

**ALL INDIA INSTITUTE OF MEDICAL SCIENCES
RAIPUR**

TENDER

FOR

**PROVIDING
OPERATION & MAINTENANCE SERVICES
at
RESIDENTIAL COMPLEX
OF
ALL INDIA INSTITUTE OF MEDICAL SCIENCES
AT
KABIR NAGAR, RAIPUR**

CONSULTANT

HSCC (INDIA) LTD

(A GOVERNMENT OF INDIA ENTERPRISE)

Plot No. 6-A, Block-E, Sector-1, NOIDA (U.P.) – 201 301

PHONE: 0120-2540153 FAX: 0120-2542447

URL: <http://www.hsccltd.co.in>

ALL INDIA INSTITUTE OF MEDICAL SCIENCES (AIIMS)
GE ROAD, TATI BANDH, RAIPUR - CG

Tender No. HSCC/Maint/AIIMS-Raipur/2014

Dated: 19.02.2014

Director, All India Institute of Medical Sciences, Raipur, through HSCC(I) Ltd. invites Bids from eligible contractors/firms for the following works:

Name & description of work	Estimated cost (Rs.)	Period of work (months)	Last date of submission of Bids	Bid Security amount (in Rs.)
Tender for providing Operation & Maintenance Services at AIIMS Housing Complex at Kabir Nagar, Raipur	1.77 Crores	12 Months	12.03.2014 upto 15:00 hrs Opening at 15:30 hrs.	3.54 Lakhs

For details in regard of eligibility, bid security, purchase & submission of bid document, please refer to HSCC website <http://www.hsccltd.co.in> & AIIMS Raipur website <http://www.aiimsraipur.edu.in>. Pre bid meeting shall be held on 27.02.2014 at 11:00 Hrs at the office of HSCC (India) Ltd, E(6) A, Sector-1, Noida-U.P. AIIMS/HSCC reserves the right to accept or reject any application without assigning any reason or incurring any liability whatsoever.

Prospective bidders are advised to regularly scan through HSCC website as corrigendum/amendments etc, if any, will be notified on the company's website and separate advertisement will not be made for this.

Director,
All India Institute of Medical Science,
Raipur

ALL INDIA INSTITUTE OF MEDICAL SCIENCES (AIIMS)

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Tender for providing Operation & Maintenance Services at AIIMS Housing Complex at Kabir Nagar, Raipur	1.77 Crores	12 Months	From 1000 hrs on 19.02.2014 till 1500 hrs on 12.03.2014	12.03.2014 upto 15:00 hrs Opening at 15:30 hrs.	3.54 Lakhs

Complete set of Bid documents has been made available at HSCC website <https://www.hsccltd.co.in> and AIIMS Raipur website <http://www.aiimsraipur.edu.in/>. The interested Contractors/firms may download and check their eligibility for the work. Interested contractors/firms may also see the complete set of Bid documents which have been kept at the dispatch counter of HSCC corporate Office at E-6(A), Sector 1, Noida (UP) – 201301.

The Bid document fee is Rs.5000/- (Rs. Five thousand Only) (non-refundable) payable in the form of Cash/Demand Draft in favour of HSCC (India) Ltd. payable at New Delhi/Noida. Interested applicants/Contractors/Firms may either (i) purchase the Bid document in person from the office of HSCC (India) Ltd.,Noida on any working day as mentioned above on written request mentioning the name & description of work against payment of Bid Document fee as above, or (ii) download the document from the website(s) as mentioned above. In case the Bid document is downloaded from the website, the bidder should submit the Bid document fee as above alongwith the Bid in Envelope No.1.

Interested applicant contractors/firms may like to attend the pre bid meeting which will be held at 11:00 hrs at Corporate Office of HSCC (India) Ltd on 27.02.2014.

The Bids should be submitted complete in all respects along with the details of Bid document fee (in case of Bid documents downloaded from website(s)) and Bid security on or before the due date and time as mentioned above at HSCC Corporate Office, E-6(A), Sector 1, Noida – 201301.

AIIMS/HSCC reserves the right to accept or reject any application without assigning any reason or incurring any liability whatsoever.

Prospective bidders are advised to regularly scan through HSCC website <http://www.hsccltd.co.in> as corrigendum/amendment(s) etc., if any, will be notified on this website only and separate advertisement will not be made for this.

**Director
AIIMS
Raipur**

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INSTRUCTIONS TO THE BIDDERS

1. Sealed Bids under two bids system in the prescribed forms are invited from eligible Bidders for providing Operation and Maintenance services listed under scope of services in this bid document.
2. The amount of earnest money deposit (EMD) shall be Rs.3,54,000/- (Rupees Three Lakh Fifty Four Thousand only) in the form of DD/Pay Order from a scheduled bank drawn in favour of HSCC(India) Ltd. payable at New Delhi/ Noida.
3. Bid form shall be complete in all respect. Incomplete Bids or Bids without EMD shall be treated as invalid.
4. Last date of submission of Bid is 12.03.2014 upto 15.00 Hrs.
5. Date and time of opening of Bid is 12.03.2014 at 15.30 Hrs.
6. Each and every page of the Bid documents should bear the stamp and signature of the authorized representative. Format I & II enclosed shall be filled without exception. The bidder shall also enclose the latest Income Tax Clearance Certificate and proof of VAT/works Contract Tax Registration where applicable.
7. A power of attorney in favour of person signing the bid should also be submitted.
8. The rates for each and every item shall be quoted in Figure and words. In case of any discrepancy in rates, the rates written in words shall prevail.
9. The envelope containing the Bids shall be sealed and bear the name of work and the name and address of the bidder.
10. The Competent Authority of AIIMS / HSCC (India) Ltd., reserves the right to accept or reject any Bid or all Bid without assigning any reason.
11. Conditional Bids are liable to be rejected.
12. The site for the work is available and can be seen on any working days during office hours by contacting SE(C), AIIMS Raipur. Intending Bidders are advised

to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A Bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The Bidder shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a Bid by a Bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc., if any, will be issued to him by the Employer and local conditions and other factors having a bearing on the execution of the work.

13. The Bid for the work shall remain open for acceptance for a period of ninety days (90) from the date of opening of Bid.
14. These instructions shall form a part of the contract document.
15. The Bid Security/Earnest Money Deposit (EMD) of unsuccessful Bidders shall be refunded within one month after the award of work to the successful Bidder.
16. Rates quoted shall be firm and fixed and shall be inclusive of cost of manpower, material, machinery, tools and plant consumables etc., complete and include all taxes (including service tax), duties and levies, insurance etc. No escalation of whatsoever nature shall be payable.
17. The successful Bidder would be required to establish its office within the site of the work in the space provided by the AIIMS.

18. Eligibility criteria:

The applicant should meet the following minimum criteria for prequalification:

1. The Experience should be in the name of bidding company and not in the name of subsidiary/ associate/ group company etc.

2. Experience of having successfully completed work during last seven years ending last day of month previous to one in which applications are invited :
 - a. Construction of One building along with associated works such as electrical, Fire Fighting, Plumbing etc. of value not less than 30 crores.
 - i. One similar completed work of value not less than the amount equal to 80% of the above cost
 - ii. Two similar completed work of value not less than the amount equal to 50% of the above cost
 - iii. Three similar completed work of value not less than the amount equal to 40% of the above cost.

OR

- b. Having experience of operation / Maintenance of building with associated services such as electrical, Fire Fighting, Plumbing etc.
 - i. One similar completed work of value not less than the amount equal to 80% of estimated cost
 - ii. Two similar completed work of value not less than the amount equal to 50% of estimated cost
 - iii. Three similar completed work of value not less than the amount equal to 40% of estimated cost

Note: Further, the agency should have in the past 3 years satisfactory completed, at least one order of similar nature of value **not less than**

40% of the estimated cost of work in Central Government/ State Government/Public Sector Undertakings/Government Autonomous bodies.

3. Average Annual financial turnover during the last 3 financial years ending 2012-13 should be at least 100% of the value of work to be executed (copies of balance sheets signed by CA to be submitted).
 4. The Bidder should substantially have in-house manpower to cover requirements of Formats III.
17. **Submission of bids:** proposals should be submitted in three separate envelopes namely, Bid Security/EMD, 'Technical Bid' (Part A) and 'Financial Bid' (Part B).

(a) Envelope No. 1: Shall Comprise the following:-

- (i) Original non refundable Demand Draft of Rs.5,000/- (Tender Document Fee), in case the Documents downloaded from website
- (ii) Original bid security / EMD

(b) Envelope No. 2: Shall contain the Technical Bid and comprise the following:-

- (a) Letter of Application
- (b) Complete Bid documents, as listed in Notice Inviting Bids excluding the Bill of Quantities including all amendment(s)/addendum(s)/ Corrigendum(s) /Clarification(s) issued, if any, duly stamped and signed.
- (c) Brief Description of the Firm as per Format I enclosed
- (d) Documents regarding constitution of Bidder including copy of Certificate of Registration.

- (e) Experience of carrying out works of Similar Nature as per Format II enclosed.
 - (f) Copies of Works Contract Tax/VAT registration/License or undertaking in this regard that the bidder will get registered with the relevant authorities in case the work is awarded to them
 - (g) Power of attorney in favour of person signing the bid
- (c) Envelope No. 3:** Shall contain only the Bill of Quantities and rates/prices duly filled and signed and stamped without any conditions whatsoever. Bids containing any conditions in Financial Package are liable to be summarily rejected.

The Contractor must ensure to fill up price against each item of BOQ .

Please note that the price should not be indicated in any of the documents submitted except financial bid (Price bid). Non-compliance shall entail rejection of the Bid. Any addition, modification, alteration etc if observed in any of the bid documents at any stage the bid shall be summarily rejected.

The Envelopes Nos. 1, 2 & 3 duly sealed must be kept inside a single outer fourth envelope and clearly super scribed as “Tender for Annual Operation & Maintenance Work at Residential Complex of AIIMS Raipur”. The inner envelopes should be clearly marked as EMD (Envelope –1), ‘Technical Bid’ (Envelope-2) and ‘Financial Bid’ (Envelope-3).

The bidder should submit their bids duly filled, before the last date and time for submission of bids by hand delivery/courier to at the following address:

HSCC (India) Ltd.
E – 6A, Sector - 1
Noida, U.P. 201 301.

Any bid received after the due date and time shall be summarily rejected and returned unopened.

18. **Evaluation of Technical Bids:** The Envelope No.1 shall be opened first and checked for the presence of the requisite EMD and Tender Document Fee (in case of tender documents downloaded from the website). The Technical Bid of bidders, whose EMD is found in order shall be opened and will be evaluated by the HSCC(I) Ltd. to ascertain the best-evaluated bid for the complete work/services. The Bidders should take care to submit all the information sought in prescribed formats.
 - a. Firm's relevant experience and strength – Profile of agency, registration details, experience of similar works, annual turnover, total manpower employed.
 - b. Qualification/Related experience.

19. **Financial Bid:** The financial bid of the Bidders, whose technical bid is found to be suitable, will be opened in the presence of the Bidders, who choose to attend the opening of financial bid.

20. **Award of work:**
 - i. The selection of the agency will be at the sole discretion of the HSCC/AIIMS who reserve the right to accept or reject any or all the bidders without assigning any reason.

 - ii. The contract for the Annual Repairs and Maintenance shall be awarded to the qualified responsive Bidder who has quoted lowest.

 - iii. Upon evaluation of Bids the notification on award of contract will be intimated to the successful Bidder.

GENERAL CONDITIONS OF CONTRACT

DEFINITIONS AND INTERPRETATION

1. Definitions

(a) In the Contract (as hereinafter defined) the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires:

- i) “Employer” means the Director, AIIMS, Raipur and the legal successors in title to Director, AIIMS, Raipur.
- ii) “Engineer” means the person appointed by HSCC (India) Ltd. to act as Engineer for the purposes of the Contract.
- iii) “Contractor” means an individual or firms (proprietary or partnership) whether incorporated or not, that has entered into contract (with the employer/ Consultant i.e HSCC (I) Ltd., on its behalf) and shall include his/its heirs, legal representatives, successors and assigns. Changes in the constitution of the firm, if any shall be immediately notified to the employer, in writing and approval obtained for continued performance of the contract.

- (b)
 - i) “Contract” means these conditions, the Specification, the Bill of Quantities, the Bid, the Letter of acceptance, the Contract Agreement (if completed) and such further documents as may be expressly incorporated in the Letter of Acceptance or Contract Agreement (if completed).
 - ii) “Specification” means the specification of the Works included in the Contract and any modification thereof.
 - iii) “Drawings” means all the completion drawings, calculations and technical information of a like nature provided by the Engineer to be Contractor under the Contract and all drawings, calculations, samples, patterns, models, Repair and Maintenance Services

manuals and other technical information of a like nature submitted by the Contractor and approved by the Engineer.

- iv) "Bill of Quantities" means the priced and completed bill of quantities forming part of the Bid.
 - v) "Bid" means the Contractor's priced Bid to the Employer for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract, as accepted by the Letter of Acceptance. The word Tender is synonymous with Bid and the words Tender Documents with Bidding Documents.
 - vi) "Letter of Acceptance" means the formal acceptance of the Bid by AIIMS, Raipur/ HSCC (I) Ltd., on its behalf.
 - vii) "Appendix to Bid" means the appendix comprised in the form of Bid annexed to these Conditions.
- (c)
- i) "Commencement Date" means the date upon which the Contractor receives the notice to commence the works.
 - ii) "Time for Completion" means the time period for which the contract of "Operation & Maintenance Services and Repair" has been awarded by the employer to the contractor.
- (d) "Taking Over Certificate" means a certificate issued by employer evidencing successful completion of the awarded work.
- (e)
- i) "Contract Price" means the sum stated in the Letter of Acceptance as payable to the Contractor for the execution and completion of the Works and the remedying of any defects therein in accordance with the provisions of the Contract.
 - ii) "Retention Money" means the aggregate of all monies retained by the Employer.
- (f)
- i) "Works" means the Works to be executed in accordance with the contract.

