

# **TENDER DOCUMENT**

**CIVIL AND ELECTRICAL WORKS FOR SETTING UP  
OF DISTRICT EARLY INTERVENTION CENTRE (DEIC)**

**AT  
KAMLA NEHRU HOSPITAL, SHIMLA, HIMACHAL  
PRADESH**

**PROJECTS DIVISION,  
HLL LIFECARE LTD,  
CORPORATE HEAD OFFICE, POOJAPPURA,  
THIRUVANANTHAPURAM – 695 012,  
KERALA, INDIA  
PHN: ++91 471 2354949, 2775588**

**FEBRUARY 2018**

**HLL LIFECARE LIMITED**  
 (A Government of India Enterprise)  
 Projects Division  
 Corporate Head Office, Poojappura.P.O,  
 Thiruvananthapuram – 695012,  
 Kerala, India  
 Phn: 0471- 2354949, 2775588

**INVITATION FOR BIDS (IFB)**

**IFB No : HLL/CHO/PROJ/HCD/DEIC SHIMLA/C&E/2017-18**

**Date : 01-02-2018**

HLL Lifecare Limited (HLL), a Government of India Enterprise is in the process of setting up District Early Intervention Centres (DEIC) at various locations in India. For the said project, sealed and super scribed bids are invited from competent and experienced Suppliers/Contractors who are capable to do the following work meeting the requirements as per our tender.

Sl. No	Brief Description of Item/Work	Qty	EMD in Rs
1	Civil & Electrical works for Setting up of District Early Intervention Centre (DEIC) at Kamla Nehru Hospital, Shimla, Himachal Pradesh.	As per Schedule V	Rs 1,00,000/-

**2. Qualification Criteria:**

- a. Bidders should have minimum **Three years experience** in the relevant field. Documentary proof for the above eligibility criteria should be submitted along with the offer.
- b. Bidders should have experience of having successfully completed within a period of last 3 years ending 31/01/2018 at least
  - i. One similar work of value not less than Rs 50 Lakhs  
Or
  - ii. Two similar works, each of value not less than Rs 35 Lakhs  
Or
  - iii. Three similar works, each of value not less than Rs 25 Lakhs

Note:- Copies of Work orders and Completion certificates issued by the Client/Authority concerned shall be submitted in proof of the same.

- c. Bidder should have satisfactorily completed at least one work for any Central/State Government Departments or Central/State PSU's or local bodies in the last three years ending 31/01/2018.

Note:- Copies of Work orders and Completion certificates issued by the Client/Authority concerned shall be submitted in proof of the same.

3. The eligible bidder can quote as per the Schedule of Work - Schedule V. The work shall be awarded to the Qualified bidder, who quotes the lowest amount as per Schedule of Work - Schedule V.
4. The bid documents will be available up to 15.00 Hrs. on the previous working day of the opening of the bids. The scheduled date for issue, receipt and opening of bids is as follows.
- a) Date of issue of tender document - 01-02-2018 onwards
  - b) Last date and time for receipt of bids - 14-02-2018 up to 15.00 Hrs.
  - c) Date and time of opening of bids - 14-02-2018, 15.30 Hrs.
  - d) Address for communication, receipt and place of opening of bids:

**SENIOR MANAGER (PROJECTS),**

Projects Division,

HLL Lifecare Limited (A Government of India Enterprise)

Corporate Head Office, Poojappura.P.O,

Thiruvananthapuram – 695012,

Kerala, India

Phn: 0471- 2354949, 2775588

E-mail: harikrishnankp@lifecarehll.com, choprojects@lifecarehll.com

5. The completed and sealed bid documents should be submitted to Senior Manager (Projects), in the above address along with the EMD. The outer cover should bear the Enquiry No, closing date and General description of item tendered, and the words "DO NOT OPEN BEFORE" 15.30 Hrs (IST) on ----- (Indicate the Closing Date). EMD shall be submitted in the form of demand draft drawn from a nationalized bank in favor of HLL Lifecare Limited payable at Thiruvananthapuram. Bids received after due date and time will be rejected. Any bid not accompanied by EMD will be rejected.
6. Bids will be opened in the presence of Bidders representative(s) who choose to attend on the specified date and time, at the office of HLL at the address given in Clause 2 (d) above.
7. In the event of the date specified for bid receipt and opening being declared as a closed holiday for the above purchaser's office, the due date for submission of bids and opening of bids will be the following working day at the appointed times.
8. HLL may, at its discretion, extend this deadline for submission of bids by amending the Bid Documents or any other reasons, in which case all rights and obligations of HLL and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

9. HLL will not be held responsible for the postal delay, if any, in the delivery of the bidding document or the non-receipt of the same. Bids sent by Telex/Fax/Telegraph will not be accepted.
10. The EMD should be enclosed in a separate envelope and super scribed as “EMD” and to be attached in the main cover.
11. SSI/MSME units interested in availing exemption from payment of EMD should submit a valid copy of their registration certificate issued by the concerned DIC or NSIC. But the Party has to provide Security deposit if Tender is awarded to them.
12. Even though the bidder meet the above qualifying criteria, they are subject to be disqualified if they have:  
  
Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.
13. The Bid must include the following information;
  - a. Enquiry No.
  - b. EMD
  - c. Promised Delivery/Completion Schedule
  - d. Price Schedule in Format For Quoting (Schedule V)
  - e. All other documents/certificate/information as specified in the bid document.
14. In addition to the invitation for bids, the bidding documents include the following schedules.

Schedule I	-	Conditions of Contract
Schedule II	-	Acceptance Form
Schedule III	-	Capability Certificate
Schedule IV	-	Performance Statement
Schedule V	-	Schedule of Works
Schedule VI	-	Drawings
15. The company reserves the right to club or split the items of works, change the qualifying criteria at their discretion and to reject or cancel the Invitation for bids without assigning any reason thereof.

**SENIOR MANAGER (PROJECTS)**

**SCHEDULE I**

**CONDITIONS OF CONTRACT**

**1) PRICE**

The price quoted should be inclusive of all material cost, loading and unloading charges, all applicable taxes and other levies, labor charges, insurance etc. The **Schedule of Work** is enclosed as **Schedule V**.

Price quoted should be firm without any escalation till the order is completely executed.

**2) TAXES/DUTIES/LEVIES**

The contractor shall be entirely responsible for all taxes including GST, sales tax, service tax, entry tax, duties, license fees etc. incurred until successful completion of contract.

**3) ESCALATION**

The rates quoted by the Contractor in the contract documents shall be final and shall not be subjected to any change due to the increase in labour wages or inflation in the cost of materials or any other price variations due to any reason during the stipulated time period of the contract or during the extended time period of completion.

Rates quoted should be inclusive of all cost of materials, Tools/Equipments labor charges, conveyance to site, handling charges, loading and unloading charges, hiring charges, clearing of debris, statutory payments etc.

**4) COMPLETION TIME**

Work should be completed within **90 DAYS** from the date of issuing the Letter Of Intent or Work Order.

**5) PAYMENT TERMS**

The contractor can submit two running account bills during the work period and payment will be made as below:

- a) 50% of the total value of work may be released upon the completion of 60 % of the work recommended by HLL Site Engineer, countersigned by Regional In charge/ State In charge.
- b) Balance 50% will be paid along with the final bill only after issue of Work Completion Certificate by Engineer In Charge & Regional In Charge of HLL Lifecare Ltd, countersigned by Business Manager (P&S), CMO or Deputy General Manager (Mktg), CMO.

5% amount of the Bill will be retained as retention money and will be released only after the Defect liability period of 12 months.

Final Bill to be submitted detailing the work description, quantity and rate as per the Work Order/LOI. Payment will be made against actual measurements recorded and certified jointly by HLL Engineer in charge and the Contractor's representative, counter signed by Business Manager (P&S), CMO or Deputy General Manager (Mktg), CMO.

Tax Deduction: All statutory deductions like Income Tax, Works Contract Tax, E.S.I., P.F. or any other government-imposed liabilities shall be borne by the Contractor (as applicable at the time of execution of job) and shall be deducted from each bill submitted by the Contractor.

