

### BIDS AND AWARDS COMMITTEE

### NOTICE OF NEGOTIATED PROCUREMENT

The Philippine International Convention Center (PICC) announces that the Bids and Awards Committee (BAC) will conduct a Negotiated Procurement for the ONE (1) – YEAR CONTRACT FOR THE DAILY OPERATION AND MAINTENANCE SERVICE OF PICC' SEWAGE TREATMENT PLANT (STP). The total Approved Budget for Contract (ABC) for this requirement is EIGHT HUNDRED THIRTY-FOUR THOUSAND NINE HUNDRED PESOS (P834,900.00), VAT inclusive.

This will be undertaken in accordance with Sec. 53.1, Two Failed Bids, of the Revised Implementing Rules and Regulations (RIRR) of Republic Act No. 9184 otherwise known as "The Government Procurement Reform Act".

A complete set of documents may be obtained by interested bidders from October 25, 2022 to on or before 3:00 p.m. of November 3, 2022.

Submission of proposals will be on or before 3:00 p.m. of November 3, 2022, at the BAC Secretariat Office, Ground Floor, Delegation Building, PICC Complex, 1307 Pasav City. Attached are the specifications for this particular procurement.

MELPIN A. GONZAGA Chairman

### **BIDS AND AWARDS COMMITTEE (BAC)**

#### **NEGOTIATED PROCUREMENT**

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Sir:

We wish to inform you that the procurement of the ONE (1) – YEAR CONTRACT FOR THE DAILY OPERATION AND MAINTENANCE SERVICE OF PICC' SEWAGE TREATMENT PLANT (STP), will be done by way of Alternative Method of Procurement through Negotiated Procurement.

The total Approved Budget for Contract (ABC) for this project is **EIGHT HUNDRED THIRTY-FOUR THOUSAND NINE HUNDRED PESOS (P834,900.00), VAT inclusive.** 

Please submit your proposal on or before **3:00 p.m.** of **November 3, 2022** at the BAC Secretariat, Ground floor, Delegation Building, PICC together with the following:

#### A. ELIGIBILITY DOCUMENTS:

1. Certified photocopy of the valid and current PhilGEPS Certificate of Registration – Platinum Membership.

If any of the documents mentioned in Annex "A" is not current, the new document should be submitted.

- Statement of all on-going government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid;
- 3. Statement of the Single Largest Completed Contract (SLCC) similar to the contract to be bid, entered into within the last three (3) years from the date of submission and opening of bids, and whose value is at least fifty percent (50%) of the ABC. Attach to such statement the following;
  - a.Certified photocopy of the SLCC; and
  - b.Certificate of Acceptance or Official Receipt or Sales Invoice
- 4. Net Financial Contracting Capacity (NFCC):

Computation of NFCC must be at least equal to the ABC to be bid, calculated as follows;

NFCC = [(Current assets minus current liabilities) (15)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started, coinciding with the contract to be bid.

or a committed Line of Credit from Universal or Commercial Bank, in lieu of its NFCC Computation. The committed Line of Credit must be at least equal to ten percent (10%) of the ABC to be bid.

### **B.TECHNICAL COMPONENT:**

- 1. Terms of Reference fully accomplished;
- 2. Notarized Omnibus Sworn Statement with attached;
  - a. For Corporations, the duly notarized Secretary's Certificate; or
  - b. For Sole Proprietorship, the notarized Special Power of Attorney.

### C. OTHER DOCUMENTARY REQUIREMENTS:

- Certified Photocopy of the CY 2021 Income and Business Tax with proof of payment;
- 2. Sections III, and V of the bid documents, signed on each and every page by the bidder's authorized representative:
- 3. Company profile with Organizational Chart, including list of all its employees and sketch of office location;
- 4. Resume of personnel mentioned in items 4 and 5 of Section II (Special/Other Conditions of the Contract) of Technical Specifications;
- 5. LLDA Accreditation certificate of its Pollution Control Officer;
- Certification from PICC' Mechanical Services Division that the participating bidder has conducted ocular inspection of the equipment that are included in the scope of work and the equipment' vicinity.
- 7. Certificate of Satisfactory Completion & Acceptance of previous PICC projects undertaken within the last three (3) years, if any

Negotiation shall be made with the bidder who made the lowest offer; should the negotiation fail then the same shall be made with the second lowest offer.

Attached is the Terms of Reference and other requirements for the implementation of the abovementioned requirements.

PICC reserves the right to reject any offer or all quotations found to be disadvantageous to the government.