- ii) "Site" means the places provided by the Employer for Operation & Maintenance Services and Repair Services.
- iii) "Cost" means all expenditure properly incurred or to be incurred, whether on or off the Site, including overhead and other charges but does not include any allowance for profit.

ENGINEER

2. Engineer's Duties and Authority

The Engineer shall carry out the duties specified in the Contract.

3. Custody and Supply of Drawings and Documents

The Drawings shall remain in the sole custody of the Employer/Engineer, but copies as required thereof shall be provided to the Contractor free solely for the purpose of this contract.

4. Sufficiency of Bid

The Contractor shall be deemed to have based his Bid on the data made available by the Employer and on his own inspection and examination of this site conditions.

5. Contractor's Employees

The Contractor shall provide on the Site qualified and experienced technical staff in connection with the Operation & Maintenance Services and Repair of the Works and the remedying of any defects therein.

6. Engineer at Liberty to Object

The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person provided by the Contractor who, in the opinion of the Engineer, misconducts himself, or is incompetent or negligent in the proper performance of his duties, or whose presence on Site is otherwise considered by the Engineer to be undesirable, and such person shall not be again allowed upon the Works without the consent of the Engineer. Any person so removed from the Works shall be replaced as soon as possible by a qualified person approved by the Engineer.

7. Safety, Security and Protection of the Environment

The Contractor is responsible for the safety of all activities taken up by him for the performance of the Contract.

The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects therein:

- i) Have full regard for the safety of all persons entitled to be upon the Site and keep the Site (so far as the same is under his control) and the Works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons, and
- ii) Provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the Engineer or by any duly constituted authority for the protection of the Works or for the safety and convenience of the public or others, and
- iii) Take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods.

8 Damage to Persons and Property

The Contractor shall, except if and so far as the Contract provides otherwise, indemnify the Employer against all losses and claims in respect of :

- (a) death of or injury to any person caused by his own acts or omissions, or
- (b) loss or damage to any property: Which may arise out of or in consequence of the Operation & Maintenance Services of the works and the remedying of any defects therein, and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof.

9. Accident or injury to Workmen

The Employer shall not be liable for or in respect of any damages or compensation payable to any workman for death or injury resulting from any act or default of the contractor. The Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation and expenses whatsoever in respect thereof or in relation thereto.

10. Evidence and Terms of Insurance

The Contractor shall take out appropriate insurance to cover his work and workers and staff employed by him fully. The contractor shall provide evidence to the Engineer/Employer as soon as practicable after the respective insurance have been taken out but in any case prior to the start of work at the Site that insurance required under the Contract have been effected.

11. Compliance with Statutes, Regulations

The Contractor shall conform in all respects, including by the giving of all notices and the paying of all fees, with the provision of:

- (a) Any National or State Statute, Ordinance, or other Law, or any regulation, or bye-law of any local or other duly constituted

authority in relation to the execution and completion of the Works and the remedying of any defects therein, and

(b) The rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works, and the Contractor shall keep the Employer indemnified against all penalties and liability of every kind for breach of any such provision.

(c) Any changes required for approval due to revision of the local laws.

12. Defect Identification and it's rectifications

The Engineer shall check the Contractor's work and notify the Contractor of any Defects which he finds. The Contractor shall immediately attend the defects and complaints noticed at site. The Contractor shall provide and develop a system for regular Operation and Maintenance of all the services, which includes defects identification and their immediate rectification, so that services are not affected. It shall be the sole responsibility of the Contractor that all the services are kept in functional condition round the clock during the currency of the contract.

13. Extension of time

The Operation & Maintenance Contract may be extended on the written mutual consent of both the Employer and Contractor for a further period of one year.

However, the Employer reserves the right to terminate the Contract by giving 15 days notice at any time during the currency of the Contract if the services of the Contractor are not satisfactory in the opinion of the Employer or his representatives.

14. Liquidated Damages for Delay

If the Contractor fails to fulfill his contractual obligations, the employer can

impose liquidated damages on the contractor as detailed in the particular conditions.

15. Contractor's Failure to Carry out Instructions

In case of default on the part of the Contractor in carrying out the works, the Employer/Engineer shall be entitled to employ and pay other persons to carry out the same and if such work, in the opinion of the Engineer, the Contractor was liable to do at his own cost under the Contract, then all costs consequent thereon or incidental thereto shall be determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or to become due to the Contractor.

17. Variations

The Contractor has to carry out all the works at the rate, terms and conditions contained in the Contract.

The quantities given in the Bill of Quantities are estimated quantities. The quantity of any particular item may vary to any extent.

The Contractor shall execute any items of work not provided for in the Bill of Quantities on the instructions of the Engineer. The rates for such items shall be worked out based on the CPWD norms/DAR. The current market rates shall be taken to derive the rates of the DSR/DAR based items. In case the item is not available in the DSR/ DAR, the rates for the same shall be derived based on the market rates.

MEASUREMENT

18. Works to be Measured for BOQ items

The Engineer shall determine by measurement of the value of actual work done in accordance with the Contract and the Contractor shall be paid proportionately. Part rate shall be made for any part of BOQ items not fully executed. Engineer

shall decide the breakup of lumpsum items and the part rate applicable for any particular item which shall be final and binding.

19. Method of Measurement

The works shall be measured as per CPWD/IS norms except otherwise provided in the Contract.

CERTIFICATES AND PAYMENTS

20. Monthly Statements

The Contractor shall submit a bill in 3 copies to the Engineer by 7th day of each month for the work executed up-to the end of previous month in tabulated form approved by the Engineer, showing the amounts to which the Contractor considers himself to be entitled. The bill must be supported with the following documents:-

- (a) Attendance sheets along-with salary certificates, wages sheets of all the workers and staffs deployed against item No. 'A'.
- (b) Certified bills miscellaneous materials purchased under different heads against item No. 'A' not covered in format III D.
- (c) Details of defects/complaints attended and rectified within time.
- (d) Details of complaints attended late.
- (e) Test certificates of materials used and tests carried out for quality control as required by the specifications and the Engineers.

21 Taxes

Taxes shall be deducted as applicable.

22 Monthly Payments

The Contractor shall submit monthly bill complete in all respects by the 7th day of

each month. The Engineer shall clear the bill and certify due amounts for payment within 15 days.

23 Performance Security

Within two weeks of the award of work, the Contractor shall submit a Performance Security equivalent to 5% of the Contract Value for the proper performance of the Contract as per format enclosed at Enclosure III.

The Performance Security shall be valid for the duration of the Contract plus 60 days.

The Performance Security can be encashed by the Employer to recover any amount which is payable by the Contractor to the Employer on any account for a cause arising out of the Contract.

24 Correction of Certificates

The Engineer may by any Interim Payment Certificate make any correction or modification in any previous Interim payment Certificate which has been issued by him, and shall have authority, if any work is not being carried out to his satisfaction, to omit or reduce the value of such work in any Interim Payment Certificate.

25. Final Certificate

Within 28 days after receipt of the Final Statement, and the written discharge, the Engineer shall issue to the employer (with a copy to the Contractor) a Final Certificate stating:

- (a) The amount which, in the opinion of the Engineer, is finally due under the Contract, and
- (b) After giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled under the Contract.

26. Default of Contractor

26.1 If the performance of the contract and is not satisfactory and not corrected within 15 days of receiving notice, then employer shall be at liberty to terminate the contract.

26.2 In the event of termination of the contract, employer shall be at liberty to get balance work done at the risk and cost of the contractor and due payment of the contractor, if any, shall be released after the completion of whole of the works.

27. Amicable Settlement of Dispute

The party shall use their best efforts to settle amicably all disputes arising out of or in connection this contract or the interpretation thereof.

28. Arbitration

Any dispute and differences relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used in the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof in respect of which Amicable settlement has not been reached shall be referred to the Sole Arbitration of the Director, AIIMS, Raipur who shall proceed as per the Arbitration Act, 1996.

28.1 The work under the contract shall continue, during the Arbitration proceedings.

28.2 The award of the Arbitrator shall be final, conclusive and binding on both the parties.

29 Interpretation

In interpreting these conditions of Contract, singular also means plural, male also means female, and vice-versa. Headings and cross-references between clauses have no significance. Words have their normal meaning under the language of the Contract unless specifically defined.

30. Language and Law

The language of the Contract is English. The jurisdiction of the Contract shall be with the Hon'ble High Court at Bilaspur.

31 Communications

Communication between parties which are referred to in the conditions are effective only when in writing.

32 Contractor's Risks

All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract are the Contractor's risks.

33 Insurance

The following insurance cover is to be provided by the Contractor in the joint names of the Employer and the Contractor for the period from the Start date to the end of the Completion Period:

- a. Cover against damage to other people's property caused by the Contractor's acts or omissions;
- b. Cover against death or injury caused by the Contractor's acts or omissions to:
 - i. Anyone authorized to be on the site;
 - ii. Third parties who are not on the site;

- iii. Cover against damage to the works and materials arising due to the performance of the services under the Contract.

Policies and certificates of insurance are to be produced by the Contractor to the Engineer

If the Contractor does not produce any of the policies and certificates required, the Employer may effect the insurance for which the Contractor should have produced the policies and certificates and recover the premiums it has paid from the payments due to the Contractor.

33 Contractor to execute the works:

The Contractor is to execute the works in accordance with the Contract and the specifications.

34 Approval of samples of all the BOQ items and materials is to be taken from the Engineer/Client. All material shall be of reputed and standard makes.

35 Instructions

The Contractor shall carry out all the instructions of the Engineer.

COMPLAINT REGISTRATION FORM

Date
Time
Nature of complaint

Complainant: _____
Signature : _____

Complaint attended.

Date
Time From To

Certified that the complaint has been satisfactorily attended.

Contractor Complainant

Date

To be submitted along with running bills.

MAINTENANCE COMPLAINT REGISTER

S.No.	Date & Time	Complainant	Nature of complaint	Complaint attended Date & Time	Remarks	Signature of Contractor

FORM OF PERFORMANCE SECURITY BANK GUARANTEE BOND

In consideration of the HSCC (India) Ltd. having agreed under the terms and conditions of the Agreement No. ____ dated _____ made between HSCC (India) Ltd. and Second Party (herein called the said Construction Agency _____ for the work _____ hereinafter called the said agreement) to production of irrevocable bank guarantee for Rs. _____ (Rupees _____ only) as a security/Guarantee from the Construction Agency for compliance of his obligations in accordance with the terms and conditions in the said agreement,

We _____ (hereinafter referred as to "the Bank" hereby)
(indicate the name of the bank)

Undertake to pay to the HSCC (India) Ltd. an amount not exceeding Rs. _____ (Rupees _____ only) on demand by the HSCC (India) Ltd.

2. We _____ do hereby undertake to pay the amounts due and payable under this Guarantee without any demure, merely on a demand from the HSCC (India) Ltd. stating that the amount claimed is required to meet the recoveries due or likely to be due from the Second Party. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs..... (Rupees Only).

3. We, the said bank further undertake to pay to the HSCC (India) Ltd. any money that is demanded notwithstanding any dispute or disputes raised by the Second Party in any suit or proceeding pending before any court or Tribunal relating thereto, a liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of a liability for payment thereunder and the Second Party shall have no claim against us making such payment.

4. We _____ further agree that the guarantee herein contained shall remain in full force and effect during the period that would taken for the performance of the said agreement and that it shall continue to enforceable till all the dues of the HSCC (India) Ltd. under or by virtue of the said agreement have been

fully paid and its claims satisfied or discharged or Engineer-in-Charge on behalf of the HSCC (India) Ltd. certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Second Party and accordingly discharges this guarantee.

5. We _____ (indicate the name of Bank) further agree with the HSCC (India) Ltd. that. The HSCC (India) Ltd. shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the HSCC (India) Ltd. against the said Second Party and to bear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor or for any forbearance, act of omission on the part of the HSCC (India) Ltd. or any indulgence by the HSCC (India) Ltd. to the said contractors or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor.

7. We..... lastly undertake not to revoke this guarantee except with the previous consent of the HSCC (India) Ltd. in writing.

8. This guarantee shall be valid upto _____. Unless extended on demand by HSCC (India) Ltd.. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to RS. _____ (Rupees _____ only) and unless a claim in writing is lodged with us within six months of the date of expiry of the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated the Day of
For (indicate the name of bank)

CONTRACT AGREEMENT FORMAT

This CONTRACT (hereinafter called the “Contract”) is made the day of the month of, 2013 between All India Institute of Medical Sciences (AIIMS), Raipur on the one hand (hereinafter called the Employer) and on the other hand
.....(hereinafter called the Contractor)

Whereas

- a. the Client has accepted the Bid of the Contractor to provide certain services for Maintenance, Repair and Operation of AIIMS Residential Complex at Kabir Nagar, Raipur
- b. the Contractor, having represented to the client that they have the required professional skills, personnel and technical resources, have agreed to provide the services on the terms and conditions set forth in this Contract Agreement.

Now therefore the parties hereto hereby agree as follows:

1.0 the following documents attached hereto shall be deemed to form an integral part of this contract:

1.	Notice Inviting Bid & Instructions to Bidders	
2.	General Conditions of Contract	
3.	Particular conditions of Contract alongwith Enclosure I, II, III & IV and specifications	
4.	BOQ	

2.0 The mutual rights and obligations of the Employer and the Contractor shall be as set forth in the contract; in particular:

- a. The contractor shall carry out the services in accordance with the provisions of the contract; and
- b. The Client shall make payments to the contractor in accordance with the provisions of the contract.

In witness whereof, the parties hereto have caused this contract to be signed in their respective names as of the day and year first above written

FOR AND ON BEHALF OF
[CLIENT]

All India Institute of Medical Sciences,
GE Road,
Tati Bandh,
Raipur – CG

FOR AND ON BEHALF OF
[CONTRACTOR]

.....