## **6) SECURITY DEPOSIT**

- 6.1 Simultaneously with the execution of the contract successful bidder shall furnish a Security deposit in the form of a Demand Draft from a nationalised bank drawn in favour of HLL Lifecare Limited, Thiruvananthapuram payable at Thiruvananthapuram or a Bank Guarantee from a nationalized bank, for an amount equal to 5 % of the total contract value as Security Deposit for his faithful execution of contract. The Security deposit should be valid until successful completion of the contract and acceptance of the Equipment/works by the Purchaser/Owner and will be released after acceptance of the Equipment/works by the Purchaser/Owner. In case of a delay in the works the validity of security deposit shall be extended.
- 6.2 Within 10 days of the receipt of notification of award from the Purchaser/Owner; the successful Bidder shall furnish the security deposit in the form of a Demand Draft or Bank Guarantee in the security deposit form to be sent along with the Notification Of Award.
- 6.3 Failure of the successful Bidder to accept the notification of award or submission of security deposit within the timeframe shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD, in which even the Purchaser/Owner may make the award to the next lowest evaluated bidder or call for new bids.

## **7) EARNEST MONEY**

- 7.1 Each bid must be accompanied by E.M.D.
- 7.2 The EMD is required to protect the Purchaser/Owner against risk of Bidder's conduct, which would warrant the security's forfeiture.
  - a. The EMD shall be in the form of cash deposit or demand draft from a nationalized bank drawn in favour of HLL Lifecare Limited, Registered and Corporate Office, Poojappura, Thiruvananthapuram payable at Thiruvananthapuram.
  - b. E.M.D. from unsuccessful bidders will be returned after the acceptance of order by the L1 party.

- c. In the case of successful bidder, the Earnest Money will be returned after signing the contract, and submission of Security Deposit, which they will have to offer for the faithful execution of the contract.

7.3 The EMD may be forfeited:

- (a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bidding Document; or
- (b) In case of the successful Bidder, if the Bidder fails:
  - (i) to sign the Contract
  - (ii) to furnish security deposit

## 8) INDEMNIFICATION CLAUSE

The Bidder shall indemnify and hold harmless the Owner/Purchaser from and against the below mentioned:

- i. All claims, demands, action, proceedings, losses, damages, liabilities, cost, charges, expenses or obligations that are occasioned or may occasion to HLL as a result of our non-payment of any statutory dues levied/leviable on the Contractor or the Contractor committing breach of any the rules, regulations, orders, directives, instructions that may be issued by any authority under various Labor Laws, PF, ESI Acts and all other applicable Laws/Acts/Rules or any other Statute or Laws for the time being in force
- ii. Any damages, loss or expenses due to or resulting from any negligence or breach of duty on our part or on the part of Sub-Contractor/s, if any, servants or agents of the Bidder.
- iii. Claims, if any, of the employee or the Contractor and its Sub Contractor/s, under the Workmen's Compensation Act, 1923 and Employer's Liability Act 1938 or Various Labor Laws or any other Laws rules and regulations in force for the time being in India and any acts replacing and/or amending the same or any of the same as may be in force at the time and under any law in respect of injuries to persons or property arising out of and in the course of the execution of the contract work and / or arising out of and in the course of employment of any workmen / employee.
- iv. Any non - compliance or improper compliance of statutes, rules and regulations which are applicable to HLL and also to the Contractor and to the employees , in respect of (a) Employees' Provident Fund and Miscellaneous Provision Act, 1952, (b) Employees State Insurance Act, 1948, © Contract Labor (R&A) Act, 1970 (d) Minimum Wages Act, 1948 (e) Payment of Wages Act,1936 (f) Bonus Act, 1965 (g) Workmen's Compensation Act, 1923 and / or any other laws which may become applicable in respect of the Contract/ Agreement between HLL and the Bidder.
- v. Any Act or omission by us or our Sub-contractor/s, if any, our /their servants or agents which may involve any loss, damages, liability, civil or criminal action.
- vi. To protect against all claims for damage caused due to non-obtaining of insurance policy during the project period.

**9) DEFECT LIABILITY PERIOD:**

The defect liability period of the work shall be 12 months from the date of completion of the work and this date will start from successful completion and handing over. If any damage or defect occurs in the work during this period then the Contractor shall rectify the damage or defect at his own expense to the satisfaction of the Purchaser/Owner. If the Contractor fails to do so, then the Purchaser/Owner shall have the authority to get the work done by other means and the expenditure incurred shall be recovered from the Contractor.

Even if Inspection and/or tests are fully carried out by Purchaser/Owner or their representatives, the Contractor is not absolved to any degree of his responsibility to ensure that all equipment fabricated comply strictly with the requirements as per specifications given in the order, and the Purchaser/Owner shall be free to point out any defect till the defect liability period is over.

**10) FORCE MAJEURE**

- a. Neither the Contractor nor the Purchaser/Owner shall be considered in default in the performance of their obligations as per the Contract so long as such performance is prevented or delayed because of strikes, war, hostilities, revolution, civil commotion, epidemics, accidents, fire, cyclone, flood or because of any law and order proclamation, regulation or ordinance of Government or subdivision thereof or because of any act of God. The proof of existence of force majeure shall be provided by the party claiming it to the satisfaction of the other.
- b. The Contractor shall advise Purchaser/Owner initially by a Fax, followed by post, the beginning and end of any of the above causes of delay, failing which Purchaser/Owner shall not be liable to consider delays due to the above reasons. Notice as stated above should be given even in case where only the Contractor's bids are under the consideration of the Purchaser/Owner and no acceptance of the same has been given and detailed order issued.
- c. In the event of definite delay even if arising out of reasons due to force majeure, Purchaser/Owner shall have the right at their discretion to cancel the Order or part of the Order without any liability on their part to make any payment to the Contractor while reserving the right to claim refund of and any payment if advanced or paid to Contractor.

**11) DELAY IN WORK EXECUTION DUE TO REASONS BEYOND CONTRACTOR'S CONTROL**

- 11.1) Force majeure: If the execution of work is delayed due to force majeure, then Purchaser/Owner as per the affected period may extend the time period.
- 11.2) In case work is delayed due to non-availability of stores supplied by Owner or any decision by Owner holding the progress of work, the contractor then upon any such happening causing delay shall immediately but not later than 10 days, give notice thereof in writing to the Owner, but nevertheless use constantly his best effort to prevent or make good delay. The Owner may in his discretion grant such extension of time as may appear reasonable to him and the same shall be



communicated to the contractor in writing and shall be final and binding on him and the contractor shall be bound to complete the work within such extended time.

## **12) LIQUIDATED DAMAGES FOR DELAYS**

If the work is not completed and handed over to the Purchaser/Owner within the time stipulated in the Order, Purchaser/Owner may at their option, either (1) recover from the Contractor liquidated damages at the rate of 0.5 % of the total contract value for every week of delay, subject to a maximum of 7.5 % of the total contract value, or (2) at the risk and cost of the Contractor and without prejudice to the other remedies/rights as per the Contract, terminate the order wholly or partially and complete it themselves or reassign it to other contractors.

