

TENDER DOCUMENT

TENDER SPECIFICATION No : BAP:CF:OT:06/2016-17 Dt: 17/08/2016

NAME OF WORK:

OPERATION AND MAINTENANCE OF 1 MLD SEWAGE TREATMENT PLANTS IN FACTORY AND TOWNSHIP OF BHEL RANIPET FOR THE YEAR 2016-17-18. (SECTION – A & B)

PERIOD OF CONTRACT:

ONE YEAR

PART – I – QUALIFICATION BID


(Pages 1 – 109 including this cover page)



CIVIL PROJECTS AND SERVICES DEPARTMENT
BHARAT HEAVY ELECTRICALS LIMITED
(A Government of India Undertaking)
BOILER AUXILIARIES PLANT
INDIRA GANDHI INDUSTRIAL COMPLEX
RANIPET – 632 406

TENDERER

ACCEPTING OFFICER

	Bharat Heavy Electricals Limited Boiler Auxiliaries Plant Ranipet - 632 406 Tamil Nadu, India CIVIL PROJECTS AND SERVICES	
	Phone:	04172 –284792 / 95855 01087
	Email :	mmselvam@bhelrpt.co.in

CIVIL PROJECTS AND SERVICES

BAP: CF:CONTRACTS:

Dt: 17/08/2016

To

The Tenderer

Dear Sirs,

Sub: **Operation & Maintenance of 1 MLD Sewage Treatment Plants in Factory & Township of BHEL Ranipet for the year 2016-17-18** – REG.

Ref: 1. Tender Notice No. **BAP:CF:OT:06/2016-17 Dt: 17/08/2016**

Please find enclosed / attached non-transferable tender document containing I) Qualification bid consisting of Preamble, Specifications, General Conditions & Special Conditions of Contract, Norms for Qualification to Tender etc ii) Price bid consisting of Bill of Quantities to offer your most competitive rates for all the items of Bill of Quantities.

Tender for the work should be submitted in a sealed cover consisting of three inner sealed covers viz. I) EMD cover ii) Qualification bid cover & iii) Price bid cover, all super scribing the name of work, tender schedule number etc.

01. **EMD cover shall contain requisite EMD in the form of DD.** Tenderers who had already remitted one time EMD should furnish the details of cash receipt No.____ DT. _____, on the top of EMD cover. Tender without EMD / one time EMD reference will be summarily rejected and the qualification bid & price bid shall not be considered. **Tender documents can be downloaded from web sites.** Demand Draft towards EMD shall be drawn in favour of BHEL, Ranipet payable at Ranipet.
02. Qualification bid cover shall contain duly filled in qualification bid document signed by the tenderer in all the pages with documentary evidences for Qualification Criteria such as experience, value of work executed in the similar nature of work, etc. **Any bid without proper documentary evidence for Qualification Criteria shall not be considered for further evaluation.**
03. The Price Bid cover shall contain only price bid document duly filled in and signed by the tenderer in all the pages. **The tenderer has to quote most competitive rates for all the items in the Bill of Quantities from page No. 2 TO 3 of Part – II - Price Bid only.**

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The completed qualification bid and price bid along with requisite EMD of **Rs.40,000/-** for the work in the form of Demand Draft in favour of BHEL, Ranipet shall reach the office of the undersigned on or before **23/09/2016 at 15.00 hrs.** Tenderers who had already remitted one time EMD should furnish the details of cash receipt no. _____ dt. _____, on the top of EMD cover. EMD in any other form will not be accepted. The qualification bid will be opened on the **same day at 15.00 hrs.** In case of opening day falls on holiday or happened to be declared as a holiday, the receipt and opening of the tender shall automatically fall on the same timing of the next working day. Date and time of opening of the Price Bid shall be intimated only to the bidders those who have qualified after evaluation of the qualification bid. You / your authorized representative may participate in the tender opening. Clarification if any can be obtained contacting following phone No. 04172 – 284440 / 284883. E-mail: mmselvam@bhelrpt.co.in, mkpillai@bhelrpt.co.in.

Thanking you,

Thanking you,

Yours faithfully

For and on behalf of

BHARAT HEAVY ELECTRICALS LIMITED,

SENIOR MANAGER / CIVIL PROJECTS AND SERVICES

TENDERER

ACCEPTING OFFICER

CONTENTS

CHAPTER	DESCRIPTION	PAGE
	<u>PART – I – QUALIFICATION BID</u>	
I	NOTICE INVITING TENDER	5
II	PREAMBLE & QUALIFICATION REQUIREMENTS (QR)	6 – 10
III	INSTRUCTIONS TO TENDERERS	11 – 14
IV	TENDER NOTICE	16 – 20
V	SPECIAL CONDITIONS TO CONTRACT	21 – 22
VI	GENERAL INSTRUCTIONS	23
VII	TECHNICAL DETAILS OF THE PLANT INCLUDING ANNEXURES I TO V	24 – 30
VIII	CONDITIONS REG. SAFETY, LABOUR LAWS ETC	31 - 38
IX	QUESTIONNAIRE	39 - 40
X	CERTIFICATE OF NO DEVIATION	41
XI	ANNEXURES B, C & SERVICE TAX	42- 47
XII	UNPRICED RATE SCHEDULE	48-50
	STP PROCESS FLOW DIAGRAM	1 page
	ACCEPTANCE FOR EFT	1 page
	GENERAL CONDITIONS OF CONTRACT (GCC) OF BHEL	57 Pages
	<u>PART – II – PRICE BID</u>	
XIII	<u>PART – II – PRICE BID</u>	3 Pages

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BHARAT HEAVY ELECTRICALS LIMITED
RANIPET – 632 401
CIVIL PROJECTS AND SERVICES DEPARTMENT

CHAPTER – I

NOTICE INVITING TENDER	
1. Tender Notice No	BAP:CF:OT:06/2016-17 Dt: 17/08/2016
2. Name of work	Operation & Maintenance of 1 MLD Sewage Treatment Plants in Factory & Township of BHEL Ranipet for the year 2016-17-18.
3. Period of contract	ONE YEAR
4. ESTIMATED COST of the work:	N.A
5. Tender Document Cost	NIL –(can be downloaded freely from BHEL web site – http://www.bhel.com/tender/list_tender.php)
6. Earnest Money Deposit (EMD) Amount	Rs. 40,000/- (Rs. Forty Thousand only)
7. Last date & Time for receipt of the completed Tender	23/09/2016 at 15.00 Hrs.
8. Date of Technical bid Opening	23/09/2016 at 15.00 Hrs.
9. Date of Price Bid Opening	Tenderers whose technical bids are found acceptable will be intimated separately about the status of their offers and the date of opening of Price Bid
10. Place of submission of Tender	<u>Tender Box placed in</u> Office of the Sr.Manager, Civil Projects & Services, BHEL - BAP, Ranipet – 632 406
11. Address on the Sealed Tender Cover to be:	DEPUTY GENERAL MANAGER <u>CIVIL PROJECTS & SERVICES</u> BHARAT HEAVY ELECTRICALS LIMITED RANIPET – 632 406 VELLORE DISTRICT TAMIL NADU
12. Venue of the Tender Opening	Office of the Sr. Manager / Civil Projects & Services
13. Tender Document Contains:	Totally 112 pages (Qualification bid & Price bid)
14. Period of contract	One Year (From the date of commencement of the work which will be reckoned from the date of the site handed over to the Contractor)

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BHARAT HEAVY ELECTRICALS LIMITED
RANIPET – 632 401
CIVIL PROJECTS AND SERVICES DEPARTMENT

CHAPTER – II

PREAMBLE

Name of work: Operation & Maintenance of 1 MLD Sewage Treatment Plants in Factory & Township of BHEL Ranipet for the year 2016-17-18

01. The scope of work includes operation and maintenance activities for two Sewage Treatment Plants (STPs) of each 1 MLD capacity, one Plant located inside Factory premises and the other plant at Township premises of BHEL, Ranipet-6, Vellore District, Tamil Nadu. Both the plants are meant for treating the domestic sewage and canteen wastes. The work is to be executed on all BHEL working days including public holidays and Sundays in shifts (any two shifts of the day at the discretion of BHEL). The STPs are Membrane Bio-Reactor based plants.

The scope of work also includes the following and the special conditions of the contract

Each of the existing Plant is capable of treating 1000 cum of sewage per day. Technical details of the Plant (Annexure – I) and the process layout (Drg. No.3-WT-220-00036) with characteristics of influent and effluent are enclosed.

Operation and Maintenance is to be carried out in any two shifts of the day at the discretion of BHEL, including maintaining pumps, blowers, pneumatic valves, dosing systems etc. The tenderers may visit the STP Plants before submitting their tenders. A copy of the O&M manual will be given to the successful tenderer after placement of order for the O&M.

The contractor should engage Supervisor and shift Operators. The Man power requirement is given in Annexure- II for operation, maintenance & treating the sewage to the norms specified by BHEL and disposes the treated water as directed by the BHEL Engineer-in-charge. The labourers engaged should be paid not less than the minimum wages prevailing time to time as per Tamil Nadu State Government norms.

Raw and treated water should be tested for pH, TSS, TDS, COD, BOD @20 ° C for 5 days / 27° C for 3 days, Oil & Grease, etc as per the schedule given in the Annexure -IV - shall be tested once in a month and record should be maintained and produced to BHEL for its verification. Apart from the daily field tests, the treated water has to be tested for the above tests in a Tamil Nadu pollution control board approved laboratory.

The contractor should maintain all monitoring records w.r.t STP operation and maintenance, Laboratory analysis, etc. List of records to be maintained is given in Annexure-V.

The Contractor should associate for collecting samples by statutory bodies like Central Pollution Control Board, Tamil Nadu Pollution Control Board and others if necessary.

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The details of spares required for all pumps, blowers and all other equipments shall be given by the contractor well in advance so as to procure and keep ready to run the plant without any interruption, and the same will be issued to them on written requisition. Replacing of defective spares is in the scope of contractor. Records shall be maintained for the receipt and use of spares supplied by BHEL. Any major repair of equipment & replacement of spares will be decided & taken up by BHEL. All minor repairs & replacement shall be carried out by the contractor. BHEL's decision is final & binding in this regard.

During this period the contractor should take whole responsibility of Plant operation including treatment efficiency. Any deviation from the specific performance requirement of any equipment or quality of treated effluent as per norms, the contractor shall immediately take steps to rectify the deficiency without any extra cost to the Authority.

02. Time is the essence of the contract. Being a time bound work on maintenance nature; the contractor should make all efforts to complete the work in the stipulated time.
03. The tenderers are advised to visit BHEL site at Ranipet and get them selves acquainted with the site conditions before submitting the offer.
04. **QUALIFICATION REQUIREMENTS (OR): Qualifying / Eligibility Criteria for Tenderer for the work of OPERATION & MAINTENANCE OF 1 MLD SEWAGE TREATMENT PLANTS IN FACTORY & TOWNSHIP OF BHEL**

The essential qualification requirements of contractors for submission of this tender shall be as under:

- a. Average annual financial turnover of the Contractor during last 3 years ending on 31st March 2015 (if audited balance sheet available for 2015-16, then year ending up to March 2016) , should be **at least Rs. 4.06 Lakh for this work** and the tenderer should submit audited balance sheet and Profit & Loss Account for the last three financial years [2012-13, 2013-14 & 2014-15 or 2013-14, 2014-15 & 2015-16 if audited balance sheet available for financial year 2015-16 also], duly certified by chartered accountant / auditor.
- b. Contractors having experience of successfully completed similar works (Operation & Maintenance of Sewage Treatment Plants / Effluent treatment plants of industries / other bodies like corporations) during the last 7 years as on 31/08/2016 for Government Organizations / Government undertakings / Corporations / Municipalities / reputed private sectors / reputed private industries etc. should be either of the following.
 - i. **Three similar completed works each costing not less than Rs. 5.41 Lakh.**
OR
 - ii. **Two similar completed works each costing not less than Rs. 6.76 Lakh.**
OR
 - iii. **One similar completed work costing not less Rs. 10.81 Lakh.**
- c. The tenderer should have executed similar type of work in their own name shall be considered.

- d. The tenderers to note that possession of Provident Fund (PF) code is not a pre-condition for participation in the tender. However, the successful tenderer should ensure to get the PF code No. and the PF amount deducted from their employees are to be deposited in this PF code along with their contribution.
- e. Also Contractor should have separate Registration Code No. for ESI, Sales Tax, PAN and Service Tax. Contractor shall submit copy of the above registration codes or proof of having applied for the registration codes along with the tender bid.

Tender bids not meeting any of the above pre-qualification criteria shall be rejected

- 05. Dissimilar / irrelevant works will not be considered for eligibility criteria.
- 06. The details on turnover, works experience (**Works Completion Certificates issued by customers / clients must be enclosed**), P.F, ESI registration etc., all as furnished by the tenderer shall have to be supported with documentary evidences (Xerox copies -attested). If BHEL demands at any stage, original certificates also have to be shown to BHEL authorities.
- 07. Tender Value is only approximate and liable for variation without entitling the tenderer to any compensation, provided the total value of contract does not vary by more than 20% (twenty percentage).
- 08. **The rates quoted shall be valid for 3 months period from the date of Tender opening (Qualification bid).**
- 09. The offered rate is for finished item of work as per Bill of Quantities and shall provide for the complete cost towards labour, tools & plants, feed & permeate testing materials, levies, taxes, transport, lay-out, repairs, rectifications, maintenance, supervision, establishment, services, overheads, profits & all other incidentals etc., complete. **The rate quoted shall not include service tax. The applicable service tax (as quoted by the bidder in the Price Bid / limited to applicable tax, whichever is lesser) can be claimed from BHEL along with their monthly bills for further payment to be made for the authorities concerned.**
- 10. For any item of work not covered in Bill of Quantities, the rate will be arrived at based on the conditions given in BHEL General Conditions of Contract.
- 11. **After award of work the contractor has to furnish the security deposit, as per Clause 11, CHAPTER – IV, TENDER NOTICE. Also it is to be noted that after award of work the contractor has to furnish security deposit before the commencement of work.**
- 12. **As and when required, the contractor has to supply extra manpower like Unskilled, Semi-skilled, Skilled, Trade certificate holders etc. for which payment (monthly) will be made to the contractor as per the prevailing rates of Government of Tamilnadu & BHEL's monthly adhoc wage (additional payment) including employer's contribution of P.F, ESI & minimum bonus for the wages and a profit margin for all these payments mutually agreeable by both BHEL and the Contractor. While deciding this wage, the contractor's already quoted rate also will be considered for fixing the new rate at par his quote of the contract.**

**WAGES & OTHER PAYMENTS / CONTRIBUTIONS TO BE MADE TO THE WORKERS
DEPLOYED IN THE CONTRACT:**

13. The tenderer has to ensure payment of Minimum Wages as per Tamil Nadu State Minimum Wages as applicable under law from time to time. The current minimum wage is **Rs.8,796.00 per month** for Unskilled worker; **Rs.9,036.00 per month** for Semi-skilled worker and **Rs.9,246.00 per month** for Skilled worker / Supervisor.

The labourers engaged in this contract shall be paid 'additional payment' as mentioned below in addition to the payment of Minimum wages as stated above.

- a) **Unskilled Worker Rs. 3200 per month**
 b) **Semi-skilled Worker Rs. 3700 per month**
 c) **Skilled Worker / Supervisor Rs. 4100 per month**

Also the labourers shall be paid a minimum bonus which shall be 8.33% as per the payment of Bonus Act 1965 for the total wages paid (i.e.) Payment of minimum wages and additional payment as mentioned above.

The Contractor shall have to remit EPF & ESI contributions at the rates applicable under law to the authorities concerned for the total wages paid (i.e.) Payment of minimum wages and additional payment as mentioned above.

Normally the revision of Tamil Nadu govt. minimum wage will be with effect from 1st April of every year. TENDERERS ARE REQUESTED TO QUOTE THEIR OFFER AFTER TAKING IN TO ACCOUNT OF THE ABOVE FACTOR ALSO. The quoted rate shall be firm for the entire contract period of one year and any extension of contract if accepted thereafter.

14. The contractor has to carry out the work without affecting the working environment.
15. The decision of Engineer-in-charge shall be final and binding on the contractor regarding clarification of items in this tender schedule.
16. The contractor shall strictly adhere to various labour laws in force.
17. The contractor shall follow norms of BHEL security system for movement of men & materials within the complex including biometric system.
18. Daily labour report for the manpower engaged on previous day area wise shall have to be submitted next day.
19. Since the responsibility for the quality, workmanship and accuracy of any work being carried out under this contract lies with the contractor, the contractor should ensure that no work is done without the presence of contractor's representative at the work spot.
20. The contractor has to submit the organization chart of their set up for the works and any change thereafter in the organization set up shall have the prior approval of BHEL.

TENDERER

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21. Statement of completed works with detailed measurements along with material reconciliation statements shall be submitted by the contractor every week and the payment for the work done will be paid once in a month.
22. The tenderer shall carry out health performance test at his cost for all the workmen engaged in the work through a registered medical practitioner and produce certificate on demand.
23. The works contract to be entered into with the successful tenderer will be governed by the BHEL General Conditions of Contract in force.
24. All materials brought by the Contractor for incorporation in the work shall be got inspected and approved by the Engineer-in-charge before they are incorporated in the work.
25. The contractor should extend fullest co-operation with the third party agencies engaged, if any by BHEL to adhere the Quality Control Procedures ensuring quality.
26. The contractor should extend full co-operation to the other contractors who may be doing other works in the same areas to enable them to execute their portions of work without any delay or difficulty.
27. Power, water and compressed air required for the operation & maintenance of the STPs will be given by BHEL on free issue basis.
28. BHEL reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract at another Project/Unit of BHEL awarded against a different enquiry.
29. BHEL reserves its right to accept / reject any or all the tenders.
30. No advance / mobilization advance will be given.
31. LD / Penalty clause is applicable as per General Conditions of Contract. All the terms & conditions in the documents are binding on the tenderers.

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BHARAT HEAVY ELECTRICALS LIMITED
RANIPET – 632 401
CIVIL PROJECTS AND SERVICES DEPARTMENT

CHAPTER- III

INSTRUCTIONS TO TENDERERS

1. The tender is open to all Contractors. The Contractors not borne on the approved list of contractors of this Organization must submit the following testimonials simultaneously with their tenders.
 - i. A Certificate to establish that the tenderer is an independent contractor working on his own.
 - ii. At least two certificates from responsible Officers of Government of Firms of repute, regarding the tenderer's capacity to undertake and carryout the work tendered for or similar work satisfactorily

NOTE:

- a) Copies of testimonials unless attested by a Gazetted Officer will not be accepted
 - b) Non – Submission of the above testimonials simultaneously with the tenders may result in the tender being rejected
2. The tenders should be accompanied by a list of contracts already held by the contractor at the time of submitting the tender and giving the following particulars
 - a) Value of each contract
 - b) The balance value of work to be done on the same

The tenderer is advised to download the tender document from BHEL / CPP / Tenders India web sites.

3. **Rate for each item of the tender schedule should be quoted in FIGURES and in WORDS.**
4. Rate quoted shall include all royalties, terminal taxes, Octroi duties, Central or Provincial Excise Tax, Sales Tax and any other taxes leviable under the State or Central Government rules. The Bharat Heavy Electricals Ltd., will not entertain any claim whatever in this respect. The rate quoted shall not include service tax. The applicable service tax (as quoted by the bidder / limited to applicable tax, whichever is lesser) can be claimed from BHEL along with their monthly bills for further payment to be made for the authorities concerned.
5. Tender Value is only approximate and liable for variation without entitling the tenderer to any compensation, till the total **value of contract vary by more than 20% (Twenty Percentage)**
6. The works contract to be entered in to with the contractor will be governed by the BHEL General Conditions of contract in force.

TENDERER

ACCEPTING OFFICER

7. Should a tender find discrepancies or omissions in the drawings or any of the tender documents or should be in doubt as to their meaning, he should at once address the authority inviting the tender for clarification. Every Endeavour is made to avoid any error which can materially affect the basis of the tender but the successful tenderer shall take upon himself to provide for the risk of any error which may be subsequently by discovered and shall make no subsequent claim on account thereof.
8. Tenders submitted by post should be sent “Registered Post with Acknowledgement due”. These should be posted with due allowance for any delay in postal delivery. Tenders received after the due date and time of opening, tenders is liable to be rejected.
9. The contractor’s responsibility under this shall commence form the date of receipt of contract or the order of acceptance of his tender. The scheduled period of completion for this work will be **ONE YEAR**, and the Contractor will have to plan his work accordingly.
10. The maintenance period for this work will be **Nil**.

11. Earnest Money Deposit:

Earnest Money is to be paid by each tenderer to ensure that the tenderer does not refuse to execute the work after it is awarded to him. **EMD be furnished only in the form of Pay Order or Demand Draft in favour of BHEL, Ranipet, EMD in any other form will not be accepted.** The rate of earnest money deposit shall be as under:

Works costing up to Rs. 2 lakhs	NIL
Works costing more than Rs.2 lakh and up to Rs. 5 lakhs	Rs. 10000/-
Works costing more than Rs.5 lakhs and up to Rs.10 lakhs	Rs. 20000/-
Works costing more than Rs.10 lakhs and up to Rs.20 lakhs	Rs. 40,000/-
Works costing more than Rs.20 lakhs and up to Rs.30 lakhs	Rs. 60,000/-
Works costing more than Rs.30 lakhs and up to Rs.50 lakhs	Rs.1,00,000/-
Works costing more than Rs.50 lakhs and up to Rs.100 lakhs	Rs.1,50,000/-
Works costing more than Rs.100 lakhs	Rs. 2,00,000/-

One time EMD will also be Rs.2.00 lakhs.

EMD by the Tenderer will be forfeited as per tender Documents if:

- a) After opening the tender, the tenderer revokes his tender within the validity period or increases his earlier quoted rates,
- b) The tenderer does not commence the work within the period as per LOI / Contract. In case the LOI / contract is silent in this regard then within 15 days after award of contract.

EMD given by all unsuccessful tenderers shall be refunded normally within fifteen days of acceptance of award of work by the successful tenderer. EMD shall not carry any interest.

12. Should a tenderer or a contractor on the list of approved Contractors have a relative, or in the case of a firm or Company of contractors any of its share holders or share holder's relative, employed in a gazetted capacity in the Engineering Department of the Bharat Heavy Electricals Limited, the authority inviting tenders shall be informed of this fact at the time of submission of the tender, failing which tender, may be disqualified or if such fact subsequently comes to light, the contract may be rescinded in accordance with the relevant provisions in the General Conditions of Contract.
13. If tenderer expires after the submission of his tender or after the acceptance of his tender the BHEL may, at their discretion, cancels such tender. If a partner of a firm expires after submission of tender or after the acceptance of the Tender, BHEL may cancel such Tender at their discretion unless the firm retains its character.
14. The Bharat Heavy Electricals Limited will not be bound by any power of attorney granted by the tenderer or by changes in the composition of firm made subsequent to the execution of the contract. They may however recognize such power of attorney and changes after obtaining proper legal advice the cost of which will be chargeable to the contract concerned.
15. If the tenderer deliberately gives wrong information in his tender or creates conditions favourable for the acceptance of his tender, the Bharat heavy Electricals Limited, reserves the right to reject such tender at any stage.
16. Words importing the singular number shall also be deemed to include the plural number and vice versa where the context so requires.
17. The expenses for competing and stamping the agreement shall be paid by the contractor.
18. The General and special conditions are complementary to each other and where they are conflict the Special Conditions shall prevail. In regard to matters not covered by the General and Special Conditions of Contract, those contained in the Tamil Nadu Building Practice Standard Specifications or other specifications approved by the Bharat Heavy Limited, Shall apply.
19. Tenderers shall not increase their quoted rates in case the Bharat Heavy Electricals Limited negotiates for negotiation for reduction of rates. Such negotiation shall not amount to cancellation or withdrawal of the original offer and the rates originally quoted shall be binding on the tenders for a period of three months from the date of opening of tenders.
20. Canvassing in any form in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection
21. All contractors will have to produce Income tax Clearance Certificate from the Income Tax–Officer concerned along with their tenders. Those Contractors whose income is not taxable will be required to give an affidavit of their income on the prescribed form. If the successful tenderer fails to produce the Income – tax clearance certificate within the stated period the Earnest Money Deposit and Security Deposit of the tenderer may be forfeited and the contract terminated.