PARTICULAR CONDITIONS OF CONTRACT

The Contractor will be responsible for Maintenance and Housekeeping Services of following:

- Internal Electrical works.
- Water supply, Sanitary and Plumbing work.
- Storm Water Drainage & Sewage Treatment Plant work.
- Building Maintenance Services of civil works.
- Sweeping & Cleaning Services of common areas.
- Landscaping and horticulture.
- Operation and Maintenance of DG Sets, pumps, lifts, Sewage Treatment Plant etc.

The following types of Works are included in the contract.

1. Civil works :-

A. Day to Day Maintenance – It shall consist of the following operations:

- a. Receiving, recording, distributing & updating/downloading the day to day complaints at Service Centre.
- b. Attending the daily complaints with required labour & material etc.
- c. Monitoring of receipt, distribution, attending the complaints as required including keeping a record of the attended complaints
- d. Other misc. operations as referred in schedule of quantity for day to day maintenance.
- e. Cleaning of terrace tanks at six months interval.
- f. Cleaning of sewer lines / man holes at one month interval.
- g. Running and maintenance of Service Centre.
- h. Other works as per description of item at Part A of Bill of Quantities

B. A/R and M/O Works:- It shall consist of following annual repair works carried out annually for residential areas as per the Bill of Quantities:-

- a. White washing, distempering etc., plastic emulsion painting, synthetic enamel painting etc.
- b. Other misc. items as per bill of quantities.

C. Special Repair Works:- It shall consist of following repair of works.

- a. Change of damaged doors/windows etc.
- b. Replacement of damaged G.I./C.I. pipes etc.
- c. Other misc. items as per bill of quantities.

1. Scope of Services to be provided:-

The details of the residential complex to be maintained are as follows:

Housing Complex for AIIMS like Institution at Raipur (CG) under PMSSY.							
Residential Accommodations – 172 DU							
Sl.No.	Description of Block	Occupancy & Area Statement					
		Unit per Block	No. of Blocks	Total Units	Total Occupancy	Area per Block	Total Area
1	Director's Bungalow	1	1	1	1	301	301
2	TYPE – I	12	3	36	36	592	1776
3	TYPE – II	36	3	108	108	2298	4596
4	TYPE – III	18	1	18	18	1464	1464
5	TYPE – IV	21	1	21	21	2206	2206
6	TYPE – V	24	1	24	24	4199	4199
7	Guest House	1	1	1	-	650	650
TOTAL			11	173	172		15192

ADDITIONAL CONDITIONS (CIVIL WORKS)

1. For all items of civil; CPWD Specifications 2009 Vol - I to Vol - II with correction slips upto 30.09.2013 shall be followed. For the items which are not covered under CPWD specifications; the special conditions/B.I.S. specifications shall apply. In this regard the decision of Engineer-in-Charge shall be final.
2. Wherever any reference is made of any Indian Standards, it shall be taken as reference to the latest edition with all amendments/revision issued there upto the date of receipt of tender.
3. Unless otherwise specified, the agreement rates for all items of work of the schedule of quantities are for all heights, depths, leads and lifts involved in the execution of work.
4. The contractor shall make his own arrangements for obtaining electric connection for carrying out any maintenance activity.
5. Other agencies working at site will also simultaneously execute the work entrusted to them and the contractor shall offer necessary co-operation wherever required to other agencies.
6. On account of security consideration, there could be some restrictions on the working hours, movement of vehicles for transportation of materials. The contractor shall be bound of follow all such restrictions and adjust the programme for execution accordingly.
7. The work shall be carried out in a manner complying in all respects with the requirements of relevant byelaws of the local bodies, labour laws, minimum wages act, workmen compensation act and other statutory laws enacted by Central Govt as well as State Govt.
8. All malba/rubbish/silt/waste/garbage etc. generated due to any operation from houses and other open spaces whatsoever shall be disposed off on daily basis by the contractor to the specified common disposal point and nothing extra shall be paid on this account. After the collection of full truck load of the said malba, the same shall be disposed of by the contractor to the authorized municipal dhalao/dumping ground. In case of non-removal/disposal in the specified period, a sum of Rs.One Thousand per day shall be recovered from the contractor.
9. No residential accommodation shall be provided to any of the staff engaged by the contractor. The contractor shall also not be allowed to erect any temporary set up for residence of his staff in the campus.
10. The Supervisor(s) who are employed by the Contractor of the agreement shall be present at the site from 9:00 AM to 5:00 PM on all working days and shall carry mobile telephone(s) to enable the Engineer to have easy and quick communication. Nothing extra shall be paid to the contractor on this account and his quoted rates for various items under this contract will be inclusive of this obligation.
11. All materials, T & P consumable and contingent articles required for the work shall be arranged by the contractor. Materials used shall be in order of preferences.
 - (i) As per list of approved makes of materials attached.
 - (ii) Under the Nomenclature of the item.
 - (iii) ISI marked.
 - (iv) CPWD specifications.
 - (vi) Direction of the Engineer-in-Charge.

Replaced material used shall have same or richer specifications to the original materials and compatible to the work.

12. Staff employed by the contractor shall be well behaved, Polite & courteous. Any complaint against staff on behavior shall be taken very seriously and such staff shall be replaced by the contractor on demand from Engineer. The decision of Engineer shall be final and binding in this case.
13. The contractor shall make all safety arrangements required for the labour engaged by him at his own cost. All consequences due to negligence or due to lapse of security/safety or otherwise shall remain with the contractor. The Employer shall not be responsible for any mishap, injury, accident or death of the contractor's staff. No claim in this regard shall be entertained /accepted by the Employer/Engineer.
14. Contractor shall be fully responsible for any damages caused to any property or allotted property by him or his labour in carrying out the work and the same shall be rectified by the contractor at his own cost.
15. VAT/WCT/Income Tax/other taxes as applicable shall be recovered from the contractor's bill.
16. Chases, holes & drilling works etc. shall be done using only power operated tools.
17. For non-compliance or partial compliance of satisfactory execution of items, the Engineer reserves his rights to levy compensation in accordance with the scale of non-conformity and the reserves his rights to levy compensations in accordance with the scale of non-conformity and the period for which this non-conformity continues. However the total amount of this compensation for the whole contract shall not exceed 10% of the Contract value of this contract. This shall be without prejudice to other remedies available to Engineer under this contract to take action against the contractor.
18. In the case of discrepancy between the Bill of Quantities, the specifications and/or the Drawings, the following order of preferences shall be observed:-
 - (i) Description of Schedule of Quantities
 - (ii) Additional specifications and special conditions, if any.
 - (iii) Contract clauses of General conditions of contract.
 - (iv) CPWD specifications.
 - (v) Architectural drawings.
 - (vi) Indian standards specification/BIS.
 - (vii) Sound engineering practice or manufacturers' specifications.

Any references made to any Indian standards specifications in these shall imply to the latest version of that standard, including such revisions/amendments as issued by the Bureau of Indian standards up to last date of receipt of tenders. The contractor shall keep at his own cost all such publications of relevant Indian standards applicable to the work at site.

19. Vacant quarters will be locked by the contractor at his cost and quarters will not be allowed to be occupied or used by him/his staff/his workers. In case any quarters has been found to be occupied unauthorized, a compensation @ Rs 1000/- (Rupees One Thousand Only) per day per quarter shall be levied and the contractor will also be liable for action for loss caused due to theft or any other causes, and shall be made good by the contractor at this own cost.
20. The contractor shall have to carry out the work other than day to day maintenance according to programme given by the Engineer or his representative. The contractor shall not carry out any work in any building without permission of Engineer. The contractor shall adhere to this programme failing which he shall be wholly responsible. No claim for idle labour on any account

- shall be entertained. The contractor shall depute his representative daily to the site of work. His name and signature shall be attested by the contractor for record in the department.
- 21.** The quarters/flats and portions of quarters/flats where the work is to be executed on any day shall be got approved from the representative of Engineer at the site of work in writing. No work shall be carried out in any quarters/flats without the approval of the representative of the Engineer.
 - 22.** Any work carried out without the approval of the representative of the Engineer at the site of work shall be rejected and will not be measured and paid for.
 - 23.** The material such as paints, varnish, distempers, water proofing cement paint and primers etc. as required shall be of approved brand and manufacturers, and of required shade and conforming in all respects to the relevant I.S. specifications. The manufacturing date and batch No. inscribed or printed on packs/containers by manufacturers are only acceptable for all the above said materials. Fresh material shall be brought at site as far as possible. The material shall be used within its shelf-life as prescribed by the manufacturer. Any material which has out lived its life shall not be permitted to be used in the work and removed immediately from the site. The decision of the Engineer shall be final & binding.
 - 24.** The contractor shall get the shades of all types of paints, distemper, water proofing cement paint etc. approved from the Engineer before procurement of materials.
 - 25.** Nothing extra shall be paid to the contractor for excess consumption of material.
 - 26.** The contractors shall quote their rates inclusive of all taxes, cartage, royalties etc, complete.
 - 27.** The contractor shall prepare one sample of item which shall be got approved from the Engineer. Only on acceptance of sample work, contractor will be allowed to commence the work and sample is to be preserved till the whole work is completed. The quality of entire work should conform to the approved samples.
 - 28.** Contractor shall take daily instructions. A register will be maintained at the Enquiry Office for this purpose. The Engineer or his representative will note down the work in units/areas to be attended to and the dates on which the work in these units/areas is to be started. An authorized representative of the contractor will, therefore, have to visit the Enquiry Office daily and note down the instructions in the register.
 - 29.** The contractor and/or his authorized agent should see the site order book every day and get the compliance noted.
 - 30.** All the malba or rubbish obtained from dismantling or otherwise during the execution of the work shall be brought down through the staircase and shall not be thrown to the ground directly from first floor or second floor etc. This shall be carried and stacked properly to the specified common disposal point on the same day and site shall be left clear as per the instructions of the Engineer-in-Charge. A compensation of Rs.1000/- shall be levied from the contractor for each complaint/default/per day.
 - 31.** Any damage to the building structure, fitting or any other articles etc. done by the contractor or his workman during the execution of the work shall be made good by the contractor at his own cost.
 - 32.** The contractor shall clear the site properly before the completion of the work.
 - 33.** Old doors, windows, floors, furniture, Electrical and other fitting shall be cleaned from all splashes, dust, dirt and mortars etc. The rate for the white

- washing/colour washing/distempering/painting etc. include the cost of removal of splashes and paint marks.
- 34.** The maintenance work is to be carried out in AIIMS Housing Complex, Kabir Nagar, Raipur – CG which includes maintenance under all branches like Civil, Electrical & Horticulture.
 - 35.** The Complaint Service /Enquiry Center will operate in full from 9.00 AM to 5.00 PM on all working days except Sundays and Gazette Holidays. Additional arrangements shall be made for registration and attending emergent complaints related to Civil/Electrical/Horticulture/ Sweeping/Cleaning services on Sundays & Gazette holidays & also from 6AM to 9AM and 5 PM to 10 PM on all days and shall be well equipped with the following;
 - Telephone facility
 - Furniture.
 - Computerized system
 - 36.** Complaints shall be made in the format (Enclosure-I).
 - 37.** A computerized complaint register (format at Enclosure-II) shall be maintained in the Maintenance and Housekeeping Services Office of the contractor in which all complaints received shall be documented.
 - 38.** Minimum number of work men/staff to be deployed shall be as given at Format III.
 - 39.** The contractor shall take immediate action to attend to any complaint assigned to him through site order book/verbal instructions from Engineer or on telephones from occupants. In all cases he shall attend the complaint in the specified duration as mentioned below :-
 - a. No delay complaints – Complaints of emergent nature such as electricity not being available. Plumbing or sewerage systems not working etc. are to be attended to immediately or at least within 6 hours of receipt of the complaints.
 - b. Minor Complaints – Complaints relating to the trades of mason and carpenter are to be attended within 24 hours.
 - c. Major Complaints – Complaints other than no delay and minor complaints. Such complaints are to be attended within shortest reasonable time which shall not be more than 7 days in any case in consultation with the Engineer.
 - 40.** Necessary registers/complaint- attendance books duly machine numbered and authenticated by Engineer shall be maintained by the contractor in respect of complaints received and shall be got signed by the occupants/concerned officer, after attendance.
 - 41.** In case of failure to meet these deadlines a compensation of Rs. 500/- (Rs. Five Hundred only) per complaint per day will be levied from his bills/Security Deposit for each default to attend the complaints assigned to him. The decision of Engineer regarding correctness of complaint shall be final and binding.
 - 42.** The following facilities shall be made available to the agency at the Service Center (s):-
 - a. A Suitable Space for use as Complaint/Service Centre by the Contractor.
 - b. All furniture etc required for contractor's staff shall be arranged by the contractor at his own cost.
 - c. Electricity/Water connection
 - d. The Contractor shall restore back the premises and other articles provided by the Employer to the contractor at the time of closure of the contract in good condition.

43. The contractor shall engage computer literate staff that should be able to use computerized complaints receiving and monitoring system. The contractor will have to arrange and maintain computers along with peripherals and consumables at his own cost.
44. The contractor shall provide his mobile number or the mobile number of his representative to the Engineer for ease of communication with the controlling staff.
45. The labour deployed for attending complaints should carry necessary tool kit, container (Tasla), required for mixing any cement sand or other material and should carry with them water bottle and waste bag for collection of minor rubbish material if received during attending the complaints, so that the site of work shall remain neat and clean.
46. The contractor shall have registration with Employee's Provident Fund Commissioner and Employee's State Insurance Corporation for safeguarding interest of his workmen. He shall obtain all other necessary approvals from statutory bodies as per law in force.
47. The contractor will arrange & store all the materials at Enquiry office, required for attending day to day maintenance complaints for at least 3 months or as decided by Engineer, throughout agreement period.
48. For the purpose of categorization of staff as skilled and unskilled, the sweepers/beldars shall be taken as unskilled; the mason/plumber/sewer man/carpenter shall be taken as skilled.
49. The contractor will maintain attendance records of the staff which can be checked by the Engineer or his officers as & when required.