## **13) SPECIAL INSTRUCTIONS**

- 1. The bidder shall visit the site before quoting for the work and also take their own assessments before quoting of bids.**
- 2. The eligible bidder can quote as per the Schedule of Work - Schedule V. The work shall be awarded to the Qualified bidder, who quotes the lowest amount as per Schedule of Work - Schedule V.**
3. All pages of the bid, except for un-amended printed literature shall be signed by the person or persons signing the bid. The seal of the company shall be stamped in all pages.
4. Bids shall be made in English. The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be signed by the person or persons signing the bid.
5. To assist in the examination, evaluation and comparison of bids, the Owner may, at its discretion, ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in the rate or substance of the bid shall be sought, offered or permitted.
6. Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be calculated. If there is a discrepancy between the words and figures of unit price, the amount in words of unit price shall prevail.
7. Prior to the detailed evaluation, the Owner will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these clauses, a substantially responsive bid is one, which conforms to specifications and all the terms and conditions of the bidding documents without material deviation. The Owner's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

8. The Owner's determination as to the substantial responsiveness or otherwise of each bid or consideration of a minor informality or non-conformity or irregularity is final and conclusive.
9. The Owner reserves the right to negotiate with the lowest evaluated responsive bidder.
10. The Owner will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily for the items offered.
11. Prior to the expiration of the period of bid validity, the Owner will notify the successful Bidder in writing by or cable or telex or fax, to be confirmed in writing by post, that its bid has been accepted. The notification of award may be sent in the form of Letter of Intent and/or Work order.
12. The signed acceptance of the notification of award by the Contractor will constitute a concluded contract.
13. The work should be carried out without causing any inconvenience to the public and shall ensure that no damages are caused to the existing site premises.
14. During the execution of work, the contractor or authorized representative should be present at site.
15. All Materials, Equipment's/ Tools required for the work should be arranged by the contractor and brought to site for the timely completion of the work.
16. The materials used shall be as per specification and of good quality.
17. The Contractor has to arrange necessary insurance coverage for the machine, workmen etc. deployed by him. He shall arrange all safety measures to protect his workmen and also the properties of HLL/Hospital Building. The work site safety of all employees, their ESI, PF etc will have to be borne by the contractor.
18. The work should be carried out in truly professional manner, neatly finished with proper line, level and plumb. Cleanliness and finishing of the job is of utmost importance. Hence the job should be done most carefully with best workmanship. For all finishing jobs samples should be approved from the Purchaser/Owner before completely executing the work.
19. The Purchaser/Owner should be immediately informed for any discrepancy in drawings, specifications and instructions in the execution of job before actual execution of particular item having discrepancy.
20. Any item found to be having been executed with poor workmanship then the Contractor shall have to rectify /reconstruct the work as specified by Purchaser/Owner. No extra charge will be admissible in such case. If CONTRACTORS fails to do so, the Purchaser/Owner reserved the right to

rectify/reconstruct the work through some other agency at the expenses of Contractor.

21. The schedule of activities as submitted by the Contractor shall have to be strictly adhered to. Regular progress reports shall have to be submitted by the Contractor giving all details for monitoring of the schedule.
22. The Contractor shall make initial drawings/layouts (as per site conditions) and get it approved by HLL before execution.
23. Special care is to be taken for cleanliness of the site. After the end of day's work, the site should be cleaned immediately.
24. The Contractor shall have to co-operate with the agencies executing other works in the same area.
25. While executing the work, the Contractor shall ensure safety and security of the property of the Purchaser/Owner so as to avoid theft etc.
26. Measurement & Payment terms:

The method of measurement of completed work shall be in accordance with the standard measurement. Payment will be made on satisfactory completion of work as per the order. Interim or running account bills shall be submitted by the contractor for the work executed on the basis of such recorded measurements in the format of HLL. All such interim payments shall be regarded as payment by way of advances against final payment only, and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re erected. Any certificate given by the officer relating to the work done or materials delivered forming part of such payment, may be modified, or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or material so which it relates is /are in accordance with the contract and certificate. Any such interim payment,/any part there of shall not in any respect conclude, determine or affect in any way powers of the engineer in charge under the contract or any of such payment s be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

27. If contractor is executing any extra items as per direction of Engineer in charge / Officer in charge, the rates shall be worked out as per the latest CPWD Schedule of Rates and in case, the item is not included in the CPWD schedule, the rate shall be arrived as per prevailing Market rates.
28. The Quantity shown in the schedule is an approximate estimated quantity. No rate revision will be entertained if the quantity increases/decreases due to the site condition while executing the work.
29. Water and Electricity: The contractor shall make his own arrangement for water and electricity required for the works. HLL will not be responsible for the supply of either electricity or water.

30. During the execution of work, the contractor or authorized representative/s at least one person having technical qualification should be present at site.
31. The contractor shall comply with by-laws and regulation of local and statutory authorities having jurisdiction over the work and shall be responsible for payment of all statutory fees and other charges and the giving and receiving of all necessary notices and the Owner shall be kept informed of the said compliances with by-laws, payment made, notices issued and received. All statutory payments shall be made by the Contractor and the same will be reimbursed by HLL on producing original challans/receipts.
32. Electrical  
The work shall be carried out by a contractor holding valid licence issued by the State Government/Competent Authority for carrying out installation work of all voltage classes involved, under direct supervision of the persons holding valid certificates issued or recognized by the state government/competent authority.
33. Final payment shall be paid only after clearing the site as per direction of Engineer-in-charge/ Officer in charge.

#### **14) CORRESPONDENCE**

All correspondence relating to this Order shall be in English, to:

Senior Manager (Projects),  
Projects Division,  
HLL Lifecare Limited (A Government of India Enterprise)  
Corporate Head Office, Poojappura.P.O,  
Thiruvananthapuram – 695012,  
Kerala, India  
Phn: 0471- 2354949, 2775588  
E-mail: harikrishnankp@lifecarehll.com, choprojects@lifecarehll.com

#### **15) SETTLEMENT OF DISPUTES**

Arbitration shall not be a means of settlement of any dispute or claim arising out of the contract relating to the work. Any disputes or difference arising between the parties with respect to the performance of any part of this agreement or anything connected therewith, etc shall as far as possible be mutually settled by the process of dialog and negotiation.

The Courts at Thiruvananthapuram alone shall have jurisdiction in respect of settlement of any matter arising out or in connection with the contract.

**SCHEDULE II**

**ACCEPTANCE FORM**

*(To be submitted in the letter pad of the firm indicating full name and address, telephone & fax numbers etc.)*

From

To

Senior Manager (Projects),  
Projects Division,  
HLL Lifecare Limited (A Government of India Enterprise)  
Corporate Head Office, Poojappura.P.O,  
Thiruvananthapuram – 695012,  
Kerala, India  
Phn: 0471- 2354949, 2775588  
E-mail: harikrishnankp@lifecarehll.com, choprojects@lifecarehll.com

Dear Sir,

I / We, hereby offer to supply/construct/erect/install/commission the work as detailed in schedule/drawings hereto or such portion thereof as you may specify in the acceptance of Bid at the price given in the price bid and agree to hold this offer open till 90 days after the date of bid opening prescribed by the purchaser/Owner. I/We have understood the terms and conditions mentioned in the invitation for bid and Conditions of Contract furnished by you and have thoroughly examined the specifications quoted in the bid document/drawings hereto and are fully aware of the nature of the scope of work required and my/our offer is to comply strictly in accordance with the requirement and the terms and conditions mentioned above.

Yours faithfully,

**SIGNATURE OF THE BIDDER**

**SCHEDULE III**

**CAPABILITY CERTIFICATE**

*(To be submitted in the letter pad of the firm indicating full name and address, telephone & fax numbers etc.)*

I/We have the financial capability to execute the work and complete the same within the specified time period (90 Days). The delay, if any, in taking measurements, certification of bills, submission of bills and release of payments will not affect the progress and completion of work. I have read all the terms and conditions of the tender document including payment terms and confirm my acceptance of the same.

**SIGNATURE OF THE BIDDER WITH SEAL**

**SCHEDULE IV**

**PROFORMA FOR PERFORMANCE STATEMENT**

Proforma for Performance Statement (for a period of last 3 year)

Name of the Tenderer:.....

Name & Address of the Tenderer / Service Provider:.....

.....

Order placed by (Full Address of Company / Consignee)	Order No. and Date	Description and quantity of ordered work and service	Value of order	Date of Completion of Contract		Remarks indicating reasons for delay, if any	Have the works been satisfactorily completed?  (Attach a documentary proof from the client)
				As per Contract	Actual		

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We hereby certify that if at any time, information furnished by us is proved to be false or incorrect, we are liable for any action as deemed fit by the Company in addition to forfeiture of earnest money.

Signature and Seal of the Bidder .....

.....