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22. **Benefits to Micro, Small & Medium Enterprises (MSE):** Guidelines of the Govt. of India shall be followed to provide benefits to MSE. MSE suppliers can avail the intended benefits only if they submit along with offer, attested copies of either EM-II certificate having deemed validity (Five years from the date of issue of acknowledgement in EM-II) or valid NSIC certificate or EM-II certificate along with CA certificate (Format enclosed as per Appendix – IV) applicable for the year, certifying quantum of investment in plant and machinery within the permissible limit as per the act for relevant status (Micro or small) where the deemed validity of EM-II is over. Date to be reckoned for determining the deemed validity will be the last date of technical bid submission. Non submission of such documents will lead to consideration of their bids at par with other bidders and MSE status of such suppliers shall be shifted to Non MSE supplier till the supplier submits these documents

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APPENDIX – IV

Certified by Chartered Accountant on letter head

This is certify that M/s, (hereinafter referred to as 'company') having its registered office at is registered under MSMED Act 2006, (Entrepreneur Memorandum No (part-II) dtd :..... Category:..... (Micro/Small) (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as on date as per MSMED Act 2006 is as follows:

1. **For Manufacturing Enterprises:** Investment in plant and machinery (i.e. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No.S.O.1722(E) dated 5, 2006 :
Rs..... Lakhs
2. **For Services Enterprises:** Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006:
Rs..... Lakhs

The above investment of Rs..... Lakhs is within permissible limit of Rs..... Lakhs for Micro / Small (**Strike off which is not applicable**) Category under MSMED Act 2006.

Date:

(Signature)

Name –

Membership Number –

Seal of Chartered Accountant

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BHARAT HEAVY ELECTRICALS LIMITED
RANIPET – 632 401
CIVIL PROJECTS AND SERVICES DEPARTMENT

CHAPTER - IV

TENDER NOTICE

NAME OF WORK: Operation & Maintenance of 1 MLD Sewage Treatment Plants in Factory & Township of BHEL Ranipet for the year 2016-17-18.

ESTIMATED COST: Rs. N/A

1. SEALED TENDERS for the above noted work are hereby invited from contractor experienced in works of similar kind and magnitude. Tenders will be received by DEPUTY GENERAL MANAGER / CIVIL PROJECTS & SERVICES, **Bharat** Heavy Electricals Limited, Ranipet – 632 406 up to **15.00 Hrs.** on **23/09/2016** and (Qualification Bid only) will be opened on the same day at **15.00 Hrs.** at the **Office of the SENIOR MANAGER / CIVIL PROJECTS & SERVICES** in the presence of such of those tenderers Or their agents who may choose to attend.
2. TENDERS must be submitted in sealed covers and should be addressed to with full name and address of the tenderer and the name of work being noted on the cover.
3. All entries in the tender documents should be in the one ink. Erasers and over writings are not permitted. All cancellations and insertions should be duly signed by the tenderer concerned.
4. TENDERERS should fill in all the required particulars in the blank spaces provided for this purpose in the tender documents and also sign each and every page of Tender Documents including the drawings attach there to before submitting their tender.
5. Clause regarding rates quoted in the tender:-
 - a. If, in the price structure quoted for the required goods / services / works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.
 - b. If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
 - c. If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject of (a) and (b) above.
 - d. If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date up to which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored.

TENDERER

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6. In quoting their rates, the tenderers are advised to take account all factors including any fluctuations in the market rates etc. No claim will be entertained on this account after acceptance of the tender or during the currency of the contract.
7. Before tendering, the tenderers are advised to inspect the site of work and its environments and be well acquainted with the actual working and other prevalent conditions, position of materials and labour, General and Special Conditions of Contract. Instructions to tenders, drawings and Specifications and all other documents which form part of the Agreements to be entered into.
8. **The rates quoted in the tender shall remain valid for a period THREE MONTHS** from the due date of opening of the tender (Qualification bid).
9. In the event of tender being submitted by firm the tender must be signed separately and legibly by each partner or member of the firm or in their absence, by the person holding the power of attorney on behalf of the firm concerned in the latter case a copy for the power of attorney duly attested by a Gazetted Officer must accompany the tender.
10. Every tender must be accompanied with EMD for the amount as specified in Page No. **12** in any of the form mentioned in Para **11** of the "Instruction to Tenderers". This Earnest Money will be refunded to the unsuccessful tenderers within fifteen days of finalization of the award of work. In case of the successful tenderer, the Earnest Money will be retained as part of the Security Deposit for satisfactory completion of the work in accordance with Clause 16 of the General Conditions of Contract

NOTE: Cheques, Currency Notes and Money Orders will not be accepted in lieu of the deposit receipt referred to above

"No interest shall be payable by BHEL on Earnest Money or Security Deposit, if applicable, or any money due to the Contractor by BHEL."

"BHEL shall have the right to recover any money which in the sole opinion of BHEL is due from the Contractor from any money due to the Contractor under this Contract or any other contract or from the security Deposit furnished by the Contractor under this contract or any other contract."

"Notwithstanding anything to the contrary, including, but not limited to, provisions relating to extension of time and compensation for delay, time shall be the essence of the Contract."

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11. **Security deposit:** Chapter – III clause 18 (18.1.1 to 18.1.5) Page Nos. 12 & 13 of General Conditions of contract booklet deleted & Revised as below.

a) The rate of Security Deposit (SD) will be as below:

- Up to Rs. 10 lakhs: 10%
- Above 10 lakhs up to 50 lakhs: Rs. 1.lakh + 7.5% of amount exceeding Rs. 10 lakhs.
- Above 50 lakhs: Rs. 4 lakhs + 5% of the amount exceeding Rs. 50 lakhs.

The Security Deposit should be collected before start of the work from the Contractor.

b) The security deposit may be furnished in any one of the following forms:

- 1) Cash (as permissible under the Income Tax Act)
- 2) Pay order, Demand draft in favour of BHEL,
- 3) Local cheques of scheduled banks, subject to realization.
- 4) Securities available from Post offices such as National Savings Certificates, Kisan Vikas Patras etc. (Certificates should be held in the name of Contractor furnishing the security and duly pledged in favour of BHEL and discharged on the back).
- 5) Bank guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The Bank Guarantee format should have the approval of BHEL.
- 6) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The FDR should be in the name of the contractor, A/c BHEL, duly discharged on the back.
- 7) Security Deposit can also be recovered at the rate of 10% from running bills. However in such cases at least 50% of the Security Deposit should be collected before start of the work and the balance 50% may be recovered from the running bills.
- 8) EMD of the successful tenderer can be converted and adjusted against the security deposit.
- 9) The security deposit shall not carry any interest.

(Note: Acceptance of security deposit against Serial No.4 & 6 above will be subject to hypothecation or endorsement on the documents in favour of BHEL. However BHEL will not be liable or responsible in any manner for the collection of Interest or renewal of the documents or in any other matter connected therewith.)

100% of the security deposit may be refunded on completion of the work along with the final bill as maintenance period is NIL for this contract.

1. Unless the contractor whose tender is accepted signs the Contract Agreements and makes the necessary security deposit specified in Para 11 above within Seven days of the date of the order directing him to do so the amount of Earnest Money Deposit already deposited by him will be forfeited and acceptance of his tender withdrawn.
2. If after opening of tenderer revokes his tender or increases his earlier quoted rates or after acceptance of his tender does not commence the work in accordance with the instruction of the Engineer-in-charge, the Earnest Money deposited by him will be forfeited and acceptance of his tender withdrawn. If only a part of the work included in the tender had been awarded to the tenderer, the amount of Earnest Money to be forfeited will be based on the value of the contract so awarded.
3. The Bharat Heavy Electricals Limited reserve the right to reject any or all the received or accept any tender or part thereof without assigning any reason thereof. In the case acceptance of part of tender, time for completion may also be reduced to the extent considered appropriate by the Accepting Authority.
4. Conditional and un witnessed tenders, tender containing absurd rates and amounts, tenders which are incomplete or otherwise considered defective and tenders not in accordance with the tender conditions laid down by the Accepting Officer are liable to be rejected.
5. Tenders not submitted on the prescribed form are liable to be rejected
6. The work must be completed within a contract period of **ONE YEAR**.
7. The General Manger / Additional General Manager / Senior Manager / Senior Engineer or the Office mentioned by BHEL shall be Accepting Officer, herein after referred to as such for the purpose of this contract.
8. This tender notice shall be deemed to form an integral part of the contract to be entered into for this work.
9. The tenderers are advised to go through the condition stipulated in the Tender document & code of conduct for Health & Safety of Contract Labourer in details. Any violation thereof will invite punitive action being taken against them. While quoting the rate all the above factors are to be taken into account.
10. **Quoted rates shall be firm through out the contract period of one year and extended contract period also and no cost escalation is allowed on any account.**

- 11. The similar works executed in the own name of the tenderer only will be considered for eligibility / qualification criteria.**
12. BHEL reserves the right to increase or decrease the tendered quantity.
13. Lowest prices received against BHEL tenders need not be the technically acceptable one, and in that case, BHEL reserves the right not to consider the same.
14. BHEL reserves the right to negotiate or refloat the tender opened, if L1 Price is not lowest acceptable price to them inter-alia other reasons.
- 15. The contract will be finalized based on the overall LOWEST value (both Factory sec-A and Township sec-B put together) and to be awarded to single party only since split in schedules is not possible.**

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BHARAT HEAVY ELECTRICALS LIMITED
RANIPET – 632 401
CIVIL PROJECTS AND SERVICES DEPARTMENT

CHAPTER – V

SPECIAL CONDITIONS OF CONTRACT

1. Each of the existing Plant is capable of treating 1000 cum of sewage per day. Technical details of the Plant (Annexure – I) and the process layout (Drg. No.3-WT-220-00036) with characteristics of influent and effluent are enclosed.
2. The contractor should engage Supervisor and shift Operators for the O&M work. The Man power requirement is given in Annexure- II for operation & treating the sewage to the norms specified by BHEL and disposes the treated water as directed by the Engineer-in-charge.
3. **There are existing society contract workers in shifts and they will assist as helpers in the O&M work. They will remove away the screen rejects and process rejects regularly and helps generally to keep the plant & surrounding neat and clean. They will take care of the blowers operation and the plants in the 3rd shift everyday. Permeate water will not be produced in the 3rd shift.**
4. Operation and Maintenance is to be carried out in any two shifts a day at the discretion of BHEL for all the activities of the plant maintaining pumps, blowers, pneumatic valves, dosing systems etc as listed in the Annexure – III. Daily log details have to be maintained for all equipment of the plant and their performance including energy / diesel consumption, feed and permeate water qualities as instructed by BHEL Engineer in charge. All equipment & valves may have to be operated / controlled manually also.
5. If the system is not operated for more than a shift of 8 hours due to break-down on account of other than Power Supply, non availability of effluent, Spares, etc., recovery will be made on pro rata basis as per the approved and awarded rate as in **SI.No.1 of Section A & B** for respective STP plant per month from the date of break down to the date of putting back the system to perform effectively. The work is to be executed on all BHEL working days including public holidays and Sundays.

Carryout preventive maintenance of the equipment like pumps, blowers valves etc as per the instructions given in the O&M manual. Attend all minor breakdowns. Materials, if any, required for repairs & maintenance of the equipment by Contractor will be given by BHEL.

Incase of major breakdown, arrange for removal of the motor, gearbox, blowers, pumps etc and handover to BHEL for repair.

The Operator / Supervisor shall report to the BHEL executive / supervisor in charge of the sewage treatment plant, about the performance & healthiness of the plant every day.

Contract supervisor shall be responsible for all official correspondences with BHEL.

The contractor shall depute alternate Supervisor / Mechanic / Operator if the shift Supervisor / Mechanic / Operator is on leave / absent / compensatory off.

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6. Required Power and water for the Operation of the system will be provided by BHEL free of charges.
7. Required Consumables like citric acid, Sodium hypochlorite, polymer, lubricants etc., will be supplied by BHEL at stores.
8. Raw and treated water should be tested for pH, TSS, TDS, COD, BOD @20 ° C for 5 days / 27° C for 3 days, Oil & Grease, etc as per the schedule given in the Annexure –IV. Possible field tests have to be conducted on daily and routine basis and pollution control board approved lab tests have to be conducted at least once in a month. All test records and results should be maintained and produced to BHEL for its verification. Analysis should be conducted in any lab approved by Tamil Nadu pollution control board for conducting the above said tests, within the quoted rates.
9. The contractor should maintain all monitoring records w.r.t STPs operation and maintenance, Laboratory analysis, etc as listed in the Annexure – V.
10. The Contractor should associate for collecting samples by statutory bodies like Central Pollution Control Board, Tamil Nadu Pollution Control Board and others if necessary. The STP O&M contractor shall liaison with TN State Pollution Control Board for all purposes as required w.r.t these STPS within the quoted rates.
11. The contractor shall ensure payment of Minimum wages, Bonus to the workmen employed by him at the rate at which shall not less than the minimum wage applicable under Law from time to time.
12. PF &ESI Act should cover the workmen as applicable and payment will be made only on verification of the documents for the remittance of ESI and PF for the personnel engaged in the work
13. The contractor should submit the list and quantity of consumables and spares used every month for the verification by BHEL
14. The details of spares required for all pumps and the equipments shall be given by the contractor well in advance so as to procure and keep ready to run the plant without any interruption, and the same will be issued to them on written requisition. Replacing of defective spares is in the scope of contractor. Records shall be maintained for the receipt and use of spares supplied by BHEL
15. The workers should be provided with personal protective equipments such as Gloves, Goggles, safety shoes, Gum boots, face masks, waste cloths, soaps, etc by the Contractor within the quoted rates.
16. The contractor should follow all procedures pertaining to safety and EMS in day to day running of the plant
17. The contractor should keep a First Aid Box with list of Aids and should be refilled as and when required.
- 18. During this period the contractor should take whole responsibility of the Plant operation including treatment efficiency. Any deviation from the specific performance requirement of any equipment or quality of treated effluent as per norms, the contractor shall immediately take steps to rectify the deficiency without any extra cost to the Authority.**

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BHARAT HEAVY ELECTRICALS LIMITED
RANIPET – 632 401
CIVIL PROJECTS AND SERVICES DEPARTMENT

CHAPTER – VI

GENERAL INSTRUCTIONS

1. The contractor shall not resort to sub-contracting under any circumstances. If found at a later date, BHEL reserves the right to take action whatever action it deems fit, including cancellation of the contract.
2. All the bills of contractors will be cleared by Finance department subject to production of “Clearance certificate’ by the contractors in respect of compliance of all statutory requirements, issued by IR section of Human Resource Department
3. Disputes, grievances between the contractor and his labour, will have to be settled by the contractor.
4. If the management of BHEL engages workers to complete any part or whole of the work as per this contract for any period due to failure of the contractor or to engage adequate number of workers. He has to reimburse to BHEL, the extra cost involved on this account. The extra cost of engaging such workmen by BHEL will be reckoned at the rate as per minimum wages and other payments (as mentioned in the tender reg. wages payable to the workers) of BHEL for purpose of recovery from the contractor along with BHEL’s administrative charges @ 12.5%.
5. The management of BHEL shall be at liberty to terminate the contract by issuing a month’s notice to the contractor without assigning any reason what so ever. As regards unsatisfactory performance or non compliance with any of the terms and conditions of the contract by the contractor, BHEL shall have the right to terminate the contract forthwith without notice & rearrange the balance work through other agencies at the risk and cost of the contractor & under such circumstances, the security deposit paid by the contractor shall stand forfeited.
6. The contractor shall follow such Act, rules & regulations of the state / central Govt. that are in force & that may be framed from time to time. BHEL shall not be responsible for any infringement of the various statues in force by the contractor.
7. In case, the contractor fails to make payment of wages to his employees or remittance of contribution to the concerned authorities & a claim is made against BHEL for whatsoever reason, the security deposit / other dues / running bills under the contract can be utilized by BHEL to discharge the liability of the contractor.
8. Contractor shall indemnify BHEL against all claims and losses it suffers under various labour laws, statues or any civil or criminal law in connection with employees deployed by him.
9. Contractor shall obtain necessary insurance cover at his own cost to mitigate any risk of accidents, losses, damages etc. BHEL shall not be responsible for any losses, damages to the contractor or to his employees.

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**BHARAT HEAVY ELECTRICALS LIMITED
RANIPET – 632 401
CIVIL PROJECTS AND SERVICES DEPARTMENT**

CHAPTER - VII

Annexure - I

TECHNICAL WRITEUP OF THE SEWAGE TREATMENT PLANT (STP)

1. INTRODUCTION

Basically the intent of the STP plant is to treat the domestic and canteen effluents coming from the factory at one location and the domestic sewage from the township at the second location. The average capacity of the each treatment plant is 1 MLD.

The plant is built with the state of the art **membrane based bioreactor technology (MBR)** to treat the effluent. All the technical requirements for the plant to produce permeate water meeting the pollution control norms and also reuse either for the gardening/toilet flushing have been incorporated in the plant design.

2. PRETREATMENT

In the pretreatment section sewage is fed from the sewage feed pump. We have a mechanical screen with automatic indexing to filter out particles of 6mm and more. An oil skimmer is provided after the screen chamber to capture the floating oil. A drum screen is also given at the discharge of submersible pump to filter particles of size 2mm and more.

3. PUMPS

The submersible pumps are provided in the equalization tank to feed water to the bioreactor tank. The pumps for producing permeate water (1w+1sb) from the effluent are given with variable frequency drive to meet the varying production capacity of the stream with savings in power based on the load. A storage of 2 m³ permeate is maintained to back pulse the membrane in a specific periodicity to dislodge the particles which were stuck to the membrane surface during production cycle. Back pulsing is carried out through reversing the flow through membrane (i.e.) from inside to outside.

The maintenance of mixed liquor suspended solids (MLSS) in the bioreactor tank is accomplished by employing a pump which will be recirculating the sludge from the membrane tank to the bioreactor tank. This pump is called Return Activated Sludge (RAS) Pump. Necessary pneumatic actuated valves are provided to operate the plant in fully auto mode.

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4. BLOWERS

The heart of the MBR system function is to keep the cultured bacteria alive in the bioreactor tank. To accomplish this function there are two needs. One is the maintenance of required oxygen level in the bioreactor tank for the bacteria to live. This is done by continuously running the process blower (1w+1sb) and supplying air to the bioreactor tank. The second is the food to the bacteria which is supplied from the fresh sewage admitted to the bioreactor tank. Mixing blower (1w+1sb) is provided to keep the incoming sewage in the equalization tank thoroughly mixed before being admitted to bioreactor tank. The membrane cassette is also having air diffusers at the bottom of the cassette to receive the air from the membrane blower (1w+1sb) and agitate the membrane fibers to dislodge the sludge particles from the membrane surface.

A compressor with air dryer and air receiver is also installed to cater to the needs of the pneumatic operated valves in the STP plant

5. ZEEWEED MEMBRANES

GE's zeeweed submersible ultrafiltration membrane have been used to produce the permeate water from the effluent. The membrane chemistry has been so chosen to take care of the harsh liquids. The pore size available in the membrane is able to produce permeate water turbidity less than 1NTU. Necessary sizing of the tanks for equalization, bio-culture development, membrane holding & sludge holding have been done to take care of the designed capacity of the STP.

6. DOSING SYSTEMS

Necessary dosing system with tank, pump and piping for dosing chemicals which are required for maintenance cleaning and recovery cleaning of the membranes.

7. SLUDGE HANDLING SYSTEM

Sludge handling system consists of sludge feed pumps and a filter press. The liquid effluent coming from the squeezed effluent is fed back to the effluent feed well. The solids will be disposed off from the filter press. .

8. MCC, PLC & INSTRUMENTATION

Required Motor Control Centre (MCC), programmable logic controller (PLC) have been installed to take care of the operation of the MBR based STP plant in Auto/Manual mode. The touch screen display available in the PLC panel provides operator to operate, control, and monitor the plant operation.

Necessary instrumentation for the flow measurement of the permeate & sludge, pressure measurement of the blowers, level controls in the screen chamber, equalization tank & membrane tank, dissolved oxygen (DO) measurement in the bioreactor tank etc., have been provided for proper monitoring of the plant performance.

9. INLET EFFLUENT QUALITY FOR DESIGN

The MBR feed water quality considered for the design of MBR system is given below.

Parameters	Values	Unit
Ph	6.5 - 8.0	
Influent Temperature	25 – 35	°C
BOD ₅	150 – 210	mg/L
COD	300 – 400	mg/L
TSS	< 600	mg/L
TKN	45	mg/L
NH ₃ -N	35	mg/L
TP	8	mg/L
Oil & Grease	8 – 10	mg/l

10. TREATED EFFLUENT QUALITY OF MBR SYSTEM

Parameter	Unit	Values
BOD	mg/l	< 3
TSS	mg/l	< 2
COD	mg/l	<20
Turbidity	NTU	< 1

11. TERMINAL POINTS

- Inlet feed to Equalization tank from sewage collection (wet) wells, located adjacent to STP.
- Permeate from MBR plant will be terminated in the 3rd compartment of the existing oxidation pond. Further pumping & disposal of the permeate will be taken care of by BHEL.
- Electrical power 3ph, 415volts, 50 Hz will be supplied at the incomer of the MCC panel of the MBR plant by BHEL.
- Required Emergency power 3ph, 415volts 50 Hz to operate one no. of Process blower will be provided at the incomer of the MCC panel of the MBR plant by BHEL at Township STP.
- Disposal of solid waste from the mechanical screen, drum screen, filter press will be taken care of by Contractor (Our existing society contract workers will do this job as advised) and shall be disposed as directed by BHEL.

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MAN POWER REQUIREMENT

<u>MAN POWER REQUIREMENT FOR FACTORY STP</u>						
Sl. No.	DESCRIPTION	Edu. Qualifn	Nos. Reqd.	Shift(s)	Total Nos./ day	Remarks
1	Operators	ITI Electr.	2	Any two shifts of A, B & C (at the discretion of BHEL)	2	Operators for Factory STP
2	Reliever duty Operator	ITI Electr.	1	A or B or C	1	Though this Reliever Operator & Supervisor are to be accounted under the factory STP, they have to work for both Factory STP & Township STP.
3	Supervisor	Diploma/ Graduate Engineer	1	General	1	
<u>MAN POWER REQUIREMENT FOR TOWNSHIP STP</u>						
Sl. No.	DESCRIPTION	Edu. Qualifn	Nos. Reqd.	Shift(s)	Total Nos./ day	Remarks
1	Operators	ITI Electr.	2	Any two shifts of A, B & C (at the discretion of BHEL)	2	Operators for Township STP
	TOTAL NO. OF WORKERS / DAY				6	

NOTE: -

1. Rates in the PART – II - PRICE BID have to be quoted considering the man power deployment as described above.
2. All the above Operators & the Supervisor shall have experienced in the Operation & Maintenance of similar Sewage / Effluent Treatment Plants.