ADDITIONAL TERMS AND CONDITION (RUNNING OPERATION OF SEWAGE TREATMENT PLANT & TUBEWELL/WATER SUPPLY SYSTEM)

1. The contractor's staff shall be well conversant with the running of pump sets/water supply/sewage treatment plant systems. The staff shall be responsible to clean their equipments and environments.

2. Logbook for pump set shall be maintained in proper form and shall be kept up to date. It should be duly signed by the contractor's staff in order to keep proper monitoring. The instruction of the Engineer or his superior officer shall be recorded in the logbook.
3. To extend coordination with Raipur Municipal Corporation/ CSEB regarding supply of electricity/ water, so that the water supply is not adversely affected.
4. Any damage caused to the pump set, WTP/STP/ Bore well Pumps, L.T. Panels / control panel or its accessories due to carelessness of the contractor's staff or any shall have to be made good by the contractor at their own cost and nothing extra shall be paid on this account.
5. The operator must possess minimum qualifications. The contractor has to submit the proper experience certificate & the contractor shall be fully responsible for safety of their staff employed at site.
6. The cost of Sundry material like Soap, duster, dhoti, cotton, waste and log book, uniform and shoes & badges has to be borne by contractor.
7. Nothing extra towards T&P will be paid.
8. Generally the contractor has to depute the staff as given in Annexure M. But the duty hours can be changed as per discretion of the Engineer. The above staffs are minimum requirement, the contractor shall depute more staff as and when situation arises, for which no extra cost shall be made. In no case the contractor shall reduce this staff strength, otherwise recovery shall be affected. The duty timing can be changed as per direction of the Engineer.
9. In case of absence of any staff from duty without providing suitable replacement, the consequential cost of the labour shall be recovered from the contractor and the contractor will have no claim from the department. Engineer's decision in this regard shall be final and binding.
10. The operator employed by the contractor shall remain employee of the firm, for all purpose and have no claim for employment in the AIIMS/HSCC.

PARTICULAR CONDITIONS OF CONTRACT FOR OPERATION & MAINTENANCE WORKS

As the work will have to be carried out in building and area in use, the contractor shall ensure:-

- a) That the normal functioning of AIIMS Raipur activity is not effected as far as possible.
- b) That the work is carried out in an orderly manner without noise and obstruction to flow of traffic.
- c) That all rubbish etc. is disposed off at the earliest and the place is left clean and orderly at the end of a each day's work.
- d) The Contractor shall ensure that his Maintenance and Housekeeping Services staff is qualified and licensed for their part of work. He shall be responsible for their conduct. The staff should behave in a courteous manner. The contractor shall be held responsible for any loss or damage to AIIMS, Raipur property arising out of the work under the Contract.
- e) The contractor shall ensure safety of his workers and others at site of work and shall be responsible for any consequence arising out of execution of the Maintenance and Housekeeping Services work.
- f) When instructed to do so, the contractor shall ensure proper record keeping and storing of irreparable/dismantled material.
- g) Water and electricity shall be made available free of cost at near by source of work. The contractor has to make his own arrangement for use of the same including drawing temporarily lines etc. The responsibility for following relevant rules, regulations and laws in this regard shall be entirely that of the contractor.

ADDITIONAL PARTICULAR CONDITIONS OF CONTRACT FOR MAINTENANCE AND HOUSEKEEPING SERVICES

For the services to be operated and maintained by the Contractor for which lump-sum amounts have been quoted, the following shall apply:-

Horticulture:-

The garden, lawns, potted plant etc. shall be taken over after listing out the same. The same shall be maintained for the contract period. During this period, all inputs like manure, replacement of plant, watering, clearing weeds, trimming, housekeeping etc. including all material labour and tools, replacement plants etc shall be provided so that the garden is maintaining in a neat and healthy condition. The same shall be handed back to HSCC (India) Ltd. in such condition at the end of the contract period.

Fire Fighting and Alarm System:-

The systems, equipments etc. shall be taken over recording the details of the fire fighting and alarm system and their running conditions. During the maintenance period, the same shall be maintained by the Contractor providing all material, labour and T&P etc. required. The same shall be maintained to the satisfaction of the concerned statutory authorities and clearances obtained from them as per requirements. The systems shall be handed over in the same conditions as it was taken over, normal wear and tear accepted.

Operation and Maintenance of Sub-stations, Pumping systems and DG sets etc.:

All the above plant and equipments etc. shall be taken over after recording the complete details of make, date of manufacture etc. including their running conditions.

During the contract period, the same shall be operated and maintained by the Contractor including supply of all spares, materials, labour, T&P etc. and including consumables like Engine oil, transformer oil etc. complete. The maintenance and operation shall meet all the requirements of the concerned statutory authorities. At the end of the Contract Period, the equipment/system shall be handed over back to HSCC (India) Ltd., in the condition in which they were taken over, normal wear and tear accepted.

NOTE:

All breakdowns/faults shall be attended to immediately and rectified promptly.

Only genuine/original spare parts shall be used while carrying out the maintenance work.

Any major repair involving overhaul of engine, rewinding of motors, replacement of major components like compressor etc. is excluded from the scope of work and shall be paid for on actuals. However, if the repairs/replacement arises out of negligence

of the Contractor or his staff, the same shall be carried out by the Contractor at his own cost. Prior approval of the Engineer is to be obtained for any such major repair/replacement.

The Contractor shall depute qualified and experienced staff for running and maintenance of the Systems/Equipments.

The Contractor shall follow all instructions conveyed to him by the concerned HSCC (India) Ltd. officials regarding maintenance of the above.

B) ADDITIONAL SPECIFIC CONDITION RELATING TO ELECTRICAL INSTALLATIONS

1.0 General

1.1 The following Additional Specific Conditions shall be read in conjunction with General Conditions of Contract and Specific Conditions of Contract. If there are any provisions in these Additional Specific Conditions which are at variance with the provisions in the above mentioned documents, the provisions in these Additional Specific Conditions shall take precedence.

2.0 Regulations and Standards

2.1 The installations shall conform in all respects to Indian Standard Code of Practice for Electrical Wiring Installation IS: 732 - 1989 amended up to date and as per CPWD General Specification for Electrical Works (Part I, II, IV & VII). It shall also be in conformity with the current Indian Electricity Rules and regulations in so far as these are applicable to the installations. Wherever these Additional Specific Conditions calls for a higher standard of material and/or workmanship than those required by any of the above regulations, then this Additional Specific Conditions shall take precedence over the said Regulation and Standards. External works & fire detection & alarm system works to be done as per CPWD specification & relevant IS codes.

3.0 Rates

3.1 The rates in the bid shall be for complete items of work inclusive of all taxes, statutory charges and all other charges for items contingent to the work, such as, packing, forwarding, insurance, freight and delivery at Site for the materials to be supplied by the Contractor, watch and ward of all materials for the Internal & external, Electrical Installation testing & commissioning work including water & power for successful installation, testing & commissioning work at Site etc.

4.0 Completeness of rate quoted

All sundry fittings, assemblies, accessories, hardware items, Tools & tackles to carry out maintenance to each electrician, foundation bolts, washers, nut & bolts, PVC insulation tapes of different colours, contact cleaning compound (CTC) toggle switches, grease, insulation Varnish, ferrules, small lugs and other small items for electrical connections as required, and all other sundry items which are useful and necessary for proper assembly and efficient working of the various components of the work shall be deemed to have been included in the Bid rates and prices, whether such items are specifically mentioned in the Bid documents or not.

5.0 Works to be done by the Contractor

5.1 Unless and otherwise mentioned in the Bid documents, the following works shall be done by the Contractor, and therefore their cost shall be deemed to be included in their rates and prices:

- i. Foundations for equipments and components where required, including foundation bolts
- ii. Cutting and making good all damages caused during installation and restoring the same to their original finish
- iii. Sealing of all floor openings provided by him for pipes and cables, from fire safety point of view, after laying of the same
- iv. Painting at site of all exposed metal surfaces of the installation other than pre-painted items like fittings, fans, switchgear/ distribution gear items, cubicle switch board etc. and erection, shall however be rectified to the satisfaction of the Engineer
- v. Testing and commissioning of complete installation
- vi Washers, Nuts & bolts
- vii PVC insulation tapes of different colours.
- viii CTC/ contact cleaning agent
- ix Insulation varnish (Dr Back) or approved equivalent.
- ix Small lugs, toggle switches, gaskets and other small items used in the plant.
- x Sets of tools and tackles needed for the maintenance of electrical works; like tong taster , multimeter, megger, phase tester, screw drivers, wrench sets, earthing megger, pliers, specific gravity meter, on load voltage tester of batteries, phase sequence tester, thermometer, crimple tools, ladders etc.,; to each electrician.
- xi Cotton clothes for cleaning of equipments like DG sets etc.
- xii Handle/ knobs of different MCCB/ SDFU etc
- xiii Clamps, desh fastener, saddles, down rods, ceiling rose, supporting angle iron , channels, nails, screws and other related items needed for the completion of work.
- xiv Distil water needed for the refill in the batteries
- xv Maintenance in which no item is required like tightening of loose wire etc will not be paid i.e. labour component is inclusive in the maintenance part.
- xvi Renewal of lift license if required.
- xvii Dewatering of lift pit if required.
- xviii The contractor shall provide all necessary items for the proper execution of the works in accordance with the intent and meaning of the drawings and specifications taken together whether the same may or may not be particularly shown or described therein. The contractor shall supply, fix and maintain at his own cost, during the execution of any works. The contractor shall also fully reinstate and make good all matters and things disturbed during the execution of the works to the satisfaction of the engineer-in-charge without any extra cost.

6.0 Tools for Handling and Erection

- 6.1 All tools and tackles required for handling of equipments and materials at Site of work as well as for their assembly and erection and also necessary test instruments shall be the responsibility of the Contractor.
- 7.0 Terminology & Scope**
- 7.1 Terminology & scope for this project shall be as per CPWD Specification for Electrical Works (Part I - Internal) - 2005 & External Works - Part II - **Latest and relevant IS codes amended up to date.**
- 7.2 Measurement
- Measurement shall be as per CPWD specifications Part – I (Internal) & Part - II (External) unless otherwise specified in the technical specifications / BOQ.
- 8.0 Drawings:**
Deleted
- 9.0 Conduit/ Trunking Layout**
Deleted
- 10.0 Shop Drawings**
Deleted
- 11.0 Manufacturer's Instruction**
- 11.1 Where manufacturers' have furnished specific instructions, relating to the materials used in this job, covering points not specifically mentioned in these documents, these instructions shall be followed in all cases.
- 12.0 Materials & Equipment**
- 12.1 All materials and equipment shall be ISI marked and shall be of the approved make and design. Unless otherwise called for, only the best quality of materials and equipment shall be used. The Contractor shall be responsible for the safe custody of all materials till these are taken over by client and shall insure as against theft, damage by fire, earth quake etc. A list of items of materials and equipment, together with a sample of each shall be submitted to the Site office.
- 13.0 Scale**
Deleted
- 14.0 Brochures and Data**
- 14.1 The Contractor shall submit four copies of all brochures / manufacturer's description data and similar literature.

15.0 Approval of Shop Drawings

Deleted

16.0 Samples & Catalogues

For HSCC approval, Contractor shall submit the samples & catalogue of the material, which are used at Site as per the approved makes.

17.0 Approval of Materials

17.1 All materials used on the Works shall be new and of the best quality available, conforming to the relevant specifications and as per good Engineering practice. Prior approval shall be obtained in writing from the Engineer for all materials proposed and when necessary, approved sample duly identified and labelled shall be deposited with the Engineer and shall be kept at Site. List of approved make indicates make/manufacturer generally acceptable. Contractor shall submit the detail drawings for HSCC approval.

18.0 Inspection, Testing and Inspection Certificate

18.1 HSCC and authorised representative of HSCC shall have at all Reasonable times access to the Contractor's premises or Works and shall have the power at all reasonable time to inspect and examine the materials and workmanship during its manufacture or erection or if the part of works is being manufactured or assembled at other premises or works.

18.2 The Contractor shall arrange all the materials and labour required for inspection of equipment or for any testing to be carried out at his/manufacturer's works or at Site. Notice for such inspection/ presence for testing shall be given to the Engineer by the Contractor at least fifteen (15) days in advance together with the routine test certificates of the equipments/ materials given by the manufacturer.

18.3 Notwithstanding approval of tests or equipment by the Engineer, the Contractor shall be required to perform site tests and prove the correctness of ratings and performance of equipment/ machinery and materials supplied and installed by the Contractor as per the Contract specifications and conditions. Engineer shall have full power to order the material or work to be tested by an independent agency at the electrical Contractor's expense in order to prove soundness & adequacy.

19.0 Schedule & Manner of Operation

19.1 Time being the essence of this Contract, Contractor shall be expected to furnish all labour & material in sufficient quantities at appropriate time, expedite and schedule the work to meet the Engineer's requirement and so manage the operations that the work shall be completed in time as

stated else where. In case of shut down of power supply, Contractor shall coordinate with Engineer and shall carry out essential works during the shut down period allowed by the Engineer. In case Engineer allows for such period during night or early morning hours, Contractor shall make all provisions to avail such account. Contractor shall not be entitled for any extra claims on such account. Contractor shall programme his work in such a way that items of work requiring presence of Engineer are carried out between 9 A.M. & 5 P.M. on working days.

20.0 Deleted

21.0 Conformity with Statutory Acts, Rules and Standards

21.1 The installation shall be in conformity with the Bye-laws, Regulations and Standards of the local authorities applicable to the installations. But if the specifications and drawings call for a higher standard of material and/or workmanship than those required by any of the above Regulations and Standards, then the specifications and drawings shall take precedence over the said regulations and standards.

