



भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

भारतीय विमानपत्तन प्राधिकरण
लीलाबाड़ी विमानक्षेत्र
विद्युत अभियांत्रिकी विभाग

सं. सं.: भाविप्रा/लीलाबाड़ी/स.म.प्र.(अभि.-वि.)/एस. टी. पी./का.आ.-04/2022-23
Ref. No: AAI/LBR/AGM (E-E)/STP/WO-04/2022-23/ 536

दिनांक: 14.03.2023
Dt. 14.03.2023

मेसर्स पोलुकॉन टेक्नोलॉजीज लिमिटेड,
डी-39, सेक्टर-7, नोएडा-201301 (यूपी)
Mob: 09212526706 / 09369149225 / 09212506063
E-Mail: pollucon_noida@yahoo.in,
info@pollucon.org.

M/s. Pollucon Technologies Ltd.,
D-39, Sector-7, Noida-201301 (U. P)
Mob: 09212526706 / 09369149225 /
09212506063
E-mail: pollucon_noida@yahoo.in,
info@pollucon.org.

विषय :- “सप्लाई, इंस्टालेशन, टेस्टिंग, कमीशनिंग एंड संचालन ऑफ 25 KLD सीवेज ट्रीटमेंट प्लांट ऑफ SBR टेक्नोलॉजी इन्क्लुडिंग 07 इयर्स ओ एंड एम एट लीलाबाड़ी एयरपोर्ट”।

Subject: “Supply, Installation, Testing, Commissioning and Operationalization of 25KLD Sewage Treatment Plant of SBR Technology including 7 years O&M at Lilabari Airport.”

संदर्भ: 1) निविदा क्र. 2022_AAI_139113_1 के संबंध में दिनांक 31.01.2023 को खोली गई आपकी वित्तीय निविदा।
Ref.: 1) Your financial bid opened on 31.01.2023 i.r.o. E-Tender No. 2022_AAI_139113_1

महोदय/Dear Sir,

- 1- उल्लेखित कार्य हेतु आपकी ई-निविदा आपके द्वारा उद्धृत कुल रू. **1,05,11,495.00 (रू. एक करोड़ पांच लाख ग्यारह हजार चार सौ पंचानवे मात्र)** जीएसटी रहित की नियत मद दर पर अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से एतद् द्वारा स्वीकृत की जाती है, जो कि ई-निविदा की अनुमानित लागत रू. 1,03,50,574/- (रू. एक करोड़ तीन लाख पचास हजार पांच सौ चौहत्तर) जीएसटी रहित से **1.55% ऊपर** है।

Your E-Tender for the work mentioned above is hereby accepted on behalf of the Chairman, Airports Authority of India at the item rates negotiated by you totaling to **1,05,11,495.00** (Rupees One Crore Five Lakhs Eleven Thousand Four Hundred Ninety Five Only) (SITC cost Rs. 71,00,000/- plus Operation & AICMC Cost Rs. 34,11,495/-) (excluding GST) which is 1.55% above the estimated cost put to tender of Rs. 1,03,50,574/- (excluding GST) (Rupees One Crore Three Lakhs Fifty Thousand Five Hundred Seventy Four Only).

- 2- सहा. महाप्रबंधक (अभि.-विद्युत), भारतीय विमानपत्तन प्राधिकरण, लीलाबाड़ी विमानतल इस कार्य के इंजीनियरिंग प्रभारी होंगे। आपसे निवेदन है कि आप संविदा करार पर हस्ताक्षर करने एवं उसे पूरा करने हेतु **23.03.2023** तक सहा. महाप्रबंधक (अभि.-विद्युत), भारतीय विमानपत्तन प्राधिकरण, लीलाबाड़ी विमानपत्तन के कार्यालय में उपस्थित हो। संविदा करार रू 100/- (सौ रुपये) के न्यायिकेतर (नॉन - ज्युडिशियल) स्टॉप पेपर पर बनाया जायगा तथा स्टॉप पेपर की लागत आपके द्वारा वहन की जाएगी।

Asstt. Gen. Manager (Engg.-Elect.), Airports Authority of India, Lilabari Airport, Lilabari shall be the Engineer-In-Charge of the work. You are requested to attend the office of the Asstt. Gen. Manager (Engg.-Elect.), Airports Authority of India, Lilabari Airport, Lilabari by **23.03.2023** to sign and complete the contract agreement. The contract agreement shall be executed on a non-judicial stamp paper of value Rs. **100/- (Rupees One Hundred only)** and the cost of the stamp paper shall be borne by you.