SHIFT DETAILS:

- General Shift - 8.00 to 16.30 Hrs
- 'A' Shift - 6.00 to 14.00 Hrs
- 'B' Shift - 14.00 to 22.00 Hrs
- 'C' Shift - 22.00 to 6.00 Hrs

(NOTE: Shift timings for the STPs and reliever operator duty are modifiable time to time to suit efficient Operation & Maintenance of the STPs at the discretion of BHEL)

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Annexure - III											
ELECTRICAL LOAD LIST FOR PUMPS & OTHER PROCESS EQUIPMENT OF THE SEWAGE TREATMENT PLANT (1MLD MBR)											
SR. NO.	EQUIPMENT	TAG NAME	DRIVE / MOTOR TAG NAME:	TOTAL (W + S)	WORKING	STANDBY	MOTOR RATING (KW)*	TOTAL OPERATING LOAD (KW)	TOTAL STANDBY LOAD (KW)	TOTAL CONNECTED LOAD (KW)	TYPE OF STARTERS
1	MECHANICAL SCREEN MOTOR	08-MSC-100	08-MSC-100	1	1	0	0.75	0.75	0	0.75	DOL
2	OIL SKIMMER MOTOR	08-OS-100	08-OS-100	1	1	0	0.75	0.75	0	0.75	DOL
3	DRUM SCREEN MOTOR	08-SCR-200	08-SCR-200	1	1	0	0.75	0.75	0	0.75	DOL
4	BIOREACTOR FEED PUMPS	08-P-100-1/2	08-M-100-1/2	2	1	1	1.5	1.5	1.5	3	DOL
5	MIXING BLOWERS	08-B-100-1/2	08-M-100-1/2	2	1	1	9.3	9.3	9.3	18.6	Y/DELTA
6	PROCESS BLOWERS	16-B-400-1/2	16-BM-400-1/2	2	1	1	18.5	18.5	18.5	37	Y/DELTA
7	MEMBRANE BLOWERS	20-B-200-1/2	20-M-200-1/2	2	1	1	9.3	9.3	9.3	18.6	Y/DELTA
8	RAS TRANSFER PUMPS	16-P-400-1/2	16-PM-400-1/2	2	1	1	5.5	5.5	5.5	11	DOL
9	PERMEATE/BACKPULSE PUMPS	20-P-300-1/2	20-PM-300-1/2	2	1	1	3.7	3.7	3.7	7.4	VFD
10	SODIUM HYPOCHLORITE DOSING PUMP (MC)	23-P-120	23-PM-120	1	1	0	0.37	0.37	0	0.37	DOL
11	SODIUM HYPOCHLORITE DOSING PUMP (RC)	23-P-110	23-PM-110	1	1	0	0.37	0.37	0	0.37	DOL
12	CITRIC ACID DOSING TANK AGITATOR	23-MX-300	23-MX-300	1	1	0	0.75	0.75	0	0.75	DOL
13	CITRIC ACID DOSING PUMPS	23-P-310	23-PM-310	1	1	0	0.37	0.37	0	0.37	DOL
14	SLUDGE TRANSFER PUMP	80-P-100-1/2	80-PM-100-1/2	2	1	1	1.1	1.1	1.1	2.2	DOL
15	POLYMER DOSING TANK AGITATOR	80-MX-800	80-MX-800	1	1	0	0.75	0.75	0	0.75	DOL
16	POLYMER DOSING PUMP	80-P-800-1/2	80-PM-800-1/2	1	1	0	0.37	0.37	0	0.37	DOL
17	FILTER PRESS POWER PACK	80-FP-700	80-FP-700	1	1	0	0.75	0.75	0	0.75	DOL
18	AIR COMPRESSOR	90-AC-100	90-AC-100-M	1	1	0	2.2	2.2	0	2.2	DOL
19	AIR DRYER	90-DR-100	90-DR-100-M	1	1	0	0.04	0.04	0	0.04	1 PHASE
20	SPARE FEEDER FOR EOT CRANE			1	0	1	3.7	0	3.7	3.7	DOL
21	SPARE			1	0	1	0.37	0	0.37	0.37	DOL
22	SPARE			1	0	1	18.5	0	18.5	18.5	Y/DELTA
23	SPARE			1	0	1	3.7	0	3.7	3.7	DOL
24	EXHAUST FAN			1	1	0	3 PH				SFU 25A
25	ILLUMINATION			1	1	0	3 PH				SFU 25A
26	PLC PANEL			1	1	0	1 PH				SFU 16A
	TOTAL LOAD							54.87	75.17	130.04	

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Sampling and analysis

Sl. No.	Parameter	Periodicity
<u>FOR BOTH FACTORY & TOWNSHIP SEWAGE TREATMENT PLANTS</u>		
1	PH of feed	Field test daily as required (All apparatus, testing chemicals & testing at contractor's cost)
2	PH of permeate	
3	Dissolved oxygen	
4	MLSS	
	<u>Permeate to be Tested in TNPCB approved Lab</u>	
1	pH	At least once in a month (All sampling & testing charges at contractor's cost – To be tested at a TNPCB approved lab) at expenditures within the quoted rates
2	Total suspended solids	
3	Total dissolved solids	
4	Oil & Grease	
5	Chemical oxygen demand	
6	BOD5@20 deg. C or BOD3@27 deg. C	

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List of records to be maintained

1. Consumption of chemicals on weekly basis.
2. Hours of Operation of all pumps, blowers, etc.,
3. Flow meter reading of Permeate, sludge bleed etc.
4. Hours of operation of DG set during power failure
5. Consumption of Diesel, kerosene, lubricants, etc.
6. Electrical units consumption in each shift
7. Breakdown and corrective/preventive actions
8. Process failures and corrective/preventive actions
9. Lab monitoring records for all parameters of feed & permeate
10. Records for receipt and use of spares, dosing chemicals, etc.
11. Pay quittance and attendance register
12. EPF, ESI, Service Tax and Pan No

BHARAT HEAVY ELECTRICALS LIMITED
RANIPET – 632 401
CIVIL PROJECTS AND SERVICES DEPARTMENT

CHAPTER – VIII

GENERAL SAFETY PRECAUTION TO BE FOLLOWED AT WORK SITE DURING EXECUTION

1. The following safety measures should be strictly adhered to during execution of works at sites.
2. Providing the working platform with toe – board and handrail for continuous working at heights
3. Providing safety belt and life – line at all times for men working at heights
4. Providing dust or fume respirator in places where dust and fume concentration exist
5. Providing goggles and welding screens
6. Providing acid and alkali – proof rubber gloves for handling acid and alkali and chemical which are corrosive
7. Providing rubber gloves for working on electrical works
8. Ensuring proper lashing of the components while being transported in vehicles
9. The vehicles must have side supports or have body to support the materials conveyed
10. The materials should not be allowed to extend or overflow the sides of the vehicles
11. Materials should not be allowed to overhang from the rear edge of the body of the vehicle
12. Driver of the vehicle must possess valid license
13. Vehicle must not be overloaded beyond the prescribed limits.
14. Red flags and lights for parts projecting from the body of vehicle must be provided.
15. The speed restrictions within the factory premises must be strictly adhered to.
16. The gas cylinders must be always handled on trolleys or kept tied down when not in use. They should never be rolled as Roller for conveying.
17. Cylinders should not be used without Regulators.

TENDERER

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- 18. All excavations must be barricaded and red lamps must be provided.
- 19. All electrical connections must be properly earthed.
- 20. No work should be taken up of execution inside shop floor, without obtaining necessary work permit.
- 21. Providing helmet for high level work
- 22. The contractor should maintain a register regarding the driver license particulars
- 23. All personal protective equipment conforms to standard specification as per the details given in the code of conduct.

All Contractors including their sub contractors, agents and labour engaged on the work are required to scrupulously adhere to the safety regulations, safety precautions and measurers. Any violation thereof will invite punitive action being taken against them. Also contractors with frequent violations of safety regulations will not be entrusted with further work in this organization.

- 24. Contractor shall provide thick hat, safety glass with side shield, full face shield, ear plug set, face mask, protective & chemical resistant gloves, safety shoe, gum boots, safety belt, rain coat, chemical resistant protective clothing, gas detector and breathing apparatus to the operators & supervisor within the quoted rates.**

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TERMS AND CONDITIONS REGARDING COMPLIANCE WITH VARIOUS LABOUR LAWS BY THE CONTRACTORS FOR BHEL

1. The Contractor shall not employ in connection with the work any person who has not completed 18 years of age.
2. The Contractor shall in respect of labour employed by him either directly or through subcontractors, company with or cause to be complied with the following statutory provisions and rules and in regard to an all matters provided therein.
 - a. The Contract Labour (Regulation & Abolition) Act 1970 and the related Tamil Nadu Rules
 - b. The Minimum Wages Act 1948 and the related Tamil Nadu
 - c. The payment of Wages Act 1936 and the related Tamil Nadu Rules
 - d. The Factories Act 1948 and the related Tamil Nadu
 - e. The Employee's Provident Fund & Miscellaneous Provisions Act 1952.
 - f. The Employees State Insurance Act 1948
 - g. The Workmen Compensation Act. 1923
 - h. The Industrial Disputes Act 1947.
 - i. **The Payment of Bonus act 1965.**

And any other law or modifications to the above or there to the Rules made thereunder from time to time.

REGISTRATION AND LICENSING

3. Every Contractor shall register his name with the Welfare Section of BHEL before taking up the work awarded to him by giving the following information getting a Code Number:
 - a. The Name of the Contractor
 - b. Nature of Contract Work
 - c. Period of work
 - d. Number of maximum labour employed by him on any one day
 - e. License No. & Date (Applicable in case of contractor employing 20 or more workers)
 - f. Whether enrolled for PF, ESI, etc., and enrolment No.

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4. The Contractor employing 20 or more workmen is required to obtain license from the authorities (The Deputy Chief Inspector of Factories / Assistant Commissioner of Labour as the case may be). The license shall be amended and / or renewed wherever, there is an increase in the workmen employed by him or in the event or contract being extended or renewed. The Contractor shall inform the license number to the BHEL Management before taking up the work.
5. The Contractor (Licensed or unlicensed) shall promptly furnish every information and document required by BHEL authorities for the purpose of fulfilling their obligations as Principal Employer and / or Occupier of the Factory and shall render all necessary assistance for the same.

WAGES

6. **The tenderer has to ensure payment of Minimum Wages as per Tamil Nadu State Minimum Wages as applicable under law from time to time for the employment in General Engineering & Fabrication Industry. The labourers engaged in this contract shall be paid additional payment as mentioned below in addition to the payment of Minimum wages as stated above.**
 - a) **Unskilled Worker Rs. 3200 per month**
 - b) **Semi-skilled Worker Rs. 3700 per month**
 - c) **Skilled Worker / Supervisor Rs. 4100 per month**

Also the labourers shall be paid a minimum bonus which shall be 8.33% as per the payment of Bonus Act 1965 for the total wages paid (i.e.) Payment of minimum wages and additional payment as mentioned above. The Contractor shall have to remit EPF & ESI contributions at the rates applicable under law to the authorities concerned for the total wages paid (i.e.) Payment of minimum wages and additional payment as mentioned above. At present the Tamil Nadu State Government Minimum wages declared is indicated in Page No.09. Normally the revision will be with effect from 1st April of every year.

7. The Contractor shall fix wage periods in respect of which wages shall be payable. No wage period shall exceed one month.
8. The Contractor shall ensure payment of wages to the contract labour employed by him within three days from the end of wage period in case the wage period is one week or a fortnight and in all other cases before 10th day of the following month
9. All Payment of wages shall be made on working days at the work site and during the working time and on date notified in advance. In case the work is completed before the expiry of the wage period final payment shall be made within 48 hours of the last working day.
10. Where the employment of worker is terminated by or on behalf of the Contractor, the wages earned by him shall be paid before the expiry of the second working day from the day on which his employment is terminated.
11. Wages due to every worker shall be paid to him direct or to the person authorized him in this behalf. All wages shall be paid in current coin or in both.

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12. The Contractor shall ensure the disbursement of wages in the presence of authorized representative of BHEL Management
13. The above payment shall be verified by the authorized office / representative of BHEL with the following certificate of the payment sheet “Certified that the amount shown in Column No..... has been paid to the workmen concerned in the presence on at.....
14. A certificate of payment shall be furnished in duplicate by the Contractor to the Engineer in charge each month in Form „A” enclosed.
15. A notice showing the wage period and the place and time of disbursement of wages shall be displayed at the work and a copy to be sent to the Welfare Department by the Contractor under acknowledgement.
16. Notices showing the rate of wages, weekly rest days, hours of work, wage period, date of payment of wages, names and addresses of the Inspector having jurisdiction, the date of unpaid wages shall be displayed in Tamil and English in conspicuous places at the establishment and work at work site by the Contractor. The Contractor shall inform the BHEL Management every month the details of contract labour engaged for contract in this following form:
 - a. Serial Number
 - b. Location
 - c. Period of work
 - d. No. of days worked
 - e. No. of man worked
 - f. Wages paid to workers

The above statement shall be furnished to BHEL Management at the end of every month.

REGISTERS AND RECORDS AND COLLECTION OF STATISTICS

17. The following documents / formats under Contract Labour (Regulation & Abolition) Act 1970 and Tamil Nadu Rules thereunder shall be maintained by each contractor.
 - a. Register of persons employed by the Contractor
 - b. Employment Card
 - c. Service Certificate
 - d. Muster Roll, Wage Register, Deduction Register, wage slip, Overtime Register, register of Fines, Register of Advances etc.,
18. The Contractor shall display the abstract of the Contract Labour (Regulation & Abolition) Act and the Rules thereunder both in English and Tamil.
19. Half yearly Return shall be by the Contractor in duplicate to the Licensing Officer

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20. The Contractor shall submit the returns required under the Contract Labour (Regulation * Abolition) Act 1970 periodically to BHEL Management.
21. The Contractor shall without fail give up to date information in writing to the attendance of the workers employed by him.
22. The Contractor shall ensure that his workers keep and produce their Employment Card when coming to duty and take them back when leaving duty.
23. All the above registers and records shall be preserved in original for a period of three years. All the registers, records and notice maintained under the Act and rules shall be produced on demand by Inspector or any authority under the Act.

WORKING HOURS AND WORKING CONDITIONS

24. No worker shall be required or allowed to work on Sunday unless he has or will have a holiday on anyone of the three days before or after the said say.
25. The Contractor shall inform BHEL Management in the prescribed form details of the contract workers scheduled to work on Sunday, the way of rest and also indicate the substituted holiday in lieu thereof. This shall be intimated two days in advance before his workmen and booked for work Sunday.
26. The contract labour working for more than nine hours in any day or for more than 48 hours in any week shall be paid wages at the rate of twice the ordinary rate of wages in accordance with the provisions of Sections 59 of the Factories Act 1948.
27. The Contractor shall provide all safety devices and personal protective equipment to his workmen at his own cost and shall ensure that his workmen wear / use such devices or equipment provided to them while doing the work and there should not be any relaxation on this.
28. The Contractor shall give four paid National Holidays to his workers, viz., 26th January, 1st May 15th August and 2nd October.
29. The Contractor shall ensure that his workmen vacate the premises after the shift is over.
30. The Contractor shall give leave with wages to his workmen who have worked for a period of 240 days of work performed by the worker during the previous calendar year. The worker whose services commences on a day other than the first of January shall be entitled to leave with wages at the above rate (One day for every 20 days of work) only if he had worked for a minimum of 2 /3 of the total number of days in the remainder of the calendar year. This leave will be admissible only during the subsequent calendar year.
31. No woman worker shall be required or allowed to work in the Factory except between the hours of 6.00 A.M. and 7.00 P.M.

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32. The Contractor shall comply with the provisions relating to Welfare and Health facilities as provided in the Contractor Labour (Regulation and Abolition) Act 1970 read with the Tamil Nadu Contract Labour Rules 1975.

NOTICE OF ACCIDENTS

33. Notwithstanding anything contrary to this, in the event of accident the contractor shall be required to fill injury report and submit the Engineer in charge immediately and ensure the compliances of ESI / workmen's compensation Act, Factories Act and Rules made there under. He shall also maintain a register of accident as per the Act.
34. The Contractor shall get the contract labour engaged by him insured under Workmen's Compensation policy from general should be for the entire period of Contract. The Contract shall comply with the provisions of the Workmen's Compensation Act 1923. (This should be read in conjunction with the provisions of ESI Act).

COVERAGE UNDER THE ESI ACT / PF AND MISCELLANEOUS PROVISIONS ACT

35. The contractor shall ensure that all his workmen are covered under the Employee's State Insurance Act and producer to BHEL such Registration Number / Enrolment Number before executing the contract work.
36. The Contractor shall regularly pay the amount of contribution. i.e., employer's contributions as well as employee's contribution pursuant of the above scheme as time. The Contribution payable presently is 1.75% wages to be recovered from his workmen and 4.75% of wages to be contributed by the Contractor. Contributions recovered from employee and contribution made by the contractor may be rounded to the higher multiples of five paise.
37. The Contractor shall take note of any amendment that may be brought forth in the above contribution rate and act accordingly.
38. The contractor shall ensure that his workmen are covered under the EPF & Miscellaneous Provisions Act 1952 and accordingly produce to the BHEL Management the registration / enrolment number before awarding of contract work. As per the existing provisions every worker shall be entitled and required to become a member of the fund. The employee's contribution payable at present is 12% of wages which will be recovered by the contractor from the wages of his workmen and the contractor should pay equal contribution. The contractor is also liable to pay any administrative charges in this behalf that may be decided from time to time. It will be the responsibility of the contractor to ensure such contribution payable in respect of workmen employed through sub-contractors also.
39. The Contractor shall take note of any amendment in the rate of contribution payable under the scheme from time to time.

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40. The Contractor shall with seven days of the close of every month submit to BHEL a statement showing the amount of contribution payable / paid for employees engaged by him or through him and shall also furnish to BHEL such information as Principal Employer is required to furnish under the provisions of the ESI Act and PF as well as the schemes made thereunder to the authorities concerned.
41. Whenever any sum of money is found to be recoverable from or payable by the contractor under the above Act, the sum shall be deducted from any sum that may be due or which at any time thereafter may become due to the Contractor under this contract or under any other contract or from his security deposit, the contractor shall immediately thereafter such further sums as may be required to replenish the shortage caused by such recoveries in amount of security deposit.
42. The Contractor shall abide by all the labour and other laws applicable to contract labour / worker under this contract and shall at all times keep BHEL indemnified against all losses, claims, prosecutions under any law.
43. In case of non-compliance of any of the provisions of the Acts and in case BHEL having complied with the same BHEL will be entitled to recover the same from the contractor / sub-contractor.
44. Non-exercise of any of the powers of rights available to BHEL hereunder to under any law shall not in any way operate as waiver thereof.

Note: The Specimen forms for the following are available in BHEL.

- 1) Form "A" - Payment Certificate
- 2) Form IV - Application for License
- 3) Form XIII - Register of Workmen employed by contractor
- 4) Form XIV - Employment Card
- 5) Form XV - Service Certificate
- 6) Form XVI - Muster Roll
- 7) Form XVII - Register of wages
- 8) Form XIX - Wage up

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**BHARAT HEAVY ELECTRICALS LIMITED
RANIPET – 632 401
CIVIL PROJECTS AND SERVICES DEPARTMENT**

CHAPTER – IX

QUESTIONNAIRE

Questionnaire to be answered by the tenderer by ticking the suitable boxes.

Sl. No.	Description	Yes	No
01	Whether the tenderer has understood the scope of work and agrees to deploy required man power as indicated in the tender. (If there is any clarification required, the same may be got cleared from the Executive-in-charge, before submitting the offer.)		
02	Whether the tenderer has agreed to all Terms & Conditions given in the tender. (If there is any deviation, the same may be mentioned in separate sheet.)		
03	Whether the tenderer has their own code for ESI & PF. (A copy of the certificate to be enclosed).		
04	Whether the tenderer has enclosed copy of the present Service / Sales / Works contract sales Tax registration certificates. If a vendor is exempted from the registration under Service / Sales Tax, the reason there of be stated.		
05	Whether the vendor / Contractor are availing service Tax credit / VAT Credit for their inputs.		
06	Whether the vendor will submit Service Tax invoice as per the existing ACT and the rules their under.		
07	Full Service Tax @ ____% (indicated in the price bid) applicable as extra for this tender.		%
08	Whether the tenderer agrees to Pay Wages as per Minimum wages Act, EL Wages, and Holiday Wages as per Tamil Nadu Factory rules. (Necessary proof should be submitted while claiming running bill and final bill.)		
09	Whether the PAN Number of the vendor is furnished. If exempted from IT, the exemption certificate shall be enclosed.		
10	Whether the tenderer agrees to keep the validity of their offer for three months from the date of opening of bid and keep the prices firm throughout the contract period.		
11	Whether the tenderer agrees for the payment terms of BHEL.		
12	Whether the tenderer has agreed to submit EMD of Rs40,000/- and has submitted the same along with technical bid. (If not enclosed, the tender will not be considered) shall		

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	be in the form of Pay order or DD payable at Ranipet.		
13	Whether the tenderer has agreed to submit Security Deposit immediately after receipt of the work order.		
14	Whether the tenderer has enclosed the list of their clients with addresses & contact persons.		
15	Whether the tenderer has enclosed the completion certificates received from Government / Reputed organization for the similar work done for the last 7 years ending on 31/08/2016.		
16	Whether the tenderer has enclosed the list of similar works carried out with supporting documents		
17	Whether the includability / excludability of the taxes and duties in the rates offered has been clearly indicated. If the same is not done, BHEL will choose to assume the rates are inclusive only.		
18	All payments by BHEL will be made through e-payment only. The required certificate as enclosed in the tender is submitted by the vendor with Banker's signature.		
19	Whether the tenderer has enclosed the list of technical personnel, their qualification & experience for who will be deployed for this work.		
20	Whether the tenderer has indicated the address of their local office in Ranipet along with phone no. & fax no.		
21	Whether the tenderer has enclosed the DD towards the cost of Tender Document, along with the Technical bid. (In case the tenderer has downloaded the tender document directly from the Web Site and If DD is not enclosed, the tender will not be considered).		
22	Whether the tenderer accepts reverse auctioning process through internet.		
23	Whether the tenderer has enclosed the annual report (audited P&L Account, Balance Sheet & IT Return) for the last three financial years (2011-12, 2012-13 & 2013-14). In case 2013-14 has not finalized, financial years 2010-11, 2011-12 & 2012-13 annual reports shall be enclosed.		
24	Whether the tenderer has submitted the proof of average annual turnover for last 3 years for a value of 30 % of estimated cost.		
25	Whether the tenderer agrees for the compensation for Delay clause as per GCC (Clause 43)		

Note: If any of the question is not applicable, please mention as "Not Applicable (NA)"

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**BHARAT HEAVY ELECTRICALS LIMITED
RANIPET – 632 401
CIVIL PROJECTS AND SERVICES DEPARTMENT**

CHAPTER – X

CERIFICATE OF NO DEVIATION

I / We of M/s

hereby certify that **there is no deviation** from the tender conditions either technical or commercial and I am / we are agreeing to all the terms and conditions mentioned in the Tender Specification.

I / We have submitted our offer for this tender. I / We have fully gone through, understood and accepted all specifications, terms & conditions of the whole tender documents uploaded in BHEL web site including all corrigenda, addenda etc published in the website time to time for this tender.

In case of any deviation, the detail of which I / we have to furnish in a separate sheet(s) along with our offer.

Date:

Signature of the tenderer

TENDERER

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**BHARAT HEAVY ELECTRICALS LIMITED
RANIPET – 632 401
CIVIL PROJECTS AND SERVICES DEPARTMENT**

CHAPTER – XI

ANNEXURE: 'B'

It is hereby agreed by me / us that the BHEL General Conditions of Contract including subsequent amendments / additions / deletions to clauses if any, and conditions pertaining to the settlement of disputes by Arbitration form an integral part of the tender documents and that the tender submitted by me / us is subject to the aforesaid BHEL General Conditions of Contract which has been read and accepted by me/us.