21.2 However, if the drawings or specifications required something which violates the Bye-laws and Regulations, then the Bye-laws and Regulations shall govern the requirement of this installation.

21.3 Indian Electricity Act and Rules: All electrical works in connection with installations of the system shall be carried out in accordance with the provision of the Indian Electricity Act, 1910 and the Indian Electricity Rules 1956, both amended upto date.

21.4 CPWD Specification: The Electrical installation work shall conform to CPWD General Specifications for Electrical Works Part I (Internal) 2005 and Part II (External) 1995, both amended upto date.

21.5 Indian Standard: The system / components shall conform to relevant Indian Standards wherever they exist and to the latest National Building Code-2005.

21.6 Nothing in these specifications shall be construed to relieve the Contractor of his responsibility for the design, manufacture and installation of the equipment with all its accessories in accordance with applicable Statutory Regulations and safety codes in force.

22.0 Completion Drawings:

The contractor shall maintain the record of changes made during the contract.

23.0 Confirmation of Quantities

23.1 All quantities indicated in BOQ are tentative which may vary as per site conditions. Contractor has to verify quantities before procuring the

material. Contractor has to maintain certain minimum quantities of the item in the store.

24.0 Terms of Payment (Only for items of major electrical equipments)

For purposes of estimating the contract value of work executed for certificate of payment under clause 32(d) of section II the following norms shall be followed.

- a. 70% of BOQ/Market/DSR(2013) rate on receipt of equipment against receipt of complete material at site & test certificates in accordance with clause 33(l) of SCC.
- c. 30% after successful completion of all works including all testing, commissioning & taking over.

25.0 Training of Personnel

The Contractor shall arrange on the job training to the personnel through the Annual Maintenance contractor for the following:

- a) Lift
- b) All other Equipments like DG sets, HT, LT panels etc.
- c) Adjustment of setting for controls and protective devices
- d) Preventive maintenance
- e) Operation of all electrical panels including their interconnectivity and interlocking scheme.
- f) Fire detection system & PA, CCTV, EPABX, UPS.

26.0 Completion Certificate

26.1 On completion of the installation if carried out at site during the contract, a certificate shall be furnished to the Engineer, by the Contractor, countersigned by the licensed supervisor under whose direct supervision the installation was carried out. This certificate shall be in the prescribed form as required by the local authority. On the basis of this certificate, the Contractor shall arrange for inspection of installation by the concerned local authorities.

26.2 The Contractor shall be responsible at his own cost for getting the installation duly approved by the authorities concerned.

27.0 Check List

27.1 The Contractor shall provide to the Engineer 4(four) copies of a comprehensive maintenance checklist and shall paste a copy of it in the Substations & Plant Room. The checklist shall be a list of each piece of equipment in this Contract, and shall provide a space for each of the next fifty-two weeks to record the maintenance provided to and status of various equipment. Each month, at the time of inspection, the Contractor shall certify on this check list that he has examined each piece of equipment and that, in his opinion, it is operating as intended by the manufacturer, and that all necessary tests have been performed.

28.0 Repairs

All equipment that requires repairing shall be immediately serviced and repaired during the maintenance period. All parts and labours shall be furnished at no extra cost to the Engineer.

29.0 Safe Custody and Storage

Safe custody of all machinery and equipment dismantled, shifted & supplied by the Contractor shall be his own responsibility till the final taking over by the Employer. The Contractor should, therefore, employ sufficient staff for watch and ward at his own expenses. The Employer may, however, allow the Contractor to use the building space for temporary storage of his equipment, if such space is ready and available.

TECHNICAL SPECIFICATION: ELECTRICAL WORKS

1. Scope of work: -Electrical

The agency will be responsible for operation/ maintenance of following electrical items/ works:

- Maintenance of Internal Electrification works including all light fixtures, switches, Power Points (5A, 15A Sockets & 20A Industrial Sockets), MCB Distribution Boards, MCBs, Ceiling Fans, Wall Bracket Fans, Exhaust Fans, Wiring, Cabling etc. complete
- Maintenance of External Lighting including External Poles, Light Fixtures, Control Box, Cabling, feeders pillars, bollard light fixtures, gate light (post top lanterns) etc. complete
- Operation and maintenance of 200 KVA Diesel Generator Sets- 2 numbers with AMF Panel. Engine Make : Kirloskar
- Operations and maintenance of 8 Passenger Lifts having manual doors– 4 Nos (8 Stops and 8 landing) and 6 nos (6 stop and 6 landings). Make: Johnsons
- Operation and maintenance of Transformer (33/0.433kV, 1.0 MVA – 2 nos), Make: Kirloskar.
- Operation and maintenance of HT Panel three panel of 1250 A 33 KV VCB of Crompton Greaves.
- Operation and maintenance of LT Panel having 2 no ACB incomer of 1250 A, two number motorized MCCB of 400 Amp, one bus coupler of 1250 Amp, and one number 800 amp and one number motorized MCCB of 400 Amp. The ACBs are EDO, microprocessor based O/L, S/C, E/F & instantaneous trip and different out goings in the form of MCCB as installed at site. Components of panel are of L&T make.
- Operation and maintenance of Capacitor Panel: 220 KVAR with APFC relay, capacitors, timers, MCCBs etc complete as installed at site
- Operation of other MV panels as installed at site at different locations.
- Maintenance of Manual Fire Alarm System installed in different buildings including FDA panel, manual call points.
- Material required for the minor maintenance of all the items will be arranged by the Contractor. Nothing will be paid for such minor material. The details of works to be done by the contractor have been mentioned in additional specific conditions related to electrical works.
- Material required for the major repairs will be paid as per the rate quoted by the contractor against different items in “Special Repairs” head.
- Tools and tackles to carry out the maintenance will be provided by the contractor.
- Printed log books to be provided by the contractor.
- The contractor should keep all the equipments in good working condition.
- If something gets damaged i.e. civil work etc during the maintenance work, Contractor has to rectify the same at his own cost.
- **Diesel for the running of DG sets will be made available by the AIIMS free of cost.**

- **Items required for the maintenance inside the flats will be arranged by the residents of the flats. However items requires for the common area will be arranged by the Contractor and the rates will be payable as per the rates quoted by the contractor under the head “Special Repairs”.**

Scope of the work as mentioned below is the minimum expected from the contractor in order to keep the equipments in good working condition:

1. Fire Detection and Alarm System. (Manual type)

1.1. Work to be done on daily basis:

1. Checking of battery
2. General check-up of the entire system
3. Checking of current & voltage of the panel
4. General checking of all Manual Call points.
5. Replacement of defective parts in the fire panels.

1.2 Work to done on half yearly basis:

1. Checking of functioning of entire FDA system.
2. Checking of MCP against proper functioning.
3. Replacement of defective parts in the panel

1.3 Work to be done on yearly basis

- a. Replacement of battery if required.
- b. All the checks as mentioned in half yearly basis.
- c. Any other checking required as per manufacturer’s recommendations

2.0 D.G SETS.

2.1 Work to be done on daily basis:

1. Specific gravity, water level and voltage of batteries.
2. Cleaning of battery terminal, if required
3. Running of DG sets at least for 5 minutes every day in winter season
4. Checking of oil level in day tank
5. Physical inspection of DG set & AMF panel
6. Lub oil level in the DG set.
7. General cleaning of DG set if required.
8. General inspection of cooling towers, pumps etc.
9. Temperature of inlet & out let water in CT.
10. Ph of CT water.

2.2 A log Book is to be maintained on regular basis by the contractor duly signed by Engineer Incharge. The log book should contain minimum following data entry or as specifies by the manufacturer.

1. Specific Gravity of battery
2. Voltage of battery
3. Electrical parameter of the DG set like Current, voltage, frequency, p.f, KW, KWh, KVA etc
4. Diesel level in day tank
5. lub oil level.
6. Running hours of the DG set
7. Water temperature.
8. Room temperature
9. Noise level
10. Lub oil pressure
11. Consumption of diesel

2.3 Work to be done on monthly basis:

1. 'B'/ 'C' checks as per manufacturers instructions.
2. Cleaning of strainers in the fuel line.
3. Watering of earth pits.

2.4 Work to be done on half yearly basis:

1. Safety checks of the DG sets
2. Operation of all the relays
3. Checking of electrical panels
3. Checking & cleaning of contacts of ACB, relays etc.
4. Checking of safety interlocks
5. Checking of functionality of relay and calibration if required.
6. Checking of insulation resistance
7. Checking of earth resistance.
8. Cleaning of cooling tower
9. Tighten the blades of cooling tower.
10. Any other checking required as per manufacturer's recommendations

2.5 Work to be done on yearly basis:

- 1 Repeat half yearly work
- 2 Change the battery, if required.
- 3 Any other checking required as per manufacturer's recommendations

3.0 ELECTRICAL INSTALLATION OF SUBSTATION:

3.1 Work to be done on daily basis:

General inspection of HT panel, transformers and related equipments including the following:

1. Level of oil in conservator of the transformer
2. Colour of silica gel in the breather of the transformer.

3.2 Work to be done on yearly basis

1. The dielectric strength of the transformer oil to be checked once in a year.
2. Function/ tripping through the relays to be checked once in a year.

3.3 A log Book is to be maintained on regular basis for **HT sub-station** duly signed by the Engineer. The log book should contain minimum following data entry:

- 1 HT voltage
- 2 Current
- 3 Frequency
- 4 Winding temperature of transformer
- 5 Level of the oil in the conservator of the transformer
- 6 Colour of the silica gel in the breather of the transformer
7. Remarks

3.4 A separate log Book is to be maintained on regular basis for **LT panel** duly signed by contractor and Engineer of the client. The log book should contain minimum following data entry to be filled up **on hourly basis**:

1. Total current on incomer
2. Voltage on incomer
3. Current of different out going feeders in R, Y & B phase
4. Power Factor

3.4 Work to be done on half yearly basis:

1. Safety checks of the Panels
2. Operation of all the relays
3. Checking of electrical panels
4. Checking & cleaning of contacts of ACB, relays etc.
5. Checking of safety interlocks
6. Checking of functionality of relay and calibration if required.
7. Checking of insulation resistance
8. Checking of earth resistance.
9. Any other checking required as per manufacturer's recommendations
10. Watering of earth pits

3.5 Work to be done on yearly basis:

1. Repeat half yearly work.
2. Through cleaning of panels after arranging the shut down of the panels.
11. Any other checking required as per manufacturer's recommendations

4.00 LIST OF APPROVED MANUFACTURERS

S.No.	ITEM	MAKE
1.	Selector Switches:	L&T/ Salzer/KAYCEE/ Siemens/BCH
2.	Push button, Indicating Lamps LED:	L&T(Esbee)/Siemens/Schinder/BCH/Veshno/ Teknik / RAAS
3.	Battery:	Panasonic/Hitachi/Mistubishi/Cummins/Exide
4.	ACB spare parts	L &T (as installed at site)
5.	Moulded case circuit Breaker	L &T (as installed at site)
6.	Power/auxiliary Contactors, timers, Relay, starters	ABB/ Schneider/ L&T/ Siemens
7.	MCB distribution Boards	L &T/Hager/Legrand/ Siemens/ ABB/ Schenieder (MG)/Havells
8.	RCCB	L & T /Hager/ Legrand/ Siemens / Schenider (Merlin –Gerin)
9.	Cable Joints (Heat Shrinkable) HT cable termination	Raychem/3M/Cabseal
10.	Light fitting	Philips/ Wipro/ Bajaj/ GE/ Crompton Greaves/
11.	Fancy lights	Kesalec Schreder/Anchor(Panasonic)/ Twinkle/ Ankur/ Decon.
12.	Lamps	Philips/ Osram/ GE/Anchor (Panasonic)/
13.	GI / MS conduit ISI marked	BEC/ AKG/ Steel Kraft
14.	PVC conduit	BEC/ AKG
15.	Steel conduit accessories (ISI as approved sample)	BEC/ AKG or approved equivalent.
16.	Modular Metal box for switch /socket	Havells/ MK/MDS/Anchor Roma/Northwest

17.	Copper conductor FRLS PVC insulated wires ISI marked	National/ Skyline/ Finolex/ Havells/ L&T/KEI / RR cable/Rallison/Skytone/Polycab
18.	Modular Switches & sockets Outlets	Havell's (Crabtree- Athena)/ MK-raparound plus /Hagger/ Legrand (Myrius)/ Anchor-Roma(Tersa,woods,viola)/ Northwest
19.	Metal clad Socket outlets With boxes	L & T Hager/ Siemens/ Merlin Gerin/ ABB MDS / BCH /Havells
20.	Lighting protection	Erico/Galaxy electrode /Earth plus or equivalent
21.	Electronic Ballast	Philips/ Wipro/Osram/Bajaj/Crompton
22.	Ceiling fans	Crompton Greaves/ Bajaj/ Orient/ Alastom/ Usha
23.	Portable fire extinguisher	Minimax/Agnidevices/Superex/Ceasefire/Eversafe
24.	Telephone cables /communication cables	AT & T/ Fusion /Polymers/Finolex/Delton Skyline/Skytone

ANNEXURE-C”

SPECIFICATIONS FOR OPERATION OF WHOLE FIREFIGHTING SYSTEM/PLUMBING SYSTEM WITH THEIR PUMPS & ALLIED ACCESSORIES Etc. INSTALLED IN RESIDENTIAL BLOCKS, AIIMS, RAIPUR.