Contd...2

- 3- आपके निविदा के साथ प्राप्त रु. 2,07,011/- (रुपये दो लाख सात हजार ग्यारह मात्र) की अग्रिम धन राशि को संविदा दस्तावेज के पृष्ठ 17 एन आई टी पर दी गई 1(A) के अनुसार सुरक्षा जमा के हिस्से के रूप में परिवर्तित कर दिया जायेगा। कृपया इस पत्र के जारी होने के 10 दिनों के अंदर शेष प्रतिभूति जमा के रूप में रु. 5,02,989/- (रुपये पांच लाख दो हजार नौ सौ नवासी मात्र) की राशि इस कार्यालय में जमा करा दें अन्यथा करारनामों की संविदा की सामान्य शर्त के पृष्ठ संख्या-17 पर दी गई शर्त 1ए के अनुसार उक्त राशि आपके बिल से काट ली जाएगी।
The earnest money amount of Rs. 2,07,011/- (Rupees Two Lakhs Seven Thousand Eleven only) received along with your tender has been converted as part of security deposit as per Clause no. 1(A) of GCC on page no. 17 of tender document. Please deposit **Rs. 5,02,989/- (Rupees Five Lakhs Two Thousand Nine Hundred Eighty Nine only)** towards balance security deposit within 10 (Ten) days from the date of issue of this letter, failing which, the same will be deducted as per condition of Clause No. 1(A) at Page No. GCC-17 of the tender document.
- 4- आपसे अनुरोध है कि आप ठेका श्रमिक (विनियम एवं उन्मूलन) अधिनियम 1970 के उपबंधों एवं ठेका श्रमिक (विनियम एवं उन्मूलन) केन्द्रीय नियमावली 1971, बालक श्रम (प्रतिषेध एवं विनियमन) अधिनियम 1986, निर्माण श्रमिकों (नियोजन और सेवा शर्त विनियमन) अधिनियम 1996, भवन और अन्य सन्निर्माण कर्मकार उपकर अधिनियम 1996 जैसा कि निविदा की ठेका सामान्य शर्तों के पृष्ठ क्र. 48 की शर्त 19 एवं केन्द्रीय एवं राज्य सरकार के नियमों में निर्दिष्ट है का अनुपालन करें।
You are requested to comply with the provision of Contract Labour (Regulation and Abolition) Act 1970 and Contract Labour (Regulation and Abolition) Central Rules 1971, Child Labour (Prohibition & Regulation) Act 1986, Construction Workers (Regulation of Employment and Condition of Service) Act 1996, Building and Other Construction Workers Welfare Cess Act 1996 as specified in Clause 19 on page no. 52 of GCC of tender and rules of Central and State Government.
- 5- आपको प्रबंधक (अभि.-विद्युत), भारतीय विमानपत्तन प्राधिकरण, लीलाबाडी विमानतल से तत्काल संपर्क करने का भी निर्देश दिया जाता है। आपको कार्यस्थल (साइट) सौंपने का कार्य उनके द्वारा किया जाएगा।
You are also directed to contact Manager (Engg.-Elect.), AAI, Lilabari Airport immediately who will arrange to hand over the site to you.
- 6- कृपया नोट करे की कार्य पूरा करने के लिए आपको **06 (छह) माह (02 माह वर्षा के मिलाकर)** का समय प्रदान किया जाता है। यह समय इस पत्र के जारी करने की तिथि के 10 वे दिन से माना जाएगा।
Please note that the time allowed for carrying out the work shall be **06 (Six) Months (including 02 months considered for rains)** and the same shall be reckoned from 10th day of issue of this letter.
- 7- इस ठेके से संबंधित किसी भी प्रकार के पत्र व्यवहार के लिए सह. महाप्रबंधक (अभि.-विद्युत), भा.वि.प्रा., लीलाबाडी विमानतल को संबोधित करें।
Any further correspondence in connection with the contract should normally be addressed to the Asstt. Gen. Manager (Engg.-Elect.), Airports Authority of India, Lilabari Airport, Lilabari, North Lakhimpur, Assam-787051.
- 8- कृपया इस पत्र की प्राप्ति की सूचना दें तथा इसके साथ अनुलग्न अनुप्रति पर हस्ताक्षर करके टोकन के प्रतिग्रहण के रूप में अधोहस्ताक्षरी को वापस भेज दें।
Please acknowledge the receipt and return the duplicate copy of this letter enclosed herewith after signing it to the undersigned as a token of acceptance.
- 9- यदि कोई विसंगति पाई जाती है तो अंग्रेजी भाषा ही मान्य होगी।
In case any discrepancy is found between Hindi & English version, then English version will be taken as correct.