TENDERER

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ANNEXURE: 'C'**CLAUSE 22 OF GENERAL CONDITIONS OF CONTRACT****LABOUR**

The contractor shall employ labour in sufficient numbers either directly or through sub-contractors to maintain the required date of progress and of quality to ensure workmanship to the degree specified in the contract and to the satisfaction of the Engineer – in – charge. The contractor shall not employ, in connection with the works, any person who has not completed eighteen years of age.

The Contractor shall pay to labour employed by him, either directly or through sub-contractors, wages not less than fair wages, as defined in the Contractor's Labour Regulations.

The Contractor shall in respect of labour employed by him, either directly or through sub-contractors, comply with or cause to be complied with contractor's labour Regulations in regard to all matters provided therein.

The Contractor shall comply with the provisions of the payment of Wages Act, 1936, Minimum Wages Act, 1948, Workmen's Compensation Act 1923, Industrial Disputes Act, 1947, Maternity Benefit Act 1961, or any modifications thereof or any other law relating there to and rules made there under from time to time.

The Contractor shall be liable to pay his contribution and the employee's contribution of the State Insurance Scheme in respect of all labour employed by him for the execution of the contract, in accordance with the provision of "The Employees' State Insurance Act, 1948" as amended from time to time. The Contractor shall apply to the ESI Authorities, get himself registered with them and obtain a code Number. He shall pay the remittances under his Code Number only.

The Contractor shall be liable to his contribution and the employee's contribution towards PF as per Provident Fund Rules and Regulations, in respect of all labour employed by him for the execution of the contract. The Contractor shall apply to the PF Authorities, get himself registered and obtain a code number from them. He shall pay the remittances towards PF under his code number only.

The Engineer-in-charge shall, on a report having been made by an Inspecting Officer as defined in the Contractor's Labour Regulations, have the power to deduct from the moneys due to the contractor any sum required or estimated to be required, for making good the loss suffered by a worker or workers by reason of non fulfillment of the conditions of the contract for the benefit of workers, non-payment of wages or of deductions made a from his or their wages which are not justified by the terms of the Contract of non observance of the said Contractor's Labour Regulations.

The Contractor shall indemnify BHEL against any payment to be made under and for observance of the Regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractors.

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In the event of the Contractor committing a default or breach of any of the provisions of the aforesaid contractor's Labour Regulations, as amended from time to time or furnishing any information or submitting or filling any form / Register / Slip under the provisions of these Regulations which is materially incorrect, then, on the report of the Inspecting Officers as defined in the Contractors Labour Regulations, the Contractor shall without prejudice to any other liability pay to BHEL a sum not exceeding Rs. 50/- as liquidated damages for every default, breach, or furnishing, making, submitting, filling materially incorrect statements as may be fixed by the Engineer-in-charge and in the event of the contractor's default continuing in this respect, the liquidated damages may be enhanced to Rs. 50/- per day for each day of default subject to a maximum percent of the estimated cost of works put to tender. The Contractor shall defend the case by himself any action brought in by such Government Agencies for non-compliance of any Labour Regulations and / or reimburse the expenses incurred by BHEL in this regard.

The Engineer-in-charge shall deduct such amount from bills or security deposit of the Contractor and credit the same to the welfare fund constituted under Regulations. The decisions of the Engineer-in-charge in this respect shall be final and binding.

MODEL RULES FOR LABOUR WELFARE

The Contractor shall, at his own expense, comply with or cause to be complied with Model Rules for Labour Welfare as appended to these conditions or rules framed by Government from time to time, for the protection of health and for making sanitary arrangements for workers employed directly or indirectly on the works. In case the Contractor fails to make arrangements as aforesaid, the Engineer-in-charge shall be entitled to do so and recover the cost there from the contractor.

SAFETY CODE

RESPONSIBILITIES OF THE CONTRACTOR IN RESPECT OF SAFETY OF MEN, EQUIPMENT, MATERIAL AND ENVIRONMENT

1. Before commencing the work, the contractor is required to submit a "SAFETY PLAN" to the authorized BHEL official. The 'safety plan' shall indicate, in detail, the measure that would be taken by the contractor to ensure safety of men, equipment, material and environment during execution of work. The plan shall take care to satisfy all requirements specified hereunder. The contractor shall submit safety plan along with his offer. During negotiations before placing of work order and during execution of the contract, BHEL shall have right to review and suggest modification in the safety plan. The contractor shall abide by BHEL's decision in this respect.
2. The contractor shall take all necessary safety precautions and arrange for appropriate appliances as per direction of BHEL, or its authorized officials, to prevent loss to human lives, injuries to personnel engaged, and damage to property and environment.
3. The contractor shall provide to its work force and ensure the use of the following personal protective equipment as found necessary and as directed by the authorized BHEL officials:-
 - (i) Safety helmets conforming to IS-2925: 1984.
 - (ii) Safety Belts conforming to IS-3521:1983
 - (iii) Safety Shoes conforming to IS-1989:1978.

TENDERER

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- (iv) Eye and Face protection devices conforming to IS-8520:1977. And IS-8940:1978.
- (v) Hand and body protection devices conforming to

1. IS-2573:1975 (2) IS-6994:1973 (3) IS-8807:1978 (4) IS-8519:1977.

All tools, tackles, lifting appliances, material handling equipment, scaffolds, cradles, safety nets, ladders, equipment etc. used by the contractor shall be of safe design and construction. These shall be tested and certificate of fitness obtained, before putting them to use and from time to time as instructed by authorized BHEL official who shall have the right to ban the use of any item.

All the electrical equipment, connections and wiring for constructions, power, its Distribution and use shall conform to the requirement of Indian Electricity Act and Rules. Only electricians licensed by the appropriate statutory authority shall be employed by the contractor to carry out the all types of electrical works. All electrical appliances including portable electric tools used by the contractor shall have safe plugging system to source of power and be appropriately earthed.

The contractor shall not use any hand – lamp energized by electric power with supply voltage of more than 24 Volts. For work in confined spaces, lighting shall be arranged with power source of not more than 24 Volts.

The contractor shall adopt all fire safety measures as laid down in the “Code for Fire Safety at Construction sites” issued by the safety department of BHEL and as per the directions of the authorized BHEL official. A copy of the above referred “Code for Fire Safety at Construction sites” shall be made available by BHEL to the contractor for reference, on demand by the contractor, during tendering stage itself.

Where it becomes necessary to provide and/or store Petroleum Products, explosives, chemicals and liquid or gaseous fuel or any other substance that may cause fire or explosion, the contractor shall be responsible for carrying out such provisions and / or storage in accordance with the rules and regulations laid down in the relevant government acts, such as Petroleum Act, Petroleum and Carbides of Calcium Manual of the Chief Controller of Explosives, Govt. of India etc., Prior approval of the authorized BHEL official at the site shall also be taken by the contractor in all such matters.

The contractor shall arrange at his cost (wherever not specified), appropriate illumination at all work spots for safe working when natural daylight may not be adequate for clear visibility.

The contractor shall be held responsible for any violation of statutory regulations local, state or central and BHEL instructions, that may endanger safety of men, equipment, material and environment in his scope of work or another contractor’s or agency’s. Cost of damages if any, to life and property arising out of such violation of statutory regulations and BHEL instructions, shall be borne by the contractor.

In case of fatal or disabling injury/accident to any person at construction / work sites due to lapses by the contractor, the victim and/or his/her dependents shall be compensated by the contractor as per statutory requirements. However, if considered necessary, BHEL have the right to impose appropriate financial penalty on the contractor and recover the same from payments due to the contractor for suitably compensating the victim and/or his/her dependents. Before imposing any such penalty, appropriate enquiry shall be held by BHEL giving opportunity to the contractor to present his case.

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In case of any damage to property due to lapses by the contractor, BHEL shall have the right to recover cost of such damages from payments due to the contractor after holding an appropriate enquiry.

In case of any delay in the completion of a job due to mishaps attributable to lapses by the contractor, BHEL shall have the right to recover cost of such delay from payments due to the contractor, after notifying the contractor suitably and giving him opportunity to present his case.

If the contractor fails to improve the standards of safety in its operation, to the satisfaction of BHEL, after being given a reasonable opportunity to do so and / or / if the contractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment or to carry out instructions regarding safety issued by the authorized BHEL official, BHEL shall have the right to take corrective steps at the risk and cost of the contractor, after giving a notice of not less than seven days, indicating the steps that would be taken by BHEL.

The contractor shall submit report of all accidents, fires and property damage, dangerous occurrence to the authorized BHEL official immediately after such occurrence, but in any case not later than twelve hours of the occurrence. Such reports shall be furnished in the manner prescribed by the contractor to the authorized BHEL official from time to time as prescribed.

Before commencing the work, the contractor shall appoint/nominate a responsible office to supervise implementation of all safety measures and liaison with his counterpart of BHEL.

If the Safety record of the contractor is to the satisfaction of Safety Department of BHEL, issue of an appropriate certificate to recognize the safety performance of the contractor may be considered by BHEL after completion of the job.

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SERVICE TAX**Operation & Maintenance of 1 MLD Sewage Treatment Plants in Factory & Township of BHEL Ranipet for the year 2016-17-18. (Section – A & Section – B)****Service Tax**

The Bidder shall not include Service Tax in their quoted rates; but the bidder has to separately indicate the Service Tax rate, amount and workings thereof in the Price bid schedule included in the bid documents.

If service tax amount is not indicated separately in the price bid schedule included in the Bid documents, it will be presumed that the quoted rate is inclusive of applicable service tax and bids will be evaluated accordingly.

Pure Service not involving any supply of materials by contractor:

Bidders have to quote full Service Tax payable in the Price bid format included in the Bid document. The Service Tax quoted in the Price Bid will be considered for reimbursement against valid documentary evidence (i.e.) Service Tax Registration Certificate, Original Invoice, Service Tax Payment Certificate and copy of Service Tax payment Challan.

The applicable Service Tax is _____% (tenderer has to quote this percentage at the time of submission).

Any statutory variation in Service Tax Rate during contract period shall be reimbursed by the Company based on claim by the Agency along with valid documentary evidence.

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TENDERER

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PRICE BID – RATE SCHEDULE(UN PRICED)

Tenderers shall not quote their rates in this Rate Schedule; the schedule is provided as part of Qualification bid for acceptance of the description and signing.

**BHARAT HEAVY ELECTRICALS LIMITED**

BOILER AUXILIARIES PLANT

RANIPET - 632406

ESTIMATE REF NO : CF/RB/16/07

NAME OF WORK: OPERATION & MAINTENANCE OF 1 MLD SEWAGE TREATMENT PLANT IN FACTORY OF BHEL RANIPET FOR THE YEAR 2016-17-18. (SECTION - A)

SL NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
01	<p>Operation and Maintenance (O&M) of 1 MLD capacity Sewage Treatment Plant at Factory premises of BHEL, Ranipet in any two shifts over the 24 hours at the discretion of BHEL to treat the sewage from Factory.</p> <p>The scope covers deputing qualified and experienced operator for shift operation of the plant. The operator is required to monitor proper functioning of all the equipments and the system in total for effective performance of the plant for better results.</p> <p>The scope includes operation of the equipments, attending to minor defects then and there, cleaning and lubricating the rotating parts periodically, maintaining the electrical systems such as panel board etc, dosing chemicals as directed by BHEL, collecting & testing feed and permeate samples, maintaining the log book for all the activities.</p> <p>Required number of operators are to be made available for shifts operation. Also a 'reliever operator' shall work in shifts and a supervisor shall work in general shift.</p> <p>(Though the 'reliever operator' and supervisor are common for both Factory STP & Township STP, their wages and all payments have to be covered under Factory STP, along with exclusive operators of the factory STP.)</p>	12.00	Month		
02	TOTAL QUOTED VALUE OF SL NO - 01		=		
03	SERVICE TAX @ _____% (Quote here full service tax % and Service tax amount payable)		=		
04	TOTAL QUOTED VALUE INCLUDING SERVICE TAX (SL NO - 02 + 03)		=		
(Rupees in words _____)					

TENDERER

ACCEPTING OFFICER



BHARAT HEAVY ELECTRICALS LIMITED

BOILER AUXILIARIES PLANT
RANIPET - 632406

ESTIMATE REF NO : CT/RB/16/06

NAME OF WORK: OPERATION & MAINTENANCE OF 1 MLD SEWAGE TREATMENT PLANT IN TOWNSHIP OF BHEL RANIPET FOR THE YEAR 2016-17-18. (SECTION - B)

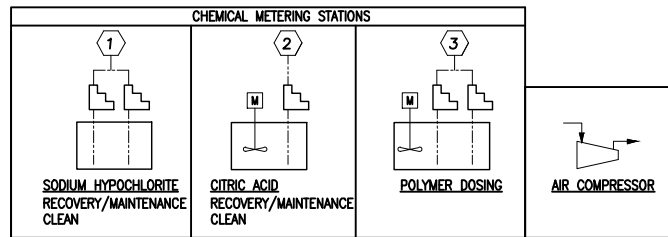
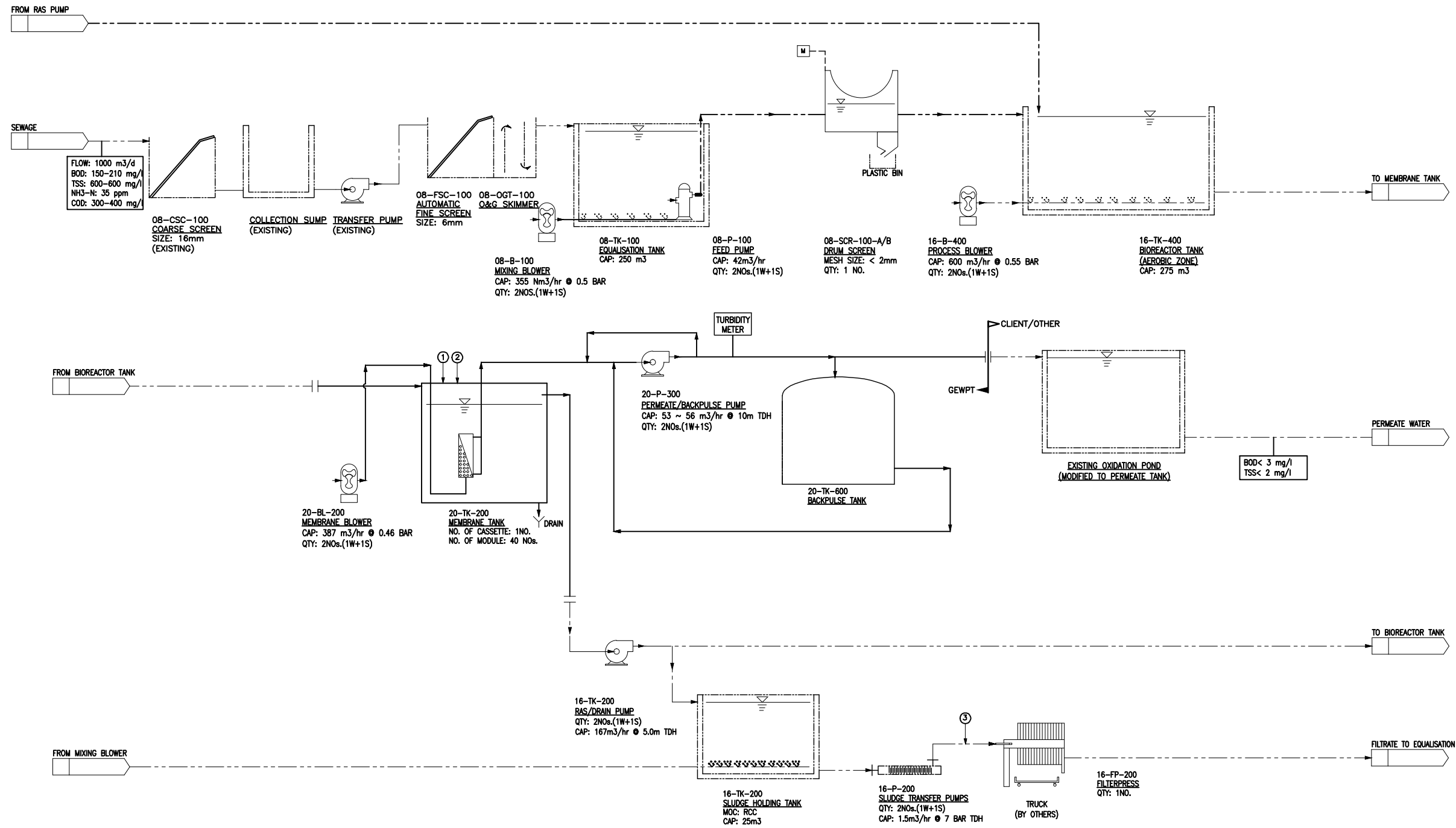
SL NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
01	<p>Operation and Maintenance (O&M) of 1 MLD capacity Sewage Treatment Plant at Township premises of BHEL, Ranipet in any two shifts over the 24 hours at the discretion of BHEL to treat the sewage from Township.</p> <p>The scope covers deputing qualified and experienced operator for shift operation of the plant. The operator is required to monitor proper functioning of all the equipments and the system in total for effective performance of the plant for better results.</p> <p>The scope includes operation of the equipments, attending to minor defects then and there, cleaning and lubricating the rotating parts periodically, maintaining the electrical systems such as panel board etc, dosing chemicals as directed by BHEL, collecting & testing feed and permeate samples, maintaining the log book for all the activities.</p> <p>Required number of operators are to be made available for shifts operation. Also a 'reliever operator' shall work in shifts and a supervisor shall work in general shift.</p> <p>(Though the 'reliever operator' and supervisor are common for both Factory STP & Township STP, their wages and all payments have to be covered under Factory STP, along with exclusive operators of the factory STP.)</p>	12.00	Month		
02	TOTAL QUOTED VALUE OF SL NO - 01		=		
03	SERVICE TAX @ _____% (Quote here full service tax % and Service tax amount payable)		=		
04	TOTAL QUOTED VALUE INCLUDING SERVICE TAX (SL NO - 02 + 03)		=		
(Rupees in words _____)					

TENDERER

ACCEPTING OFFICER

Remarks:

- 1. In the above un-priced schedule, bidders are requested to write as “Quoted” in the ‘Rate’ & ‘Amount’ column and submit. The actual Rate & Amount are to be quoted in the “Price Bid” only and the price bid shall be submitted in a separate cover.**
- 2. Only Service Tax % should be indicated by bidder in the above UN PRICED BID.**
- 3. Un-priced bid should be submitted along with Technical Bid.**



PROJECT		BHEL - BAP RANIPET			
		1 MLD SEWAGE TREATMENT PLANT			
Bharat Heavy Electricals Ltd		UNIT : BOILER AUXILIARIES PLANT, RANIPET - 632406			
NEW PRODUCTS / DESALINATION					
COPY RIGHT AND CONFIDENTIAL		DEPT CODE	NAME	SIGN	DATE
The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED it must not be used directly or indirectly in any way detrimental to the interest of the company.		9776	DRN SS		20-Dec-11
			CHD MSM		20-Dec-11
			APPD MN		20-Dec-11
TITLE					
PROCESS FLOW DIAGRAM					
DEPT.	SCALE	NTS	DRAWING NO.		
			3-WT-220-00036		
SIGN	DATE		SHEET 1	OF 1	REV. 00



ACCEPTANCE FOR ELECTRONIC FUND TRANSFER / RTGS TRANSFER

01	NAME & ADDRESS OF THE SUPPLIER / VENDOR PHONE NO. WITH STD CODE																																																					
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K)	NAME OF AUTHORISED SIGNATORY																																																					

CERTIFICATE

I / We hereby agree to receive the payments due from BHARAT HEAVY ELECTRICALS LIMITED, RANIPET by the National Electronic Funds Transfer and/or RTGS Transfer mode by credit to my / our above mentioned Bank Account. I / We also agree that payments made to the above mentioned Account is a valid discharge of the liability of Bharat Heavy Electricals Limited, Ranipet. I / we also agree to bear the applicable Bank Charges for the above mode of transfer.

AUTHORISED SIGNATORY OF VENDOR WITH SEAL

Banker's Certification

We confirm that we are enabled for receiving RTGS and NEFT credits and we further confirm that the account number of _____ (name of account holder), the signature of the authorized signatory and the MICR and IFSC codes of our Branch mentioned above are correct.

PLACE:

DATE:

(Manager / Officer's
Signature Under Bank stamp)
Authorisation No. _____

Note: This EFT Form is to be submitted duly filled in manually in all fields and duly signed by Authorised Signatory and certified by Banker.

**GENERAL CONDITIONS OF CONTRACT
FOR
LUMP SUM, ITEM RATE AND
PERCENTAGE CONTRACT**



Bharat Heavy Electricals Limited

**BOILER AUXILIARIES PLANT
RANIPET - 632 406.**

CONTENTS

Condition No.	Description	Page No.
CHAPTER - I		
1.	DEFINITIONS	1
CHAPTER - II		
SCOPE OF CONTRACT		
2.	HEADING TO THE CONTRACT	4
3.	CONTRACT DOCUMENTS	4
3A.	SECRECY	4
4.	WORKS TO BE CARRIED OUT	4
5.	PROVISIONAL ITEMS	5
6.	DEVIATIONS	5
7.	TIME	6
8.	STORES & MATERIALS	7
9.	DELAY & EXTENSION OF TIME	9
10.	PATENT RIGHTS	10
11.	OCTROI & OTHER DUTIES	10
12.	ROYALTIES	10
13.	PLANT & EQUIPMENT	10
14.	ASSIGNMENT OR TRANSFER OF CONTRACT	11
	a) SUB - CONTRACT	11
15.	COMPLIANCE TO REGULATIONS AND BYE-LAWS	11
16.	DELETED	11
17.	DELETED	11

CHAPTER - III

SCOPE OF CONTRACT

18.	SECURITY DEPOSIT	12
19.	ORDERS UNDER THE CONTRACT	13
20.	ADMISSION TO SITE	13
21.	CONTRACTOR'S SUPERVISION	14
22.	LABOUR LAWS	15
23.	SAFETY RULES	15
24.	WATER	15
25.	TEMPORARY WORKSHOPS, STORES ETC.	15
26.	TOOLS & PLANT ON SITE	16
27.	STATEMENT OF HIRE CHARGES	16
28.	PRECAUTIONS AGAINST RISKS	16
29.	NOTICE & FEES	16
30.	SETTING OUT OF THE WORKS & PROTECTING & MAINTAINING SIGNALS AND WORKS	16
31.	SITE DRAINAGE	17
32.	EXCAVATIONS, RELICS ETC.,	17
33.	FOUNDATIONS	17
34.	COVERING IN WORK	17
35.	APPROVAL OF WORKS BY STAGES	18
36.	EXECUTION OF WORKS	18
37.	DAY WORK	18
38.	INSPECTION OF THE WORK	18
39.	RESPONSIBILITY FOR BUILDING	19
40.	INSURANCE OF WORKS	19

41.	DAMAGE AND LOSS TO PRIVATE PROPERTY & INJURY TO WORKMEN	20
42.	COMPLETION	20
43.	COMPENSATION FOR DELAY	21
44.	LAWS GOVERNING THE CONTRACT	21
45.	CANCELLATION OF CONTRACT FOR CORRUPT ACT	22
46.	CANCELLATION OF CONTRACT FOR INSOLVENCY	22
	ASSIGNMENT OF SUB-LETTING OF CONTRACT	
47.	CANCELLATION OF CONTRACT FOR DEFAULT	23
48.	TERMINATION OF CONTRACT FOR DEATH	24
49.	SPECIAL POWERS OF DETERMINATION	24
50.	DELETED	24

CHAPTER - IV

VALUATION AND PAYMENT

51.	RECORDS & MEASUREMENTS	25
52.	VALUATION OF DEVIATIONS	26
53.	REIMBURSEMENT / REFUND ON VARIATION IN PRICE	27
54.	ADVANCES ON ACCOUNT	28
55.	FINAL BILL	29
56.	PAYMENT OF BILLS	29
57.	RECOVERY FROM CONTRACTORS	30
58.	POST-TECHNICAL AUDIT OF WORK AND BILLS	30
59.	REFUND OF SECURITY DEPOSIT	30
60.	ARBITRATION	30
61.	JURISDICTION OF COURT	31
62.	PAYMENT OF TAXES, DUTIES & LEVIES	31

ANNEXURE

LABOUR LAWS	ANNEXURE - I	32
SAFETY RULES	ANNEXURE - II	50

CHAPTER - I

DEFINITIONS IN THE CONTRACT AS HEREINAFTER DEFINED

The following terms shall have the meanings hereby assigned to them, except here the context otherwise requires :-

- a. **'CONTRACT'** means and includes the conditions of contract, the documents forming the tender and acceptance, thereof, specifications, drawings, bill of quantities, schedule of rates and prices if any, general and special conditions of contract, schedules A,B,C,D and or general summary attached to the form of tender and contract agreements. All these terms and conditions and documents as applicable taken together shall be deemed to form one contract and thereby complementary to one another.
- b. **'TENDER DOCUMENTS'** means and includes the form of tender, the applicable schedules A, B, C, D and / or general summary, general and special conditions of contract and specifications and drawings as given to the contractors on payment.
- c. **'THE CONTRACTOR'** means the person or persons, firm or company whether incorporated or not, whose tender is being accepted and includes the contractor's legal / personal representatives, successors and permitted assignees.
- d. **'THE WORK'** means the work described in the tender documents and / or individual work orders, drawings and specifications as may be issued from time to time to the contractor by the Engineer - In - Charge within the powers conferred upon them including modified or additional works and obligations to be carried out either at the site or at any factory, workshop or any other place as required for the performance of the contract.
- e. **'THE SITE'** means the lands and other places on, under, in or through which the work has to be executed under the contract and any other lands and places provided by the company for the purpose of carrying out the contract.
- f. **'THE COMPANY'** referred to as BHEL in this contract shall mean M/s. Bharat Heavy Electricals Limited including its Board of Directors, Director, Executive Director, Group General Manager, General manager, Dy. General Manager and / or the Officers of the company including Sr. Manager, Manager, Dy. Manager, Sr. Engineer and Engineer authorised on behalf of Bharat Heavy Electricals Limited, Boiler Auxiliaries Plant, Ranipet.
- g. **'THE ACCEPTING OFFICER'** means the official who signs the contract agreement on behalf of Bharat Heavy Electricals Limited and includes his successors.
- h. **'ENGINEER-IN-CHARGE'** means the Officer / Engineer of BHEL who is in charge of works under the contract and includes such other Officer / Engineer as may be notified by BHEL from time to time.
- i. **'APPROVED AND DIRECTED'** means approval and / or directions of the Officers / Engineers of BHEL issued from time to time with regard to the contract.