Very truly yours,

Chairman

	Date	
The Chairman Bids and Awards Committee (BAC) Philippine International Convention Center (PICC)		
Dear Sir/Madam:		
In response to your letter dated, ONE (1) — YEAR CONTRACT FOR TO MAINTENANCE SERVICE OF PICC' SEWAGE	E TREATMENT PLANT (STP)	).
TOTAL ANNUAL CONTRACT RATE: INCLUS	SIVE OF VALUE ADDED TAX	(VAT)
(Amount in Words)	(P(Amount in figure	) es)
Very truly yours,		
Signature of bidder over printed name		
Address		
Telephone/Fax No.		

# **TERMS OF REFERENCE**

## A.TECHNICAL SPECIFICATIONS

Item No.	Article /Description	COMPLIANCE
	ONE (1) YEAR CONTRACT FOR THE DAILY OPERATION AND MAINTENANCE SERVICE OF THE PICC's SEWAGE TREATMENT PLANT/SYSTEM	
	I. SPECIFIC WORKS  Supply of labor, expertise and supervision, provision of tools and instruments, repair equipment, personal protective equipment (PPE) and miscellaneous materials for the daily operation and preventive maintenance service of the PICC's Sewage Treatment Plant (STP)/System for a period of one year to include, but not limited to the following:	
	1. Operate daily in automatic and/or manual mode (if necessary) and maintain regularly the 900 M³ effluent volume flow rate - design capacity sewage treatment plant/system. This is to include the following process equipment including their controllers, pipings and accessories:	
	1.1.Three (3) units Sequencing Batch Reactor (SBR) air blowers complete with open-drive motor- 20 Hp, 460V, 23.7 A, 3 Phase, 60Hz., coupled with 5,000 mm/Hg, 12.9 M³ /min. capacity air blower/ compressor and Programmatic Logic Controller (PLC), control safety devices and other accessories.	
1	<ul> <li>1.2. Three (3) units Influent Submersible Pumps – 5 Hp, 460V, 7.2 A, 3 Phase, 10 Total Dynamic Head (TDH) and maximum volume flow rate capacity of 2 M³/min.</li> <li>1.3. Two (2) units Effluent Submersible Pumps – 5 Hp, 460V, 7.2 A,</li> </ul>	
	3 Phase, Total Dynamic Head (TDH) of 10M maximum volume flow rate capacity of 2 M³/min. 1.4.Three (3) units Waste and Sludge Submersible Pumps – 0.5 Hp, 460V, 0.85 A, 3 Phase	
	1.5.Two (2) units Tertiary or Re-use Pumps – Total Dynamic Head (TDH) of 28M and maximum volume flow rate capacity of 0.9 M³/min. coupled with a drive motor - 5 Hp, 460V, 7.2A, 3 Phase, 60Hz.,	
	<ul> <li>1.6.One (1) unit Sludge Digester Submersible Pumps – 0.5 Hp, 460V, 0.85 A, 3 Phase</li> <li>1.7.Six (6) units Lift Stations Submersible Pumps – 2 Hp, 230V, 7.2 A, 3 Phase, Total Dynamic Head (TDH) of 8M maximum</li> </ul>	
	volume flow rate capacity of 0.72 M³/min. 1.8.Sludge Mechanical Filter Press (Manual Plate Shifting) 1.9.Influent's Bar Screen 1.10.Lift Station Nos. 1, 2 & 3	
	1.11.Equalization Tank 1.12.SBR 1, 2 & 3 1.13.Contact Tank	

- 1.14.Sludge Digester Tank
- 1.15.Re use Tank
- 1.16.Sewer lines and service manholes
- 1.17.Tertiary Treatment Process System and it's allied Installations
- 2. Perform the following services for the above-mentioned equipment:
  - 2.1. Operation

## 2.1.1 Sequencing Batch Reactor (SBR) Tank/s

- 1. Conduct daily inspection on the three (3) units SBR Tanks.
- 2.Perform regular monitoring of the SBR Tank in operation. Take note on the quality of wastewater being treated. Be alarmed on abnormal color, odor and foam formation while influent is in settle or as being aerated.
- 3. Manually remove floating plastic/s or any other solid wastes from the water surface using improvised waste catcher/remover.
- 4.Regularly dewater the two (2) units stand by SBR tanks during rainy season to prevent build-up of algae and moss and deter breeding of mosquitoes inside the tanks. Coordinate with the ground maintenance for useful application of the contained water.
- 5.Monitor growth and multiplication of the useful bacteria, sludge formation, influent feeding frequency, aeration as well as required transfer of surplus/excess sludge from the subject tank/s to the Sludge Digester Tank
- 6.Monitor operation of the solenoid valve and other controllers for the Decant Process
- 7. Wear proper Personal Protective Equipment (PPE) in the performance of required activities/duties for safety.

