



बीकानेर नगर निगम

नगर निगम मार्ग, बीकानेर (राजस्थान) फ़ैक्स नं :- 0151-2226906, फ़ोन नं:- 0151-2226902, 2226905,
Email Address :- bikanernagarnigam@gmail.com, Website :- www.bikanermc.org

क्रमांक/निर्माण/2022-23/ 10508-518

दिनांक 07/11/22

(ई-निविदा सूचना 10508 2022-23)

बीकानेर नगर निगम के नगरीय क्षेत्र में कार्य "Operation and maintenance of SPS, Public Park Bikaner & Machinery system for performance of work included in the scope of work and other terms & conditions and technical specification as per tender document including all major/minor repair & maintenance in scope of tender and regular desilting of chamber, wet wells, screens etc. as per requirement" की निविदा हेतु पंजीकृत फर्मों से निर्धारित प्रपत्र में ई-प्रोक्योरमेंट प्रक्रिया से ऑनलाईन निविदाएँ आमंत्रित की जाती हैं। निविदा से सम्बन्धित विवरण राज्य सरकार की ई-प्रोक्योरमेंट पोर्टल <http://eproc.rajasthan.gov.in>, www.sppp.rajasthan.gov.in तथा नगर निगम, बीकानेर की वेबसाइट www.bikanermc.org पर देखी व डाउनलोड की जा सकती हैं।

निविदा का कुल अनुमानित लागत:- 53.98 लाख (5398084/-)

आयुक्त
नगर निगम बीकानेर

क्रमांक/निर्माण/2022-23/10508-518 दिनांक 07/11/22
प्रतिलिपि:-

- माननीय महापौर महोदया, नगर निगम बीकानेर।
- श्रीमान् निदेशक, राजस्थान संवाद, सूचना एवं जन सम्पर्क विभाग को प्रेषित कर निवेदन है कि उक्त निविदा का प्रकाशन:-
 - एक मुख्य क्षेत्रीय दैनिक सामाचार पत्र में।
 - एक राज्य स्तरीय मुख्य दैनिक सामाचार पत्र में RTPP नियमानुसार प्रकाशित करने का श्रम करावें एवं Intimation नगर निगम बीकानेर की ई-मेल आईडी nagarnigambikaner@gmail.com, पर भिजवाने का श्रम करें।
- ओसवाल डाटा, बीकानेर नगर निगम को भेजकर लेख है कि निविदा सूचना को नगर निगम की वेबसाइट पर प्रकाशन करावें।
- नोटिस बोर्ड बीकानेर नगर निगम।

आयुक्त
नगर निगम बीकानेर



बीकानेर नगर निगम

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क्रमांक / निर्माण / 2021-22 / 10508-18

दिनांक... 07/11/22

(ई-निविदा सूचना 2022-23)

बीकानेर नगर निगम के नगरीय क्षेत्र में कार्य "Operation and maintenance of SPS, Public Park Bikaner & Machinery system for performance of work included in the scope of work and other terms & conditions and technical specification as per tender document including all major/minor repair & maintenance in scope of tender and regular desilting of chamber, wet wells, screens etc. as per requirement" की निविदा हेतु पंजीकृत फर्मों से निर्धारित प्रपत्र में ई-प्रोक्योरमेंट प्रक्रिया से ऑनलाईन निविदाएँ आमंत्रित की जाती हैं। निविदा से सम्बंधित विवरण राज्य सरकार की ई-प्रोक्योरमेंट पोर्टल <http://eproc.rajasthan.gov.in>, www.sppp.rajasthan.gov.in तथा नगर निगम, बीकानेर की वेबसाइट www.bikanermc.org पर देखी व डाउनलोड की जा सकती हैं।

1	निविदा कार्य	"Operation and maintenance of SPS, Public Park Bikaner & Machinery system for performance of work included in the scope of work and other terms & conditions and technical specification as per tender document including all major/minor repair & maintenance in scope of tender and regular desilting of chamber, wet wells, screens etc. as per requirement"
2	निविदा की कुल अनुमानित लागत	53.98 लाख (5398084/-)
03	कार्य की कुल समय अवधि	02 वर्ष
3	ऑनलाईन निविदा फॉर्म मिलने की तिथि	दिनांक 09/11/2022 को 9.30 बजे से 18/11/22 को 18:00 तक
04	ऑनलाईन निविदा फॉर्म जमा कराने की तिथि	दिनांक 09/11/2022 को 9.30 बजे से 18/11/22 को 18:00 तक
05	ऑनलाईन तकनीकी निविदा खोलने की तिथि	दिनांक 21/11/2022 को दोपहर 4 बजे के बाद
06	ऑनलाईन वित्तीय बिड खोलने की तिथि	तकनीकी बिड में सफल फर्मों की ही वित्तीय बिड खोली जायेगी जिसके लिये अलग से सूचना दी जायेगी

आयुक्त

नगर निगम बीकानेर

दिनांक... 07/11/22

क्रमांक / निर्माण / 2021-22 / 10508-18

प्रतिलिपि:-

1. श्रीमान् निदेशक एवं सयुक्त सचिव, स्वायत्त शासन विभाग, राजस्थान जयपुर।
2. श्रीमान् महापौर महोदय, नगर निगम बीकानेर।
3. श्रीमान् जिला कलक्टर महोदय, बीकानेर।
4. श्रीमान् उप महापौर, नगर निगम बीकानेर।
5. उपायुक्त, नगर निगम बीकानेर।
6. मुख्य लेखाधिकारी, नगर निगम बीकानेर।
7. कोषाधिकारी, बीकानेर।
8. सुरक्षित पत्रावली।

आयुक्त

नगर निगम बीकानेर



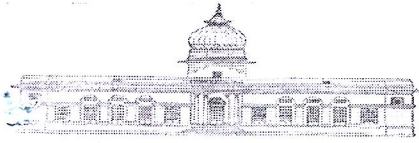
NIT No. 208/2223

Municipal Corporation, Bikaner.

Name of Work: - Operation and maintenance of SPS, public park Bikaner & Machinery system for performance of work included in the scope of work and other terms & conditions and technical specification as per tender document including all major/minor repair & maintenance in scope of tender and regular desilting of chamber, wet wells, screens etc. as per requirement for 2 year.

Section	Description	
1	Eligibility Conditions	Technical Bid
2	General Condition of Contract	
3	Special Condition of Contract	
4	Technical Specification	
5	Financial Bid	

7



Municipal Corporation , Bikaner.

Section1:- Eligibility conditions(Technical Bid)

The bidders shall be required to fulfill the following eligibility criteria, the requisite documents should be submitted in the technical bid in proof of qualifying the eligibility conditions, and otherwise the technical bid shall be rejected.