Encls: Schedule of Quantities (Ten Pages).

Yours Faithfully

(नवीन कुमार मारवाह)/(Naveen Kumar Marwaha)

सह. महाप्रबंधक (अभि.-विद्युत)

Asst. Gen. Manager (Engg.-Elect.)

भा.वि.प्रा., लीलाबाडी विमानतल -787051

AAI, Lilabari Airport -787051.

कृते तथा ओर से, अध्यक्ष,

For and on behalf of Chairman,

भारतीय विमानपत्तन प्राधिकरण.

Airports Authority of India

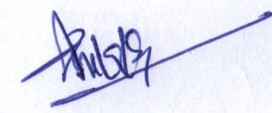
Airports Authority of India
Electrical Engineering Wing
Lilabari Airport

SCHEDULE OF QUANTITIES

Name of work:- Supply, Installation, Testing, Commissioning and Operationalization of 25KLD Sewage Treatment Plant of SBR Technology including 7 years O&M at Lilabari Airport.

Tender ID: 2022_AAI_139113_1

Sr.No.	Item Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
	SH : I (SITC Work)				
1	Design, Engineering, Supply, Installation, Testing, Commissioning and Operationalization of 25KLD Packaged Type Sewage Treatment Plant of Sequential Batch Reactor (SBR) Technology at Lilabari airport including Site inspection, Process design, preparation and submission of complete Layout Drawings, Hydraulic Drawings and Construction Drawings considering the following SOQ, Scope of work and as per Technical specification of the contract, obtaining initial and final NOC from State Pollution Control Board (if required) etc complete as required.				
1.1	Design, Drawing, Construction of Container Plant Room (Operator Cabin) having size of minimum 3000 mm X 4000 mm x 3000mm (H) including 1 no. Door and door panel having size of 1000mm (width)x 2000mm(height), 2 nos Windows each having size of 1000mm x1000mm with window panel, fabrication with minimum 3 mm corrugated MS Sheet and minimum 5 mm thick Angles/Channels, Rain proof, all finishing works such as Painting inside and outside walls, Roof with plastic emulsion paint, CC flooring etc including provision for fixing required electric wiring, LED fittings, fan, sockets, complete as directed by the Engineer-in-charge. The necessary provision for cable entry for incoming and outgoing power cables, control cables, data cables, earthing, fixing arrangement of wall mounting / self standing control panel to be incorporated. The installation shall complete with proper locking arrangement & handles etc. on door and windows, finishing, cleaning etc complete as required. The appropriate foundation shall be provided based on the structure design. The design of Foundation and Structure shall be vetted from any Govt. Engineering Colleges/NIT/IIT etc. The cost is inclusive of all the above and nothing extra shall be paid.	1	Job	2,30,000.00	2,30,000.00