**SCHEDULE V**  
**SCHEDULE OF WORK**

Sub:	Civil and Electrical works for setting up of DEIC at KNH, Shimla, Himachal Pradesh				
Sl No	Specification	Unit	Quantity	Rate in Rs	Amount in Rs
	<b>CIVIL WORK</b>				
	<b>EARTH WORK</b>				
1	"Excavate foundation in all kinds of soil including soft rock except hard rock requiring blasting part return and fill in foundation and basement in layers not exceeding 15cm in depth including watering , breaking clods and consolidating, disposing and spreading surplus earth within the site upto 1.5m depth.(No extra shall be payable for working space)  Tenderer to ensure proper dewatering and shoring methods to ensure all time dry condition. Any damages of sides of foundation or collapsing of soil from sides due to excessive water seepage or surface runoff or any other cause have to be replaced with quarry dust or Malaimann at no extra cost."	Cum	0		
2	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	Sqm	0		
3	Felling trees of the girth (measured at a height of 1 m above ground level), including cutting of trunks and branches, removing the roots and stacking of serviceable material and disposal of unserviceable material. Beyond 60 cm girth upto and including 120 cm girth	Each	0		
4	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	0		
	<b>CEMENT CONCRETE</b>				
5	Cement concrete 1:5:10 (1 cement ,5 sand , 10 hard blue granite stone metal 40mm and down gauge) laid in layers not exceeding 15cm each in depth and well consolidated in foundation/levelling course including necessary shuttering , in steps, in floors, etc . all complete as directed.	Cum	0		
6	Cement concrete 1:4:8 (1 cement ,4 sand , 8 hard blue granite stone metal 40mm and down gauge in layers not exceeding 15 cms in depth well consolidated in foundation and levelling course under floors including necessary shuttering, in steps etc all complete as directed.	Cum	2.00		
	<b>R.C.C.WORK</b>				
7	"RCC M20 (Design Mix) using hard blue granite metal 20mm and down gauge including centering, shuttering, curing etc., complete but excluding cost of reinforcement Note: Polythene sheet shall be provided under the slabs."				
a	In Foundation, Footing and bed blocks at all levels.	Cum	2.00		
b	In Suspended roof slab of required thickness				
c	In Ground Floor	Cum	0		
d	"High Yield Strength Deformed bars in all RCC items & floorings General Note: Sizes of RCC elements shown in the drawing are only indicative and subject to change .No extra shall be payable on this account. Any change in size of concrete elements resulting in change of area of shuttering due to change in quantity of concrete shall also not be payable"	M.T	0.20		
	<b>MASONRY WORK</b>				
8	Brickwork of locally available best quality table moulded bricks of not less than 50kg/sq.cm crushing strength in cement mortar 1:5 (1 cement,5 sand) in foundation and plinth. No extra payment will be paid for any shape or size,turnings, fins, etc unless otherwise specified seperately.	Cum	4.00		
9	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with : Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	0		
10	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : With Sewer bricks conforming to IS : 4885	Each	0		



**SCHEDULE V**  
**SCHEDULE OF WORK**

<b>Sub: Civil and Electrical works for setting up of DEIC at KNH, Shimla, Himachal Pradesh</b>					
<b>SI No</b>	<b>Specification</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate in Rs</b>	<b>Amount in Rs</b>
11	Half brickwork with locally available best quality table moulded bricks of not less than 50kg/sq.cm crushing strength in CM 1:3 (1 cement 3 sand ) and reinforced with two numbers of 6mm dia. M.S rods at every fourth course embedded in cement mortar 1:4 for partitions.				
	In Ground Floor	Sqm	128.00		
	<b>FLOORING</b>				
12	Providing & laying first class full body vitrified ceramic tile of make Kajaria/ Restile/Johnson or equivalent of size 600mmx600mmx 9.5mm or approved size of approved colour (matt finish) in flooring using spacer of required size (2mm-4mm) from endura or equivalent over a bed of cement mortar 1:4 of required thickness to match finished floor level mentioned and to match the neighbouring floor finish and jointed with epoxy grout of approved shade from Bal Endura or equivalent brand all complete as directed.(Basic cost of tile - Rs.85/sft).Any difference in basic price and OHP at the time of approval shall be adjusted for the laid area.No extra shall be payable for forming any pattern in the flooring like border, cut tiles.etc.	Sqm	446.00		
13	Providing and laying 600mm x 600mm or required size from Kajaria/ Restile/Johnson glazed tiles of plain series(Satin finish) in dado set in CM 1:3 with joints so as to form a true & even surface and joints finished neatly with white cement mixed with matching pigments all complete as directed. (Rate should include base plastering with CM 1:5 of required thickness.)  The rate shall include cost of providing 6mmx6mm groove in the plastering at top of the tile all complete as directed.(Basic cost of tile - Rs.85/sft).Any difference in basic price and OHP at the time of approval shall be adjusted for the laid area.No extra shall be payable for forming any pattern like border, etc.	Sqm	68.00		
14	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. Granite of any colour and shade. Area of slab over 0.50 sqm	Sqm	12.00		
	<b>STEEL WORK</b>				
15	Providing and fixing stainless steel ( Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in incharge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts,fasteners etc.).	MT	0		
16	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	MT	0		
17	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2 mm and braced with flat iron diagonals 20x5 mm size, with top and bottom rail of T-iron 40x40x6 mm, with 40 mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	Sqm	0		
	<b>ALUMINUM WORK</b>				
18	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)	M.T	0.30		
19	Providing, fabricating and fixing in position colour anodised Aluminium framed louver with or without fixed glazing panels on side or top all as per Architect's drawings.Fabricated with Aluminium extruded Indal sections of weight specified in the drawing including providing and fixing clear float glass of required thickness and of approved manufacturer and fixed with U-tube glazing gasket snapon beadings,etc. including providing floor springs,locking arrangements etc all complete as per detailed architectural drawing.	Sqm	0		

**SCHEDULE V**  
**SCHEDULE OF WORK**

<b>Sub: Civil and Electrical works for setting up of DEIC at KNH, Shimla, Himachal Pradesh</b>					
<b>SI No</b>	<b>Specification</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate in Rs</b>	<b>Amount in Rs</b>
20	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge : Powder coated aluminium (minimum thickness of powder coating 50 micron)	MT	0.80		
21	S/F 100mm brass lock for aluminium door including necessary cutting and making good etc. complete	Each	18.00		
22	Providing and fixing aluminium tower bolts (100*10mm) ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade with necessary screws etc. complete :	Each	18.00		
23	Providing and fixing glazing in aluminum door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in- Charge. (Cost of aluminum snap beading shall be paid in basic item): With float glass panes of 5.5 mm thickness.	Sqm	268.00		
24	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	M.T	0.10		
25	Providing and fixing aluminum tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc. complete as per direction of Engineerin-Charge. Anodized (AC 15 ) aluminum tubular handle bar	Each	36.00		
26	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete. With twin rubber stopper	Each	18.00		
27	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS : 6315 marked, for doors including cost of cutting floors as required, embedding in floors and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge. With Brass cover Plate	Each	18.00		
28	Providing and fixing 12 mm thick pre laminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in paneling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of Engineer-inCharge. Pre-laminated particle board with decorative lamination on both sides	Sqm	312.00		
29	24 mm thick factory made PVC door shutters made of styles and rails of a uPVC hollow section of size 59x24 mm and wall thickness 2 mm (± 0.2 mm) with inbuilt edging on both sides. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x24 mm and 2 mm (± 0.2 mm) wall thickness, fixed to the shutter styles by means of plastic/galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge. (For W.C. and bathroom door shutter).	Sqm	16.00		
30	Providing and fixing cup board shutters 25 mm thick, with Pre-laminated flat pressed three layer particle board or graded wood particle board IS: 12823 marked, exterior grade (Grade I Type II), having one side decorative lamination and other side balancing lamination, including IInd class teak wood lipping of 25 mm wide x12 mm thick with necessary screws and bright finished stainless steel piano hinges, complete as per direction of the Engineer-in-Charge	Sqm	0		