- 1) Tender Fee 2000/-, Processing Fee 1000/- & Earnest money (Bid Security) 2% (For registered in other department, Rajasthan) or 0.5% (For registered in local self-department, Rajasthan) of Project cost (5398084/-) will be submitted online through Website of Nagar Nigam Bikaner "www.bikanermc.org." of Pay online option. The scan copy of proof of payment in form of Receipt/screenshot/payment transfer advice etc. should be uploaded along with technical bid. Any documents in offline mode will not be accepted by the office of Nagar Nigam Bikaner
- 2) The bidder should be in business work O&M of SPS (Sewerage Pumping Station) in any government/ local self GOVT. in India. The related 24 Months experience certificates should be submitted in proof of the experience from any local self-government body/semi government body or government institution in India. The certificates should be signed by the officer not below the rank of Executive Engineer or deputy commissioner.
- 3) The bidder should have average annual turnover of the three financial years not less than the 1/3rd of the tender cost. (Upload Certificate issued by C.A.)
- 4) Firm Registration Copy: -Bidder should be registered as AA, A, B class contractor in local self-department, Rajasthan, or AA or A in other department like PHED, PWD or irrigation department of Rajasthan state.
- 5) Declaration by the Bidder in Compliance of Section 7 & 11 of the Act. (Undertaking on 100/- stamp as per attached format no. 01)
- 6) Undertaking for not Black listed firm in any Govt./semi-Govt. Department (on 100/- stamp as per attached format no. 02)
- 7) Undertaking "A" on 100/- stamp as per attached format no. 03
- 8) Labor licence under act 1970 copy
- 9) GST Registration copy
- 10) PAN Card copy

9

Note: The bidder will have to submit separate- separate stamp for condition no. 6,7 and 8 and also upload signed copy of tender document (every page.) otherwise the technical bid shall be rejected.

SECTION 2 General condition of the contract

- 2.1 Condition of Eligibility:** -Tender document shall be available on website <http://eproc.rajasthan.gov.in>, www.sppp.rajasthan.gov.in, www.bikanermc.org The conditions of eligibility of bidders are mentioned in section. The financial bids of only the qualified bidders shall be open.
- 2.2 Contract agreements:** - The successful bidder will have to enter into a contract agreement with department on a non-judicial stamp paper after the acceptance in the tender within 10 days of letter of intent/any other intimation in this regard.
- 2.3 Tender fee, Processing fee & Earnest Money:** -Tender Fee, **Processing Fee&Earnest money** (Bid Security) will be submitted online through Website of nagar Nigam Bikaner www.bikanermc.org of **Pay online option**. Tender fee and processing fee is not refundable. The scan copy of proof of payment in form of Receipt/screenshot/payment transfer advice etc. should be uploaded along with technical bid. Any documents in offline mode will not be accepted by the office of NAGAR NIGAM BIKANER. The earnest money of the bidders will be returned to them as early as possible after the award of the contract for successful bidder or expire of the validity period of the offer, whichever is earlier.
- 2.4 Performance Guarantees:** - The successful bidder will have to deposit performance guarantee @ 2.5 % of the total amount of tender cost as bank draft or bank guarantee of a scheduled bank acceptable by the corporation in favor of **COMMISSIONER, MUNICIPAL CORPORATION, BIKANER** payable at Bikaner. The performance guarantee shall be valid up to contract closer date i.e. two year the date of start mentioned in the letter of acceptance. if contractor fails to start the work in the stipulated time frame or does not perform satisfactorily as per contract condition the performance guarantee can be forfeited by MCB and the work may be awarded to other agency on the contractor's risk and cost.
- 2.5 Pre inspection and required clearance:** -MCB if desires, may depute his representative for inspection of the SPS units to ensure compliance of offered/ordered specifications and working condition of the unit before accepting the technical offer of the bidder or deployment of the unit for works at Bikaner, if information submitted under format found wrong or fraudulent, earnest money of the bidder shall be forfeited and works shall awarded next lowest bidder on the rates decided by Nagar Nigam Bikaner.
- 2.6 Type of work:** -The present tender is for the operation and maintenance (including preventive maintenance) of machinery installed in Sewage Pumping Station at Public Park, Bikaner including Main Control Room, DG set and switchyard. The work includes operation & maintenance of all valves, piping, submersible sewage pumps, civil works, electrical, mechanical & instrumentation installation and equipment's, DG set, switchyard & its equipment, internal and external lighting etc. This will also include the de-silting of wet wells, input chamber and screen chamber once in month including immediate disposal of sludge from premises and general cleaning of all the units of Sewage Pumping Station.
- 2.7 Correspondence:** -The bidder shall provide full details of his address and telephone with the name of the Person to whom all communications related to the Tender be directed. All correspondence from the bidder to the MCB shall be addressed to the Commissioner, Municipal Corporation, Bikaner, as detailed in the NIT.
- 2.8 The legal jurisdiction shall be Bikaner.**
- 2.9 RTPP rule 2013 & act 2012 also applicable.**

Section 3 special condition of contract

- 1) **Type of work:** The present tender is for the operation and maintenance (including preventive maintenance) of all plant and machinery installed in Sewage Pumping Station at Public Park, Bikaner including Main Control Room, PLC Room, DG set and switchyard. The work includes operation & maintenance of all valves, piping, submersible sewage pumps, civil works, electrical, mechanical & instrumentation installation and equipment, DG set, switchyard & it's equipment, internal and external lighting etc. This will also include the de-silting of wet wells, input chamber and screen chamber once in month including immediate disposal of sludge from premises and general cleaning of all the units of Sewage Pumping Station.
- 2) **Contract Duration:** -Initially the Rate contract shall be signed for two year from the date of start as mentioned in the work and may be extended for one year if contractor work is satisfied.
- 3) **Compliance with Labor Regulations:** -During continuance of the contract, the Bidder and his sub bidders shall abide at all times by all existing labor enactment and rules made there under, regulations, notifications and by laws of the State or Central Government or Local authority and any other labor law (including rules) regulations, bye laws that may be passed or notification that may be issued under any labor law in future either by the State or Central Government or the local authority. **Rajasthan Building and Other Construction Workers** (Regulation of Employment and Conditions of service) Rules, 2009 and Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 (Act no. 27 of 1996) shall be followed with regards to the worker deployed for the works and for safety during works as mandatory provisions under rules, Acts and laws.
- 4) **Compliance of provision of IS 11972; Safety precautions to be taken while entering a sewerage system must also be made by the Bidder:** -Due precautions shall be taken by the Bidder, at his own cost, to ensure the safety and protection against accidents of all staff and labor engaged on the works, local residents in the vicinity of the works, and the public traveling through the work sites. The Bidder/Firm or company while executing the work will adopt all safety measures at his cost to safeguard from any loss of life and damage of public and private property. If any loss and damage is occurred, they will pay the full compensation from their own pocket to the concern. All the consequence (legal and or financial) will be born by the Bidder only and Municipal Corporation Bikaner will not be responsible in any way.
- 5) **Bidder to inform himself fully:** -The bidder shall be deemed to have made himself fully aware of all external conditions and risks including but not limited to the general site conditions, availability of labor and employment practices in the region, availability and quality of construction and all other external factors. He is supposed to be fully aware latest rules/circular about deduction of royalty, contractor tax and income tax act.
- 6) **Validity of the offer:** -The offer shall remain valid for 180 days from the date of opening of the price bid.
- 7) **Handing over / taking over**

The MCB shall hand over the complete pumping station premises from inlet chamber to outfall sewer including pumping station machinery, control rooms, DG set, inside & outside lightings,

portable containers, switchyard and other equipment's and all ancillary units in working conditions on the basis of as is where is, at the time of handing over to the contractor on award of contract for its operation, maintenance, safety and security of these equipment's etc. Handing over/ Taking over of site will be done on inventory list of all the fixed and loose equipment's & appurtenances at Sewage Pumping Station. The inventory list will be prepared by concerning JE/AE/EX. EN of MCB, in which detail of items, quantity, make and preset condition (working/non-working) will be mentioned. The date of taking over by the contractor shall be date of start of work. The contractor shall hand-over all the equipment's in working condition on completion of the contract as per inventory list. The MCB reserves the right to operate all Bank Guarantees or part of the Bank Guarantees to meet out any losses in case of damages/theft/mishandling etc. of the Govt. properties due to negligence of the contractor. If losses/damages caused by the contractor are more than the bank guarantee & other deposits available with department then contractor shall have to deposit the differences amount. If not deposited, then MCB may recover the dues under various acts & clauses.

