

TENDER DOCUMENT

FOR

**Tender Document for Design, Supply, Installation and Commissioning
of Effluent Treatment Plant at Lab Complex, JIPMER Karaikal, campus.**

**PART-III
PRICE BID**

**TENDER NO. HITES/IDS/16/35/JIPMER-II/DSIC-ETP/KIK-33
Dated: 28.12.2016**

HLL INFRA TECH SERVICES LIMITED

	Contents	Page No.
1.	Commercial Conditions	03
2.	Special Conditions	06
3.	Testing of Installations	07
4.	Bill of Quantities	08

1. COMMERCIAL CONDITIONS

- 1.1 The tendered rate shall inter alia be deemed to include for the provision of all materials, process, operation and special requirements detailed in the particular specification irrespective of whether these are mentioned in the description of equipment schedule and Bill of quantities or not. It is an express condition of the contract that the tendered rates for various items in the Bill of Quantities shall be deemed to include for the full, entire and final condition of the contractor respective items of the works in accordance with the provision of the contract.
- 1.2 The tendered rate shall include for all taxes, duties, etc. as applicable and shall be quoted on the works contract basis for the Design, Supply, Installation and Commissioning of Effluent Treatment Plant at Lab Compex, JIPMER Karaikal campus.
- 1.3 The tendered rate shall remain firm and free from variation due to rise in the cost of materials/equipment labour or any other reasons whatsoever during the contract period and valid extension.
- 1.4 The quantum of excise duty included in the tendered price, the rate at which they were assumed etc. shall be indicated in the tender.

2. UNIT RATES

- 2.1 Only approved work will be measured on completion and priced as per rates quoted against the respective items.

3. BRIEF DESCRIPTION OF PRICING

- 3.1 The tenderer shall furnish duly certified breakup of material and labour separately for each item of work. The same shall be attached separately along with the price bid.

4. PRO-RATA VALUE

The detailed break up of prices for various items of equipments and materials of the full system should be provided by successful tenderers within fifteen days from the date of letter of intent to facilitate the Employer for assessment and verification and to certify payment.

5. INCOME TAX

Any payment to the contractor as per contract, will be made after deducting income tax as per the rules and regulations.

6. SALES TAX AND EXCISE DUTY

The tenderer shall clearly indicate sales tax, Excise and works contract tax and other duties as applicable in his offer for carrying out this work.

The quoted price shall be inclusive of all taxes and duties whether payable by the contractor or to be deducted at source. This shall include those applicable among VAT, Sales Tax, Income Tax, Customs Duty, Excise Duty, Turnover Tax, Service Tax, Work Contract Tax, Octroi, Labour Welfare Cess or any Other Taxes and Duties prevailing in respect of this contract. ANY BID STATING THAT TAXES ARE EXTRA WILL BE SUMMARILY REJECTED.

7. SUBMISSION OF BILL

- 7.1 The contractor shall from time to time prepare and submit interim bills of the work executed and on completion of the contract, he shall prepare and submit the final bill. The measurements sheets in support of the interim and final bills shall be prepared by the contractor on the basis of measurements taken by him jointly with the project engineer and the said measurement sheets shall be submitted by him with the relevant bill.

8. EXTRA ITEMS

The contractor is bound to carry out any items of work necessary for the completion of the job even though such items may not have been included in the schedule of probable quantities or rates, such items being necessary or essential for completing the job. Variation order in respect of such additional items and their quantities will be issued in writing by the Employer.

All shavings, cuttings and other rubbish as it accumulates from time to time during the progress of work and on completion including that of the sub-contractors and special tradesman and all materials condemned by the project engineer shall be cleared and removed from the site by the contractor without any extra charge.

All measuring steel taps, scaffolding, ladders instruments and tools that may be required for taking measurements shall be supplied by the contractor.

9. OVER TIME WORK

If the contractor is required to work night or on holidays in order to maintain the time schedule he shall take prior approval from the Employer. He should also provide and maintain at his own cost sufficient lights as may be necessary to enable the work to proceed satisfactorily during the night.

- 9.2 The contractor shall give full facilities to all other contractors working on site. He shall also arrange his programme of work so as not hinder the progress of other trades. The decision

of the Employers on any point of dispute between the various parties shall be final and binding.

- 9.3 It is specifically pointed out that the contractor shall not be entitled to any compensation whatsoever on account of delay in procurement or supply of controlled materials and the rates quoted in the contract are fixed till the completion of the contract.
- 9.4 The contractor shall co-operate with other agencies appointed by the Employer for the work to proceed smoothly with the least possible delay and to the satisfaction.
- 9.5 The owners shall provide a source for power supply at one convenient point at site. The contractor shall at his own cost install a separate meter at the said source and lay additional cables from the said source also at his own cost. For the electricity consumed by the contractor he shall pay the owner the actual cost at the rate charged by the local authority for power for constructional purposes. The contractor shall also obtain the necessary permit for utilizing power for constructional purposes.