<b>SCHEDULE V</b>					
<b>SCHEDULE OF WORK</b>					
Sub:	<b>Civil and Electrical works for setting up of DEIC at KNH, Shimla, Himachal Pradesh</b>				
Sl No	Specification	Unit	Quantity	Rate in Rs	Amount in Rs
<b>ROOFING</b>					
31	Supplying and embedding P.V.C rain water pipes of approved quality embedded inside the RC columns/masonry in position with all necessary specials like shoes , bends or any other specials required to suit site conditions etc., jointed with wavin cement and lubricants with necessary MS clamps,brackets ,bolts and nuts all complete as directed. 110mm dia-6kg/sq.cm"	R.M	0		
32	Providing and fixing 15 cm wide, 45 cm overall semi-circular plain G.S. sheet gutter with iron brackets 40x3mm size, bolts, nuts and washers etc., including making necessary connections with rain water pipes complete. 0.63 mm thick with zinc coating not less than 275 gm/m <sup>2</sup>	R.M	0		
33	Supply and Laying in cladding & Roofing COLOUR COATED sheet with guard flim made out of 0.5mm TCT 550MPa cold rolled sheet with hot dip metallic coating of Aluminium Zinc alloy 150gms/sq.m.The colour shall have a total coating thickness of 35 microns of an super Polyester colorbond XRW quality paint system or equivalent as per AS/NZS-2728:1997 (category 3), comprising of 20 microns exterior coat on top surface and 5 micron reverse coat on back surface over 5 micron primer coat on both surfaces and having 975/1000mm cover width with 26mm high crest at 195/200mm c/c in lengths as approved by Architect also to suit to site requirements and fixed with necessary suitable imported galvanized carbon steel self drilling and self tapping screws of BUILDEX or corrosshield confirming to ASTM 3566-1990 (class- III) of required diameter and length as approved all complete with EPDM sealing washers, foam fillers wherever necessary, silicon sealent wherever necessary. The RAL Colour shall be 9006. No extra payable due to shade selection.	Sqm	0		
34	Same as item above but with polycarbonate sheet of 2mm thick (embossed) in cladding to suit the profile of the roof sheeting.(Only laid area without overlapping will be measured for payment.) all as per architectural drawings.	Sqm	0		
<b>PLASTERING</b>					
35	Prepare surfaces and plaster with CM 1:3(1 cement, 3 sand) ,12mm minimum thick (sponge finish) to ceiling sides and soffit of beams and columns and other interior and exterior RCC surfaces not contiguous to masonry.	Sqm	448.00		
36	Prepare surfaces and plaster with CM 1:5(1 cement, 5 sand) ,12mm minimum thick to all interior faces of walls (sponge finish) including RCC surfaces not contiguous to masonry.Necessary internal grooves of size 10mmx10mm shall be carried out as shown/directed by engineer-in-charge.	Sqm	0		
<b>PAINTING</b>					
37	Prepare surfaces and paint two coats of plastic emulsion paint of approved colour over two coats of Gypsum punning of 6 mm minimum thick and primer all complete as per manufacturers specifications to all ceilings in all floors.	Sqm	0		
38	Finishing with oil bound washable Interior Emulsion of approved brand and manufacture to give an even shade : New work (two or more coats) over and including water thinnable priming coat with cement primer	Sqm	316.00		
39	Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @0.75 ltr/10 sqm of approved brand and manufacture	Sqm	12.00		
40	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/ 10 sqm over an under coat of primer applied @ 0.80 ltr/ 10 sqm of approved brand and manufacture	Sqm	9.00		
41	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	Sqm	24.00		
42	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	Sqm	0		
43	Prepare surfaces and paint with 3 coats (each coat of 25 micron) of synthetic enamel paint of approved make and shade over a coat of approved anticorrosive yellow primer (25 micron) on structural steel work. Cold rolled section,gutter at all heights.The finished surface should show uniform and uneven coverage of paint shall not be acceptable.	MT	1.00		
44	Finishing with Deluxe Multi surface paint system for exteriors using Primer as per manufacturers specifications : Two or more coats applied on walls @ 1.25 ltr/10 sqm	Sqm	0		

**SCHEDULE V**  
**SCHEDULE OF WORK**

Sub:	Civil and Electrical works for setting up of DEIC at KNH, Shimla, Himachal Pradesh				
Sl No	Specification	Unit	Quantity	Rate in Rs	Amount in Rs
	<b>DISMANTLING</b>				
45	Dismantling plastered brickwalls in cement mortar including cleaning, stacking the useful materials as directed by engineer-in-charge and dumping the dismantled debris as indicated at site, levelling, consolidating, all complete as directed and disposing the debris away from site all complete as directed.	Cum	2.00		
46	Dismantling the existing RCC concrete including cutting the reinforcement, stacking the useful materials as directed by engineer-in-charge, dumping the dismantled debris as indicated at site, leveling, consolidating, all complete as directed and disposal of debris away from site all complete.	Cum	1.00		
47	Dismantling Aluminium partition including disposing the debris away from site as directed by engineer in charge all complete.	Sqm	36.00		
48	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of: G.S. Sheet	Sqm	45.00		
49	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 metres lead.	MT	1.00		
50	Dismantling of flushing cistern of all types (C.I./PVC/Vitrious China) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead.	Each	2.00		
51	Dismantling Tile Flooring and Walls and disposing the debris away from site all complete as directed.	Sqm	28.00		
	<b>PATHWAY</b>				
52	Providing and laying cement concrete paver blocks of thick 80mm made out of M25 design mix of shape and profile as approved by architect .The rate should include cost of necessary excavation, COARSE SAND upto a depth of 50mm pointing in CM 1:3 all complete as directed.(For purpose of payment total laid area in length multiplied by width in plan will be paid.) Tenderer to submit necessary pamphlets along with tender.	Sqm	0		
	<b>PLUMBING</b>				
53	Providing and fixing gun metal gate valve with C.I. wheel of approved quality -25MM	Sqm	4		
54	Providing and fixing C.P. brass angle valve for basin mixer and geyserpoints of approved quality conforming to IS:8931 a) 15 mm nominal bore: 15 mm nominal bore.Make:Hindware,Cera,Jaquar etc..	Each	4		
55	Providing and fixing PTMT Bottle Trap for Wash basin and sink.Bottle trap 38mm single piece moulded with height of 270mm, effective length of tail pipe 260mm from the centre of the waste coupling 77mm breadth with 25mm minimum water seal, weighing not less than 263gms.	Each	0		
56	Providing and fixing trap of self cleansing design with screwed down orhinged grating with or without vent arm complete, including cost of cuttingand making good the walls and floors :100 mm inlet and 100 mm outlet	Each	4		
57	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : With common burnt clay F.P.S designation 7.5	Each	0		
58	Providing and fixing square – mouth PVC. Gully trap grade “A” complete with CI grating brick masonry chamber with water tight tight CI cover with frame of 300 x 300mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design	Each	0		
59	Providing and fixing white vitreous china pedestal type water closet(European type W.C. pan) with seat and lid, 10 litre low level white P.V.C.flushing cistern, including flush pipe, with manually controlled device(handle lever), conforming to IS : 7231, with all fittings and fixturescomplete, including cutting and making good the walls and floors wherever required :W.C. pan with ISI marked white solid plastic seat and lid	Each	8		

**SCHEDULE V**  
**SCHEDULE OF WORK**

Sub:	Civil and Electrical works for setting up of DEIC at KNH, Shimla, Himachal Pradesh				
SI No	Specification	Unit	Quantity	Rate in Rs	Amount in Rs
60	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required: White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps	Each	8		
61	Supplying and providing Polyethylene Septic Tanks unique size and 3 chamber design with all accessories branded like United , for a capacity of 5000 litre (100 flush/day) including all material and labour charge for fittings	Ls	1		
62	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work including cutting chases and making good the walls etc				
a	20 mm nominal outer dia .Pipes	Metre	0		
b	32 mm nominal outer dia Pipes	Metre	0		
c	50 mm nominal outer dia Pipes	Metre	0		
63	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS: 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required ::(Lowest retail price of sink not less than Rs. 3150)				
	Kitchen sink without drain board, Size -610x510 mm bowl depth 200 mm	Each	4		
64	Providing and fixing PVC Waste pipe for sink or wash basin including PVC waste fittings complete.:Semi rigid pipe 32mm dia	Each	4		
65	Providing and fixing CP Waste coupling for wash basin and sink of approved quality, colour and make. Waste coupling 31mm of 79mm length and 62mm breadth, weighing not less than 45 gms. Make:Hindware,Jaquar etc.,,	Each	4		
66	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	Each	4		
67	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	Each	4		
68	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour. 600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms.	Each	4		
69	Providing and fixing PTMT liquid soap container 109mm wide, 125mm high and 112mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour. weighing not less than 105 gms.	Each	4		
70	Providing & fixing of CP Health faucet. Hand operated spray unit (instand type)	Set	8		
71	Providing and fixing PVC pipes for water supply arrangements including cost pipes, fittings, solvent cement, testing of pipes, labour charges etc complete : Concealed work including cutting chases and making good the wall etc				
a	20mm dia. PVC pipe	Metre	32		
b	25mm dia. PVC pipe	Metre	68		
c	32mm dia. PVC pipe	Metre	0		
72	Providing and fixing CP grating of 6mm thick with rim including setting in floor with white cement mortar and making good the floor				
	125mm dia	Each	8		
73	Providing and fixing PVC soil, waste and vent pipe to IS : 13592 of SWR quality including all fittings, like : Bends, Tees, Elbows, Collars, junction, inspection doors, cowls, offsets, access pipes, jointing with rubber ring / solvent cement by application of leak proof adhesive like FRP paste including cutting holes in walls and floors and making good. Make:Supreme,Finolux,Prince etc.,,				
a	50mm dia	Metre	0		
b	110mm dia	Metre	32		