### 2.1.2. Sequencing Batch Reactor (SBR) Air Blowers

- 1.Conduct daily inspection of the Air Blower that is scheduled for operation during shutdowns. That is, every 3-hr cycle time of the process operation.
- 2. Monitor operation
- 3. Change/rotate operation of the three (3) Air Blowers everyday and during emergency shutdown due to occurrence of any abnormality on the subject equipment/or its controller while it is in active operation.
- 4. Manually shift individual control valves of each three (3) Blower units to implement a change in operation. As designed, each units are dedicated for individual SBR tank only.
- 5.Monitor regularly the operation using voltmeter and ammeter to determine actual operating condition of the subject equipment
- 2.1.3. Equalization Tank and Three (3) units Influent

### Submersible Pumps

- 1. Conduct daily inspection on the three (3) Influent Submersible Pumps
- 2.Observe/assess pumps' frequency of operation and efficiency. Regularly heck influent condition inside the Equalization Tank as well as level sensors' position/condition.
- 3.Remove plastics and other solid wastes inside the tank to prevent clogging at the pumps/lines, stock up and burn-out of drive motor.
- 4. Alternately operate the subject pumps.
- 5.Monitor regularly the operation using voltmeter and ammeter to determine actual operating condition of the submersible pumps.

# 2.1.4. Contact Tank and Two (2) units Effluent Submersible Pumps

- 1. Conduct daily inspection of the Contact Tank for possible intrusion of solid wastes from the SBR and leaves of trees from the surrounding trees. Remove/clean as needed.
- 2.Conduct daily/hourly inspection of the two (2) Effluent Pumps and their controllers.
- 3.Monitor regularly the operation of the subject effluent submersible pumps using voltmeter and ammeter to determine actual operating condition of the subject equipment

# 2.1.5. Three (3) units Waste and Sludge Submersible Pumps

- 1. Conduct periodic inspection on the three (3) Waste and Sludge Pumps.
- 2.As the subject pumps are not yet used or seldom to be used, there is a need to conduct at least 5 seconds weekly test-runs to prevent stock-up of bearings.
- 3. Monitor the test-operations using voltmeter and ammeter to determine actual operating condition of the subject equipment

## 2.1.6. One (1) unit Sludge Digester Submersible Pumps

- 1. Conduct periodic inspection of the Sludge Digester Pump.
- 2.As the subject pumps are not yet used or seldom to be used, there is a need to conduct at least 5 seconds weekly test-runs to prevent stock-up of bearings.
- 3. Monitor the test-operations using voltmeter and ammeter to determine actual operating condition of the subject equipment

# 2.1.7. Re - use Tank/pipelines Two (2) units Tertiary or Re-use Pumps

1.Conduct daily inspection of the Re-use Tank/pipelines and of the two (2) Tertiary or Re-use Pumps which are basically designed for the watering of plants using the sprinkler system. Take

not of possible leakage/s on the concrete tank and at the pipelines.

2. Alternately operate the subject pumps.

3. Coordinate with the PICC Ground Maintenance personnel for the schedule of watering of plants.

4. Monitor the operation of the subject Tertiary Pumps using voltmeter and ammeter to determine actual operating condition of the subject equipment

# 2.1.8. Three (3) units Lift Stations/pipelines and six (6) units Submersible Pumps

- 1. Conduct daily inspection (to be conducted at the start and end of the two (2) daily shift schedules) on the three (3) Lift Stations and of the six (6) Submersible Pumps. Assess pumps' operating efficiency and condition of influent level sensors and their controllers via actual verification at site, by observation/recording of frequency and volume of influent flow/delivery from Lift Stations to the Equalization Tank or both. Conduct daily inspection on the wastewater/influent pipelines for possible leak/s and cloggings.
- 2. Monitor the operation of submersible pumps using voltmeter and ammeter to determine actual operating condition of the subject equipment

# 2.1.9. Sludge Mechanical Filter Press (Manual Plate Shifting)

- 1.Before the start of sludge pressing operation, be sure that filter canvass are properly inserted and pressed to avoid unwanted leakage.
- 2. Check alignment and tightness of plate contacts. Retighten adjuster if found necessary.
- 3. Observe cleanliness and proper handling of caked sludge. Be sure that manually scrapped filtered and pressed sludge are initially deposited at the provided Stainless steel pan. Dump waste sludge only at an environmentally safe/appropriate area designated for the purpose.
- 4.Assist DENR/LLDA accredited Transporter and Treater during the hauling of the caked sludge for proper treatment and disposal.