Sr.No.	Item Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
1.2	Design, Drawing, Construction of underground RCC Collection Tank of 6 m3 holding capacity with depth of 2 m (1.5 m liquid depth + 0.5 m free board) below invert level , Square type with inside dimension of 2M x 2M, covered from the top with RCC with manhole having MS cover of approx. 500mm x 500 mm for maintenance purpose and provisions for fixing of Level Switchs, provisons for keeping 02 Nos. submersible pumps, Providing proper lifting arrangment to lift the the submersible pumps fabricated from GI angle/GI pipe, Guide pipe and Chain made from SS 304 and providing suitable foundation of the tank.The structural design & foundation of Collection Tank shall be vetted from any Govt. Engineering College/NIT/IIT.	1	Job	3,50,000.00	3,50,000.00
1.3	Design, Supply & Installation of Equalisation Tank fabricated from MS with FRP lining/coating inside the Chamber of 14 m3 holding capacity with depth of 3 m (2.5 m liquid depth + 0.5 m free board), 2.8 m (L), x 2 m (W) alongwith seprate Bar Screen Chambers-2nos (one for Fine Bar Screen and the other for Coarse Bar Screen) fabricated from MS with FRP lining/coating inside the Chamber having inside measurement of 1.5m (L)x 0.5m(W) x1m(D) each, Seperate Oil & Gresse Trap Chamber fabricated from MS with FRP lining/coating inside the Chamber having inside dimension 1.5 m (L) x 0.8 (W) x 2.5 m (D), Seprate Grit Chamber fabricated from MS with FRP lining/coating inside the Chamber having inside dimension 1.5 m (L) x 0.8 (W) x 2.5 m (D). The Equalisation tank should have provisions for fixing of Level Switches with necessary Puddle Flanges. Sewage will move from Bar Screen Chamber to the Equalization Tank through gravitational force only.	1	Job	9,00,000.00	9,00,000.00
1.4	Design, Supply & Installation of SBR Tank fabricated from MS with FRP lining/coating inside the Chamber of 35 m3 capacity having inside dimensions of 1.85m (L) x 3.5 m (W) x6.0 m(H) (liquid depth 5.5M +0.5 M Free Board). The tank shall be suitable to fit 2 nos of Decanting System and fine bubble type diffusers for the reaction part.	1	Job	12,00,000.00	12,00,000.00
1.5	Design, Drawing, Construction of RCC Platform of minimum size 13000mm (L) x 11000 mm (W) x 450 mm (H) with roofing made out of 3mm GI corrugated sheet and 5mm thick Angle Iron/Channels to cover the STP of 25KLD capacity including Pumps, Blowers, Tanks and all other equipments including painting etc. as required. The foundation design shall be vetted through any Govt. Engineering Colleges/NIT/IIT.	1	Job	4,63,000.00	4,63,000.00
	MECHANICAL AND ELECTRICAL EQUIPMENT				
1.6	Supply and fixing of 2 Nos of Bar Screens of SS-304 of spacing of 10 mm and 6 mm respectively for Coarse and Fine Bar Screen. The Bar Screens shall be provided with Hand Rake suitable for lifting purpose. Bar Screens to be fitted at the Bar Screen chambers of the Equilaztion Tank.	1	Job	60,000.00	60,000.00

Sr.No.	Item Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
1.7	Supply & Installation of Non Clog Type Submersible Pump (cutter type)- 02 Nos , Solid Passage of 35 mm max, Discharge of minimum 7 m ³ /hr, Head of 10 mtrs, minimum HP-1, RPM-2900, Motor body and shaft-SS, working voltage 3 phase, 415 +/-10% volts, 50Hz, Continuous Duty, Class 'F' insulation placed at inlet of Collection Tank to lift raw sewage from Collection Tank to Screen Chamber, providing suitable length of 40mm UPVC pipe on delivery connection with flange, SS bolts and nuts, gasket, Water tight power supply connection, earthing connection, interlinking and common delivery lines with 40 mm UPVC pipe, UPVC valves, Non Return Valves, Pressure Gauges with Isolation Valve including all necessary accessories etc. and as per Technical specification of the Tender Document complete as required. (For sewage transfer from Collection Tank to Bar Screen Chamber)	1	Job	80,000.00	80,000.00
1.8	Supply & Installation of Sewage Transfer Pump for transferring Sewage from Equalization Tank to SBR Tank . The pumps should be 2 nos (1W + 1S) Non-submersible Horizontal Centrifugal type. Capacity of pumps - 4 M ³ /hr and 10 m head. The solid handling capacity of the pumps should be 10 mm, minimum HP-1, RPM-2900, Motor body and shaft-CI, working voltage 3 phase, 415 +/-10% volts, 50Hz, Continuous Duty, Class 'F' insulation, providing suitable length of 25mm UPVC pipe on suction & delivery line, connection with flange, SS bolts and nuts, gasket, power supply connection, earthing connection, interlinking and UPVC valves, Non Return Valves, Pressure Gauges with Isolation Valve including all necessary accessories etc. and as per Technical specification of the Tender Document complete as required.	1	Job	80,000.00	80,000.00
1.9	Supply & Installation of complete Floating type Decanter Mechanism of 15Cum capacity suitable for SBR Tank including moving weir arm fabricated from SS 304 with suitable drive, Scum Guard, Down comer & supports with PLC controlled Auto Operation, motorized valves with by-pass arrangement, local control box with manual operation selection, push buttons, electrical and communication cables, wiring, communication to main PLC by RS 485/Ethernet etc. as required.	2	Jobs	4,50,000.00	9,00,000.00

