Bioset wet cake pumps to the silos in the Truck Loading Facility

The proposed improvements should be cost-effective and reliable. The Scope of Services includes the following:

Task 1: Project Management

Consultant will maintain proactive management across all project activities and facilitate project success by meeting the schedule, objectives, and LASAN's expectations for project results, and provide an avenue for communication between Consultant team and LASAN.

- Project Direction and Management includes managing the project, staffing, budget, schedule, quality assurance, and deliverable review.
- Project Initiation and Kickoff Meeting to discuss related topic items, health and safety, work breakdown structure, quality management, near-term deliverables, and communication protocols.
- Meetings include coordination meetings and conference calls with LASAN to discuss project status, progress, and resolution of any potential project issues.
- Consultant shall prepare draft agendas in advance of project meetings for review by LASAN and prepare meeting minutes within 48 hours of meetings completion and distribute to the team.

Task 2: Assessment of Existing Storage Facilities and Conveyance Systems.

The consultant will evaluate the existing digested sludge wet wells, conveyance system, and silos at the Truck Loading Facility. Additionally, evaluate appurtenances from the Digester Screening Facility to Truck Loading Facility.

- The evaluation will assess the structural integrity of the supporting structures, the extent of corrosion to the piping including, but not limited to, valves, pumps, actuators, transmitters, and other piping accessories.
- Identify any deficiencies and the need for rehabilitation to bring the pipeline into compliance with changing regulatory requirements and maintenance and design restrictions.
- Conduct ultrasonic test on all piping and vessels. Determine if there are any restrictions in the piping or other conveyance system that impedes digested sludge flow and biosolids flow.
- The Consultant will make recommendations for the modification or otherwise of the system to improve efficiency and safety. Also, make recommendations, if any, to improve the system as well as to avoid catastrophic failures in the future.

Deliverable:

Provide a presentation of findings and a technical report in electronic format, describing the existing process and systems that require modifications to achieve long term reliability, operational efficiency and address the challenges hampering the smooth and safe operation of the systems addressed in the Task 2.

Task 3: Identify and Evaluate Options to Add an Emergency Storage Facility immediately after the Digester Screening Facility for the digested sludge or before the Truck Loading Facility for dewatered Biosolids.

The Consultant will identify and evaluate options for locations that would be optimum for an emergency storage facility location(s) of the digested sludge or dewatered biosolids after a thorough study of the plant processes as addressed under Task 2. The new emergency storage facility should have the capacity to store at least a period of eight (8) hours if the storage is added after the digested sludge is screened at the Digester Screening Facility (DSF) or a capacity of thirty (30) hours if the storage is added after the digested sludge is dewatered.

 Identify location(s) to add two wet wells for a total capacity of 1,200,000 gallons of digested sludge; and • Identify location (s) to add a storage facility with two storage tanks for a total capacity of 1,000 tons of biosolids.

The consultant will identify and evaluate new conveyance system and appurtenances to pump and transfer the digested sludge/biosolids flow from the new storage facility to the existing piping for further processing after the emergency storage facility.

- Conduct a performance test and report on the best possible conveyance system.
- Conduct a performance test and report on the best possible appurtenances including, but not limited to, pumps, valves, transmitters, actuators, and insulation.
- Identify and evaluate on the Class A biosolids requirements for storing digested sludge and dewatered biosolids, and how to implement them in the design.

Deliverables:

- 1. Provide a presentation and report of the new emergency storage facility, conveyance systems, and appurtenances.
- 2. Propose a cost for installing the proposed emergency storage facility, conveyance systems, and appurtenances.

Task 4: Other Additional Tasks

Perform any additional tasks that may be required as part of the study as directed by the task manager.

3. COVID VACCINATION REQUIREMENT FOR CONSULTANTS/CONTRACTORS

For the purposes of this section the terms contractor and consultant are interchangeable and deemed to have the same meaning; and the terms subcontractor and subconsultant are interchangeable and deemed to have the same meaning.

Employees of Contractor and/or persons working on its behalf, including, but not limited to, subcontractors (collectively, "Contractor Personnel"), while performing services under this Agreement and prior to interacting in person with City employees, contractors, volunteers, or members of the public (collectively, "In-Person Services") must be fully vaccinated against the novel coronavirus 2019 ("COVID-19"). "Fully vaccinated" means that 14 or more days have passed since Contractor Personnel have received the final dose of a two-dose COVID-19 vaccine series (Moderna or Pfizer-BioNTech) or a single dose of a one-dose COVID-19 vaccine (Johnson & Johnson/Janssen) and all booster doses recommended by the Centers for Disease Control and Prevention. Prior to assigning Contractor Personnel to perform In-Person Services, Contractor shall obtain proof that such Contractor Personnel have been fully vaccinated. Contractor shall retain

such proof for the document retention period set forth in this Agreement. Contractor shall grant medical or religious exemptions ("Exemptions") to Contractor Personnel as required by law. If Contractor wishes to assign Contractor Personnel with Exemptions to perform In-Person Services, Contractor shall require such Contractor Personnel to undergo weekly COVID-19 testing, with the full cost of testing to be borne by Contractor. If Contractor Personnel test positive, they shall not be assigned to perform In-Person Services or, to the extent they have already been performing In-Person Services, shall be immediately removed from those assignments. Furthermore, Contractor shall immediately notify City if Contractor Personnel performing In-Person Services (1) have tested positive for or have been diagnosed with COVID-19, (2) have been informed by a medical professional that they are likely to have COVID-19, or (3) meet the criteria for isolation under applicable government orders.