### 2.1.10. Influent's Bar Screen

- 1.Check up Bar Screen upon start of duty of each shift operator. Be sure that the Bar Screen is seating properly at the bottom of the metal framing to ensure trapping of solid wastes from the raw influent.
- 2.Monitor inflow of raw wastewater/influent from Lift Stations.
  - Remove immediately all solid wastes that are trapped in the screen to prevent being clogged and possible overflow.
- 3.Immediately wash/rinse the Bar Screen/enclosure at the end of every wastewater delivery/inflow to

- in the screen to prevent being clogged and possible overflow.
- 3.Immediately wash/rinse the Bar Screen/enclosure at the end of every wastewater delivery/inflow to prevent build-up of dirt and emission of foul odor.

# 2.1.11. Tertiary Treatment Process System and allied Installations

- 1. Conduct daily inspection on the Coagulant Tank and Flocculation Tank for possible intrusion of leaves of trees from the surrounding trees. Remove/ clean as needed.
- 2. Monitor the operation of the subject Dosing Pump/s using voltmeter and ammeter to determine actual operating condition of the subject equipment.
- 3.Monitor automatic process operation of the Tertiary Treatment Process as programmed in the PLC.

# 2.2. Other Operation-related services

- 1. In the occurrence of voltage fluctuation/or power failure, manually reset the bell/alarm as well as the equipment control system (if necessary). Coordinate with the assigned electrical/or mechanical technicians at the main powerhouse building on the cause and expected duration of power interruption for the on-time resumption of operation.
- 2. Shut down process equipment found to be operating beyond normal limits in terms of ampere-drawn, observed/ noticed to be in abnormal operating condition and those that failed to operate in normal sequence as programmed until corrective action/s are done.
- 3. Monitor automatic process operation of the STP as programmed in the PLC. Adapt the most efficient and effective operating system that would ensure continuous compliance on the new General Effluent Standard (GES) parametric values as set by the Department of Environment and Natural Resources (DENR) and of the Laguna Lake Development Authority (LLDA) for Class "SB" Marine Water

Parameters	Unit	DENR Effluent Standards
Biological Oxygen Demand, BOD	mg/L	30
Chemical Oxygen Demand, COD	mg/L	100
Total Suspended Solids, TSS	mg/L	100
Oil and Grease	mg/L	5.0
Color	NTU	150
Total Coliform	MPN/100mL	10,000

Color	NTU	150
Total Coliform	MPN/100mL	10,000
pHq		6.5-9.0
Chloride	mg/L	350
Nitrate as NO3-N	mg/L	20
Phosphate	mg/L	2
Ammonia as NH3-N	mg/L	3
Fecal Coliform	MPN/100mL	200
Surfactants (MBAS)	mg/L	3

- 4. Assist the pollution Control Officer (PCO) of PICC in the preparation of quarterly Self-Monitoring Report (SMR) on water component as required by the Laguna Lake Development Authority.
- 5. Assists in conducting quarterly or as needed effluent sampling for laboratory analysis by a DENR/LLDA accredited service provider as part of the process and effluent quality monitoring system.
- 6. Assists in the processing of renewal of LLDA Discharge Permit.
- 7. Records day-to-day activities and operating conditions of all the process equipment and of the STP as a whole for reference. The daily volume of decanted or treated wastewater as metered/recorded at the decant pump's discharge flow meter must be included in the daily recording. Assist/coordinate with the authorized ground maintenance personnel the schedule of watering of plans and other related activities.
- 8. Weekly (or as needed) taking of SBR water with sludge to determine the sludge level or Sludge Volume Index (SVI). Maximum level of sludge as read from graduated cylinder for an hour settlement is 300ml/L of the sample water. This is an indication that there is already a need for reduction of the existing sludge on the SBR tank for an ideal influent treatment process operation.
- 9. Monthly taking of water samples from SBR water for pH and Dissolve Oxygen (D.O.). The pH and the D.O. of the SBR water must be maintained at normal ranges of 6.5-9.0 and 2-5 mg/L/ppm respectively. Also, monthly sampling of effluent shall be done by the Contractor for laboratory testing/analysis. Said effluent sample/s could be tested/analyzed by a third party testing laboratory to be contracted by the winning Contractor. The cost of laboratory analysis shall be shouldered by the said Contractor.
- 10. Prepare and submit monthly STP Monitoring Report outlined as follows:
  - 1.Plant Operation Status