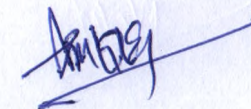
Amir

Sr.No.	Item Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
1.10	Supply & Installation of 63m ³ /Hr capacity (minimum) of Twin Lobe Rotary Air Blower -02 Nos (1 W + 1S) , discharge pressure 5000 mmwc, 'V' belt or flexible couple drive, suitable capacity motor working on 415 +/- 10% volts, 3 phase, 50Hz with necessary enclosure for protecting the unit from rain water for fresh air supply to SBR Tank and Equalization Tank. Supplying and providing air grid distribution system with non clog type fine bubble diffusers for SBR tanks and separate Air Grid Distribution for Equalization Tank. Air distribution shall be comprise of isolation valves, pipe droppers, laterals, interlinking etc. including Mild Steel Epoxy Painted (MSEP) pipeline with all fittings, supports, clamps, flanges, non clog, modular type air dispersion system capable of handling 3-5 cfm of air to the required depth with necessary supports, valves, with all necessary accessories, operation of aeration system with PLC based control etc. complete as required.	1	Job	2,80,000.00	2,80,000.00
1.11	Supply & Installation of Centrifugal Monoblock Filter Feed Pump - 02 Nos (1W+1S) to transfer water from SBR tanks to filters with following specifications a) Discharge of 3 m ³ /hr at 35 meter head (Minimum), b) Minimum 1.5HP motor capacity, c) Impeller-Cast iron, d) Motor body-Cast iron, e) Power supply-415v+/-10%, 3-phase, concrete foundation, necessary enclosure for rain protection, providing individual 25 mm UPVC suction lines, interlinking and common delivery line upto Multi Grade Filter with UPVC piping, UPVC butterfly valves (for both suction & discharge), UPVC Non Return Valves, Pressure Gauges with isolation including all necessary accessories etc complete as required.	1	Job	80,000.00	80,000.00
1.12	Supply & Installation of Pressure Sand Filter made of Mild Steel Epoxy Painted (MSEP) of minimum dia 0.60m and 1.875m height of capacity not less than 3 m ³ /hr at 3 kg/cm ² pressure with max pressure rating of 3.5 kg/cm ² pressure vessel, necessary foundation, along with 50 mm UPVC frontal pipeline, necessary valves, interlinking pipes, delivery line upto Activated Carbon Filter, drain line upto collection tank, Pressure Gauge with isolation, Air Release, provision of back wash arrangement, valves and all necessary accessories complete with filtering media , support media etc as required.	1	Job	1,00,000.00	1,00,000.00
1.13	Supply & Installation of Activated Carbon Filter made of Mild Steel Epoxy Painted (MSEP) of minimum dia 0.60m and 1.875m height of capacity not less than 3 m ³ /hr at 3.0 kg/cm ² pressure with max pressure rating of 3.5 kg/cm ² pressure vessel, necessary foundation, 50mm UPVC frontal pipeline, necessary valves, interlinking pipes for delivery line upto Treated water tank, drain line upto collection tank, Pressure Gauge with isolation valve, Air Release, provision of back wash arrangement, valves, all necessary accessories complete with filtering media, support media etc as required.	1	Job	1,20,000.00	1,20,000.00
1.14	Supply & Installation of UV System of capacity 1.5 cum/hr, fabricated from SS for 25KLD SBR technology Sewage Treatment Plant including wiring, all accessories complete etc as required.	1	Job	1,00,000.00	1,00,000.00