8) Staff and Administrative office of contractor at site

Contractor has to establish one functional administrative office (with operational telephone/ mobile phone facility) at Sewage Pumping Station, which is subjected to inspection at any point of time. Minimum Supervisory staff, required to fulfill the requirement of scope of work to the satisfactory of Engineer-in-charge, shall be available at all the times and to be stationed at established office/camp office of the contractor. Contractor shall have to deploy his operating staff round the clock in three shifts so that pumping can be done whenever the water is available in the wet wells, depending on the availability of power or as directed by Engineer in Charge.

All staff relative to the mechanical, electrical & instrumentation installations should be well qualified, so as to operate the electrical / mechanical / instrumentation installations properly. Electrician should be at least ITI holder with good knowledge of electrical items such as motors, panels, DG set, transformer, CT, PT, etc. Pump driver should be well qualified.

The attendance register shall be maintained at site and watched. The persons appointed by the contractor shall be available in prescribed uniform with identification mark of firm and identity card with photographs. In case minimum staff is not found on duty, following deduction from the contractors will be made:-

Rs. 500/- per day of Supervisor / skilled person

Rs. 300/- per day for labors / helpers / unskilled persons

It is necessary to give weekly off to every staff. Casual leave admissible to staff considered as 10 days per annum. At least 5 holidays, but not more than holidays admissible to employees of Govt. of Rajasthan are to be given to the employees by the contractor. The contractor shall employ adequate relieving staff to cover absentee on public holidays/ festivals weekly holidays, casual leaves, long leave, other holidays or compensatory holidays to ensure that the required minimum staff or general shift are available. No extra payment on this account will be payable to the contractor. Labour Laws should be followed by Contractor.

Unless the reliever comes on duty the staff from the earlier shift can not be relieved and has to perform overtime and same is to be paid by the contractor. No overtime payment will be made by the department to the contractor on this account.

9) Safety Precautions

Adequate safety precautions against fire, flooding, lighting, electric shocks, hazardous gases accident,/ mishaps duty to moving, non-moving heavy equipment etc. shall be strictly observed by the contractor at his risk & cost. Suitable safety article like safety shoes, gloves, safety belts, helmet, ear muff/ plug, welding shield, insulated tools, gas mask, sand bags, alarms etc. shall be provided by the contractor at his own cost. A fully equipped necessary medical first aid and apparatus with oxygen filled cylinder should be available at each installation at all times.

In the event of any damage/ loss of life and property the contractor shall be solely responsible and liable for compensation and damages.

10) Power Charges

- The electric power shall be provided by JVVNL at the Sewage pumping station. All expenses of power charge shall be borne by the MCB, but increase in power charges due to non-maintenance of requisite power factor or any surcharge due to power consumption in excess of MDI shall be borne by the contractor and deducted from his running payment from time to time. The contractor will ensure that there is no misuse of power irrespective of use in functional necessity.

In case of fault in capacitor bank contractor should change the capacitors immediately so that power factor should be always more than 0.90. Failing which he will be sole responsible of power factor surcharge and amount of this surcharge will be deducted from his running bill payment. For this purpose, contractor may be allowed to procure capacitor bank of various capacity in advance as a spare.

In case of non-availability of power in rainy days or more than one hour in non-rainy days, the contractor will get permission from the Engineer in charge to operate DG set. The diesel will be arranged by the contractor to operate DG set for which no separate payment will be made. The average diesel consumption of DG set is 35-40 liter per hour. The mobile oil and coolant will be arranged by the contractor for which no separate payment will be made. The contractor will ensure that mobile oil and coolant are arranged and used in DG set as per maintenance instructions of the manufacturer. Oil and coolant changing will be done in presence of JE/ AE of MCB and it will be entered in logbook of the DG set. The contractor will maintain a logbook of DG set and get verified the same by AE/JE of MCB. The contractor will ensure that at least 150-liter diesel should be available in fuel tank of DG set at any time.

11) Arrangement of tools and tackles and heavy equipment's:

All sort of tools, special tools, tackles and test instruments required for operation & maintenance of the sewage pumping station & switchyard shall be arranged by the contractor at his own cost. Any repairs to the articles of T&P necessitated due to its use shall be carried out by contractor at his own cost. If the contractor fails to repair T&P articles, the MCB shall recover the charges for repairs and damages.

12) Liaison with other turn-key/ O&M Contractors

The contractor shall be fully responsible for keeping liaison with the original contractors and, whose address and contact reference shall be given on demand. The contractor shall be fully responsible for all correspondence and communications and to take necessary steps or guidance to keep the system running.

13) Terms of payment:

Bidders are requested to quote their composite rates for 2 Years. However, the contract may be extended for next 1 year with mutual consent on same rates, & conditions. Bidder should not offer conditional rebate. They should offer competitive price on departmental terms & conditions. If they offer any conditional rebate, the same shall not be considered for comparison but department shall avail the rebate without fulfilling the conditions stipulated. The due payment for the work allotted shall be payable as below;

- The operation and maintenance cost quoted by bidder shall be payable on monthly basis. The contractor shall submit his bill at the end of every month along with the following record/ documents/certificates duly verified and countersigned by the Engineer-in-Charge as on evidence of the contractor's satisfactory performance. The payment shall be made monthly within fifteen days of the presentation of the bill to the MCB with the required certificates mentioned below. Signed and duly verified copy of abstract of log book for pumping station in the format (given at annexure-4) all required log books shall be arranged by the contractor at his own cost.

14) Repairs of Spares from authorized dealers/manufactures and workshop;

All electrical and mechanical machinery at site will be repaired by contractor on own cost. No extra payment to be made by the department. All spare parts to be used by the contractor shall be made of authorized dealer/ manufacturer. If pump or other parts is not repairable condition (after decision of committee) and then nagar

Nigam Bikaner will change pump or parts. Contractor should have workshop within 100 km periphery of Bikaner city for minor repair work of pumps and other parts.

15) Emergency for spare

Whenever E/C feels that maintenance agency is delaying the procurement of some particular spare or consumable which in his opinion may hamper the proper working of pumping station and switchyard, then he may procure the same through some other agency and such the cost incurred would be recovered from the payment due of maintenance agency or his deposit. Such situation would be considered as an unsatisfactory performance of maintenance agency and liable to be penalized.

16 Delisting Works

For carrying out the de-silting of wet wells, intent chamber and screen chambers required during operation and maintenance of sewage pumping station and switchyard. The Contractor will be done de-silting the above wet well, inlet chambers & screen chambers as per requirement of direction given by Engineer-in-Charge. Cleaning of screens will be done at least 6 times in a day by lifting one by one screen, while desilting of wet wells will be done at least once in a month. The desilting work of wet wells will be done one after one. Before starting de-silting, entry of sewage water will be stopped in the wet well to be desilting by closing sluice gates (1 in inlet chamber and 1 on interconnection of wet wells) and sewage water will be pumped out up to lowest level. The floating material shall be removed once in a week from each wet well. The contractor will ensure that only well trained and experienced labor with safety equipment's is engaged for de-silting work. All the safety measures are to be adopted strictly. Necessary safety equipment's like helmets, gas masks proper rope, safety belts in good and correct condition will be made available by the contractor. No one will be allowed to enter wet well/chamber without bearing safety equipment's. In case of any mishap, the contractor shall be solely responsible for it and he has to face all the legal consequences. The sludge taken out from the wet well/chambers shall be disposed of within 24 hours from pumping station premises to the suitable disposal site (most probably land fill site near Seagate) as directed by the competent authority. The contractor should consider the cost of disposal of sludge in his quoted rates. The carriage of sludge, he has to arrange necessary tractor and trolley for which no extra payment will be given by the MCB. After disposal of sludge from site, the premises shall be cleaned immediately by sweeping and there shall be no stack of sludge or garbage at pumping Station site.