**SCHEDULE V**  
**SCHEDULE OF WORK**

Sub:	Civil and Electrical works for setting up of DEIC at KNH, Shimla, Himachal Pradesh				
Sl No	Specification	Unit	Quantity	Rate in Rs	Amount in Rs
	<b>CURTAIN WORK</b>				
	1.Two range of curtain cloth – Type 1 - II.				
	2. Both for doors, windows and partions.				
	3. Assorted colours plain & prints				
	4.Stitched as per site/ size requirement				
	5.Minor modifications in stitching as per site/ size requirement				
	6.Preferred colour (Brown, Cream, Beige)				
	7.Curtain price (including cloth & curtain rod) to be quoted in Squire metre				
	8.Stitching for each curtain to be absorb in the price of the cloth generally 2 meters.				
	9.Fast colours, water wash				
	10.Fabric density Non Transparent Composition				
	11.Fabric of curtain shall be soft texture, great shading, drape effect and nice doobby.				
	12.The bracket shall be side mounted and front mounted as required				
	13.First rod mount is 3.5 inches from the wall.				
	14.Where curtain used as a partition/ long length, sufficient support from ceiling should be provided to avoid sagging.				
	15.Rate quoted for fully stitched Curtain with top nepha with punch holes after lining bucramreinforced with SS / PVC islets and lower nepha 200mm double turned.				
74	Type -I (Surgical Curtain) Curtain fabric weight shall be up to 275-300 (±5%) gsm Composition of fabric shall be polyester yarn I.E. 300 denier fast colour sink age shall be (±5%) Weft and warp shall be polyester / cotton polyester mix	Sqm	0		
75	Type - II (Window & Door Curtain) Curtain fabric weight shall be up to 250-275 (±5%) gsm Composition of fabric shall be polyester yarn I.E. 300 denier fast colour sink age shall be (±5%) Weft and warp shall be polyester / cotton polyester mix	Sqm	0		
	<b>FALSE CEILING &amp; CLADDING</b>				
76	Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building , for all heights and all levels etc. including: Structural analysis & design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design. Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metallic colour of approved shades made out of 4mm thick aluminium composite panel material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based PVDF / Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc. The fastening brackets of Aluminium alloy 6005 T5 / MS with Hot Dip Galvanised with serrations and serrated washers to arrest the wind load movement, fasteners, SS 316 Pins and anchor bolts of approved make in SS 316, Nylon separators to prevent bi-metallic contacts all complete required to perform as per specification and drawing The item includes cost of all material & labour component, the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working curtain wall with aluminium composite panel cladding, cleaning and protection of the curtain wall with aluminium composite panel cladding till the handing over of the building for occupation. Base frame work for ACP cladding is payable under the relevant aluminium items The Contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete , as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer-in-Charge. However, for the purpose of payment, only the actual area on the external face of the curtain	Sqm	12.00		
77	Providing & fixing 35mm Flush doors 1.0 mm thk laminate as per design. The item includes Providing and fixing chaukhats made from 100mm x 50mm teak wood members. The Doors to have all hardware such as 125mm SS hinges, 450 mm long SS handles, SS tower bolts, Mortice Locks (Dorma/ Godrej). The item also includes SS rods 6mmx6mm inserted in grooves as per details complete to the satisfaction of Architects / HLL. Size of Door: 1000 x2100mm Including chaukhats.	Sqm	5.00		

**SCHEDULE V**  
**SCHEDULE OF WORK**

Sub:	Civil and Electrical works for setting up of DEIC at KNH, Shimla, Himachal Pradesh				
Sl No	Specification	Unit	Quantity	Rate in Rs	Amount in Rs
78	Providing and Fixing Acoustic tiles of 15 mm thickness and tegular edge, easily demountable tile, manufactured from High density glass wool, with the visible surface batch painted glass tissue in white and the back of the tile should be covered with glass tissue. The glass wool core of the tiles should be tested and classified as noncombustible according to prEN ISO 1182. The system should have Sound Absorption NRC value of 0.9 (according to ASTM C 423). Tiles should withstand a permanent ambient RH Upto 95% at 30°C without sagging, warping or delaminating (ISO 4611). The light reflectance of the tiles should not be less than 83%. Tiles certified by the indoor climate labeling and recommended by Swedish asthma and allergy association and granted Nordic Swan eco-label and fully recyclable. The glass wool core of the tiles should be tested and classified as non combustibile according to EN ISO 1182 and the ceilings should fall under Class A2 -s1 d0 according to EN 13501- 1.	Sqm	32		
79	Operable Acoustic Partitions (Type 2) – Training rooms (G.F.) (Without perforation) with openable and foldable doors alongwith complete arrangement and fittings required and as per the drawing. Supply and installation of operable acoustical partitions in designated area comprising individual panels 100mm thick and maximum 1200mm wide Panels shall be of all Steel construction and shall fully enclose and protect all edges of surface material with protective edge trim. Panel skins shall be of MDF Board (good quality Exterior Grade) laminated to steel structure and acoustical backing, mounted in full aluminium profile perimeter protective frames. Vertical sound seals between panels shall be tongue and groove configuration incorporating vinyl acoustical seals Panel weight shall not exceed 55 kg/sqm. Panels shall be suspended from roll-formed steel track system suspended from steel supports by threaded rods. Each panel shall be top supported by two trolley assemblies comprising steel ball bearing wheels. Partitions to be complete with Veneer in both sides as per approved sample (with a base rate of Rs. 200 Per Sqft). Panels shall have operable top and bottom seals simultaneously operated by a removable handle. The seals shall not contact floor or track during movement of panels. Panels shall also feature horizontal seals for stabilization and acoustic performance. Final partition closure to be accomplished by lever closure panel of same construction as basic panel but provided with an expanding jamb operated by a removable handle. The partition shall have been tested by an independent acoustical laboratory and shall have weighted SRI (Rw) of at least 51 in accordance with ASTM E90/DIN 52210. After installation, operable partition shall be tested by manufacturer in presence of client's representative and consultant. Noise reduction measurements shall be made in accordance with ASTM E336. NIC shall be calculated as per ASTM E413. Noise reduction shall meet NIC 51. Entire work to be done complete as per drawings, specifications and direction of E-I-C.	Sqm	40		
80	Providing and Fixing Wooden false Ceiling comprising of a Galvanized MS frame as required covered with 12 mm thick Marine ply, followed by 6 mm premium quality MDF for making groove and finished with a natural veneer (as approved) of 3.5 mm thickness duly Spirit polished with melamine matt coating. The ceiling shall be fixed to the roof soffit with adequate suspenders. The item shall be inclusive of cutting & making cutouts for lights, diffusers etc all complete. (veneer with basic cost Upto Rs:100 per sft FOR site)	Sqm	456		
<b>Total Civil Works</b>					
<b>ELECTRICAL SCHEDULE OF WORK</b>					
<b>a Subhead 1.1 POINT &amp; SUBMAIN WIRING</b>					
1	<b>Point wiring in PVC conduit with modular type switch.</b>				
	Wiring for light point/fan point/exhaust fan point /call bell point with 1.5 sq mm FR PVC insulated copper conductor single core cable in surface/recessed medium class PVC conduit, with modular switch, modular plate, suitable PVC box and earthing the point with 1.5 sq.mm FR PVC insulated copper conductor single core cable etc as required.				
	Group C	Point	97		
2	<b>Wiring through PVC conduit</b>				
	Wiring for circuit/submain wiring along with earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/recessed medium class PVC conduit as required.				
a	2X1.5 sq.mm + 1X1.5 sq.mm earth wire	Metre	400		
b	2X2.5 sq.mm + 1 X2.5 sq mm earth wire	Metre	625		
c	2X4 sq.mm + 1X4 sq.mm earth wire	Metre	400		
2.1	<b>Telephone wiring in existing conduit:</b>				
	Supplying and drawing following pair 0.5 sq mm FR PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
a	2 Pair	Metre	90		
2.2	<b>T. V cable in existing conduit:</b>				
	T. V cable in existing conduit: Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	Metre	145		