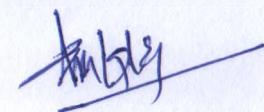
Ambley

Sr.No.	Item Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
1.15	Supply & Installation of 5000 Ltr capacity HDPE Clarified Water Tank including foundation, inlet connection from SBR tanks, outlet connection to Filter feed pumps, inter connection with isolation valve, drain connections with valves and all accessories etc. complete as required.	2	Job	80,000.00	1,60,000.00
1.16	Supply & Installation of 5000 Ltr capacity HDPE Treated Water Tank including foundation, inlet connection to UV System, outlet connection to Treated water pumps, inter connection with isolation valve, drain connections with valves and all accessories complete etc as required.	2	Job	80,000.00	1,60,000.00
1.17	Supply, Installation of Centrifugal Monoblock Treated Water Pump - 02 Nos (1 W + 1 S) to transfer water from treated water tank with following specifications a) Discharge of 2.5 m3/hr at 25 meter head (Minimum), b) minimum 1HP motor capacity, c) Impeller-Cast iron, d) Motor body-Cast iron, e) Power supply-415v+/- 10%, 3-Phase, concrete foundation, necessary out door enclosure for rain protection, providing individual UPVC suction lines, interlinking and common delivery line upto 1mtr with UPVC piping, UPVC Butterfly Valves (for both suction & discharge), UPVC Non Return Calves, Pressure Gauges with isolation including all necessary accessories etc as required.	1	Job	70,000.00	70,000.00
1.18	Supply, Installation of Sludge Feed Pump Screw type -02 Nos. (1W+1S) of capacity of 1m3/hr & 50 mwc for 25KLD Sewage Treatment Plant SBR technology with following specifications a) Minimum motor capacity- 0.5HP, b) Impeller-Cast iron, c) Motor body-Cast iron, d) Power supply-415v+/- 10%, 3-Phase, concrete foundation, necessary out door enclosure for rain protection, providing individual UPVC suction lines from Sludge holding Tank, interlinking and common delivery line to Filter Press, valves, Pressure Gauges with isolation, including all necessary accessories etc as required.	1	Job	60,000.00	60,000.00
1.19	Design, Supply & Installation of Sludge Holding Tank fabricated from MS with FRP lining/coating inside the Chamber with 1.5m3 volume capacity including foundation, inlet connection from SBR Tank through Sludge feed Pumps, outlet connection, inter connection with isolation valve and all accessories complete etc as required.	1	Job	30,000.00	30,000.00
1.20	Supply, Installation of Manual Filter Press for 25 KLD SBR technology Sewage Treatment Plant, concrete foundation, enclosure, drain pipe to collection tank etc complete as required.	1	Job	2,00,000.00	2,00,000.00

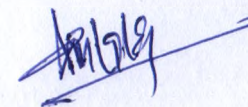
Sr.No.	Item Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
1.21	Supply & Installation of Level Switches in Collection Tank, Equalisation Tank, Clarified Water Tank and Treated Water Tank for Low & High Level alongwith suitable Wiring, Connection & Interconnection as required	1	Job	10,000.00	10,000.00
1.22	Supply & Installation of 1-1/2 inch Magnetic Flow Water Meter for Treated Water Delivery Line including isolation valves, sampling point and all accessories etc as required.	1	Job	60,000.00	60,000.00
1.23	Supply & Installation of Flow Water Meter suitable for Raw Sewage Inlet Line of collection tank including isolation valves, sampling point and all accessories etc. complete as required.	1	Job	50,000.00	50,000.00
	ELECTRICAL WORKS				
	A) Fabrication, Supply, Installation, testing & Commissioning of Compartmentalised type PLC based Motor Control Center (MCC) Panel with all accessories for Auto/Manual On/Off control of entire 25 KLD Sewage Treatment Plant of SBR technology, fabricated from 1.6mm CRCA sheet, totally enclosed, IP 54, floor mounted/wall mounted, powder coated, fabricated with following accessories:- 1) Incomer - 4pole MCCB 100Amp, 25KA - 2 nos. with electrical and mechanical interlocking. 2) 4-Pole AI Bus Bar 150 amps -1 set. 3) Outgoings: (a) 32 Amps 3pole MCB, Contactors, ON/OFF Push Button, OLR, SPP for SBR Blowers -2nos, (b) 25 Amps 3pole MCB, Contactors, ON/OFF Push Button, OLR, SPP for Submerisable Sewage Pumps-2nos, (c) 25 Amps 3pole MCB, Contactors, ON/OFF Push Button, OLR, SPP for Sewage Feed Pumps- 2nos, (d) 25Amps, 3 pole MCB, Contactors, ON/OFF Push Button, OLR, SPP for Filter Feed Pumps -2nos, (e) 25 Amps 3pole MCB, Contactors, ON/OFF Push Button, OLR, SPP, for Treated Water Pumps -2nos. (f) 25 Amps 3pole MCB, Contactors, ON/OFF Push Button , OLR, SPP for Sludge Feed Pumps -2nos. (g) 25 Amps 2pole MCB for internal/external lighting- 3nos. (h) 25 Amps 3 Pole MCB (Spare) - 3 nos.				