1. The bidders are required to visit the site to see the actual installations for themselves to assess the quantum of work involved before submitting the tender. Once the tender is submitted, it will be presumed that the bidder has seen and understood the complete work involved for each of the system.
2. **Applicable Law:**
 - 2.1 The contract shall be interpreted in accordance with the Laws of the Union of India. Contractor shall be solely responsible for compliance of all labour laws, payment of fair wages/ salaries and allowances to his personnel that might become applicable under any new act, law or order of Government of State / Centre. HSCC/Client shall have no liability whatsoever in any manner. The Contractor has to show the proof of payment of fair wages to his workers as and when asked for the same by HSCC/ Client.
 - 2.2 Minimum wages act to be complied with - The contractor shall comply with all the provisions of the Ministry Wages Act, 1948, and Contract Labour (Regulation and Abolition) Act, 1970, amended from time and rules framed hereunder and other labour laws affecting contract labour that may be brought into force from time to time.
- 3.0 **LIST OF MAJOR FIRE FIGHTING AND PLUMBING SYSTEM TO BE OPERATED**

Sl.No.	Major Items	Qty.	Unit
1.	Water closet(IWC & EWC),vitreous china wash basin, counter wash basin, beveled edge mirror of superior glass, towel rail, C.P. brass liquid soap container, toilet paper holder, CP brass twin coat hook, stainless steel grab bar, urinal, Infra red controlled electrically operated automatic flushing cistern urinals and no touch hand drier, flushing cistern, Lab sinks etc.	1	Set
2.	Soil, Waste, Rain water and vent pipes- Centrifugally cast (spun) iron S&S pipes and fittings, uPVC pipes for rain water piping	1	Set
3.	Water Supply- CPVC/GI and PE-AL-PE pipes complete with fittings and accessories	1	Set

4.	Sewerage and Drainage- i) Gully trap ii) Brick masonry manhole iii) Non-pressure NP2 pipe/SW pipe	1	Set
5.	External water supply, water treatment i) DI/G.I. pipes complete with G.I. fittings(25 to 100mm dia) ii) Multi-level indicator cum controller for automatic operations of various pumps-(with appropriate size) a) Vertical Online/ Horizontal Centrifugal pumps 1. Treated water and Raw Water transfer pump- 900LPM& 60 M Head- 4 nos. b) Submersible drainage pump (2 nos.)-150LPM & 10 M Head c) Tubewell (5 nos.)	1	Set
6.	Rain water harvesting (8 nos.)	1	Set
7.	Fire fighting system with i) Wet riser ii) Yard hydrant(10 nos. approx.) iii) Terrace tank iv) UGT(1 no.) v) Landing valve (70 nos. appx.) vi) Fire extinguisher -200 nos. approx. a) Terrace pump of 900LPM and 35M head (9 no.) vii) fire alarm system viii) Glowing exit sign board single ix) Fire alarm and detector system	1	Set

The contractor shall ensure proper maintenance of existing plumbing and fire fighting system, periodical cleaning of water tank, change of washer, rain water harvesting structure, manhole, basement sump drain, fire fighting system etc and periodical painting of all equipments as per requirement or as directed by Engineer –in-charge.

SCOPE OF WORK FOR FIRE FIGHTING AND PLUMBING WORK

The Scope of work as mentioned below are the minimum expected from the firm / agency / contractor including necessary assistance during break down maintenance. Any other work required for operation in proper way as per the operation and maintenance manuals of respective equipments and as per good engineering practices will be required to be done under this scope of work while ensuring the safety of the equipment and personal using it. Successful bidder will make Performa for recording the following minimum work schedule / parameters and show to HSCC/ Client to ensure proper accomplishment of these tasks. For plumbing work internal water supply and sewerage will be maintained by appointing his specialized staff. The scope cover all work related to operation and

functioning of all PHE & fire fighting system and assistance Coordination with maintenance agency for proper functioning of systems .

A. WORK TO BE DONE ON EVERY DAY BASIS:

1. The readings of the suction and discharges pressure, oil pressure, oil & gas level, Voltmeters & Ammeters etc shall be checked and recorded in the LOG-BOOK (provided by firm/agency/contractor) on hourly basis. Necessary action is to be taken if the readings are not normal.
2. To check all the electrical motors and their bearings for abnormal noise / heating and to take necessary action if found abnormal.
3. To check the water level in the water tanks and check functioning of float valve.
4. To drain out water and clean the Basement/Pump Room etc as and when required / scheduled.
5. The functioning of each toilet shall also be checked for any corrective action and these are to be recorded in log-book.
6. To keep the pump rooms equipment neat and clean including their room floor, wall ceiling etc. in an orderly manner.
7. Any other work required by the equipment manufacturer/supplier/client for proper functioning.
8. Operation of pump & Tube well

B. WORK TO BE DONE ON WEEKLY BASIS:

1. To check the battery of hand drier, sensor, hand drier, loose screws etc.
2. To clean all the strainers on plumbing fixtures/fittings.
3. To check the lugs/ thimbles/ terminal points of the all electrical motor, switches, starters single phase preventers and the indication lights .etc
4. To check the alignment / looseness of all the belts driven equipment etc. if required.
5. Yard hydrant, fire hose cabinet etc. are to be cleaned regularly as per services maintenance schedule and pump shall be operated at least once in a week.
6. Listing of broken and misplaced plumbing and fire fighting item if any. Check the functioning of all plumbing and fire fighting fixtures and fitting/system and record the same.

C. WORK TO BE DONE ON MONTHLY BASIS:

1. To check the gland / seal, coupling of Pumps and engine.
2. To check the solenoid valve, safety controls Mechanical, Electrical/ Electronics and the inter-locking of the various equipments and fire fighting systems.
3. To manually inspect the leakage inside the building and in the soil/waste/vent pipes.

D. WORK TO BE DONE AFTER EVERY THREE MONTH:

1. To check and lubricate (if required) the bearing of the motors and keep the proper record.
2. To check the foundation bolts of the Pumps and motors and to take the necessary action if required.
3. To check and reset the relays and controls, and to maintain the proper record. Carry out servicing of the main switches/ACB,s as required. To tighten all screws, nuts, bolts.
4. Check the quantity of flow rate of various equipments such as R.O., water cooler etc., testing of raw and treated water from approved laboratory as per drawing/technical specification of system and do adjustments in the system to meet the requirement.
5. Check/clean the probe of level controller. Replace the battery of all sensors fitting if required.

E. WORK TO BE DONE HALF YEARLY:

1. Clean water strainer from plumbing and fire fighting system.
2. Check the overload of functioning of all pumps by measuring the amperage, check anti-recycle timer and operation of the electrical interlock.
3. To tighten the clamps/nut bolt of the system.

F. WORK TO BE DONE YEARLY:

1. Check the water quality from RO etc. for its requisite quality.
2. Check the condition of all plumbing and firefighting equipment for its operation life and functioning.
3. Clean all wirings for loose contacts.
4. Clean baskets of pot strainers and “Y” strainers for pumps.
5. Drain all water from pipe lines of fire fighting system and fill fresh water. Do not keep water lines without water.
9. Chemical cleaning of all tanks (water storage), twice in a year.
10. Painting of all exposed pipe fitting, fixture for weather protection.

G. OTHER WORK:

1. Any other requirement to keep the whole plumbing and fire fighting systems in proper, healthy running condition as per operation and maintenance manual of various equipments.

H. SPECIAL REQUIREMENTS:

The water supply shall be operational even during maintenance period. Leakages/seepage if any shall be attended within two hour of report. Flooding and back flow and blockage in sewers, waste water line, and storm water drain shall be attended within one hour.

It is recommended these performed by a qualified technician who is the familiar with the methods.

The fire fighting system shall be remained operational for 24 hour on automatic operation mode. For maintenance only part shut down will be allowed for very short time for which maintenance agency has to obtain the written permission for changing part system from auto mode to manual mode, the permission will be only for limited time to attend the same.

- I. LOG-BOOK for recording of parameters related to the functioning of plumbing and fire fighting system, water quality test shall be provided and maintained by the firm/ agency /contractor showing the complete working and maintenance done and it should be made available to the engineer-in-charge of HSCC / Client. Formats for keeping the operation and maintenance record may be prepared after discussion with Engineer-in-charge/client in line with CPWD.
- J. Tools and equipment required for proper operation for whole plumbing/fire fighting systems.
- K. **Deployment of manpower:-** As per manpower deployment schedule i.e. FORMAT III. One operator for firefighting system and one plumber to operate the plumbing system and pump etc. shall be available along with the helper.
- L. Care shall be taken so that the plumbing and fire fighting systems do not lead to major breakdown. In the event of any breakdown, the same will be rectified immediately failing which such rectification will be done at the risk and cost of the firm/ agency/ contractor. Similarly, if any breakdown takes place due to negligence of firm/ agency/ contractor, the whole component has to be replaced/ rectified to bring it to the original condition immediately at the contractor's cost.
- M. For maintaining record/plumbing and fire fighting system, agency will have proper qualified adequate manpower along with all supporting equipment otherwise a deduction of 2000/- per day will be made for not proved the same.
- N. In case of any accident/mishap fire suppression will not be in the scope of the agency.

ANNEXURE D

RESPONSE TIME

Sl. No.	Type of complaint	Max permissible time for attendance of complaint from notice of complaint

1.0 Electrical		
1.1	Evacuation of person from the lift	1/2 hrs
1.2	Minor nature of complaints like replacement/repairing of tubelight,choke, power points,light points , switch, indicators of panels,socket,MCB, electronic regulators, capacitors of ceiling fans etc.	3 Hrs
1.3	Medium rectification works like street light replacement,Circuit breaker maintenance etc.	4 Hrs
1.4	Major rectification works like rewinding of motors, ceiling fans replacement, D G set maintenance, lift maintenance, FDA , PA system and specialised auditorium services	48 Hrs or as specified by the manufacturer

2.0 PHE

2.1	Minor nature of complaint e.g. replacement of washers,bib cock,,entire tap, Jali for waste pipe,changing of small parts and repair parts.	Complaint received upto 10.00 AM by close of shift,other by forenoon next day
2.2	Medium rectification works like urinal sensors,replacement of sanitary fixtures,valves,unions,manhole cover,towel rail, plumbing leaks and clogging	1 day
2.3	Major rectification works like replacing soil, waste, rain water, vent pipes and water supply pipes,overhauling of pumps,motor winding etc.	1 day or as specified by the manufacturer

3.0 CIVIL

3.1	Minor nature of complaints like rectification repairing of door closers, renewing of putty of glass panes,	3 Hr
3.2	Medium rectification works like replacement of glass panes with wooden fillets, renewing glass panes with putti and nails, aluminium handles, door hinge repairs,	2 days
3.3	Major rectification works like repairing of auditorium chairs, sand stone replacement,	7 days or as specified by the manufacturer

TECHNICAL BID (PART A)

Format I

BRIEF DESCRIPTION OF THE FIRM

(An outline of the experience of the firm for similar works during last three years)

- a) Name of the firm.
- b) Year of registration.
- c) Type of firm (Individual/Proprietary/Limited Company or any other)
- d) In house facilities available in following fields.

S.No.	Fields	Manpower with more than 10 years experience	Manpower with 5 to 10 years experience	Manpower with lesser than 5 years experience
1.	Original/Repair works (Civil)			
2.	Laying/Repairs of water supply, plumbing & sewerages, drainage etc.			
3.	Electrical works			

Note:-

- Provide documents in support of the details provided in above format, failing which the authenticity of the information may not be accepted.

Format II

EXPERIENCE OF COMPANY

(Experience of relevant and similar work of Construction etc/ Annual Maintenance, Operation and Housekeeping Services completed during last three years preceding March, 2013 and on going works) Use separate sheet for each work.

1.	Project title & Location:	
2.	Name of the Client and Address:	
3.	Describe area of Participation (Specific Work done/Services rendered by the applicant)	
4.	Period of Work Done/Services rendered for the project	
5.	Total cost of work/AMC cost	
6.	Date of start of the work and the present status	
7.	Any other details	

NOTE::

- Supporting documents like certificates from the client in support of each of the above projects to be furnished failing which the authenticity of the information may not be accepted.

Format III

MANPOWER DEPLOYMENT SCHEDULE
(Maintenance and Housekeeping Services)

A. The following manpower is to be deployed in daily shifts as mentioned against each:

			Shift				Total
			General 0900-1730	A 0600-1400	B 1400-2200	C 2200-0600	
1		FOR DAILY AND ROUTINE MAINTENANCE					
	a	Mason	1				1
	b	Helper	1				1
	a	Carpenter	1				1
	b	Helper	1				1
	a	Plumber	1				1
	b	Helper	1				1
		Electrical					
	a	Electrician	2				2
2		FOR HOUSEKEEPING AND SWEEPING SERVICES					
	a	Sweepers	3	2			5
	b	Sanitary Supervisor	1				1
3		FOR ELECTRICAL SUB STATION OPERATION AND LIFTS					
	a	S/S Operator		1	1	1	3
	b	Helper		1	1	1	3
	c	Lift Operator		10	10	5	25
4		FOR WATER SUPPLY PUMP, TUBEWELL & FIRE FIGHTING OPERATION					
		Operator		1	1		2
		Helper		1	1		2
5		FOR SEWAGE TREATMENT PLANT OPERATION					
		STP Operator		1	1	1	3
		Helper		1	1	1	3
6		FOR HORTICULTURE SERVICES					
		Mali + Head Mali	4				4

7	FOR COMPLAINT CENTRE					
	Computer Operator for Complaint Cell, Billing etc.	1				1
	Supervisor	1				1

Qualification and experience of manpower for Electrical works:

J.E./ Supervisor Three year full time diploma in Electrical Engineering with 5 year experience of maintenance of 11 KV/ 0.433 KV Sub-Station. DG sets, Lifts, FDA & PA system etc

Electrician Two year ITI certificate in Electrical trade having 3 year experience of maintenance of 11 KV/ 0.433 KV Sub-Station DG sets, Lifts, FDA & PA system etc

Helper Class VIII pass with some experience.