- 2.2 Effluent Quality Monitoring/Result of laboratory Analysis
- 2.3 Attachments (site/inspection reports, PM servicing etc.)
- 2.3. Regular Preventive Maintenance
  - 2.3.1. Sequencing Batch Reactor (SBR) Tank/s, Equalization Tank, Contact Tank, Lift Stations, Re use Tank & Accessories and Tertiary Treatment Process System and allied Installations

Monthly Check - up and Servicing

- 1. Check and service water level sensors, solenoid valve and other control system to ensure reliability of operation.
- 2.Perform routine maintenance checks on the piping system. Retighten loose pipe joints, bracket/s and supports.
- 3. Conduct inspection on the concrete tanks' laterals and surroundings for abnormal water marks, cracks or any other sign of deterioration. Report finding/s immediately to the office of Mechanical Services Division for the implementation of appropriate preventive maintenance service/action.
- 4.Service/clean the two (2) stand by SBR tanks. Remove dirt, tree leaves and any other waste contained in these tanks. Scrape moss or algae using metal scraper or other cleaning device that would not damage the concrete interior finish of the tanks. The Equalization Tanks, Lift Stations, Contact Tank Sludge Digester Tank as well as the Re use Tank must be serviced/cleaned of dirt and other solid wastes.
- 5. Clean surroundings of the subject tanks.

Quarterly Check - up and Servicing

- 1.Dewater the two stand by tanks using portable submersible tanks or by using the built in Waste and Sludge pump whichever is appropriate/or economical when the need arises.
- 2.Service/clean inlet holes of the decant pipe for faster discharge of effluent during the decant stage/process.
- 3.De rust and repaint light fixtures, holders, pipes and their supports and other accessories atop the SBR tanks as well as the metal stands and supports of the control panels of the three (3) Lift Stations. Paint and other related materials will be supplied by the PICC.

Semi-Annual Check – up and Servicing

1. Transfer contained influent of SBR tank that is in operation for the past six months to give way for the

- check —up and servicing of the air diffuser pipes and vanes and other tank's accessories.
- 2. Service/clean the SBR tank interior, air diffuser pipes and vanes.
- 3.Re-tight loose fittings and joints if found necessary. Annual Check up and Servicing
- 1.De rust and repaint light fixtures, holders, pipes and their supports and other accessories atop the SBR tanks as well as the metal stands and supports of the control panels of the three (3) Lift Stations. Paint and other related materials will be supplied by the PICC.
- 2.Conduct inspection/check up on the concrete tanks' finishes, top section plastering/waterproofing for possible sign of warping and peeling-off. Apply necessary corrective maintenance using PICC-supplied materials.

### 2.3.2. Air Blowers (Pump and Compressor Assembly)

Monthly Check - up and Servicing

- 1.Check compressor-motor belt drives and their alignment.
- 2.Check compressor oil level and sign of leakage. Retighten loosened oil plugs and refill if necessary.
- 3. Check level of noise and vibration of motor and compressor. It must not be abnormal/or excessive.
- 4.Check sign of possible deterioration of bearing of the compressors and pumps. Replace bearing if necessary.
- 5. Check air pressure gauges. Replace if found defective
- Check air control valves if leaky. Service and clean or replace if found necessary.
- 7. Check and clean air suction filters using appropriate cleaning agent and compressed air.
- 8. Check air relief valve operation
- Check electrical terminal connection on motor, control starter and circuit breaker. Check and record motor insulation resistance, drawn current and power supply/voltages.
- 10. Check water level sensors and the programmable logic control system if all are set and functioning in accordance with the required design specifications or aeration patterns of the air blowers.

Quarterly Check - up and Servicing

1. Check electrical terminal connection on motor, control starter and circuit breaker. Check and record motor insulation resistance, drawn current and power

- supply/voltages.
- 2.Check holding bolts of the compressor-motor. Retighten loosened bolts if necessary.
- 3. Lubricate motor and pump bearings.
- 4.Check compressor oil level and sign of leakage. Retighten loosened oil plugs and/or loose fittings/connections. Refill if necessary.
- 5.Check compressor-motor belt drives and their alignment.
- 6.Check and clean air suction filters using appropriate cleaning agent and compressed air.

### Semi-Annual Check – up and Servicing

- 1. Check electrical terminal connection on motor, control starter and circuit breaker. Check and record motor insulation resistance, drawn current and power supply/voltages.
- 2.Check water level sensors and the programmable logic control system if all are set and functioning in accordance with the required design specifications or aeration patterns of the air blowers.
- 3. Lubricate motor and pump bearings.
- 4. Change oil of compressor.
- 5.Check compressor-motor belt drives and their alignment.
- 6.Check and clean air suction filters using appropriate cleaning agent and compressed air.