10. TERMS OF PAYMENT

10.1 For equipments delivered and sorted at the site for the installation, the payment will be made by the HLL in accordance of this contract.

10.2 The rate of payment for the contract value under this contract shall be regulated and detailed below:

70% after supply of materials at site in good working condition on pro-rata basis.

20% after completion of installation in all respects.

Balance 10% will be paid after testing, commissioning & handing over to the client, including all required statutory approvals.

11. SPECIAL CONDITIONS

11.1 EXECUTION WORK

11.1.1 The whole of the work as described in the contract (including bills of materials, specification and all drawings pertaining thereto) and as advised by the Owners/Employers from time is to be carried out and completed in all parts to the entire satisfaction of the Owners/Employers. Any minor details of construction which are obviously and fairly intended, or which may not have been definitely referred to in this contract, but which are usual construction practice and essential to the work, shall be included in this contract.

11.2 MAINTENANCE & TRAINING FOR PERSONNEL

- 11.2.1 The contractor shall without any extra cost carry out for a period of 12 months after the installation is taken over by the owners, all routine and special maintenance and attend to any difficulties and defects that may arise in the operation of the System
- 11.2.2 The contractor shall associate with the Employers' staff during erection and the maintenance period, in the maintenance/operation of the system
- 11.2.3 If required, by the Employers, the contractor shall also train members of the Employers' staff at their works/service station without any extra charge.

11.3 CERTIFICATE OF COMPLETION

- 11.3.1 The contractor shall intimate to HITES in writing as and when the works are completed and put into beneficial use in order to enable HITES to check certify to the Employer to take over the plants.
- 11.3.2 The work shall not be considered as completed and put into beneficial use until HITES have certified in writing that the same has been completed and put into beneficial use.
- 11.3.3 The defects liability period of one year shall commence from date of such completion or any specific date mentioned therein.

11.4 OPERATIONAL AND MAINTENANCE MANUALS

- 11.4.1 The contractor shall also furnish the prints of all up-dated handing over along with required set of operating/maintenance manuals/instructions.

11.5 STATUTARY APPROVALS

All statutory approvals pertaining installations including electrical inspectorate & all the required approvals shall be in the scope of the supplier.

Reference: TENDER NO. HITES/IDS/16/35/JIPMER-II/DSIC-ETP/KIK-33 Dated:28.12.2016

THE ABSTRACT OF BILL OF QUANTITIES IN THE PRICE BID SHALL BE INVARIABLY FILLED. THOSE WHO BIDDERS DO NOT FILL WILL BE NON-RESPONSIVE AND WILL BE DISQUALIFIED FROM EVALUATION AND WILL BE TREATED AS TECHNICALLY NOT QUALIFIED.

**ALL ROWS SHALL BE FILLED, THIS IS MANDATORY
(IF NIL OR NA, THAT MAY ALSO BE SHOWN)**

BILL OF QUANTITIES

ABSTRACT

SI No	Name of work	Amount in Rs
1	Design, Supply, Installation and Commissioning of Effluent Treatment Plant at Lab Complex, JIPMER Karaikal campus, including all taxes & duties except service tax.	
a	Service tax component to be paid by the bidder	
b	Service tax component to be directly paid by the HITES in case the bidder is a Proprietary firm	
	GRAND TOTAL	

Design, Supply, Installation and Commissioning of Effluent Treatment Plant at Lab Complex of JIPMER Karikal					
Tender: HITES/IDS/16/35/JIPMER-II/DSIC-ETP/KIK-33					
S.no	Description	Unit	Qty	Rate	Amount
1	Design, Supply, Installation and Commissioning of Effluent Treatment Plant as per the detailed specifications mentioned herein under and as per the layout drawing enclosed and obtaining approval from statutory authorities including PCB etc., complete all as per the direction of Engineer-in-charge				
a	Effluent collection tank (2nos of 5000 lit each capacity).	LS	1		
	The tank must be made of MS (minimum 2 mm thick plate) and having a minimum FRP coating thickness of 1.5mm. This tank needs to be buried underground so as to collect the effluents from Labs. Contractor scope also include the necessary excavation, necessary dewatering, putting 150mm thick PCC, placing the tanks and refilling and compacting the area. The standard make for the steel are TATA/SAIL/VIZAG/JSW.				
b	Transfer pump (4 nos – two nos working and two nos standby) (one set each for each collection tank).				
	The pump must be capable of pumping the effluents to a horizontal distance of 160m. The standard make for the pumps are KIRLOSKAR/Grundfos/CG.				
c	MS tank for ETP with including required partitions (1 nos) (minimum size of 3m x 2.7m x 2.5m)				
	The tank must be made of MS (minimum 2 mm thick plate) and having a minimum FRP coating thickness of 1.5mm. All civil works necessary for the installation of this tank is in the scope of contractor. All platforms and necessary railing required for the tank must be in the scope of contractor. The standard make for the steel are TATA/SAIL/VIZAG/JSW.				
d	Ozonator (required quantity as per design)				
	Model having capacity of 20g/hr Maximum ozone concentrations: 20 mg/ L (operating ambient temperature of 10-25 ° C, oxygen flow 1.2L/MIN) Ozone Output : 20.G/ H (oxygen source 5L/MIN). The standard makes of ozonator are CECON/ULTRA/ALPHA				
e	Bar screening (required quantity as per design)				
	Bar type screening made of SS316 having a filterability >10mm				
	Standard make of stainless steel is Salem Steel				