**SCHEDULE V**  
**SCHEDULE OF WORK**

Sub:	Civil and Electrical works for setting up of DEIC at KNH, Shimla, Himachal Pradesh				
SI No	Specification	Unit	Quantity	Rate in Rs	Amount in Rs
3	<b>S/F OF A/C POINT</b>				
	S/F 20A SPN MCB industrial socket outlet: Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 amps "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.(Make: Legrand/Havells/HPL)	Point	5		
4	<b>Modular type blanking plate:</b>				
	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.(Make: Legrand/Havells/HPL)	Each	30		
<b>b</b>	<b>Subhead 1.2 BOXES, SWITCH &amp; SOCKETS</b>				
5	<b>Modular boxes, bases &amp; cover plate:</b>				
	Supplying and fixing following size/modules, GI box along with modular base & cover plate for modular switches in recess etc as required.				
a	3 module	Each	17		
b	6 module	Each	22		
6	<b>Modular type switch/socket:</b>				
	Supplying and fixing following modular switch/socket on the existing modular plate & switch box including connections but excluding modular plate etc as required.				
a	5/6 Amps switch	Each	42		
b	3 pin 5/6 Amp socket outlet	Each	42		
c	15/16 Amps switch	Each	12		
d	6pin 15/16 Amps (universal) socket outlet	Each	12		
e	Telephone socket outlet	Each	4		
f	T,V Socket Outlet Modular type	Each	2		
<b>c</b>	<b>Subhead 1.3 CONDUIT</b>				
7	<b>S/F PVC conduit:</b>				
	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.(ISI Make)				
a	20 mm	Metre	325		
b	25 mm	Metre	290		
<b>d</b>	<b>Subhead 1.4 INSTALLATION OF FANS/LIGHTS</b>				
8	<b>ITC Fluorescent fitting directly on surface:</b>				
	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting/LED of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	55		
9	<b>ITC Ceiling/wall fan:</b>				
	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable etc. as required.	Each	24		
10	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	24		
<b>e</b>	<b>Subhead 1.5 LAYING OF CABLES &amp; END TERMINATION</b>				
11	<b>CABLE LAYING</b>				
	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1kV grade of following size clamped on wall surface with 1mm thick saddles as required complete.				
a	FROM EB Mains TO DG & DG TO VDB 3.5 X 50 Sq.mm	Metre	200		
b	FROM VDB TO PBD 1, 2 3.5 X 35 sq.mm	Metre	35		
c	FROM VDB TO LBD 1, 2 4 x 16 sq.mm	Metre	35		



**SCHEDULE V**  
**SCHEDULE OF WORK**

Sub:	Civil and Electrical works for setting up of DEIC at KNH, Shimla, Himachal Pradesh				
SI No	Specification	Unit	Quantity	Rate in Rs	Amount in Rs
12	<b>END TERMINATION</b>				
	Supply and making end termination with brass compression gland, earth clip and aluminium lugs for following size of PVC insulated and PVC sheathed/XLPE aluminium conductor cable fo 1.1KV grade as required.				
a	3.5 X 50 Sq.mm	Each	4		
b	3.5 X 35 sq.mm	Each	4		
d	4 x 16 sq.mm	Each	4		
<b>f</b>	<b>Subhead 1.6 SUPPLY &amp; LAYING OF LIGHT/FAN FITTINGS</b>				
13	Supplying and fixing PVC angle batten/batten holder with 18W CFL(Make:Havells/Philips) including connection as required.	Each	14		
14	Supply of 18W LED fittings with decorative end cap, powder coated CRCA steel channel complete with all electrical accessories like electronic ballast, lamp holder, 10W lamp etc complete as required. (Havells LHEWEBP7IN1W010/or else same type of philips/bajaj/crompton) without any change in cost	Each	40		
15	Supply and installation of 42W recess mounted, decorative Soft lite luminaire, powder coated CRCA housing complete with all electrical accessories like electronic ballast, lamp holder, 42W LED lamp etc complete with all mounting accessories like chain, anchor fastner etc as required.(Wipro cat no: LC30-551-XXX-57-G1(30W) Havells Ordering CodeLHEWEIP7PW1W034/Philips ) .or else any higher versions may be approved as per the direction of engineer in HLL without change in cost.	Each	1		
16	Supply and installation of 1200 mm sweep Ceiling fan, white colour, 5 star rated as per BEE complete with blades, down rod, shackle, canopy etc(Make Havells/bajaj/usha/V-guard)	Each	24		
<b>h</b>	<b>SUB HEAD:1.7 SUPPLY OF DISTRIBUTION BOARD'S, ISOLATORS, &amp; MCB'S</b>				
18	<b>S/F Vertical Type TP MCB DB:</b>				
	Supplying and fixing following way, three pole and neutral, sheet steel, Vertical MCB distribution board, 415 volts, on surface/recess, complete with tinned copper busbar, neutral busbar, earth bar, din bar, detachable gland plate, interconnections, phosphatised and powder painted including earthing etc. as required (with provision for isolator as incomer).				
	4 way, double door	Each	1.00		
18.1	<b>S/F of FP ISOLATOR</b>				
	Supplying and fixing following rating, four pole, (three phase and neutral) 415 volts isolators in the existing Vertical DB as incomer complete with connections, testing and commissioning etc as required.				
	100 A 4 pole ISOLATOR	Each	1.00		
18.2	<b>S/F of TP MCB</b>				
	Supplying and fixing 6 amps to 63 amps rating, 415 Volts, "C" series, miniature cirucuit breaker suitable for lighting and other loads of following poles in the existing MCB DB complete with connections, testing and commissioning etc as required.(Make: Legrand/Havells/HPL)				
	63A TP MCB	Each	2.00		
	40 A TP MCB	Each	2.00		
19	<b>S/F of TPN MCB PDB</b>				
	Supplying and fixing following way, three pole and neutral, sheet steel, MCB distribution board, 415 volts, on surface/recess, complete with tinned copper bus bar, neutral busbar, earth bar, din bar, detachable gland plate, interconnections, phosphatised and powder painted including earthing etc. as required (But without MCB/ RCBO/isolator) (Make: Legrand/Havells/HPL)				
	8 way Double door, horizontal type	Each	2.00		
19.1	<b>S/F of TPN RCBO</b>				
	Supplying and fixing following rating, four pole, (three phase and neutral) 415 volts RCBO, having a sensitivity current upto 100/300 milliamperes in the existing MCB PDB complete with connections, testing and commissioning etc. as required.(Make: Legrand/Havells/HPL)				
	63 A 4P RCBO 100mA	Each	2.00		
19.2	<b>S/F of SP MCB</b>				
	Supplying and fixing 6 amps to 32 amps rating, 240 Volts, "C" series, miniature cirucuit breaker suitable for power loads of following poles in the existing MCB DB complete with connections, testing and commissioning etc as required.(Make: Legrand/Havells/HPL)				
	6/32 A SP MCB	Each	48.00		