Sr.No.	Item Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
1,24	(B) Supply and laying of required numbers and length of XLPE insulated, PVC sheathed Copper conductor cable including cable glanding, GI Cable tray, fixing of cables on Tray/Wall/Surface etc. as required for following Pumps / equipments: a) 3C X 6sqmm cable for blower motor-2 Nos. b) 3C X 6sqmm submersible cable for submersible pumps-2 Nos. c) 3C X 6sqmm cable for Sewage Feed Pumps -2 Nos. c) 3C X 6sqmm for Filter Feed Pumps-2 Nos. d) 3C X 6sqmm cable for Treated Water Pumps -2 Nos. f) 3C X 6sqmm cable for Sludge Feed Pump -2 No. (C) 8 SWG GI Wire to all individual motors from main panel for earth connections - 2 runs each. (D) 'ON' Red coloured LED Indicator for each outgoing with protection MCBs . (E) R,Y,B LED indication (incomer side) with protection MCBs - 2 sets. (F) 96mmx96mm Digital Voltmeter with Selector Switch including interconnections -2 nos. (G) 96mmx96mm Digital Ammeter with Selector Switch including interconnections and 3 nos. CT's of suitable rating - 1set (H) Power supply and control wiring to Motorized Valves, All Pumps, Blowers, UV System etc. complete as required. (Note: Quoted rate shall include SITC of MCC panel, Supply and Laying of armoured XLPE copper cables on GI trays of suitable size, Supports, Cable Glands, Providing and Laying of 2 nos 8 SWG GI Wire for earthings to all equipment, Providing and laying of all Communication and Control cables, PLC etc. complete as required.)	1	Job	2,00,000.00	2,00,000.00
1.25	Supply & Installation of PLC Software System including all Hardwares and Softwares to Control the entire 25KLD SBR STP including all the pumps and blowers etc. in Auto/Manual mode. The automation system includes automatic valves with 4.3" HMI display, process and operator software with dynamic flow chart displayed on monitor, Furniture, UPS, Computer etc complete as required.	1	Job	1,50,000.00	1,50,000.00
1.26	Earthing with G.I. earth plate 600 mm x 600 mm x 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. with charcoal/ coke and salt as required.	2	Each	10,000.00	20,000.00
1.27	Providing and fixing 25 mm x 5 mm G.I. Strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and refilling etc. as required.	20	Meter	200.00	4,000.00
1.28	Providing and fixing 25 mm x 5 mm G.I. strip on surface or in recess for connections etc. as required.	10	Meter	100.00	1,000.00

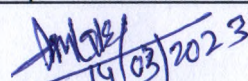


Sr.No.	Item Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
1.29	Providing Internal & External Electrical Installations inside the Operator Cabin, Inside Covered Shed of STP and outside of STP with suitable size Copper conductor, PVC insulated, FRLS wires/cables as per CPWD specifications, ISI marked MS conduiting on surface i/c painting & providing Modular type switch board, Modular type Switches/Sockets along with supply and installation of following fittings including all accessories etc. complete as required. (a) LED Tube light Fittings (2000lm, Efficacy ≥ 100 lm/W): 6 nos. (b) 400 mm sweep Wall mounted fan: 1no , (c) 6/16A Sockets: 4nos , (d) IP 65 Outdoor LED Light Fitting (4500lm, Efficacy ≥ 100 lm/W) - 4 nos. (e) Double Door SPN DB with required numbers of MCBs- 1 set	1	Job	50,000.00	50,000.00
1.30	Supply of 3.5C X 50 sq.mm. Al conductor, XLPE insulated, PVC sheathed, armoured power cable of 1.1 kV Grade conforming to IS:7098 Part-I amended upto date etc. complete all as required and as specified in Technical Specifications.	850	Meter	500.00	4,25,000.00
1.31	Supply of 63 mm dia (OD- 63 mm and ID- 51mm nominal) ISI marked DWC HDPE pipe along with all accessories like socket, bend, couplers and plug etc. conforming to IS:16205 Part-24 or amended complete as required and as specified in Technical Specifications.	800	Meter	200.00	1,60,000.00
1.32	Laying of one number 63 mm dia DWC HDPE pipe complete with fittings, cutting, jointing etc. direct in ground at a depth of 75 cm including excavation and refilling the trench etc. complete as required.	400	Meter	200.00	80,000.00
1.33	Laying of one number 63 mm dia DWC HDPE pipe complete with fittings, cutting, jointing etc. in the existing trench complete as required.	400	Meter	200.00	80,000.00
1.34	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of size 3.5C x 50 sq mm. in the existing RCC/ HUME/ METAL/ HDPE/DWC HDPE Pipe /Open Trench etc as required.	850	Meter	100.00	85,000.00
1.35	Supplying & making End termination with Brass compression gland and Aluminium Lugs for 3-1/2 x 50 sq mm PVC insulated PVC sheathed /XLPE Aluminium conductor cable of 1.1 KV grade as required.	4	Each	500.00	2,000.00