17) Compensation: -

In case of unsatisfactory performance by contractor in operation and maintenance of Sewage Pumping Station and Switchyard, compensation @ 0.25% of contract value per week of unsatisfactory performance subject to maximum of 10% of contract value shall be levied. Regarding such liquidity damages the decision of the Commissioner, Municipal Corporation, Bikaner shall be final. Preventive maintenance non repair of mechanical/ instrumentation equipments within reasonable time or non-compliance of the clauses of the contract to the satisfaction of the Engineer incharge.

18) Deduction against delayed operation & maintenance of sewage Pumping Station & Switchyard

- a. In case if motor or any component including pump is burnt or damaged due to any reason, it shall be the sole responsibility of the contractor to rewind/ replace the same as per standards of the equipment / component as per provisions of the contract, for which no payment will be made by the department.
- b. In the event of any damage / loss of life and property in the wet wells, chambers and pump house on pumping station the contractor shall be solely responsible and liable for compensation and damages.
- c. The contractor shall be held responsible for any interruption in pumping of sewage water due to breakdowns and appropriate amount will be recovered from his bill if the breakdown takes place due to negligence of the contractor's staff bad results in interrupting pumping for more than two hours at a stretch. The amount of recovery shall be as per point 'a' of this clause.
- d. In case of sudden break down, Engineer incharge will decide whether the break down is attributable to contractor's poor preventive maintenance or not. If break down is found on the part of contractor then cost of repair / replaced by him at his cost. The decision of Engineer incharge regarding cause of failure / break down shall be final. In case of difference of opinion between contractor & MCB the decision of the competent authority will be final. However during the tendency for such decision immediate action for rectification/ removal for cause of failure shall be initiated by the contractor as per terms & conditions of contract / direction of Engineer incharge

- e. In case of break down due to non-availability of diesel for DG Set, the amount of recovery shall be made as two times of actual from the contractor.

19) Execution of the work against the risk and cost of contractor

The MCB shall reserve the right to get the work done on the risk and cost of contractor without rescinding the contract after a notice given to the contractor and he fails to commence the work within 2 hours. In such case, compensation for delay in rectification of leakage/ burst shall be levied as per relevant clause. Contractor shall be fully responsible for repairing of all installations of pumping station and switchyard due to non preventive or faulty maintenance done by him for which no payment shall be allowed on this account. Contractor shall be responsible for safety & security of pumping station, switchyard and their appurtenances etc. Any loss or damages occurred due to negligence will be repaired by contractor free of cost. Also damaged parts will be replaced free of cost.

20) Site books

For the purpose of quick communication between the Engineer in Charge and the Contractor site books shall be maintained at all sites, where work is being carried out. If the Contractor's site agent is leaving site he shall not take the site book with him, it shall always be readily available at site. Any instructions or order which the Engineer in charge may like to issue to the contractor may be recorded by him in the site book.

21) Insurance

It shall be the responsibility of contractor to get the men, machinery, and plant etc, insured as per norms, insurance charges shall be borne by the contractor. The MCB shall not be liable for or in respect of any damages or compensation payable by law in respect of or in consequence of any accident of injury to any person in the employment of the contractor and contractors shall indemnify and save the MCB harmless against all such damages and compensations and against all actions suits, claims, costs or expenses arising there from. The contractor shall insure against such liabilities and shall continue such insurance during the whole of the time that any persons are employed by him on the works.

Requirement of Staff

S.NO.	Category	no.	Shift
1	supervisor	1	For general shift
2	Electrician	2	For all three shifts
3	Mechanical	2	For all three shifts
4	Pump Driver	3	For all three shifts
6	Sweeper	6	For all three shifts
7	Security Person	3	For all three shifts

22) Scope of work for contractor

The work of Operation and Maintenance (routine, periodical, preventive and breakdown) of Sewage Pumping station & switchyard complete in all respect located in Public Park, Bikaner is a complete job. The scope of work, basically, comprises of the following jobs:

- Operation and maintenance (routine, periodical, preventive and breakdown) of all plant and machinery installed in Sewage pumping station at Public Park Bikaner
- Operation and maintenance of all electrical, mechanical & instrumentation installation of sewage pumping station i.e. all pumps, motors, cranes, exhaust fans, diesel generating set, valves, piping, internal & external lighting, panels, transformer, lighting arrestor, drop out fuse, isolators etc.
- routine check up and routine / periodical / preventive and breakdown maintenance of all the equipment / machinery, as per manufacturers manual / instructions and the standard engineering practice or as directed by Engineer-in-Charge.
- All electrical / mechanical / instrumentation installations are to be thoroughly examined, opened and maintained periodically and checked for their working, as per manual provided by the manufacturer standard practice.

- e) all measuring equipment's / devices for measuring pressure, discharge, levels etc. are to be operated and periodically maintained, as per manufacturers manual.
- f) all special tools /spare parts tackles etc. required for proper operation and preventive maintenance shall be provided by the bidder. The cost of such items is deemed to be included in the rates quoted by the bidder.
- g) if any part or equipment's, which in the opinion of contractor and Engineer-in-Charge may result in break down, is to be replaced during the preventive maintenance by the contractor.
- h) Any device for preventive maintenance or of operation, which bidder feels necessary to avoid major breakdowns of control panels, motors or other units, may be provided by the bidder.
- i) the contractor has to clean one by one screens (4 nos.) at least 6 times in a day by lifting of the screens by Electrically Operated cranes.
- j) All floating material shall be removed twice in a week from both the wet wells and will be recorded in log book.
- k) De-sitting / cleaning of wet wells (2 nos.) shall be done by the contractor once in a month.
- l) After de-silting, the taken-out sludge will be disposed of within 24 hrs from the sewage pumping station premises at disposal site.
- m) The pumps are likely to be operated for 16 hours a day at present. The contractor shall have to deploy operating staff round the clock in three shifts, so that pumping can be done whenever the water is available in the wet, well, depending upon the availability of power or as directed by the Engineer In charge, for 24 hours.
- n) To operate sluice valves by Actuators with taking special care to operate actuators.
- o) Normally there should not be any break down in the system. However, if break down occurs because of damage/ burning of any part or equipment, then the same shall have to be replaced / repaired by the contractor, without any loss of time.
- p) In case of opening / loosening of welding joints/ nut bolts of any part of any equipment, the contractor will arrange re-welding / replacing and tightening of nut bolts, without any loss of time.
- q) The contractor has to maintain the log book / record book, as stipulated in Tender Document.
- r) The contractor shall have to run DG set in case of power failure with written permission from MCB. in case of emergency, permission on phone may take and confirmed later on. No anypayment of diesel shall be done by MCB as per clause 15.
- s) The contractor shall be responsible for carry out watch & ward for all the installations in the premises as well the appurtenances of pumping stations & switchyard. Security guards shall be made available round the clock for safety of campus and all other electro-mechanical installations.
- t) The contractor shall maintain telephone/ mobile phone in operational condition for communication and reporting purpose.
- u) The contractor shall maintain fire extinguishers, first aid boxes, in the premises. He shall also refill the fire extinguishers as per the requirement.
- v) The contractor shall maintain the equipment's for safety of person / public viz. breathing apparatus, weather cock etc., as per prevailing safety norms.
- w) If any specialized work is involved during preventive or breakdown maintenance, the same should be got carried out by special agency, with prior approval of Engineer in-charge, as stipulated under section B of Tender Document.
- x) Contractor shall submit the daily report to the office of Engineer-in-Charge regarding day to day activities done, any failure / defect / difficulty experienced, P.F. obtained along with daily pumping report on phone, besides recording the same in prescribed log books.
- y) In the event of strike by the operation & maintenance staff employed by the contractor, the department shall be empowered to operate and maintain the pumping station, at the sole risk and cost of the contractor.