- j. In the case of Lump-sum Contracts '**CONTRACTOR'S PERCENTAGE**' means the percentage offered by the Contractor as addition to our deduction from the cost of building, or other works listed in Schedule "A" to provide a Lump-sum quotation for performance of the contract inclusive of all extra costs, profit, establishment charges, carriage, insurance etc., complete.
- In the case of percentage Rate "Contracts Contractor's Percentage" shall, if the context so permits mean the uniform percentage tendered by the Contractor and accepted by the Accepting Officer; and the expression '**CONTRACT RATE**' shall likewise mean the rates in the BHEL Schedule of Rate applicable as on date as adjusted by the said Contractor's percentage, if any.
- k. '**THE CONTRACT SUM**' means the sum accepted or the sum calculated in accordance with the prices accepted in the tender and / or the contract rates as payable to the contractor for the execution and full completion of the work.
- l. The '**FINAL SUM**' means the actual amount payable under the Contract by BHEL, to the Contractor for the entire Execution and full completion of the work.
- m. The '**DATE OF COMPLETION**' is the date or dates for completion of the whole or any part of the work as the case may be set out in or ascertained in accordance with the individual work orders of the tender documents, or any subsequent agreed amendments thereto.
- n. A '**WEEK**' means seven days without regard to the number of hours worked or not in any day in that week.
- o. A '**DAY**' means a day of 24 (Twenty Four) hours irrespective of the number of hours worked or not in that day.
- p. A '**WORKING DAY**' means any day other than the holidays declared by BHEL, Ranipet.
- q. '**DEVIATION ORDER**' means an order given by the Engineer-in-Charge to effect an alternation addition or deduction which does not radically affect the scope or nature of the contract.
- r. '**EMERGENCY WORKS**' means any urgent measures which in the opinion of the Engineer-In-Charge, become necessary during the progress of the work to obviate any risk of accident or failure which become necessary for security.
- s. '**PROVISIONAL SUM**' or "Provisional Lump-sum" means a Lump-sum included by the BHEL in the tender documents and represents the estimated value of work for which details are not available at the time of inviting the tender.
- t. '**PROVISIONAL ITEMS**' means items for which approximate quantities have been included in the tender documents.
- u. '**DAY WORK**' means an item of work requiring the employment of labour with or without materials as the case may be which in the opinion of the Engineer-in-charge, is not capable of being evaluated by the accepted methods of measurement or assessment and is paid for on the basis of the actual labour and materials utilised on the particular item of work referred to.

- v. Heading of these terms and conditions shall not affect the interpretation or construction thereof.
- w. The '**DATE OF CONTRACT**' shall mean the date / dates on which the parties to the contract have signed the contract agreement.
- x. **MAINTENANCE PERIOD / GUARANTEE PERIOD** shall mean the period during which the contractor shall remain liable for satisfactory performance of the work under the contract, repair or replacement of any part of the work performed under the contract.
- y. '**COST**' shall mean and include any liability, expenditure, overhead costs whether on the site or off the site incurred by BHEL.

The contractor shall be deemed to have carefully examined all the documents to his satisfaction. If he shall have no doubt as to the manner of the contract document, he shall obtain the details/clarification from BHEL before signing the contract.

MANNER OF EXECUTION OF CONTRACT

The contract shall be deemed to have come into force from the date of Letter of Intent unless otherwise provide in the Letter of Intent. Unless and until the contract agreement is executed, the Letter of Intent read in conjunction with the tender documents will constitute a binding contract.

CONTRACTOR / TENDER

ACCEPTING OFFICER

CHAPTER - II

SCOPE OF CONTRACT

2. Heading to the Contract

The heading to these conditions shall not affect the interpretation thereof.

3. Contract Documents

The Accepting Officer shall furnish to the Contractor on demand "FREE OF COST" three copies of signed Drawings and one copy of the signed agreement comprising of preamble to agreement, General and Special Specification, Schedule A,B,C & D etc., (but excluding General Conditions of Contract and Drawings) and three copies of all further drawing issued the progress of work.

However, for any additional copies of the agreement of drawings required by the Contractor, the same will be supplied on payment of the Specified cost.

The Contractor shall keep one copy of all the Drawings and of the Specifications on the site and the Engineer-in-Charge or his representative shall be at all reasonable times have access to them.

None of these documents shall be used by the contractor for any purpose other than that of this contract.

3a. Secrecy

The Contractor shall take necessary steps to ensure that all persons employed on any work in connection with this contract have noted that the Indian Officials Secrets Act 1923 (XIX of 1923) applies to them and shall continue so to apply even after the execution of such work under the contract.

All classified documents furnished to the contractor shall be returned to the Engineer-in-charge on the completion of works or the earlier determination of the Contract.

4. Works to be Carried Out

The Contract shall, except as provided under Schedules "B" and "C" included all labour materials, tools, plant, equipment, and transport which may be required in preparation for and in the entire execution and full completion of the work. Schedule "A" shall be deemed to have been prepared in accordance with good practice and recognised principles and unless otherwise stated, the descriptions given therein shall be held to include waste on materials carriage and cartage, lead, hoisting, setting, fitting in position and all other labour necessary in and for the entire execution and full completion aforesaid. Any error in description or quantity in Schedule "A" or any omission therefrom shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the work comprised therein according to the Drawings and Specifications, or from any of his obligations under the Contract.

The insertion of the name of any firm of suppliers in the Tender Documents is for the purpose of obtaining a particular class or quality of materials or workmanship but the articles or materials specified may be obtained from any other firm subject to prior written approval of the Engineer-in-Charge.

In the case of a discrepancy between Schedule "A" the specification and / or the Drawings, the Accepting Officer shall be the sole deciding authority as to which shall prevail and his decision shall be final and conclusive. If neither Drawings nor specifications contain any mention of minor details of construction, which is in the opinion of the Accepting Officer, whose decision shall be final and conclusive, are reasonable and obviously and fairly intended for the satisfactory completion of the work, such details shall be provided by the Contractor without any extra cost as if they were specially mentioned and shall be deemed to be included in the contract.

The Contractor will be deemed to have satisfied himself as to the nature of the site, local facilities of access and all matters affecting the execution and completion of the work. No extra charges consequent on any mis-understanding in these respects or otherwise will be allowed.

5. Provisional Items

The full amount of provisional Lump-sums and the value annexed to each provisional item inserted in the Tender Documents shall be deducted from the contract sum and the value of work ordered and executed there under shall be ascertained by measurement or valuation as for deviations.

No work under these items is to be begun without instructions in writing from the Engineer-in-charge.

The extent of quantities or items described as "Provisional" shall not be held to guarantee or limit the amount and description of the work to be executed by the Contractor either in respect of the items concerned or the work as a whole.

No addition or deduction shall be made by the Contractor to the amount of the provisional Lump-sum as included in the tender documents.

6. Deviations

The contractor shall not make any alteration in addition to or omission from the work as described in the tender documents except in pursuance of the written instructions of the Engineer-in-charge. No such deviation from the work described in the tender documents shall be valid unless the same has been specifically confirmed and accepted by the Accepting Officer in writing and incorporated in the contract.

The Accepting Officer may deviate either by way of addition or deduction, from the work so described, provided that the contract sum be not thereby varied on the whole by more than percentage set out in the tender documents. The value of all additions and deductions will be added to or, deducted from the contract sum, when ever the Accepting Officer intends to exercise such a right, his intentions shall specify the deviations which are to be made, the Lump-sum assessment or the proposed basis of payment, the extra time allowed, if any, and the date for completion of the entire contract.

Any objection by the Contractor to any matter concerning the order shall be notified by him in writing to the Engineer-in-charge within seven days from the date of such order, but under no circumstances shall the work be stopped (unless so ordered by the Engineer-in-charge) owing to differences or controversy that may arise from such an objection. In the absence such notification of objection by the contractor, he will be deemed to have accepted the order and the conditions stated therein. In the event of the contractor failing to agree with the Engineer-in-charge regarding the terms of the proposed deviation, the objection shall be referred to the Head of Civil Engineering Department whose decision shall be final, conclusive and binding on the contractor.

7. Time

Time is the essence of the contract and is specified in the tender documents or in each individual Work Order.

As soon as possible after the contract is let or any substantial Work Order is placed and before work order is to begin, the Engineer-in-charge and the Contractor shall agree to a Time and progress Chart. The Chart shall be prepared in direct relation to the time stated in the tender documents or the Work Order for the completion of the individual items there of and the contract or order as a whole. It shall indicate the fore cast of the dates for the commencement of the various trade processes or sequence of the work, and shall be amended as may be required by agreement between the Engineer-in-charge and the Contractor within the limitation of the time imposed in the tender, document or order.

In the absence of any specific Time and Progress chart to be agreed to between the Contractor and Engineer-in-charge the contractor shall ensure and maintain uninterrupted progress of the work such that the entire work shall be completed within the time imposed in the Tender documents or Order and that the proportion of the work completed upto any time in relation to the entire work to be under the Contract or Order shall not be less than the proportion that the time elapsed bears to the total time of completion provided in the Tender documents or Order.

The Contractor shall suspend the execution of the work, or any part or parts thereof whenever call upon in writing by the Engineer-in-charge to do so, and shall not resume work there on until so directed in writing by the Engineer-in-charge. The Contractor will be allowed an extension of time for completion not less than the period of suspension. However, no other claim in this respect for compensation or otherwise however will be amitted. Provided the cause for suspension is not attributable to any default of the contractor's part to proceed with or fulfil the contractual obligations. This may also be extended to allow for alteration of work made by the deviation order.

8. Stores and Materials

8.1 Materials to be supplied by the Contractor

The Contractor shall at his own cost and expense provide all materials required for the work other than those listed in Schedule-B which are to be supplied by Bharat Heavy Electricals Ltd.

All materials to be provided by the Contractor shall be brand new and in conformity with the specifications laid down in the contract and the Contractor shall if requested by the Engineer-in-charge furnish proof, to the satisfaction of the Engineer-in-charge, that the materials so comply.

The Contractor shall at his own cost and expense and without delay, supply to the Engineer-in-charge samples of materials proposed to be used in the works. The Engineer-in-charge shall within seven days of supply of samples or within such further period as he may require and intimate to the Contractor in writing, inform the Contractor whether samples are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Engineer-in-charge for his approval fresh samples complying with the specification laid down in the contract.

The Engineer-in-charge shall have full powers to require removal of any or all of the materials brought to site by the Contractor which are not brand new and not in accordance with the contract specifications or do not conform in character or quality to samples approved by him. In case of default on the part of the Contractor in removing rejected materials, the Engineer-in-charge shall be at liberty to have them removed by other means at the Contractor's expense and risk. The Engineer-in-charge shall have full power to require other proper materials to be substituted for rejected materials and in the event of the contractor refusing to comply, he may cause the same to be procured by other means. All costs charges and expenses which may attend such substitution shall be borne by the contractor. All charges on account of Octroi, terminal or sales tax and other duties on material obtained for the works from any source (excluding materials supplied by BHEL) shall be borne by the Contractor.

The Engineer-in-charge shall be entitled to have tests carried out as specified in the Contract for any materials supplied by the Contractor other than those for which, as stated above, satisfactory proof has already been furnished, at the cost of the Contractor and the Contractor shall provide at his expense all facilities which the Engineer-in-charge may require for the purpose.

8.2 Materials to be supplied by BHEL

Materials which BHEL are prepared to supply are shown in Schedule-B which also stipulates place of issue and rate(s) to be charged in respect thereof soon after acceptance of the tender the Contractor shall agree in writing with the Engineer-in-charge on a phased programme of his requirements with regard to deliver of materials.

In the event of delay in supply of any Stores and materials mention in Schedule-B the contractor shall be entitled to reasonable extension of time as provided for under condition-9 but no claim for compensation or damage on any ground whatsoever shall be entertained by BHEL.

For the materials listed in Schedule-B the contractor shall give a reasonable notice in writing of his requirement to the Engineer-in-charge in accordance with the phased programme.

All materials issued to the Contractor by BHEL for incorporation or fixing in the works shall on completion or on fore-closure of the works and before submission of bills, be returned by the Contractor at his expense, at the place of issue, after making due allowance for actual consumption reasonable wear and tear and for waste. In the Contractor is required to deliver such materials at a place other than the place less the transportation charges which would have been incurred by the Contractor had such materials been delivered at the place of issue, shall be borne by BHEL.

The Contractor shall bear the cost of loading, transporting to site, unloading storing under covered area as necessary, assembling and joining the several parts together as necessary and incorporating or fixing materials in the work including all preparatory work of whatever description as may be required, and of closing preparing, loading and returning empty cases or containers to the place of issue.

If, in the opinion of the Engineer-in-charge (which shall be final and conclusive) any stores supplied by BHEL have either during currency of the work or after completion of the work whilst under custody, of the contractor, become damaged to such an extent that they cannot be usefully utilised, either in the same work or in other works, the Engineer-in-charge shall not accept the stores and in the rates specified in the contract. The contractor shall not be entitled to any claim whatsoever on this account.

The Engineer-in-charge shall have access to the stores where materials issued by BHEL as per schedule -B of the contract is stored to ensure the balance stock of material on hand after taking into consideration the materials used on the work is as per the issue and usage. If there be any discrepancy, the cost towards the same will be recovered at the double recovery rate indicated for the material concerned. This is without prejudice to and in addition to the overall reconciliation of materials to be made at the completion of work.

If on completion of works, the Contractor fails to return surplus materials out of those supplies by BHEL then, in addition to any other liability which the Contractor would incur, the Engineer-in-charge may, be written notice to the Contractor, require him to pay within a fortnight of receipt of the notice for such un-returned surplus materials given in sub para-4.

The Contractor shall have to build a weather-proof shed ^{for} or the storage of Cement (required for 15 days consumption of the work).

8.3 General

Materials required for the works, whether brought by the Contractor or supplied by BHEL shall be stored by the Contractor only at places approved by the Engineer-in-charge. Storage and safe custody of materials shall be at the risk and the responsibility of the Contractor.

Officials concerned with contract shall be entitled at any time to inspect and examine any materials intended to be used in or in the works either on the site or at factory or workshop or other places where such materials are assembled, fabricated or manufactured or at any place(s) where these are lying or from which these are being obtained and the Contractor shall give such facilities as may be required for such inspection and examination.

All materials brought to the site shall not be removed off the site without the prior written approval of the Engineer-in-charge. But whenever the works are finally completed and advance if any, in respect of any such materials is fully recovered the Contractor shall at his own expense forthwith remove from the site all surplus materials originally supplied by him and upon such removal the same shall revert in and become the property of the Contractor.

Should the Engineer-in-charge consider at any time during the construction or re-construction prior to the expiry of the MAINTENANCE PERIOD that the stores or materials provided by the Contractor are unsound or of a quality inferior to that contracted for or otherwise not in accordance with Contract (in respect where of the decision of the Engineer-in-charge shall be final and conclusive) the Contractor shall on demand in writing from the Engineer-in-charge specifying the Stores or materials complained of notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith remove the Stores or materials so specified and provide other proper and suitable stores or materials at his own expense, to the entire satisfaction of the Engineer-in-charge and in the event of his failing to do so within a period to be specified by the Engineer-in-charge in his demand aforesaid the Engineer-in-charge may replace with others the Stores or materials complained of at the risk and expense in all respects of the Contractor. The liability of the Contractor under this condition shall not extend beyond the maintenance period aforesaid except as regards Stores or materials which the Engineer-in-charge shall have previously given notice of to be Contractor to replace.

9. Delay and Extension of Time

If, in the opinion of Engineer-in-charge the work is delayed :

- i) by reason of abnormally bad weather, OR
- ii) by reason of serious loss or damage by fire OR
- iii) by reason of Civil commotion local combination of workmen, strike or lockout, affecting any of the trades employed on the work, OR
- iv) by delay on the part of the agency or tradesman engaged by BHEL in executing work not forming part of this Contract OR
- v) by reason of any other cause which in the absolute discretion of the Engineer-in-charge is (when he is the Accepting Officer of the Contract), beyond the Contractor's reasonable control, then in such cases the Accepting Officer, on the recommendation of the Engineer-in-charge or higher authority may make fair and reasonable extension in the completion dates of the individual items of work of the Contract as a whole. Such extension which will be communicated to the Contractor by the Engineer-in-charge in writing shall be final and binding on the Contractor. No other claim in this respect for compensation or otherwise howsoever is admissible. Upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-in-charge but shall nevertheless use constantly his best endeavour to prevent or make good the delay and shall do all that may reasonably be required to the satisfaction of the Engineer-in-charge to proceed with the work.

10. Patent Rights

The Contractor shall fully indemnify BHEL or the agent, servant, employee of BHEL against any action, claim or proceeding relating to infringement or the use of any patent or design or any alleged patent or design rights, and shall pay any royalties which may be payable in respect of any article / or part thereof included in the Contractor. In the event of any claim, being made or action brought against BHEL or any agent, or servant or employee of BHEL in respect of the matters aforesaid, the Contractor shall immediately be notified thereof for taking necessary action provided that payment of indemnity shall not apply when such infringement has taken place in complying with the specific directions issued by the BHEL but the Contractors shall pay any royalties payable in respect of any such use.

11. Octroi and Other Duties

All changes on account of Octroi, Terminal or Sales Tax and / or other duties on materials obtained for the Work (excluding materials provided by BHEL on payment) shall be borne by the Contractor.

12. Royalties

Royalties fixed from time to time as per prevalent local rules will be recovered for materials, which the Contractor may be allowed to remove from quarries situated on land which is in charge of the BHEL authorities.

13. Plant and Equipment

The Contractor, shall at his own expense, supply all tools, plant and equipment (here-in-after referred to as T & P) required for the execution of the contract other than those listed in Schedule - C which subject to their availability may be hired by BHEL to the Contractor or issued free for use in the execution of the work, as specified in Tender documents.

14. Assignments or Transfer of Contract

The Contractor shall not without the prior written approval of the Accepting Officer assign or transfer the Contract or any part thereof, or any share, or interest there in to any other person. No sum of money which may become payable under the Contract shall be payable to any person other than the Contractor unless the prior written approval of the Accepting Officer to the assignment or transfer of such money is given.

14 (a) Sub - Contract

The Contractor shall not sub-let any portion of the Contract without the prior written approval of the Accepting Officer.

15. Compliance to the Regulations and Bye - Laws

The Contractor shall conform to the provision of any statute relating to the work and regulations and bye-laws of any local authority and of any water and lighting Companies or Undertakings with whose system the work is proposed to be connected. He shall, before making any variation from the drawings or the specifications that may be necessitated for such connections give the Engineer-in-charge notice, specifying the variation proposed to be made and the reasons there for and shall not carryout any such variation until he has received instructions from the Engineer-in-charge in respect thereof. The Contractor shall be bound to give all notice required by Statute Regulations of Bye-laws as aforesaid and to pay all fees and taxes payable to any authority in respect thereof.

16. BLANK

17. BLANK

CHAPTER – III

PERFORMANCE OF THE CONTRACT

18. Security Deposit

18.1.1 Security Deposit should be collected from the successful tenderer. The rate of Security Deposit will be as below:

Upto Rs. 10 lakhs	10%
Above Rs. 10 lakhs up to Rs.50 lakhs	1 lakh+7.5% of the amount Exceeding Rs. 10 lakhs.
Above Rs. 50 lakhs	Rs.4 lakhs + 5% of the amount Exceeding Rs. 50 lakhs.

The security Deposit should be collected before start of the work by the contractor.

18.1.2 Security Deposit may be furnished in any one of the following:

- i) Pay Order, Demand Draft in favour of BHEL.
- ii) Local cheques of scheduled banks, subject to realization.
- iii) Securities available from Post Offices such as National Savings Certificates, Kisan Vikas Patras etc.
(Certificates should be held in the name of Contractor furnishing the security and duly pledged in favour of BHEL and discharged on the back).
- iv) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act subject to a maximum of 50% of the total security deposit value. The balance 50% has to be remitted either by cash or in the other form of security. The Bank Guarantee format should have the approval of BHEL.
- v) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The FDR should be in the name of the contractor, A/C BHEL, duly discharged on the back.
- vi) Security deposit can also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of the Security Deposit should be collected before start of the work and the balance 50% may be recovered from the running bills.
- vii) EMD of the successful tenderer shall be converted and adjusted against the security deposit.
- viii) The security deposit shall not carry any interest.

NOTE: Acceptance of Security Deposit against Sl. No. (iv) and (vi) above will be subject to hypothecation or endorsement on the documents in favour of BHEL. However, BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.

CONTRACTOR

- 18.1.3** Security deposit shall not be refunded to the contractor except in accordance with the terms of the contract.
- 18.1.4** All compensation or other sums of money payable by the contractor to BHEL, under the terms of this contract or under any other contract with BHEL, may be deducted from the security deposit or realized by the sale of the securities or from the interest arising there from or from any sums which may be due or may become due to the contractor payable by BHEL on any account whatsoever against this contract or any other contract with BHEL, and in the event of his security deposit being reduced by reason of such deduction or sale as aforesaid, the contractor shall within seven days thereafter make good in cash or in securities endorsed as aforesaid, any sum or sums by which the security deposit has been so reduced.
- 18.1.5** 50% of the security deposit may be refunded on completion of the work after payment of the final bill and the balance 50% of the security deposit is refundable only after the expiry of the maintenance period of six (6) months from date of completion of work as stipulated in the contract concerned.