**SCHEDULE V**  
**SCHEDULE OF WORK**

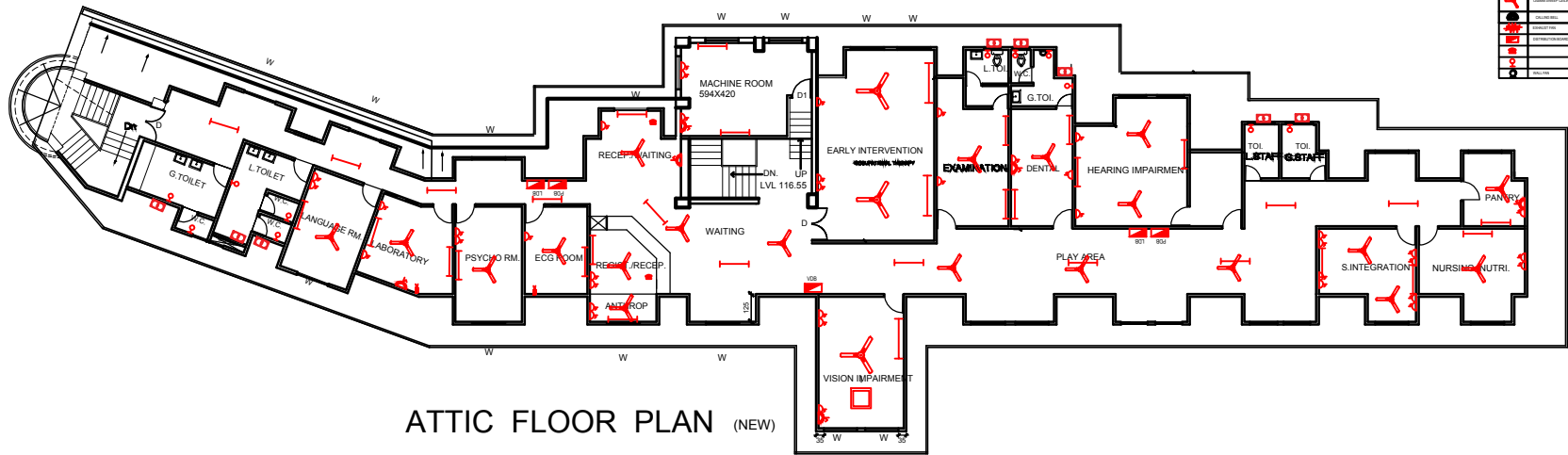
Sub:	Civil and Electrical works for setting up of DEIC at KNH, Shimla, Himachal Pradesh				
SI No	Specification	Unit	Quantity	Rate in Rs	Amount in Rs
20	<b>S/F of TPN MCB LDB</b>				
	Supplying and fixing following way, three pole and neutral, sheet steel, MCB distribution board, 415 volts, on surface/recess, complete with tinned copper bus bar, neutral busbar, earth bar, din bar, detachable gland plate, interconnections, phosphatised and powder painted including earthing etc. as required (But without MCB/ RCBO/isolator) (Make: Legrand/Havells/HPL)				
	8 way Double door, horizontal type	Each	2.00		
20.1	<b>S/F of TPN RCBO</b>				
	Supplying and fixing following rating, four pole, (three phase and neutral) 415 volts RCBO, having a sensitivity current upto 100/300 milliampers in the existing MCB PDB complete with connections, testing and commissioning etc. as required.(Make: Legrand/Havells/HPL)				
	40 A 4P RCBO 30mA	Each	2.00		
20.2	<b>S/F of SP MCB</b>				
	Supplying and fixing 6 amps to 10 amps rating, 240 Volts, "C" series, miniature circuit breaker suitable for lighting and other loads of following poles in the existing MCB DB complete with connections, testing and commissioning etc as required.(Make: Legrand/Havells/HPL)				
	6/10A SP MCB	Each	48		
i	<b>SUB HEAD:1.8 CABLE SUPPLY</b>				
21	<b>CABLE SUPPLY</b>				
	Supplying the following PVC insulated and PVC sheathed/XLPE power cable of 1.1 KV grade as per CPWD standards as required. (Make:Havells/ Glostar/Nicco/Finolex/Polycab)				
a	3.5 X 50 Sq.mm	Metre	200		
b	3.5 x 35 sq.mm	Metre	35		
c	4 x 16 sq.mm	Metre	35		
j	<b>SUB HEAD:1.9 EARTHING</b>				
	<b>EARTHING</b>				
23	Earthing with copper earth plate 600X600X3mm thick including accessories , and providing masonry enclosure with cover plate having locking arrangement and water pipe of 2.7 metre long etc. with charcol/coke and salt as required.	SET	3		
23.1	Supply and laying 25 X 5 mm copper strip at 0.50 metre below ground as strip electrode , including connection / terminating with nut/bolt , spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50 mm )	Metre	60		
23.3	Supplying and laying 10 SWG Copper wire on, surface or in recess for loop earthing along with existing surface/recessed conduit/submain wiring/ cable as required.	Metre	100		
25	<b>WORK COMPLETION</b>				
25.1	Preperation of electrical drawing, submission of drawings to electrical inspectorate, EB and obtaining approval, arranging inspection for entire installation and other utilities. Obtaining road cutting permission obtaining sanction orders for electrical installation, power allocation, energization of installation complete. Inculding all incidental expensed except statutory payable to statutory bodies. The statutory fees will be reimbursed on production of valid receipts. (Finding the exact Feeder(from transformer side) to tap power is under the scope of Contractor)	LS	1		
a	<b>EB Meter Board</b>				
	Supply and fixing of 3 phase meter board dust tight vermin proof wall mounted free standing cubicle construction with suitable cutouts/Neutral links/TPN SFU with HRC Fuses and CT if necessary.				
	Phase indication lamps, voltmeter in the incoming, HRC fuses, earth bus of adequate capacity and double earth connection to all switches, internal rigid connection. The board shall be fabricated out of 16 SWG CR sheet and powder coated with Simens grey after phosphating.	LS	1		
b	Statutory fees for submitting approvals.	LS	1		
26	<b>Miscellaneous Items</b>				
26.1	Miscellaneous electrical work, removing of existing conduits and interconnections of light,6A socket/16A socket/A/C point from existitng DB	LS	1		
27	Supply and pointing exhaust fan shutter type white colour-9"/10"(Make Havells/Bajaj/Almonard)	Each	9		
28	Supply and Fixing of Calling bell with its all accessories(ISI Branded)	Each	4		

**SCHEDULE V**  
**SCHEDULE OF WORK**

<b>Sub:</b>	<b>Civil and Electrical works for setting up of DEIC at KNH, Shimla, Himachal Pradesh</b>				
<b>Sl No</b>	<b>Specification</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate in Rs</b>	<b>Amount in Rs</b>
29	Providing and fixing computer I/O outlet (RJ-45) in MS flush box complete with all accessories, connection etc. complete as required as per specification and drawing of make R&M or Krone	Each	2		
30	Providing and fixing wiring for LAN cable coaxial copper conductor cable (CAT -6 (E)) in existing conduit complete with all accessories, connection, etc. as required of make R&M or Krone	Metre	80		
<b>Total Electrical Works</b>					
<b>Grand Total</b>				<b>Rs.</b>	
<b>GST @ 18%</b>				<b>Rs.</b>	
<b>Grand Total (In Rs. Incl. of taxes )</b>				<b>Rs.</b>	
<b>Grand Total in words Rupees.....</b> .....					
I AGREE TO EXECUTE THE WORKS AS PER THE RATES QUOTED ABOVE					
<b>Signature of Contractor</b>					

# **SCHEDULE VI**

## **DRAWINGS**




ATTIC FLOOR PLAN (NEW)

DEIC BLOCK

DIMENSION: MM

SUBMISSION COPY

REF.	DESCRIPTION	DATE	SIGN
REVISIONS			
KAMALA NEHRU HOSPITAL AT SHIMLA, HIMACHAL PRADESH			
PROPOSED DEIC DRAWING			
DEIC - ELECTRICAL LAYOUT DRAWING			
 <b>H L L LIFE CARE LTD.</b> ( A Government of India Enterprise )			
DRAWN	JOB NO	DATE	
CHECKED		SCALE	1 : 100
DWG NO			