### Annual Check – up and Servicing

- 1.Dismantle motors and conduct cleaning of stator winding, motor casing internals as well as the rotor using approve solvents.
- 2.Replace bearings of motors and compressor as necessary. Lubricate motor bearings.
- 3. Change oil of compressor.
- 4. Check and clean air suction filters using appropriate cleaning agent and compressed air.
- 5.De-rust and repaint corroded portion of valves, pumps, motors, piping and accessories. Apply primer and finishing paint.
- 2.3.3. Lift Station Submersible Pumps, Influent Submersible Pumps, Waste and Sludge Pumps, Contact Tank Submersible Pumps, Sludge Digester Submersible Pump, Chemical Dosing Pumps and the Tertiary or Re-use Pumps.

Monthly Check – up and Servicing

- 1. Check and clean submersible pumps' suction strainer.
- 2. Check discharge pipeline. De-clog/clean if necessary.
- 3. Check submersible pump's oil level and sign of leakage. Retighten loosened oil plugs and/or loose fittings/connections. Refill if necessary.
- 4. Check level of noise and vibration during test-run. It must not be abnormal/or excessive.
- 5. Check sign of possible deterioration of bearing.
- 6.Check cable seal on top of the pump. Retighten and apply appropriate sealant if found necessary.
- 7.Check electrical terminal connection on motor, control starter and circuit breaker. Check and record motor insulation resistance, drawn current and power supply/voltages.
- 8. Check authenticity of recording of the effluent/decant pump's discharge flow meter.
- 9. Check water level sensors and the programmable logic control system if all are set and functioning in accordance with the required water discharge patterns of the subject pumps.

### Ouarterly Check - up and Servicing

- 1. Check electrical terminal connection on motor, control starter and circuit breaker. Check and record motor insulation resistance, drawn current and power supply/voltages.
- 2.Check submersible pump's oil level and sign of leakage. Retighten loosened oil plugs and/or loose fittings/connections. Refill if necessary.
- 3. Check cable seal on top of the pump. Retighten and apply appropriate sealant if found necessary.
- 4. Check and clean submersible pumps' suction strainer.
- 5. Check discharge pipeline. De-clog/clean if necessary

### Semi-Annual Check – up and Servicing

- Check electrical terminal connection on motor, control starter and circuit breaker. Check and record motor insulation resistance, drawn current and power supply/voltages.
- 2.Check submersible pump's oil level and sign of leakage. Retighten loosened oil plugs and/or loose fittings/connections. Refill if necessary.
- 3. Check cable seal on top of the pump. Retighten and apply appropriate sealant if found necessary.
- 4. Check and clean submersible pumps' suction strainer.
- 5. Check discharge pipeline. De-clog/clean if necessary

- 6.Clean submersible pumps' nameplate using appropriate cleansing agent. Preserve readability/clarity of stipulated technical specifications of the subject pump therein.
- 7.De-rust and repaint pump's casing.
- 8. De-rust and repaint discharge pipe lines of the influent pumps at the equalization tank as well as of the tertiary pumps.

### Annual Check - up and Servicing

- 1. Check electrical terminal connection on motor, control starter and circuit breaker. Check and record motor insulation resistance, drawn current and power supply/voltages.
- 2.Check submersible pump's oil level and sign of leakage. Retighten loosened oil plugs and/or loose fittings/connections. Refill if necessary.
- 3. Check cable seal on top of the pump. Retighten and apply appropriate sealant if found necessary.
- 4. Check and clean submersible pumps' suction strainer.
- 5. Check discharge pipeline. De-clog/clean if necessary
- 6.Clean submersible pumps' nameplate using appropriate cleansing agent. Preserve readability/clarity of stipulated technical specifications of the subject pump therein.
- 7.De-rust and repaint pump's casing.
- 8.De-rust and repaint discharge pipe lines of the influent pumps at the equalization tank as well as of the tertiary pumps.
- 3. Submit monthly accomplishment reports and recommendations signed by the Maintenance Supervisor and Service Manager. Submit said reports together with the monthly billing.

### II. SPECIAL/OTHER CONDITIONS OF THE CONTRACT:

- 1. The CONTRACTOR shall be responsible for the supply of labor, technical expertise, supervision, provision of tools and instruments, repair equipment, office supplies and disposables such as waste rugs and other related items needed for the daily operation and proper maintenance of the Sewage Treatment Plant (STP) as specified in the above scope of work.
- 2. The PICC shall supply the materials and spare parts needed in the actual implementation of preventive and corrective maintenance services for the subject STP.
- 3. The CONTRACTOR shall perform the above-mentioned minimum detailed operation and maintenance services on the STP equipment /system on daily basis, seven (7) days a week, twenty eight (28) to thirty one (31) days a month for a period of one (1) year. The daily

work schedule/duty of personnel and the STP operation and maintenance servicing schedule shall be as follows:

Daily Schedule

Shift 1:6:00 AM to 2:00 PM Shift 2:2:00 PM to 10:00 PM Shift 3:10:00 PM to 6:00 AM

Scheduled Preventive Maintenance Services shall be performed from 8:00 AM to 5:00PM. Work schedule shall be adjusted from 5:00PM work time-out to "As-Required" to meet scheduled service/work completion for the day.