19. Orders under the Contract

All orders, notices, etc., to be given under the contract shall be in writing, typescript or printed and if sent by registered post to the address given in the tender of the Contractor, shall be deemed to have been served on the date when in the ordinary course they would have been delivered to him.

The Contractor shall carry out without delay all orders given to him.

20. Admission to Site

The contractor shall not enter on (other than for inspection purposes) or take possession of the site unless permitted to do so by the Engineer-in-charge. The portions of the site to be occupied by the Contractor will be clearly defined and marked on the site plan, and the contractor will on account be allowed to extend his operations beyond these areas. The Contractor shall provide if necessary or required at the site, temporary access there to and shall alter, modify and maintain the same as required from time to time. He shall out and clear away the access route when no longer required restoring the area to its original condition.

The Engineer-in-charge shall have power to execute other works (whether or not connected with the work, in the contract agreement) on the site contemporaneously with the execution of the original work and contractor shall give reasonable facilities for this purpose.

BHEL reserves the right of taking over, at any time, any portion of the site which they may require and the contractor shall at his own expense clear such portion forthwith. No photographs of the site or of the work or any part here of shall be taken published or otherwise circulated without the prior approval of the Engineer-in-charge.

No such approval shall ~~however~~ ^{however} exempt the Contractor from complying with any statutory provision in regard to the taking and publication of such photographs.

BHEL Officials connected with the Contract shall have the right of entry to the site at all times.

Engineer-in-charge shall have the power to exclude from the site any person whose admission there to may, in his opinion be undesirable for any reason whatsoever

The Contract shall be governed by the security regulations of BHEL including the entry exit timings, use of roads as may be in force from time to time. The Contractor should follow these regulations strictly and no claims for any additional payment whatsoever will be entertained under by circumstances.

21. Contractors Supervision

The Contractors shall either himself supervise the execution of the Contractor or shall appoint a competent Agent approved by the Engineer-in-charge to act in his stead. The Contractor shall employ an Engineer/Agent having atleast a Degree of Bachelor of Civil Engineer from a recognised University/on any work with a Contract value exceeding rupees two lakhs, and having atleast a Diploma in civil Engineering from a recognised college, on work with a contract value exceeding Rs. 50,000/- but not exceeding rupees two lakhs.

The Employment of an Engineer/Agent as aforesaid shall not be necessary if the Contractor himself is in possession of a recognised technical qualification and is, in opinion of the Engineer-in-charge, capable of the receiving instructions of the Engineer-in-charge and of the executing the work to the satisfaction of the Engineer-in-charge. If the Contractor fails to appoint a suitable Engineer/Agent as aforesaid, the Engineer-in-charge shall have full powers to suspend the execution of work and stop payment of any advances that may have become due until such date as a suitable Engineer/Agent is appointed and the Contractor shall be held responsible for the delay caused to the work and no extension of time on this account shall be given to him as stipulated in condition (9) above.

Orders given to the Contractor's Agent Engineer shall be considered to have the same force as if they had been given contractor himself.

The Contractor or his Agent shall be in attendance at the site during all working hours and shall superintend the executing of work with such additional assistance in each trade as the Engineer-in-charge may consider necessary.

The Contractor or his accredited agent shall attend when required and without making any claim for doing so, either the Office of the Engineer-in-charge or the work site to receive instructions.

The Engineer-in-charge shall have full powers, and without assigning any reason to require the Contractor immediately to cease to employ in connection with the

Contract any Agent, servant or employee whose continued employment is, in his opinion undesirable

The contractor shall not be allowed any compensation on this account.

22. Labour

The contractor shall employ labour in sufficient number either directly or through sub-contractors to maintain the required rate of progress and of quality ensure workmanship of the degree specified in the contract and to the satisfaction of the Engineer-in-charge. The contractor shall comply with all labour laws in force from time to time.

23. Safety Rules

The Contractor shall comply with all safety rules of BHEL.

24. Water

The Contractor shall allow in his Tender and provide at his cost all water required for the work or his employees on the work, together with all pipes and fittings or other means that may be necessary or required to ensure a proper and ample supply of water for all purposes connected with the work.

In the event of a provision existing in the Tender documents for supply of water on payment by Bharat Heavy Electricals Limited, water will be supplied from the BHEL supply system or other sources at any points fixed by the Engineer-in-charge on the site of work. The contractor shall make necessary arrangement for lifting pumping carrying or conveying the water as required at his own cost. The levy of water charges to be borne by the contractor in such case shall be specifically mentioned in the Tender documents.

25. Temporary workshops, store Etc,

The Contractor shall, during the progress of the work provide, erect and maintain at his own expense all necessary temporary workshops, offices etc., required for the proper and efficient execution of the work. The planning, siting, and erection of these buildings shall have the approval of the Engineer-in-charge and the Contractor shall all at times keep them tidy and in a clean and sanitary condition to the entire satisfaction of the Engineer-in-charge.

On completion of the work all such temporary building shall be cleared away and the site restored and left in a clean and tidy condition to the entire satisfaction of the Engineer-in-charge.

26. Tool and Plant on site

All tools, plant and equipment brought to the site shall not be removed from the site without the prior written approval of the Engineer-in-charge when the work is finally completed or the contract is determined for reasons other than the default of the contractor he shall forthwith remove from the site all tool, plant, equipment etc., (other than those as may have been provided by BHEL)

27. Statments of Hire Charges

A monthly detailed statement of the hire charge incurred in respect of BHEL tools, plant, equipments etc., shall be given to the Contractor by the Engineer-in-charge.

28. Precaution Against risks

The Contractor shall be responsible for providing at his own expense, for all precaution to prevent loss or damage and for the necessary steps to be taken for the said purpose until the works have been handed over complete, in all respects to the Engineer-in-charge.

The Contractor shall provide all watchman necessary for the protection of the site, the work, the materials, tools, plant, equipment and anything else lying on the site during the progress of the work. He shall solely be responsible for and shall take all reasonable and proper steps for protecting, securing, lighting and watching all places on or about the work and the site which may be dangerous to any person whomsoever.

29. Notices and fees

The Contractor shall give all notices required by any Statutory provision or by the regulations and/or bye-laws of any local / or of any same are or will be connected. The contractor shall pay and indemnify BHEL against any statutory fees and charges payable under such Acts. Regulation and / or bye-laws in respect of the work and shall make and supply all drawings and plans required in connection with any such notice.

30. Setting out of the works and Protective and Maintaining signals and works

The Engineer-in-charge shall supply dimensioned drawings, levels and other information necessary to enable the contractor to set out the work. the contractor shall at his own expense set accurately according to the drawings and figured dimension thereon, all the work comprised in the contract and any extras or additions there to and shall be solely responsible for their being so set out and executed.

All bench marks, pegs, signals on the surface alignment stones, milestones and all similar marks whether put in by BHEL Authorities for the purpose of checking the Contractor's work or in the nature of permanent survey marks will during the tenure of the contract, be under the care of the Contractor who shall at his own expense take all proper and reasonable precautions and care to preserve and maintain them in their true position. In the event of these marks being disturbed or obliterated by accident or due to any other cause whatsoever, the same may, if deemed necessary be replaced by the Engineer-in-charge at the Contractor's expense and the cost thereof deducted from any money then or thereafter becoming due to the Contractor.

Where requested by the Contractor, the level marks, centre line and chainage pegs corresponding to those shown on the Drawing will be pointed out to the Contractor on the ground but all bench marks or chainage pegs additional to those shown on the Drawing will be set out by BHEL authorities.

31. Site Drainage

All water that may accumulate on the site during the progress of the work, or in trenches and excavations shall be removed to the entire satisfaction of the Engineer-in-charge and at Contractor's expense.

32. Excavation, Relics, etc.

Materials of any kind obtained from excavation on the site shall remain the property of BHEL and shall be disposed off as Engineer-in-charge directs.

All gold, silver, oil and other minerals of any description and all precious stones coins treasures, relics, antiquities and other similar items which may be found in or upon the site shall be the property of Bharat Heavy Electricals Limited and the contractors shall duly preserve the same to the satisfaction of the BHEL and shall from time to time deliver the same to such person or persons as the BHEL may appoint to receive the same.

33. Foundations

The Contractor shall not lay any foundations until the excavations for the same have been examined and approved in writing by the Engineer-in-charge.

34. Covering - in work

The Contractor shall give reasonable notice in writing to the Engineer-in-charge whenever any work is to be permanently covered up or concealed, whether by earth or other means so that it can finally be inspected or measured, if necessary. In default of so doing, the Contractor shall if required by the Engineer-in-charge uncover such work at his own expense.

35. Approval of Works by Stages

All work embracing more than one process shall be subject to examination and approval at each stage thereof and the Contractor shall give due notice in writing to the Engineer-in-charge when each stage is ready. In default of such notice being received, the Engineer-in-charge shall be entitled to approve the quality and extent thereof at any time he may choose and in the event of any dispute, the decision of the Engineer-in-charge thereon shall be final conclusive.

36. Execution of the work

The work shall be executed in a workman like manner and to the satisfaction in all respects of the Engineer-in-charge.

The Engineer-in-charge will communicate or confirm his instructions to the Contractor in respect of the execution of the works in a "Work Site Order Book" maintained at his office and the Contractor shall visit this office daily and shall confirm receipt of such instruction by signing the relevant entries in this book. Such entries will rank as order to notices in writing the intent and meaning of these conditions.

37. Day Work

No day - work shall be performed without the prior written instructions of the Accepting Officer.

The Contractor shall give to the Engineer-in-charge reasonable notice of the start of any work ordered to be executed by day-work and shall deliver to the Engineer-in-charge within two days of the end of each pay week a return in duplicate giving full detailed accounts of labour and materials for the payweek. One copy of each of these returns, if found correct will be certified by the Engineer-in-charge and returned to the Contractor and must be produced at the time of adjustment of accounts.

An Invoice in duplicate signed by the Contractor or his agent shall be sent with each delivery of materials for day-work and the Contractor will be furnished with receipt signed by the Engineer-in-charge specifying the description, quantities, weight or measurement (as the case may be) of the articles approved, reference will be made in this receipt in the return aforesaid and the Contractor's Bill.

In the case of Lumpsum Contracts, the rates to be charged and the percentage addition for profit and establishment charges etc. will be agreed upon between the Accepting Officer and the Contractor prior to the execution of the work.

38. Inspection of the Work

BHEL Officers concerned with the contract shall have power at any time to inspect and examine any part of the work and the Contractor shall give such facilities as may be required to be given for such inspection and examination.

Should Engineer-in-charge consider, at any time during the expiry of the maintenance period, that any work has been executed with unsound, imperfect or unskilled workmanship or of a quality inferior to that contracted for or not otherwise in accordance with the contract (in respect). Whereof the decision of the Engineer-in-charge shall be final and conclusive the contractor shall, on demand in writing from the Engineer-in-charge specifying the fault notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or removed and reconstruct the work so specified in whole or in part as the case may require at his own expense to the entire satisfaction of the Engineer-in-charge and in the event of his failing to do so within a period to be specified by the Engineer-in-charge in his demand as aforesaid, the Engineer-in-charge whose decision shall be final and binding may carry out the work by other means at the risk and expense in all respects of the Contractor. However, the liability of the Contractor under this condition shall not extend beyond the maintenance period except as regards workmanship which the Engineer-in-charge shall have previously given notice of to the Contractor to rectify.

39. Responsibility for Building

In the event of any building or part of any building being handed over to the Contractor for the execution of work there to under the provisions of the Contract he shall give a written receipt for all fixtures, glass etc., and he shall be required to make good at his own expense all damages resulting from the cause whatsoever while in his charge and on completion of the work to deliver the said building or part

thereof in a clean state complete in every particular to the entire satisfaction of the Engineer-in-charge.

40. Insurance

The Contractor shall within one month after the date of acceptance of the Contract, insure the work against loss or damages to the contract works, temporary work and materials erected in performance of the contract "all risks" basis from the time of arrival on site until taken over by BHEL on completion of the Contract.

The cover shall also include whenever necessary the risks of testing including breakdown or explosion of plant and machinery undergoing testing, trial and commissioning operations. The insurance shall also specifically cover removal of debris cost. The sum insured shall represent the estimated full value of the contract work inclusive of value of free supply materials by BHEL, transport charges, customs dues, express freight, overtime charges, cost of erection, value of constructional plants and machinery; removal of the debris and excavation of costs. Where the contract includes a maintenance period, the insurance cover shall specifically include the Contractor's liabilities during the maintenance period. The insurance shall also be extended to cover third party personal injury and property damage for a sum to be specified by BHEL. The insurance shall be effected in the name of BHEL and the Contractor shall submit to BHEL a draft of the insurance policy for approval. The policy when issued will be lodged with BHEL together with receipts of premium for such insurance and the contractor shall maintain such policies in force until the obligations of the Contractor are fully discharged.

If the Contractor fails to comply with the terms of this condition the Accepting Officer may insure the work and may deduct the amount of premiums from any money that may become payable to the Contractor or may at his discretion refuse payment of any advances to the Contractor until the Contractor shall have complied with the terms of this condition. This provision does not, however, absolve the Contractor of his responsibility for taking up the insurance. The Contractor is, therefore, primarily responsible for the insurance in time.

41. Damage and Loss to Private Property and Injury to Workmen

The Contractor shall at his own expense reinstate and make good to the satisfaction of the Engineer-in-charge and pay compensation for any injury, loss or damage occasioned to any property or rights whatever including property and rights of BHEL (or agents, servants or employees of BHEL) the injury loss or damage arising out of or in any way in connection with the execution of the contract and further the Contractor shall indemnify BHEL against all claims enforceable against BHEL or any agent, servant, or employee of BHEL a private person, in respect of any such injury (including injury resulting in death loss or damage to any person) who so ever or property, including all claims which may arise under the Workmen's Compensation Act or otherwise, or which would be enforceable against BHEL.

42. Completion

The works shall be completed to the entire satisfaction of the Engineer-in-charge and in accordance with the Contractor's forecast of Time and progress where operative, and all unused stores and materials, tools, plants equipment, temporary Building and things shall be removed from the site and work cleared of rubbish and all

waste materials and levelled up clean and tidy to the satisfaction of the Engineer-in-charge at the Contractor's expense and/or before the Schedule date of completion.

The BHEL shall have power to take over from the Contractor from time to time such sections of the Work as have been completed to the satisfaction of the Engineer-in-charge. In such an event, the contractor is not entitled for any extension of time or any other compensation for executing the balance work.

In case the Contractor fails to remove any of his properties, assets or fails to clear the rubbish and waste materials within 30 days of the completion of the contract, it is lawful for the contractee, that is BHEL to take such action as it deems fit to clear, dispose of such properties, assets or such waste materials and charge the Contractor any expenses incurred thereon.

The Engineer-in-charge shall certify to the Contractor the date on which the work is completed and the state thereof.

The Engineer-in-charge shall also certify to the Contractor the state of the work at the end of maintenance period, where applicable.

43. Compensation for delay

If the Contractor fails to maintain the required progress in terms of condition 7 or to complete the work and clear the site on or before the contracted or extended period of completion, he shall, without prejudice to any other right or remedy of the BHEL on account of such breach pay as agreed compensation an amount calculated as stipulated below or such smaller amount as may be fixed by the BHEL on the contract value of the work for every week that the progress remains below that specified in condition 7 or that the work remains incomplete.

This will also to items or groups of items for which separate period of completion has been specified.

For the purpose the term "Contract Value" shall be the value at contract rates of the work or ordered.

- | | |
|--|------------------------|
| a) Completion period (as originally stipulated) not exceeding 6 months | at 1 per cent per week |
| b) Completion period (as originally stipulated) exceeding 6 months and not exceeding 2 Years | at ½ per cent per week |
| c) Completion period (as originally stipulated) exceeding 2 years | at ¼ per cent per week |

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed the under noted percentage of the contract value or of the item or group of items of work for which a separate period of completion is given :

- | | |
|---|-------------|
| a) ^{Completion} Complete period (as originally stipulated) not exceeding 6 months | 10 per cent |
|---|-------------|

- | | |
|--|-------------|
| b) Completion period (as originally stipulated) exceeding 6 months and not exceeding 2 Years | 7½ per cent |
| c) Completion period (as originally stipulated) exceeding 2 years | 5 per cent |

The amount of compensation may be adjusted or set-off against any sum payable to the contractor under this or any other contract with the BHEL.

44. Laws Governing the Contract

This Contract shall be governed by the Indian Laws for the time being in force.

45. Cancellation of Contract for Corrupt Acts

The Accepting Officer, whose decision shall be final and conclusive, shall without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter to Bharat Heavy Electricals Limited, cancel the Contract in any of the following cases and the contractor shall be liable to make payment to BHEL for any loss or damage resulting from any such cancellation for default. If the Contractor shall :

- a) Offer or give or agree to give to any person in BHEL service any gift or consideration of any kind as an inducement or reward for doing or for bearing to do or for having done or forborne to do a day act in relation to the obtaining or execution of this or any other contract for BHEL service OR
- b) Enter into a contract with BHEL in connection with which commission has been paid or agreed to be paid by him or with his knowledge, unless the particulars of any such commission and the terms of payment thereof have previously been disclosed in writing to the Accepting Officer, OR
- c) Obtain a contract with BHEL as a result of ring tendering or by non-bonafide methods of competitive tendering without first disclosing the fact in writing to the Accepting Officer.

46. Cancellation of Contract for Insolvency, Assignment or Transfer or Sub-Letting of Contract

The Accepting Officer, without prejudice to any other or remedy which shall accrue thereafter to BHEL shall cancel the contract in any of the following cases :

If the Contractor

- a) being an individual, or if a firm any partner thereof shall at any time be adjudged bankrupt or have a receiving order or orders for administration, of his Estate made against him or shall take and proceedings, for liquidation or composition under any Bankruptcy Act for the time being in force or make any conveyance of assignment of his effects composition or arrangement for the benefit of his credit or purport to do so, or if any application be made under any Bankruptcy Act for the time being in force for sequestration of his Estate or if a trust deed be granted by him on behalf of his creditors, OR

- b) being a company shall pass a resolution or the court shall make an order for the liquidation of its affairs, or a Receiver or Manager on behalf of the debentures holders shall be appointed or circumstances shall arise which entitle the court or debentures holders to appoint a Receiver or Manager OR
- c) assigns, transfer, sub-lets or attempts to assign, transfer or sub-let any portion of the work without the prior written approval of the Accepting Officer OR
- d) Shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.

Whenever the Accepting Officer, exercises his authority to cancel the contract under this condition, he may complete the work by any means at the Contractor's risk and expense provided always to that in the event of the cost of completion (as certified by Engineer-in-charge which is final and conclusive) being less than the contract cost, the advantage shall accrue to the BHEL and that if the cost of completion exceeds the moneys due to the Contractor under the contract, the contractor shall either pay the excess amount ordered by the Engineer-in-charge or the same shall be recovered from the Contractor by other means.

Engineer-in-charge will have powers to take possession of the site and any materials constructional plant, implements, stores, etc. thereon and carry out the work by any means at the risk and cost of the Contractor.

In case the BHEL completes the work under the provisions of this condition the cost of such completion to be taken into account in determining the excess cost to be charged to the contractor under this condition shall consist of the cost of materials purchased and or labour provided by the BHEL with an addition of such percentage or cover superintendence and establishment charges as may be decided by the General Manager whose decision shall be final and conclusive.

In the Contractor fails to pay the excess sum within a period of 30 days, the Engineer-in-charge shall have the right to sell any or all of the Contractor's unused materials, constructional plant implements, temporary buildings etc. and apply the proceeds of sale thereof towards the satisfaction of any sum due from the Contractor under the contract and if thereafter be any balance outstanding from the Contractor, it shall be recovered in accordance with the provisions of the Contract.

47. Cancellation of contract in part or Full for Contractor's Default

If the contractor :

- a) makes default in commencing the work within a reasonable time from the date of handing over of the site and continue in that state a reasonable notice from Engineer-in-charge OR
- b) in the opinion of the Engineer-in-charge at any time, whether before or after the date extended date for completion, make default in proceeding with the work, with due diligence and continue in the state after a notice of seven days from Engineer-in-charge OR
- c) fails to comply with any of the terms and conditions of the contract or after 7 days notice in writing with orders properly issued thereunder. OR

- d) fails to complete the work order and items of work individual dates for completion and clear the site on or before the date of completion or fails to achieve the progress at set out under clause 7 of these General conditions of contract.

The Accepting Officer may, prejudice to any other right or remedy which shall have accrued or shall accrue after B H E L, Cancel the contract as a whole or in part there or only such work order items of work in default from the contract. Whenever the Accepting officer exercises his authority to cancel the contract as a whole or in part under this condition he may complete the work at the contractor's risk and cost provided always that in the event of the cost of completion (as certified by Engineer-in-charge which is final and conclusive) being less than the contract cost the advantage shall accrue to the BHEL if the cost of completion exceeds, the money due to the contractor under this contract the contractor shall either pay the excess amount ordered by General Manager or the same shall be recovered from the contractor by other means. Engineer-in-charge will have power to take possession of site and materials, constructional plant, implements, stores etc there on.

In case the BHEL completes the work or any part there of under the provisions of the condition the of such completion to be taken in to account in determining the excess cost to be charged to the contract under this condition shall consist of the cost of materials purchased and / or labour provided by the BHEL. with an addition of such percentage to cover superintendance and establishment charges as may be decided by the General Manager whose decision shall be final and conclusive.

If the contract fails to pay the excess sum within a period of 30 days the Engineer-in-charge shall have the right to sell any or of the contractor's unused materials, construction plant, implements, temporary buildings etc and apply the proceeds of sale there of towards the satisfaction of any sum due from the contractor under the contract and if ^{there} ~~not~~ after be any balance out-standing from the contract, it shall be recovered in accordance with the provisions of the contract.

48. Termination of Contract for death

Without prejudice to any of the rights or remedies under this contract. if the contractor dies, the Accepting officer shall have the option of terminating the contract without compensation to the contractor.

49. Special Powers of Determination

If at any time after the acceptance of the tender BHEL shall for any reason whatsoever not require the whole or any part of the work to be ^{carried out} ~~done~~ General Manager shall give notice in writing of the fact to the contractor who shall have no claim to any payment of compensation or otherwise howsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he ^{did} ~~did~~ not derive in consequence of the foreclosing of the work.

He shall be paid at contract rates for the full amount of the executed including such additional works, e, g. clearing of site, etc., as may be rendered necessary by the said foreclosing. He shall also be allowed a reasonable payment (as decided by the Accepting office) for any expenses sustained on account of labour and materials collected but which could not be utilised on the work, as verified by the Engineer-in-charge. Neither shall the contractor have any claim for compensation on account of any alterations have been made in the original specifications drawings, designs and instructions, involving any curtailment of the work as original contemplated.

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CHAPTER - IV

VALUATION AND PAYMENT

5). Records and Measurements :

All items having a financial value shall be entered in the BHEL Measurement Book so that a complete record is obtained of all works performed under the contract.

Buildings, etc., priced in schedule 'A' as a unit Lump-sum will be entered by number at the unit Lump-sum.

Work carried out for agreed Lump-sum will be described and similarly recorded.

Lump-sum omissions will be entered for deduction. Measurement shall be restricted to that required to ascertain the financial liability of BHEL under the contract.

Work which fails to be measured in detail shall be measured physically, without reference to any local custom that may obtain excepting where it may otherwise be directed in the tender documents. The measurements shall be taken jointly by any person duly authorised on the part of the BHEL and by the contractor.

The engineer-in-charge shall give reasonable notice in writing to the contractor of appointment of measurement.

The contractor shall without extra charge, provide assistance with appliance and other things necessary for measurement.