f	Feed pump (2 nos – one nos working and one nos standby)				
	The feed pump must be of required capacity as per the design. The standard make for the pumps are KIRLOSKAR/Grundfos/CG.				
g	Aeration Blower with motor(2 nos- one working and one standby)(motor- 2 nos -one working and one standby)				
	Aeration blower capacity must be minimum of 50cum/h and must be twin lob type. Standard makes for the aeration blower are Everest / Leintz Pneumatics /Airvac. Motor must be of required capacity to make the aeration blower working. Standard makes for the motor are Kirloskar/CG/Grundfos.				
h	Diffused aeration system diffusers (required quantity as per design)				
	Standard makes are EE/Aquaflex/Jaeger.				
	The system must have EPDM with Teflon. The type must be disk 25mm threaded and capacity 0 to 10 cum/hr.				
i	Filter feed pump (2 nos – one working and one standby)				
	The requirement is Mono block pump with minimum 1hp power. The standard make for the pumps are KIRLOSKAR/Grundfos/CG.				
j	Pressure Sand Filter				
	Dial : 13”, HOS : 54”, MOC : FRP, Inner Lining : PP, Thick : 3 mm, Filtration Velocity : 15 m/s, B/W Velocity : 20 m/s, Frontal Pipeline : 1" UPVC B/F, Type : Automatic, Volume : 90 Liter				
k	Activated Carbon Filter				
	Dial : 13”, HOS : 54”, MOC : FRP, Inner Lining : PP, Thick : 3 mm, Filtration Velocity : 15 m/s, B/W Velocity : 20 m/s, Frontal Pipeline : 1" UPVC B/F, Type : Automatic				
l	HDPE Tank				
	Make : Sintex or Eq Height : 900 mm, Dial : 400 mm, Thickness : 3 mm, Temperature : range of -40c to 60c (HDPEWhite), Type : Round type with closing Cap				
m	Chemical dosing pump (4 nos: 2 nos working and 2 nos stand by) (required capacity as per design)				
	Standard makes are E Dose/SRS pumps/Matz pump				
n	Recirculation cum sludge transfer pump (2 nos – one working and one standby)				
	The requirement is self-priming pump with minimum 1hp power. The standard make for the pumps are				

	KIRLOSKAR/Grundfos/CG.				
o	Tube Settler's and Bio Media				
	MOC of Media : PVC, Shape of Tube : HEXAGONAL & Square Shape, Thickness : 1.1mm (+/- 0.1 mm), Height of Media : 750mm, 1000mm, Tube Fitting : Tongue and Groove. MOC : PE / PVC, No of Rooms : 6 to 12, Dia x Height : 25mm * 12mm Surface Area : > 500 M2 /M3 , Weight Per M3 : 25 Kgs, Num of pieces per M3 : 65,000 Approx. Colour : Black or White				
p	Electrical PLC Control Panel				
	Make : Siemens Model Along with Volt and Amp Meter, MOC : MS with Metal Power Coating, Breakers : Schneider Switch Gears, Contractor : L & T or Schneider Switch Gears, OLR : L & T or Schneider Switch Gears, Wiring Type : Star – Delta, Wiring Cable : Finolex or Polycab, Outer Cable : Finolex or Polycab (Armored), Power : 3 Phase, Neutral, Earth				
	All necessary wiring for the ETP from the USS room has to be done by the contractor.				
q	Inter Connection Aeration Tank Diffuse Pipe Lines				
	Make : Finolex , Supreme, ashirvad, Avonplast MOC : UPVC, MS Size : 1", 2", 4" Drilling : Manually, Clamping : Manually, Pasting : Manually, Pipes : As Required, L Bows : As Required, T Joints : As Required, Couplings : As Required, Pasting Solution : As Required				
r	Connection line from collection tank to ETP (300m length confirming to schedule 40)				
	Standard make : Finolex/Supreme/Ashirvad/Avonplast				
s	Operator for the ETP for 12 months (one shift)				
	Chemicals and Lubricants required for Erection and Commissioning to be supplied by contractor. Hand Rails, Ladders, Walk ways and MS Man holes (minimum total weight 400kg) have to be supplied and installed by the contractor. Interconnecting pipes in the tanks, air vent line for treatment tanks, treated water pump supply& installation and treated water final discharge pipe line are also included in the scope of contract. All loading and unloading of the Materials, Equipments, Tools and Crane for lifting the Materials are also in the scope of the contract.				
Total Cost inclusive of all taxes & CPOH					