4. TERM OF ENGAGEMENT AND COST ESTIMATE

The term of engagement is from the issuance date of the Notice to Proceed (NTP) through July 22, 2024. It is estimated that the cost ceiling for this TOS is approximately \$200,000.

5. SOLICITATION SCHEDULE (TENTATIVE)

- Receive Solicitation Responses......As indicated in Cover Letter.
- Conduct Interviews if necessary....... 6 weeks after issuance of TOS.
- Select and Negotiate......8 weeks after issuance of TOS.
- Estimate Project Start Date: December 15, 2023

6. 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 LASAN staff via e-mail, no later than 2:00 pm of proposal due date indicated in cover letter:

- Thu-Van Ho, thu-van.ho@lacity.org
- Michael W. Lee, Michael.w.lee@lacity.org
- Wanda Epps, san.oncall@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 below.).
- MBE/WBE/SBE/EBE/DVBE/OBE subcontractors utilized and the percent utilization.
 (See Attachment A below.)

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) for a pledged amount
- ➤ 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.
- If a subconsultant needs to be added to Schedule A, use Mini Outreach Subconsultant Phone Log template uploaded to RAMP (Regional Alliance Marketplace for Procurement) for this TOS.

Statement pertaining to the candidate's availability.

7. SELECTION CRITERIA

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

- A. Consultant Qualifications, Experience, and Expertise
 - Proven capability in conducting scientific studies and analysis supporting the wastewater treatment facilities, specifically processes involving the Hyperion's Digester Screening Facility, DICE-II wet wells, Dewatering Facility, Schwing Bioset wet cake pumps and Truck Loading Facility.
 - Capability, and experience in providing the Scope of Services as shown in the proposal.
 - Expert knowledge and work experience associated with understanding of the issues, options, and approaches related to capital improvement projects and DSF, DICE-II and TLF.
- B. Personnel Qualifications, Experience, and Expertise

- Expert knowledge and work experience associated with understanding of the issues, options and approaches related to capital improvement projects and DSF, DICE-II, TLF, and all of the related appurtenances.
- Expert knowledge and experience in facilities planning issues in relation to wastewater treatment operation and practices that involve the processes of DSF, DICE-II and TLF.
- C. Technical Approach
 - Familiarity and understanding of processes involving DSF, DICE-II, and TLF.
- D. Project Management Approach
 - Ability to effectively and rapidly meet on going needs for the related stakeholder activities.
 - Experience and proven track record with local stakeholders.
- E. Competitive Fees and Costs
 - The value offered to the City considering cost in comparison to capabilities and experience of the candidates.
 - Direct and indirect costs, markups, expenses, overhead rates and profit will be considered.

8. 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. Minority, women, small, emerging, disabled veteran owned and controlled businesses must be considered along with other business enterprises whenever possible as sources of subconsulting services.

Note: Sub-consultants that are not listed on Consultant's current Schedule A - LIST OF POTENTIAL MBE/WBE/SBE/EBE/DVBE/OBE SUBCONSULTANTS (which includes any previously approved mini outreach) cannot be included in a proposal and/or utilized without the performance of a mini outreach and approval of said outreach by LASAN. A Request to Add Sub(s) should be made at least 10 business days prior to proposal due date. If a consultant needs to add a sub to their Schedule A, please see the Mini Outreach Phone Log and Instructions to Add Sub document associated with this TOS and available for download within the Regional Alliance Marketplace for Procurement (RAMP). When a CONSULTANT receives from LASAN an approved Request to Add Sub(s), approved sub(s) then may be included in the proposal. Exception: If Request to Add Sub(s) is in the process of being approved by LASAN, CONSULTANT may submit a proposal that includes the yet to be approved sub. The Request to Add Sub(s) must have been submitted prior to the proposal due date deadline.

9. TASK ORDER MANAGER

The LASAN On-Call Contract Representative: Nancy Lantin, Sr. Management Analyst II, Administration Division, nancy.lantin@lacity.org.

The designated Task Manager for this TOS is: Michael W. Lee, Environmental Engineering Associate III, Hyperion Water Reclamation Plant (HWRP), (310) 648-5492 (O), or (562) 533-6557 (M), michael.w.lee@lacity.org.

10. 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 - BIL	LING SALARY RA	TE BASI	S							
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 Prim	ie									
Total Subcontract Expenses										
5% Administractive Fee (markup)										
Other Direct Costs (with no markup)										
Total	Task Order Amount									
Total Subconsultant Participati										
Pledged	MBE	WBE	SBE	EBE	DVBE	OBE				
% of Total Task Order	%	%	%	%	%	%				
\$ Amount	\$	\$	l \$	l s	\$	l s				