The contractor shall bear all the cost of measurements of his work.

measurements shall be entered in the BHEL measurement book and signed and dated by both parties each day at the site on completion of measurement. If the contractor objects to any of the measurements recorded on behalf of the BHEL. A note to that effect to be made in the BHEL measurement book or against the item or items objected to; and such note shall be signed and dated by both the parties engaged in taking the measurement.

If as a result of such objection, it becomes necessary to re-measure the work wholly or in part, the expense of such measurement shall be borne by the party requiring the measurement.

Measurement to be re-taken provided that a net error is found by this re-measurement to amount to less than 5% (Five percent) of the value as recorded by the first measurement. But where the net errors amount to 5% and over of the said value, then the cost is to be borne by the other party. In any case if the net value of errors found exceeded to Rs 500 the expense or re-measurement is said to be borne by the other party. If the contractor's representative fails to attend when required, the engineering-in-charge shall have power to proceed by himself to take measurement and in that case those measurements shall be considered as accepted by the contractor as final. The contractor shall, once in every month, submit to the engineer-in-charge with a copy to the accepting officer details of his claims for the work done by him up to and including the previous month which are not covered by his contract agreement in any of the following respects.

- a) Deviation from the items and specifications provided in the contract documents.
- b) Extra Items / Items of work.
- c) Quantities in excess of those provided in the contract schedule.
- d) Items in respect of which rates have not been settled. He should, in addition furnish a clear certificate to the effect that the claims submitted by him as aforesaid cover all his claims and that no further claims shall be raised by him in respect of work done up to and including the period under report.

Except where any general to detailed description of the work in quantities expressly shows to contrary, schedule of quantities shall be deemed to have been prepared and measurements shall be taken in accordance with the procedure set forth in the schedule of rates specification not withstanding any provision in the relevant standard method of measurement or any general or local custom. In the case of items which are not covered by the schedule of rates / specification, measurement shall be taken in accordance with relevant standard method of measurement issued by the Indian Standard Institution or as per Standard engineering practice.

52 Valuation of Deviations

Rates for deviated items of work will be fixed as follows :

- 1) For any item of work required to be carried out after the contract has been awarded and which is not covered by Contractor's Schedule but is covered by B.H.E.L. schedule of Rates the payable for such a fresh item will be derived from B.H.E.L. Schedule by the method of proportion as follows:
 - a) In the same proportion to the BHEL Schedule of rates as the tendered rate for the nearest analogous item of work in contractor's schedule bears to rate for the particular analogous item of work in BHEL schedule of rates. However in case of nearest analogous item of work in contract schedule forms part of individual chapter of the BHEL schedule of rates the above proportion will be worked out only for such items which are found both in contract schedule and BHEL Schedule of rates as group of items under the chapter.
 - b) If a single appropriate analogous item of work is not available in both schedule (contractor's and BHEL schedule) then the method of proportion will be applied to the nearest analogous group items available in both the schedule referred to i.e. in the same proportion as the total tendered cost of that particular group of item (the sum of the products of the tendered rates and the quantities for which orders are placed) bears to the total cost of the same items and quantities and BHEL Schedule of Rates.
 - c) If even an appropriate analogous group of items is not available in contractor's schedule and BHEL Schedule, then the methods of proportion will be applied to all those items of the whole work, which are available in both the schedule and for which orders have been placed on the contractor i. e., in the same proportion as the total cost of all

these items of work (the work of the products of the tendered rates and the quantities for which order are placed) bears to the total cost of the same items and quantities at the BHEL schedule of rates.

The selection of analogous items or analogous group of items referred to above shall be done by the Engineer-in-charge. Where the rates for deviated items or new items of work can be derived by the selection of different analogous items or analogous group of items, the lowest of all such derived rates shall be taken as the correct rate.

In the case of the contracts for which the Engineer-in-charge is the Accepting officer all disputes regarding the settlement of rates of deviated or new items or work shall be referred to the Head of Civil Engineering Department whose decision shall be final and conclusive as the case may be.

II. If any work not covered by any of the foregoing is ordered of the contractor, the basis of payment shall be decided by the Accepting Officer whose decision shall be final and conclusive and binding on the parties.

53. Reimbursement / Refund on variation in Price, Materials

If after submission of the tender and / or during the progress of the works, the price of any material (not being a material supplied from the BHEL store in accordance with the conditions of the contract) is increased or decreased by an Act of Legislature (central or state) and / or any notification thereunder or on account of new duties or levies such as octroi or on account of increase or decrease in such duties affecting the price of materials required for incorporation in the works and made from materials of which the price has increased or decreased as aforesaid and the contractor has thereupon to pay in respect of such material or item a price which is higher or lower than the price of that material or item as prevailing immediately before the passing of such act or levying, increasing / decreasing of such duty, the BHEL shall increase in price or the duty reimbursed to the contractor the increase in price or additional or increased duty paid by the contractor and in case of decrease in price the BHEL shall be entitled to a refund of the reduction in the price or the reduction in duty. This will be applicable only for material which are directly incorporated on the work. The contractor shall however indicate the assumption he has made while submitting the tender. However no reimbursement or refund shall be made if the increase / decrease is not more than + 10% of the said price, and if so the reimbursement or refund shall be made only / on the excess over \pm 10% provide always that any such increase shall not be payable if, in the opinion of the Accepting officer (whose decision shall be final and conclusive) the increase is attributable to the delay in the execution of the contract with the control of the contractor or that any such increase has become operative after the contracted/ or extended date of completion of the works or items of work in question.

The Contractor shall, for the purpose of this condition, keep such books of account and other documents as are necessary to show the amount of any increase or any reduction available and shall allow inspection of the same by any duly authorised representative of the BHEL and further shall at the request of the Engineer-in-charge furnish for verification such other information as the Engineer-in-charge may require.

The Contractor shall within a reasonable time of his becoming, aware of any alteration in the prices of any such materials give notice thereof in writing to the Engineer-in-charge stating that the rate is submitted in pursuance to this condition together with all information relating thereto which he may be in a position to supply.

Advance on account

No payment shall be made for work estimated to cost less than Rupees ONE THOUSAND till after the whole of the work shall have been completed and a certificate of completion given by the Competent authority.

In the case of work estimated to cost more than Rupees FIVE THOUSAND the contractor may at intervals of less than one month or as otherwise provided for in the Contract documents, counting from the date on which order to commence work is given by Engineer-in-charge submit claims on BHEL forms for payment of advances on account of work done and of materials delivered in connection with the Contract.

The Contractor shall be paid in respect of such claims to the extent approved and passed by the Engineer-in-charge subject to a maximum of 90% of the value of the work actually executed to the satisfaction of the Engineer-in-charge. The certificate of the Engineer-in-charge regarding such approval and passing of the sums so payable shall be final and conclusive against the contractor.

Notes :

"After the full amount of Security Deposit is made up through the 10% deduction from On account bills, 100% payment of all subsequent bills may be made to the contractor.

The Contractor may also be paid during the progress of the work 75% of the value of any materials which are in the opinion of the Engineer-in-charge in accordance with the Contract, and are actually required for incorporation in the work and which have reasonably been brought to the site in connection therewith and are adequately stored and / or protected against damage by weather or other causes, but which have not at the time of payment of the advance been incorporated the work on furnishing a formal hypothecation deed. Payment of such advances, however shall be purely at the discretion of the Accepting Officer provided always that payment shall not be made under these periodical certificate in respect of materials like lime, cement, timer, sand, kankar, etc.

Any sums, due from the Contractor on account of Tools and Plant, stores or any other items provided by BHEL shall be deducted from the respective advances. The Engineer-in-charge shall from time to time certify the sums payable to the Contractor after retaining the reserves.

Any certificate relating to work done or materials delivered may be modified or corrected by any subsequent interim certificate or by the final certificate of the Engineer-in-charge supporting an advance payment shall itself be conclusive evidence that any any work or materials it relates are in accordance with the contract. All such intermediate payments shall be regarded as advance against the final payment only and shall not be considered an admission of the performance of the contract or any part thereof in any respect or the accruing of any claim whatsoever.

Such intermediate payment shall not conclude determine or affect in any way the powers of the Engineer-in-charge as to the final settlement and adjustment or the account or otherwise or in any way vary or affect the contract.

55. Final Bill

As soon as possible after the completion of the work to the satisfaction of the Engineer-in-charge, the contract shall forward a certified final account on BHEL forms, in duplicate.

It shall be accompanied by all abstracts, vouchers, etc., in support thereof and shall be prepared in the manner prescribed by the Engineer-in-charge.

No claims will be entertained after the receipt of the final bill.

The Contractor shall be entitled to be paid the final sum less the value of payments already made on account, subject to certification of the final bill by the Engineer-in-charge. Any sums due from the Contractor on account of Tools and Plant, Stores or any other items provided by BHEL not yet recovered from the contractor shall be deducted from the final sum aforesaid.

No charge shall be allowed to the Contractor on account of the preparation of the final bill.

56. Payment of Bills

All payment to be made to the Contractor under this contract shall be by "Crossed Cheque" marked "A/c payee only" (within a reasonable time after the certification by the Engineer-in-charge) at the Nationalised Banks/Scheduled banks or their subsidiaries located in the station where either the work is executed or service rendered or at their branch nearest to the station where the Office of the Engineer-in-charge is located.

57. Recovery from Contractor

Whenever under the contract any sum of money shall be recovered from or payable by the Contractor the same may be deducted any sum then due or which at any time thereafter may become due to the Contractor under the contract or under any other contract with BHEL or from his Security Deposit or he shall pay the claim on demand.

58. Post Technical Audit of work and Bills

BHEL reserve the right to carry out a post-payment audit and technical examination of the work and final bill including all supporting vouchers, abstracts etc., and to enforce recovery of any sums becoming due as a result thereof in the manner provided in the preceding sub-paragraphs provided. However, no such recovery shall be enforced after three years of passing the final bill.

59. Refund of Security Deposit

50% of the Security deposit mentioned in condition 18 above, may be refunded to the Contractor in respect of all contract on completion of work and after payment of final bill and the balance 50% on expiry of the maintenance period, provided the

Contractor shall have rendered a "No - Demand" Certificate. In case of work where maintenance period is not involved 100% of the Security Deposit may be refunded after payment or final bill provided that the Contractor shall have rendered a "No Demand" Certificate.

60. Arbitration

Except where otherwise provided for in the contract all questions and disputes relating to the meaning of the specifications, designs, drawings and Instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or there conditions or otherwise concerning the work or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of the General Manager of BHEL and if General Manager is unable or unwilling to act, to the sole arbitration of same other persons appointed by the General Manager, willing to act as such arbitrator.

The cases referred to arbitration shall be other than those for which the decision of the Accepting Officer, or Engineer-in-charge as the case may be, is expressed in the contract to be final and conclusive. There will be no objection if the arbitration, so appointed is an employee of BHEL and that he had to deal with the matters to which the contract relates and that in the course of his duties as such he had expressed views on all or any of the matters in dispute or difference.

The arbitrator to whom the matter is originally referred being transferred or vacating his office or being unable to act for any reason, such General Manager as aforesaid at the time of such transfer, vacation of office or inability to act, shall appoint another person to act as arbitrator in accordance with the terms of the contract. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

Subject as aforesaid the provision of the Arbitration Act, 1940 or any statutory modification or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause.

It is a term of the contract that the party involving arbitration shall specify the dispute or disputes to be referred to arbitration under this clause together with the amount or amount claimed in respect of each dispute.

The arbitrator(s) may from time to time with consent of the parties enlarge the time, for making and publishing the award.

The work under the Contractor shall if reasonably possible continue, during the arbitration proceedings and no payment due or payable to the Contractor shall be withheld on account of such proceedings.

The Arbitrator shall be deemed to have entered on the reference on the date he issues notices to both the parties fixing the date of first hearing.

The Arbitration shall give a separate award in respect of each dispute or difference referred to him.

The venue of arbitration shall be such place as may be fixed by the Arbitrator in his sole discretion.

The award of the Arbitration shall be final, conclusive and binding on all parties to this contract.

In the event of disputes or differences arising between one public sector enterprise and a Govt. Department or between two public sector enterprises the above stipulations shall not apply, the provisions of BPF Office memorandum No. BPF/CL001/76MAN/2(1.10) 75 - BPE (GM - 1) dated 1st January 1976 or its amendments for arbitration shall be applicable.

61. Jurisdiction of Court

For the purpose of Court proceeding if any, same shall be in the Court having jurisdiction over Ranipet - 632 406. (Vellore District, Tamilnadu).

62. Taxes etc. -

All taxes, duties, levies that are payable to the Government or to any other authorities in respect of the works under the contractor at the time of contract or becomes payable in future shall be exclusively borne by the contractor and the BHEL is not liable for any reimbursement / Payment thereof.

ANNEXURE - I

TERMS AND CONDITIONS REGARDING COMPLIANCE WITH VARIOUS LABOUR LAWS BY THE CONTRACTORS FOR BHEL

{Please See Condition - 22}

1. The Contractor shall not employ in connection with the work any person who has not completed 18 years of age.
2. The Contractor shall in respect of labour employed by him either directly or through sub-contractor's comply with or cause to be complied with the following statutory provisions and rules and in regard to all matters provided therein.
 - a) The Contract Labour (Regulation & Abolition) Act 1970 and the related Tamilnadu rules.
 - b) The Minimum wages Act 1948 and the related Tamilnadu Rules.
 - c) The payment of wages Act 1936 and the related Tamilnadu Rules.
 - d) The factories Act 1948 and teh related Tamilnadu Rules.
 - e) The Employees' Provident Fund & Miscellaneous Provisions Act 1952.
 - f) The Employees State Insurance Act 1948.
 - g) The workman's Compensation Act 1923.
 - h) The Industrial Disputes Act 1947 and any other Law or modifications to the above or to the rules made there under from time to time.
 - i) Paymet of Bonus Act 1985.

REGISTRATION AND LICENSING

3. Every Contractor shall register his name with the Welfare Section of BHEL before taking up the work awarded to him by giving the following information and getting a code Number :-
 - a) The Name of the Contractor.
 - b) Nature of Contract Work.
 - c) Period of Work.
 - d) Number of maximum labour employed by him on anyone day.
 - e) Licence No. & Date (applicable in case of Contractors employing 20 or moreworkers)
 - f) Whether enrolled for PF, ESI, etc., and enrolment No.

This information is called for the purpose of informing the Inspectorate of Factories whenever they call for information regarding Contracts.

4. The Contractor employing 20 or more workmen is required to obtain licence from the authorities (The Deputy Chief Inspector of Factories / Assistant Commissioner of Labour as the case may be). This licence shall be amended and /or renewed wherever there is an increase in the workmen employed by him or in the event of contract being extended or renewed. The Contractor shall inform the licence number to the BHEL Management before taking up the work.
5. The Contractor (licensed or unlicensed) shall promptly furnish every information and document required by BHEL authorities for the purpose of fulfilling their obligations as principal Employer and / or occupier of the factory and shall render all necessary assistance for the same.

WAGES

6. The Contractor shall pay wages to the workmen employed by him at the rate which shall not be less than the minimum wages applicable under Law from time to time.
7. The Contractor shall fix wage periods in respect of which wages shall be payable. No wage period shall exceed one month.
8. The Contractor shall ensure payment of wages to the Contract labour employed by him within three days from the end of wage period in case the wage period, is one week or a fortnight and in all other cases before 10th day of the following month.
9. All payment of wages shall be made on working days at the work site and during the working time and on dates notified in advance. In case the work is completed before the expiry of the wage period, final payment shall be made within 48 hours of the last working day.
10. Where the employment of any works is terminated by or on behalf of the Contractor, the wages earned by him shall be paid before the expiry of the second working day from the day on which his employment is terminated.
11. Wages due to every worker shall be paid to him direct or to the person authorised by him in this behalf. All wages shall be paid in current coin or currency or in both.
12. The Contractor shall ensure the disbursement of wages in the presence of such authorised representatives of BHEL Management.
13. The above payment shall be verified by the authorised Officers/ representative of BHEL with the following certificates on the payment sheet
 Certified that the amount shown in Column No..... has been paid to the workmen concerned in my presence on..... at
14. A certificate of payment shall be furnished in duplicate by the Contractor to the Engineer-in-charge each month in Form "A" enclosed.

15. A Notice of showing the wage period and the place and time of disbursement of wages shall be displayed at the place of work and a copy to be sent to the welfare department by the Contractor under acknowledgement.
16. Notices showing the rates of wages, weekly rest days, wage period, hours of work, date of payment of wages, and addressed of the Inspectors having jurisdiction the date of unpaid wages shall be displayed in Tamil and English in conspicuous places at the establishment and at worksite the contractor. The contractor shall inform the BHEL Management every month the details of contract labour engaged for each contract in the following form :-
 - a) Serial Number
 - b) Location
 - c) Period of Work
 - d) No. of Contract labour engaged during the work
 - e) No. of days worked
 - f) No. of Mandays worked
 - g) Wages paid to his workers

The above statement shall be furnished to BHEL Management at the end of every month.

REGISTERS AND RECORDS AND COLLECTION OF STATISTICS

17. The following documents/formats under contract labour (Regulation and Abolition) Act 1970 and Tamil Nadu Rules there under shall be maintained by each Contractor.
 - a) Register of Persons employed by the Contractor.
 - b) Employment Card
 - c) Service Certificate
 - d) Muster Roll, Wage Register, Deduction Register, Wage Slip, Over Time Register, Register of Fines, Register of Advances etc.
18. The Contractor shall display the abstract of the contract labour (Regulation and Abolition) Act and the Rules there under both in English and in Tamil.
19. Half Yearly Return shall be sent by the Contractor in duplicate to the Licensing Officer.
20. The Contractor shall submit the returns required under the Contract Labour (Regulation and Abolition) Act 1970 periodically to BHEL Management.
21. The Contractor shall without fail give upto date information in writing of the attendance of the workers employed by him.

22. The Contractor shall ensure that his workers keep and produce their Employment Card when coming to duty and take them back when leaving duty.
23. All the above registers and records shall be preserved in original for a period of Three years. All the Registers, Records and notice maintained under the Act and rules shall be produced on demand by Inspector or any authority under the Act.

WORKING HOURS AND WORKING CONDITIONS

24. NO WORKER SHALL BE REQUIRED OR ALLOWED TO WORK ON SUNDAY UNLESS HE HAS OR WILL HAVE A HOLIDAY ON ANYONE OF THE THREE DAYS BEFORE OR AFTER THE SAID DAY.
25. The contractor shall inform BHEL Management in the prescribed form details of the contract workers scheduled to work on Sunday, the day of rest and also indicate the substituted holiday in lieu thereof. This shall be intimated two days in advance before his workmen are booked for work on Sunday.
26. The contract labour working for more than nine hours in any day or for more than 48 hours in any week shall be paid wages at the rate of twice the ordinary rates of wages in accordance with the provisions of section 59 of the factories Act 1948
27. The contractor shall provide all safety devices and personal protective equipment to his workmen at his own cost and shall ensure that his workmen wear/use such devices or equipment provided to them while doing the work and there should not be any relaxation on this.
28. The contractor shall give four paid National Holidays to his workers, viz. 26th January, 1st May, 15th August and 2nd October.
29. The contractor shall ensure that his workmen vacate the premises after the shift is over.
30. No woman worker shall be required or allowed to work in the factory except between the hours of 6.00 a.m and 7.00 p.m
31. The contractor shall comply with the provisions relating to welfare and Health facilities as provided in the contract labour (Regulation and Abolition) Act 1970 read with the Tamilnadu contract labour Rules 1975.

NOTICES OF ACCIDENTS

32. Notwithstanding any thing contrary to this , in the event of accident the contractor shall be required to fill injury report and submit the Engineer-in-charge immediately and ensure the compliance of ESI/Workmen's Compensation Act, Factories Act and Rules made there under. He shall also maintain a register of accident as per Act.
33. The contractor shall get the contract labour engaged by him insured under workmen's Compensation Policy from General Insurance Corporation of India before actually starting the work of contract. The Insurance coverage should

be for the entire period of contract. The contractor shall comply with the provision of the Workmen's Compensation Act 1923 [This should be read in conjunction with the provision of ESI Act]

34. The contractor shall ensure that all his workmen are covered under the Employees State Insurance Act and produce to BHEL such Registration Number/ Enrolment Number before executing the contract work.
35. The contractor shall regularly pay the amount of contribution i.e. employers contribution as well as employees contribution in pursuance of the above scheme as fixed from time to time. The contribution payable presently is 1.75% of wages to be recovered from the workmen and 4.75% of wages to be contributed by the contractor. Contribution recovered from employee and contribution made by the contractor may be rounded to the next higher multiples of five paise.
36. The contractor shall take note of any amendment that may be brought forth in the above contribution rate and accordingly.
37. The contractor shall ensure that his workmen are covered under the EPF & miscellaneous Provision Act 1952 and accordingly produce to the BHEL Management the registration / enrolment number before awarding of contract work. As per the existing provision every worker who has completed three months continuous service or has actually worked for not less than 60 days within a period of three months or less shall be entitled and required to become a member of the fund. The employees' contribution payable at present is 12% of wage which will be recovered by the contractor from the wages of his workmen and the contractor should pay equal contribution. The contractor is also liable to pay any administrative charges in this behalf that may be decided from time to time, it will be the responsibility of the contractor to ensure such contribution payable in respect of workmen employed through sub-contractors also.
38. The contractor shall take note of any amendment in the rate of contribution payable under the scheme from time to time.
39. The contractor shall within seven days of the close of every month submit to BHEL a statement showing the amount of contribution payable/paid for employees engaged by him or through him and shall also furnish to BHEL such information as Principal Employer is required to furnish under the provision of the ESI Act and PF as well as the schemes made thereunder to the authorities concerned.
40. Whenever any sum of money is found to be recoverable from or payable by the contractor under the above Acts the same shall be deducted from any sum that may be due or which at any time thereafter may become due to the contractor under this contract or under any other contract or from his security deposit in case the recoveries are not sufficient to satisfy the claims, the contractor shall pay the balance thereof on demand. In case any recoveries are made this clause shall as may be required to replace the shortage caused by such recoveries in the amount of Security Deposit.

41. The contractor shall abide by all the labour and other laws applicable to contract:labour/worken under this contract and shall at all times keep BHEL Indemnified against all losses, claims, prosecutions under any law.
42. in case of non compliance of any of the provisions of the Acts and in case BHEL Haveing complied with the same BHEL will be entitled to recover the same from the contractor / sub contractor.
43. Non exercise of any of the power of or rights available to BHEL here under or under any law, shall not any way operate as waiver thereof.

ACCEPTING OFFICER

FORM - IV

(See Rule 21(1) of Tamil Nadu Contract Labour Rules)

Application for Licence

01. Name and Address of the Contractor
(including his Father's Name in case of
Individuals) :
02. Date of Birth and age (in case of
Individuals) :
03. Particulars of Establishment where
Contract Labour is to be employed :
- a) Name and Address of the
Establishment :
- b) Type of business, trade industry
manufacture :
- c) Number and date of certificate of
Registration of occupation, which is
carried on the Establishment under
the Act. :
- d) Name and address of the Principal
Employer :
04. Particulars of contract labour :
- a) Nature of work in which contract
labour is employed or is to be
employed in the establishment :
- b) Duration of the proposed contract
work (give particulars of proposed
date of commencing and ending) :
- c) Name and address of the agent or
Manager of contractor at the worksite :
- d) Maximum No. of contract labour
proposed to be employed in the
establishment on any date :

- 05. Whether the contractor was convicted of any offence within the preceeding five years, if so give details :
- 06. Whether there was any order against the contractor revoking or suspending licence or forfeiting security deposit in respect of an earlier contract if so the date of such order :
- 07. Whether the contractor has worked in any other establishment within the past five years, if so, give details of the principal employer Establishment and nature of work :
- 08. whether a certificate by the principal Employer in form V is enclosed :
- 09. Amount of licence fee paid No of Treasury challan and Date :
- 10. Particulars of security deposit if any, requested to be adjusted, including Treasury Receipt number :
- 11. The amount of security deposit or balance if any after adjustment of amount to be refunded under rule 31 deposited with treasury Receipt Number and date :

DECLARATION

I hereby declare that the details above are correct to the best of my knowledge and belief.