The complete work as defined above includes operation, maintenance, periodical overhauling of all machinery, electrical equipment's, mechanical equipment's of main pumping station at Public park Bikaner.

23) PUMP HOUSE

1) Operation and Maintenance

- a) For the purpose of operating pumps, it shall be the responsibility of the contractor to properly control, operate, maintain and safely keep all electrical / mechanical / instrumentation units such as pump, motor, capacitors, DG Sets etc. in working order.



- b) Pumps / motors / cranes / exhaust fans, and all other equipment, fittings etc. shall be operated and periodically overhauled as prescribed in the manuals provided by the manufactures, standard engineering practice and as per the direction of Engineer In charge.
- c) All type of valves and actuators shall also be operated and periodically maintained as per manufacturer's manual & standard practice.
- d) All measuring equipments / devices for measuring pressure, discharge, water levels, current, voltage, temperature etc. shall be operated and periodically maintained and calibrated as per manufacturers manual.
- e) Measuring equipments / devices, relays etc. requiring calibration or testing, shall be got tested, and calibrated from manufacturers / authorized or reputed firms.
- f) If any motor is burnt due to any reason, the same shall be removed, repaired, rewinding, tested and re-installed in position for operation by the contractor, cost against material and labour will be borne by the contractor. No extra payment shall be made by the department (MCB).
- g) In case of break down or faculty running of pump, it shall be removed, repaired and re-installed by the contractor without loss of time, for which payment will be made by MCB.
- h) The pump should be cleaned, after removal & opening every month, so that the full rated discharge of pump is ensured. If discharge is reduced to less than 75% of rated discharge, the extra power charge may be recovered from the contractor.
- i) The contractor will ensure correct operation of actuators. If any fault including burning of motor occurs, it shall be responsibility of the contractor. No extra payment for replacing or rewinding of motor or repairs of actuator shall be paid.

2) General Maintenance

The pump house and its surroundings up to 20 M distance from pump house, ICP rooms shall be kept clean and in dry condition, properly ventilated and illuminated. For the purpose of illumination. replacement of fitting / fixtures shall be done by the contractor. The electrical control panels, capacitors, pumps and motors, walls of pump house, MCC room, stair cases, railing, battery room, DG Set etc. shall be kept and maintained, dust, oil / grease free to the satisfaction of the Engineer In charge.

24) Records and Log Books

The following printed record/ log book shall be maintained and produced periodically by the contractor for proper monitoring by the Engineer-in-charge. The Completed records/ logbook shall be deposited with Engineer-In-Charge.

a. Log book of pumping showing voltage, current in all phases, interruption of power if any, hourly power factor (to be recorded on basis of JVVNL meter which is normally installed at GSS and or the power factor meter installed at the pump house). The format of log book shall be finalized in consultation with Engineer-In-Charge. However, a model format of log book is enclosed at Annexure..... A separate log book for DG set showing operation hours, diesel entry and load given to DG set hall also be maintained.

B. History Sheets of Overhauling / maintenance / replacement of consumables / non consumable items related to all the important electrical / mechanical equipment's which will be duly verified by the in-charge of pumping stations.

The observations in the log books should be recorded on hourly basis. Printed log books shall be provided by the contractor at his own cost. The log books shall be securely kept in the pump house under the charge of a responsible person and shall be made available to any officer of the department on demand. Log books of the previous month shall be deposited to the Engineer-in-Charge every month. All the log books will be deposited to the Engineer In-charge after completion of the contract. An inspection register will be maintained at pumping station by the contractor. Instructions recorded in the register shall be complied with immediately under the directions of the Engineer-In-Charge & the compliance shall be recorded in books.

7

SECTION:4 -Technical Specifications

The technical specifications of pumping machinery and instruments at sewage pumping station public park, Bikaner is as under: -

1.Submersible Non clog pump set: -

DESCRIPTION	DETAILS	
Total No. of Pump	4	
Make	Kishor Make	
Model	2 PUMPS 2014	2 PUMPS 2017
POWER	60 HP	
Total Head	14 M	
Year of Commissioning Pumping Station	2007	

3. 225 KVA DG SET

DESCRIPTION	DETAILS
Engine Make	Kirloskar
Model	6SL880TA
No. of Cylinders	6
Engine Configuration	Vertical In Line
Battery Capacity	24VDC
Alternator Make	Kirloskar
Alternator Insulation Class	H
Fuel Consumption At 75% Average Load Factor Ltr/Hr	36.2
Noise Level at 3 M distance	103-106

4. .Capacitor

DESCRIPTION	DETAILS
Rated voltage	415 V AC 3 Phase
Rated Frequency	50 HZ
Maximum over voltage capacitor with stand	105% of rated voltage
Capacitor control	On/OFF by contractor operated auto / manual Mode
Quantity	8 nos

9

6. Transformer 11/ 0.433 kv.

DESCRIPTION	DETAILS
Make	RTS
Installation	Outdoor
Painting	IS 5 Shade 631
Grounding Conductor	GI Flat 50 x 6
Rating	11 KV/ 0.433 KV. 250 KVA

7. General procedure for operation of pump sets: -Following general points should be checked while operating the submersible sewage pump set:

- a. Dry running of the pumps should be avoided.
- b. Pumps should be operated only within the recommended range on the head discharge characteristics of the pump.
 - If pump is operated at point away from duty point, the pump efficiency normally reduces.
 - Operation near the shut off should be avoided, as the operation near the shut off causes substantial recirculation within the pump, resulting in overheating of water in the casing and consequently, in overheating of the pump.
- c. Voltage during operation of pump motor should be within + /- 10% of rated voltage. Similarly current should be below the rated current. As per name plate on the motor.
- d. Sum of low and medium specific speed draw lesser power at shut off head and power required increases from shut off to normal operating point. Hence in order to reduce starting load on motor, pump shall be started against closed delivery valve.
- e. It is also necessary to control opening of delivery valve during pipeline filling period, so that the head on the pump is within its operating range, in order to avoid operation on low head and consequent overloading. This is particularly important during charging of the pumping main initially or after shutdown. As head increases the valve shall be gradually opened. The pumps of High specific speed draw more power at shut off. Such pumps should be started within the delivery valve open.
- f. The running of the duty pumps and the standby should be scheduled so that no pump remains idle for long period and all pumps are in ready to turn condition. Similarly unequal running should be ensured so that all pumps do not wear equally and become due for overhaul simultaneously.
- g. If any undue vibration or noise is noticed, the pump should be stopped immediately and cause for vibration or noise be checked and rectified.
- h. Frequent starting and stopping should be avoided, as start or stop causes overloading of motor, starter, contractor and contacts. Though overloading lasts for few seconds, it reduces life of the equipment.