- 4. The CONTRACTOR shall assign a regular three (3) operators for the daily operation and maintenance services who are qualified to operate, maintain, trouble shoot and can implement emergency activation on all other spare or stand-by equipment/facilities especially on the electrical control system so as not to spoil the process operation of the subject STP. During scheduled process monitoring and inspection, a process engineer must be assigned for the purpose. A crew composed of one (1) service engineer, one (1) electrical technician and one (1) mechanical technician shall be assigned for the implementation of schedule preventive and emergency repair or corrective maintenance for the STP.
- 5. The CONTRACTOR's personnel for the scheduled process monitoring, operation and inspection shall have the following qualification and experience:
  - a. Process Engineer shall be a licensed chemical engineer with a minimum experience of two (2) years in supervisory capacity and technical works on Sewage Treatment Plant operation and maintenance. He/she must be an accredited Pollution Control Officer by the Department of Environment and Natural Resources (DENR) and the Laguna Lake Development Authority (LLDA).
  - b. Maintenance Supervisor/Service Engineer shall be a licensed mechanical or electrical engineer with a minimum experience of two (2) years in supervisory capacity and technical works on Sewage Treatment Plant operation and maintenance.
  - c. Electrical Technician shall be electrical engineering graduate or undergraduate or a graduate of two to three-year course on electrical technology with a minimum experience of two (2) years in technical works on Sewage Treatment Plant operation and maintenance.
  - c. Mechanical Technician shall be a mechanical engineering graduate or undergraduate or a graduate of two to three-year course on mechanical technology with a minimum experience of two (2) years in technical works on Sewage Treatment Plant operation and maintenance.
  - d. STP Operators shall be a graduate or under graduate of any four to five –year course in engineering or other technical course. He must have attended seminars/trainings on STP operation and maintenance and that, he is aware and knowledgeable on the environmental compliance requirements on report preparations, waste management, water testing/analysis especially on treated wastewater/effluent quality and standard parameters as set by the

Department of Environment and Natural Resources (DENR) and the Laguna Lake Development Authority (LLDA).

- 6. The CONTRACTOR's personnel to be assigned regularly to PICC shall subject to interview by the Pollution Control Officer and/or the Assistant Director for Mechanical Services Division and approved by the Director of PICC Technical Services Department.
- 7. The CONTRACTOR shall observe seven (7) days a week regular-duty schedule from Monday thru Sunday regardless of holiday. The CONTRACTOR shall assign personnel to operate, tender and maintain the STP facilities and equipment and accessories during holidays and non-working days without additional cost to the PICC.
- 8. The CONTRACTOR's personnel on each of the three (3) shift duty shall not leave the STP/PICC premises until such time the reliever arrives. One must secure first all the equipment in operation to ensure continuous treatment process as programmed in the PLC control system prior to turnover of post to his reliever and/or before leaving the STP/PICC premises.
- 9. The CONTRACTOR shall be responsible, with the assistance of the Pollution Control Officer (P.C.O.) of PICC for the process operation, periodic inspection and maintenance, taking of water sample and analysis, submission of quarterly Self-Monitoring Reports to the office of the DENR/LLDA. Notarial services and payment for the renewal of environmental permits and clearances shall be on PICC's account.
- 10. The CONTRACTOR shall harmoniously work together with the PICC personnel and shall always be ready to assist the P.C.O. in the preparation and submission of DENR/LLDA-required reports and application for any environmental permits or clearances in compliance with the Republic Act 9275, otherwise known as the Clean Water Act.
- 11. The following services (labor only) shall be part of the CONTRACTOR's responsibility:
  - 11.1. All services under regular operation and maintenance schedule and scope of works.
  - 11.2. Minor adjustment and calibration of electrical and electronic controls and other accessories. This is to include minor trouble shooting on the controllers and reprogramming the PLC in case of malfunctioning or erratic operation.
  - 11.3. Replacement of defective parts and accessories of any facility of the STP not requiring extensive services and manpower.
  - 11.4. Replacement of bearings of electric motor, and submersible pump assembly as well as their mechanical seal and valve packing if any.
  - 11.5. Minor painting, soldering, welding, brazing and fabrication works.
  - 11.6. Replacement of V-belts of the air blowers
  - 11.7. Servicing/removal of plastics and other solid wastes of all the tanks of the STP.
  - 11.8. Manual Chlorine feeding unto container.