PLACE :
DATED :

SIGNATURE OF THE APPLICANT
[CONTRACTOR]

NOTE : The application should be accompanied by a treasury Receipt for the appropriate amount and a certificate in Form V From the principal employer.

(To be filled in the office of the Licensing officer)

Date of receipt of the application with challan for fees / security Deposit.

SIGNATURE OF THE LICENSING OFFICER

CONTRACTOR

FORM - XIII

(See Rule 75 of Tamil Nadu Contract Labour Rules 1975)

Register of workman employed by contractor

Name and Address of the Contractor :

Name and location of work :

Name and address of establishment in /under
which contract is carried on :

Name and address of Principal Employer :

01. Serial Number :

02. Name and surname of workman :

03. Age and sex :

04. Father's / Husband's Name :

05. Nature of Employment /Designation :

06. Permanent Home address of workman
(village Taluk and District) :

07. Local Addresss :

08. Date of commencement of Employment :

09. Signature or Thump Impression of workman :

10. Date of termination of Employment :

CONTRACTOR

FORM - XIV

(See Rule 76 of Tamil Nadu Contract Labour Rules)

EMPLOYMENT CARD

Name and Address of contractor : Name and address of
Establishment in/under which
contract is
carried on _____

Nature of work and location of work : Name and address of
Principal Employer

01. Name of the workmen :

02. Sl. No. of register of workmen employed :

03. Name of Employment/Designation :

04. Wage rate (with particulars of unit in case of
Piece work) :

05. Wage period :

06. Tenure of Employment :

07. Remarks :

SIGNATURE OF CONTRACTOR

CONTRACTOR

FORM - XV

{See Rule 77 of Tamil Nadu Contract Labour Rules}

SERVICE CERTIFICATE

Name and Address of the contractor : Name and address of
Establishment in/under which
contract is
carried on _____

Name and location of the work :

Name and address of the workman : Name and address of Principal
Employer

Age or Date of Birth :

Identification marks :

Father's / Husband's Name :

Sl.No	Total period for which employed		Nature of work done		Rate of wage (with particulars units in case of piece of work	Remarks
	From	To	(4)	(5)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)

SIGNATURE

CONTRACTOR

FORM - XVI

(See Rule 78 [1] [a] [i] of Tamil Nadu Contract Labour Rules)

MUSTER ROLL

Name and Address of contractor

: Name and address of
Establishment in/under which
contract is
carried on _____

Nature of location of the work

: Name and address of
Principal Employer _____

For the Month of _____

Sl. No	Name of workmen	Father's/Husbands Name	Sex	Dates					Remarks	
				1	2	3	4	5		
(01)	(02)	(03)	(04)	(05)	(06)					

SIGNATURE OF CONTRACTOR

CONTRACTOR

FORM - XVII

(See Rule 78(1) (a) (i) of Tamil Nadu Contract Labour Rules)

Register of wages

Name and Address of the Contractor :

Nature and location of work :

Name and address of establishment in/under
which contractor is carried on :

Name and address of Principal Employer :

Wage Period : MONTHLY

01. Serial Number :

02. Name of workman :

03. Sl. No. in Register of workman :

04. Designation / Nature of work done :

05. No. of days worked :

06. Units work done :

07. Daily rate of wages / Piece rate :

08. Basic wages :

09. Dearness allowance :

10. Overtime :

11. Other cash Payment
(Nature of payment to be indicated) :

12. Total :

13. Deductions, If any [indicate nature] :

14. Net amount paid :

15. Signature / Thumb impresion of workman :

16. Initials of contractor or his representative :

CONTRACTOR

FORM - XIX

(See Rule 78(1) (b) of Tamil Nadu Contract Labour Rules)

Wage Slip

Name and Address of the Contractor : Name and Father's /
Husband Name of the
workman _____

Name and location of work : For the week / Fortnight /
Month ending

01. No. of days worked :

02. No. of units worked in
case of piece rate workers :

03. Rate of daily wages /piece rate :

04. Amount of over time wages :

05. Gross wages Payable :

06. Deductions, if any :

07. Net amount of wages paid :

**INITIALS OF THE CONTRACTOR OR
HIS REPRESENTATIVE**

CONTRACTOR

FORM - XX

(See Rule 78(1) (a) (ii) of Tamil Nadu Contract Labour Rules)

Register of deductions for damage or loss

Name and Address of the Contractor :

Nature and location of work :

Name and address of establishment in/under
which contractor is carried on :

Name and address of Principal Employer :

01. Serial Number :

02. Name of workman :

03. Father's / Husband's Name :

04. Designation / Nature of employment :

05. Particular of damage or loss :

06. Date of damage or loss :

07. Whether workman showed cause
against deduction :

08. Name of person in which presence
employee's explanation was heard :

09. Amount of deduction imposed :

10. No. of instalments imposed : Date of Recovery

11. First Instalments :

12. Final Instalments :

13. Remarks :

CONTRACTOR

FORM - XXI.

(See Rule 78(1) (a) (ii) of Tamil Nadu Contract Labour Rules)

Register of Fines

Name and Address of the Contractor :

Nature and location of work :

Name and address of establishment in/under
which contractor is carried on :

Name and address of Principal Employer :

01. Serial Number :

02. Name of workman :

03. Father's / Husband's Name :

04. Designation / Nature of employment :

05. Act / Omission for which fine imposed :

06. Date of offence :

07. Whether workman showed cause against
fine :

08. Name of the person in whose presence
employee's explanation was heard :

09. Wage period & Wage payable :

10. Amount of fine imposed :

11. Date on which fine realised :

12. Remarks :

FORM - XXII

(See Rule 78 (1) (a) (ii) of Tamil Nadu Contract Labour Rules)

Register of Advance

- Name and Address of the Contractor :
- Nature and location of work :
- Name and address of establishment in/under which contractor is carried on :
- Name and address of Principal Employer :
01. Serial Number :
02. Name of workman :
03. Father's / Husband's Name :
04. Designation / Nature of employment :
05. Wage period and wages payable :
06. Date and amount of advance given :
07. Purposes (s) for which advance made :
08. No. of instalments by which advance to be repaid :
09. Date and amount of each instalment repaid :
10. Date on which instalment was repaid :
11. Remarks :

CONTRACTOR

FORM - XXIII

(See Rule 78(1) (a) (iii) of Tamil Nadu Contract Labour Rules)

Register of Overtime

Name and Address of the Contractor :

Nature and location of work :

Name and address of establishment in/under
which contractor is carried on :

Name and address of Principal Employer :

01. Serial Number :

02. Name of workman :

03. Father's / Husband's Name :

04. Sex :

05. Designation / Nature of employment :

06. Dates on which overtime worked :

07. Total overtime worked or production
in case of piece -rated :

08. Normal rate of wages :

09. Overtime rate of wages :

10. Overtime earning :

11. Date on which Overtime wages paid :

12. Remarks :

CONTRACTOR

PAYMENT CERTIFICATE

FORM "A"

Certified that :

1. I as contractor of
have made payment to all contract Labourers in full in respect of contract
No. as per terms of my contract
and in no case less than the rates applicable upto the period ending.
2. The above payment have been made by me in the presence of the au-
thorised representative of
of for
Employees amounting to Rs
3. The necessary payment registers attendance register / Form 12 . Leave
register / book under Laboure and industrial Law and other relevant records
have been maintained by me and available with me for production as and
when required .
4. No payment is due / outstanding to any contract Labourers engaged by
me in respect of the aforesaid contract upto the period ending
.....

CONTRACTOR

NAME :
DATE :

SUPERVISOR

NAME :
DESIGN :
DATE :

COUNTERSIGNED
OFFICER INCHARGE

NAME :
DESIGN :
DEPT. :

CONTRACTOR

ANNEXUR II
SAFETY RULES
(See Condition 2)

A BHEL SAFETY CODE

A

1. Suitable scaffolds shall be provided for workmen for all work that cannot safely be done from the ground, or from solid construction except such short period of work as can be done safely from ladder. When a ladder is used an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable footholds and handholds shall be provided on the ladder and the ladder shall be give an inclination not steeper than $\frac{1}{4}$ to 1 ($\frac{1}{2}$ horizontal and 1 vertical)
2. Scaffolding or staging more than 3.25 metres above the ground or floor, swing or suspended from an overhead support or erected with stationary support, shall have a guard rail properly attached, bolted braced and otherwise secured atleast 1 metre high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
3. Working platform, gangways and stairways shall be so constructed that they do not sag unduly or unequally, and if height of a platform or gangway or stairway is more than 3.25 metres above ground level or floor level it shall be closely boarded, have adequate width and be suitably fenced, as described in 2 above.
4. Every opening in floor of a building or in a working platform shall be provided with suitable means to prevent fall of persons or materials by providing suitable fencing or railing with a minimum height of 1 metre.
5. Safe means of access shall be provided to all working platform and other working places. Every ladder shall be securely fixed, no portable single ladder shall be over 9 metres in length. Width between side rails in a rung ladder shall in no case be less than 30 cm for ladders upto and including 3 metres in length, For longer ladder this width shall be increased by atleast 6mm for each additional 30cm of length. Uniform step spacing shall not exceed 30cm.

Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and light to protect public from the accident and shall be bound to bear expenses of defence of every suit-action or other proceeding at law that may be brought by any person for injury sustained owing to neglect of the above precautions, and pay any damages and cost which may be awarded in any such suit, action or proceeding to any such person or which may with the consent of the contractor be paid to compromise any claim by such person.

6. Excavation and Trenching

All trenches 1.5 metres or more in depth, shall at all time be supplied with atleast one ladder for each 30m length or fraction there of ladder shall be extended from bottom of trench to atleast 1 metre above surface of the ground . Sides of the trench 1.5 metres or more in depth shall be stepped back to give suitable slope or securely held by timber bracing,so as to avoid the danger of sides collapsing . Excavated materials shall not be placed within 1.5 metres of the edge of trench or half the depth of trench, whichever is more. Cutting shall be from top to bottom under no circumstances shall under mining or under - cutting be done.

7. Demolition :

Before any demolition work is commenced and also during the progress of work.

- a) All roads and open areas adjacent to the work site shall be closed or suitably protected .
 - b) No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
 - c) All practical steps shall be taken to prevent danger to person employed from the risk of fire or explosion ,or flooding no floor , or roof or other part of building shall be so overloaded with debris or materials as to render it unsafe.
8. All necessary personal safety equipment as considered adequate by the Engineer-in-charge shall be /available for use of person employed on the site and maintained in a condition suitable for immediate use and the contractor shall take adequate steps to ensure proper use of equipment by those concerned.
- a) Workers employed on mixing asphaltic materials cement and lime mortars concrete shall be provided with protective footwear and protective gloves.
 - b) Those engaged in handling any material which is injurious to the eye shall be provided with protective goggles.
 - c) Those engaged in welding work shall be provided with welder's protective eye shells
 - d) Stone breaker shall be protective goggles and protective clothing and seated at sufficiently safe intervals.
 - e) When workers are employed in sewers and manholes which are in use , the contractor shall ensure that manhole covers are opened and manholes are ventiled atleast for an hour before the workers are allowed to get into them manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to public.
 - i) No paint containing lead or lead products shall be except in the form of paste or ready-made paint.
 - ii) Suitable face masks shall be supplied for use by workers when paint applied in the form of spray or surface having lead paint is dry rubbed and scrapped .

f) The contractor shall not employ men below the age of 18 and women on the work of painting with products containing lead in any form. Whenever men above the age of 18 are employed on the work of lead painting the following precaution shall be taken :

A f i) No paint containing lead or lead products shall be used except in the form of paste or ready-made paint.

ii) Suitable face masks shall be supplied for use by workers when paint is applied in the form of spray or surface having lead paint is dry rubbed and scrapped

iii) Overalls shall be supplied by the contractor to workmen and adequate facilities shall be provided to enable working painters to wash during or cessation of work.

9. When work is done near any place where is risk of drowning ,all necessary equipment shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision made for prompt first aid treatment of all injuries likely to be sustained during the during the course of the work.

10. Use of hoisting machine and tackles including their attachments,anchorage and support shall conform to the following

a)

i) These shall be of good mechanical construction, sound materials and adequate strength and free from defects and shall be kept in good working order.

ii) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength and free from defects.

b) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 yrs shall be incharged of any hoisting machine including any scaffolding winch or give signals to operator.

c) In case of every hoisting machine and or every chain ,ring , hook, shackle swivel and pull block used in hoisting or lowering as means of suspension safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall have the safe working load plainly marked there on. In case of a hoisting machine having a variable safe working load,each safe working load at the condition under which it is applicable shall be clearly indicated. No part of any machine or gear referred to above in this paragraph shall be loaded be yond the safe working load except for the purpose of testing.

d) In case of department machine ,safe working load shall be notified by the Engineer-in-charge. As regards contractor's machine the contractor shall notify safe working load of each machine to the Engineer-in-charge when ever he brings it to site of work and get it verified by the Engineer-in-charge.

11. Motors , gearing , transmission electric wiring and other dangerous parts of hoisting appliances shall be provided with efficient safeguards, hoisting appliances shall be provided with such means as will reduce to the minimum risk of accident descent of load . Adequate precaution shall be taken to reduce to the minimum risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energised insulating mats, working apparel such as gloves, sleeves and boots as may be necessary shall be provided. Workers shall not wear any rings watches ,carry keys or other materials which are good conductors of electricity.
12. All scaffolds , ladders and other safety devices mentioned or described here in shall be maintained in a safe condition and no scaffold , ladder or equipment shall be altered or removed while it is use. Adequate washing facilities shall be provided at or near the places of work.
13. These safety provision shall be brought to the notice of all concerned by display on a notice board at a prominent place at the workspot persons responsible for ensuring compliance with the safety code shall be named thereon by the contractor.
14. To ensure effective enforcement of the rules and regulations relating to safety precaution , arrangement made by the contractor shall be open to inspection by the Engineer-in-charge or his representation and the inspecting officers as defined in the contractor's Labour Regulations.
15. Notwithstanding to the above conditions 1 to 14, the contractor is not exempted from the operation of any other Act or Rule in force.

B. GENERAL SAFETY PRECAUTIONS TO BE FOLLOWED AT WORK SITES DURING EXECUTION

The following safety measures should be strictly adhered to during execution of works at sites.

1. Providing the working platform with toe-board and handrail for continuous working at heights.
2. Providing safety belt and lifeline at all times for men working at heights.
3. Providing dust or fume respirator in places where dust and fume concentration exists
4. Providing goggles and welding screens.
5. Providing acid and alkali proof rubber gloves for handling acids, alkali and chemicals, which are corrosive.
6. Providing rubber gloves for working on electrical works.
7. Ensuring proper lashing of the components while being transported in vehicles.
8. The vehicles must have side supports or have body to support the materials conveyed.
9. The materials should not be allowed to extend or overflow the sides of vehicles.
10. Materials should not be allowed to overhang from the rear edge of the body of the vehicle.
11. Driver of the vehicle must possess license.
12. Vehicle must not be overloaded prescribed limits.
13. Red flags and lights for parts projecting from the body of the vehicle must be provided.
14. The speed restrictions within the factory must be strictly adhered to.
15. The gas cylinders must always be handled on trolleys or kept tied down not in use. They should never be rolled as Roller for conveying.
16. Cylinders should not be used without regulators.
17. All excavations may be barricaded and red belts/ lamps must be provided .
18. All electrical connections must be properly earthed.
19. No work should be taken up for execution inside shop floor, without obtaining necessary work permit.
20. Providing helmet for high level work.
21. The contractor should maintain a register regarding the driver license particulars.
22. All Personnel Protective Equipments (PPE) conform to standard specification as per the details given in the code of conduct.
 - (i) Safety helmets confirming to IS-2925: 1984
 - (ii) Safety Belts confirming to IS-3521: 1983
 - (iii) Safety Shoes confirming to IS-1989: 1978
 - (iv) Eye and face protection devices confirming to IS – 8520:1977 & IS – 8940:1978
 - (v) Hand and body protective devices confirming to: IS – 2573: 1975
IS – 6994: 1973
IS – 8807: 1978
IS – 8519: 1977

Contractor including the subcontractors, agents and labours engaged on work are required to scrupulously adhere to the safety regulations, safety precautions and measures. Any violation thereof will invite punitive action being taken against them. Also contractors with frequent violations of safety regulations will not be entrusted with further work in this organization.

General:

All tools, tackles, lifting appliances, material handling equipment, scaffolds, cradles, safety nets, ladders, equipment etc., used by the contractor shall be of safe design and construction. These shall be tested and certificate of fitness obtained, before putting them to use and from time to time as instructed by authorized BHEL official who shall have the right to ban the use of any item.

C. SAFETY PRECAUTION TO BE OBSERVED WHILE TRANSPORTING MATERIALS

I. Vehicle

1. Vehicle carrying materials should have proper registration documents and must be produced on demand by our Security staff.
2. The light on right side i.e. over the driver's cabin shall be in working condition
3. Both the head light as well as park lamps must be in working condition.

II. Movement of Vehicle

1. The vehicle should not travel at more than 20KMPH in our premises.
2. The driver of the vehicle must possess heavy duty licence and produce on demand by the Security Staff.
3. Vehicles carrying inflammable liquids in the tanks containers should have grounding chain or the tank container should be coated with insulating materials to avoid static electricity.
4. In road junction , speed breaker and Railway crossing the speed should be lowered and vehicles should proceed cautiously.
5. The driving should be ' keep to the left ' at all places.
6. The vehicles should not parked on the road which could obstruct the vehicular traffic.
7. No person other than driver should be allowed to sit or stand on the prime mover or trailer.
8. The vehicle should pass only through the approved routes. Short cuts should be forbidden.
9. There must be a safe distance behind another moving truck.
10. The driver should avoid making quick starts, jerk stop or quick turns at excessive speed .

III Shipping

1. Strong side supports should be provided on both sides of the trailer. The side supports should be fixed in such a way that it cannot be removed even temporarily.
2. Adequate packing must be given for easy slinging operations. The packing materials should be good enough to withstand the load.
3. The stacking of loads on the truck should be evenly placed. The load should not be heaped together or dumped over the chassis.
4. The load on the truck should not be beyond its standard capacity. The carrying capacity must be clearly marked on the trailers also.
5. The loaded materials should be fastened tightly with "WIRE ROPE". Manila rope or coir rope should not at all be used. There must be side packing such as gunny or rubber tyre between the sharp edges of the job and wire rope in order to avoid cut in the wire rope.
6. There must be minimum two fastening and it should be more in case of lengthier loads.
7. The wire rope should be in sound condition i.e there should not be links, knots or bristles etc.
8. The wire rope ends should be clamped with 'U' clamps.
9. The loose pieces should be bundled before loading on the truck.
10. There must be red flags or red lamps for the lengthly loads which extend beyond chassis.
11. The materials should not be stacked too high to avoid hitting against live electric lines.
12. The load should not be overhanging more than 0.9 metres from the end of body.
13. While transporting the scraps, there must be wire net cover to prevent falling of scrap.

IV General

1. The vehicles should not be moved directly inside the production building in case the materials are to be unloaded there. But the vehicles should be parked outside the building and the driver should ascertain the passage as well as the unloading points, with the help of the shop officials. This will avoid the congestion or blocking of traffic in the gangway.

TENDER DOCUMENT

TENDER SPECIFICATION No : **BAP:CF:OT:06/2016-17 Dt: 17/08/2016**

NAME OF WORK:

OPERATION AND MAINTENANCE OF 1 MLD SEWAGE TREATMENT PLANTS IN FACTORY AND TOWNSHIP OF BHEL RANIPET FOR THE YEAR 2016-17-18. (SECTION – A & B)

PERIOD OF CONTRACT:

ONE YEAR

PART – II – PRICE BID

(Pages 03 including cover page)



CIVIL TOWNSHIP DEPARTMENT
BHARAT HEAVY ELECTRICALS LIMITED
(A Government of India Undertaking)
BOILER AUXILIARIES PLANT
INDIRA GANDHI INDUSTRIAL COMPLEX
RANIPET – 632 406

TENDERER

ACCEPTING OFFICER



BHARAT HEAVY ELECTRICALS LIMITED

BOILER AUXILIARIES PLANT

RANIPET - 632406

PRICE BID

ESTIMATE REF NO : CF/RB/16/07

NAME OF WORK : OPERATION & MAINTENANCE OF 1 MLD SEWAGE TREATMENT PLANT IN FACTORY OF BHEL RANIPET FOR THE YEAR 2016-17-18. (SECTION - A)

SL NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
01	<p>Operation and Maintenance (O&M) of 1 MLD capacity Sewage Treatment Plant at Factory premises of BHEL, Ranipet in any two shifts over the 24 hours at the discretion of BHEL to treat the sewage from Factory.</p> <p>The scope covers deputing qualified and experienced operator for shift operation of the plant. The operator is required to monitor proper functioning of all the equipments and the system in total for effective performance of the plant for better results.</p> <p>The scope includes operation of the equipments, attending to minor defects then and there, cleaning and lubricating the rotating parts periodically, maintaining the electrical systems such as panel board etc, dosing chemicals as directed by BHEL, collecting & testing feed and permeate samples, maintaining the log book for all the activities.</p> <p>Required number of operators are to be made available for shifts operation. Also a 'reliever operator' shall work in shifts and a supervisor shall work in general shift.</p> <p>(Though the 'reliever operator' and 'supervisor' are common for both Factory STP & Township STP, their wages and all payments have to be covered under Factory STP, along with exclusive operators of the factory STP.)</p>	12.00	Month		
02	TOTAL QUOTED VALUE OF SL NO - 01		=		
03	SERVICE TAX @ _____% (Quote here full service tax % and Service tax amount payable)		=		
04	TOTAL QUOTED VALUE INCLUDING SERVICE TAX (SL NO - 02 + 03)		=		
(Rupees in words _____)					



BHARAT HEAVY ELECTRICALS LIMITED

BOILER AUXILIARIES PLANT

RANIPET - 632406

PRICE BID

ESTIMATE REF NO : CT/RB/16/06

NAME OF WORK : OPERATION & MAINTENANCE OF 1 MLD SEWAGE TREATMENT PLANT IN TOWNSHIP OF BHEL RANIPET FOR THE YEAR 2016-17-18. (SECTION - B)

SL NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
01	<p>Operation and Maintenance (O&M) of 1 MLD capacity Sewage Treatment Plant at Township premises of BHEL, Ranipet in any two shifts over the 24 hours at the discretion of BHEL to treat the sewage from Township.</p> <p>The scope covers deputing qualified and experienced operator for shift operation of the plant. The operator is required to monitor proper functioning of all the equipments and the system in total for effective performance of the plant for better results.</p> <p>The scope includes operation of the equipments, attending to minor defects then and there, cleaning and lubricating the rotating parts periodically, maintaining the electrical systems such as panel board etc, dosing chemicals as directed by BHEL, collecting & testing feed and permeate samples, maintaining the log book for all the activities.</p> <p>Required number of operators are to be made available for shifts operation. Also a 'reliever operator' shall work in shifts and a supervisor shall work in general shift.</p> <p>(Though the 'reliever operator' and 'supervisor' are common for both Factory STP & Township STP, their wages and all payments have to be covered under Factory STP, along with exclusive operators of the factory STP.)</p>	12.00	Month		
02	TOTAL QUOTED VALUE OF SL NO - 01		=		
03	SERVICE TAX @ _____ % (Quote here full service tax % and Service tax amount payable)		=		
04	TOTAL QUOTED VALUE INCLUDING SERVICE TAX (SL NO - 02 + 03)		=		
(Rupees in words _____)					