8. Energy Conservation: -The operation should ensure energy conservation to the maximum possible extent.

- a) As far as possible when outflow pump starts, the reservoir level should be as near as possible to maximum WL. On practical consideration the level should be about 0.5 m below maximum WL, so as to prevent overflow due to any likely delay in starting. Operation under such situation shall cause minimum static head and thus energy can be saved.
- b) Recommendations for operation plan:

9

- WL in the reservoirs serving as suction sump to the pumps shall be at maximum permissible level at the time of switching ON the pumps.
- Overflow in the reservoir should be avoided.
- The aspect that the motor does not get overloaded due to operation at lower head, shall be ensured.

9. Undesirable Operation of pump set:- Following undesirable operations of pump set should be avoided:

9.1 Operation at Higher Head

The pump should never be operated at head higher than maximum recommended head. Such operation results in excessive recirculation in the pump, overheating of water and the pump. As useful guide, appropriate marking on pressure gauge should be made.

9.2 Operation at Lower Head

If the pump is operated at lower head than recommended minimum head, radial reaction on the pump shaft increases, causing excessive unbalanced forces on shaft, which, may cause failure of the pump shaft. As useful guide, appropriate markings on both pressure and ammeter are made.

9.3 Operation of the pump with Low Submergence

Minimum submergence above the bell mouth or strainer is necessary, so as to prevent air entry into the suction of the pump, which give rise to vortex phenomenon causing excessive vibration, overloading of bearings, reduction in discharge and efficiency. As useful guide the lowest permissible water level be marked on water level indicator.

9.4 Operation with Occurrence of Vortices

The vibration continues even after taking all precautions, vortex may be cause. All parameters necessary for vortex-free operation should be checked. Chapter of manual on water supply and treatment discusses the aspect in details.

10. Starting the pump set

10.1 Checks before starting: -Following points should be checked before starting the pump:

- a) Power is available in all 3 phases.
- b) Trip circuit for relays is in health state.
- c) Check voltage in all 3 phases.
- d) The voltage in all phases should be almost same and within +/- 10% of rated voltage, as per permissible voltage variation.
- e) Check and ensure that the pump is free to rotate.
- f) Check over-current setting if the pumps are not operated for a week or so.
- g) Before starting it shall be ensured that the water level in the wet well is above low water level and inflow from the interceptor sewer is adequate.
- h) Check and ensure that the pumps are on Auto or Manual Mode.

10.2 Starting of Pumps

Procedures for starting and operation of Submersible Pump shall be as follows:

- a) Close delivery valve, and then loosen slightly.
- b) Switch on the motor and check correctness of direction of rotation. If the pump does not rotate, it should be switched off immediately.
- c) Check pressure gauge reading to ensure that pump has built up required shut off head.
- d) When the motor attains steady speed and pressure gauge becomes steady, the delivery valve should be gradually opened in steps to ensure that the head does not below recommended limit.
- e) Check that ammeter reading is less than rated motor current.
- f) Check for undue vibration and noise.
- g) Voltage should be checked every half an hour and should be with permissible limit.

11.MODE OF OPERATION & MAINTENANCE OF VARIOUS INSTALLATIONS

11.1Pumps

11.1.1Operation:-Procedure for pump operation has already been described.

11.1.2 PREVENTIVE MAINTENANCE

1) Daily maintenance

- a) Clean the pump, motor and other accessories.
- b) Check coupling bushes/rubber spider.

2) Routine Observations of irregularities

The pump operator should be watchful and should take appropriate action on any irregularity noticed in the operation of the pumps. Particular attention should be paid to following irregularities.

- a) Changes in sound of running pump and motor.
- b) Abrupt changes in bearing temperature.
- c) Changes in Voltage.
- d) Changes in current.
- e) Changes in vacuum gauge and pressure gauge readings.
- f) Sparks or leakage current in motor, starter, switch gears, cable etc.
- g) Overheating of motor.

3) Monthly Maintenance

- a) Clean and apply oil to the gland bolts.
- b) Inspection of mechanical seal for wear and replacement if necessary.
- c) Cleaning of impellers (removal of polythene etc.)

12. BREAKDOWN MAINTENANCE

- a) Opening of the casing, rotator assembly and find out the reasons for break down.
- b) All modification, rectification, replacement shall be done except impeller.
- c) Pumps can not be run when pipe line is under repair.
- d) Only impeller shall be referred to original manufacturer for repair.

13.Motors

13.1.OPERATION :-Procedure for pump operation has already been described section.

13.2 PREVENTIVE MAINTENANCE

1) Daily Maintenance Schedule for Motors

- a) Clean external surface of motor.
- b) Examine earth connections and motor leads.
- c) Check temperature of motor and check whether overheated. The permissible maximum temperature is above the level, which can be comfortably felt by hand. Hence temperature observation should be taken with RTD or thermometer (Note: In order to avoid opening up motors, a good practice is to observe the stator temperature under normal working conditions. Any increase not accounted for, by seasonal increase in ambient temperature should be suspected).
- d) In case of oil bearing
 - Examine bearing to check whether oil rings are working.

- Note bearing temperature.
- Add oil if necessary.

2) Monthly Maintenance

- Check belt tension. In case where this is excessive it should immediately be reduced.
- Examine oil in oil lubricated bearing for contamination by dust, grit, etc. (this can be judged from the color of the oil).
- Check functioning and connections of anti-condensation heater (space heater) if provided.

13.3 BREAKDOWN MAINTENANCE

- Opening of cover and find out reasons of break down.
- Clanging of bearing only.

Never run motor when voltage is more than 3.7kv or less than 2.9 kv and also when repair work at coupling/pump is going on. Repair of motor shall be referred to original manufacturer & get it repaired.

A. PREVENTIVE MAINTENANCE (motor)

- Checking of vibrations, bed plates and foundation bolts, tightening of bolts.
- Checking of bearing temperature, winding temperature indicators, transmitter connections etc.
- Checking of cable connections in the terminal box for any damages for electric burning.
- Anti condensation heaters are working or not and if no do rectification.
- Cleaning of air flow duct & dust ring, etc.
- Bearing lubrication/greasing as per schedule.

13.4 L.T. PANEL/415 V PMCC

A. Operation

Making of circuit breaker ON/OFF of all the motors, fans, lights and other fittings equipments as and when required and as per direction of in charge.

B. Preventive maintenance

- Checking of all indicators, ON/OFF indicators, operating mechanism etc.
- Checking of control voltage at panels and rectification.
- Checking of are chutes, its cleaning, greasing, and replacement if needed.
- Checking of operating mechanism for closing, tripping etc.
- Cleaning of dust, dirt, moisture, discoloration in chassis and checking of electrical connection.
- Checking of MCCB's and its functioning.

C. Break down maintenance

- Do operating mechanism replacement if found defective.
- Replace push buttons, switches, meters etc. if found defective.

13.5 CAPACITOR CONTROL PANEL

A. Operation :- Making ON/OFF capacitor bank to maintain the power factor. It shall be always more than 0.9.

B. Preventive maintenance

- Checking of control voltage & ON/OFF operation of breaker at 80% Voltage.
- Checking of capacitor bank for discharging.
- Operating mechanism is to be checked for ON/OFF position and making contacts.
- Checking of all electrical connections, terminals indicators, dust dirt, moisture, noise, and smell discoloration is to be checked & rectified.

C. Break down maintenance

1. If capacitor bank burnt out then replace the same with good one.
2. Replacement of operation mechanism if found functioning unsatisfactory.