- Note:-**
1. Only licenced / certified electricians/operators shall be deployed.
 2. Preferably the other skilled worker deployed shall also be licenced/certified.
 3. All the above staff of the contract shall wear uniform and badges identifying their category and name in English and local language.
 4. In case of absence of any of the above mentioned workers under format III without providing suitable replacement, consequential cost of the labour shall be recovered and Engineer's decision will be final in this regard.
 5. All complaints and work executed shall be properly recorded in the complaint register and documented. This register shall be kept at site office/service centre and abstract of daily complaint received/attended shall be recorded in the register and compiled list of monthly complaint shall be submitted on first day of every succeeding month. Attendance register of staff deputed shall be maintained and kept at site office and duty chart of worker shall be displayed at site office/service centre. One Supervisor/ site Engineer should be available at site office for overall supervision of the work under this agreement.

BILL OF QUANTITIES (BOQ)

RAIPUR

Item No	Description Of Item	Qty.	Unit	Rate(Rs.) in Figures	Rate(Rs.) in words	Amount in (Rs.)
A	PART A: MAINTENANCE					
1.0	Carrying out maintenance Works and upkeep of AIIMS Residential complex at Kabir Nagar, Raipur. The approximate area of construction is 15200 sqm in a campus spread over a total area of approx.38 acres. There are total 11 blocks consisting of 173 dwelling units consisting of Type I, II, III, IV & V quarters, Director Bungalow, Guest House etc. along with service buildings like UG Tank, Substation, Sewage Treatment Plant etc. Internal and External Works					
I	Maintenance and repair of internal and external plaster, flooring, masonry work, repair of BB coba, RCC work upto an area of 2.5 sqm, Khurras, CC gola, sealing of leakages from roofs, floor, traps, WC/P traps and joints of pipes and fittings, gully traps and manholes and restoration of existing finishing in the affected are to the entire satisfaction and as per direction of Engineer/Client					
li	Carpentry work of all kinds including Maintenance, repairing and fixing of damaged doors, windows, ventilators of steel/wood/PVC/Aluminium etc. at all floors and fixing of necessary fittings wherever required to keep them in proper functional conditions works of doors/windows, providing nails on the walls etc.					
iii	Change of glass panes, wherever required.					
iv	Maintenance and cleaning of chajjas, roofs, expansion joints, etc. and removing cobwebs, beehives, vegetation including malba etc. to the authorized dumping ground to the entire satisfaction and as per the direction of the Engineer/Client					
V	Welding by electrical plant including transportation of electrical welding plant at site to weld broken grills, hinges, doors, windows, gates, railings and any other steel work of dwelling units, parks, boundary walls, guest house etc. complete as per direction of the Engineer/Client.					

vi	<p>Comprehensive Maintenance, up-keeping, attending day to day complaints and rectification of all electrical installations in various type of flats and bungalows (as per list attached) including attached servant quarters, garages, sentry post, guard room etc. round the clock including Sundays and Holidays. Installations comprises of internal electrification, external electrification, distribution board, main board and all type of light fixtures like brass bracket, fluorescent fitting, CFL fittings, gate light, lawn/compound light, street light, security light etc. and electrical appliances and gadget like geysers, ceiling fan, exhaust fan, fresh air fan and pump set etc. including repairing of these fixtures and gadget, repainting etc. as and where ever required and as per attached terms and conditions.</p>					
vii	<p>Comprehensive maintenance of plumbing system including Supply and replacement/Repair of non functional broken sanitary fixture or repair of the non functional part of sanitary fixtures of the entire residential complex & maintaining all the plumbing fixture & plumbing system in good functional condition including repair of leakages and making openings in walls if required and making good the same complete as per instruction of engineer incharge/client.</p>					
viii	<p>Maintenance of sewerage, drainage system and desilting of gully traps etc. within the campus like opening/cleaning of choked sewer pipes, drains, manholes, gully traps, wash basins, sinks and other fittings and fixtures, etc. at all floors and vertical stacks of sewer pipes and rain water pipes of all sizes to keep sewerage and drainage system functional including disposal of silt, malba, waste, garbage etc. to the authorized dumping ground complete including Regular cleaning of Drains, pipes, sewerage & Drain Line up to Municipal disposal points Gully traps, manholes to ensure that there is no blockage including maintaining minimum requisite T &P material required for cleaning / maintenance , manpower (plumber, Sewer man, sewer/Drain cleaner, Helper, & consumables such as washer, lead, M.seal, nut, dash fastener, lubricant, tools etc. Proper functioning of the plumbing system & maintaining the record for the same.</p>					

ix	Maintenance of water supply grid and valves in the entire campus to keep the water supply system efficient and operational at all times complete to the entire satisfaction and as per direction of the Engineer/Client					
X	Changing of pipes and traps, Manholes including covers of drains/manholes etc.					
xi	Maintenance and repair of plumbing system for the entire campus (internal and external works) including stopping leakages or overflows of water from PVC/RCC overhead tanks and water cisterns and replacement of the bib cock, stop cock, pillar cock, fittings, ball cocks etc. to keep the entire water supply system efficient and functional to the entire satisfaction and as per the direction of the Engineer/Client.					
xii	Cleaning of RCC/PVC water storage tanks (Overhead/Underground) by adopting six stage process, i.e., dewatering, sludge removal, high pressure cleaning, vacuum cleaning, anti-bacterial spray and ultra violet radiations i/c mentioning the date of cleaning and next due date of cleaning on each tank complete to satisfaction of Engineer/Client					
xiii	The scope also includes attending to the overflow/float valves of overhead water tanks, including replacement if required and operation of valves, pumps, etc.					
xiv	The rate quoted shall include the cost of manpower, T&P like a welding machine, assorted screwdrivers/pliers, ladders, drills, etc., scaffolding, consumables and disposal of unservicable debris/malba outside the building compound at municipal dumping grounds and nothing extra shall be paid. Cost of tiles, plumbing & electrical fittings and fixtures, glass panes, MCB/MDB, Fan/regulators, tubelights/bulbs etc. shall be payable separately on actuals					
xv	The quoted cost will include manpower for day-to-day maintenance and all other items/works mentioned in additional specifications of contract document.					
xvi	The agency/bidder shall visit the AIIMS Residential complex at Kabir Nagar, Raipur and make themselves familiar with the existing setup/system provided.					
A	Maintenance Cost. Minimum Manpower to be provided 1 Mason with 1 Helper, 1 Carpenter with 1 Helper, 1 Plumber with 1 Helper, 2 Electricians, 1 Supervisor with 1 Computer Operator in General Shift	12 jobs		per job per month		

	PART B : HORTICULTURE MAINTENANCE					
1	Scope of work for horticulture operation includes plantation & maintenance of any type of grass, shrubs, trees (cost of grass/shrubs/trees is payable separately) and their maintenance by deploying adequate no. of experienced Malis and one head Mali for eight working hours daily and supplying all materials in sufficient quantity required to properly maintain the horticulture like fertilizers, manure, granules, vermi-compost, bone meal, neem cake, NH3/SO4/Urea, DAP, pesticides, good earth, seasonal flower seeds, plants, grass, flower pots, all tools & plants required for the above work, shrubs, trees etc. all complete.	12 jobs	per job per month			
a	Minimum 4 malis to be provided					
C	PART C : SWEEPING AND CLEANING SERVICES					
1	Daily (excluding Sunday's) Sweeping, Cleaning & Dusting of common areas of all residential blocks i.e. staircases (Main & Fire), corridor etc., all roads, parking, pavements, green areas, security rooms, and other locations in public areas. The agency shall be completely responsible for cleanliness of the housing complex. All fans of the residential complex to be cleaned at least once in six months. Collection of garbage from the bins located on each block in the Housing Complex and its segregation into organic and inorganic waste. Dumping of the organic waste into the compost pit and periodic maintaining the compost pit. All the housekeeping staff shall wear uniforms as approved by the client and have a neat and clean look and shall wear rubberised gloves, boots and overalls.					
	Minimum manpower as detailed to be provided for house keeping works, dusting, cleaning works etc including all consumables such as dusters, brooms, mops, DDT, cleaning soap/detergents and disinfectants, buckets, bins, covered handcarts etc. or any other material required for Cleaning/housekeeping to be supplied by the agency for which nothing extra shall be paid. The work shall be carried out to the entire satisfaction of	12 jobs	per job per month			-

	Client/Engineer-in-charge.					
	Minimum 3 Sweepers in General Shift and 2 in A Shift to be provided along with one Sanitary Supervisor					
D	PART D: OPERATION					
1.0	Operation charges for following system through deployment of qualified manpower as per suggested minimum manpower chart. The charges will be all inclusive. Contractor has to follow all maintenance requirement as per tender conditions	12	Months			
	Operation charges for one year					
	Round the clock operation of electrical sub-station & DG set through minimum defined manpower in SCC					
	Operation of lift round the clock through minimum defined manpower in SCC					
	Operation FDA & PA in A & B shift through minimum defined manpower in SCC					
2.00	Under Ground Tank, Pumps Rooms, Tubewells, etc. Daily operation of Pumps, Tubewells, etc. with requisite manpower for requirement of the same as per instruction of engineer-in-charge & all small consumables part, etc required for proper functioning of the system & maintaining the record for the same, complete in all respect. Operation of Underground Tank Pumps, Tubewells, etc Minimum One Operator and One Helper each to be provided in Morning and Evening Shift	12				Month

3.00	Sewage Treatment Plant Daily operation of STP , pumps, maintaining plumbing systems and agency will maintain minimum requisite manpower & small material such as washer, lead, M.seal, nut, dash fastener, lubricant, tools etc will be included in the cost & allied systems with requisite manpower for requirement of the same as per instruction of engineer-in-charge & all small consumables part, etc required for proper functioning of the system & maintaining the record for the same, complete in all respect. Operation of Sewage Treatment Plant etc Minimum One Operator and One Helper each to be provided in Morning, Evening Shift and Night Shift	12	Month			
4.00	Fire Fighting Systems					
	Operation of Fire Fighting System with requisite manpower for requirement of the same as per instruction of engineer-in-charge & all small consumables part, refills for the fire extinguishers etc required for proper functioning of the system & maintaining the record for the same, complete in all respect as per defined in various clauses of the tender document					
	1st year	12	Months			
E	PART E: AMC					
1.00	Annual comprehensive maintenance charges for the following items installed at site. The CAMC will be done by OEM or his authorised service provider. The bidder is required to quote the annual cost of the CAMC inclusive of his professional charges for arranging the same. The detailed break-up of CAMC chages for each equipment / system to be enclosed separately					
	Charges for the first year of CAMC					
1.1	Lifts					
	Comprehensive Annual Maintenance including all material and labour for 8 passenger lifts having speed of 0.66 to 1.0 MPS, with having car doors single panel single slide which slide horizontally collapsible doors, landing doors a swinging type MS powder quoted doors, VVVF, etc.(Make: Johnson lifts) complete as					

	installed and having following stopes and landings:					
1.1.1	8 stops and 8 landings	4	Nos			
1.1.2	6 stops and 6 landings	6	Nos			
1.2	DG Set Charges for annual maintenance					
	Annual Maintenance including all labour for 200 KVA DG set (Make: Kirloskar) including AMF panel, day tank and associated pumps pipe lines etc, power & control cable, acoustics enclosure, heat exchanger etc complete including 'B' checks as per the manufacturer's recommendations/ requirements.	2	Lot			
2.00	AMC Items for Residential buildings at AIIMS, Raipur AMC of existing Tube wells, taking out & fixing of motor for service/ repair , maintaining the record of the same, any part of tube well System including starter Panel, all motors & switchgear of pumps, all parts and consumables etc complete as required for proper functioning of the system Domestic water transfer pump-900 LPM & 60 M head (4 nos.) Submersible drainage pump-150LPM & 10M head (2 nos.) 1st year	1 job	Per job			
3.00	Sewage treatment Plant AMC of existing Sewage treatment Plant including all equipments, components and spares of Sewage treatment Plant, replacement of consumables and other necessary materials, quarterly testing charges for raw and treated effluent as per requirement of Pollution Control norms, electrical and mechanical parts & material and Labour complete AMC of existing Sewage treatment Plant 1st year	1 job	Per job			
4.00	AMC-Fire Fighting System					
	Wet risers, Yard hydrant (9 nos. approx.),UGT& Terrace tanks, Landing valve(70 nos. approx. of approved make), Fire extinguishers recharging , Fire extinguisher of carbon dioxide/Water type gas/ABC type/dry chemical powder, CO2(86 nos.), Water type (86 nos.), Dry chemical powder (13 nos.), ABC type(13nos), Fire Pump- Centrifugal pump					

	of 900LPM and 35 M head (9nos)					
	Fire Panel including all associated switchgear, all motors & switchgear of pumps, diesel engine all parts and consumables etc complete as required for proper functioning of the system. Glowing exit sign board of fire system					
	Arranging/assisting the fire operations once in three months (at-least) and making the record of the same and getting approval from engineer i-in-charge /client					
	AMC for existing complete fire fighting system					
	1st year	1 job	Per job	1		
F	PART: F					
1.0	ONE-TIME REPAIR					
	These charges shall include one-time repair charges of all the items given below complete so as to bring those to the proper working condition including the replacement of all damaged/stolen parts, painting, oiling, greasing, replacing washers, gasket, mechanical seal, rewinding motors, battery, filter cartridge, membranes, un-functional valves/pipe portion, supporting structure, missing parts covers (complete or part as per the condition or instruction of engineer-in-charge).					
	STP (500 KLD approx.)-MBBR based, pumps, blowers, piping, valves , panel, filter press, media etc (repair of all un-functional part of all STP equipments & cleaning of tanks)	1 job	Per job			
G	PART G : MANPOWER					
II	Supply of manpower as required by the Client. With complete Tools, tackles etc.					
A	Electrician	20	Manday			
B	Plumber	20	Manday			
C	Helper	20	Manday			
D	Mason	20	Manday			
E	Carpenter	20	Manday			
H	PART H:					
	MISCELLANEOUS ITEMS					
	(The following items may be executed at the discretion of the Client/Engineer and their quantity may vary to any extent)					