- 12. The following services shall not be part of the CONTRACTOR's responsibility:
  - 12.1. Supply of materials like oil, grease, rubber gaskets, paints and related materials, paint brushes, cleaning agents, chlorine and spare parts
  - 12.2. Overhauling of compressor, pumps, gear boxes and components.
  - 12.3 Rewinding and reconditioning of motors, control gate valves, solenoid controllers, transformers, holding coils and other accessories.
  - 12.4. Major dismantling, installation, disassembly, assembly, alignment, and re-installation of equipment and accessories requiring additional personnel from the Contractor.
  - 12.5. Rewiring of electrical and/or electronic controls and accessories of the STP.
  - 12.6. Extensive leak repair or major de-clogging work on the Lift Station tanks and other tanks and pipe lines of the STP.
  - 12.7. Any works that necessitates additional personnel from the Contractor and other significant work not included under Operation and Preventive Maintenance services.
- 13. All preventive maintenance services and repair works shall be performed during working hours and within the shifting schedules.
- 14. In case of equipment breakdown, the CONTRACTOR's qualified officer and/or engineer shall immediately inspect and evaluate within 24 hours the cause and extent of damage and shall inform/advise promptly the PICC verbally followed by a detailed written report and recommendations for the needed restoration.
- 15. PICC's procurement of CONTRACTOR's services that are not part of the scope of work of the Contract shall go through the procurement process in accordance with the Government Procurement Law.
- 16. The CONTRACTOR's personnel to be assigned at PICC shall have no employee-employer relationship with PICC. The PICC shall not in any way responsible for claims for personal injury, wages and other employee benefits, and other claims for damages including death of its personnel and third parties brought in by the CONTRACTOR or by its employees for the performance of duties specified herein.
- 17. The CONTRACTOR shall provide its personnel with uniform that is acceptable to and approved by the PICC, being an international convention center.
- 18. The Contractor must submit NBI/Police Clearance of its personnel to be assigned at the PICC.

### III. TERMINATION OF CONTRACT

In addition to the above conditions, the contract/scope of services shall be terminated by PICC if the Contractor has rendered services below satisfactory performance rating for two consecutive or accumulated occasions or bi-monthly

periods.

Commission of any of the following shall be considered "poor performance or unsatisfactory performance":

- 1. Non-completion of bi-monthly services as required under Specific Activities.
- 2. One-time sabotage of operation or intentional shut down of the STP without valid cause.
- 3. Three (3) times failure to respond to an emergency trouble call within 24 hours from receipt of phone call on monthly basis.
- 4. Any rendition of works that resulted to three (3) written warnings on monthly period from the Office of Mechanical Services or Technical Services Department due to poor workmanship.

Further, the Contractor shall not be paid for any rendition of monthly services below satisfactory/poor performance rating. The Contractor shall be given written warning for the first periodic offense and shall be penalized immediately by way of non-payment for monthly services for the subject period.

**Statement of Compliance** 

Offerors must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered.

#### D. Performance Bond

	Amount of Performance Security	
Form of Performance Security	(Equal to Percentage of the Total	
	Contract Price)	
Cash or Cashier's/Manager's Check issued		
by a Universal or Commercial Bank.	Five percent (5%)	
Bank draft/guarantee issued by a Universal or Commercial Bank	Five percent (5%)	
Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security.	Thirty percent (30%)	

### E. PAYMENT

For the services to be undertaken by the CONTRACTOR in accordance with the PICC specifications enumerated above, the latter shall pay the former the contract amount on per month basis for one (1) year period, inclusive of Expanded Value Added Tax (E-VAT); payments shall be made upon submission of the monthly billing invoice and the monthly reports with latest Results Laboratory Analysis (ROLA) to the Mechanical Services Division, Technical Services Department who, in turn, shall issue a Certification of Acceptance and Full Satisfaction on Services delivered by the CONTRACTOR, subject to the usual government auditing and accounting rules and regulations.

No

# G. Schedule of Requirements

Item No.	Description	Contract Period
1		Contract duration or service delivery shall be for a period of one (1) year from, 2023 to, 2024

I hereby commit to comply and deliver all the above requirements in accordance with the above stated schedule.
Name of Company / Bidder
Signature over printed Name of Authorized Representative
Position
Date