D. Maintenance schedule: -Pre-requisites for Satisfactory Functioning of Capacitors. Ensure following points: -

- i) A capacitor should be firmly fixed to a base.
- ii) Cable lugs of appropriate size should be used.
- iii) Two spanners should be used to fasten or loosen capacitor terminals. One spanner should hold the lower nut and the upper nut should be held by the other spanner to avoid damage to or breakage of terminal bushings and leakage of oil.
- iv) To avoid damage to the bushing, a cable gland should always be used it should be firmly fixed to the cable-entry hole.
- v) The capacitor should always be earthed appropriately at the earthing terminal to avoid accidental leakage of the charge.
- vi) There should be a clearance of at least 75 mm on all sides for every capacitor unit to enable cooler running and maximum thermal stability. Ensure good ventilation and avoid proximity to any heat source.
- vii) While making a bank, the bus bar connecting the capacitors should never be mounting directly on the capacitor terminals. It should be indirectly connected through flexible loads so that capacitor bushings do not get unduly stressed.
- viii) Ensure that the cables, fuses and switchgear are of adequate ratings

E. Operation and Maintenance of Capacitors

- i) The supply voltage at the capacitor bus should always be near about the rated voltage the fluctuations should not exceed 4/- 10% of the rated voltage of the capacitor.
- ii) Frequent switching of the capacitor should be avoided. There should always be a interval of about 60 seconds between any two switching operations.
- iii) The discharge resistance efficiency should be assessed periodically by sensing shorting is required to discharge the capacitor even after one minute of switching off. If the discharge resistance fails to bring down the voltage to 50 V in one minute, it needs to be replaced.
- iv) Leakage or breakage should be rectified immediately. Care should be taken that no appreciable quantity of imp regnant has leaked out.
- v) Before physically handling the capacitor, the capacitor terminals shall be shorted one minute after disconnection from the supply to ensure total discharging of the capacitor.

Do not replace with other make & type.

14. SLUICE VALVES WITH ACTUATORS

A. Operation: - Making the valve open and close as and when necessary

A. Preventive Maintenance

1. Checking for full travel of the gate of valve.
2. Checking of the lubrication of bearings and removal of leakages.
3. Placing of glands in the stuffing box and tightening of nuts and bolts.
4. Checking of gear box its lubrication.
5. Checking limiting switch accuracy n actuators.
6. Checking operation of actuator manually when power is not available of electrical motor is not operating.

C. Break down maintenance

1. Replacement of the glands & stuffing box cover etc. if found defective.
2. Replacement of the gear assembly if found defective.
3. Replacement and repairing of spindle, its nut with gate, locking key if found defective and even if not working satisfactorily.
4. Rewinding of motor, if required including unlowering, lowering and re-installing in position after rewinding and other repairs.

D. Operating schedule

- Check gland packing of the valve at least once in a month. It should be ensured that packing inside the stuffing box is in good trim and impregnated with grease. It may be necessary to change the packing as often as necessary to ensure that the leakage is within limit.
- Grease should be applied to reduction gears one in a month.
- Check tight closure of the valve once in 3 months.
- A valve normally kept open or closed should be operated once every three months to full travel of gate and an jamming developed due to long unused shall be freed.
- Inspect the valve thoroughly for flaws in guide channel, guide lugs, spindle, spindle nut, stuffing box etc. once in a year.
- Important DON'T for sluice valve is that it should never be operated with oversize hand wheel or cap or spanner as this practice may result in rounding of square top and hand wheel or cap or spanner may eventually slip.

Another important DON'T for sluice valve is that it should never be operated with under throttled i.e. particularly open condition, since such operation may result in undue chatter, wear and failure of value spindle.

- ❖ Never close the valve of that pump which is in running position.
- ❖ Never open the valve of that pump which is under repair.
- ❖ Never apply excessive force to ensure end position of the valve
- ❖ Never operate actuator in wrong direction.

15. FIRE EXTINGUISHERS

A. Operation:-Use of fire extinguishers in case of any fire fighting is needed in and around the pump house.

B. Preventive maintenance

1. Checking of CO₂ gas present in the bottle and removal of any leakage if found.
2. Replacement of nozzle if found defective/broken.
3. Refilling of gas if found emptying.

16. EARTHING AND LIGHTING PROTECTION UNIT

A. PREVENTIVE MAINTENANCE

1. Checking of terminals, joints of conductor strips and connection with pits.
2. Checking of unit series resistance, shut capacitance, leakage current etc. as and when required.

B. BREAK DOWN MAINTENANCE:-Replacement of parts/items, jointing of conductor strips, terminal if found defective.



17. Wet well

1. All foreign floating matters in the sump/intake shall be manually removed at least once in a month and shall be disposed off away from pump house with adequate safety measure.
2. De-silting of intake/sump shall be carried out once in a month preferably before onset of monsoon. Care should be taken to dump the removed silt away from pump house.

18. Pump House/Control Room Building

1. The pump house should be cleaned daily. Good housekeeping and cleanliness is necessary for pleasant environment.
2. Entire pump house, superstructure and sub-structure shall be adequately illuminated and well ventilated. Poor lighting state air etc. create unpleasant environment and have an adverse effect on will of the staff to work.
3. Wooden flooring and M.S. grating wherever damaged should be repaired on priority.
4. It is observed that at many places, roof leaks badly and at times the leakage water drips on the panel/motor which is dangerous and can cause short circuit and electric accidents. All such leakages should be rectified on priority.
5. All facilities in sub-structure i.e. stair case, floors, walkway etc. should be cleaned daily.
6. Painting of civil works should be carried out at least once in two years.

19) Handover and taking over

Observe carefully machinery of SPS before tendering SPS will be handed over to the qualified bidder on current running condition and after completion of work bidder again handover SPS to Nagar Nigam Bikaner on running condition. (Including all major/ minor repair of each part of pumping station)

20) For any kind of query: -

- **Office:** Nagar Nigam Bikaner, Near ki Kriti Stambh, Bikaner
- **Section:** Nirmaan Anubhag
- **Web site:** bikanermc.org
- **EMAIL:** Nagarnigambikaner@gmail.com
- **Phone:** 0151-2226906, 0151-2226902, 0151-2226905



FORMAT FOR DAILY/PERIODICAL PREVENTIVE MAINTENANCE

S. No.	Daily check up done or not	Defects date wise No. of defects	Date of rectification	Weekly Preventive Maintenance		Fortnightly Preventive Maintenance		Monthly preventive Maintenance		Quarterly/Half Yearly/ Yearly Maintenance	
				Schedule Date	Actual performance date	Schedule date	Actual performance date	Schedule Date	Actual performance date	Schedule Date	Actual performance date

Signature of Contractor's Representative

Junior Engineer

Asset. Engineer



HISTORY SHEET

Equipment No..... Sr. No..... Unit No..... Card No.....