Sr.No.	Item Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
1.36	Testing, Commissioning and Operationalization of complete Sewage Treatment Plant including all the accessories/equipments in Manual/Auto mode after providing sewage by AAI and conducting trial run for a period of minimum One month. During this period contractor shall arrange all required manpower and materials for the trial run. The date of completion of SH-I will be recorded after completion of trial run and submission of treated water test certificate fully meeting the tender criteria and pollution norms along with all documents as per scope of work.	1	Job	1,00,000.00	1,00,000.00
	SUB TOTAL OF SH : I				71,00,000.00
	SH:II (Operation & AICMC)				
1	Operation and Routine Maintenance of complete 25 KLD Swage Treatment Plant as provided under SH-I after completion of work for 07 years on all days including sunday and holidays by engaging following manpower along with providing required tools & consumables such as cotton waste, greese, UV lamp, Media, Chemicals and safety materials such as shoes, gloves, mask etc., monitoring and maintaining the required registers, monthly testing and submitting the treated water test certificate from the State govt approved/authorised Laboratories as per technical specification etc. complete as required. i) Technician cum Operator (Skilled) working in general shift duty (8 hr) on 07 days a week - 1 no.				
1.1	First year after completion of work (4.95% of SITC cost)	1	Year	3,51,450.00	3,51,450.00
1.2	Second year after completion of work (Yearly 0% cumulative enhancement on 1st year cost shall be applicable for 2nd year)	1	Year	3,51,450.00	3,51,450.00
1.3	Third year after completion of work (Yearly 0% cumulative enhancement on 2nd year cost shall be applicable for 3rd year)	1	Year	3,51,450.00	3,51,450.00
1.4	Fourth year after completion of work (Yearly 0% cumulative enhancement on 3rd year cost shall be applicable for 4th year)	1	Year	3,51,450.00	3,51,450.00
1.5	Fifth year after completion of work (Yearly 0% cumulative enhancement on 4th year cost shall be applicable for 5th year)	1	Year	3,51,450.00	3,51,450.00
1.6	Sixth year after completion of work (Yearly 0% cumulative enhancement on 5th year cost shall be applicable for 6th year)	1	Year	3,51,450.00	3,51,450.00
1.7	Seventh year after completion of work (Yearly 0% cumulative enhancement on 6th year cost shall be applicable for 7th year)	1	Year	3,51,450.00	3,51,450.00
2	All Inclusive Comprehensive Maintenance of 25 KLD STP as provided under SH-I for the period of 05 years after completion of DLP of 02 years including manpower, material, spares, transportation as per technical specification etc. complete as required.				
2.1	First year AICMC after completion of DLP of 02 years (2.33% of SITC cost)	1	Year	1,65,430.00	1,65,430.00
2.2	Second year AICMC after completion of DLP of 02 years (Yearly 7% cumulative enhancement on 1st year cost shall be applicable for 2nd year)	1	Year	1,77,010.10	1,77,010.10

Sr.No.	Item Description	Qty	Unit	Rate (Rs.)	Amount (Rs.)
2.3	Third year AICMC after completion of DLP of 02 years (Yearly 7% cumulative enhancement on 2nd year cost shall be applicable for 3rd year)	1	Year	1,89,400.81	1,89,400.81
2.4	Fourth year AICMC after completion of DLP of 02 years (Yearly 7% cumulative enhancement on 3rd year cost shall be applicable for 4th year)	1	Year	2,02,658.86	2,02,658.86
2.5	Fifth year AICMC after completion of DLP of 02 years (Yearly 7% cumulative enhancement on 4th year cost shall be applicable for 5th year)	1	Year	2,16,844.98	2,16,844.98
	SUB TOTAL OF SH :II (O & M)				34,11,494.75
	Total of SITC + O & M Cost				1,05,11,494.75
	SAY				1,05,11,495.00


 (Naveen Kumar Marwaha)
 Asstt. Gen. Manager (E-E)
 AAI, Lilabari Airport