Anti Termite Treatment						
1	Supplying chemical emulsion in sealed containers including delivery as specified					
i	Chlorpyriphos / Lindane emulsifiable concentrate of 20%	100	Litre			
2	Diluting and injecting chemical emulsion for Post Constructional anti termite treatment (excluding the cost of chemical emulsion)					
(a)	Along the external wall below concrete or masonry apron using chemical emulsion @2.25 litre linear metre including drilling and plugging holes etc.	1000	Sqm			
Painting and Finishing						
3	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade					
i	one or more coats on old work	1000	sqm			
4	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade					
i	old work (one or more coats)	15000	sqm			
5	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade					
i	one or more coats on old work	1000	sqm			
6	Finishing walls with premium acrylic smooth exterior paint with silicone additives of required shade:					
l	Old work (one or more coats applied @ 0.83 ltr/10 sqm)	8000	sqm			
7	Providing and Fixing glazing in aluminium door, window, ventilator shutters and partitions, curtain walls etc. with neoprene gasket etc. complete as per the architectural drawings and as directed					
i	With glas panes of 5.50 mm thickness (weight not less than 13.75 kg/sqm)	50	sqm			
8	Providing and Fixing aluminium handles colour anodized (anodic coating not less than grade AC10 as per IS:1868) to required colour or shade with necessary screws etc. Complete					
i	125mm	20	each			

9	Providing and Fixing aluminium tower bolt powder coated (powder coating not less than 50 micron) to required colour or shade with necessary screws etc.					
i	150 x 10mm	20	each			
	250 x 10 mm	10	each			
10	Providing and Fixing aluminium sliding door bolts powder coated (powder coating not less than 50 micron) to required colour or shade with necessary nuts, screws etc.					
l	250 x 16mm	15	each			
12	Providing and Fixing aluminium pull bolt lock powder coated (powder coating not less than 50 micron) to required colour or shade with necessary nuts, screws etc.	15	each			
13	Providing and Fixing Aluminium hanging floor door sotpper ISI marked anodised (anodic coating not less than grade AC 10 as per IS:1868) transparent and dyed to required colour and shade with necessary screws etc. complete					
l	Twin rubber stopper	20	each			
14	Providing and Fixing 35 x 12mm wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete					
l	Approved quality 1st class sal wood	1	Metre			
15	Providing and Fixing white vitreous china pedestal type water closet (European Type) with seat and lid, with CP Brass hinges and rubber buffers, 10 litre low level flushing cistern with fittings & CI/MS brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required.					
l	WC pan with black solid plastic seat and lid with white vitreous china flushing cistern and CP flush bend.	2	each			
16	Providing and Fixing white vitreous china wash basin with CI/MS brackets, 15mm CP brass pillar taps, 32mm CP brass waste of standard pattern including painting of fittings and brackets, cutting and making good the walls wherever required					

1	Flat back washbasin size 550x400mm with single 15mm CP brass pillar tap.	5	each			
17	Providing and Fixing bottle trap for wash basins and sinks					
1	32mm dia	5	each			
18	Providing and Fixing towel rail complete with brackets fixed to wooden cleats with CP Brass screws					
1	CP brass towel rail with two CP brass brackets 600x20mm size	5	each			
19	Providing / supplying un-plasticised PVC connection pipe with brass unions, 45cm length					
1	15mm dia nominal bore	25	each			
20	Providing/fixing CP brass Dish of approved quality and brackets complete with wooden cleats and CP Brass screws,	10	each			
21	Providing and Fixing CP Brass adjustable shower with 15 or 20mm inlet all complete	5	each			
22	Providing and Fixing stainless steel kitchen sink as per IS 13983 with CI Brackets and stainless steel plug 40mm including painting of fittings and brackets, cutting and making good the walls wherever required					
1	Kitchen sink with drain board 510x1040 mm bowl depth 175mm	3	each			
23	Providing and Fixing Stainless steel jali (Grating) with or without hole for waste pipe for floor /nahani trap					
1	100mm dia weight not less than 100 gms	20	each			
24	Providing and Fixing brass gate valve with CI sheet of approved quality					
1	32mm dia nominal bore	4	each			
li	65mm dia nominal bore	1	each			
25	Providing and Fixing CP Brass long body bib cock of approved quality conforming to IS Standards and weighing not less than 690gms					
1	15mm dia nominal bore	15	each			
26	Providing and Fixing CP brass bib cock of approved quality					
1	15mm dia nominal bore	5	each			

27	Providing and Fixing CP Brass angle valve for basing mixer and geyser points of approved quality conforming to IS8931					
I	15mm dia nominal bore	10	each			
28	Steel work in built up sections/framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required					
I	in gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	1000	kg			
29	Filling the gap in between the aluminium frame and adjacent RCC/Brick/Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-Charge complete					
I	Upto 5mm depth and 5mm width	200	Metre			
30	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	5000	sqm			
31	Supply and Grassing with "Calcutta Doob" grass in rows of 7.5 cms apart in either direction including fine dressing the ground to be levelled, supply and filling with good earth as required, watering of the lawn and its maintenance for a period of one year.	2000	sqm			
32	Providing, supplying, transplanting sapilings of various varieties in good/live condition with roots covered in good soil with polythene bags at various locations in the campus etc., complete as directed by the Client/Engineer and their maintenance for a period of one year.					
A	Shrubs like aglonima, cycis palm, fycus panda, golden duranta, or equivalent	500	Each			
B	Trees like Royal Palm, Date Palm, Amaltas, Ashoka or equivalent with average height 3 metres.	250	Each			

ELECTRICAL (Special Repairs)						
1	Supplying of following size of FRLS PVC insulated copper conductor, single /flexible core cable.					
a	1.5 Sq. mm	200	Metres			
b	2.5 Sq. mm	200	Metres			
c	4.0 Sq. mm	100	Metres			
d	6.0 Sq. mm	100	Metres			
e	10.0 Sq. mm	100	Metres			
f	16.0 Sq. mm	100	Metres			
2	Supply of telephone wiring of un armoured 2 pair 0.5 mm dia copper PVC conductor wiring of following sizes in the existing conduit. The replaced wire will be FR cable of reputed make.					
	2 pair	100	Metre			
3	Supplying of following sizes of steel conduit along with accessories.					
a	20 mm	50	Metres			
b	25 mm	50	Metres			
c	32 mm	50	Metres			
4	Supplying of following sizes of PVC conduit along with accessories.					
a	20 mm	50	Metres			
b	25 mm	50	Metres			
c	32 mm	50	Metres			
5	Supplying metal box of following sizes (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in the front including painting etc. as reqd.					

a	180 mm x 100 mm x 60 mm deep	10	Nos.			
6	Supplying 3mm thick phenolic laminated sheet cover in the existing metal switch board alongwith screws, washer i/c dismantling the existing sheet etc. as required.	2	Sq mtrs.			
7	Supplying of following modular switch, socket & accessories on the existing modular plate and switch box including connections but excluding modular plate etc. as reqd.					
a	5/6 amps switch	50	Nos.			
b	2 way 5/6 amps switch	10	Nos.			
c	15/16 amps switch	10	Nos.			
d	3 pin 5/6 amp socket outlet	20	Nos.			
e	6 pin 15/16 amp socket outlet	10	Nos.			
f	20 amp switch/ SP MCB	5	Nos.			
g	20 amp socket	5	Nos.			
h	Telephone socket outlet (RJ-11)	10	Nos.			
i	Stepped type electronic fan regulator	10	Nos.			
j	Blanking plate (modular)	50	Nos.			
k	Bell push	10	Nos.			
l	TV Antenna Socket Outlet	10	Nos.			
m	RJ-45 Socket Outlet	10	Nos.			
8	Supplying call bell/buzzer suitable for D.C/A.C.single phase,230 volts, complete as reqd.	5	Nos.			
9	Rewinding of 1200 mm ceiling fan including removing and further installation. Rewinding will carry 6 months guarantee	10	Nos.			

i	Change of bearing of 1200 mm ceiling fan including removing and further installation	10	Nos.			
ii	Replacement of capacitor for 1200 mm ceiling fan	10	Nos.			
10	Rewinding of 900 mm ceiling fan including removing and further installation. Rewinding will carry 6 months gurantee	10	Nos			
i	Change of bearing of 900 mm ceiling fan including removing and further installation	10	Nos			
ii	Replacement of capacitor for 900 mm ceiling fan	10	Nos			
11	Rewinding of 225 mm exhaust fan including removing and further installation Rewinding will carry 6 month guarantee	8	Nos			
I	Change of bearing of 225 mm exhaust fan including removing and further installation	8	Nos			
Ii	Replacement of louver of 225 mm exhaust fan	8	Nos			
Iii	Change of capacitor for exhaust fan	8	Nos			
12	Painting of ceiling fan in installed position with one or more coats of spray painting with synthetic enamel paint of approved brand and manufacture to give an even shade, i/c cleaning of surface with detergent etc. as reqd.	50	Nos			
13	Supplying following rating / series 240 volts miniature circuit breaker suitable for lighting and other loads / inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as reqd.					
a	6 to 32 amp Single Pole 'C' Series	50	Nos.			
b	25 Amps Double pole C- series.	5	Nos			
c	32 Amps Double pole C- series.	5	Nos			
d	32 Amps Double pole C- series (Modular)	5	Nos.			
e	40 Amps Double pole C- series.	5	Nos			
f	25 A Four Pole C- series.	5	Nos.			

g	32 A Four Pole C- series.	5	Nos.			
h	40 A Four Pole C- series.	5	Nos.			
i	63 A Four Pole C- series.	5	Nos.			
14	Supply following ELCB/ RCCB in the existing MCB DB of 30/ 100 mA rating					
a	25 A DP	5	Nos.			
b	32 A DP	5	Nos.			
c	40 A DP	5	Nos.			
d	25 A Four Pole	5	Nos.			
e	32 A Four Pole	5	Nos.			
f	40 A Four Pole	5	Nos.			
g	63 A Four Pole	5	Nos.			
15	Supply of following thermal magnetic MCCB / components in the existing panels . The MCCB/components will be of same make as installed or approved equivalent. 25 ka /35 ka /50 ka rating					
i	FP MCCB 63 Amp ,	1	Nos.			
ii	FP MCCB 100 Amp	1	Nos.			
iii	FP MCCB 125 Amp	1	Nos.			
iv	FP MCCB 160 Amp	1	Nos.			
v	FP MCCB 200 Amp	1	Nos.			
vi	FP MCCB 250 Amp	1	Nos.			
vii	FP MCCB 320 Amp	1	Nos.			
viii	FP MCCB 400 Amp	1	Nos.			
ix	FP MCCB 500 Amp	1	Nos.			
x	FP MCCB 630 Amp	1	Nos.			
16	Supply of following components in existing electrical panels/ air circuit breakers/ starters/APFC etc. The components will be of same make and model as installed or approved equivalent.					

i	Fixed contacts 630- 1600 Amp ACB	1	Set			
ii	Moving contacts 630- 1600 Amp ACB	1	Set			
iii	Arc Chutes 630- 1600 Amp ACB	1	Nos			
iv	Different type of coils each used in ACB like closing, tripping etc	1	Nos			
v	Rack-in rack-out handle for ACB	1	Nos			
vi	Spare contact kit for 32 amp TP contactor similar to existing kit.	1	Nos			
vii	Spare contact kit for 60 amp TP contactor similar to existing kit.	1	Nos			
viii	Spare contact kit for 100 amp TP contactor similar to existing kit.	1	Nos			
ix	Auto/ Manual selector switch	1	Nos			
x	10 KVAR capacitor bank, Extra heavy duty	1	Nos			
xi	25 KVAR capacitor bank, Extra heavy duty	1	Nos			
xii	50 KVAR capacitor bank, Extra heavy duty	1	Nos			
xiii	Off delay timer similar to existing timer	1	Nos			
17	Supply of light fixtures. The makes and model should be same as installed or approved equivalent.					
i	18 watt tube light	5	Nos			
ii	36 watt fluorescent light lamp (tube)	50	Nos			
iii	28 watt tube light TL-5	25	Nos			
iv	Starter for fluorescent fixture	50	Nos			
v	Electronic ballast for fluorescent fixture	50	Nos			
vi	Copper bound ballast for fluorescent fixture	50	Nos			
vii	Copper bound ballast for CFL	20	Nos			
viii	9 watt CFL	50	Nos			
ix	11 watt CFL	50	Nos			
x	13 watt CFL	10	Nos			
xi	18 watt CFL	50	Nos			
xii	36 watt CFL	5	Nos			
xiii	50 watt halogen lamp	10	Nos			
xiv	150 watt HPSV lamp	10	Nos			
xv	Ignitor for 150 watt HPSV Lamp	10	Nos			
xvi	Complete gear box for 150 watt HPSV Lamp	2	Nos			
xvii	Housing for post top light fixture Philips HPS 360, Sonara or approved equivalent	5	Nos			
xviii	12 volt transformer for halozen lamp	5	Nos			

18	Painting of street light pole with silver grey or as approved by site incharge. Including paint and labour.	50	Nos.			
19	Supply of heat shrinkable straight through joints of the following LT cables of 1.1 Kv					
a	3.5 C x 25 Sq mm	2	set			
b	3.5 C x 50 Sq mm	2	set			
c	3.5 C x 70 Sq mm	2	set			
d	3.5 C x 95 Sq mm	2	set			
e	3.5 C x 120 Sq mm	2	set			
f	3.5 C x 185 Sq mm	2	set			
g	3.5 C x 300 Sq mm	2	set			
h	4 C x 16 Sq mm	2	set			
20	Supply of 11 kV grade hand gloves	4	Nos.			
21	Supply of 440 V grade hand gloves	4	Nos.			
22	Supply of First aid box as per Indian Red Cross Society details.	2	Nos.			
23	Replacement of existing 12 V battery for starting of DG set with new against buy back of the old battery	2	Nos.			
GRAND TOTAL(In figures)						

GRAND TOTAL (In words)_____