Date	Nature of Maintenance P.M./BDM	Observation	Details of work done	Material used/ replaced	Man hours	Signature of	
						Contractor	JE/AE

SECTION :06 Financial Bid

The bills of quantities (BOQ) shall be read in conjunction with the General Conditions, the Special Conditions, the work Description, and the Technical Specifications. For these reasons, general descriptions and specifications are not repeated or summarized in the BOQ. Before entering rates and prices the bidder has to carefully study the relevant sections of the Contract. Particular attention has to be put on the following conditions:

Particular attention has to be put on the following conditions:

- 1) The present contract is turn Key Contract. For his financial offer contractor has to consider the makes and the specifications of the equipment's, as given in tender document. If no makes are specified only makes of reputed manufacturers of equipment corresponding to the State of technology and to the latest Indian standards are accepted. It is clearly stated that the fact that the bidder has agreed to provide the materials and equipment of specifications prescribed in the tender document does not release him to ask for the final approval of Engineer-in-Charge for the equipment and material to be used for the work in case the contract is awarded to him.
- 2) The whole Cost of complying with the provision of the contract shall be included in the items provided in the BOQ. Where no specific items are provided the cost for such items shall be deemed to be included in the rates entered in the BOQ.
- 3) **Observe carefully machinery of SPS before tendering SPS will be handed over to the qualified bidder on current running condition. (Including all major/ minor repair of each parts of pumping station)**

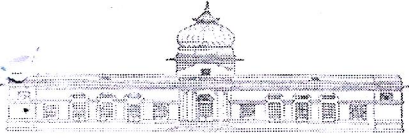
Note:

1. The rates should be quoted as per item rates in the BOQ format.
2. The quoted rates must be inclusive of all taxes, Government levies, GST/VAT/Service Tax at the rates prevailing at the time of tendering.
3. Composite rate 24 months is to be quoted.
4. Rates of repair if appurtenance in pump house & switchyard are required is including in "H" – Schedule rate.

निविदा प्रपत्र पढ़ एवं समझ लिया है इसकी पूर्ण पालना करने को सहमत है तथा अपनी सहमति में निविदा प्रपत्र हस्ताक्षर सील लगाकर प्रस्तुत कर रहा हूँ

निविदादाता का नाम
व हस्ताक्षर मय सील

निविदादाता का पत्राचार हेतु पता, ई-मेल आई.डी., मोबाईल नम्बर अंकित करें.....



Municipal Corporation , Bikaner.

"H" ScheduleBOQ

S. No.	Item	Period	Rate to be quoted by Contractor (Per Month)	Amount
1.	Operation and maintenance of sps, public park Bikaner & Machinery system for performance of work included in the scope of work and other terms & conditions and technical specification as per tender document including all major/minor repair & maintenance in scope of tender and regular desilting of chamber, wet wells, screens etc. as per requirement.	24 Months		
TOTAL AMOUNT: -				

9

Declaration by the Bidder in Compliance of Section 7 & 11 of the Act
Declaration by the Bidder

undertaking (on 100/- stamp)

In relation to our bid submitted to Commissioner, Municipal Corporation Bikaner for Procurement of Tender to provide Operation and maintenance of sps, public park Bikaner& Machinery system for performance of work included in the scope of work and other terms & conditions and technical specification as per tender document including all major/minor repair & maintenance in scope of tender and regular desilting of chamber, wet wells, screens etc. as per requirement. Of municipal corporation for 2 years in response to their notice Inviting Bids No Dated We hereby Declare under section 7 & 11 of the Rajasthan Transparency in Public Procurement Act, 2012, that;

1. We possess the necessary professional, technical, financial and managerial resource and competence required by the bidding document issued by the procuring Entity;
2. We have fulfilled our obligation to pay such of the taxes payable to the central government or the state government or any local authority, as specified in the bidding document;
3. We are not insolvent, in receivership, bankrupt or being wound up, not have my/our affairs administered by a court or a judicial officer, not have my/our business activities suspended and are not the subject of legal proceeding for any of the foregoing reasons;
4. We do not have, and our directors and officers not have, been convicted of any criminal offence related to our professional conduct or the making of false statement or misrepresentations as to our qualifications to enter into a procurement contract within a period of three years preceding the commencement of this procurement process, or not have been otherwise disqualified pursuant of debarment proceeding;
5. We do not have a conflict of interest as specified in the Rajasthan Transparency in public procurement Act, the Rajasthan Transparency in public procurement Rules and this Bidding Document, which materially affects fair competition;
6. We have complied and shall continue to comply with the code of integrity as specified in the Rajasthan Transparency in public Procurement Act, the Rajasthan Transparency in public procurement rules and this bidding document, till Completion of all our obligation under the contract.

Date:

Signature of Bidder

Place:

Name:

Designation:

Address:

Undertaking for not Black listed firm

Name of work :- Operation and maintenance of sps, public park Bikaner & Machinery system for performance of work included in the scope of work and other terms & conditions and technical specification as per tender document including all major/minor repair & maintenance in scope of tender and regular desilting of chamber, wet wells, screens etc. as per requirement.

मैं..... एवं मेरी फर्म..... यह घोषणा करते हैं कि

पिछले 05 साल में फर्म किसी भी सरकारी संस्था/अर्द्धसरकारी संस्था/विभाग में ब्लैक लिस्ट नहीं है। यदि यह घोषणा गलत/असत्य पाई जाती है तो फर्म के विरुद्ध की जाने वाली कार्यवाही के लिए

सहमत हूँ।

मय हस्ताक्षर
निविदादाता का नाम
फर्म का नाम

Undertaking (A) (on 100/- stamp)

निविदा के लिये मेरे/हमारे द्वारा प्रस्तुत किये गये सभी पत्र व जानकारीयों सही व सत्य है, यदि यह गलत व असत्य पायी गयी तो मेरे/हमारे द्वारा प्रस्तुत निविदा निरस्त कर मेरी/हमारी जमा कार्य प्रतिभूति राशि जब्त करने के लिये आप अधिकृत है।

मेरे/हम को यह ज्ञात है कि हमारे द्वारा प्रस्तुत पत्र/जानकारी निविदा के कार्य समय में कभी भी असत्य व गलत पायी जाने पर मेरी/हमारी निविदा निरस्त कर दी जावेगी तथा कार्य प्रतिभूति राशि व भुगतान आदि राशि जब्त कर ली जावेगी।

मैं/हम यह भी घोषणा करते हैं कि मैंने/हमारे कार्य स्थल तथा कार्य विवरण को देख समझ लिया है। मैं/हम स्वीकार करते हैं कि हमारी जमा की गई धरोहर राशि तथा सिव्योरिटी डिपोजिट पर ब्याज देय नहीं होगा तथा अगर मैंने/हमने (1) अपनी निविदा दर की वैधता 180 दिवस से कम समय के लिए प्रस्तुत की (2) दरें स्वीकृति के पश्चात् निविदा के निर्देशों की निर्धारित समय में पालना नहीं की (3) आदेशित कार्य समय पर प्रारम्भ नहीं किया (4) निविदा प्रपत्र में अगर नगर निगम के आदेश/निर्देशों की पालना नहीं की तो नगर निगम द्वारा निविदा निरस्त कर प्रतिभूति राशि जब्त कर ली जायेगी। इन वाहनों से संबंधित सभी व्यय मैं/हमारे द्वारा वहन किया जायेगा।

मुझे/हमें यह ज्ञात है कि कार्य प्रतिभूति राशि का कार्य संतोष जनक समाप्त होने के पश्चात् मांग करने पर बिना ब्याज के भुगतान किया जावेगा।

निविदा स्वीकार होने पर निविदा के नियम, शर्तों, संलग्न प्रपत्रों, निगम आदेशों की पालना करने के लिये मैं/हम बाध्य हैं तथा सहमति देते हैं।

मैं/हम यह भी घोषणा करते हैं कि नगर निगम प्रशासनिक, विधिक या अन्य किसी कारण से किसी भी समय कार्यादेश की निरस्त कर सकता है तथा इसका कोई क्षतिपूर्ति भुगतान नहीं किया जावेगा। इसकी मैं/हम सहमति देते हैं।

महामारी में बजट में फर्म रिस्क एंड कॉस्ट निविदा होने पर मेरे द्वारा भुगतान किया जायेगा या नगर निगम स्वतंत्र है।

दिनांक

निविदादाता का नाम
व हस्ताक्षर मय सील